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# PROCEEDINGS

# CCBC 2022

## CROSS-CULTURAL BUSINESS CONFERENCE 2022

May 12<sup>th</sup> - May 13<sup>th</sup>, 2022

School of Business and Management, Steyr Campus

### Intercultural or International Perspectives in

- » Global Business and Export Management
- » Marketing, Sales and Service Management
- » Higher Education Research, Teaching and Learning
- » Human Resource Management

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UNIVERSITY  
OF APPLIED SCIENCES  
UPPER AUSTRIA

Proceedings

# **Cross-Cultural Business Conference 2022**

**Thursday, 12<sup>th</sup> and Friday, 13<sup>th</sup> May 2022**

## **Sessions**

Intercultural or International Perspectives in Global Business and Export Management

Intercultural or International Perspectives in Marketing, Sales and Service Management

Intercultural or International Perspectives in Higher Education Research, Teaching and Learning

Intercultural or International Perspectives in Human Resource Management

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**Bibliographic information published by the Deutsche Nationalbibliothek**

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at <http://dnb.d-nb.de>.

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Content: The sole responsibility for the content of this publication lies with the authors. All pictures, graphs and tables have been provided by the authors for publication.

Layout: Jakob Vaboschek and Barbara Haas

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ISBN 978-3-8440-8625-6

Shaker Verlag GmbH • Am Langen Graben 15a • 52353 Düren

Phone: 0049/2421/99011 - 0 • Telefax: 0049/2421/99011 - 9

Internet: [www.shaker.de](http://www.shaker.de) • e-mail: [info@shaker.de](mailto:info@shaker.de)

Cite as:

Überwimmer, Margarethe, Robert Füreder and Piotr Kwiatek (2022), *Proceedings Cross-Cultural Business Conference 2022*, Düren: Shaker Verlag.

# PREFACE

In the times of the COVID-19 crisis and the Ukraine war, the megatrends of globalization and digitalization have to be newly interpreted and the challenges in global business are enormous for everyone, although there are also winners of the crisis. Above all, cross-cultural and economic topics are increasingly becoming the centre of attention in a variety of business and research areas. Therefore, it is crucial for both researchers and practitioners to continuously enhance and share their knowledge of their particular research areas. The objective is to support both the economy and academia in establishing international cooperation.

In order to give researchers a platform to discuss and publish their findings, the research group Global Business Management at the University of Applied Sciences Upper Austria, Campus Steyr is hosting the 11<sup>th</sup> Cross-Cultural Business Conference. The special conditions as a response to the current challenges presented by the COVID-19 virus illustrate the importance of adapting to current trends, especially in digitalization and new forms of internationalization. The CCBC has become a symbol of international networking in the scientific community over the last few years. In order to facilitate this networking process, we are aware that unfortunately some of our international colleagues and friends are not able to join this year's conference.

The research group Global Business Management at the University of Applied Sciences Upper Austria, Campus Steyr performs research activities for the study programmes Global Sales and Marketing, addressing cross-cultural topics in an innovative global business setting. The 11<sup>th</sup> Cross-Cultural Business Conference serves as a platform for research and teaching co-operation in this specific field. Therefore, the CCBC 2022 sets out to deal with intercultural or international perspectives in:

- Global Business and Export Management
- Marketing, Sales and Service Management
- Higher Education Research, Teaching and Learning
- Human Resource Management

We would like to thank all conference participants for their valuable contributions. The willingness of all parties involved to overcome the current challenges enabled us to host this conference in Steyr despite the difficult situation.

We hope the conference and the successful cooperation under these particularly challenging circumstances will further strengthen our international partnerships and networks and serve as a platform for further research cooperation.

Sincerely,  
The Cross-Cultural Business Conference Team



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University President



Prof. Dipl.-Ing. Dr. Margarethe Überwimmer  
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**Opening Keynote:**  
**“Leadership Competencies in International, Complex  
and Highly Connected Environments”**

*Monica López-Sieben*

*Dean at CETYS Graduate School of Business (Mexico)*

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Dr. Monica López-Sieben is the Dean of the CETYS Graduate School of Business in Mexicali, Mexico and Professor of Business Organization and Leadership. She earned her PhD in Business Organization at the Technical University of Valencia (Spain). As background she is a Computer Engineer and has a Master’s Degree in Business Administration from the Technical University of Valencia (Spain).

Dr. López-Sieben has been involved in developing graduate studies and executive education in higher education institutions for 30 years and has worked as a consultant for management teams in companies in more than ten countries in Latin America and Europe. Mónica López- Sieben focuses on people. Participating in projects and activities, she has led multifunctional teams with a clear orientation towards results. She believes in the strategic value that the new paradigms of education have in the process of social change, which our complex environment needs to respond to global trends. Using an innovative teaching style, Dr. López-Sieben has given numerous presentations on both sides of the Atlantic in which she invites the audience to avoid conventional thinking and to consider new ways of facing up to the future.



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## ***Closing Keynote:***

# ***“Getting the Mix right: Professional Competencies in a Post-Pandemic World”***

*Richard Griffith*

*Executive Director at The Institute for Culture, Collaboration, and Management, Florida Institute of Technology (USA)*

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Dr. Richard Griffith is the Executive Director of The Institute for Culture, Collaboration, and Management at the Florida Institute of Technology, a partner in the Erasmus Mundus Work and Organizational Psychology consortium. Dr. Griffith provides more than 25 years of expertise in talent management research and consulting. He is the author of over 150 publications, presentations, and book chapters and has conducted funded research for the Department of Defense examining the assessment and development of cross-cultural competence.

Dr. Griffith is the founder of the Ph.D. program at Florida Tech, including the international concentration, the first in the U.S. In addition, he is the editor of the books *Internationalizing the Organizational Psychology Curriculum*, *Critical Issues in Cross Cultural Management*, and *Leading Global Teams*. He has served as a guest editor of the journals *Human Performance*, the *International Journal of Cross Cultural Management*, *Military Psychology*, *Organizational Development* and as associate editor of the *European Journal of Psychological Assessment*. He has been recognized as a Fellow by the International Association of Applied Psychology (IAAP), the Society for Industrial Organizational Psychology (SIOP), and as a Senior Research Fellow by the Army Research Institute. His work has been featured in *Time* magazine and *The Wall Street Journal*.





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# Session A

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Intercultural or  
International  
Perspectives in  
Global Business and  
Export Management

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# ***A Comparative Study of Carbon labeling Policy and Application***\*

*Jingmin Wang<sup>1</sup>, Ruifeng Duan<sup>1</sup>*

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## **ABSTRACT**

For coping with the consumers' awareness increase and scientific progress in climate change, more countries have been taking measures to decarbonize and actively enhance their adaptation ability. Among multiple instruments, carbon labeling effectively satisfies consumers' needs and motivates enterprises to mitigate greenhouse gas emissions. However, there are still some different views, including the immaturity of the Life Cycle Assessment (LCA) method and the possible increase in social inequity. This paper focuses on different countries implementing carbon labeling systems. It compares the institutions, evaluation methods, standards, etc., and sorts out the government, enterprises, and consumers' roles in implementing carbon labels from the time and space scales in providing strategic suggestions for the implementation of carbon labels in the future. The paper revealed that: (1) Most countries implementing carbon labeling systems are developed countries, few are developing countries, and there are significant differences in policies and applications in different countries. (2) There are technical barriers to promoting carbon labels, such as the diversification of carbon footprint accounting standards, the disunity of life cycle accounting boundaries, the availability and stability of data, and the variety of carbon labels. (3) In practice, the degree of support from consumers, enterprises, and governments for carbon labeling systems affects the implementation of carbon labeling systems.

Keywords: carbon label; policy and application; strengths and weaknesses; comparison

## **1 INTRODUCTION**

In recent years, greenhouse gas emissions have led to global climate change, which has brought some potential threats to the environment (Yin and Shi, 2019). To effectively reduce greenhouse gas emissions and achieve sustainable economic development, countries with the intention of emission reduction have adopted low-carbon systems based on market mechanisms such as carbon tax and carbon trading (Qiu F, 2021). At the same time, as an environmental policy integrating government policies and market constraints, the carbon labeling system directly acts on both the demand side and the consumption side, guiding consumers to low-carbon consumption and enterprises to low-carbon production (Chen ZY, 2010). It has been recognized and promoted by more and more countries or regions, especially developed countries, which have achieved remarkable practical results.

As early as 2007, The UK Carbon Trust launched the world's first batch of products with Carbon labels, such as potato chips, milkshakes, and shampoo, becoming a pioneer in carrying out

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\* Acknowledgement: This paper was supported by the Chinese national social science funding project, A study of china's carbon trading mechanism optimization-from political economics perspective (17BJL23)

low-carbon product certification (Zhao, et al., 2017). Subsequently, the United States, Canada, France, Germany, Australia, Japan, and other countries launched a series of carbon labeling-related government policies and third-party standards set by the trade association to reveal the environmental impact of products or services (Mostafa, 2016). The application of carbon labeling has covered 43 countries or regions worldwide, involving food, building materials, electronic products, and other products, generally in the form of government-led, voluntary participation of enterprises and third-party certification promotion (Zhao, et al., 2020).

Although carbon labeling can help reduce greenhouse gas emissions during the life cycle of a product or service and promote the development of a low-carbon economy, there are technical barriers to implementation. At present, the carbon labeling systems of various countries are still in the initial stage of development, and there is no unified carbon footprint accounting standard and carbon label labeling. There are problems with standard diversification and standardization of promotion, making it difficult for mutual recognition and global promotion of carbon labels (Qiu F, 2021). On the other hand, the spread of carbon labels could create global trade problems and inequality problems. Some scholars believe that in low-carbon development, the carbon labeling system is prone to abuse by trade protectionists and becomes a new type of non-tariff trade barrier (Dai Y, 2014). The carbon footprint accounting based on the production end of products will increase the pressure of emission reduction of raw material export-oriented developing countries, resulting in the unequal distribution of emission reduction responsibilities (Li CH and Wu LB, 2014).

Through literature review, this paper learns about existing carbon label types and carbon footprint accounting methods and standards, sorts out carbon labeling schemes implemented by various countries, analyzes the role of governments, enterprises, and consumers in the promotion of carbon labeling, summarizes the problems faced by carbon labeling system and puts forward suggestions.

## **2 LITERATURE REVIEW**

The concept of carbon labeling, closely related to carbon footprints, dates back to the 1970s, when "food miles" were discussed. Carbon label refers to the total amount of greenhouse gases emitted in the life cycle of products (including raw materials, manufacturing, packaging, storage, and transportation, as well as the process of waste and recycling) marked with a quantitative index to inform consumers of the carbon footprint of products or services in the form of labels (Hu YF, et al., 2010). As implied in the definition of carbon label, lifecycle-based carbon footprinting is a cornerstone to support the presentation of a carbon labeling scheme (Hu, et al., 2019). By adding quantitative labels, enterprises can show transparent information such as carbon emission sources to guide consumers to adopt Pro-environmental purchase behavior. At the same time, they can find ways to reduce carbon emissions in the product life cycle and improve low-carbon management ability and technological innovation ability (Wu J and Jiang Q, 2009). In practice, the carbon labeling system needs to meet two necessary conditions to achieve the set goals: First, enterprises and consumers have a strong awareness of environmental protection and are willing to pay a certain premium for implementing the carbon labeling system. Secondly, the carbon labeling and certification system have scientific solid and operational characteristics, and can unify the label form and standard(Qiu F, 2021). Many scholars have studied the feasibility of carbon labeling implementation from the stakeholders of consumers, enterprises, and governments. From the perspective of consumers, consumers' low-carbon purchasing behavior is an essential factor in achieving the

goal of zero carbon. Still its purchasing behavior is a complex decision-making process (Ciasullo, et al., 2017). Consumers' characteristics, such as age, gender, income, and education level, significantly affect purchase and payment intention (Grunert, et al., 2014). Meanwhile, carbon label information (Babakhani, et al., 2020) and product premium (Xu and Lin, 2021) also have an impact on the market demand for carbon label products. From the perspective of enterprises, carbon labels can identify links with high carbon emission intensity and improve their emission reduction capacity. On the other hand, they can also be a green pass for enterprises participating in international trade (Cheng, et al., 2018). In theory, carbon labeling brings many benefits to businesses, but there is still no incentive to implement it. Driven by the profit motive, most enterprises are reluctant to try carbon labeling considering the cost of product certification in the early stage, market risk of carbon labeling products, and government policies (Gadema and Oglethorpe, 2011). From the government's perspective, government policy guidance is an essential driving force for the implementation of carbon labels. It is difficult to exert the effect of carbon emission reduction only by relying on consumers' low-carbon preference for carbon labels, and reasonable administrative intervention is also needed (Spaargaren, et al., 2013). In addition, direct subsidies, tax incentives, regulatory penalties, and other policies adopted by the government will encourage enterprises to practice carbon labeling and achieve carbon emission reduction targets. It can be seen that the implementation of carbon labeling requires the joint promotion of government departments, industry associations, enterprises, and the public (Geng and Doberstein, 2008). The type of carbon label is a means of product evaluation. Most carbon labels are present in carbon footprints, so they are also called carbon footprint labels. In terms of its manifestations, not all labels show carbon emission values, but traffic light labels, low carbon labels, and other forms of labels (Schaefer and Blanke, 2014). According to the survey, consumers are more willing to accept carbon emission labels with multiple values and carbon labels traffic lights (Sharp and Wheeler, 2013). Some scholars measure the effectiveness of carbon labels in terms of location, size, color, icon, background or border color, and text and propose design standards of vividness, coordination, simplicity, and clarity (Carrero, et al., 2021). It is worth exploring how to design carbon labels to effectively convey information and improve consumers' cognition and understanding. Table 1 summarizes the classification of carbon labels under different standards.

**Table 1.** The type of carbon labels.

Classification standard	Type	Label content	Features	Representative country
The form of carbon label	Carbon emission labeling	Clearly identify product life cycle carbon emissions, expressed in co2 equivalent. It can be divided into two types: single value (total carbon emissions of life cycle) and multiple value (carbon emissions of all stages of life cycle)	Consumers are aware of the product's carbon footprint and feel it directly, but do not provide a horizontal quantitative comparison standard for similar products, so it is not possible to compare products.	Japan

Classification standard	Type	Label content	Features	Representative country
			The enterprise can serve as a basis for continuous improvement	
	Carbon emission reduction labeling	Label the life cycle carbon emissions of the product and commit to reduce the temperature emissions of the product within a certain period in the future.	The expected emission reduction can be used as a marker to identify low-carbon products	UK
	Low carbon label	It indicates that the life cycle carbon emission of the product is lower than that of the same type of product. Or declare that a certain degree of reduction has been implemented in the product life cycle phase.	Identify high performing (or best performing) low carbon products	Swiss
	Carbon neutral label	Indicates that the product has achieved carbon neutrality through carbon offset.	Represents zero carbon emissions, which is the best low carbon products label.	Australia
	Carbon grade label	Indicate the performance of the product in carbon emissions of the same type of product by fraction, magnitude or grade.	It is convenient for consumers to choose high-quality low-carbon products	US
	Environmental labeling	In addition to carbon emissions, other environmental impact data are also presented.	Integrate environmental information.	France
Binding force on participating subjects	Voluntary carbon labeling		The current mainstream approach can be adopted at the initial and transitional stages of policy	UK, US, Japan Etc.
	Mandatory carbon labeling		Few countries do, but it's the future	France
Attributes of carbon labels	Public carbon labeling		The owner is the government, and most carbon labels are implemented by government agencies	UK, Germany, Japan Etc.
	Private carbon label		Operated by a few private companies	France and US

Source : (Li CH and Wu LB, 2014)

The carbon footprint accounting standard is the premise of carbon label implementation. Countries set out independently and develop different certification methods and accounting standards, even within a country or region, also distinct (Mouron, et al., 2006). Standards issued by international organizations are international standards and are committed to promoting worldwide; Standards issued by some countries or areas are national standards (Schaefer and Blanke, 2014). According to different standards, it is easy to cause differences in evaluation results, which is not conducive to understanding and recognizing other countries. Most carbon footprint accounting methods base on life cycle assessment, but it is difficult to determine the accounting boundary of specific products or services. Studies have shown that the carbon footprints of crops from different origins are different, leading to inconsistent assessment results and reducing the credibility of carbon labels (Cohen and Vandenberg, 2012). Therefore, in the future, government supervision and international cooperation are indispensable for developing consistent evaluation standards at the national level and unified accounting methods at the global level to facilitate a fair comparison of products and indeed play a role in international trade. Table 2 collates international carbon footprint standards.

**Table 2.** International carbon footprint standards.







Standard name	Responsible organization	Calculation boundary	Launch year
PAS2050	BSI	Cradle-to-gate (B2B), Cradle-to-grave (B2C)	First released in 2008, The 2011 revision
GHG Protocol	WRI, WBCSD	Cradle-to-gate (B2B), Cradle-to-grave (B2C)	Released in 2011
ISO14067	ISO/TC 207	Cradle-to-gate (B2B), Cradle-to-grave (B2C)	TS version was released in 2013; The first version was released in 2018


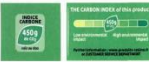



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### 3 COMPARE CARBON LABELING SYSTEMS IN DIFFERENT COUNTRIES

In 2007, the UK became the first country to implement carbon labeling. Carbon Trust has issued more than 2000 products with over 90 international brands. Subsequently, government departments and industry associations in more and more countries actively promote carbon labeling systems, such as the United States, France, Germany, Japan, and other countries, awarding to encourage enterprises to evaluate and disclose their footprints and guide the public green consumption behavior. Based on existing studies, this paper sorted out the basic situation of carbon labeling systems in various countries, as shown in Table 3.

**Table 3.** The practice of carbon labeling systems in various countries.

Nation/ Region	Launch year	Scheme name	Label Image	Responsible organization	Implement project	Accounting method	type
UK	2007	Carbon Reduction Label		Carbon Trust (NPO)	B2B and B2C products and services, Supply chain, organization	PAS 2050, GHG Protocol	CERL
		Carbon Measured Label					
US	2007	Carbon Free Label		Carbon Fund (NPO)	B2C products, services, activities, organizations	PAS 2050, GHG Protocol, ISO 14044	CNL
		Climate Conscious Label		The Climate Conservancy (NPO)	B2C products and services	Assessment of climate awareness	CGL
	2007	Green index		Timberland (manufacturer )	All outdoor products of the company	Custom algorithms	CEL
	2009	Carbon Label for California		Carbon Label California (NPO)	A particular food	EIO-LCA	CGL
Canada	2007	Carbon Counted Carbon Labels		Carbon Counted, Carbon Footprint Solutions (NPO)	B2C products and services	PAS 2050, GHG Protocol	CEL

Nation/ Region	Launch year	Scheme name	Label Image	Responsible organization	Implement project	Accounting method	type
EU		CO2 Star			Biodiesel, lubricating oil, transportation products, and services	Based on the LCA method	LCL
France	2008	Casino Indice Carbon		Casino Group (dealer)	Own-brand food and beverages	BPX 30-323	EL
	2008	Bilan Carbone		E.Leclerc (dealer)	food	BP X30-323	CGL
	2011	Environmental Index		Casino Group (dealer)	Own-brand food and beverages	BPX 30-323	CEL
	2012	SGS Carbon Footprint/Reduction / Neutrality Mark		SGS (RTPO)	Product, service, supply chain, organization	PAS 2050	LCL
	2021	CO2 Score Label			Clothing, textiles		
Germany	2008	Product Carbon Footprint		Themal, WWF, IAE, PIK (NPO)	B2C products and services, Supply chain	ISO 14040/44, ISO 14064, PAS 2050	LCL
Sweden	2008 2010	Climate marking in Sweden		Swedish Farmers' Association, Food Labelling organization (NPO)	B2C food	Based on the LCA method	LCL

Nation/ Region	Launch year	Scheme name	Label Image	Responsible organization	Implement project	Accounting method	type
Switzerland	2007	Climatop		Okozentrum Langenbruc (Independent agency)	B2C products and services	GHG Protocol, ISO 14040	LCL
New Zealand	2008	Carbon Zero		Landcare Research (government sector)	Individual, product, service, activity, organization	PAS 2050, GHG Protocol, ISO 14064	LCL
Australia	2009	Carbon reduction label		Planet Ark		PAS 2050	LCL
Japan	2009	Carbon Footprint Label		METI (government sector)	B2B and B2C products and services	TSQ 0010	CEL
South Korea	2009	Carbon footprint certificate		Eco-Product Institution (government sector)	In addition to the farming, fishing, animal husbandry category of B2C products	ISO14040/ 44/64 PAS 2050, GHG Protocol, Etc.	CEL
	2011	Low carbon product certificate					LCL
Thailand	2009	Carbon Reduction Label		TGO, TEI (government sector)	B2C products and services	PAS 2050, ISO 14040/64, UNFCCC/ CDM, etc.	CGL
	2009	Carbon Footprint Label		TGO, METC (government sector)	Export products		CEL
Taiwan	2010	Taiwan carbon footprint label		Taiwan Executive Yuan (government sector)	B2C products	PAS 2050, ISO14001	CEL

NPO: Non-profit organization; RTPO: Third party organization; CEL: Carbon emission labeling; CERL: Carbon emission reduction labeling; CGL: Carbon grade label; LCL: Low carbon label; CGL: Carbon grade label; CNL: Carbon neutral label; EL: Environmental labeling

Source : (Liu, et al., 2016, Qiu XD, 2011a) and access to relevant online materials

## 4 Practice of carbon labeling system

### 4.1.1 *Responsible organization*

Most responsible agencies are non-profit organizations or government organizations established by the government. Among them are non-profit organizations such as The UK's Carbon Trust, Canada's Carbon Counted and Carbon Footprint Solutions, The Swedish Farmers' Association and Food Labeling Organization, and government departments such as Japan's Ministry of Economy, Trade, and Industry, South Korea's Ministry of Environment and Taiwan's National Council for Sustainable Development. A few carbon labeling initiatives have come from other sorts, such as Timberland, an American manufacturer; Casino Group, a French supermarket giant; and Ökozentrum Langenbruck, an independent Swiss outfit. In addition, the UK Carbon Trust is funded and supported by the government. All departments work together to develop the Carbon footprint assessment standard PAS 2050, certify and issue Carbon labels. In Japan's carbon labeling system, the Ministry of Economy, Trade, and Industry are mainly responsible for carbon footprint accounting and carbon label certification. At the same time, third-party organizations are responsible for inspection and evaluation.

### 4.1.2 *Assessment criteria and methods*

The evaluation criteria of carbon labels are diversified. Practice in various countries shows that PAS 2050, GHG Protocol, ISO 14064, and other international standards are widely used. National standards developed by some countries or regions are suitable for implementation in specific supply chains or organizations, such as BPX 30-323 in France, TS Q0010 based on ISO 14044 in Japan, climate awareness assessment method in the United States, and carbon footprint calculation based on LCA or self-developed algorithms in other countries. In addition, South Korea and Thailand rely on multiple standards, which can easily lead to inconsistent calculation results and insufficient communication skills.

Most countries use the life cycle assessment method for product carbon footprint accounting, but the accounting boundary selected is different. Carbon Reduction Label and Carbon Label in The UK, SGS Carbon Footprint Mark in France, Cool Label in South Korea, and other labels cover the whole life cycle of products or services. While The US Green Index only measures the carbon footprint of production, France Casino Carbon Index measures the carbon footprint of transportation, power consumption, and refrigeration, and Sweden only measures the carbon footprint of product transportation.

### 4.1.3 *Carbon Label Form*

In the graphic design of carbon labels, most countries and regions present the form of footprint shapes and carbon dioxide chemical formulas. Eu CO2 Star takes water droplets as its basic form and equips it with the English word "CO2 Star". The pattern of Japan's Carbon Footprint Label looks like a scale and marks the GHG emission ratio at each stage of the product life cycle. The French Environmental Index takes three green leaves as the main design elements, keeping the proportion of greenhouse climate emissions, water consumption, and water pollution to the environment (Zhang L and Guo Q, 2014).

Carbon labels also come in different forms. The carbon labels of some countries show their quantitative results, such as the carbon emission reduction label and carbon label of the UK, the green index of the United States, the counting carbon label of Canada, the Bilan carbon and environmental index of France, the carbon footprint label of Japan, the carbon footprint certificate of South Korea, the carbon footprint label of Thailand, etc. among them, the carbon emission reduction label and carbon label of the UK, the green index of the United States, the

counting carbon label of Canada Bilan carbon and environmental index of France, carbon footprint label of Japan, carbon footprint certificate of South Korea, carbon footprint label of Thailand, etc. The European Union, Germany, Switzerland, Sweden, New Zealand, Australia, and other countries do not Label the Carbon footprint of products. The Carbon-Free Label of the United States indicates that products have achieved Carbon neutrality. In contrast, Climatop of Switzerland suggests that products are in a leading position by reducing 20% of Carbon footprint. In addition, carbon labels also use the way of classification. France Bilan carbon is a green color block from light to dark, divided into seven grades A to g, indicating that the degree of environmental impact shows an increasing trend. The climate awareness label in the United States presents in gold, silver, and copper (Jonsson, 2000); Thailand's carbon emission reduction labels classify as 10%, 20%, 30%, 40%, and 50%(Qiu XD, 2011b).

#### *4.1.4 Implementation Objects*

The implementation object of carbon labels is mainly products or services. Product categories are primarily food, clothing, textile, electronic products, and others closely related to daily life. The UK carbon labeling system is widely used, including food products such as crisps, bread, and fruit, daily necessities such as shampoo, light bulbs, washing liquid, building materials such as cement, clothing, toys, and online banking transaction services. Thailand's Carbon Reduction Label certifies the Carbon footprint of food, beverage, carpet, paper, and other product categories. The Us Carbon Label for California, France's Casino Indice Carbon, Bilan Carbone, Environmental Index, and Sweden's Climate marking in Carbon labels such as Sweden apply only to food.

Service objects include B2B and B2C. Most countries, such as Germany, Switzerland, Canada, and South Korea, only apply to B2C products, while the CARBON labeling systems of Britain and Japan involve B2B and B2C products or services. In addition, some countries carry out carbon footprint certification of supply chains, projects, or organizations, such as the UK, Germany, New Zealand, etc.

## **4.2 Stakeholder response**

### *4.2.1 Consumer wishes*

Consumers' awareness of environmental protection is the basis of implementing the carbon label system. Various countries improve consumers' awareness of carbon label products in multiple ways. A 2020 survey of more than 10,000 consumers in France, Germany, Italy, the Netherlands, Spain, Sweden, the UK, and the US, commissioned by the Carbon Trust and conducted by You Gov, found that two-thirds of consumers supported carbon-labeled products. Consumers in France, Italy, and Spain showed the highest support for carbon footprint labels at 80 percent, 82 percent, and 79 percent. Sweden showed a significant increase in support for carbon labels. At the same time, consumers in countries such as China and Egypt also support carbon labeling, providing a basis for emerging countries to implement carbon labeling systems (Rondoni and Grasso, 2021). In addition, as public awareness of climate change has increased, Korean consumers' preference for mandatory carbon labeling has increased significantly. The gap of willingness to pay between voluntary and compulsory low carbon labels is significant (Kim, et al., 2016).

Other factors, such as individual characteristics, product premium, and perceived efficiency of consumers, also influence consumers' purchasing behavior(Zhao and Zhong, 2015,Li, et al., 2017). Research shows that compared with the elderly, young people have a stronger preference for carbon label products, among which women with higher income levels and

education levels have a more positive attitude. There are significant differences in the premium affordability of consumers in different countries (Rondoni and Grasso, 2021). Consumers in European countries such as France, Germany, the UK, and Italy cap a 20 percent premium for carbon-labeled products (Feucht and Zander, 2018). In the survey of Chinese consumers' willingness to pay for carbon label products, respondents can only bear the upper limit of 7.85% premium, indicating that quality and price are still the dominant factors in consumers' purchasing decisions (Xu and Lin, 2021).

#### *4.2.2 Enterprise participation*

The positive response of enterprises is an essential driving force of the carbon labeling system. Since the rise of the carbon labeling system, many distributors, retailers, and other large enterprises in developed countries have started to try carbon labeling to improve their brand competitiveness and follow the trend of low-carbon development. America's Green Index, France's Casino, and E.Leclerc experimented with carbon labeling on own-brand goods. Under the leadership of Carbon Trust, more than 20 enterprises, including the largest supermarket chain Tesco, Coca-Cola, BP, and Boots, have successively implemented Carbon labeling strategies, involving 75 products (Qiu XD, 2011c). Sapporo Brewery, Aeon supermarkets, Lawson and 7-Eleven, and Panasonic Electric have joined Japan's carbon labeling pilot program. Coop of Switzerland, Dell, HomeDepot of the United States, Apple, Otto of Germany, and other companies have said that they will inject environmental protection concepts into their products to guide consumers to pay attention to the carbon footprint of products. Walmart, IBM, IKEA, and Watsons require their suppliers to carry out carbon footprint certification and attach carbon labels. In recent years, Pepsi, Unilever, Nestle, and other big food companies have pledged to reduce carbon emissions and put carbon labels on their products.

#### *4.2.3 Government policies*

The government provides an institutional guarantee for the carbon labeling system. France was the first country in the world to codify carbon labeling. From July 1, 2011, companies were forced to disclose environmental information about their products, and all products manufactured or sold in France will have to show their carbon footprints. In April 2021, the French National Assembly passed a revised bill to add a CO<sub>2</sub> Score Label to products, which will test in the textile and clothing industry for the first time. If proved effective, it will extend to households, hotels, electrical appliances, and other industries. Most other countries implement voluntary carbon labeling, but they also provide institutional guarantees for developing carbon labeling systems. For example, the UK issued the White Paper on Energy: Creating a Low-carbon Economy, The Climate Change Act, The Ten Point Plan for a Green Industrial Revolution, Net Zero Strategy: The German government has developed eco-smart behavior models and an independently certified eco-labeling scheme. The US has passed the Low Carbon Economy Act and the American Clean Energy and Security Act. The Swedish government has issued new dietary guidelines, suggesting consumers choose environmentally friendly eating habits based on greenhouse gas emission targets. Taiwan, China, issued the Sustainable Energy Policy Program, which sets the goal of "reducing one person's carbon footprint by one kilogram a day."

The government is not only the maker of low-carbon economic development strategies such as carbon labeling but also can use administrative means to vigorously promote the implementation of the system, such as subsidies, tax breaks, and other policies (Canavari and Coderoni, 2019). The EU stipulates that small and medium-sized enterprises or manufacturers in developing countries can reduce the application cost by 25% when applying for carbon label

certification. At the same time, enterprises with ISO14001 certification or EU ecological management audit system certification can also reduce the annual royalties by 25% (Chen and Hu, 2020). In addition, as various carbon labels continue to flood the market, consumers in some countries are confused and even skeptical, which could seriously undermine their trust (Onozaka, et al., 2016). To implement the carbon labeling system smoothly and truly realize its value, the government should supervise carbon labeling to ensure the stable and effective operation of the market.

## 5 COMPARISON RESULTS

Developed countries in Europe and North America implemented carbon labeling earlier, and their systems are relatively perfect. However, there is a gap between developing countries and developed countries in the practice of carbon labeling due to technological limitations, insufficient capacity, and low cognition of enterprises and the public. If developed countries cooperate with developing countries through financial support, technology transfer, and capacity training, it will contribute to the balanced development of carbon labeling systems. The UK's Carbon Trust has helped countries like Australia and South Korea set up Carbon labeling systems within their borders. Among them, Thailand became the first Southeast Asian country to carry out a carbon labeling program due to its cooperation and is the only developing country that has formed a carbon labeling system at present.

There are differences in the implementation of carbon labeling systems in different countries. Some countries adopt a "top-down" approach. A non-profit organization funded by the government in the UK pioneered the carbon labeling system, and local enterprises responded positively. Japan, South Korea, Thailand, and other countries introduced the carbon labeling systems and then carried out carbon labeling pilot work. However, the United States, France, and other countries choose the "bottom-up" approach, in which enterprises or non-profit organizations carry out carbon labeling spontaneously. Then national governments formulate related policies to manage carbon labeling (Lan ZR, 2020). France has enacted laws and regulations forcing companies to disclose their carbon footprint information. It can see that government leadership, active participation of enterprises, and certification by third-party institutions are the primary forms of carbon labeling systems, providing experience and reference for developing countries to carry out carbon labeling systems.

By comparing the carbon labeling systems of different countries, it is found that there are differences in carbon footprint evaluation standards and methods, forms of carbon labeling, and objects of implementation. Some countries adopt a single evaluation standard for Carbon labels. France and Japan adopt their standards -- BPX 30-323 and TSQ 0010. However, the United States (except Carbon Free Label), the European Union, Sweden, and other countries adopt their accounting methods. Different countries adopt multiple evaluation standards, primarily based on international standards such as PAS 2050, GHG Protocol, and ISO 14044. The great difference between evaluation standards may make it difficult to compare products and reduce the emission reduction efficiency of carbon labels. On the other hand, various forms of carbon labeling confuse consumers and can become a marketing tool for manufacturers and retailers, undermining emissions reduction targets. In addition, the implementation objects of carbon labels are mainly products or services related to daily life, not covering all products, which result in a higher substitution of carbon label products.

## 6 QUESTIONS AND SUGGESTIONS

With the increasing awareness of climate change among the public, the carbon labeling system will become one of the vital market mechanisms to realize the transformation of a low-carbon economy. It will be applied by more and more countries to help achieve the goal of carbon neutrality. However, there are still some problems to be studied in practice, for example, the diversity and differentiation of carbon footprint accounting standards and methods, the availability and stability of carbon emission data, the variety and lack of transparency of carbon labels, the limited type and high substitutability of carbon label products, and inequality in international trade, etc. At the same time, the purchase intention of consumers, the emission reduction intention of enterprises, and the government's incentive mechanism will all affect the promotion of the carbon labeling system (Zhao, et al., 2018). How to solve the obstacles to implementing carbon labeling from the level of stakeholders to give full play to its value will be the focus of the future.

This article summarizes the following suggestions: First, improve laws and regulations. Establishing uniform carbon accounting standards and methods and limiting the number of types of carbon labels within a country will facilitate a fair comparison of products (Liu, et al., 2016). Second, strengthen the cooperation between developing and developed countries and promote the broad application of carbon labeling systems globally. Third, support publicity and education. Consumers are the buyers of carbon label products, and their attitudes and purchase intentions are the determinants of the effectiveness of the carbon label system (Upham, et al., 2011). For this purpose, they are using eco-advertising on social media to encourage people to purchase environmentally friendly products and services. Fourth, create the right incentives. The government guides enterprises to actively participate in carbon label certification through subsidies and other preferential policies. Fifth, the state scientifically selects pilot industries and regions and establishes a step-by-step carbon labeling system.

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# ***Developing Management Students' Cultural Intelligence through Collaborative International Online Learning***

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## **ABSTRACT**

Collaborative Online International Learning (COIL) is a pedagogical model that offers a teaching and learning paradigm often employed to develop cross-cultural awareness (Suarez & Haduch 2020). In the face of travel restrictions, whether financial or COVID-19 related, COIL offers a viable alternative for academic institutions seeking to internationalize their curriculum without the need for physical travel. The question our study seeks to address is: Does COIL afford students an opportunity to develop their cultural intelligence without physical travel? Using an experimental design, we test this question with a group of university students from a University in Taiwan and a University in the Southeastern United States, enrolled in an International Human Resource Management course that included a nine-week COIL project. Findings show that participating in the COIL course contributed to students' metacognitive, cognitive and behavioral cultural intelligence. This serves to demonstrate the benefit of embedding COIL assignments in university courses in order to internationalize the curriculum without physical travel. This is especially relevant given travel restrictions driven by the COVID-19 pandemic. However, COIL also offers a solution for students who cannot travel for financial reasons or apprehension regarding the risks involved (Rubin 2017), but can still benefit from an opportunity to collaborate across cultures and boost their CQ.

## **1 INTRODUCTION**

Experiential learning, simply defined as 'learning by doing' (Alon 2003), is a well-established tool used to enhance student learning. In this paper, we discuss a unique experiential learning model that has been gaining popularity in the late 1990s (Rubin 2017), long before the outbreak of the COVID-19 pandemic: Collaborative Online International Learning (COIL). COIL takes advantage of existing online collaboration tools to offer a teaching and learning paradigm that develops cross-cultural awareness in a shared multicultural learning environment (Suarez & Haduch 2020). In our study, students from a University in Taiwan and a University in the Southeastern United States, enrolled in an International Human Resource Management course, collaborated on a COIL course project. The students from both universities worked in virtual teams to complete the three-part project, covering nine weeks of the semester. Students' cultural intelligence (CQ) was assessed at the beginning of the semester, before any instruction had taken place, and again at the conclusion of the team project. CQ is a specific form of intelligence focused on the capability to grasp, reason and behave effectively in situations characterized by cultural diversity (Schmidt & Hunter, 2000), it is of interest to academic institutions that wish to prepare their graduates for success in a global world. CQ is a

multidimensional construct including a metacognitive, a cognitive, a motivational and a behavioral dimension.

## **2 LITERATURE REVIEW**

### **2.1 Experiential Learning**

Experiential learning is “the process whereby knowledge is created through the transformation of experience (Kolb, 1984, p. 41). Rather than teaching students about a complex subject matter or concept, instructors can integrate hands-on assignments which enable students to experience complex issues firsthand. Indeed, the benefits of experiential learning have been studied extensively with findings suggesting that experiential learning is superior to traditional models because it requires active participation, is student based, allows students to build subjective evaluations and perceptions, and is inductive and explorative (Alon 2003; Burnard 1989; Gremer et al. 2000; Joplin 1981; Kolb 1984; Liu & Shirley, 2021; Rebek, del Corte Lora & Riauka, 2021). When experiential learning is included in course assignments, students become more interested and engaged, retain the information better and for longer, and learn how to apply otherwise elusive theoretical concepts (Alon 2003). Gremer et al. (2000) add that experiential learning assignments are more likely to develop students’ interpersonal and communication skills, understanding of course concepts, teamwork and team building, as well as listening, critical thinking and problem-solving skills. Kurpis and Hunter (2017) employed an experiential learning activity in their marketing course and found it increased students’ cultural knowledge, motivation, and confidence in their ability to communicate with people from other cultures. Indeed, it is difficult to experience a different culture through traditional classroom instruction (Alon 2003). When students have the opportunity to work in cross-cultural teams, their learning becomes active, reflective and experiential (Barkley, Cross & Major 2014). In this study, we focus on a specific type of experiential learning: collaborative international cross-cultural learning (COIL). Rather than teaching students about the unique demands of working across cultures and the challenges and benefits of collaborating in virtual, cross-cultural teams, the integration of COIL into our course, enabled students to experience these issues firsthand. We discuss the COIL pedagogical method next.

### **2.2 Collaborative International Online Learning**

Collaborative Online International Learning (COIL) is a pedagogical model that has been growing in popularity. COIL courses “engage students in learning course content both through their own unique cultural lens and also by exchanging their cultural and experiential lenses as they move through the learning material together” (Suarez & Haduch 2020, p. 314). Brooks and Pitts (2016) predict that the globally connected classroom will become a natural extension in many universities. Indeed, globally networked classrooms are well suited to prepare students for the complexities of globalization (Rubin & Guth 2015). COIL takes advantage of existing online collaboration tools to offer a new teaching and learning paradigm that develops cross-cultural awareness in a shared multicultural learning environment (Suarez & Haduch 2020). “Without the need to physically travel, COIL courses embed a way to internationalize the curriculum and enrich the student experience, preparing students with transferable and employability skills” (Suarez & Haduch 2020, p. 313).

In her study of a COIL course among universities in South Africa, Mexico and Brazil, Bauk (2019) cites student and staff development as well as international and professional collaboration as key benefits of the collaborative model. She expects that “internet-connected

classrooms will become a common aid for many universities. This will enable more extensive cross-cultural and cross-discipline collaboration at a global scale, opening new possibilities for education and training, as well as for boosting research and service activities” (Bauk 2019, p. 215). Similarly, Appiah-Kubi and Annan (2020) found that students in COIL courses performed better on the coursework compared to the students in the regular non-COIL course settings. In their COIL course that involved students in the U.S. and German, Liu and Shirley (2021) found students perceived to “have engaged in active collaborative learning with peers, developed skills and knowledge and produced a sense of community” (p. 188). Suarez and Haduch (2020) further identify higher intercultural capacities as a desirable outcome in courses that integrate a COIL component into the curriculum. Indeed, “cultural intelligence has been linked to several desirable workplace outcomes such as the capability to better grasp, reason and behave effectively in situations characterized by cultural diversity” (Suarez & Haduch 2020, p. 337). For example, “exhibiting culturally appropriate words, tone, gestures and facial expressions” (Suarez & Haduch 2020, p. 338). Rebek, del Corte Lora and Riauka (2021) identified increased intercultural awareness, increase interest in studying abroad, and increased interest in future intercultural learning opportunities as some of the key outcomes of their COIL embedded course between universities in Canada and Spain.

The COVID-19 global pandemic and the travel restrictions that accompanied it certainly reduced students’ ability to travel internationally for study abroad programs or semester exchanges. However, even prior to the global pandemic, many students faced financial limitations that made travel difficult if not impossible. COIL offers all students an opportunity to boost their cultural intelligence regardless of their financial status and ability to study abroad. We define and discuss cultural intelligence in the following section.

### **2.3 Cultural Intelligence**

Cultural intelligence (CQ) is defined as “an individual’s capability to detect, assimilate, reason, and act on cultural cues appropriately in situations characterized by cultural diversity” (Van Dyne et al. 2012, p. 297). Furthermore, “CQ is a malleable capability that can be enhanced by active engagements in education, travel, international assignments and other intercultural experiences” (Van Dyne et al. 2012, p. 297). Individuals with “high CQ are consciously aware of others’ cultural preferences before and during interactions. They also question cultural assumptions and adjust their mental models during and after interactions” (Ang et al. 2007, p. 338). Ang et al. (2007) argue that culturally intelligent people are better able to handle the stress associated with cross-cultural interactions and as a result, find it easier to adapt across cultures. Strong CQ can be uniquely beneficial to university graduates given that they “will be required to maneuver an increasingly diverse, international, and physically separated reality in which online team work...is expected and rewarded” (Suarez & Haduch 2020, p. 313).

As a construct, CQ is multidimensional, including a metacognitive, a cognitive, a motivational and a behavioral dimension. The *metacognitive dimension* focuses on higher-order cognitive processes: the individual’s mental capability to control cognition and the process individuals use to acquire, evaluate and understand knowledge. The metacognitive dimension focuses on awareness and monitoring of cognitive processes (Van Dyne et al. 2012). The *cognitive dimension* refers to knowledge of the economic, legal and social systems of different cultures as well as knowledge of basic frameworks and cultural values. Individuals with high cognitive CQ understand similarities and differences across cultures (Brislin et al., 2006). The *motivational dimension* of CQ reflects the capability to direct attention and sustain energy toward learning about and functioning in situations characterized by cultural difference.

Individuals with high motivational CQ are intrinsically motivated to engage in cross cultural situations. Finally, the *behavioral dimension* refers to the ability to exhibit appropriate verbal and non-verbal actions when interacting with people from other cultures. Individuals with high behavioral CQ are able to put others at ease during intercultural interactions (Van Dyne et al. 2012) because they exhibit situationally appropriate behaviors based on their broad range of verbal and non-verbal capabilities. For example, exhibiting culturally appropriate words, tone, gestures and facial expressions. In this study we examine the degree to which taking a course that includes a COIL project contributed to building students' CQ. We hypothesize that:

H1: Participating in a COIL course will increase students' metacognitive CQ.

H2: Participating in a COIL course will increase students' cognitive CQ.

H3: Participating in a COIL course will increase students' motivational CQ.

H4: Participating in a COIL course will increase students' behavioral CQ.

### 3 METHODOLOGY

Our sample consisted of all the students enrolled in an International Human Resource Management course who participated in a class COIL project between a University in Taiwan and a university in the Southeastern United States. The students in the U.S. were, for the most part, senior undergraduate students and the students in Taiwan were first- and second-year students in an English language global MBA. The courses at both universities were taught in English using the same textbook and covering the same content. Students were placed in seven teams of 5-6 students which included 2-4 students from each university to complete a three-part course project over the course of nine weeks. Students were surveyed twice, the first questionnaire (T1) was administered on the first day of class, before any instruction took place. The second questionnaire (T2) was administered at the conclusion of the group project. Both questionnaires were administered in English. The COIL component of the course occurred during the 9-week overlap between the two universities' semesters which is 16 weeks long in the U.S. and 18 weeks long in Taiwan. All course materials were shared on a Moodle-based platform on which students could share videos as well as documents and other content. During the first week of the collaboration, the course also included several required (but not graded) 'ice breaker' activities such as video introductions to facilitate trust building and collaboration within each team. Haug (2017, p. 254) stresses that socializing and getting to know one another is "of utmost importance to create an in-group feeling," build trust and explore cultural differences. It is "the time when the person behind the email address is discovered" (Haug 2017, p. 254). Haug (2017) warns that skipping this first step is likely to lead to more miscommunication and project management issues throughout the project. To avoid unequal participation in the group assignment—a common problem in group work (Zhu et al. 2005)—students completed peer evaluations at the conclusion of the COIL project. Those evaluations were factored into the calculation of individual student grades. In addition, following Zhu et al.'s (2005) recommendation, groups were kept small with no more than six members each. Also, Suarez and Haduch (2020) recommend allowing students to select their own projects so as to boost their excitement about, and commitment to, the assignment. While all the teams in this COIL project worked on the same multinational company, teams were given the choice to select one of three subsidiaries located in different countries for their project. Finally, to facilitate students' ability to collaborate across a 12-hour time zone difference, teams were formed by matching individual preferences for meeting in the morning hours or the evening hours.

The survey instrument employed Ang et al.'s (2007) 20-item measure of cultural intelligence. The items were rated on a 7-point Likert scale ranging from "1" being "strongly disagree" to "7" being "strongly agree." Ang et al.'s (2007) CQ measure has gone through extensive validation demonstrating its generalizability across countries and culturally diverse samples (Van Dyne et al. 2012). The scale is also conceptually and empirically distinct from other individual difference variables such as emotional intelligence or personality in predicting a range of inter-cultural effectiveness outcomes. Studies in various sectors, including business, education, and the military have employed the Ang et al. (2007) CQ scale further supporting its construct validity and high reliability, with Cronbach's alpha values ranging from .70 to .86 (Matsumoto & Hwang 2013). The T1 questionnaire also included demographic variables including age, gender, country of birth, country of residence, extent of travel experience, and proficiency in languages other than mother language. The T2 questionnaire included the CQ items only. The students based in the U.S. completed paper-and-pencil questionnaires during class whereas the students based in Taiwan completed electronic questionnaires.

#### 4 RESULTS

The T1 response rate was 100% with 42 complete responses, and 95% in T2 with 40 complete responses. Attrition is common in longitudinal studies and the attrition in our case was very minimal. In terms of cultural intelligence, the Cronbach alpha reliability for the four CQ dimensions (metacognitive, cognitive, motivational and behavioral) ranged from .82 to .93 in T1 and from .74 to .85 in T2 (See Table 1).

**Table 1.** Cronbach's alpha of CQ scale.

CQ Dimensions	T1 (n=42)	T2 (n=40)
Metacognitive CQ (Meta-CQ)	.88	.74
Cognitive CQ (Cog-CQ)	.93	.85
Motivational CQ (Motiv-CQ)	.86	.80
Behavioral CQ (Beh-CQ)	.82	.79

Table 2 offers descriptive statistics of the sample of 42 students, 27 students from the American university and 15 students from the Taiwanese university. Overall, the sample was 42.9% female, 64.3% senior students, 16.7% first year graduate students and 19% second year graduate students, 73.8% had previous travel abroad experience and 33.3% had experience living abroad. For additional demographic data see Table 2.

**Table 2.** Demographic Characteristics Participants.

	Taiwan (n=15)	US (n=27)	Total (n=42)
Average age	26.40	21.48	23.24
Male	60%	55.6%	57.3%
Female	40%	44.4%	42.9%
Travel experience	93.3%	63%	73.8%
Intl. living experience	86.7%	3.7%	33.3%
Languages*	2.60	1.41	1.83

\*Average number of languages spoken beyond mother tongue

To determine whether significant differences in the four CQ dimensions existed between T1 and T2, we conducted a paired-samples t-test. The t-test results (See Table 3) show a significant increase in the Cognitive CQ dimension ( $t=-4.67$ ,  $p<.001$ ) and Behavioral CQ dimension ( $t=-4.60$ ,  $p<.001$ ), supporting Hypotheses H2 and H4. A significant increase in the scores for the metacognitive CQ dimension was also identified ( $t = -2.95$ ,  $p=.005$ ), supporting H1. These results suggest that students' mental capability to control cognition and their ability to acquire, evaluate and understand knowledge was enhanced. In addition, objective knowledge of the economic, legal and social systems of different cultures as well as knowledge of basic frameworks and cultural values (the cognitive dimension of CQ) were strengthened as a result of participating in the course. Results also indicate that students' ability to exhibit appropriate verbal and non-verbal actions when interacting with people from other cultures (the behavioral dimension of CQ) was also strengthened as a result of participating in the course. The increase in the motivational CQ dimension ( $t=-1.88$ ,  $p=.067$ ) between T1 and T2 was not statistically significant, failing to support H3. This suggests that students' motivational CQ was relatively stable and not greatly affected by the course. It should be noted that the students in the current study ranked above average on both motivational CQ dimensions ( $M_{T1}=5.56$ ;  $M_{T2}=5.77$ ). While there was a slight increase from T1 to T2, this was not statistically significant.

**Table 3.** Descriptive and paired samples statistics of CQ dimensions (n=40)

Dimensions		M	SD	Paired Difference				
				Mean Difference	Std. Deviation	t	df	Sig. (2 tailed)
Meta-cognitive	T1	5.53	1.18	-.43	.91	-2.95	39	.005**
	T2	5.95	.83					
Cognitive	T1	3.52	1.43	-.71	.96	-4.67	39	<.001***
	T2	4.24	1.03					
Motivational	T1	5.56	1.18	-.21	.69	-1.88	39	.067
	T2	5.77	.87					
Behavioral	T1	4.77	1.14	-.49	.67	-4.60	39	<.001***
	T2	5.26	.95					

\*\*\* $p<.001$  \*\* $p<.005$

## 5 DISCUSSION

Our results show a significant increase in the Cognitive and Behavioral CQ dimensions. As expected, taking part in a course that includes a COIL project, contributed positively to students'

objective knowledge of various systems in different cultures as well as knowledge of basic frameworks and cultural values. In addition, a significant increase in the behavioral dimension of CQ was also observed, suggesting that course participation boosted students' ability to exhibit appropriate verbal and non-verbal actions when interacting with people from other cultures. Indeed, collaborating across cultures on a three-part project over the course of nine weeks, required the students to actively engage within their teams. While not as strong, a significant increase in the metacognitive dimension of CQ was also noted, suggesting that participating in the COIL project enhanced students' mental capability to control cognition and their ability to acquire, evaluate and understand knowledge was enhanced. It is possible that the increase in this dimension was not as strong as in the cognitive and behavioral dimensions discussed above given that higher level knowledge and understanding of culture (the metacognitive dimension) takes longer to develop, or requires more active engagement than what is possible in a virtual exchange.

The motivational dimension of CQ did not increase significantly as a result of taking part in the course. This suggests that the students' motivational CQ dimension was relatively stable and not greatly affected by course design or content. In terms of the motivational dimension of CQ, the U.S. based students took the course as an elective, rather than a course required for graduation. Thus, the students from the US who self-selected into this course might have already had an intrinsic interest in international management. While the course was required for most of the students based in Taiwan, these students were enrolled in a Global MBA program taught in English with over 98% international students. Therefore, it is likely that these students were also highly motivated to learn about and experience multicultural management. Indeed, the students' score on the motivational dimension of CQ was already above average at the beginning of the course ( $M_{T1}=5.56$ ).

While not part of this study's hypotheses, we also collected qualitative data from students as to their experience with the COIL component of the course. Based on students' comments, we can infer that the large majority of the students felt the course, and COIL project within it, were a valuable and novel learning experience. For example, a male student from the US shared: *"This is unlike anything I have done in college as I have never worked on a project with people from a different university, much less students that are in a different time zone that is twelve...hours ahead...I really enjoyed getting to branch out and get to know/work with other students in the class who I have never worked with before. Working with the students in Taiwan was neat as they could provide a different perspective as they are located in Taiwan which is where the company we were focusing on was located [and] they have different skills...As the project progressed, I could tell we all became more comfortable with each other and everyone began to talk more in our zoom meetings and in our messenger chat."* A female student from the US shared: *"One thing that I enjoyed about this group project was the chance to meet and work with new people that I would not have had the chance to otherwise. My team was made up of a lot of really cool individuals. We all had something unique to bring to the table due to our different backgrounds."*

Similarly, a male student from Taiwan shared: *"I would say that I learned much more in this group project than in others, because it challenges us to cope with the geographical difficulties and maybe other levels of knowledge because the university's progresses might be different. It was also great to work in a group with four different nationalities which also brings different ideas on different topics. On the other hand, the project was much more time intensive and harder to handle than other group projects. This sometimes hinders the progress and the*

*motivation of the team. In total, I would still recommend to go on with the project in the future!*" A female student from Taiwan also shared: *"This cooperation project gave me a new experience. I really liked the group members to exchange different ideas with each other."* These comments clearly convey the benefit that the students felt they gained from the opportunity to collaborate with others across cultures. For the most part, students were willing and motivated to work together and aware of the unique challenges and opportunities of working across cultures and different levels of English proficiency. This is clear from the following comment made by a female US student: *"I had to make sure that I was communicating in clear language, so we did not have any miscommunications. I also had to be sure that I was messaging my Taiwanese partners whenever they would be awake to see it. I had to be cognizant of the fact that I needed to communicate issues in a timely manner, due to the time difference."* A comment shared by a female student from Taiwan: *"People have very unique and different views on HRM and culture. This is our specialty and it is so much more than just national culture. Consider your individual personality, country culture, as well as global culture. Each layer affects how a person communicates. Not only do you need to know the norms for each country, but understand the culture of each person. Then you must try to learn and understand the best way to communicate based on this unique combination."*

## **6 LIMITATIONS**

Our study is limited in its geographic scope involving students from two universities in only two countries. This limits our ability to generalize our findings to other nations or other types of projects. In addition, while the students from the two universities participating in the COIL team project followed very similar syllabi, the semester at the Taiwanese university started five weeks after the U.S. university's semester schedule. This required the instructor and students in Taiwan to cover course material in a shorter time frame so as to prepare students for the COIL team project. An additional possible limitation is due to the differences in frequency and quality of team interaction across the seven teams. As Erez et al. (2013) suggest, a change in global competencies depends on team dynamics. While some of the teams had a positive experience, a few struggled with communication, participation and sharing the work load equitably. A larger sample would possibly allow to control the effects of these factors with introducing a subjective measure of the degree to which students on a team felt communication was effective and work load was equitably shared.

An additional limitation results from the fact that the U.S. students were undergraduate students while the students in Taiwan were part of a graduate program. However, students were assigned to mixed teams, thus, every team included students from both universities as well as undergraduate and graduate students. Also, the students in the U.S. completed the questionnaire in a paper-and-pen version whereas the students in Taiwan completed an electronic version. This was unfortunately required given that for the students in Taiwan, the first two weeks of the semester required remote instruction due to COVID-19 restrictions. Finally, while the virtual team project was the same for all students and monitored (and graded) by the same instructors, we cannot verify that the changes in CQ can be attributed exclusively to the COIL course project. It is possible that some of the change in CQ resulted from course instruction on cross cultural issues for example. Introducing a control group that would take the same course without the COIL component, would address this issue.

## 7 CONCLUSIONS AND RECOMMENDATIONS FOR RESEARCH AND PRACTICE

This study explored whether collaborative online international learning (COIL) affords students an opportunity to develop their cultural intelligence without physical travel. Given the motivation in many universities to internationalize the curriculum in the face of growing travel restrictions (financial limitations or those presented by the COVID-19 pandemic), COIL offers an attractive alternative that is accessible to all students. Using an experimental design, we examine this question with university students from a University in Taiwan and a University in the Southeastern United States. Students participated in an International Human Resource Management course that included a nine-week long COIL project. Our findings show that participating in the course and the COIL project, contributed to a significant increase in three of the four cultural intelligence (CQ) dimensions: the metacognitive, cognitive and behavioral dimensions of CQ. This suggests that a COIL team project within a course can contribute to strengthening students' knowledge regarding the similarities and diversities across cultures and enable them to adjust their behavior when interacting with others across cultures. In an increasingly globalized world, in which collaborating with others across cultures becomes more common and even necessary, this has the potential to make significant contributions for students' future careers. University leaders who wish to internationalize their curriculum for the entire student body, rather than just for the students who have the financial means to travel internationally, could greatly benefit from introducing COIL into their courses.

## 8 ACKNOWLEDGEMENTS

The authors wish to thank the American Higher Education Alliance (ahealliance.org) for the training that enabled us to develop this collaborative course and the COIL project for your students.

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# ***BOOST4BSO: Supporting SMEs In Industry 4.0 Implementation Actions***

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## **ABSTRACT**

*Of 300 words:*

Digitalization poses an attractive opportunity for businesses worldwide to increase internal efficiency, intensify customer communication and interaction or even to access new markets. However, Small and Medium-sized Enterprises (SMEs) often lack the required expert knowledge, financial resources and time to make these transformations happen. This is why Business Support Organizations (BSOs) frequently need to support companies in this venture. The Interreg project BOOST4BSO focuses on increasing the knowledge exchange among Central European BSOs in order to optimize the support offered to SMEs in the field of Industry 4.0. Starting with the creation of a knowledge exchange platform, followed by the conceptualization of a knowledge distribution mechanism, selected SMEs are currently being assessed and supported in so-called “pilot actions” to create ideas and implement changes in the context of digitalization and Industry 4.0. First preliminary findings have already been derived from the initial steps of the ongoing pilot actions which seem to be valid across industries and application cases.

## **1 INTRODUCTION**

In a world where transformation towards digitalization (“Industry 4.0”) represents one of the driving forces of the economy (Faber 2019), businesses all around the globe try their best to adapt to these fast-advancing developments and gain an advantage by utilizing these new capabilities. While big, multinational companies usually have the resources to develop tailor-made solutions fitting their business cases perfectly, SMEs often lack these resources. (Heikkilä, Bouwma and Heikkilä 2018) Developing traditional manufacturing processes towards more digitalized production is one example of the many kinds of transformations that SMEs are struggling with, mainly because of their lack of expert knowledge and other resources. This is where BSOs come into play, providing support and expertise based on their broad networks and in-depth knowledge.

It is the goal of the Interreg Central Europe (CE) project BOOST4BSO to improve knowledge acquisition as well as sustainable knowledge transfer among SMEs and BSOs on a transnational level. Through this interregional cooperation, BSOs, are enabled to provide effective support services for SMEs on a local basis, covering all key aspects of the transformation towards Industry 4.0. However, the transfer of knowledge alone does not suffice to effectively acquire expertise. It is expected that, by the cooperative design of the project, more than just the level of “knowledge” (i. e. cognitive competences), but also skills, attitudes and learning, as suggested by Winterton et al., will be enhanced among BSOs and SMEs.

(Winterton, Deist and Stringfellow 2006) The BOOST4BSO project consortium consists of seven CE BSOs and one academic institution from Croatia, the Czech Republic, Germany, Italy, Poland and Austria.

## **2 WORK PACKAGES AND METHODS**

The 24 month-project can be broken down into three main work packages as follows:

### **2.1 Development of an integrated BSO Industry 4.0 competence pack and an implementation toolbox**

As a first step, the partners focused on compiling, adapting, and creating comprehensive content in the form of a toolbox, which improves the competences of the BSOs in the respective countries. The efficient and effective knowledge transfer from Central European BSOs to local SMEs as well as an easy accessibility and exchange of the available knowledge for all involved parties were crucial considerations in this process.

### **2.2 Downstreaming knowledge to Central European BSO**

To distribute the acquired knowledge among Central European BSOs, the project partners developed a “snowball mechanism” for sustainable downstreaming from the currently participating BSOs to further BSOs in Central Europe. After a trial within the project partnership, a feedback loop and the integration of all lessons learnt, the program was rolled-out to associated project partners and interested intermediaries, like other local BSOs. After this second wave, the downstreaming mechanism is now ready for broad roll-out within Central Europe and beyond.

### **2.3 Pilot implementation of innovative BSO support with SME**

In the final step of this project, the support mechanism is tested in so-called “pilot support actions” by all project partners. The goal of these pilot support actions is to test the previously developed cooperation concept among BSOs to help the participating SMEs in a cross-border and interdisciplinary manner. A three-step-process has been announced that was later tailored to the individual needs of the respective SME:

- (1) Initial assessment of the current digitalization status
- (2) Strategy development in cooperation with experts in the respective fields
- (3) Action plan for the implementation of the discussed changes

The implementation of step 1 and step 2 is currently taking place (Jan./Feb. 2022) and valuable insights for both researchers and practitioners have already been identified. Thus, this paper presents the preliminary findings of the ongoing collaborations with six SMEs.

## **3 PILOT SUPPORT ACTION TOPICS**

The following table gives an overview of the investigated SMEs and the identified fields for potential improvement.

**Table 2.** Overview of investigated SMEs

SME Nr.	Domain	Employees	Identified fields for improvement
1	Mechanical drive technology	10	Interactive product configuration software
2	Mechatronics solutions	23	CRM, document management
3	Automation and control technology	45	CRM, document management
4	Home automation	11	CRM, internal communication
5	Machine casing construction	122	Intralogistics, production efficiency
6	High-tech doors, windows, facades	68	Service business development

The following chapter now summarizes four different focus areas which could be identified for one or more SMEs as potential areas for further development.

### 3.1 Interactive Product Configuration Software

SME 1 specializes in mechanical drive technology for various industrial sectors. It supplies products and special solutions such as electromechanical lifting cylinders, clutches and gears. In the course of the initial assessment of the pilot support action, the integration of an interactive product finder and configurator into the existing website was identified as an opportunity for improvement with considerable potential for the optimization of internal and external processes.

### 3.2 Customer Relationship Management, Document management and Internal Communication

In three SMEs from different industries (SME 2, 3 and 4), a large proportion of internal processes, especially regarding the sales process, are handled manually and in an unstructured way. As a result, detailed knowledge about individual customers is only available to the directly responsible salespersons and is lost in case of personnel changes. An integrated solution for customer relationship management, document management as well as internal communication and coordination poses an attractive opportunity to become more digitalized and efficient.

### 3.3 Intralogistics

SME 5 focuses on the construction of control cabinets. Project targets were identified as the optimization of production capacity and increasing efficiency by responding adequately to production peaks and troughs. A joint discussion with an expert on intralogistics revealed several opportunities to optimize the overall production process, such as using simulation to identify critical bottlenecks and error-prone components.

### 3.4 Service Business Development

SME 6 sells products which require regular maintenance (e.g. high-quality doors, windows). Since they are selling to general contractors and construction companies, they do not have access to the end users which is one of the reasons why the implementation of services proves to be challenging. Developing a new service business model raises several questions that need to be answered by the SME, not only in terms of the alignment towards customer expectations but also regarding internal organization (e.g., service staff).

## 4 CONCLUSION AND FINDINGS

Even though these pilot actions discuss different problem areas, a number of general observations can be made which are of relevance for all participating SMEs:

- Contrary to the common believe that SMEs are too product-oriented and lack customer focus, it could be observed that the participating SMEs take the customers' perspective into close consideration when making decisions. By doing so, they are more precise in anticipating the success of a certain strategy or project on the market. In some cases, it could be observed that the degree of digitalization of products is quite advanced, while internal processes lag behind.
- The personnel requirements, regardless of the industry, are becoming more and more complex with digitalization. Especially for personnel that have regular customer contact such as salespeople or service employees, digital skills add another indispensable component to the already complex job requirements. ( Koponen, Julkunen, and Asai 2019)
- Different and partly legacy interfaces of existing software create a significant obstacle for the integration of additional software into the current infrastructure. Commonly, SMEs do not have much choice regarding the appropriate supplier of new software due to limited compatibility. Therefore, the selection of such software needs to be performed carefully, starting from the very first investment. (Westerlund 2020)
- While CEOs are usually enthusiastic about the introduction of a new solution, they are aware that their staff needs to be convinced of its benefits too. Especially with long-term employees with little digital experience, new systems and processes might lead to dissatisfaction and rejection. For this reason, a clear strategy for how to integrate the new solution also into the company culture is a prerequisite. (Yeatts, Folts and Knapp 2000)

## 5 OUTLOOK

Using the international cooperation within this project, our project partners' expertise will be taken into account when developing solutions for all participating SMEs. In internal alignment meetings, the pilot actions from all project partners will be presented and possible solutions will be discussed in the project group. In the next steps of the project, the SMEs will be supported using different modes of expert input depending on their requirements, such as workshops, product presentation events or subsequent projects. In the future, the support mechanism developed in this project is expected to be applied on a larger scale. By documenting all BSO support activities in the knowledge exchange database, the shared expertise of Central European BSOs is constantly growing and support services provided by these BSOs will become even more valuable.

## 6 ACKNOWLEDGEMENTS

This project (CE 1644) has been co-financed by the European Regional Development Fund.



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# ***Developing an Entrepreneurial Self-Leadership and Mindfulness-based Course in International Collaboration***

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## **ABSTRACT**

Nascent entrepreneurs face ambiguous demands and unique challenges. They require novel and specific skills to address the continuously changing environment successfully. Mindfulness can serve as a means to enhance self-leadership skills, and thereafter, entrepreneurial skills. This study is occupied with the development of a training program manual designed to improve the entrepreneurial mindset and skills of high school and university students via the use of mindfulness-based self-leadership methods. The manual will be tested with the focus groups of enrolled students and pupils in Albania, Croatia, Finland, and Liechtenstein. Based on the results, a digital course will be constructed. The first module of the course covers self-awareness; the second module focuses on goal setting; and during the third module, a business plan is constructed. The third module also provides exercises to address obstacles such as intrusive thoughts or impedimental emotions. The fourth module teaches revision and reflection of accomplishments as well as forming habits to reach goals and implementing systems to manage tasks. The final module covers understanding others, their opinions, and different ways of thinking to empower students to build relationships and connections. Thus, a path from self-awareness to leadership is established. The training manual resulting from the project's implementation will enable access to specialized education and knowledge to a wide audience.

## **1 INTRODUCTION**

Entrepreneurship describes the process that occurs when individuals called entrepreneurs discover, evaluate, and exploit opportunities through the creation of business ventures (Shane and Venkataraman 2000). These entrepreneurial enterprises are often innovative and question the status quo, which makes them particularly suitable to occasional societal change. This feature warrants recent calls by supranational policy-makers like the EU or the OECD to implement entrepreneurship education into the school and university curricula (Wilson et al. 2009).

The project presented in this paper is aimed at the development and validation of a course to foster the entrepreneurial mindset and skills of high school and university students. The course is being designed to improve the participants' personal resources like self-awareness, self-efficacy, and self-confidence as well as teach practical methods like design thinking and business planning. It draws from research on self-leadership and mindfulness to create an experience-based learning environment for participants to not only acquire novel information

but to apply it in a naturalistic context and reflect on their actions and results. In doing so, it aims to teach participants a universal and replicable framework for the ideation, pursuit, and revision of projects that will enable entrepreneurial venture creation and, going beyond, are transferable to any personal or professional undertaking the students wish to implement. This paper aims to present the results of efforts undertaken by an international consortium of universities and high schools on the development of an innovative training programme aimed at improving the intrapersonal foundation for entrepreneurial education, i.e., self-leadership, mindfulness, and social skills. Being able to apply mindfulness and self-leadership skills facilitates the development of an entrepreneurial mindset by fostering proactivity and self-reflection. It also helps individuals to deepen their understanding of themselves, to lead from the inside out, and to be able to unite a group to something greater than the sum of its parts. The strengthening of self-efficacy, self-confidence, and self-awareness in this way helps to bring out their best self and give back to society. It follows from there that discovering the path towards the inner self helps individuals to learn, grow, and apply as well as to contribute to the development of efficient organizations and of the entire entrepreneurial ecosystem.

## **2 LITERATURE REVIEW**

Companies are constantly faced with volatility, complexity, and uncertainty due to various challenges like demographic changes, environmental crises, or technological developments accompanied by emerging economies and increasing global interconnectedness. Conventional management and leadership strategies are no longer sufficient for firms to maintain sustainability, growth, and development. In the recent decade, many successful entrepreneurs have created successful enterprises based on innovative products and services that have disrupted the global market; in addressing such developments, they have caused further disruptions (Shane and Venkataraman 2000). Entrepreneurs are creative, innovative, proactive, passionate, and visionary individuals; they are strategists and risk takers who are oriented to change and alert to opportunities; they are individuals who coordinate scarce resources and take risks to create value (Carlsson et al. 2013). Thus, entrepreneurship describes both processes of discovering, evaluating, and exploiting opportunities as well as the individuals who implement them in order to create novel goods and services (Shane and Venkataraman 2000).

Entrepreneurship can be facilitated by self-leadership and mindfulness. On the one hand, self-leadership is an individual's ability to exercise self-control in order to motivate themselves to approach and complete tasks using behavioural, cognitive, and reward-focused strategies (Manz 1986). Their use was linked to desirable outcomes like performance, self-efficacy, and commitment (Harari et al. 2021) as well as team performance (Konradt, Andreßen, and Ellwart 2009). In turn, self-leadership can support nascent entrepreneurs in taking persistent goal-directed action and bringing their vision to fruition. Thus, self-leadership constitutes a toolbox for facing challenges in dynamic environments. It prepares students to cultivate a growth mindset fostering performance, adaptiveness, and innovative behaviour. It can be a method for developing future entrepreneurs and leaders, enabling them to act creatively, think critically, collaborate effectively, and develop their inner purpose. On the other hand, mindfulness is a cognitive or metacognitive practice (Sumantry and Stewart 2021) that describes the human ability to maintain one's attention and awareness centred on the present moment and to observe the experience with a non-judgmental attitude (Kabat-Zinn 1990). Fostering this ability was linked to a wide array of desirable outcomes like greater confidence, better mental health,

more effective emotion regulation, higher life satisfaction, lowered experiences of stress, less intense negative emotions, and lower anxiety and depression; furthermore, it has been associated with desirable workplace-related outcomes like higher job satisfaction, better interpersonal relationships, less intense feelings of withdrawal and burnout, and higher job performance (Mesmer-Magnus et al. 2017). Taken together, mindfulness is a promising resource accompanying self-leadership that can prove to be valuable at every stage of the entrepreneurial process.

### **3 METHOD**

The study employs a qualitative case study approach to identify the key aspects of course development. Qualitative case studies explore a phenomenon contextually by utilizing various data sources (Baxter and Jack 2005). In the present study, the data sets were obtained from institutions addressing high-school and university students in four different countries; thus, the data is suitable to provide valuable insights into the process of course development in an international, intercultural, and interdisciplinary collaboration. The variety of datasets allows the assessment of the course's development and implementation from multiple perspectives, the differences and similarities between which shall reveal the essence of the phenomenon (Stake 1995; Yin 2003).

#### **3.1 Context and aims**

The course was developed as a part of the activities of the Erasmus+ funded project "Entrepreneurial Self-Leadership Education through Virtual Training" aimed at the cooperative creation, implementation, and assessment of a course curriculum on strengthening the entrepreneurial mindsets of pupils. The project is undertaken by five schools and universities located in Albania, Croatia, Finland, and Liechtenstein. It encompasses the following activities: first, the development of a modular course curriculum including various exercises from the domains of self-leadership, entrepreneurship, and mindfulness; second, the pilot implementation of the course on pupils and students of the participating institutions and the subsequent revision of the manual; third, the creation of a web-based course platform that will be freely available for teachers working at the educational institutions of various educational levels (schools, vocational institutions and universities); fourth, the creation of a case study on best practices and learnings.

#### **3.2 Description of the data**

The data in the present study consists of five datasets describing the stages of the curriculum development process. The first dataset is represented by the documentation of results of the collaborative work of the partners between Autumn 2020 and Spring 2021 on identifying the course's motivation, learning outcomes, and teaching methods based on the existing research on self-leadership and mindfulness methods in the context of entrepreneurial education. The second and third datasets include the documentation of the synthesis of the first dataset in the form of competence charts for self-leadership and entrepreneurship. The fourth dataset contains the results of the collaboration workshop aiming at further synthesizing the competence charts and structuring the course objectives and contents.

**Table 3.** Details of the data of the study.

	Timing	Participants	Aims
Notes from collaboration meetings	10/2020 – 04/2021	University of Liechtenstein, University of Dubrovnik, LAB University of Applied Sciences, Formatio school, The Austrian school “Peter Mahringer”	Defining educational needs and gaps course learning outcomes, motivation, and teaching methods
DACUM chart for Self-Leadership	03/2021 – 04/2021	LAB University of Applied Sciences	Defining course modules for Self-Leadership
DACUM chart for Entrepreneurship	04/2021 – 05/2021	University of Liechtenstein	Defining course modules for Entrepreneurship
Notes from the collaborative workshop	23 April 2021	University of Liechtenstein, University of Dubrovnik, LAB University of Applied Sciences, Formatio school, The Austrian school “Peter Mahringer”	Developing the course outline
Training Manual	04/2021 – 12/2021	University of Liechtenstein, University of Dubrovnik, LAB University of Applied Sciences, Formatio school, The Austrian school “Peter Mahringer”	Developing the course activities

The process of collecting datasets is described in section 3.3.

The SLEM project partners organized a series of weekly meetings held in Zoom in October 2020 – April 2021 to define the future course learning outcomes, motivation, and teaching methods for the course. The workgroup consisted of the project staff representing the partner organizations ( $n = 9$ ). The benchmarking of the existing educational programmes was performed by the partners during the project application period, and the results of the benchmarking set the foundation for formulating the course theme, as well as educational needs and gaps. During the sessions, the workgroup brainstormed the skills to be developed based on the analysis of the literature on self-leadership, Mindfulness and Entrepreneurship and benchmarking existing course offerings. The results of discussions were documented in the second dataset, an excel file, where the first column contained learning outcomes (knowledge and skills), and the following columns specified motivation, resources, assignments and learning activities relevant to the development of each skill. The total number of skills defined in collaboration was 62.

Based on the first dataset, the project team from LAB University of Applied Sciences (Finland) created a competence chart for self-leadership skills to outline the content of course modules. Thematic analysis and analysis of existing literature on self-leadership was performed on the

outcome of the workshop. The competence areas were identified by utilizing the DACUM (Developing A Curriculum) process developed at Ohio State University in 1976. The emphasis of the DACUM method is on the application of knowledge rather than the knowledge itself. The competence chart is a table with a summary of competences, where the first column represents relevant competencies, and the following columns define the variety of skills relevant to each competence area. The number of competence areas defined for self-leadership was 5. The DACUM chart for Entrepreneurship, was developed by the team from the University of Liechtenstein based on the first dataset and the European Entrepreneurship Competence Framework (European Union 2019). The competence chart included 3 areas, where relevant skills were grouped according to three levels of competence.

Based on the DACUM chart, the course outline (fourth dataset) was developed during the collaboration workshop. The workshop was held by the partners online via Zoom using Google Jamboard on 23 April 2021. The course outline represents 11 pages, where the first page illustrates the structure of educational modules, and the following pages contain the list of exercises and resources. Based on the course outline, the course manual (fifth dataset) was developed through collaboration between the partners. The training manual is a pdf document containing an introduction into self-leadership, entrepreneurship and mindfulness, as well as the number of exercises.

## **4 RESULTS**

### **4.1 Benchmarking of existing courses**

The importance of soft skills for employability and personal development of the young population has been addressed in several nations' policy documents. They are calling for the introduction of programmes to school and university curricula that are based on both the employers' needs and the students' possibility of personalizing their study programmes. However, their proposed actions to improve the quality, relevance, and effectiveness of higher education have only been implemented partially.

There are significant differences between public and private higher education institutions and between different scientific disciplines. Both public and private higher education institutions offer soft skills development modules in their curricula. However, the modules on the development of soft skills offered at public institutions are fairly uniform, covering mainly communication, negotiation, and ethics. Only a few of those are supplemented by modules on personal development, entrepreneurship, or leadership. Private higher education institutions, pay more attention to soft skills. Apart from including modules on communication skills in their curricula, private institutions offer their students the opportunity to enrol in modules such as critical thinking, stress management, crisis communication, or teamwork skills. Further, while soft skills modules are present in various social science programmes, their availability in other fields, such as technical sciences, is sparse. In that regard, future actions should aim to develop a strategic framework for soft skills development in the young population, broaden the range of skills addressed in formal and informal training programmes, and reduce the imbalance in soft skills used across scientific disciplines.

### **4.2 Course development and structure of the manual**

An innovative training manual aiming at enhancing the entrepreneurial skills of high school and university students was developed using a variety of collaboration methods. The course development included an analysis of existing literature on self-leadership and mindfulness in

the context of entrepreneurship. Based on the analysis, the learning outcomes, or what students will learn and what kind of skills they will master as a result of the course, were identified. The learning outcomes for self-leadership were adopted from the 35-item revised self-leadership questionnaire (RSLQ) created by Houghton and Neck (2002) for the assessment of self-leadership skills. Entrepreneurship skills were defined based on the European Entrepreneurship Competence Framework (European Union 2019). The skills were grouped in the competence areas according to the DACUM method. Based on the DACUM charts for self-leadership and Entrepreneurship, the course outline was developed jointly by the partners (see Table 2). The competence areas of self-leadership were aligned with the competence areas of Entrepreneurship to enable the mutual support of the skills developed. For example, Module 2 included activities aimed at defining individual goals as a part of self-leadership training, and creativity exercises aimed at developing entrepreneurial ideas. At the same time, Mindfulness exercises are aimed at supporting the development of self-leadership and entrepreneurship skills throughout the programme. Each module contains an introduction and 9-17 group or individual exercises aimed at developing skills. The content of the manual will be tested with the number of pilot groups trainings organized in Liechtenstein, Croatia, Finland and Albania. The content will be updated according to the feedback of the pilot group participants (high school pupils and university students) and teachers' experiences, and an online course will be made open for wider audiences.

**Table 4.** Structure of the manual.

Modules	Self-Leadership	Entrepreneurship	Mindfulness
Module 1: Inspiration & Self-Awareness	Self-Awareness		Mindfulness block supports the continuous progress in the development of mindfulness skills without specific separate themes.
Module 2: Idea Generation	Identifying Dreams	Idea Incubation	
Module 3: Design & Planning	Employing Constructive Thought Patterns	Concept Development	
Module 4: Implementation & Revision	Creating Impact	Business Model	
Module 5: Final Check & Pitch	Influencing	Designing & Testing	

Initially, the course will lay the foundation of self-exploration, allowing participants to gain insights into their personal individual strengths, values, and interests. This will equip them with a personal compass to guide future decisions. Then, the students will learn about creative methods to help them identify a personal entrepreneurial goal that is in line with their personal characteristics and benefits both themselves and their communities. Subsequently, the course will provide them with methods to set achievable goals and plan the implementation of their vision. Then, during the implementation phase, the students will learn how to reflect on their progress, deduct learnings from their experiences, and revise their plans if needed. The course

will conclude with the sharing of results within their peer group and the creation of a personal process manual on how to ensure success in future endeavours. After completing the course, participants will have developed a broad array of knowledge and skills from the domains of self-leadership, mindfulness, and entrepreneurship. They will know who they are, what they want, why they want it, how it benefits their society, and how they can achieve it. In other words, they will be well-equipped to thrive in the world of tomorrow. To assess the effectiveness of the course, the students will be asked to complete a survey assessment before and after the implementation of the course.

### **4.3 Relevance and novelty**

The approach is novel on several dimensions. Being trained in areas of self-efficacy, self-confidence, and self-awareness from the early stages of their personal and professional development, students learn how to become successful in their careers but also strengthen their role as responsible citizens. It is particularly worth noting that this process involves an inter-cultural dimension through partnerships of universities and high-schools from four different countries. As stated often in entrepreneurial ecosystems and cross-country collaboration literature, the cognitive, cultural, social differences often present insurmountable barriers to personal and organizational success in a globalized world. The approach developed within SLEM acknowledges the relevance of these issues and incorporates issues of cross-cultural understanding, closeness and unity within the content and delivery of developed modules in order to strengthen the relational, intrapersonal and interpersonal skills of trained students. Hence, by departing from the commonly-used localized entrepreneurship perspective, our approach prepares students for real world conditions, enables cross-cultural interaction and paves the way for trans-disciplinary and inter-country educator collaboration.

The innovativeness of the proposed approach, embodied in the project presented here, manifests itself along collaborative, scientific and educational dimensions. As one of the few projects aimed at the development of entrepreneurial mindset with a focus on self-leadership, mindfulness and social skills, our approach provides new practices whose origins lie in educational research. This is reflected in the fact that self-leadership, mindfulness and social skills are targeted within the framework of a single training. Furthermore, the approach towards entrepreneurial mindset brings together high-schools and universities. Such an approach is innovative in its design in at least three ways. First, it allows students to develop relevant competences within groups of individuals with diverse educational backgrounds and diverse sets of skills. Second, it allows prospective entrepreneurs to develop self-efficacy, self-confidence and self-awareness competencies from the early stages of their lives. Third, the approach is structured in a way that enables its application in a multi-level educational framework (e.g., by bringing together high schools and universities) but also helps with groups of students from the same educational level but with a different pace of adopting learning content. This makes our approach somewhat unique in the existing entrepreneurial education ecosystem.

The project is envisioned as a learning space that does not result only in a one-time creation of a particular training programme. Rather, it provides a manual with a diverse set of tools for education at high school and university levels. This manual is created in a way that it can lead to the development of an entire curriculum, embodied as a topic within curricula of existing programmes and even delivered as a self-standing lifelong learning programme. Furthermore, a set of pre-intervention and post-intervention assessments have been developed based on scientific research and best practices. This allows prospective instructors to ascertain the

effectiveness of the training, adjust it to their own needs and enrich it by adding novel and relevant features. In this way, the approach is intended to live long after the project expires.

## 5 DISCUSSION

Entrepreneurship has been recognised as the basis of economic and non-economic growth, enhancing both products and services and employment opportunities (Schumpeter 1934). Entrepreneurs aim to fill a need in the marketplace or to answer the need more effectively. The entrepreneur is often viewed as a source of new ideas, goods, services, or procedures. Entrepreneurship is often characterized by innovativeness and a willingness to take risks, forming the base for success in constantly changing and increasingly competitive markets. The course manual developed through this cooperation will equip participants with the skills to heighten their awareness of who they are, what they want, why they want it, how it benefits their society, and how they can achieve it. Thereby, it aims to endow them with the tools needed to thrive in the constantly changing and increasingly world of tomorrow.

The need for entrepreneurial education has been addressed widely, yet, entrepreneurship education is often too focused on products or services rather than considering the individuals that create them (Ries 2011). The presented course curriculum aims to teach the skill of entrepreneurial venture creation. However, it is not restricted to the mere creation of a business, but imbued with self-leadership and mindfulness to enable the participants' holistic personal development in order to prepare the cognitive soil from which successful and sustainable entrepreneurial activity may sprout.

The economic future largely relies on entrepreneurs; thus, schools and universities play a substantial role in teaching knowledge and skills that are not only sufficient to succeed in the world of today but to thrive in that of tomorrow (Vaičekauskaitė and Valackienė 2018). By developing inter- and intrapersonal skills of mindfulness and self-leadership alongside entrepreneurship, the participants not only improve their entrepreneurial skills like opportunity recognition, proactivity, leadership, and management; they also benefit from heightened self-efficacy, self-confidence, and self-awareness; learn to lead from the inside out; and develop the relational abilities, allowing them to unite a group to form something greater than the sum of its parts, empowering them to become the drivers of positive and sustainable change.

## 6 ACKNOWLEDGEMENTS

This project was funded by a grant from the European Commission's Erasmus+ Key Action 2 programme. Project title: Entrepreneurial Self-Leadership Education through Virtual Training. Grant number: 2020-1-LI01-KA203-000190. Duration: 09/2020–08/2023.

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# ***Research on Influencing Factors of corporate social responsibility information disclosure: semi-structural literature review based on visual analysis\****

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## **ABSTRACT**

In the last decade, the influencing factors of corporate social responsibility information disclosure have been discussed from different perspectives. Although some scholars made a comprehensive comparison between developed and developing countries, it is limited to the comparison and analysis of literature in English only. To fully compare and synthesize the research in recent ten years, this paper uses CiteSpace software to make the meta-analysis for literature both in English and Chinese. Chinese scholars' research gradually increased in the last decade not only in Chinese but also in English. By using the meta-analysis, this paper will take the literature on the influencing factors of corporate social responsibility information disclosure that are included in the CNKI (China national knowledge infrastructure) Database and Web of Science Core Collection Database from 2009 to 2021. meantime It will then summarize the distribution of the Chinese and English academic journals, the main research institutions, the prolific authors, and the hotspots of research orientations in the research field above, and also analyzes the current research hotspots and trends. Based on the thorough analysis, this paper will finally conclude the findings into a theoretical framework that will provide a comprehensive idea to understand the relationship among the influential factors, information disclosure of CSR, and CSR performance.

## **1 INTRODUCTION**

Corporate Social Responsibility Disclosure (CSRD), as an important research field of Corporate Social Responsibility (CSR), refers to the Disclosure of information related to the performance of Social Responsibility by enterprises to information users. Such as product safety, employee welfare, charitable input, support for environmental protection, and other information (Yan.M, 2020). Generally speaking, the content of disclosed information, it can be divid into voluntary disclosure and mandatory disclosure (Li, and Niu, 2004).On the one hand, enterprises' disclosure of social responsibility information originates from the mandatory requirements of stakeholders, on the other hand, it originates from the consideration of self-interest.Amo ng them, corporate social responsibility information disclosure laws and regulations formulated by the government or relevant organizations have always been the main driving force for enterprises to disclose social responsibility information. In developed countries with more complete corporate social responsibility laws and regulations, the government plays the role of guiding enterprises to disclose social responsibility information.Fo r example, as

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\* Acknowledgement: This paper was supported by the Chinese national social science funding project, A study of china's carbon trading mechanism optimization-from political economics perspective (17BJL23)

early as 1977, the French government forced companies with a certain number of employees to provide a social responsibility information balance sheet in the form of regulations, including employee information, health and safety, working hours and conditions, employee training, and other seven contents. A large number of studies on factors affecting CSRD followed.

To comprehensively sort out the influencing factors of corporate social responsibility information disclosure, scholars have adopted different classification frameworks in different periods to conduct summary studies. For example, Gray et al. (1995) conducted a longitudinal study on social and environmental disclosure in the UK by dividing the literature into subject areas of disclosure and the amount of disclosure (Gray, Kouhy, and Lavers, 1995); Mathews (1997) reviewed the literature from 1971 to 1995 in chronological order (Mathews, 1997); Adams (2002) divided the previous determinants of CSR information disclosure into company characteristics, general situational factors and internal situational factors (Adams, 2002); Belal and Momin (2009) divided the studies on CSR disclosure in emerging countries into three categories: the degree and level of CSR disclosure and its determinants, the perception of managers and the perception of stakeholders (Belal, 2009). Ali et al. (2017) used the research framework of Adams (2002) for reference to conduct a comparative study on the determinants of CSR information disclosure in developed and developing countries (Ali, 2017). However, due to the limitation of language and other factors, their study only included academic papers published in English. There was an obvious lack of relevant literature data on CSR disclosure in developing countries (especially papers published in non-English). As for China, the world's second-largest economy, a large number of studies on Chinese regions are not included in the comprehensive comparative studies conducted by Western scholars, thus affecting the results of comparative analysis. In this paper, Chinese and English literature related to influencing factors of CSRD from 2009 to 2021 were searched from CNKI and Web of Science core collection database respectively, and meta-analysis and descriptive analysis were conducted. To more accurately evaluate the differences and commonalities of Chinese and Western researcher research factors of corporate social responsibility information disclosure on the basis of studies.

## **2 RESEARCH DESIGN**

### **2.1 Research methods and tools**

The research method of bibliometrics and literature review is adopted in this paper. Firstly, Citespace (version 5.8.R3) was used to conduct basic statistical analysis on the annual distribution, regional and institutional distribution, core journals, and core authors of the CSRD influencing factors in the past ten years. Citespace is a citation visualization analysis software that focuses on the analysis of potential knowledge contained in scientific literature and has gradually developed under the background of scientometrics, data and information visualization (Li and Chen, 2016). Secondly, the co-occurrence network analysis of keywords on CSRD influencing factors is carried out to analyze the research hotspots and evolution process. The co-occurrence network of keywords is mainly formed through co-word analysis. Co-word analysis refers to counting the frequency of occurrence of a group of words in the same group of literature in pairs, and measuring their affinity and affinity relationship through such co-occurrence frequency (Wu and Fu, 2019). Finally, this paper demonstrates the mainstream subdivisions of CSRD influencing factors through co-citation analysis of

literatures. Co-citation analysis means that if two literatures appear together in the bibliography of the third cited literature, they will form a co-citation relationship (Wu and Fu, 2019).

Literature research by bibliometric method has the following advantages: First, a large number of sample literature can be described scientifically and objectively, so as to comprehensively analyze and evaluate the research focus and focus of influencing factors of corporate social responsibility information disclosure; Second, atlas display can be carried out for different projects of literature, such as annual distribution, discipline distribution, journal distribution, institution distribution and prolific authors, to objectively depict the academic research characteristics of influencing factors of corporate social responsibility information disclosure (Xu, Shi, and Zhang, 2019).

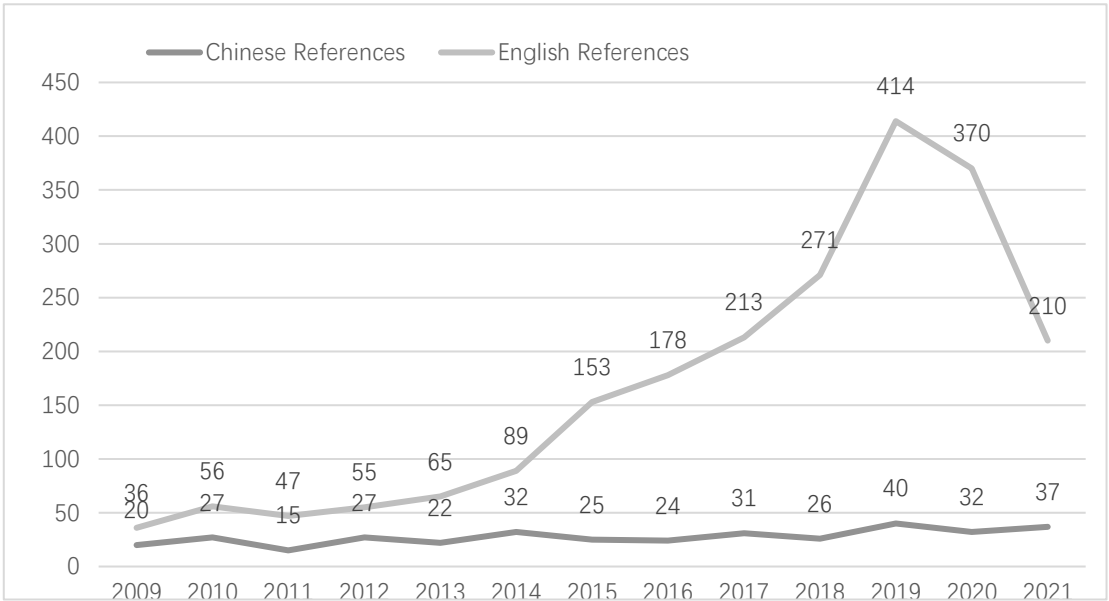
## **2.2 Data sources**

The literature data of this paper are selected from CNKI database and Web of Science Core Collection database. In the Web Of Science core Collection database, Based on 'Determinants of CSR Disclosure', "Determinants of Social Disclosure", "Determinants of Environmental Disclosure", "Motivations of CSR disclosure", "motivations of social disclosure", "motivations of environmental Disclosure", "CSR & Driving Factors", "CSR & Driving Forces", "Corporate Social Performance", "corporate Social Responsiveness" was selected as the key word, the literature type was "Article", and 2157 English literatures were retrieved from 2009 to 2021 without duplication. "Corporate social responsibility information disclosure influence factors", "corporate social responsibility information disclosure driver", "corporate social responsibility information disclosure motivation", "corporate social responsibility information disclosure quality", "environmental information disclosure influence factors", "environmental information disclosure motivation", "environmental information disclosure quality", "social factors affecting information disclosure", "social information disclosure The keywords "motivation" and "quality of social information disclosure" were removed from the CNKI database, and 358 Chinese literatures from 2009 to 2021 were retrieved.

## **3 DESCRIPTIVE STATISTICS**

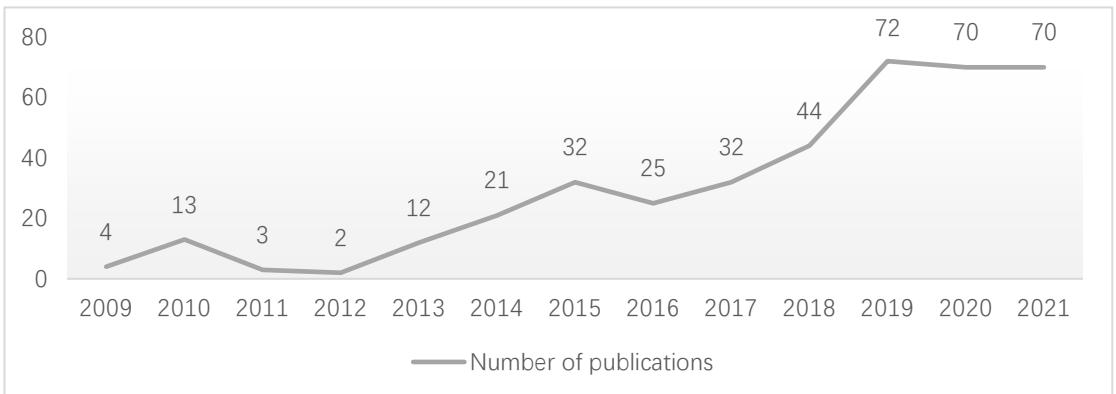
### **3.1 Annual distribution**

Figure 1 reflects the annual distribution of Chinese and English literature on CSRD influencing factors. It can be seen that since 2009, the number of articles published in English and the growth rate of articles published are much higher than that of Chinese literature, and



**Figure 1.** Annual distribution of Chinese and English literature

the number of articles published reached the maximum (414) in 2019. The reasons for this phenomenon may be as follows: Firstly, some Chinese scholars choose to publish their articles in English journals. Based on the Country function of Citespace, the author checked the distribution of English periodicals by Country/region (Table 2), and found that Chinese scholars contributed a lot to English literatures (400), second only to the United States. Figure 2 shows the annual distribution of literatures published by Chinese scholars in The English region, showing an increasing trend, which is basically the same as the general trend. Secondly, studies on CSR have been carried out earlier in foreign countries and a large number of studies have been accumulated, while relevant studies in China have been carried out later and are still in the process of development.



**Figure 2.** Publications of Chinese scholars in The English region.

### 3.2 Author distribution

Table 1-a lists the top 5 highly published authors and highly cited authors in the study of influencing factors of CSRD in The Chinese region, and Table 1-b lists the top 10 highly published authors and highly cited authors in the English region. Among them, the high number of articles indicates that there are many outputs in the research field of CSRD influencing factors, and high citation is an important indicator to measure academic level and academic influence (Wu and Fu, 2019). By comparing authors with authors with high publication volume and high citation frequency, it can be found that there is no necessary relationship between publication volume and citation frequency, and scholars with high publication volume do not have outstanding performance in high citation frequency.

**Table 1-a.** Analysis of the top 5 core authors of Chinese literature.

The sorting	High publication author	
	Number of publications (Papers)	The author
1	12	Li Qiang
2	6	Feng Bo
3	4	Jian-ling wang
4	4	Zheng-yong zhang
5	4	Guang-hua xu

Highly cited authors are one of the important indicators to measure the author's academic influence in a certain research field (Wu and Fu, 2019). Due to the limitation of text data, highly cited authors cannot be identified in Chinese literature. According to the ranking of highly cited authors in Table 1-b, it can be found that highly cited authors are representatives in the research field of corporate social responsibility. McWilliams (2001) summarized corporate social responsibility from the perspective of enterprise theory and outlined the supply and demand model of CSR. The degree to which a firm complies with CSR will depend on its size, level of diversification, research and development, advertising, government sales, consumer income, labor market conditions, and stage in the industry's life cycle (McWilliams, 2001) **Error! Reference source not found.** Answers the question "How much should companies spend on CSR?" Deegan and Gordon (1996) analyzed the environmental disclosure practices of Australian companies and found that company size affected the disclosure level of social responsibility information, and there was a significant positive correlation between company size and disclosure level of social responsibility information, especially in environmentally sensitive industries (Deegan, 1996). As for corporate social responsibility information disclosure, Gray et al. (1995) believed that the content of corporate social responsibility information disclosure should basically include environment, energy, employees, communities and consumers (Gray et al., 1995). As for the study on the relationship between corporate social responsibility and corporate value, Brammer et al. (2008) believe that the investment in corporate social responsibility will increase management's disposable resources and further increase agency cost (Brammer, 2008). Waddock and Graves (1997) used the data of corporate social performance to conduct an empirical study on financial performance and

corporate social performance, and found that corporate social performance (CSP) was positively correlated with previous financial performance and future financial performance (Waddock, 1997). Through a meta-analysis of research literature, Orlitzky (2003) found that corporate social responsibility has a positive impact on corporate financial performance (Orlitzky, 2003). The pyramid definition of corporate social responsibility proposed by Carroll (1979) (corporate social responsibility is composed of economic, legal, ethical and charitable social responsibilities) has become the most widely used concept (Carroll, 1979). Jensen et al. (1978) found that agency cost made large companies that relied on external capital more actively disclose information (M. C. Jensen, 1978).

### 3.3 Geographical and institutional distribution

Table 3 lists the top 10 scientific research institutions with high publication volume in the world. It can be seen that there are three Chinese scientific research institutions in the top 10, namely Xi'an Jiaotong University, China University of Mining and Technology, and Shanghai Jiao Tong University. Penn State Univ in the US and Univ Newcastle in the UK are also in the top 10.

**Table 1-b.** Analysis of top 10 core authors in English literature

The sorting	High publication author		Highly cited authors	
	Number of publications (Papers)	The author	High citation frequency	The authors cited
1	14	Garcia-Sanchez, Inmaculada M	504	McWilliams A
2	14	Gallego-Alvarez, Isabel	489	Freqeman RE
3	13	Martinez-Ferrero, Jennifer	427	Brammer S
4	9	Ortas, Eduardo	425	Deegan C
5	8	Kilic, Merve	406	Orlitzky M
6	7	Uyar, Ali	402	WADDOCK SA
7	7	Karaman, Abdullah	402	Gray R
8	7	Puchetamartinez, maria-consuelo	375	Porter ME
9	6	Hussainey, Khaled	341	Jensen MC
10	6	Rodrigues, Lucia Lima	314	Carroll A B

**Table 2.** Distribution of the top 10 core countries/regions

The sorting	Countries/regions with high publication volume		The sorting	Countries/regions with high publication volume	
	identified	Country/region		identified	Country/region
1	763	Peoples R China	6	121	Italy
2	393	USA	7	99	Canada
3	231	Spain	8	83	France
4	196	England	9	74	Germany
5	175	Australia	10	66	Malaysia

Other research institutions with large publications are mainly in Spain and Australia, which are the main countries/regions in the study of CSRD influencing factors. However, although there are four scientific research institutions in China whose publications are among the top ten in the world, the number of publications is relatively small. Moreover, from the ranking of highly cited authors, there are no Chinese scholars in the list of highly cited authors.

**Table 3.** Ranking of the top ten core research institutions

The sorting	Scientific research institutions with high publications		The sorting	Scientific research institutions with high publications	
	identified	Scientific research institutions		identified	Scientific research institutions
1	42	Univ Salamanca	6	15	Hong Kong Polytech Univ
2	19	Univ Granada	7	15	Shanghai Jiao Tong Univ
3	19	Univ Zaragoza	8	14	Univ Valencia
4	17	China University of Mining and Technology	9	14	City Univ Hong Kong
5	16	Univ Newcastle	10	13	Univ Sains Malaysia

Therefore, Chinese scholars have published fewer influential articles and their academic influence needs to be strengthened.

### 3.4 Distribution of periodicals

Table 4-a and Table 4-b list the most published journals in The Chinese and English regions of CSRD research. As can be seen from the number of journals published, the top three journals publishing CSRD-related literatures in Chinese region from 2009 to 2021 were Finance and Accounting Bulletin (63), Finance and Accounting Monthly (22) and Friends of Accounting

**Table 4-a.** Top periodicals published in Chinese section

The journal	Volume of articles	The journal	Volume of a
Accounting Newsletter	63	Accounting Research	9
Accounting Monthly	22	China Soft Science	6
The Accountant's Friend	17	China's Population, Resources and Environment	5
	10	Journal of Beijing Technology and Business University (Social Science Edition)	5
Statistics and Decision			
Economic Management	10	Nankai Management Review	4

(17). Journal of Business Ethics (128 articles), Sustainability (85 articles), Corporate Social Responsibility and Environmental Management (84), Journal of Cleaner Production (71), etc.

**Table 4-b.** Top journals published in English.

The sorting	The journal	Volume of articles
1	Journal of Business Ethics	128
2	Sustainability	85
3	Corporate Social Responsibility and Environmental Management	84
4	Journal of Cleaner Production	71
5	Social Responsibility Journal	45
6	Business Strategy and the Environment	37
7	Business & Society	26
8	Sustainability Accounting Management and Policy Journal	20
9	Accounting Auditing & Accountability Journal	18
10	Journal of Business Research	18

## **4 CSRD INFLUENCING FACTORS RESEARCH HOTSPOT EVOLUTION ANALYSIS**

### **4.1 Identification and evolution of research hotspots based on keyword co-occurrence**

Table 5-a and 5-b respectively list the top 15 keywords in Chinese and English literature on influencing factors of CSRD according to the frequency of keyword co-occurrence. Although keywords account for a small proportion in an article, they are highly concentrated summaries of the whole article and represent research hotspots in a certain research field. The year in the table represents the time when the co-occurrence frequency of corresponding keywords first appears, but it is not necessarily the time when keywords first appear (Zhang, Bai, Su, and Chang, 2016).

The ranking of keyword frequency in Table 5-a and Table 5-b reflects, to some extent, the research hotspots in the field of influencing factors of CSRD from 2009 to 2021. 'Corporate Social Responsibility', 'Influencing factor', 'Corporate governance', 'Environmental. Disclosure is a hot research topic in Both Chinese and English areas. However, the research hotspots in Chinese and English areas are different. The Chinese area mainly focuses on the influence of "political connection", "institutional environment" and "internal control" on CSR disclosure and "information disclosure quality". The English section mainly focuses on "financial performance", "performance", "management", "legitimacy", "strategy", etc.

**Table 5-a:** Ranking of the top 15 keywords in Chinese literature.

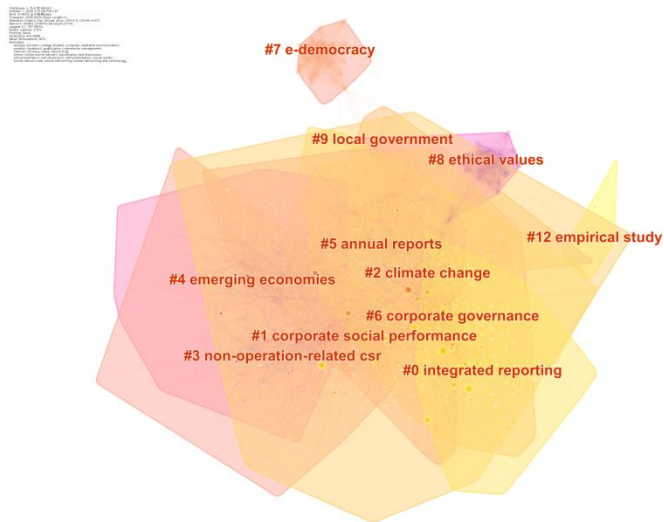
The sorting	Keyword sorting		
	Frequency (Freq)	year	keywords
1	75	2009	Environmental information disclosure
2	62	2009	Corporate social responsibility
3	46	2009	Information disclosure
4	32	2010	Corporate social responsibility information disclosure
5	32	2009	Factors affecting the
6	20	2009	Quality of information disclosure
7	14	2009	Environmental information
8	14	2010	Social Responsibility Report
9	12	2009	The listed company
10	9	2016	Quality of environmental information disclosure
11	8	2013	Corporate governance
12	7	2015	Political association
13	7	2014	Marketization process
14	6	2015	The internal control
15	6	2016	The institutional environment

## 4.2 Influencing factors of CSRD based on literature co-cited knowledge graph

Figure 3 shows the co-citation operation results of English literature. It can be seen from Figure 3 that the co-citation analysis clustering of English literature has a total of 881 nodes, 4419 lines and 11 clusters. After removing the smaller and non-major clusters, a total of 7 clusters are obtained. Then, LLR algorithm (logarithmic likelihood ratio algorithm) is used to generate clustering labels automatically. The name of the cluster is extracted from the keywords cited in the literature, which cannot fully represent the characteristics of the cluster, and it still needs to be interpreted in detail in combination with the literatures in the cluster. Table 6 and Table 7 show the main clustering in English and Chinese regions. Cluster #0 is integrated reporting, cluster #1 is corporate Social performance, cluster #2 is climate change, and cluster #2 is integrated reporting. The theme of cluster #3 is non-operation-related CSR, cluster #4 is emerging economics, and cluster #5 is annual Report. The topic of cluster #6 is Corporate Governance. The topic of Cluster #0 in Chinese area is information disclosure quality, cluster #1 is environmental information, cluster #2 is information disclosure, cluster #3 is environmental information disclosure, cluster #4 is influencing factors, and cluster #5 is information disclosure quality of social responsibility.

**Table 5-b:** Ranking of the top 15 keywords in English literature.

The sorting	Keyword sorting		
	Frequency (Freq)	year	keywords
1	775	2009	corporate social responsibility
2	503	2009	determinant
3	392	2009	corporate governance
4	374	2009	disclosure
5	352	2009	financial performance
6	338	2009	performance
7	289	2009	management
8	254	2009	impact
9	198	2010	sustainability
10	197	2009	company
11	195	2009	responsibility
12	194	2009	firm
13	189	2009	legitimacy
14	174	2009	environmental disclosure
15	137	2010	strategy



**Figure 3.** Cocitation knowledge map of English literature based on LLR algorithm.

Classical literature (highly cited literature) represents the knowledge base of a certain field (Wu and Fu, 2019). The "Network Summary Table" function of Citespace was used to obtain all literatures with citation frequency greater than 2. By sorting the citation frequency of literatures in each cluster, the highly cited classical literatures in each cluster were screened out. Frontier literatures (cited literatures with many classical literatures) represent research hotspots and trends in a certain research field (Wu and Fu, 2019). Citing literatures with highly cited classical literatures were obtained by using Citespace's "List Papers to the Cluster" function. Citing literatures were sorted according to the Citing times, and frontier literatures of each Cluster were obtained. In the following part, the research evolution process of each cluster in English region will be systematically described by combining classical literature and frontier literature.

**Table 6.** Main clustering in English region based on LLR algorithm.

Clustering number	The tightness of the cluster	Mean year of publication	LLR log likelihood tag word
# 0	0.755	2012	integrated reporting
# 1	0.622	2009	corporate social performance
# 2	0.753	2007	climate change
# 3	0.798	2007	non-operation-related csr
# 4	0.687	2005	emerging economics
# 5	0.757	2007	annual report
# 6	0.844	2011	corporate governance

**Table 7.** Main clustering of Chinese area based on LLR algorithm.

Clustering number	The tightness of the cluster	Mean year of publication	LLR log likelihood tag word
# 0	0.912	2015	Quality of information disclosure
# 1	0.751	2010	Environmental information
# 2	0.612	2012	Information disclosure
# 3	0.760	2014	Environmental information disclosure
# 4	0.866	2013	Factors affecting the
# 5	0.951	2017	Quality of social responsibility information disclosure

**The research topic of #0 clustering is integrated reporting.** In recent years, international listed companies have adopted different forms of information disclosure according to the requirements of various countries, mainly including Sustainability Report, Corporate Social Responsibility Report (CSR), International Comprehensive Report (IIRC) and Environmental, Social and Corporate Governance (ESG) information Disclosure Report. Remedy the problem of insufficient environmental information disclosure in financial reports ( Zhang , Li, li, and Li,

2017). As environmental, social and other non-financial information has attracted more and more attention, comprehensive reports, as a carrier integrating financial information and non-financial information, have gradually entered the category of mainstream reports (Cao, S.J., 2017). Comprehensive reporting, proposed by the International Comprehensive Reporting Committee (IIRC) established in 2010, has become a new trend of global information disclosure (Hu, and Deng, 2013). This cluster focuses on the determinants of aggregate reporting. Kolk et al. (2010) explored the factors associated with voluntary decision making to ensure social, environmental and sustainability reporting and found that companies operating in countries/regions with stronger stakeholder orientation and weaker governance enforcement mechanisms were more likely to adopt sustainability assurance statements (Kolk, 2010). Fifka (2011) discusses the determinants of CSR reports, mainly including five internal determinants (company size, industry, financial performance, social and environmental performance and management attitude) and three external determinants (country/region, stakeholder interests and media pressure) (Fifka, 2013). In addition, scholars from different countries/regions have carried out relevant studies with different research methods and samples. Existing studies have found that company size (Ali et al., 2017; Frias - Aceituno, 2012; Kansal, 2014; Duran & Ignacio, 2018; Beatriz et al., 2010) and industries (Ali et al., 2017; Kansal, 2014; Duran & Ignacio, 2018;), price-to-book ratio (Duran and Ignacio, 2018;), system risk (Duran and Ignacio, 2018;), profitability (Ali et al., 2017) has a positive impact on enterprises' CSR disclosure, but Duran & Ignacio (2018) conducted a study on 643 Latin American companies from 2006 to 2015 and found that profitability has a negative impact on companies' CSR disclosure. Jensen et al. (2012), based on institutional theory, found that companies issuing traditional sustainability reports (TSR) and those issuing comprehensive reports (IR) are significantly different in terms of institutional conditions under which they operate, and companies issuing IR are more likely to come from countries with higher investor protection. It is also found that a country's financial system, educational and labor systems, cultural systems and economic systems determine whether companies issue IR reports, while political factors have no significant influence on this (J. C. Jensen, and Berg, N, 2012). Although the research on IR has been enriched from different perspectives with different research objects, the research on IR is still limited at present. Most of the researches focus on large companies in developed countries and ignore developing countries and small and medium-sized enterprises.

**The research topic of #1 clustering is corporate Social performance.** Carroll (1979) first proposed the theoretical framework of corporate social performance. He divided corporate social performance into three levels: "corporate social responsibility", "social problem management" and "corporate social response", but did not clearly explain what corporate social performance is (Liu.M, 2012).

This cluster mainly focuses on the impact of corporate social performance (CSP) on corporate social responsibility information disclosure (CSRDI). Hooghiemstra (2000) found that CSP has an important impact on CSRDI, and enterprises with high social performance tend to disclose more social responsibility information, which means that enterprises prefer to disclose "good news" rather than "bad news", and corporate social responsibility information disclosure is imprinted with "self-praise" to a certain extent (Hooghiemstra, 2000). In addition, some scholars focus on the relationship between corporate social performance (CSP) and corporate financial performance (CFP). Surroca et al. (2010) investigated the role of corporate intangible resources in regulating the relationship between corporate social responsibility and financial performance, and found that there was no direct relationship between corporate responsibility and financial performance, but only an indirect relationship, which depended on the mediating

role of corporate intangible resources (Surroca, 2010). Barnett et al. (2012) found a U-shaped relationship between corporate social performance (CSP) and corporate financial performance (CFP), and believed that stakeholder influence (SIC) is the basis of the ability to transform social responsibility into profit (Barnett, 2012). After reviewing the frontier literature, Chen et al. (2011) integrated the measurement indexes of CSP and proposed a new method to calculate CSP index based on DEA (Chen, 2011). Michelin et al. (2013) investigated the relationship between strategic corporate social responsibility and corporate performance (G. Michelin, Boesso, G., and Kumar, K, 2013). Guiral et al. (2014) explored whether superior corporate social performance (CSP) would affect investors' judgment of financial evaluation (i.e. future profitability, liquidity and financial risk) (Guiral, 2014). Through the analysis of the frontier literature, it is found that most of the researches are empirical researches, and the case studies can be used to expand the current researches in the future, and the differences in the industry are not considered.

**The research topic of #2 clustering is climate change.** In recent years, new environmental issues such as global warming and climate change have become hot topics of global concern. UN Secretary-General Ban Ki-moon has said: "Climate change is the defining challenge of our time. It is more fundamental and fundamental than the global challenges we face to reduce poverty, maintain economic growth, and ensure peace and stability." Due to the "contribution" of commercial enterprises to climate change and environmental deterioration, they have been criticized by the government, decision-makers, environmentalists and other aspects, and new responsibilities have been assigned to the business world (Chen, Y, 2014). Environmental responsibility is an important part of corporate social responsibility. Enterprises should fulfill their social obligations to protect the environment while pursuing the maximization of their own and shareholders' economic interests (Li, and Zhang, 2016).

Through the analysis of the frontier literature, the research hotspots in recent years mainly focus on the influencing factors of environmental disclosure and carbon information disclosure. Jose-manuel et al. (2010) explore the role of boards of directors in disseminating ghG-related information (Prado-Lorenzo, 2010). Sonia Maria Da et al. (2010) took large Portuguese companies as samples to analyze the degree and influencing factors of their environmental disclosure, increasing international research on environmental disclosure (da Silva Monteiro, 2010). Luo et al. (2012) studied how global top 500 companies respond to climate change challenges in terms of carbon disclosure strategies (Luo, 2012). At present, most studies on environmental disclosure take large companies as samples, the analysis period is short, the types of environmental disclosure information are not distinguished, and the quality of environmental disclosure and its influencing factors are not investigated. Future studies can improve the above deficiencies.

**The research topic of #3 clustering is non-operation-related CSR.** Carroll (1991) proposed the "corporate social responsibility pyramid" model, believing that corporate social responsibility activities include four dimensions: economic, legal, moral and charitable activities (Carroll, 1991). Schwartz & Carroll (2003) modified the framework by combining the charity dimension with the moral dimension, forming a three-dimension framework including economic, legal and moral dimensions (Schwartz, 2003). Based on Carroll's theoretical framework, Lee et al. (2013) divided CSR activities into operational RELATED CSR activities (OR CSR) and non-operational CSR activities (N-OR CSR) for the first time. The former includes improving product quality, employee relations or treatment, and corporate governance; The latter include activities to promote human rights, develop community relations, support environmental issues and encourage diversity (S. Lee, Seo, K., and Sharma, A, 2013).

This cluster mainly focuses on the impact of OR CSR and N-OR CSR on corporate financial performance (CFP). Lee et al. (2013) studied the relationship between corporate social responsibility and corporate performance in aviation industry and found that OR CSR activities had a positive impact on corporate performance (S. Lee, Seo, K., and Sharma, A, 2013). Lee et al. (2013) took the American catering industry as the research object and compared whether OR CSR and N-OR CSR activities had different impacts on CFP under different economic conditions (recession period and non-recession period). The study found that OR CSR and N-OR CSR activities had no significant impacts on CFP (S. Lee, Singal, M., and Kang, K. H, 2013). **Error! Reference source not found.** Yoon & Chung (2018) discussed the impact of corporate social responsibility on internal and external stakeholders of catering enterprises' financial performance. It is found that external CSR improves the company's market value, but is negatively correlated with operating profitability. Internal CSR improves the company's operating profitability, but has no effect on the company's market value (Yoon, 2018). Inoue et al. (2011) decomposed CSR into five dimensions of employee relations, product quality, community relations and diversity of environmental issues based on the company's voluntary activities for five stakeholder issues, and discussed the impact of each aspect on the financial performance of companies in tourism-related industries (Inoue, 2011). Wu et al. (2013) took 162 banks from 22 countries/regions as samples to explore the correlation between corporate social responsibility (CSR) and financial performance (CFP), and discussed the motivation of banks to participate in CSR (Wu, 2013). **Error! Reference source not found.**

**The research topic of #4 cluster is emerging economics.** Most previous studies on CSR have focused on developed economies that started CSR earlier. In recent years, studies have gradually expanded to emerging economies and transition economies such as China, India, Malaysia, Bangladesh and Turkey. Belal & Momin (2016) used the Desk-based research method to review and forecast CSR studies in emerging economies and found that CSR studies in emerging economies were mainly concentrated in Asia-Pacific and Africa. Content analysis is mostly used to analyze the quantity and quality disclosed in annual reports, which indirectly explains the reasons for enterprises to carry out social responsibility practices. They point out that CSR in emerging economies is mainly driven by external forces, with pressure mainly coming from parent companies, international institutions and international markets (Belal, 2009). Arrive & Feng (2016) assessed the quality of corporate social responsibility and disclosure practices by BRICS companies. The study found that companies in South Africa had low CSR levels compared to India and Brazil due to their voluntary participation in CSR practices. In China and Russia, stakeholders such as managers, consumers and communities are seeking improvements in the disclosure of CSR practices (Arrive, 2018). Shaomin Li et al. (2010) discussed how factors at the national, industry and company levels affect CSR in Russia, Brazil, India and China (Li, 2010). Through further review of frontier literature, it is found that, in addition to content analysis and other research methods, some scholars have recently begun to directly explore the management motivation behind corporate social responsibility through in-depth interviews and other methods (Belal and Owen, 2007; Owen, 2004, 2008).

**#5 The research topic of clustering is annual Reports.** As a carrier for enterprises to disclose relevant financial and non-financial information to stakeholders, the annual report is the main data source for scholars to conduct CSR research. Matten et al. (2008) discussed the differences in CSR among countries and why they are different (Matten, 2008). **Error! Reference source not found.** Aguilera et al. (2007) integrated organizational justice, corporate governance and various capitalist theories and provided a multi-level theoretical model to explain why corporate organizations are increasingly involved in corporate social

responsibility (CSR) programs, thus demonstrating the potential for positive social change (Aguilera, 2007). Rimmel et al. (2013) explored the motivation of biodiversity disclosure by studying the official website and annual reports of Swedish companies and interviewing company representatives (Rimmel, 2013). Sumit Lodhia et al. (2014) discussed the development of sustainable development reports in mining industry in the form of literature review (Lodhia, 2014) **Error! Reference source not found..**

**The research topic of #6 clustering is corporate governance.** With the development of corporate governance theory, the relationship between corporate governance and corporate social responsibility information disclosure begins to draw attention (Wang, Wang, and Jia, 2013). All dimensions of corporate governance will have an important impact on the work of enterprises at all levels of social responsibility (Qin, Wang, and Zhao, 2018). This cluster mainly focuses on the impact of corporate governance characteristics on CSR, with most empirical articles. Characteristics of corporate governance at present academia mainly divided into two categories to explore the influence of corporate governance on corporate social responsibility disclosure: one is the company's management and the board of directors characteristics, including board independence, CEO duality, gender diversity (mainly refers to the percentage of women directors on the board), the presence of independent directors, senior management personnel of the personal characteristics, etc. Second, the characteristics of the company's equity structure, including the shareholding ratio of management, public shareholding ratio and foreign shareholding ratio (Siddiqui J, 2010; Qin Xuzhong et al., 2018).

From the perspective of the characteristics of corporate management, the influence of the independence of the board of directors and the duality of CEO on CSR has been widely concerned by scholars at home and abroad in relevant studies (Qin, X.Z et al., 2018). Existing studies show that board independence has a positive impact on corporate social responsibility information disclosure (Khan et al., 2013; Villiers et al., 2011; MI et al., 2013; Jo et al., 2011). However, some scholars have found that board independence has no impact on sustainability disclosure (G. Michelon, and Parbonetti, A, 2012).

As for the impact of CEO duality on corporate social responsibility information disclosure, some scholars found that CEO duality is positively correlated with corporate social responsibility information disclosure (Jizi, 2014). In terms of corporate social responsibility, entrepreneurs with a high sense of social responsibility can better promote enterprises to fulfill social responsibility and disclose social responsibility information by serving as general manager (Qin, X.Z, et al., 2018). However, some scholars have found that THE DUality of CEO has no relationship with corporate social responsibility information disclosure (Michelon et al., 2012; Khan et al., 2013). Giannarakis et al. (2014) studied 366 companies in the 2011 Fortune 500 as samples and found that companies with CEO duality released less CSR information (Giannarakis, 2014). As for gender diversity (percentage of female directors on the board), the study found that the number of women on the board was positively correlated with corporate social responsibility information disclosure (Bear et al., 2010; Post et al., 2011; Liao et al. 2014). Khan (2010) took the corporate social responsibility report of Bangladesh Private Commercial Bank (PCB) as the research object and found that there was no significant relationship between female representation on the board of directors and corporate social responsibility information disclosure (H. U. Z. Khan, 2010). Some scholars have found that the existence of audit committee is positively correlated with CSR (Khan et al., 2013; Walls et al., 2012; Said et al., 2009). Liao et al. (2014) took 329 largest companies in the UK as samples and found that boards with environmental committees showed higher ecological transparency, but

if the committees were not large enough, independent or active, their role would be insignificant (Liao, 2015).

Management shareholding ratio, public shareholding ratio and foreign shareholding ratio completely describe the characteristics of the company's shareholding structure (A. Khan, Muttakin, M. B., and Siddiqui, J, 2013), shareholders are important stakeholders of an enterprise, and different shareholder groups have different influence on the operation of the enterprise due to different shareholder structures (Qin, X.Z et al., 2018). For a long time, the influence of management shareholding ratio on voluntary disclosure has been the focus of accounting researchers. Previous studies have found that the proportion of managerial ownership is negatively correlated with the level of voluntary disclosure of enterprises (Gray and Chau, 2010; Khan, 2013).

Different from companies with a higher proportion of management shares, companies with a higher proportion of public shares are often jointly invested by multiple investors. The ownership dispersion among investors will intensify the pressure of corporate disclosure and promote the spontaneous disclosure of enterprises (Cullen & Christopher, 2002; Ullmann, 1985). Existing studies have found that there is a positive correlation between public shareholding ratio and corporate social responsibility information disclosure (Chau & Gray, 2002; Due et al., 2015; Khan, 2013).

When the management and owner are separated geographically and foreign investors hold a higher proportion of shares, they usually have higher requirements on information disclosure, so as to better understand the operating status of the enterprise (Schipper, 1981; Bradbury, 1991). On the other hand, because foreign investors are in foreign markets and may have different values and knowledge backgrounds, companies with higher foreign ownership may disclose more information publicly, including social and environmental information, to help them make better decisions. Existing studies have found that there is a positive correlation between foreign ownership ratio and corporate social responsibility information disclosure (Ayuso et al., 2007; Haniffa & Cooke, 2005). But Aray & Garanina (2020) based on legitimacy theory and agency theory, discusses the foreign shareholders and board members of Russia's corporate social responsibility information disclosure, found that foreign ownership does not enhance corporate social responsibility information disclosure, as most foreign shareholders in the Russian company registered offshore, To allocate tax revenue more efficiently (Garanina, 2021).

Different from the English area, the Chinese area mainly focuses on the quality of environmental information disclosure and social responsibility information disclosure. Scholars selected different samples to carry out relevant research. Wang Yong and Liu Wengang (2012) constructed an evaluation system for CSR quality of retail enterprises, and empirically analyzed the CSR quality and its influencing factors of 30 listed retail enterprises in China. It is found that the proportion of independent directors, enterprise size, earnings, financial risk and third-party evaluation are the main factors that significantly affect the quality of listed retail CSR, while ownership concentration has no significant impact on the quality of information disclosure (Wang, and Liu., 2012). Wang Jianling et al. (2013) constructed a quality evaluation system of financial social responsibility based on stakeholder theory, and found that ownership structure, board governance and third-party audit were important factors affecting the quality of CSR of Chinese financial enterprises (Wang, J.L et al., 2013). Tang Xiaojian (2016) investigated the mechanism of internal control on CSR quality under a weak institutional environment, and found that internal control has a positive regulation effect on CSR quality. Weak institutional environment inhibits the improvement of CSR quality, and meanwhile

inhibits the positive regulation effect of internal control on CSRD quality (Tang,X.J, 2016).Li Hong and Yuan Xiaoqian (2019) found that agency cost was negatively correlated with the quality of environmental information disclosure based on the moderating effect of the hometown sentiment of internal management and the external marketization process, and the quality of environmental information disclosure would decrease with the increase of agency cost (Li, and Yuan, 2019). He Pinglin et al. (2019) found that the characteristics of senior executives (financial, academic, overseas experience) and legal environment are positively correlated with the quality of information disclosure of listed companies ( He, SUN, Ning, and Chen, 2019). Zou Pingji studied the influence of Confucian culture on corporate social responsibility information disclosure based on the data of A-share listed companies in Shanghai and Shenzhen from 2009 to 2018, and found that Confucian culture can promote corporate social responsibility information disclosure and improve the quality of disclosure (Zou, 2020). August good and Feng Yongjia based on China's a-share listed companies from 2008 to 2017 samples and China's economic policy uncertainty index, examines the economic policy uncertainty on the influence of corporate social responsibility information disclosure, found that when economic policy uncertainty rises, the enthusiasm of companies voluntarily release social responsibility report A significant increase in (Liu, and Feng, 2020). Li Minxin et al. discussed the influence and internal mechanism of environmental pollution liability insurance on the quality of environmental information disclosure of enterprises, and the research results showed that environmental pollution liability insurance significantly improved the quality of environmental information disclosure of enterprises (Li, and Wang, 2021). In addition to studying the influencing factors of CSRD quality, some scholars also studied the relationship between CSRD quality and enterprise value.Dai Wen et al. (2016) discussed the relationship between the quality of environmental information disclosure and corporate value, and the study showed that the quality of corporate environmental information disclosure had a positive impact on corporate value, and the existence of institutional investors effectively weakened the impact of environmental information disclosure quality on corporate value (Chen,S.Y, 2015). Wang liping, such as empirical analysis on the Shanghai and shenzhen stock market in 2013-2017, the enterprise environmental data of heavy pollution industry, the study found that environmental information disclosure quality and enterprise value has significantly positive correlation between the environmental information disclosure has the effects of "communication", reduces the enterprise and the degree of information asymmetry of the outside world, promote the enterprise value significantly increased; The relationship between the quality of environmental information disclosure and enterprise value shows great differences in different degrees of marketization. Compared with areas with high degree of marketization, enterprises located in areas with low degree of marketization have a greater contribution to the improvement of their value through environmental information disclosure. (Wang, Li, and Li, 2020), Tang Yongjun et al tested the relationship between environmental information disclosure quality, internal control "level" and enterprise value through empirical analysis of unbalanced panel data of listed companies in heavy pollution industry from 2010 to 2016. The empirical results show that the improvement of the quality of environmental information disclosure plays a significant role in promoting enterprise value. However, the improvement of the level of internal control has the effect of "binding agent" and "inhibiting adjustment", that is, with the improvement of the level of internal control, the improvement of the quality of environmental information disclosure on enterprise value is gradually inhibited. (Tang, Ma, and Xia, 2021).

## 5 CONCLUSIONS AND PROSPECTS

### 5.1 Conclusions

Consistent with the research of Ali et al. (2017), this paper finds that corporate governance mechanism and other corporate characteristics (such as industry and scale) promote companies to disclose social responsibility information.

The main conclusions of this paper are as follows:

**First**, compared with the number of articles published in English journals, the number of articles published in Chinese journals is relatively small, and the growth rate has been tepid. Meanwhile, some Domestic scholars choose English journals to publish their research results in the same period. Most of the relevant research results in The English area are published in the Journal of Business Ethics, Journal of Cleaner Production and other journals, famous journals in the Chinese area, For example, Nankai Management Review, China Soft Science, Accounting Research and other journals have also published relevant studies on the influencing factors of CSR, but the number of articles published is relatively rare.

**Secondly**, McWilliams A (2001) became the most influential scholar in the field of CSR influencing factors with the CSR supply and demand model. Other highly cited authors are also important promoters in the field of CSR research. For example, the corporate social responsibility pyramid proposed by Carroll (1979) has become the most widely used concept. In comparison, although Chinese scholars are among the most frequently cited authors in The English region, there are no Chinese scholars among the highly cited authors, and there are no highly cited in the Chinese region. To some extent, this indicates that the international academic influence of Chinese scholars in this field needs to be strengthened.

**Third**, the main research force of CSR influencing factors is distributed in North America, Asia, Europe and Australia. China topped the list with 763 articles, followed by the United States with 393. Five of the top 10 countries in the world in terms of publication volume are European countries, which are important regions for the study of CSR influencing factors. Among the leading research institutions in CSR influencing factors, Univ Salamanca in Spain topped the list with 42 publications, and four Chinese research institutions ranked in the top 10. The number of articles published by Chinese scholars and the contribution of research institutions are gradually increasing, but compared with the leading position of European and American scholars in this field, there is still a lot of room for development.

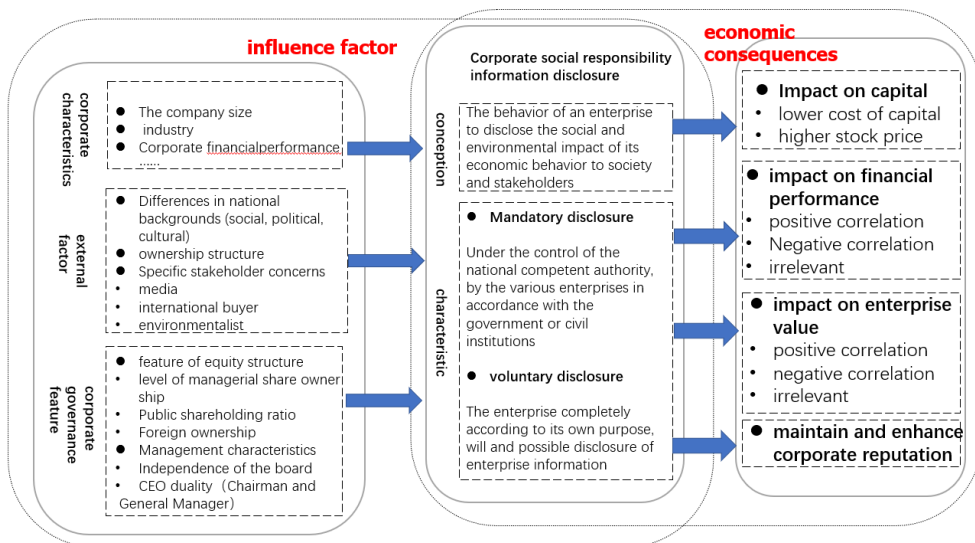
**Fourthly**, keyword co-occurrence of CSR influencing factors shows that research on CSR influencing factors focuses on environmental information disclosure, corporate governance and financial performance, mainly focusing on the impact of corporate governance characteristics on corporate social responsibility information disclosure and the relationship between corporate social responsibility information disclosure and corporate financial performance. The research data mainly came from comprehensive reports and annual reports of enterprises.

**Fifthly**, the analysis results of literature co-cited knowledge graph show that the research on influencing factors of CSR in English region can be divided into 7 mainstream research directions, which are: Integrated reporting, Corporate Social Performance, climate change, non-operation-related corporate social responsibility CSR, Emerging economics, annual Reports and corporate governance. CSR related research in Chinese area can be divided into six mainstream research directions: information disclosure quality, environmental information, information disclosure, environmental information disclosure, influencing factors and social responsibility information disclosure quality. It can be found that, different from

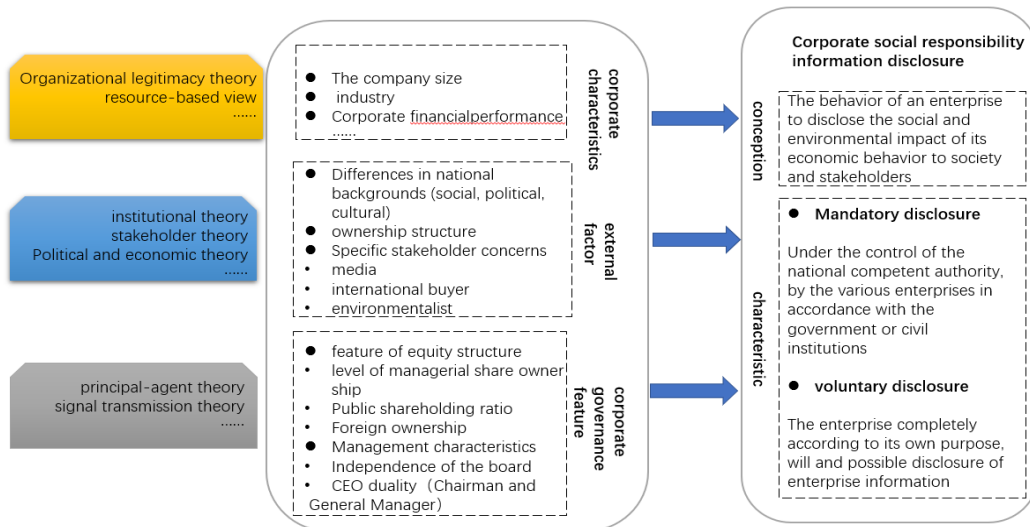
relevant studies in English area, Chinese area mainly focuses on the quality of environmental information disclosure and corporate social responsibility information disclosure.

**Sixthly**, There are differences in the influencing factors of CSR information disclosure between developed and developing countries. The disclosure of CSR information in developed countries is mainly influenced by shareholders, investors and environmentalists, while that in developing countries is mainly influenced by foreign investors and media. It is also found that the pressure of CSR information disclosure in developing countries is increasing, and investors and other stakeholders put forward higher requirements for CSR information disclosure in developing countries.

Combined with the seven research topics of influencing factors of corporate social responsibility information disclosure summarized above, this paper constructed the current research status of influencing factors of corporate social responsibility information disclosure (see Figure 4) and relevant theoretical framework (see Figure 5).



**Figure 4.** Research status of CSRD influencing factors.



**Figure 5.** Theoretical basis.

As can be seen from the figure, the current academic circles mainly study CSRD from two aspects of influencing factors and economic consequences based on organizational legitimacy theory, resource-based view, system theory, stakeholder theory, political and economic theory, principal-agent theory and signal transmission theory. There are three main influencing factors of CSRD: corporate characteristics, external factors and corporate governance characteristics. Company characteristics mainly include company size, industry and financial performance, etc. External factors mainly include national background differences (social, political, cultural), the concerns of specific stakeholders, ownership structure, etc. The characteristics of corporate governance mainly include the characteristics of ownership structure (proportion of management ownership, proportion of public ownership and proportion of foreign ownership) and characteristics of management (independence of board of directors, Duality of CEO, etc.). The above factors may cause economic consequences in four aspects by influencing CSRD. The first is the impact on the cost of capital, which may reduce the cost of capital or increase the stock price. The second is the impact on the financial performance and corporate value of enterprises. The above factors may have a positive or negative impact (or no impact) on corporate financial performance and corporate value by influencing corporate social responsibility information disclosure. Finally, an enterprise's active disclosure of social responsibility information may maintain or enhance its reputation. There are few researches on the quality of corporate social responsibility information disclosure and other consequences except economic consequences, which can be carried out in the future.

## 5.2 Outlook

Based on the research of Ali et al. (2017) on influencing factors of CSRD in developed and developing countries, this paper adds the research results of influencing factors of CSRD in Chinese area and uses Citespace to analyze influencing factors of corporate social responsibility information disclosure from different perspectives, so as to provide useful reference for future research.

Based on the literature cited knowledge map analysis, from the point of the research methods, most of current research on the influence factor of CSRD with empirical study is given priority to, through multiple regression analysis of certain aspects of the test factors (company characteristics/external/internal factors, etc.) influence on CSRD, or on the relationship between the antecedent and consequence variables to test, Its advantage is that it can obtain universal conclusions based on large sample data inspection, but there are also problems that it is difficult to measure variables and can not systematically analyze the influence of factors at all levels, lack of case studies and questionnaire design, and method innovation can become the direction of future research. In future studies, qualitative comparison method (QCA) can be used to explore the results of CSRD in a combination of multiple factors. Qualitative comparison method (QCA) adopted by configuration analysis combines the respective advantages of qualitative analysis and quantitative analysis, and has been widely adopted by scholars in the field of sociology in the past decade (Du, and Jia, 2017).

From the point of the research object, and Ali (2017) found that, although the studies of CSRD factors mostly in the developed economies of large companies as the research object, but part of the research is to expand in emerging economies and transition economies, with China, India, South Africa and other countries as the research object of the research is gradually increased. Consistent with the findings of Ali (2017), there are few studies on small and medium-sized companies. Although data from large companies are easier to obtain, the research results are not necessarily applicable to small and medium-sized companies, and future studies can use data from small and medium-sized companies to expand the current research.

This paper mainly has the following shortcomings: First, this paper only selects academic papers from CNKI and Web of Science core collection databases, and the search strategy uses limited keyword combinations, which will result in the omission of some research results, especially related research reports and papers not included in the database. Secondly, although Citespace is used in this paper to conduct bibliometric analysis on the research results of CSRD influencing factors, which can present the overall picture of the research on CSRD influencing factors, the analysis of each cluster needs to be further carried

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# ***A qualitative study on sustainable marketing and strategy applied to creation of value according to SDG's 2030***

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## **ABSTRACT**

The main purpose of this research is to highlight the role of sustainable marketing and strategy as business disciplines, oriented to develop solid strategies aimed at meeting the corporate objectives and the Sustainable Development Goals (SDGs) 2030 of the United Nations. This work, in its initial stages, is focusing on documenting the experiences of entrepreneurs and organizations from various industries in Baja California, Mexico, such as medical, maquila, transportation, electronics, electro domestics, restaurants, quality, entrepreneurship, among other relevant local industries. With this, it can be implied that sustainable precepts, according to SDGs 2030, are a parameter of certainty that companies and the private sector can take advantage to rethink their traditional objectives and generate strategies focused on sustainable development. And it is in this balance where the efforts of those companies defined or conceptualized as sustainable are mainly concentrated. To visualize how the companies participating in the study plan to integrate their objectives and strategies into the 2030 Sustainable Development Goals (UN), a qualitative study (focus group session) with 11 participants of different industries and corporate concepts is presented with its results. Participants are part of an academic course (Sustainable Business), which is aimed to improve conscience and value of sustainable precepts applied to business. The main results of the focus group establish the testimony of participants, who enhance the strategic planning elements of their companies and their business objectives that can be matched with the United Nations (UN) SDGs 2030. Also, results show the application of these objectives to create innovative strategies of business and marketing with a sustainable approach and orientation.

## **1 INTRODUCTION**

Sustainability and marketing are business strategic concepts that create and provide value to contemporary enterprises. The American Marketing Association (2013) defines marketing as follows:

“The activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offers that have value for customers, clients, partners, and society at large”.

Kotler and Keller (2016) also mention the importance of the creation, communication, and delivery of value to customers. The influence of marketing is oriented mainly to satisfy stakeholders and society at large in a value creation ecosystem. As Sivarajah et al. (2020) state, it is very important not only to create actions oriented to business and sustainability, but also it is very relevant to communicate and deliver value to consumers and society at large.

On the other hand, sustainability and sustainable development are concepts that can be defined according to the context and research area that is considered. For instance, Brown, Hanson, Liverman and Merideth, Jr. (1987) define the perspective of sustainable world as follows:

“One in which humans can survive without jeopardizing the continued survival of future generations of humans in a healthy environment”.

Sustainability also influences individual decision-making, reaching the family, individual and general citizen level. The World Commission on Environment and Development, in its report entitled "Our Common Future" (1987), defines sustainable development as "meeting the needs of the present generations without compromising the ability of future generations to meet their own needs”.

That is why, starting from a clarity in the definitions of marketing and sustainable development, a research opportunity is glimpsed to strengthen the transcendental role of companies with the creation, communication and delivery of superior value that will be required by future generations and more specifically, by its consumers and society at large. Creating the present welfare is promoting a better future for generations. And enterprises are not an exception: they are created to overcome time and the existing restrictions prevailing in the global business arena. Regarding the interest aroused by the topic of business and sustainability, Schaltegger, Hansen, and Lüdeke Freund (2016) establish the following: "

“Business models are particularly relevant in the context of sustainability because they emphasize the logic of value creation of a company”.

## **2 THE ROLE OF SUSTAINABLE MARKETING AND SDG 2030 IN THE VALUE CREATION**

Starting from the definitions of marketing and sustainable business, the development of marketing strategies can be directly focused to enable a company to have a sustainable approach. By incorporating the reduction of excessive consumption materials, influencing a reduction in emissions and carbon footprint, and interacting in a healthy way with its stakeholders and with its economic, social, and ecological environment, marketing becomes an indispensable discipline to generate superior value throughout the structure of the companies.

In times of economic crisis, such as the one experienced today mainly due to the COVID19 pandemic, it is crucial to address the main problems of uncertainty and poverty generated by the lack of economic activation and confinement, which are aspects that are also within the field of marketing attention with a sustainable approach. In this regard, Kirchgeorg and Winn (2006) define sustainable marketing:

“The planning, coordination, implementation and control of all market transactions, in such a way that a sustained satisfaction of consumers is achieved, and the achievement of corporate objectives is guaranteed, and, at the same time, the reduction of social and ecological impact, in such a way as to promote the restoration of ecological and social health”.

Planning and coordination of market transactions and business actions require frameworks to direct efforts of companies, consumers, and stakeholders. Hence, it is necessary to provide precise objectives and targets to accomplish. According to this, seventeen Sustainable Development Goals (SDGs) were proposed by the United Nations to give direction and perspective to humankind. The SDGs are: 1) No poverty, 2) Zero hunger, 3) Good health and well-being, 4) Quality education, 5) Gender equality, 6) Clean water and sanitation, 7) Affordable and clean energy, 8) Decent work and economic growth, 9) Industry, innovation and

infrastructure, 10) Reduced inequalities, 11) Sustainable cities and communities, 12) Responsible consumption and production, 13) Climate action, 14) Life below water, 15) Life on land, 16) Peace, justice and strong institutions, 17) Partnerships for the goals. As stated by Khalique, Madan, Puri and Parimoo (2021), the SDGs are willing to encompass economical, societal, and environmental dimensions that can help to improve quality of life for future generations and stakeholders around companies.

With this, it is proposed to carry out a study of theoretical-practical content where some insights followed by the managers and participants of the undergraduate Sustainable Business course will be exposed to adapt or create new objectives with a sustainable approach, and the results they hope to obtain in the short, medium, and long term with the implementation of the new objectives and strategies attached to the UN SDGs 2030.

### **3 METHODOLOGY**

#### **3.1 Specific findings and research orientation**

##### *3.1.1. Focus groups*

To clearly visualize how participants and companies included in the study plan to integrate their objectives and strategies to the 2030 Sustainable Development Goals (SDGs), a compilation of academic projects (theoretical/practical) already created in advance and where they have been applied has been carried out. The diffusion and use of the opinions, concepts and reality of marketing and sustainability within the companies has been authorized for research and academic purposes. To obtain the key insights of the participants about this topic, a qualitative methodology was considered to understand the sustainability adoption and insights of participants.

Specifically, it was considered the focus group as the chosen qualitative technique. The American Psychological Association (2022) defines a focus group as follows:

“A small set of people, typically 8 to 12 in a number, who share characteristics and are selected to discuss a topic of which they have personal experience. A leader conducts the discussion and keeps it on target while also encouraging free-flowing, open debate. Originally used in marketing to determine consumer response to particular products, focus groups are now used for determining typical reactions, adaptations, and solutions to any number of issues, events, or topics and are associated particularly with qualitative research”

##### *3.1.2. Research main objectives*

The objectives of research are the following:

- Obtain from participants relevant sustainable strategies aimed at meeting the objectives set by the companies.
- Establish which are the key concepts that are related to sustainability, according to the participants' perspectives expressed in the focus group.
- Show specific examples of the development of marketing strategies with a sustainable approach that are derived from the rethinking of the objectives, according to SDGs 2030.
- Classify the main strategies applied by the companies to promote superior value to the customers.

### 3.1.3. Sample

Considering the characteristics of an ideal sample, this focus group included 11 participants. Participants were students of the subject Sustainable Business at executive university level (oriented to adults that work and, due to work and other circumstances, they have decided to study the major mainly in the afternoon and night). The focus group lasted 40 minutes. Participants' age was between 28 and 55 years old. 45% of participants were female and 55% male. Participants of the focus group stated that they work in different industries, such as health, technology, maquila, electronics, and transportation. Even, some of them mentioned that they are entrepreneurs or participants in the creation of startups and new business concepts. The key characteristics were summarized in the following table:

**Table 5.** Participants (focus group).

#	Participants	Age	Industry	Function
1	Female	51	Health	Co-founder
2	Male	50	Transportation	Director
3	Female	40	Maquila	HR Manager
4	Female	36	Manufacture	Analyst
5	Female	29	Maquila	Manager CS
6	Male	37	Electro domestics	Engineering
7	Male	28	Technology	Technician
8	Male	35	Electronics	Manager tech.
9	Male	27	Transportation	Operations US
10	Male	-	Entrepreneur	Entrepreneur
11	Female	-	-	Coordinator

Note: Main profile of participants (focus group demographics).

### 3.1.4. Data analysis

Review of results were considered, as the dynamics of the focus group was feasible only by zoom, due to the sanitary emergency. The analysis included a correct identification of general topics and student experiential attitudes toward the course. Arguments of participants during the session were included in the results' section.

## 4 RESULTS

The key points stated for the exchange of ideas and discussion in the focus group were the following:

- (1) Sustainability relevance for life and business
- (2) Key words related to sustainability
- (3) Business and sustainability
- (4) Implementation of business or marketing sustainable strategies and SDGs 2030

According to these topics, the results are stated as follows.

#### 4.1 Sustainability relevance for life and business

In the first part of the discussion, some participants mentioned the importance of sustainability in their companies. The relevance to switch and prioritize the principles of sustainability was enhanced by this testimonial:

“If we continue in the same way, we are going to lose a great opportunity for us, our environment is the most important thing because we can be very profitable in the economic issue. We can make a lot of progress in the social aspects, but if the environment is being demerited, then nothing makes sense” (Female, 51 years old, health industry).

Also, some of the participants mentioned that sustainability should be not optional, but a mandatory concept within nowadays companies’ philosophy:

“In order to complement a little bit this aspect, I think that it is necessary to make sustainability a mandatory concept for enterprises. Hum...I would like that my classmates, who are already managers and entrepreneurs, take this into consideration. They are the ones who can make the difference and change nowadays reality. Also, employees can also make suggestions to make the difference. Finally, the legal variable is one that I consider important to complement the course. I mean, if there are (or not) laws that motivate or even force companies to be sustainable” (Female, 29 years old, maquila)

#### 4.2 Key words related to sustainability

Brainstorming technique was applied to get the first word that the participants relate to sustainability as a concept. According to Goldenberg and Wiley (2011), brainstorming, a technique stated in 1953, is relevant nowadays due to the large number of ideas and the freedom to express them in a group.

The main concepts that are related to sustainability, according to participants of the focus group, are the following:

**Table 2.**

Society	Economy	Environment	Ecology	Renewable energies
Profitable companies	Social awareness	Carbon footprint	Competitiveness	Enterprises
Resources	Social development	Technology	Modernity	Human survival
Future	Welfare	Economic growth		

#### 4.3 Business and sustainability

Considering the meaning of what represents to be a sustainable company, private organizations can propose different strategies, at the same time innovative and practical. According to this, Estrella & González (2014) propose this definition of sustainable company:

“A sustainable enterprise incorporates an integral vision of all processes, reduces consumption levels of materials that are employed for production processes, incorporates clean technologies to reduce emissions and the carbon footprint, and establishes a solid chain with suppliers, distributors and buyers that, in the same way, have a sustainability commitment because they are certified to do so”.

Moreover, the next testimonial of participants enhances the relationship of business and sustainability, specifically considering the importance of clean energies within the enterprises:

“It seems that today there are companies that are dedicated to installing solar systems for companies, so that greatly reduces the impact that electricity causes to the planet, which is one of the things that most damages our environment. Nowadays, even in the smallest and remote towns, thanks to the solar panels there is light for citizens and people in several remote places in Mexico” (Female, student).

#### **4.4 Implementation of business or marketing sustainable strategies and SDGs 2030**

Every strategy that is willing to accomplish goals and provide value to customers can be considered a successful business or marketing strategy. And the faster to adopt them, the better. As stated by Kumar, et al. (2012):

“The companies are slow in adopting this concept in marketing strategy. Despite the emergence of sustainability in 1987, companies are planning to make best use of it in their marketing strategy. The companies must give importance to sustainability issues as its importance has already realized. It is a win-win approach both from the side of company and customers”.

Some participants mentioned the importance to implement strategies, and how the companies are introducing sustainability as a differentiator and a disruptive focus. As stated in the next testimonial, sustainability, marketing, and business bring integral solutions to consumers and companies:

“In my company they made a big change. All the plants are already installing solar panels so that the company is 100% solar energy. It is something big that you want to do immediately. It is very motivating to see how they are transforming it. The investment was significant, but it was worth it to differentiate and provide value to customers at the end of the value chain. This relevant action is related to the SDG #7 - affordable and clean energy.” (Female, 36 years old, quality projects).

Depending on the industry there are different aspects to consider about sustainability and environmental solutions. For instance, transportation is an industry closely related to SDGs 2030. This industry reflects that taking care of the environment is very important to lower the individual and collective carbon footprint:

“For me, the goal of sustainable cities and communities (SDG #11) has a lot to do with the issue of transportation. This is important because it also forces you to have the necessary systems so that the units pollute less. Consequently, you can also adhere to all these ecological and sustainable standards for the correct issue of fuel, oils and all materials that are highly polluting” (Male, 50 years old, transportation).

This argument is supported by studies that confirm the importance to adopt strategies efficiently. According to Kumar, et al. (2012), corporate strategies should be adopted faster and in a better way considering the relevance of the strategy:

“Sustainability can be implemented in strategy when the companies will adopt it in their business practices”.

## 5 CONCLUSIONS

There is an opportunity to improve sustainable business or marketing culture of value in the specific companies considered in this particular study in Baja California, Mexico. Moreover, the required sustainable culture is not very present in these companies yet, but participants consider including them and reinforce these concepts in their philosophy and strategic planning. As stated in the following testimonial:

“I think that we lack a lot of culture of sustainability. It is a concept that is not new, but we still have a long way to go. It is very interesting to know that principles such as economics (marketing), ecology and society join to provide value. There is still a lot of work to do in the future about sustainable culture in Mexican companies and around the world in my opinion” (Male, 50 years old, transportation).

Sustainable culture can be enhanced by communicating past and recent research about the topic to practitioners and companies. For instance, to improve the importance of the relationship between sustainability and enterprises, Russo (2008) has created a set of readings and cases oriented to illustrate the importance of contemporary disciplines, such as environmental management. With these readings and cases, culture within universities and people interested in this relevant topic can know more and communicate the importance of business areas and sustainability. All these areas will enhance the strategic strength and results of the contemporary enterprises.

Another relevant conclusion is that all participants in the focus group expressed the usefulness of creating solid bonds between their traditional processes, marketing, and sustainability. Superior value is seen in the reorientation of the key aspect of strategic planning of the company, such as the mission and vision statements. And moreover, in the future replacement of the past objectives and strategies to the new orientation of corporate objectives linked to SDGs 2030.

Participants reflected relevant key words and free associations related to sustainability. The concepts that are shared by most of the participants are: environment, social awareness, and competitiveness. Other concepts such as the carbon footprint and technology are implied in most of their reflections after the course of Sustainable Business.

Other aspects that were enhanced by participants is the need to measure the quality and quantity of sustainability in the companies. Certifications and processes to evaluate the sustainability variables is necessary, with the intention to measure accurately the progress of the studied companies after installing a sustainability program. As stated by some of the participants, contemporary enterprises must adopt a new mindset for future challenges. As stated by Rudawska (2018):

“Business in the twenty first century must respond to legitimate demands of their environment and take up responsibility of the societies they operate in. There are two key motives for doing

so: conviction and their own self-interest. Conviction because sustainability must constitute the nucleus of their business model”.

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# ***Managers' Role in Innovations***

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## **ABSTRACT**

At a Harvard Business School colloquium on “Creativity, Entrepreneurship, and Organizations of the Future”, practitioners discussed the important question, “Can creativity and innovation be managed?” It also appears from current literature that there are critical views on whether and what traditional management approaches contribute to creativity and innovation in business, especially when SMEs are concerned.

This paper aims to discuss the main ideas within the field of innovation management, with a focus on the managers’ role. The presented literature research will serve as a basis for further elaborations and qualitative interviews, including existing evidence of innovation management and leadership theory research.

The results of the literature review point out several hindering and supporting factors for successful innovation management in general and end up with considerations about the special role of SME managers in innovations. It was found, among other aspects, that personal characteristics of managers, a fostering context and business culture, and the involvement of employees at all levels of the company are influential. Innovation leadership (as compared to innovation management) and its enabling, empowering character is shown to better foster innovations. The paper concludes by giving an outlook on further research recommendations in this field.

## **1 INTRODUCTION**

At a Harvard Business School colloquium in 2007 on “Creativity, Entrepreneurship, and Organizations of the Future”, practitioners discussed the important question “Can creativity and innovation be managed?” (Heskett, 2007). It appears from the contributions of the panelists, that there were critical views on whether and what traditional management approaches actually contribute to creativity and innovation in business (Heskett, 2007, p. 1).

One panelist, Ulrich Nettesheim,

“suggested that, if innovation is to be fostered in the conventional organization, ‘the role and practices of management require innovation as well.’” (Heskett, 2007, p. 1).

Another participant, Umesh Gupta, contributed that according to him,

“Innovation [...] is directly proportional to the attitude of senior management” (Heskett, 2007, p. 1),

directly referencing the “mindset”-aspect of management (cf. Szambelan, Jiang, & Mauer, 2020). A very progressive contribution in the same colloquium was provided by panelist Joe Violette, who mentioned the team aspect of innovation which would pose the challenge to managers

“to provide a work environment of openness built on trust where every member of the team feels free to express their views/opinions without fear of ridicule or reprisal” (Heskett, 2007, p. 1).

And finally, there were deliberations in the colloquium that traditional leadership might not be necessary for large innovations which could occur in “open-source environments”. The development of networking technologies could raise the question of whether

“more innovation be carried out in communities that cross corporate lines”,

as summarized by professor Heskett (2007, p. 1).

Inspired by the practitioners’ experiences, the following chapter should shed an updated light on the current situation of managerial roles and the relevance for innovations from the perspective of research findings.

## **2 LITERATURE REVIEW**

The aim of this chapter is to give an overview about the manifold approaches and perspectives which have been and are currently applied in the field of managers’ role in innovations. Several chosen papers are presented, and the main insights are summed up in the end of the chapter. A paper by Damanpour & Schneider (2009) develops direct and moderating hypotheses for the relationship between innovation characteristics, manager characteristics, and innovation adoption in public organizations (p. 495). What is new, according to the authors, is the fact that research about organizational innovation often focusses on facilitating or inhibiting conditions (environmental, organizational) in innovations, not so much on the role of innovation characteristics and their meaning for innovation adoption (p. 495). By characteristics of the innovation, the authors understand this to signify, for example, the cost of the innovation, its complexity, relative advantage or impact. As a second variable, the authors analyze the leaders’ role by examining the influence of managers’ demographic and personal characteristics on the relationship between innovation characteristics and innovation adoption (p. 496).

“Whereas young age and short tenure of managers may negatively influence innovation because they may not be sufficiently familiar with their job and the organization, over time, age and tenure facilitate innovation adoption because managers gain experience, become familiar with critical issues that may arise during the innovation process, and learn how to resolve them” (Damanpour & Schneider, 2009, p. 499).

In addition to that, they point out that education “inspires receptivity to new ideas” (p. 500). However, Damanpour & Schneider come to several conclusions in their large sample study in the Anglo-American region (p. 515), among which the most insightful is that

“personal characteristics [of managers] play a more crucial role in the adoption of innovation than demographic characteristics.”

In their study in France about managers’ intention to innovate in a change context, Massu et. al. (2018) analyzed managers’ innovation behavior (i.e. effects of individual predispositions and organizational variables) under the condition of external influences or “forces”, in their case an organizational change such as the introduction of teleworking as a trigger. They concluded that managers’ positive attitudes towards the field of innovation (in this case “teleworking”) predicts

the intention to innovate (p. 335). Furthermore, they could also show the impact of “organizational support for creativity and innovation” on managers’ intention to innovate (ibid.). Tripathi (2014) researched “the role of managers as agents in successful service innovations” in India, by qualitatively analyzing 70 business executives from 20 different organizations over a period of three years with respect to service innovations. The author concluded by presenting insights along 19 themes, where findings were differentiated between highly successful organizations, successful organizations, and unsuccessful organizations. Their research showed, for example, that in highly successful organizations, innovators are found on all levels of the organization, whereas in unsuccessful organizations “only the top management drives innovation; others are not encouraged.” (p. 20). They furthermore showed that in highly successful organizations, 30-40% of the employees “are trained in innovation”, whereas in “unsuccessful organizations” only “1-2% of top management people are trained in innovations.” (p. 21). To conclude, Tripathi (2014) gives three recommendations to organizations which would like to successfully innovate services:

“Have a clear process for innovation”, “empower employees and support them in risk-taking”, and “get off the fail-safe track” (p. 24).

Birken et al. (2012) investigated middle managers’ role in healthcare innovation implementation and elaborated a theory in which they suggest should be empirically tested in the future. However, the role of middle managers was identified to be impactful, since “teamwork designs have become popular” (p. 1) in the healthcare industry, giving more responsibility to middle management than top management. According to Birken et al. (2012), it is therefore often not the top-management, but actors from the middle management who are more involved with the implementation of innovations. In the healthcare sector, as compared to other sectors, managers contribute to implementing innovations “in addition to clinical responsibilities” (p.9) and

“[managers] may influence healthcare innovation implementation in the following ways: diffusing information regarding innovation implementation; synthesizing information regarding innovation implementation; mediating between strategy and the day-to-day activities required to implement innovations; and selling innovation implementation” (p.10).

These findings are also supported by Urquhart et al. (2018) in a Canadian qualitative study, which points at the necessity to optimize middle managers’ “capacity to fulfill this role” as a “key to improving innovation implementation in healthcare organizations” (p. 421).

In their paper, Szambelan et al. (2020) assess “the relationship between effectuation orientation and perceived levels of market-based innovation barriers and innovation performance” (p. 430). In their paper, they mention innovation barriers, among which they point out “intrafirm innovation barriers” as, for example, a lack of innovation competence, a lack of resources, an unsuitable organizational structure, or “market-based innovation barriers” like competitor rivalry or an absence of market demand for innovation (p. 425). Their study regards market-based innovation barriers as “socially constructed perceptions”, in contrast to seeing innovation barriers as “uncontrollable obstacles” (p. 431). They conclude, among other aspects, that

“lowering perceived innovation barriers might be worth pursuing, as lowered perceived market-based innovation barriers are positively associated with a firm’s innovation performance.” (p. 432).

The focus of this paper lies on the managerial role in innovations, and interestingly, also here, the human factor and especially the leadership aspect seems to be highly impactful ones. Chiu (2018) discusses in his article about employees’ intrinsic and extrinsic motivation in innovation implementation, the moderation role of managers’ persuasive and assertive strategies. The study “introduces manager influence strategy as a contextual variable and examines the moderation of manager influence strategy on the relationship between employee motivation and both employees’ attitudes and their use of an innovation” (Chiu, 2018, p. 233).

“Managers will find that employees with higher intrinsic motivation have a more positive attitude toward using the innovation, but the positive attitude might not turn in to a real action, while employees with higher extrinsic motivation are more likely to comply with the request to use the innovation” (Chiu, 2018, p. 233).

Thus, the author recommends managers to

“create a context that fosters employees’ competence, autonomy, and relatedness to help them to transfer the positive attitude to behavior” (Chiu, 2018, p. 233).

Harel et al. (2020) deal with “the level of manager dominance in processes of innovation promotion, and the impact of that dominance on business innovation and growth” (p. 17). Their study’s findings show that “manager dominance in innovation promotion processes is exceedingly high” (ibid.). It is, however, interesting that the manager dominance level showed no effect on the business’s level of innovation or on the business growth rate (p. 17.). Harel et al. (2020) conclude that,

“high managerial dominance appears not to guarantee success;” and “other factors are needed” when wanting to “promote innovations in small businesses and ensure their growth” (ibid.).

Radaelli et al. (2017) on their part, analyzed how “managers organized a professionalized workforce for radical innovation” (p. 468). The study contributes to innovation research by pointing out how professional experts and their autonomy may contribute to enhancing their preparedness to engage in radical innovation implementation. They showed that “enacting gradual and collaborative institutional work proved successful” when setting managerial actions towards radical innovations (p. 468). Even though the study was conducted in the healthcare sector, it can be applied to all contexts where “professionalization dynamics” (ibid.) are relevant (R&D, science, software, ...).

A Korean study by Kelley and Lee (2010) including a survey of 89 “project champions” of multinational Korean companies, suggest that “both empowerment and manager roles are relevant to the management of innovation” and that

“for organizations to effectively develop and commercialize innovations, managers need to recognize when certain projects call for different levels and types of involvement” (p. 1007).

To sum up, the main insights from the literature overview are:

- (1) personal characteristics [of managers] play a more crucial role in the adoption of innovation than demographic characteristics (Damanpour & Schneider, 2009).
- (2) managers' positive attitudes towards the field of innovation predict the intention to innovate and organizational support for creativity and innovation is impactful (Massu et al., 2018).
- (3) in highly successful organizations, innovators are found on all levels of the organization and employees are trained in innovation (Tripathi, 2014).
- (4) often not the top-management, but actors from the middle management are more involved with the implementation of innovations (Birken et al., 2012).
- (5) lowering perceived innovation barriers might be worth pursuing, as this was shown to be positively associated with a firm's innovation performance (Szambelan et al., 2020).
- (6) that there is a difference between attitude to innovations and using an innovation. Managers are recommended to create a "[...] context that fosters employees' competence, autonomy, and relatedness [...]" (Chiu, 2018, p. 233).
- (7) that managerial dominance has no effect on the level of innovation; thus, other factors are needed to promote innovation and ensure growth in small businesses (Harel et al., 2020).
- (8) that in professional organizations, special attention must be paid to the role of frontline professionals, who are in control of radical innovations. Thus, the role of managers in these contexts differs when it comes to implementing innovations (Radaelli et al., 2017).
- (9) that levels and types of involvement of managers might need flexible adaption depending on the type of the project (Kelley & Lee, 2010)

### **3 SUCCESSFUL INNOVATION MANAGEMENT – HINDERING FACTORS**

When researching the phenomenon of innovations, several triggers, supporting and hindering factors become evident. In this chapter, several hindering factors proposed by researchers and practitioners are presented, followed by suggestions of how to overcome them.

Among the hindering factors Szambelan et al. (2020) mention "intrafirm innovation barriers" as, for example, a lack of innovation competence, a lack of resources, an unsuitable organizational structure, or "market-based innovation barriers" like competitor rivalry or an absence of market demand for innovation (p.425).

Osterwalder (2010) presents a collection of references which experts mentioned when being asked "What stands in your way?" when it comes to innovating business models for example. The following citations underline the human and managerial factor as a hurdle to innovations:

"Everybody loves innovation until it affects them. The biggest obstacle to business model innovation is not technology: it is we humans and the institutions we live in. Both are stubbornly resistant to experimentation and change" (Saul Kaplan, United States) (Osterwalder, 2010, p. 194).

The above citation connects innovation with the necessity and willingness of participants and stakeholders to be open to "experimentation and change" as a prerequisite for successful

innovation. When asked what would hinder innovating business models, another interviewee from Australia mentioned the following:

"The mental models of executives and the board. The lack of candor and fear of deviating from the status quo sets in groupthink. Executives are comfortable with exploit phase and not 'explore' phase, which is unknown and hence risky" (Cheenu Srinivasan, Australia) (Osterwalder, 2010, p. 195).

This citation highlights that innovation might be perceived as something "irregular", "deviating from the status quo", which seems to appear risky to certain executives. It also includes the hint that innovation might occur in certain phases more than in others. Following the statement, "exploiting" or taking advantage in a successful phase of the business cycle, might put executives in a "comfort zone", which could be risky to leave for the sake of exploring new paths.

"I have found that the management and key employees in many SME companies lack a common framework and language for discussing business model innovation. They do not have the theoretical background, but they are essential to the process because they are the ones who know the business" (Michael N. Wilkens, Denmark) (Osterwalder, 2010, p. 194).

From a very practice-oriented perspective, Rittersshaus (2016a) identifies the following five hurdles:

### **3.1 No time to think**

Rittersshaus discusses the influence of enabling employees to think at the workplace (p. 72). According to his findings, employees should have the opportunity to go for walks, go outside and work on a concept, without being kept busy by constant meetings and telephone calls. He doubts that employees are 100% concentrated at work, while being in meetings, working at their monitors or making phone calls. He brings up a Gallup study (p. 72), which showed that from employees in a worldwide study (142 countries), only 13% are actively engaged in their work. From the remaining 87%, around half of the employees are actively not engaged. This means that more than 40% of all employees are busy with other things than what they are paid for. The German data showed 16% engagement, 61% non-engagement and 23% actively not engaged employees. Thus, Rittersshaus doubts the success of "leadership through attendance control" and finds it inappropriate for knowledge workers. He states:

"In order for innovation to emerge, it is necessary to give freedom in time and space so that employees can work on and think about ideas in a concentrated way and for a longer period of time" (p. 73).

### **3.2 Business case mania**

Rittersshaus (2016a, p. 74) criticizes the fact that innovations are, at an early point in time, hindered by the wish to prove their impact via an ROI or business case. By that, innovations, which might pay off in the future, are neglected too early.

"Of course, the consideration of investments is extremely important. But those who immediately overload every innovation with a business case need not be surprised if no new ideas are realized." (p. 74).

### **3.3 Not-invented-here virus**

Rittershaus (2016a) identified the so-called “not-invented-here”-virus as one of the main barriers to innovation. He interprets this virus as “what does not come from us/myself cannot be good.” (p.74). The main signs of this virus are leaders who quickly disqualify ideas from their employees, by pointing out shortcomings and potential risks. The reasons for this behavior are, according to Rittershaus, among others, a lack of trust in the abilities of your employees, time pressure, lack of understanding and a high degree of creativity, which makes it difficult and time consuming to follow-up the idea (p. 76). When ideas stem from other departments, leaders would be likely to mistrust them, due to a general doubt in other functions’/departments’ abilities. Rittershaus continues by citing Mark Twain (p. 75), who already in 1891 supposedly said the following:

“The fact is the human race is not only slow about borrowing valuable ideas - it sometimes persists in not borrowing them at all” (Twain, 1891).

### **3.4 Sunk cost fallacy**

Very similar to the “not-invented-here” phenomenon is, according to Rittershaus (2016a, p. 77) the sunk cost fallacy. It hinders innovations by keeping up working at long-term, existing projects and systems, without reacting to warnings, drawbacks, or alternative approaches. As reasons why companies stick to “dead” projects instead of initiating innovations, Rittershaus gives the following reasons (p. 78): Projects are sometimes continued because they are favoured by board members or CEOs. Other projects are set up to impress competitors with innovativeness or customer orientation. Even though these projects might, at some point, show themselves to be unsuccessful, initiators lack courage to end them. Finally, Rittershaus (p. 77) names in-house projects based on self-developed systems or software which function only inside the organization but have problems connecting with more modern, outside architectures. These projects are often continued due to a personal stake in them, pointing at the personal-emotional reasons for being attached to them. He makes it clear that managers tend to be fearful of losing face when correcting a previous decision or admitting a project needs to be ended to make space for an innovation.

### **3.5 Lack of fault tolerance**

Rittershaus (2016a, p.79) furthermore elaborates on the lack of fault tolerance being a severe hurdle for innovations. According to him, making mistakes relates to fear. Fear blocks what companies need: new business models, different approaches, new markets, innovations. Especially managers would fear consequences of tolerating faults in the form of a possible image damage, career consequences or disfavor of one’s own superior. For Rittershaus (p. 80), this is also a reason for innovations evolving more often from start-ups than from established organizations with a longer history.

## **4 SUCCESSFUL INNOVATION MANAGEMENT – SUPPORTING FACTORS**

Given the insights from the chapter above, several suggestions for supportive managerial behavior can be presented below. In her article, Happich (2021) discusses what „Innovation Leadership “is all about and describes the roles of so called “innovation leaders”. Innovation leadership for her is “creating space for innovation through leadership” (p. 14). This means, that in the ideal case, top managers regard themselves as “enablers”. Also van Assen (2020) focuses on researching the leadership influence on innovations – in his research setting the

positive relationship between “empowering leadership” and “contextual ambidexterity” (p. 442). In her book about “innovation leadership”, Kaudela-Baum (2014) describes innovation leadership as

“support for cultural, communicative and relational factors that recognize deviation and delimitation and increase the likelihood of accepting the selection of variation (i.e. organizational change)” (2014, p. 71).

Happich (2021) proposes that innovation leadership, in a sense, can increase the innovative capacity of employees. According to her reasoning, different leadership styles or roles need to be combined, to foster “creative ideas, products or services” (p. 14). She names the following three leadership roles and underlines that they should substitute “leadership styles” when being combined. For Happich (2021), in innovation leadership, managers....

- (1) ...enable instead of managing, by creating framework conditions that enable personal development and organizational learning for employees (p. 14).
- (2) ...reframe/change of perspective, instead of remaining in the often unconsciously chosen or predefined knowledge space. The innovation leader develops - together with the employees - methods to systematically recognize and question patterns of thought and action (ibid.).
- (3) ...let go instead of controlling, where the innovation leader sets him/herself the goal of not immediately thinking in terms of answers and solutions. She/He lets go and waits for what wants to emerge. Only then, possibly unprecedented things can develop.

Kaudela-Baum (2014) furthermore compares innovation leadership and innovation management (p. 72). The table below gives an insight into innovation leadership being described as more visionary, long-term, strategic, and addressing more uncertainty than stability:

**Table 6.** Innovation Leadership vs. Innovation Management

Innovation Leadership	Innovation Management
Long-term innovation goals, based on innovation content and strategies.	Short-term innovation goals based on innovation tactics
Strategic orientation (focus on internal and external processes), development and maintenance of internal networks, involvement of external network partners	Operational and implementation-oriented focus (focus on internal processes)
Innovation success based on long-term innovation projects, learning and knowledge development	Innovation success based on cost savings, time savings, product success
Parallel promotion of incremental and radical innovation as well as business model innovation	Promotion of smaller and short-term development steps achieved through incremental innovation
Maintaining resonance and leading a portfolio of different innovation initiatives	Concentration on a selected innovation project
Focusing on appropriate innovation speed to achieve strategic innovation goals	Focus on increasing the pace of innovation (time-to-market)
Addressing paradoxes, uncertainty, and complexity	Addressing safe and stable processes
Intervening in a meaningful way: Freedom and self-responsibility are important, as is fostering opportunities for self-observation and reflection	Guide and manage processes and projects and monitor success metrics
Cooperative partnership with employees	Target agreements with employees

(Kaudela-Baum, 2014, p. 72)

Rittershaus (2016b) gives several suggestions in his article about how leaders promote innovation: At first, he strongly recommends giving employees enough space to think, to try things and to exchange ideas with others, when demanding more innovation from them (p. 3). Furthermore, he suggests considering and evaluating every idea, no matter in what form and in what setting it is expressed (p. 5). He underlines the need for a standardized and simple procedure for submitting ideas and the importance of managers to encourage employees with suggestions to communicate them (ibid.). The author sums this up by giving the following advice to practitioners:

- (1) If disruptive innovations are desired, there must be an awareness that some ideas might endanger the current business model. Long-term companies and leaders take such suggestions particularly seriously and create a space where even “forbidden” ideas can be tested and implemented. According to Rittershaus (2016b), it is better to control the speed of the decline of a current business model yourself and build a new one in parallel, than to be overtaken by the competition and destroyed in the long run (p. 6).
- (2) Managers have a decisive influence on whether their employees produce and implement innovations. In all the points mentioned, both the influence of a direct manager as well as the overall leadership culture play a decisive role (p. 6).
- (3) If innovation is demanded, managers must also find the obstacles to innovation in the company and remove them in parallel to working on new ideas. Incidentally, a large part

of the obstacles is in people's heads, for example entrenched thought patterns, fear of setbacks or the not-invented-here virus (see above) (ibid.).

- (4) Thus, managers would do well to regularly ask themselves and the employees they lead whether they are promoting or preventing innovation. Unconscious behavior is a trap that is very easy to fall into (ibid.).

## 5 CONCLUSION

To sum up, the main insights from this paper are as follows:

- The impact on innovation (implementation) of the managerial role is not to be neglected. This concerns not only the personal characteristics of managers, their attitudes but also their managerial style.
- It is necessary to consider what kind of managers are discussed, as there is research about the different roles of managers for innovation, depending on the organizational level (i.e., middle managers).
- The industry/business culture and environment seem to play an important role, as studies from the healthcare sector point out their special situation due to the existence of so-called “professional/expert managers”.
- It appears to be necessary to lower the perceived innovation barriers by managers in charge to enhance a firm’s innovation performance.
- When realizing that managerial dominance has little or no effect on innovations, a fostering context needs to be created to promote innovations and to ensure growth.
- Innovation leadership enhances employees’ capacity to innovate. They need space, time, an empowering culture, and managers who identify and remove obstacles to innovation.
- It is the responsibility of innovation leaders to enable, reframe, and let go instead of controlling, remaining, and managing. It creates valuable insight to compare the characteristics of innovation leadership to the more conservative characteristics of innovation management.

The author would like to conclude by highlighting the following:

“Not only must employees be encouraged to be creative to initiate and realize innovations, it is also important to build up a capacity to implement a continuous stream of incremental innovations.” (Van Assen, 2020)

## 6 OUTLOOK

In this paper, several problem areas for further research could be identified. First of all, it appears necessary to further specify the topic of “managers’ role in innovations” with respect to certain aspects like a focus on “SME-managers”, which seem to play a special role in innovations and have other/limited resources to enhance innovations. Secondly, when discussing the managerial impact on innovations, a look at digital management tools and their supportive possibilities should not be neglected. Third, a look at cultural characteristics of (SME)-managers and their impact on their innovation capacity could be fruitful, e.g. by considering findings of the GLOBE study (2021). All these aspects have not yet been

thoroughly researched which supports the aim and relevance of the suggested further research.

## 7 ACKNOWLEDGEMENTS

This paper is based on a seminar paper which has been elaborated with the support of Prof. Rolínek and Prof. Skodová-Parmová.

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# ***Global Carbon Pricing Mechanism Development : A Review***

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## **ABSTRACT**

Carbon pricing is the general term for putting a “value” on reducing carbon emission by putting a “price” on it. Carbon pricing internalizes the externalities by covering the cost of the damages from emissions in the production and consumption of a good or service. The carbon price provides a financial incentive for reducing CO<sub>2</sub> and other greenhouse gas emissions. There are two major carbon pricing mechanisms applied – carbon tax and carbon trade. Different pricing measures have distinctive strengths and weaknesses, and this requires policy interventions in real market situations. However, it is clear that potential of carbon pricing is still largely untapped, with most carbon prices below the levels needed to drive significant decarbonization.

This paper sort out the development of research and practice of the global carbon pricing mechanism, by using semi-systematic literature review combining meta-analysis and qualitative study. Both the literature in English and Chinese region will be collected and analyzed. By the thorough analysis, this paper summarizes the research on carbon pricing mechanism into the following aspects: the connotation and driving mechanism of carbon pricing, the status quo and trend of carbon pricing mechanism, and the impact of carbon pricing mechanism. It is found that mastering the basic characteristics of carbon pricing changes can help the government make correct decisions, maintain the effective operation of carbon market, and better serve the low-carbon economic development of countries and regions in the world.

Keywords: Carbon pricing, carbon tax, carbon trading, meta-analysis, literature review

## **1 INTRODUCTION**

Carbon pricing policies aim to raise the cost of emitting CARBON dioxide and other greenhouse gases and ensure that market participants take the true cost of emissions into account when making business decisions, so as to encourage companies and households to change their production and consumption behavior and achieve a reduction in carbon emissions across society. Companies will invest in the most cost-effective mitigation options, seeking to minimize the costs associated with the carbon price. At the same time, consumers will choose low-emission products based on the cost advantage. Through this process, low-emitting producers will gain more market share over time than high-emitting producers, allowing carbon pricing policies to play a key role in decarbonizing the economy. The three main carbon pricing policy tools are carbon tax, carbon emission trading System (ETS) and emission reduction mechanism.

In this paper, a total of 3747 English papers on carbon pricing mechanism from 1998 to 2022 were searched from the Web of Science core Collection database. Meta-analysis and descriptive analysis were conducted using Citespace, and 3473 valid papers were screened out to sort out the development of global carbon pricing mechanism research and practice.

Based on the current situation and trend of carbon pricing mechanism, the driving mechanism of carbon pricing is analyzed firstly, and the influence effect of carbon pricing is explored later. The theoretical framework of carbon pricing is summarized, so that carbon pricing mechanism can better serve the low-carbon economic development of countries and regions in the world.

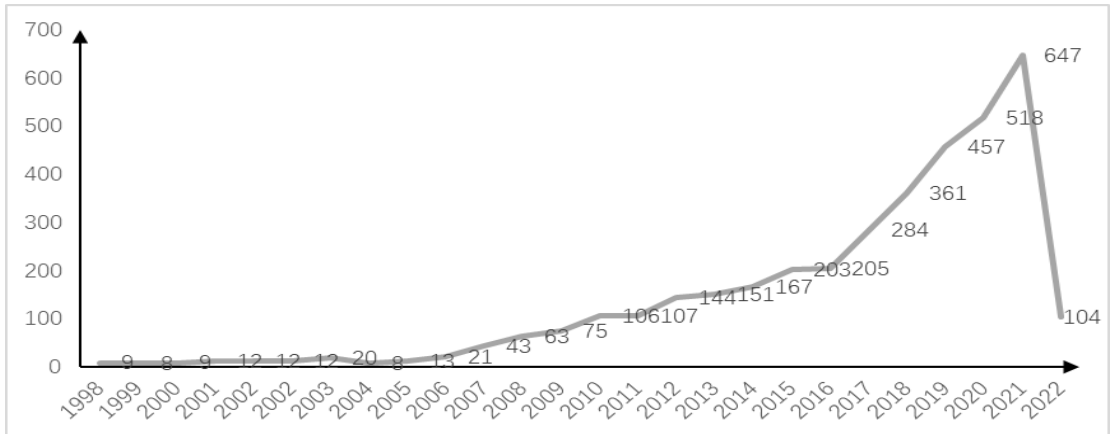
## **1.1 Research tools and data sources**

This paper adopts the research method of combining bibliometrics with literature review. Firstly, citespace (version5.8.R3) was used to conduct basic statistical analysis on the annual distribution, regional and institutional distribution, core journals, core authors and other aspects of the research literature on carbon pricing mechanism. Secondly, this paper conducts a network analysis of keyword co-occurrence on the research literature on carbon pricing mechanism and analyzes its research hotspots and evolution process. Finally, this paper demonstrates the mainstream segmentation fields of carbon pricing mechanism through co-citation analysis of literatures.

The literature data for this paper were selected from the Web Of Science Core Collection database. In the core collection database Of Web Of Science, it takes "Carbon Pricing", "Carbon tax", "Carbon Trading", "Carbon Pricing Literature Review" as the main topic, and links with OR. The literature type was selected as "Article" and "review", and the duplication was removed, and 3747 English literatures from 1998 to 2022 were retrieved. With citespace's automatic screening function, Pathfinder and Pruning Sliced Networks in the Pruning box were selected to effectively screen the documents, and 3473 effective documents related to the topic were obtained.

## **1.2 Annual distribution**

Based on the Country function of Citespace, the author checked the distribution of English journals by Country/region (Table 2) and found that Chinese scholars made the largest contribution to English literature, so the change of the amount of publications was closely related to China's policies. As can be seen from the figure 1, the number of published articles increased steadily from 1998 to 2010. Number more than 2011 articles, reasons may be: in November 2011, the National Development and Reform Commission in Beijing, Tianjin, Shanghai, Chongqing, Hubei, Guangdong and Shenzhen officially launched carbon emissions trading pilot work, encourage each pilot area in the middle of the clear general idea on the basis of bold attempt to try first. "Much starker choices-and graver consequences-in" in 2016, is to determine the top design, environmental protection to ensure that during the period of "much starker choices-and graver consequences-in" environmental protection work smoothly, effectively improve environmental quality in China, the 2016 state department has issued a series of laws and regulations and soil ten reform, the new list of dangerous waste, emissions, green taxes, and other areas of the major aspects of legislative work smoothly, so, as shown in the figure The number of articles published in 2016 increased rapidly compared with that before. On September 22, 2020, General Secretary Xi Jinping delivered a speech at the general Debate of the 75th SESSION of the United Nations General Assembly, saying that China will step up its nationally determined contribution and adopt more effective policies and measures to peak carbon dioxide emissions by 2030 and achieve carbon neutrality by 2060. The year 2021 is known as the "first year of low carbon". As can be seen from the figure, the number of documents issued has reached the highest level in history.



**Figure 1.** Annual distribution of literature on carbon pricing mechanisms.

Source: Web of Science Core Collection Database, as of 2022.3.27

### 1.3 The author distribution

According to figure 2, Table 1 lists the top ten authors with high publications and preliminarily evaluates the two main carbon pricing mechanisms by sorting out their respective views.

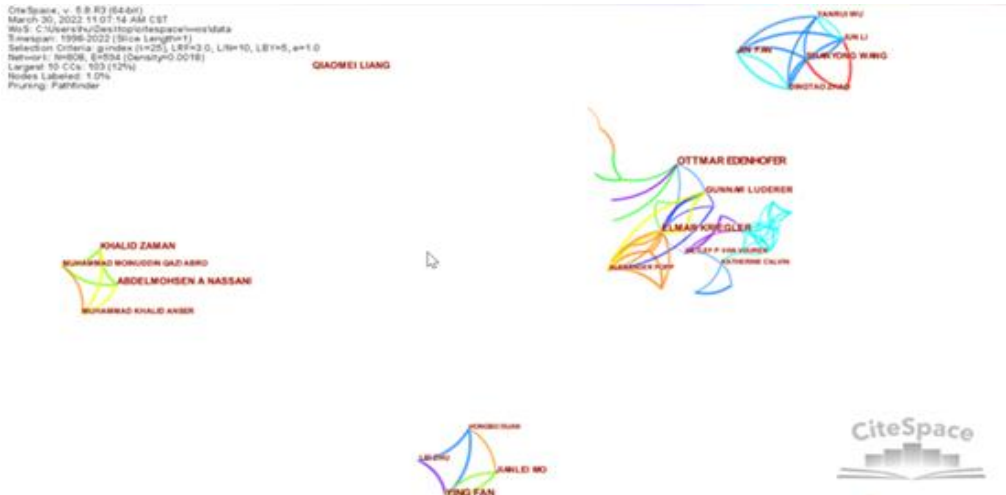
Carbon trading and carbon tax are two main forms of carbon pricing mechanism. When the GDP effect remains unchanged, both carbon trading and carbon tax have strong emission reduction capabilities. Carbon pricing will largely reduce carbon emissions from fossil fuels<sup>1</sup>, but the relative emission reduction efficiency of carbon tax is higher than that of carbon trading<sup>2</sup>. The negative impact of a carbon tax on GDP would be acceptable, with a maximum scenario of no more than 0.5%. China should impose a high carbon tax on energy-intensive companies, which would minimize emissions<sup>3</sup>. These policy tools have different impacts on energy demand, consumption, and research and development. Carbon tax policies have proved to be the most cost-effective way to reduce emissions, and their implementation will greatly facilitate the development of CCS (carbon capture and storage technology)<sup>4</sup>.

China's national carbon emissions trading market is an effective tool to reduce carbon dioxide emissions, has a direct impact on energy consumption, environmental quality and economic potential<sup>5</sup>, can significantly reduce the cost of the economy as a whole, the emissions trading system (ETS) is considered to be a cost-effective way to reduce emissions<sup>6</sup>, will help China achieve "double control" (total and strength) of targets<sup>7</sup>, The carbon market price can be adjusted by adjusting the carbon market mechanism<sup>5</sup>. The Carbon Emissions Trading System (ETS) and renewable energy generation is the way to reduce emissions in most countries around the world, and research shows that ETS will be the spring of renewable energy generation because most of its revenue will be available for the development of various renewable energy sources<sup>8</sup>.

Climate finance and carbon pricing are considered sustainable policy mechanisms to mitigate negative environmental externalities by developing green finance projects and taxing carbon pollution in the context of the COVID-19 pandemic. They are critical to improving air quality indicators that improve the health and wealth of countries, enabling them to reduce COVID-19 through sustainable healthcare reform<sup>9</sup>. The SUSTAINABLE development package in the UN 2030 Agenda also includes international climate finance, a progressive realignment of carbon pricing revenues and improved modern energy, which can contribute to more comprehensive sustainable development<sup>10</sup>.

**Table 1.** Analysis of top 10 core authors.

The sorting	High publication author	
	Number of publications (Papers)	The author
1	34	BOQIANG LIN
2	18	FREDERICK VAN DER PLOEG
3	16	YING FAN
4	16	OTTMAR EDENHOFER
5	14	ZHIJIE JIA
6	12	QIAOMEI LIANG
7	12	ABDELMOHSEN A NASSANI
8	12	KHALID ZAMAN
9	11	HANCHENG DAI
10	11	ELMAR KRIEGLER



**Figure 2.** Author distribution of literatures on carbon pricing mechanism.

Data source: Web of Science Core Collection database, mapping tool: Citespace (version5.8. R3), as of 2022.3.30

## 1.4 Geographical and institutional distribution

According to figure 3, Table 2 lists the top 10 most prolific countries in the world, with China topping the list with 1,128 articles, followed by the US, UK, Australia, and Canada.

According to figure 4, Table 3 lists the world's top 10 core scientific research institutions. There are 6 scientific research institutions in China with high publication in the world's top 10, namely, North China Electric Power University, University of Chinese Academy of Sciences, Tsinghua University, Beijing Institute of Technology, Xiamen University and Beijing University of Aeronautics and Astronautics.

**Table 2.** Distribution of the top 10 core countries/regions.

The sorting	Countries/regions with high publication volume		The sorting	Countries/regions with high publication volume	
	identified	Country/region		identified	Country/region
1	1128	Peoples R China	6	198	Germany
2	786	USA	7	147	France
3	272	England	8	120	Netherlands
4	265	Australia	9	94	Japan
5	229	Canada	10	88	Italy

Note: Data in China include Taiwan and Hong Kong and Macao SAR

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 Network: n=135, e=420 (Density=0.0475)  
 Largest CC: 112 (82%)  
 Nodes Labeled: 1.0%  
 Pruning: Pathfinder



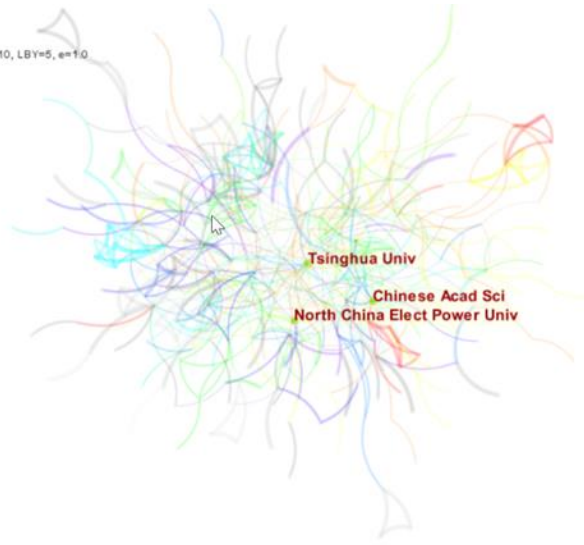
**Figure 3.** National distribution of literature on carbon pricing mechanisms.

Data source: Web of Science Core Collection database, mapping tool: Citespace  
 (version5.8. R3), as of 2022.4.3

**Table 3.** Ranking of the top ten core research institutions.

The sorting	Scientific research institutions with high publications		The sorting	Scientific research institutions with high publications	
	identified	Scientific research institutions		identified	Scientific research institutions
1	84	North China Elect Power Univ	6	51	Univ Oxford
2	80	Chinese Acad Sci	7	39	MIT
3	77	Tsinghua Univ	8	39	Xiamen Univ
4	52	Vrije Univ Amsterdam	9	35	Beihang Univ
5	52	Beijing Inst Technol	10	35	Univ Sydney

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 Timespan: 1998-2022 (Slice Length=1)  
 Selection Criteria: g-index (k=25), LRF=3.0, L/N=10, LBY=5, e=1.0  
 Network: N=584, E=764 (Density=0.0045)  
 Largest CC: 345 (59%)  
 Nodes Labeled: 1.0%  
 Pruning: Pathfinder



**Figure 4.** Institutional distribution of carbon pricing mechanism literature.

Data source: Web of Science Core Collection database, mapping tool: Citespace  
 (version5.8. R3), as of 2022.4.3

## 1.5 Identification and evolution of research hotspots based on keyword co-occurrence

Table 4 lists the top 15 keywords in the literature on carbon pricing mechanism according to the frequency of co-occurrence of keywords. Although keywords account for a small proportion in an article, they are highly concentrated summaries of the whole article and represent research hotspots in a certain research field.

By analyzing the top 15 keywords, the research hotspots in recent years are "carbon emission", "carbon price", "carbon tax" and "energy". Scholars use "model" to study the "performance" and "optimization" of its "cost", "demand" and "system". Finally, it comes to "policy" and "impact".

**Table 4.** Ranking of the top 15 keywords.

The sorting	Keyword sorting		
	Frequency (Freq)	year	keywords
1	473	2000	impact
2	423	2003	policy
3	420	1998	emission
4	364	1999	model
5	342	1998	energy
6	238	2008	system
7	238	1998	cost
8	197	1998	carbon tax
9	187	2007	China
10	168	2003	climate change
11	160	2010	price
12	154	1999	optimization
13	153	2011	performance
14	152	1998	co2 emission
15	151	2001	demand

## 1.6 Carbon pricing mechanism based on literature co-citation knowledge graph

Figure 5 shows the co-citation operation results of literatures on carbon pricing mechanism. It can be seen from Figure 5 that the co-citation analysis clustering of English literatures has 1318 nodes, 2701 links and 39 clusters. After removing the smaller and non-major clusters, a total of 10 clusters #0 to #9 are obtained. Then, LLR algorithm (logarithmic likelihood ratio algorithm) is used to generate clustering labels automatically.

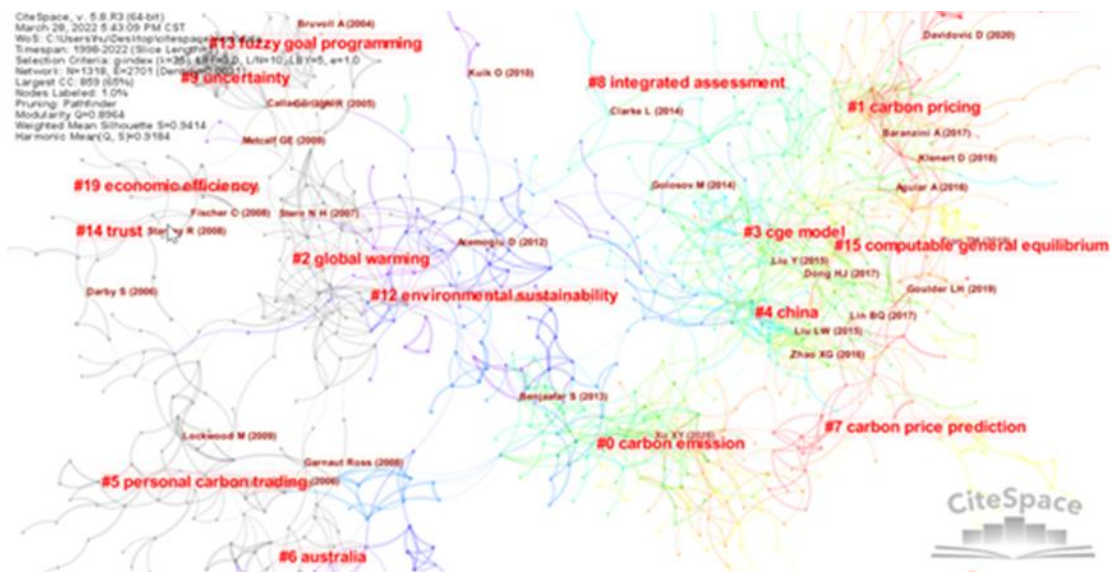
Table 5 shows the specific clustering. The theme of cluster #0 is carbon emission, cluster #1 is carbon pricing, cluster #2 is Global warming, and cluster #3 is CGE mode. The theme of cluster #4 is China, cluster #5 is Personal carbon trading, cluster #6 is Australia, and cluster #7 is Carbon Price prediction. The topic of cluster #8 is integrated Assessment and that of cluster #9 is uncertainty.

Analysis above cluster label, under the background of global warming, in order to achieve the global average temperature control at "the pre-industrial 2 degrees within" goal, countries such as China actively take action to tackle climate change, from electricity decarbonization

**Table 5.** Main clustering analysis of co-cited references.

Clustering number	The tightness of the cluster	Mean year of publication	LLR log likelihood tag word
#0	0.973	2015	carbon emission
#1	0.923	2017	carbon pricing
#2	0.924	2009	global warming
#3	0.894	2015	cge mode
#4	0.896	2014	China
#5	0.947	2008	personal carbon trading
#6	0.959	2009	Australia
#7	0.971	2018	carbon price prediction
#8	0.966	2013	integrated assessment
#9	0.992	2007	uncertainty

and transportation electrification, to develop low carbon industry, and increase forest carbon sequestration in the soil, change the existing investment behavior and pattern, And continuous innovation in technology research and development, infrastructure, financing and practice. In this context, how to choose reliable policy tools to ensure the realization of carbon emission reduction targets has become an increasingly common issue, hence the emergence of carbon pricing mechanism. The CGE model (Computable General Equilibrium model) is used to study carbon emissions, carbon trading and carbon price, analyze their uncertainties, and evaluate them comprehensively.



**Figure 5.** Cocitation knowledge map of core-set literature on carbon pricing mechanism

Data source: Web of Science Core Collection database, mapping tool: Citespace

(version5.8. R3), as of 2022.3.28

## 2 RESEARCH ON THE CONNOTATION AND DRIVING MECHANISM OF CARBON PRICING

### 2.1 The connotation and characteristics of carbon pricing

In recent years, global warming has aroused people's wide concern. Extreme weather events such as shrinking glaciers and rising sea levels take an extreme socio-economic toll. Based on 2020 emissions, from 2007 to 2017, the global damage caused by co2 was \$50 per tonne (Revesz, 2017). Under market economy conditions, emitters do not need to pay for the social and economic losses caused by their greenhouse gas emissions, and other individuals and companies do not need to compensate for the loss of welfare, resulting in external diseconomy, which makes the private cost less than the social cost. The most fundamental solution to external diseconomy is to make private cost equal to social cost. In addition, emitters should pay for the external costs caused by their emissions to realize "polluter pays", which requires the government to formulate corresponding policies to internalize the external costs of emitters, to realize the Pareto optimization of the whole society. Carbon pricing arises at the right moment (Montgomery 1972; Ha-Duong and Grubb 1997; Hultman et al. 2011; Twomey 2012; Wesseh Jr et al. 2017). There are two main types of carbon pricing policies: carbon tax and carbon emissions trading. This paper mainly studies carbon emission trading policy. Carbon emission trading refers to the realization of emission targets by emission trading. In the process of carbon emission right trading, the price of carbon emission right determined by market supply and demand is the carbon price. <sup>3</sup>.Carbon pricing is a core issue in environmental economics, because carbon emissions trading schemes are of great significance for pollution control on a global scale <sup>11</sup>.

According to the results of dynamic modeling of carbon price in Europe, the characteristics of carbon price can be summarized as follows: First, the behavior of carbon price is asymmetric, and the probability of long-term bearish is greater than that of long-term bullish. Second, the time scale of investment and the expectation of return of speculators have a dual influence on carbon price behavior. Third, the major differences in perceptions of carbon markets among non-greedy speculators with different return expectations lie mainly in the magnitude and timing of carbon price fluctuations, rather than in the carbon price fluctuations themselves. Fourth, speculators have a critical point of return expectation, and they will no longer be able to distort carbon price behavior <sup>12</sup>.

## **2.2 Drivers of carbon pricing**

Around the driving mechanism of carbon pricing, foreign scholars have made specific analysis on different research objects. Firstly, two basic drivers of CARBON pricing in EU are found: economic activity and energy price <sup>13</sup>. Secondly, China's carbon quota allocation rules have different effects under different driving factors, and emission quota allocation is an important task for China to achieve carbon emission reduction targets and establish carbon trading market. Specifically, analysis ETS covered under the rules of different distribution of the products price behavior and emission reduction, and the results show that the first, the grandfather system, the self-declaration and auction rules, enterprises in determining the optimal price and optimal carbon emissions, is likely to focus on the current stage of profit maximization, however, under the rules of benchmarking, These companies may be more concerned with the impact of current decisions on the next stage; Second, optimal product price policy is positively correlated with the price of similar products, consumers' awareness of low carbon and government subsidies. Third, with the rise of carbon price, consumers' low-carbon awareness, government subsidies and the reduction of carbon emission cap, these enterprises tend to reduce carbon emissions <sup>14</sup>. In addition, Zhu BZ (2019) tried to explore and identify the driving factors of carbon price at different time scales with a multi-scale analysis model. The results showed that among the three most important driving factors of carbon price, electricity price and stock index showed a positive impact, while coal price showed a negative impact. On different timescales, the impact of electricity and equity indices comes earlier, which has encouraged carbon prices to strengthen from shorter timescales. However, the impact of coal, oil and natural gas prices lags behind, which respectively drives the carbon price in the medium and long term <sup>15</sup>.

## **3 RESEARCH ON CURRENT SITUATION AND TREND OF CARBON PRICING MECHANISM**

### **3.1 The significance of carbon pricing mechanism**

Traditional environmental policy methods cannot effectively reduce greenhouse gas emissions, so people pay more and more attention to market tools in the form of carbon pricing mechanism<sup>16</sup>, because carbon pricing mechanism can effectively reduce the cost of carbon dioxide emission reduction. Moreover, carbon pricing is currently seen as the most cost-effective tool for reducing greenhouse gas emissions and can successfully incentivize incremental reductions <sup>13,17</sup>.

## **3.2 Discussion on the prospect and problems of carbon pricing mechanism**

Given the global nature of climate change, international cooperation among countries is necessary. At the same time, however, traditional environmental policy approaches, such as harmonized technology and performance standards, are difficult to achieve due to the universality and diversity of GHG emissions in most economies and the differences in mitigation costs between sources. Therefore, more and more attention is being paid to market-based tools in the form of carbon pricing mechanisms, and the opportunities and challenges associated with major options such as carbon pricing, carbon taxes, cap-and-trade, emission credits, clean energy standards and fossil fuel subsidy reductions need to be studied<sup>16</sup>. At present, the carbon price is often viewed as the main policy tools to combat climate change, but Rosenbloom's (2020), according to a new study carbon price weakness exists in the five core dimensions, including: (1) problem framework and solution oriented, (2) the policy priorities, (3) innovation methods, (4) background, (5) political; Furthermore, it stresses that in order to address the urgency of climate change and achieve deep decarbonization, climate policy responses need to go beyond market failure reasoning and focus on fundamental changes in existing socio-technological systems, such as energy, mobility, food and industrial production<sup>18</sup>.

At present, compared with carbon tax, carbon market is more environmentally adaptable, flexible, less cost efficient, more able to promote technological innovation and more easily accepted by the public, so countries tend to apply carbon market as the main mechanism. There are few studies on carbon tax. Specifically, in the United States, the design considerations of the initial carbon tax policy include which departments to tax, where to set the tax rate, how to use the tax, its impact on consumers, and how to ensure the realization of emission reduction targets<sup>19</sup>. In China, as an effective policy tool to reduce carbon dioxide emissions, the impact of carbon tax on distribution has always been the key factor to determine whether China can accept carbon tax. Studies show that low-income groups bear the highest carbon tax burden, so some reasonable redistribution and compensation measures should be implemented when introducing carbon tax, such as targeted transfer payment<sup>20</sup>.

## **3.3 Climate targets for carbon pricing mechanisms**

### *3.3.1 The core pursuit of carbon pricing mechanism*

Carbon pricing mechanisms are designed to achieve climate goals, while the core pursuit of implementing climate change policies is to reduce the core cost of carbon (SCC), a term that represents the economic cost of emitting an additional tonne of CO<sub>2</sub> or its equivalent<sup>21</sup>. The latest research shows that climate change awareness is positively correlated with carbon pricing, but the proportion of people who think climate change is a serious threat is negatively correlated with carbon pricing<sup>22</sup>.

### *3.3.2 Research on comprehensive carbon pricing methods*

In order to keep climate targets within the achievable range, previous studies have often used technology policies to supplement carbon prices and adopted comprehensive carbon pricing. Using a state-of-the-art energy economy model, quantify the interactions and unique impacts of three major policy components: (1) rationalizing carbon prices to incentivize economy-wide emissions reductions; (2) Support low-carbon energy technologies to pave the way for decarbonization in the future; (3) A moratorium on new coal-fired power plants to limit idle assets. This policy tool is more feasible, limiting efficiency losses and reducing distributional impact<sup>23</sup>. On this basis, carbon pricing has evolved into other complementary tools, such as

innovation policy and information provision, in addition to the above technological policies to achieve climate goals <sup>24</sup>.

Despite this, economists generally agree that carbon pricing is an effective policy to address the externalities of energy use, but political feasibility may be a perennial issue (2020, Best R)<sup>22</sup>. Because of country-specific development goals and constraints, multiple market failures and limited international transfers, carbon prices do not need to be uniform across countries, but must be part of a broader policy package<sup>25</sup>.

### **3.4 Implementation path**

In the past, many economists have argued that carbon pricing through carbon taxes or markets, as well as subsidies for basic research and development, is the most cost-effective way to decarbonize the energy system. As countries move towards deeper emissions reductions, the mix and sequencing of policies is proving critical to avoiding the environmental, economic and political dead ends of decarbonizing energy systems. Therefore, the evolution direction of future realization path is more inclined to foster green innovation and industrial policy of low-carbon energy technologies<sup>26</sup>. Based on the core pursuit of achieving climate goals and using policy tools and supplementary tools to achieve the core cost of carbon reduction, foreign scholars put forward the following path choices: At the national level, first, the gap between the actual carbon price and the carbon price required to mitigate climate change can be narrowed by appropriately using the income obtained to improve the public's acceptance of carbon pricing, especially to improve the acceptance of citizens, so that carbon pricing can serve citizens <sup>27</sup>. Second, policymakers are often reluctant to implement strong carbon pricing for fear of penalizing domestic industries and outsourcing emissions-intensive activities. Carbon border Carbon adjustment (BCA) will address such carbon leakage through the use of trade measures to ensure that the products of foreign producers facing low (or no) carbon prices are on an equal footing with those produced domestically<sup>28</sup>. At the enterprise level, it is very urgent to take action against climate change, and the gradual internalization of carbon costs by enterprises is the key to transition to a low-carbon economy. Internal carbon pricing is an emerging set of voluntary practices by companies aimed at embedding a climate footprint into their operations and business models. Bento N's (2020) study explored the reasons why global companies reporting to the Carbon Disclosure Project adopted an internal carbon price (ICP) between 2015 and 2017. The results show that ICP depends heavily on national climate policy, national development, industry and corporate governance<sup>29</sup>.

## **4 STUDY ON THE IMPACT OF CARBON PRICING MECHANISM**

### **4.1 The impact on the government**

On the one hand, studies have found that the integration of electricity prices increases over time, and carbon prices have a positive but uneven impact on the integration of electricity prices<sup>30</sup>. Mastering the basic characteristics of carbon price changes can help the government make correct decisions, maintain the effective operation of the carbon market, and help investors take effective measures to avoid investment risks<sup>31</sup>. On the other hand, studies show that when China's economic growth remains at a medium or low level, the national carbon trading market with carbon sequestration function will reduce the cost of carbon emission reduction more effectively<sup>32</sup>.

## 4.2 The impact on the market

Although the carbon trading mechanism is not perfect, it seems to bring better supply chain performance in terms of emissions, cost and service level<sup>33</sup>. The carbon market strengthens the information flow and connection between the carbon market and the energy market. Crude oil price plays an important role in influencing the change and risk of the carbon price. There is feedback from the carbon market to other energy markets, and the electricity price is proved to be the largest information receiver in the system<sup>34</sup>. In addition, there is a strong information dependence between carbon price return and power stock return<sup>35</sup>. In addition, the establishment of China's carbon emission trading market has a positive impact on the excess returns of enterprises participating in carbon emission trading, and the carbon premium in stock returns increases after the establishment. Studies have shown that the carbon risk coefficient is significantly positive, which can be interpreted as higher carbon exposure for companies participating in the carbon market<sup>36</sup>. In addition, research data suggest that the Chinese pilot has increased ETS's low-carbon innovation by 5-10% without crowding out other technological innovations; Growth from ETS companies accounted for about 1% of the regional low-carbon patent growth, while similar growth from large non-ETS companies was also caused by ETS<sup>37</sup>.

## 5 CONCLUSION

Through synthesizing the relative research works, it is concluded that the current literature mainly focuses on western carbon emission trading markets such as Europe and the United States, regional carbon price forecast and the connection between carbon pricing and industrial markets, but there is not much research on the optimal selection of carbon pricing mechanisms in various countries and the comparison of the current situation of carbon trading markets in various countries. In addition, China's national carbon trading market have launched in 2021. As the largest carbon trading market in the world, how to follow the basic principles of the carbon market and fully learn from international practical experience, and how to take the road of carbon market development with Chinese characteristics based on China's reality will become a research hotspot.

## 6 ACKNOWLEDGEMENT

This paper was supported by the Chinese national social science funding project, a study of china's carbon trading mechanism optimization-from political economics perspective ( 17BJL23) .)

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# ***The Taiwan Banking Sector – The Impact of Liberalization and Macro Economic Factors: An Empirical Study of Taiwan***

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## **ABSTRACT**

National culture is a well-researched and significantly impactful factor as nations transition from developing to emerging to fully developed status. Adam Smith set forth the idea that certain “norms” were required for capitalism to grow, and subsequent research has indicated that cultural factors are significant in both bilateral trade and the participation in stock markets. While many factors significantly influence the internationalization of currency, perhaps none is more important than financial liberalization. This paper investigates the process of liberalization of Taiwan’s banking sector since the Asian financial crisis in 1997. The steps undertaken by the country are reviewed and what foreign banks may offer in terms of increasing competitiveness amidst the domestic banks is examined. The effects of liberalization are analyzed by developing a model and tested by an empirical framework. Lessons are drawn for other markets currently engaged in efforts of liberalization of their financial services industry.

## **1 INTRODUCTION**

Culture is a well-researched and significantly impactful factor as nations transition from developing to emerging to fully developed status. Economists as far back as Adam Smith (1776), set forth the idea that certain “norms” were required for capitalism to grow. Additionally, research has indicated that cultural factors are significant in both bilateral trade (Guiso et al., 2009) and the participation in stock markets (Guiso et al., 2008; Sapienza and Zingales, 2012). While many factors significantly influence the internationalization of currency, perhaps none is more important than the financial liberalization of a nations’ banking system (Cohen, 2015; Germain & Schwartz, 2017; Lu & Liu, 2020; McDowell & Steinberg, 2017)

Financial liberalization is defined as “the removal of government intervention from financial markets” (Masci, 2008). Taiwan began the process of internationalization of its banking industry in 1987 and extended further through the 1990’s, with a commitment to open more offices abroad on a consistent basis and to invite foreign banks to establish a local presence (Chan & Hu, 2000). New avenues of investment had to be sought and knowledge of new products became necessary as excess liquidity at home market caused problems to the financial system. Diversification had become indispensable and the lack of competitiveness in the rigid domestic banking system constrained by regulations necessitated opening up the domestic banking market to competition from both at home and from abroad (Chan & Hu, 2000). This paper examines the effects of liberalization in the banking sector in Taiwan. In the first section of the paper, we look into the size and structure of the banking sector and in the next section, we review the process of liberalization. In the third section, we look into the problem of non-performing assets of the banking sector in Taiwan. In the fourth and final section, we conduct

an empirical study on how the process of liberalization has influenced the country's banking sector. Finally, conclude by deriving valuable lessons for other countries engaged in the process of liberalization of their financial services industries.

## 2 PROFILE OF THE BANKING SECTOR IN TAIWAN

According to Shimizu, (2001), Taiwan (part of China but accounted separately in banking and finance) is the second largest banking market of Asia, next only to Japan. The country's individual assets are estimated at \$1.1 trillion, GDP per capita is \$12,961, and with a savings rate of 25 percent proves to be a naturally attractive market for banks (Shimizu, 2001). Taiwan's banking industry comprises 53 domestic banks (3,023 offices), 36 foreign banks (68 offices), 324 cooperatives (credit cooperatives and credit departments of farmers' and fishermen's cooperatives, with 1,300 total number of offices), 3 trust and investment corporations (33 offices) and 15 bill finance companies (48 offices). 8 of the 36 foreign banks in Taiwan are from the United States and others are from the United Kingdom (3), Japan (4), France (4), Germany (2), Canada (2), Netherlands (3), Singapore (4), Switzerland (1), Australia (1), South Africa (1), Thailand (1), Philippines (1) and Hong Kong (1).

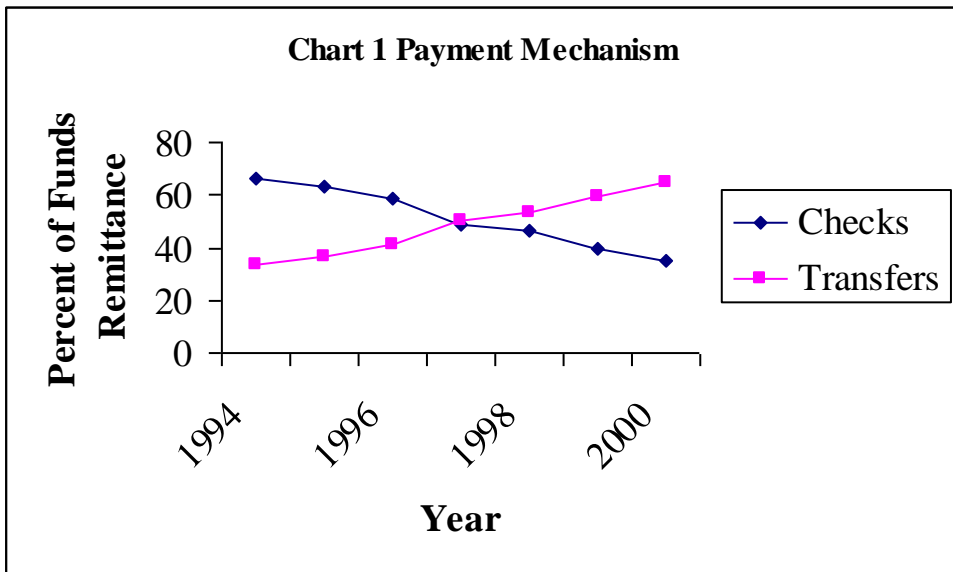


Figure 1.

Source: Central Bank of the Republic of China (Taiwan)

Taiwan's net outflow of direct investment (FDI) in the four years between 1997 and 2000 was \$2.5 billion. This is significant because it was the period immediately following the Asian financial crises. Foreign banks and domestic international banks have been responsible for providing efficient channels for the net-transfer of funds outside of Taiwan. According to the Central Bank of China -Taiwan (Bank, 2010), the area of retail banking, specifically the number of ATMs increased from 1,522 in 1989 to 15,951 at the end of 2001 and the number of transactions through the ATMs has also increased more than ten-fold from 52 billion to 539 billion. Similarly, the number of credit cards issued has increased from 586,000 to about 43 million but still the credit card portfolio represents less than 1 percent in the payment

mechanism of the country (“Ministry of Commerce, People’s Republic of China,” 2006). Citigroup, Hong Kong and Shanghai Banking Corporation and Standard Chartered Bank are major players in the third largest card market in Asia after Japan and South Korea. Chart 1 shows the remittances by transfer slowly increasing over the traditional method of checks.

### 3 PROCESS OF LIBERALIZATION

Over a period of fifteen years, Taiwan adopted a sequential policy to invite foreign portfolio investment through indirect investment of funds raised overseas by domestic investment trust companies, followed by direct investment of foreign institutional investors in 1991 and then finally from all foreigners in 1996 (Chevalérias, 2010). The process has influenced the country’s entire financial services industry in the areas of banking, insurance, securities and fund management. Besides, the country has also developed foundational that would take the financial sector well into the 21st century. The mission behind the plan is to ensure efficiency in the system and in its operations, establish financial discipline, expand scope by new product development and enhance competitiveness by increasing competition. Taiwan’s position in the process of liberalization has remained much ahead of many other emerging countries as shown in Table 1.

**Table 1.** Liberalization Index.

Table 1: Liberalization Index - A Comparative Chart														
World Rank	Country Name	Property Rights	Judicial Effectiveness	Government Integrity	Tax Burden	Gov't Spending	Fiscal Health	Business Freedom	Labor Freedom	Monetary Freedom	Trade Freedom	Investment Freedom	Financial Freedom	2022 Score
1	Singapore	94.4	58.3	92.8	90.5	90.1	79.6	83.1	77.0	86.5	95.0	85	80	84.4
2	Switzerland	95.2	98.0	92.3	70.1	67.2	96.3	84.3	60.0	84.9	86.6	85	90	84.2
3	Ireland	92.6	93.0	80.7	76.5	79.9	89.0	87.2	60.9	85.2	79.2	90	70	82.0
4	New Zealand	88.2	95.9	97.5	70.8	53.5	88.3	81.3	70.5	81.8	90.0	70	80	80.6
5	Luxembourg	97.4	96.4	89.5	64.1	41.5	98.7	89.3	56.3	80.1	79.2	95	80	80.6
6	<b>Taiwan</b>	<b>81.3</b>	<b>94.2</b>	<b>73.8</b>	<b>79.2</b>	<b>90.7</b>	<b>86.6</b>	<b>84.3</b>	<b>68.7</b>	<b>86.1</b>	<b>86.0</b>	<b>70</b>	<b>60</b>	<b>80.1</b>
12	Australia	91.7	95.2	87.0	62.5	51.6	52.0	84.6	64.2	83.2	90.0	80	90	77.7
19	Korea, South	90.5	77.1	69.2	60.4	84.5	95.3	84.8	55.6	85.2	73.0	60	60	74.6
25	United States	95.7	77.9	75.7	75.9	54.5	0.0	87.5	75.8	82.3	75.2	85	80	72.1
35	Japan	94.6	95.3	81.4	67.4	52.5	19.7	78.3	66.6	87.1	75.4	60	60	69.9
42	Malaysia	65.6	57.6	53.9	83.8	82.9	73.4	67.1	57.0	83.6	82.2	60	50	68.1
63	Indonesia	38.6	43.2	39.9	85.3	91.2	80.1	66.6	59.3	80.3	78.6	50	60	64.4
80	Philippines	47.1	25.6	34.7	76.8	84.2	81.8	61.5	58.0	69.4	73.8	60	60	61.1
131	India	49.9	51.5	42.4	79.5	76.2	4.0	63.9	58.2	70.0	71.0	40	40	53.9
132	Sri Lanka	51.7	57.7	40.1	90.3	87.4	0.0	58.3	55.7	71.6	47.0	40	40	53.3
153	Pakistan	29.0	28.5	27.4	78.0	85.1	4.8	49.5	51.6	65.9	65.8	60	40	48.8
158	China	43.7	37.4	39.3	71.2	64.2	11.1	68.8	57.2	70.0	73.2	20	20	48.0

Source: 2022 The Heritage Foundation; Wall Street Journal

### 4 EFFICIENCY

Provision for capital to manage market risk, permitting commercial banks to issue debentures (and also subordinated debt to substantiate their capital), establish a system to recognize, provide for and write off non-performing loans and promotion of privatization of the government-owned banks, are the important steps envisaged for increasing operational efficiency of the banking sector. (Liang, Yao, Hwang, & Wu, 2008). Also considered are credit guarantee schemes for medium and small size enterprises, improving deposit insurance schemes and also making insurance a compulsory feature, and consolidation of examination in order to increase efficiency of the system (Kuo, Chen, & Sung, 2011). As of now, only 48 of the 53

domestic banks and only 40 percent of their deposits are insured. Overall, 45 percent of deposits of the entire financial intermediaries sector is insured (Bank, 2010).

## **5 FINANCIAL DISCIPLINE**

Concentration risk management, as recommended by the Bank for International Settlements, is the major feature to improve financial management in a banking system (Basel Committee on Banking Supervision Basel, 2017; Cherpack & Jones, 2013). Additional measures have also been established by the bank for international settlements - (1) requiring financial institutions publish consolidated reports of operations periodically to ensure full disclosure, (2) empowering banks to terminate fraudulent and reckless employees, (3) starting a compliance adherence unit to promote self-discipline and (4) also train and educate other divisions are other highlights of this process. (Basel Committee on Banking Supervision Basel, 2017)

## **6 PRODUCT DEVELOPMENT**

There exist several important steps necessary to increase consumer-banking activities. Among the most prevalent are securitization, promoting electronic banking, and liberalization of cross sector services among banks (commercial and investment banking, trust services and financial planning directly or through subsidiaries) (Andries & Capraru, 2013; Cetorelli & Peristiani, 2012; Lin et al., 2018). Established international banks such as JPMorganChase and Citigroup, having gained securitization experience in the Latin American debt crises in the early 1980's, offer stability and a template for local banks in Taiwan.

## **7 COMPETITIVENESS**

Withdrawal of all restrictions for foreign banks to open new branches is the most important step planned to increase competitiveness (Claessens & Laeven, 2004; Liu, 2018). Also considered are asset management, revision of financial tax laws to conform to international practices and promoting a credit rating system for debt instruments and institutions, are other important features to accomplish this mission (Chodnicka-Jaworska, 2018; Zarutskie, 2004)

## **8 BENEFITS FROM FOREIGN BANKS PRESENCE IN TAIWAN**

In a survey conducted by McKinsey & Co., 44 percent of Chinese households welcomed foreign banks into China. It represents that clients, worldwide, will gladly receive new products, regardless of the nationality of the corporation or bank that offers them (Shimizu, 2002). Foreign banks do really increase competitiveness due to their superior technology, brand recognition and innovative product development (Claessens & Laeven, 2004; Liu, 2018). For example, ABN AMRO introduced a video banking center where customers would be able to use the video conference feature to seek a credit facility or apply for a credit card or to speak to a service representative in addition to all usual features of electronic banking. This is their first instance of video-conferencing in a global bank setting and has been the launching point for a growing and expanding service offering in the retail banking sector (Coeckelbergs, 2020). The bank asserted its superiority as an established foreign bank when its competitors offered credit cards free of membership fees by a unique innovation. The bank placed the membership fees in a mutual fund account (Coeckelbergs, 2020)

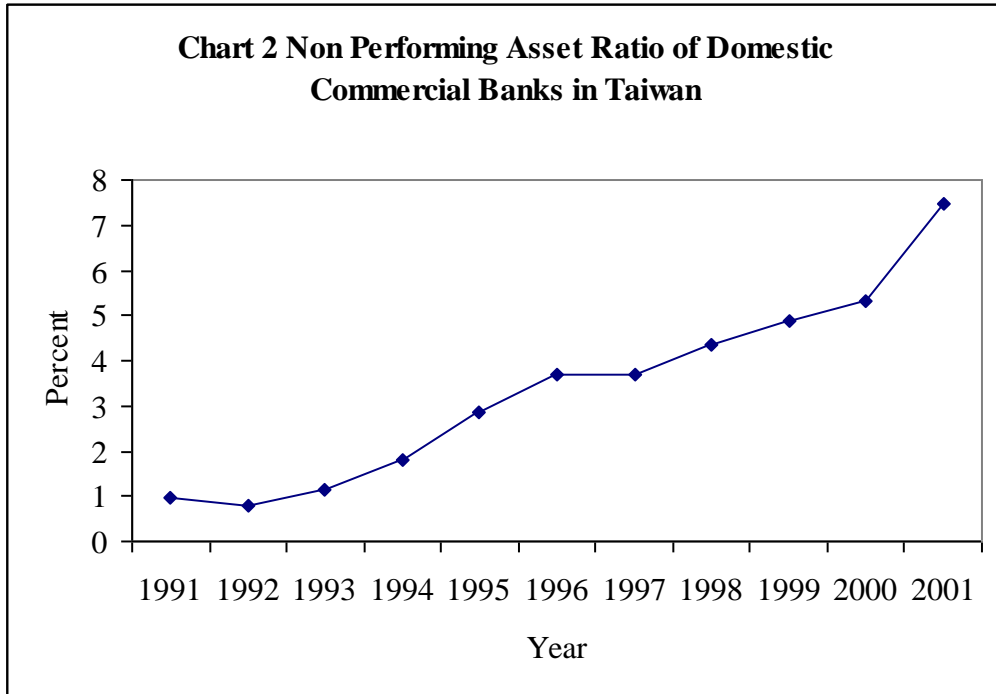
Standard Chartered Bank introduced its new securities processing system, Network Custody & Clearing System (NCS) across its custody market of 15 Asian countries including Taiwan (Kentouris, Chris, 2000). Bank of America's portal for corporate clients provides online tools for

working capital management, raising of capital, B2B exchanges, foreign exchange and fixed-income underwriting. Both Citigroup and HSBC have been recognized by various international surveys for best bank in the world and in several regions, best in corporate finance, securitization, loan syndication, project finance, currency and interest rate derivatives. When Citigroup targeted high net-worth clients in Taiwan for its products of credit cards, personal loans and investment funds, the bank emphasized profitability more than market share. Its acquisition of a 15 percent stake in Fubon in 2000 - a family controlled enterprise in Taiwan that comprises a bank, two insurance firms, a securities firm and a mutual fund company - has strengthened its base in Taiwan and prior to its exit from the Asian consumer market in 2021, it was the most profitable foreign bank in Taiwan (Islam, Yang, & Mia, 2012)

## **9 NON-PERFORMING ASSETS IN TAIWAN'S BANKING SECTOR**

The banking sector in many countries is uniformly suffering from the malady of non-performing assets (loans). In China, the problem stemmed from huge financial assistance accorded to the state-owned enterprises. When these units became less productive due to technological obsolescence and also managerial and operational inefficiencies, the loans and periodical interest thereof became unrecoverable. Besides, the institutions had growing commitments in welfare schemes, employee benefits and pension schemes. (Cockerill, 2001; Gray, 2004; Lei, 2008). In India, the leading development banks and other nationalized banks started reporting a similar problem and the government with a huge fiscal deficit (about 5 percent of GDP) could not bail them out. Therefore, a thorough overhaul of the system became necessary and was included in the financial sector liberalization. Competition was the only remedy and so domestic private banks were granted licenses to operate This was followed by permitting 100 percent foreign direct investment to facilitate more foreign banks entering the market (Mallick, Sarkar, Roy, Duttachaudhuri, & Chakrabarti, 2010; Sáez, 2004). This in turn facilitated the institutions becoming more innovative in their strategies and also in seeking strategic alliances. The Industrial Credit and Investment Corporation then transformed its project financing efforts into an array of different banking products including venture capital funding, asset management, investment banking, commercial banking, home mortgage finance and stock trading.

The non-performing loan ratio for domestic financial institutions in Taiwan was less than 1 percent in 1991. It rose from 2.9 percent in 1995 to 7.7 percent at the end of 2001, as shown in Chart 2 (Bank, 2010). The effects of the Asian financial crisis of 1998 when some domestic firms resorted to excessive use of highly leveraged funds for speculation mainly caused the increase in non-performing assets. Increasing unemployment rate and continued recession in the real estate sector also have contributed to the increase in non-performing loans in Taiwan (Liang et al., 2008)



**Figure 2.**

Source: Central Bank of the Republic of China (Taiwan)

Regulations were strengthened to prevent continuance of the problem. Business tax of financial institutions was reduced from 5 percent to 2 percent in June 2001 to help institutions use the tax savings to provide for and write off the non-performing loans. The rate of increase of the non-performing assets appears to be minimal but quantification and recognition of such loans are the real cause for concern. In the United States, the United Kingdom and most other banking systems, any loan or part thereof overdue beyond ninety days is recognized as non-performing (Baudino, Orlandi, & Zamil, 2018; Narwal & Pathneja, 2019)

In Taiwan, interest payments delayed over six months will render a loan non-performing as long as principal payments are not pending beyond three months. Besides, the recommendation of the ministry of finance to restructure loans to real estate, construction and textile sectors either by lowering rates or extending maturities is an indirect form of interference in bank management (Flannery, 1990). Custom provides for lifetime employment and so reduction of expenditure is also not available to local domestic banks. Thus in Taiwan, non-performing loans and deteriorating asset quality are a major problem to the state-owned banks and private domestic banks as well. The regulators have advocated for consolidation, but healthy domestic and foreign banks are unwilling to merge with weak banks.

## **10 METHODOLOGY FOR ESTIMATING COMPETITIVENESS**

Banks operating in an emerging market such as Taiwan tend to be extremely competitive to gain additional market share as and when further steps of liberalization are announced and implemented. Foreign banks assert their global superiority by introducing their products and

technology while domestic banks attempt to thrive on their virtues of familiarity, recognition and culture. We try to measure competitiveness of banks in their ability to achieve expansion together with efficiency. Expansion and efficiency are both measures of success for the banks. Expansion is indicated by growth in assets and also the number of offices. Increase in the number of offices also is a sign of expansion but that by itself is not important and therefore, efficiency in operation is critical. Efficiency for a bank is reflected in its ability to increase its growth and productivity through its entire network of offices and employees, besides increasing its net-worth for creating value to its stockholders. Therefore, lowering, early recognition and writing-off of non-performing assets will be a factor of the profits before tax of the institution. Domestic banks would naturally be controlling a large share of the market whereas foreign banks will be constrained in competing on number of offices due to regulations. Our basic model of competitiveness therefore, stems from expressing the performance of an institution in its operations per office so that the number of offices will not be a factor in our measurement. Foreign banks bring in their well-tested technology, knowledge and other resources of infrastructure and so they compete on efficiency, quality and productivity. Efficiency for a bank lies in its ability to maximize its potential through each of its offices and employees. While deposits maintained at an office provide stability to the operations, assets (loans being a major part of the portfolio of assets) increase the revenues and also enhance the size of the institution's balance sheet. For this reason, we have based our model in terms of deposits, assets and loans per office. The effectiveness of employee utilization is realized in increasing the productivity of each employee and the quality of service rendered by each employee increases the value of the loan portfolio. So our model includes loans and assets expressed in per-employee basis.

## **11 METHODOLOGY**

The main source of our data is the bureau of monetary affairs of the government of Taiwan. Our data set comprises of all foreign banks, domestic banks, cooperative institutions, farmers and fishermen's cooperatives, investment companies and bill finance companies for the period from 1990 to 2001. For each of the type of institution, from the total values of assets, loans and deposits given for a total number of offices, we have calculated asset and loan portfolios in units of employees and offices in order to measure their efficiency. The net worth of the institutions largely influences their ability to recognize and provide for non-performing assets in a timely fashion and of the institution and ultimately reflects in satisfying capital adequacy standards. Foreign banks are not devoid of tier-1 capital, a standard that they have satisfactorily met during the last decade. They also do not suffer from the malaise of non-performing assets as much as the domestic banks that have hitherto devoted their efforts to development banking. So, we have expressed capital adequacy of the institutions as a ratio of their net-worth to total assets and thus serves as a measure of risk too. The correlation matrix of the variables in our data set is reported in Table 2.

**Table 2. Correlation Matrix**

	Offices	Deposits	Assets	Deposits per office	Assets per office	Employees per office	Loans per Office	Table 2 Correlation Matrix				Non-performing Assets	Employees
								Loans per employee	Net Worth	Capital Adequacy	Loans		
Offices	-												
Deposits	0.943	-											
Assets	0.918	0.997	-										
Deposits per office	0.180	0.218	0.300	-									
Assets per office	-0.351	0.022	-0.109	-0.331	-								
Employees per office	-0.167	-0.200	-0.045	0.778	-0.221	-							
Loan per Office	0.111	0.274	0.363	0.757	0.015	0.781	-						
Loans per employee	0.532	0.655	0.662	0.215	0.142	-0.282	0.335	-					
Net Worth	0.896	0.990	0.989	0.309	-0.095	-0.045	0.368	0.702	-				
Capital Adequacy	-0.127	-0.039	-0.011	0.336	0.025	0.118	0.240	0.496	0.067	-			
Loans	0.923	0.995	0.995	0.332	-0.176	-0.012	0.381	0.669	0.984	0.002	-		
Non-performing Assets	0.069	-0.116	-0.116	-0.672	-0.688	-0.600	-0.796	-0.275	-0.158	-0.201	-0.167	-	
Employees	0.905	0.949	0.949	0.202	0.008	-0.167	0.281	0.553	0.911	-0.113	0.962	-0.146	-
Profits before Tax	0.914	0.896	0.896	0.319	-0.368	-0.069	0.385	0.492	0.888	0.122	0.933	0.169	0.955
GDP	0.169	0.199	0.199	0.053	0.165	-0.165	0.029	0.421	0.233	0.204	0.157	0.502	0.045
Exchange Rate	0.142	0.169	0.169	0.043	0.124	-0.171	-0.017	0.345	0.204	0.169	0.123	0.452	0.015
Liberalization Index	0.024	0.034	0.034	0.033	-0.041	0.032	-0.093	-0.124	0.021	-0.110	0.009	0.221	0.001

## 12 BUILDING OF A STATISTICAL MODEL

Our basic model can be algebraically expressed as follows:

$$\begin{aligned} \text{Assets} = & \alpha + \beta_1(\text{deposits per office}) + \beta_2(\text{employees per office}) \\ & + \beta_3(\text{loans per office}) + \beta_4(\text{assets per office}) + \beta_5(\text{loans per employee}) \\ & + \beta_6(\text{capital adequacy}) \end{aligned}$$

As per our hypothesis, the purpose of the intercept is to explain the macroeconomic factors of the market, entry barriers and infrastructure and technology expenditure incurred by both domestic and foreign institutions for establishing financial services in an emerging market. As liberalization occurs in stages, foreign banks can expand their product-line and client base as and when they are permitted and so we included the liberalization index as a variable to our basic model. We tested the model along with non-performing assets and profits before tax as two more additional variables as both result in the measure of competitiveness, one acting in the opposite direction of the other. Our complete model was expressed algebraically as follows:

$$\begin{aligned} \text{Assets} = & \alpha + \beta_1(\text{deposits per office}) + \beta_2(\text{employees per office}) \\ & + \beta_3(\text{loans per office}) + \beta_4(\text{assets per office}) + \beta_5(\text{loans per employee}) \\ & + \beta_6(\text{capital adequacy}) + \beta_7(\text{non-performing assets}) \\ & + \beta_8(\text{profits before tax}) + \beta_9(\text{liberalization index}) \end{aligned}$$

The growth of the market as explained by the country's GDP and the confidence of foreign banks in the market as suggested by the stability of the exchange rate were both tested but did not yield significant results. The complete results of our models are reported in table 3.

**Table 3a.** Statistical Tests of Banks' Performance in Taiwan.

Determinants of Banks' Performance	Model 1		Model 2	
	estimated coefficient	t-static	estimated coefficient	t-static
constant	-65,434.05	(-3.932)***	-901,656.40	(-5.182)***
deposits per office	1,848.47	(5.427)***	2,113.11	(2.989)*
employees per office	681.50	(1.465)	869.45	(2.007)*
loans per office	884.57	(1.066)	2,719.59	(2.464)*
loans per employee	178,122.96	(5.05)***	185,170.15	(4.706)**
capital adequacy	-8.796.28	(-7.243)***	-5,415.84	(-4.858)***
asset per office	-1,406.30	(-6.18)***	-1,410.31	(-4.31)**
liberalization index			342,894.11	(4.296)**
profits before tax			43.89	(2.209)*
number of observations	60		21	
R2	0.81		0.97	

\* = significant at 90% confidence level  
 \*\* = significant at 95% confidence level  
 \*\*\* = significant at 99% confidence level

**Table 3b.** Statistical Tests of Banks' Performance in Taiwan.

Model 3			Model 4	
Determinants of Banks' Performance	estimated coefficient	t-static	estimated coefficient	t-static
constant	428,478.20	(-2.934)**	-453,508.00	(-2.629)*
deposits per office	2,722.39	(3.836)**	3,571.58	(4.539)***
employees per office	348.90	(0.685)	-1.258.75	(-5.303)***
loans per office	3,011.27	(2.954)**	5,771.04	(7.783)***
loans per employee	138,559.77	(3.433)**		
capital adequacy	-7,880.33	(-6.499)***	-5,009.50	(-4.824)***
asset per office	-1,925.72	(-6.944)***	-2,137.81	(-6.684)***
liberalization index	161,924.12	(2.128)*	207,613.58	(2.343)*
non-performing assets	3,108.78	(2.006)*	2,205.17	(1.221)
number of observations	35		35	
R2	0.90		0.87	

\* = significant at 90% confidence level

\*\* = significant at 95% confidence level

\*\*\* = significant at 99% confidence level

## 13 DISCUSSION

Our basic model (Model 1) yielded positive results with estimated coefficients bearing expected signs. The intercept had a negative sign explaining all macroeconomic factors and infrastructure development expenditure. The positive sign of the variable 'deposits per office' and its t-static being highly significant, explained the availability of funds for operations and for better investment in loans and securities at predictable cost of capital. The negative sign of the two variables, capital adequacy and asset per office, both also being highly significant, were pointers for other factors of influence. We could visualize the presence of non-performing assets and thereby, erosion of profits as the other possible factors. The other two variables,

'employees per office' and 'loans per office', were not significant but turned out with positive sign for the respective coefficients, as expected.

In the case of an emerging market where financial services are undergoing phases of liberalization, we considered liberalization index to be a vital factor whereby foreign banks will be able to expand their client base, offer a package of financial products and also diversify their asset portfolio. Our objective was to ensure profitability together with efficiency. Our second model (Model 2) proved that to be correct where all variables turned out significant. Since banking industry in several emerging markets suffers from the institutions' inability to deal with non-performing assets, we studied its influence on banks in Taiwan in our third and fourth models. Models 3 and 4 produced interesting results. All variables except 'employees per office' were significant in Model 3. We concluded that that was an important variable and so studied the same without being influenced by 'loans per employee' and we found it to become very significant. The results indicated that employees are an integral part of the organization but their productivity was being subdued by the presence of non-performing assets.

## **14 CONCLUSION**

Taiwan's domestic banks are indeed becoming increasingly competitive. Table 4 shows select Taiwan's international banks assets in the United States together with Moody's credit rating of the banks' long-term deposits.

**Table 4. U.S. Assets of Select Taiwanese International Banks.**

Name	Year of Establishment in Taiwan	Year of Listing in Exchange in Taiwan	Capital (NT \$ billions)	Domestic Offices	Employees	Assets in the US (US\$ millions)	Moody's LT Deposit Ratings
The International Commercial Bank of China	1971	1979	33.16	64	3,574	4,720	A2
The First Commercial Bank	1947	1962	36.28	134	6,481	1,627	A3
Chang Hua Commercial Bank	1950	1962	34.25	36	6,110	1,380	A3
Chinatrust Commercial Bank	1966	1991	42	49	4,675	2,004	Baa1
Chiao Tung Bank	1907		24.4	32	1,155	709	A3
Bank of Taiwan						2,487	A1
Farmers Bank of China	1933	1994	11.88	77	2,117	387	
United World Chinese Commercial Bank	1975	1996	34.18	58	2,727	220	A3
Land Bank of Taiwan				82		217	A2
Bank Sinopac				36	1,641	1,174	Baa2
E.Sun Commercial Bank				37		119	Baa2

Source: Structure Data of Foreign Banks (US Federal Reserve), Moody's Investor Service & Taiwan Business Information (Taipei Times)

Taiwan's banks are definitely superior to similar institutions in other emerging markets. Once the malady of non-performing assets is carefully addressed without direct or indirect interference by the country's central bank, the domestic banks would become equally efficient and productive as their foreign competitors. Consolidation has not been the current trend as it is likely to be without synergy because of the weak banks but it will be a trend to watch within this decade as foreign banks will strive for market share and their domestic rivals would match them with equal negotiating skills and strengths.

Taiwan is a good example for other emerging markets where liberalization efforts are in progress. Slowing down such efforts only would increase uncertainty and the result will be a decline in confidence in such markets. Therefore, the process should continue even if slowly. There will be a need for additional substantial investment to compete with foreign banks. Local banks lack the products but have abundant knowledge of the market. There are numerous possibilities of forming strategic alliances and above all, reaping the benefits of freshly acquired knowledge.

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# ***Why are intercultural skills and their development still not considered as gamechangers in the professional world?***

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## **ABSTRACT**

Intercultural competences are gaining an increased importance in today's business environment as international, highly qualified workers close the shortage of skilled workers. It is not only necessary to train one's employees accordingly to develop a competitive advantage on the global market, but also ever-changing technology and the digital transformation require new ways of working. This paper is focusing on the importance of intercultural competence as such, as well as the connectivity between intercultural competences and trainings and the impact in real business environments. Additionally, it emphasizes the opportunities organizations could gain when investing more in intercultural competences of their employees. The research is based on literature analysis and later in-depth interviews will be conducted with companies, schools and universities in Upper Austria and in Vysočina in the Czech Republic.

## **1 INTRODUCTION**

The scientific world already seems to be agreed on the importance of obtaining cultural competence to successfully interact in intercultural encounters, be that personal or business encounters (Trompenaars and Hampden-Turner 2002; Lewis 2006; Hofstede, Hofstede and Minkov 2010; House et al. 2004; GLOBE 2020), even in our today's digital world. Consensus about this crucial topic in the international business world however, is still lacking rather behind (Ferraro 2002; Rohlfer and Zhang 2016).

Employees with good intercultural competence and excellent intercultural skills are becoming more and more important in our steadily changing world. Driving forces such as extensive globalization and digitalization continuously enforce this issue. Hence, intercultural skills and competences are an important necessity in every higher educational system to reduce prejudices and boost professional empowerment of the future employees (Pinto 2018).

Therefore, projects like the Interreg project "ATCZ240 - Cross Cultural Communication Network" (CCCN) are vital to point out the importance of cross-border cooperation and intercultural competences, which in the best case are already acquired and immersed by students during the completion of their course of study.

The CCCN project conducted between Austria and the Czech Republic aims to improve the awareness about intercultural differences between the two countries by conducting in-depth interviews with two main target groups. The first target group are well established small and medium sized enterprises with a close connection to the region Upper Austria and the CZ

market. In order to guarantee this close connection to the CZ market, Upper Austrian companies with subsidiaries, production sites, branch offices or sales offices in CZ are selected. In Upper Austria the project partners are conducting 10 interviews with managers at c-level e.g., owners, CEOs or other top managers on the topics of intercultural differences between Austria and the Czech Republic as well as required and important skills (e.g., intercultural competence, language skills etc.) that graduates of Universities or Fachhochschulen should have when applying at Upper Austrian companies. Similarly, the Czech partners are conducting interviews based on the same guidelines at 10 selected small and medium sized companies with headquarter in Vysočina and a close relationship to the Upper Austrian market. The output of these interviews and insights gained on the perceived importance of intercultural competence of Upper Austrian top managers should serve as a basis for further research. Within the scope of the CCCN project, also the perspective of Austrian and Czech school principals and teachers responsible for interculturality of economic secondary colleges, on intercultural competence will be investigated, as secondary schools are the second target group within the project. For this reason, in-depth interviews regarding the topics interculturality and internationalization, practice-oriented education and digitalization and digital competence are conducted. Additionally, students will be interviewed on their perspective regarding these topics.

One main reason for conducting a project between Austria and the Czech Republic are the close economic ties between the two markets. Czech Republic's GDP per Capita in 2020 was at 42.044 USD with a growth expectation of around 4.9% (OECD 2020). The growing importance of the Czech Market for Austria is also visible when looking at the most important export countries of destination for Austria. The Czech Republic, ranked at place number seven, is among the top ten export countries. Looking at the year 2020, the Austrian exports to the Czech Republic amounted 3,5% of the total export share, which is around 5 billion in EUR (Mohr 2020). As economic cooperation between these two countries is increasing, the topic of proper intercultural understanding is becoming more prevailing. Especially, because there are some significant differences in culture as well as language that must be considered when cooperating with each other (Hofstede, Hofstede and Minkov 2010).

## **2 THEORETICAL FRAMEWORK**

### **2.1 Intercultural Competence for an increasingly International Working-Environment**

Intercultural skills are becoming increasingly important in today's global business world, due to an increase in intercultural teams and networks. Many international companies are concerned with the building of teams with members from different cultures, in order to achieve a better level of collaboration and acceptance between interculturally divergent employees (Kňap and Nový 2017). Leadership is one crucial aspect when it comes to successful cooperation in culturally diverse setups. The selection of the leading persons for internationally varied teams has to be thought over deliberately (Lewis 2006). Furthermore, agility is a crucial characteristic of every international team; it is a prerequisite for success and endurance. However, not every member is uniformly comfortable and familiar with agile working environments and intensive innovation or change (Lewis 2006). Additionally, culture can affect the efficiency of virtual teamwork (e.g. remote teams), which indicates that intercultural competence is required to

improve the overall performance within virtual teams especially within a steadily digitalizing business environment (Zakaria 2017).

One highly critical aspect is therefore the issue of building trust within international teams, yet difficult to conduct. Nationalities and certain habits and manners have to be considered consciously, as well as deploying basic trust building strategies (Lewis 2006). The role trust plays within successful intercultural business interactions should not be underestimated, as trust is perceived differently from country to country. While so called task-based cultures e.g. Germany or the USA are perceived to rather focus on building up business relationships by focusing on cognitive trust aspects, thus heavily relying on the other party's skills and ability, countries such as China or Brazil develop trust via strong relationships and consequently focus more on affective trust elements (Meyer 2015).

Apparently, flexible and collaborative business relationships require trust, as it clearly has an impact on the building and maintenance of good and long-lasting relationships. Trust is always built on the mutual agreement that both partners take care about the others well-being (Huang and Wilkinson 2013). The willingness to trust someone, however, can quite differ depending on the cultural background of the society the person is coming from (van Hoorn 2015).

Likewise relevant are communication challenges in business situations, which are best mastered by applying a strategic approach. It is essential that managers and international employees are becoming aware of the cultural components which influence human behaviour, and then are able to analyse the reasons for this behaviour in a methodological way (Meyer 2018). The understanding of the differences in communication depending on country and culture, are critical for every successful intercultural cooperation. Culture is so important to understand, because people who do not consider cultural aspects when communicating with people from another culture, might tend to assess the behaviour of the counterpart, through the perspective of their own culture. Consequently, certain behaviour might be interpreted wrong which can lead to severe misunderstandings (Meyer 2018).

## **2.2 Cultural Intelligence and Intercultural Skills**

The concept of cultural intelligence can be seen as a framework for intercultural skills. Cultural intelligence can be described by obtaining three main skillsets. The first skillset, called perceptual skills, is the ability to recognize critical differences between one's own culture and the culture of the counterpart, which includes the capability of being open-minded, tolerant towards uncertainty, and being non-judgmental. The second skillset is about relational skills, mainly including being flexible, social, and empathetic to build and maintain good relationships. The third skillset, adaptive skills, is the ability to adapt social behaviour towards different cultural settings, which basically means being flexible in one's own behaviour and having extensive knowledge about other cultures (Thomas et al. 2008). Simply said, cultural intelligence refers to the professional capability of a person outside of a certain group or culture, to interpret content and gestures of the counterpart in the correct manner (Early and Mosakowski 2004). The final result of training and improving cultural intelligence should be an increase of successful and effective intercultural encounters (Thomas et al. 2008). Improving one's cultural intelligence, hence adjusting to other cultural norms, includes coping with challenges and drawbacks. Building up confidence and recognizing learnings out of situations that were mastered successfully are important steps towards a high level of cultural intelligence (Early and Mosakowski 2004). Therefore, the CCCN project is concerned with developing training concepts for managers and executives or internationally working employees to improve cultural

intelligence and create a high level of intercultural skills. Cultural intelligence and intercultural skills within this project refer to the abilities to interact and communicate successfully with people from diverse cultural backgrounds within business encounters.

### **2.3 Intercultural Competence and Intercultural Sensitivity**

Intercultural sensitivity, intercultural awareness, and intercultural communication competence. These three concepts are very much related to each other; however, they slightly differ in their perception (Chen and Starosta 2000).

The so-called intercultural communication competence can be described as an umbrella term, which again is divided into cognitive, affective, and behavioural abilities of a person with intercultural communication competence (Chen and Starosta 2000). Intercultural awareness describes the cognitive understanding part of the concept of intercultural communication competence and refers to the understanding of different cultures that influences how people feel, think and act. Intercultural sensitivity describes the affective part of intercultural communication competence which can be defined as the motivation to value, understand and accept the differences between one's own culture and other cultures (Chen and Starosta 2000).

According to other studies (Leung, Ang and Tan 2014; Fantini 2007), intercultural competence broadly can be defined as the abilities required to behave adequately and properly while collaborating and connecting with other people who are differing from oneself, in terms of their culture and language.

Additionally, intercultural sensitivity can be understood as an improvement process in which people are developing the ability to transform on an emotional level, a cognitive level, and a behavioural level. This process is described as a transformation from an ethnocentric view (the belief that one's own culture is better than the one from other nationalities) towards an ethno-relativistic viewpoint (no one's culture is superior) (Bennett 1986). This approach of Milton J. Bennett to explain the development process of intercultural sensitivity, is based on six stages (denial, defence, minimization, acceptance, adaptation, and integration) which a person passes during the transformation from ethnocentric towards ethno-relativistic (Bennett 1986).

Within this project and this paper, the term intercultural competence or being interculturally competent is understood as the ability to behave and act in an adequate and proper manner, knowing cultural differences and adapting one's own behaviour accordingly, while interacting with people from different cultures.

The world of research already provides several different models for assessing intercultural differences and intercultural competence (Reber, Auer-Rizzi and Malý 2004; Hofstede, Hofstede and Minkov 2010; House et al. 2004; GLOBE 2020; Überwimmer and Füreder 2019), which can be used to enlarge one's own intercultural knowledge as well as finding out one's individual intercultural competence level. Regarding the Interreg Project ATCZ240, the decision was made to rely on two models, one related to intercultural competence (the MPICO model) and one focused on illustrating the differences in terms of culture between the two countries (Hofstede's model of cultural dimensions).

### **2.4 The MPICO Model**

As a method of evaluating one's own intercultural competence, the MPICO Model can be considered. The MPICO Model (Manager Process Model for Intercultural Competences) assumes that the acquisition of intercultural competencies is a life-long process. The model

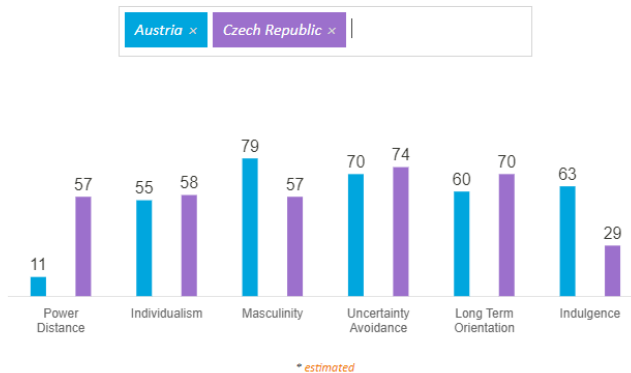
suggests that intercultural competent people actively prepare for situations, act in the situation, and reflect critically afterwards. These three steps can be defined as the Forethought Phase, the Performance Phase, and the Self-Reflection Phase. The model helps to evaluate one's intercultural competence, which is especially important in a continuously globalizing and digitalizing world, by answering a questionnaire of 40 questions (Überwimmer and Füreder 2019).

Using the MPICO model to determine one's intercultural competence before attending in intercultural trainings, is certainly helpful to know the starting point of one's intercultural competence. The model clearly depicts what a person already does to improve or develop intercultural competence, and the personal perspective on one's intercultural skills (Überwimmer and Füreder 2019).

The empirical part of the project will focus on the core elements of the MPICO Model. Consequently, how the managers at c-level and owners from Austrian and Czech companies prepare for specific intercultural situations, act in specific intercultural situations and finally critically reflect their behaviour afterwards.

## **2.5 Hofstede's Model of Cultural Dimensions**

Furthermore, it is crucial to use one of the many different models given by researchers, to analyse similarities and differences between the two investigated cultures. Even though categorizing cultures according to predefined dimensions may mislead some distinct characteristics that cannot be squeezed into a given model, it is still applicable to use cultural dimensions to compare cultures based on the same variables (Bolten 2007). For this study the decision was made to use the cultural dimensions of Hofstede's model, to compare the two respective countries Austria and the Czech Republic. As Hofstede's model is not free of criticism but still a good framework, additional authors e.g., Lewis or House et al. were chosen to demonstrate a second perspective in some of Hofstede's dimensions. Hofstede's work and development of cultural dimensions is one of the most utilized models in the scientific field. This is mostly since it provides dimensions and country indexes to measure the respective dimension in each country (Beugelsdijk, Kostova and Roth 2016). Even though, his work is not free of criticism, this project relies on his national culture framework as it enables good comparison of cultural differences on country level and provides first insights into the differences of the Austrian and Czech culture. These first insights are serving as preparation for the empirical part which aims to find out the perspective of Upper Austrian firm's managers and owners on the importance of intercultural competence and preparation for doing business with Czech business partners.



**Figure 1.** Cultural Dimensions of Hofstede (1984).

When looking at Hofstede's dimensions for Austria and the Czech Republic one main differentiating variable is clearly power distance. Power distance is described as the extent to which societies accept hierarchies and different levels of power (Hofstede, Hofstede and Minkov 2010). House et al. define their dimension of power distance in a pretty similar way than Hofstede does. Power distance in the GLOBE study is described as the acceptance of authority and hierarchical levels within a society. Moreover, it reflects the importance or acceptance of differences in power and status symbols or privileges (House et al. 2004). According to Hofstede, Austria has a very low power distance which means the general acceptance of high hierarchical levels is rather low and flat hierarchies are preferred. Equal rights, decentralized power systems, consulting of everybody, and direct communication styles, are typical (Hofstede, Hofstede and Minkov 2010). In contrast to what Hofstede states about power distance in Austria, Lewis describes Austria as the exact opposite. In business the Austrian mentality according to Lewis (2006) is highly relying on hierarchy and respect for authorities. He describes the Austrian business environment as hierarchical in which employees look up to their bosses and listen without interrupting or speaking up (Lewis 2006). The level of power distance for Austria in the Hofstede model is one main critic addressed by different authors e.g., Ly (Ly 2013).

In comparison to Austria, the Czech Republic has a rather high-power distance, which means it is a very hierarchical society, in which every member has a certain place and status. Within companies, hierarchy is important, centralization of power is common, and the employees expect to get instructions and orders (Hofstede, Hofstede and Minkov 2010). Moreover, Lewis describes the Czech Republic as a country that focuses on egalitarianism and democracy, meaning ensuring a liberal environment by laws and regulatory behaviour (Lewis 2006).

Furthermore, there is a distinct difference in the dimension of masculinity or femininity. Austria has a high score on masculinity which illustrates that the society is very much driven by competition, achievement, and success factors. The Czech Republic has a rather low score on masculinity, which implies that it is a less masculine society than Austria, with values such as quality of life and taking care of others being more important (Hofstede, Hofstede and Minkov 2010).

The last highly differing dimension is indulgence. While Austria is an indulgent country with a rather high score, the Czech Republic has a low score which indicates that the culture is more

restrained. The Czech Republic's society therefore is perceived to have a more cynical and pessimistic viewpoint. Leisure time and fulfilling one's own desires is not the number one priority. However, Austria which is a very indulgent society puts much more emphasis on fulfilling individual desires and enjoying life. Additionally, the Austrian society can be described as much more optimistic and with great focus on leisure time (Hofstede, Hofstede and Minkov 2010).

Less of a difference is visible between the two countries when looking at the dimensions of long-term orientation, individualism, and uncertainty avoidance, therefore the research will concentrate on the major differences as mentioned above.

Even though Hofstede's culture model is often criticized it provides us with a useful framework for analysing different countries and cultures. As a counterpart to Hofstede, we considered some aspects of the GLOBE project initiated by House et al. In fact, the GLOBE study enhanced and built on Hofstede's cultural dimensions and developed nine dimensions, instead of the six originally proposed by Hofstede (Zainuddin et al. 2018). Indeed, the GLOBE study was conducted via a very different approach, it still follows the framework of the model proposed by Hofstede (Hofstede, Hofstede and Minkov 2010), which is why Hofstede's model is considered as main model for country comparison in this research project.

For the comparison of the AT/CZ intercultural differences, also the Vroom/Yetton situational leadership model could be used, as it can be seen and utilized as a model for situational intercultural competence as well (Reber, Auer-Rizzi and Malý 2004). This model applies a methodology that is close-to-action in contrast to the collection of empirical data based on questionnaires such as the studies of Hofstede and the GLOBE-Project. Reber, Auer-Rizzi and Malý (2004) collected the Czech and Austrian data prior to leadership training programs for the Vroom/Yetton model. They concluded that Austrian managers usually do not employ autocratic strategies for decision-making, and they prefer to use group processes while the Czech managers prefer more the autocratic leadership styles.

Analysing cultural differences via the use of existing models is just the first step towards better cultural understanding. Consequently, it is extremely useful to participate in cultural trainings, to practice, get valuable insights first-hand and develop personal strategies in dealing with difficult cultural situations in business encounters.

## **2.6 Trainings and Development Possibilities for Intercultural Competence**

Trainings for expatriates or global leaders to improve their intercultural competence already became one of the major fundamentals of any corporate training curriculum. This is extremely important as driving forces such as globalization and digitalization are growing continuously. Therefore, communicating effectively across cultural borders is becoming a fundamental ability (Szkudlarek 2009).

Communicating with strangers very often is exposing people to similar, if not the same, discomfort than when communicating with people from different cultures. Both encounters usually involve uncertainty and a certain degree of anxiety. Having successful intercultural interactions therefore very much depends on emotions and cognitive aspects involved, and not entirely on extensive cultural knowledge. However, intercultural competence is one very important part of the strategic skillset, needed to deal with complications in a global market environment (Poelzl-Hobusch and Reimerth 2017).

When it comes to the development of intercultural trainings it is essential to keep in mind that participants might react in different ways to the same training concepts. Furthermore, it is

important to consider that acquiring intercultural skills is based on a certain development process. Trainers therefore need to find out the level of intercultural sensitivity or competence the participants already have and then further build on that (Bennett 1986). The initial evaluation of the participants intercultural competence can be done by a self-test such as the one proposed by the MPICO model (Überwimmer and Füreder 2019).

The world we live in today has changed towards a global community, in which intercultural encounters are not only normal but extremely important. Whether we have to communicate with people from another culture in school, university, or work, intercultural and language skills to interact successfully are vital (Ilie 2019). As a second step, intercultural trainings will be designed to improve the competences of international employees and managers from companies who are interacting with the neighbouring country (Austria, CZ), as well as from students at international schools and universities. Such intercultural trainings could involve self-checks to find out one's own intercultural behaviour and background, learning how to apply different cultural models, and interpreting cultural dimensions e.g. the very recent ones of the GLOBE 2020 project. Intercultural trainings are based on self-reflexion and the willingness to take on new behaviour manners to interact in intercultural encounters successfully. The target of the CCCN Project is to further develop the different skill sets of the defined stakeholders in order to improve the knowledge and as a consequence the behaviour of the different target groups, when interacting with international partners.

### **3 METHODOLOGY**

In order to find out the perceived importance of intercultural competence and the actual level of intercultural intelligence and know-how within the selected companies, expert interviews in form of in-depth interviews are going to be conducted. In-depth interviews are part of a qualitative research approach and provide researchers with a rather detailed picture of a person's thoughts and insights (Creswell 2014), which is why this technique will be applied to acquire the necessary data.

The right formulation of the questions within a qualitative research approach is essential, however unfortunately often neglected. Especially during the decision about data collection, drafting the interview-guidelines, and during the conception of interpretation for the used method and chosen materials, reflexion and reformulation of questions should be one main part. This is crucial to determine the adequacy and reasonableness of the decisions made (Flick 2007).

Furthermore, a guided interview should always ensure unbiased questioning, which can be guaranteed by using different ways of asking questions. It is advisable to start the interview with unstructured questions and slowly increase the degree of structure within the questions to avoid biased answers influenced by the interviewer (Flick 2007). Moreover, keeping interview guidelines as flexible as possible would be wise (Flick 2007).

For the interviews with the companies, an interview-guideline was developed together by both partners. This guideline will serve as a basis for all interviews in both countries and focuses on two distinct topics. The first part includes the topic of intercultural aspects and how companies deal with intercultural difficult situations, and the second part deals with the topic of FH and University graduates within the companies.

Within the framework of the Interreg Project Cross Cultural Communication Network, ten selected companies as well as four high schools and one university in both countries (Austria and the Czech Republic) will be interviewed. Both project partners chose companies and

schools within their region, namely Upper Austria and Vysočina. Moreover, Upper Austrian companies with a subsidiary, production site or other close connection to the region Vysočina will be preferred. The selection process of the companies is based on a list of around 38 possible companies in Upper Austria that have a connection to the Czech Republic. Out of this list a convenience sample will be drawn.

Convenient sampling is one of the non-probability sampling methods, which can be described as methods in which the researcher does not ensure that every member within a population gets the chance to participate. Non-probability sampling methods are typically methods in which the participants for the study are directly chosen by the researchers (Stratton 2021).

A convenient sample can be defined as selecting participants for a study that are available fast and effortless (Taherdoost 2016). Thus, participants are chosen by the researchers based on availability and accessibility. Very often convenience sampling is used due to its low costs, the reduced amount of time needed to set up the sample, and its simplicity (Stratton 2021).

As the conducting of interviews with representatives of secondary schools is also part of this project, the selection of the four interviewed schools is based on their level of interculturality and their location in Upper Austria. The schools have to be high-schools that finish with a graduation level of A-levels. After collecting a list of 14 possible schools, the most international schools were chosen to be interviewed. International schools in this case are defined as schools that either have the status of an international school and therefore are following the principle of the International Baccalaureate (IB program), or schools with international majors, English as a course-language, or the possibility of exchange semesters/internships abroad. Additionally, schools with a connection to the Czech Republic for instance via close cooperation in projects or exchange programs are preferred.

For the interviews with the selected schools and the one university, which was decided to be the University of Applied Sciences Upper Austria in Steyr, interview-guidelines were created in cooperation with the Czech partners. The interview-guidelines serve as a basis for all interviews in both countries and include the topics of intercultural intelligence and skills as well as intercultural competence and sensitivity.

#### **4 FUTURE OUTLOOK AND CONCLUSIONS**

The research done in this project is not yet completed, and the next logical step is therefore to make use of the collected data and build upon the theoretical framework. The final results and data will help to develop meaningful and helpful training concepts for executives as well as students, to improve their intercultural skills. Additionally, the goal is to develop “train the trainer” concepts and prepare trainers accordingly to manage all the challenges that might occur within such trainings. Further research and development of how to point out the importance of intercultural trainings, to train and build up intercultural competent employees, should be of utmost interest for any company and business corporation.

The aim of this paper was to give a theoretical overview about the topic of intercultural competence and trainings as well as introducing the CCCN research project. Pointing out the importance of this topic is a crucial part of this paper as there is still little to no acceptance in the practical area and business environment. The next step of this research will be the conducting of the interviews and collecting as well as analysing the data. The results and findings of the interviews conducted within this project, as well as managerial implications based on them, will be presented within the next paper.

The concept of culture and intercultural competence is a very broad and diffuse topic, which requires clarification and training, to be successful. In our today's global and interconnected business world, intercultural competence has become a major skillset required for many positions and jobs.

Cultural competence is not just a theoretical framework, heavily researched in the world of academia, but a highly critical skillset for employees, students, and private people. So, what if cultural trainings would become a normal part of every curriculum starting in high schools and continuing throughout higher educational systems e.g., universities, and business life?

## 5 ACKNOWLEDGEMENTS

This project (ATCZ240-CCCN) has been co-financed by the European Regional Development Fund.



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# Session B

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Intercultural or  
International  
Perspectives in  
Marketing, Sales and  
Service Management

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# ***Diffusion and (mis)perception of internet trust marks in Germany and Italy – a comparative empirical analysis***

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## **ABSTRACT**

Trust marks for online shops have been subject to intense research ever since their introduction in the USA in 1997. The vast majority of empirical research has its focus on national trust marks schemes, which come from a selected country – mainly the USA. Comparative studies about trust mark schemes from various countries and in particular cross-cultural comparative studies operating in more than one country are rare or not existent. This paper addresses this research gap by comparing the diffusion and perception of the most important trust marks in Germany and Italy. Two of the examined trust mark schemes (Trusted Shops and Ecommerce Europe) are operated in both countries.

The analysis was carried out with the help of an empirical study executed in both countries. A total of 598 online shoppers (381 in Germany, 217 in Italy) were surveyed with an identical questionnaire and a website analysis of the most frequented online shops in Germany and Italy was performed.

The results show significant differences regarding the diffusion and the recognition of trust marks by the study participants. Both diffusion and recognition were higher in Germany, including the schemes operated in both countries. At the same time, the study revealed great similarities regarding the (mis-)perception of the content of the analyzed trust mark schemes. In both countries, online shoppers showed an inadequate understanding of such certification, which means that trust marks currently do not fulfill their purpose, namely the generation of justified trust. The major implication for researchers and practitioners clearly lies in the development of measures to improve the correct perception of trust mark schemes. The authors' proposal is comprised of a new mindset for the development of trust mark schemes, using an outside-in approach instead of the prevailing inside-out approach.

## **1 INTRODUCTION**

Among the various trust intermediaries used by online retailers to engender trust among (potential) online shoppers, trust marks belong to the most long-standing and widespread mechanisms. Since the introduction of the first trust mark in the USA in 1997, a large number of different mainly national trust marks emerged in each country. Researchers described the situation as a "jungle", "maze" or "glut" of internet trust marks (Rüdiger 2008). Although many publications incurred up to now, their focus lies nearly exclusively on trust marks in the USA. Research on trust marks in European countries and cross-cultural comparative studies of trust mark schemes operated in more than one country are rare or not existent. As "the trust features of trustmark services are extremely diverse" (European Commission 2012, p. 4) and refer strongly to the national legislation, the results of studies of US-American trust marks cannot be

easily generalised. This paper addresses these research gaps by comparing the diffusion, awareness and perception of trust marks in Germany and Italy, including two pan European trust marks. Germany is a high trust country with a strong online retail sector and a high number of different trust marks with a widespread diffusion, whereas Italy is a low trust country with an under average developed online retail sector, and from the beginning on with comparatively few trust marks (European Commission 2012, Fukuyama 1995).

## **2 ONLINE SHOPPING AS AREA OF APPLICATION OF TRUST MARKS**

### **2.1 Facts about online shopping in Germany and Italy**

Even though study results on online shopping (B2C E-Commerce via the Website) differ due to different survey methods, a coherent picture emerges regarding the importance of online retailing in the countries surveyed. Germany is the largest EU online shopping market; whereas Italy's online shopping values are below average. In 2019, about 71% of the German population bought online and generated sales of 59.2 billion Euros, which represented for 11% of retail sales. In the same period only about 28% of Italians bought online. Online turnover amounted to 31.4 billion Euros, which represented 4% of total retail sales (Statista 2019b; Statista 2020a; Statista 2020b; Statista 2020c). In both countries, consumers tend to make their online purchases via a very few, well-known retailers, which has led to an extreme market concentration. In Germany, the top ten online shops generated in 2019 about 40% of all online sales. Only amazon.de, otto.de, and zalando.de, the three largest online shops by turnover, achieved sales of nearly 14 billion Euros in 2018 (Statista 2019a; Statista 2020a). In Italy, the top five online retailer accounted for 37% of the net sales of the top 250 online shops in 2019. Only the three largest online shops by turnover (amazon.it, zalando.it and apple.com) achieved sales of nearly 3.8 billion US Dollars (ecommerceDB 2020).

### **2.2 Perceived risks involved in online shopping**

The facts about online shopping, especially the share of total retail turnover, show that there is still enormous potential for growth in online trading which so far remains unfulfilled. A central explanation for the hesitation by customers to buy online are the uncertainties and particular risks involved in online trading and the resulting lack of trust this engenders among consumers. Various studies have shown that both potential online buyers (internet users, non-buyers) as well as online buyers are aware of the following risks involved in online trading: privacy risks, IT security risks, difficulty in assessing the reliability of the retailer, difficulties in assessing the goods & services and fulfilment risks (Rüdiger 2008; Daroch 2021). The most recent Eurobarometer study confirms these findings: "Concerns about online privacy and security have caused 93% of respondents to change their behaviour in some way, [...]. Almost one third (32%) say they only visit websites they know and trust." (European Commission 2019, p. 6).

## **3 INTERNET TRUST MARKS: CONCEPT AND FUNCTIONING**

### **3.1 Definition and core elements of trust mark schemes**

Despite intensive consideration of the topic on the part of research (Bauman, Bachmann 2017), the European Union (European Commission 2012) and national players from different countries (Rüdiger 2008), no uniform understanding of the term has emerged. Based on a comprehensive analysis of the literature, internet trust marks can be defined as follows: Internet trust marks are word and/or figurative marks issued by an independent institution, which online retailers can display on their websites as a sign of recognition, giving customers and potential

customers in a compact form the assurance that the online retailer concerned fulfils certain criteria / (quality) requirements (i.e. codes of conduct, criteria catalogues, standards, guidelines, etc.) specified by the issuer with respect to his business practices, particularly with regard to information privacy, IT security and consumer protection (European Commission 2013; Rüdiger 2008).

Behind each trust mark stands an individual trust mark scheme, which can be categorised according to the following core elements (see in detail Rüdiger 2008): (1) The award criteria are the key element since they represent the requirements which an online retailer has to meet in order to be allowed to display the trust mark on his website. (2) The award procedure specifies how compliance with the award criteria is verified. The scope of the procedure varies widely from a self-evaluation with the help of questionnaires to an assessment of the retailer's website to thorough on-site inspection and test purchasing. (3) The enforcement actions include all measures that are pursued in the event of violation of the award criteria, e.g. sanctions like the withdrawal of the trust mark or legal actions.

### **3.2 Trust marks as a trust building institution**

Trust marks assume the role of a trust intermediary. The basic concept is that the trust intermediary invokes a transference process of trust building from a known, trustful institution, here the trust mark and its provider, to an online shop, which in the eye of the potential customer cannot be trusted solely. Typically, this is the case when the online retailer is unknown and the consumer has no or little direct experience with the merchant. To establish trust in an online shop via the trust mark on the retailer's website, (potential) customers must be able to recognise the trust mark, and the overall concept of the trust mark scheme must be consistent with consumer interest: i.e. the award criteria must address the perceived risks of the (potential) online shopper and the scheme must contain credible compliance and enforcement mechanisms. This requires that the scheme must be well documented, and thoroughly read, and understood by consumers (Cook, Luo 2003). Although these requirements may seem obvious, they are essential to the trust-building process – and in many cases are not met in reality, as this analysis shows again. Trust always has a cognitive and an emotional basis, and a behavioural enactment (Luis, Weigert 1985). In the case of Internet trust marks, there is a clear preponderance of cognitive content as trust basis (Bauman, Bachmann 2017). As Simmel already stated in his 1908 influential work, trust is always an intermediate state between knowledge and ignorance (Möllering 2001; Simmel 1983). In situations of complete ignorance, there is no basis of trust (Luis, Weigert 1985). If online shoppers are not able to differentiate trust marks from other website labels (= awareness) and do not know for what the trust mark stands for (= perception), we would not speak about (justified) trust but about blind leap of faith (Rüdiger 2008). If so, consumers may place their trust in labels that they confuse with internet trust marks, or in trust marks that do not deserve the trust due to unknown weaknesses / gaps in the trust mark scheme. This could lead to harmful decisions, for example having tried to buy goods from a fake shop (For an in depth analysis of the concept of trust and trust marks see Rüdiger 2008).

## **4 EMPIRICAL RESEARCH AND METHODOLOGY**

### **4.1 Procedure**

To measure awareness of the trust marks, respondents in both countries were shown a questionnaire with six labels: two pan European trust marks, two national trust marks, one fake trust mark and one SLL-seal. (see section 4.3 and table 2, p. 6). Respondents were asked to

put a tick on those trust marks they recognised. Then, respondents were asked to identify the two trust marks, which would most increase their confidence in a website. To assess the understanding (perception) of each of the two selected trust mark schemes the “true – false – don’t know” technique was used, see Table 1 (Rüdiger 2008).

**Table 1.** True-false-don’t know statements

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Q1: For the trust mark in question, please indicate whether you believe the following statements are true or false, or if you are not sure.

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	The trust mark ensures that ...
1	... the online shop complies with the data protection regulations.
2	... the online shop takes measures for data security.
3	... data transmission during payment is encrypted.
4	...the goods and services offered meet the legal requirements.
5	... the buyer can make use of an Alternative Dispute Resolution (mediation, arbitration, etc.) procedure if differences arise with the online shop.
6	The trust mark provider checks the content of the online shop website before the trust mark is awarded.
7	If the online shop is found not to comply with the criteria of the trust mark, and the buyer is harmed by this, the trust mark provider assumes liability for this.

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So as not to overburden the participants, each respondent was only required to assess the two most trusted trust marks. Additionally, the respondents had to answer further questions concerning trust marks and their shopping behaviour (see the questionnaire in Rüdiger 2008, annex VII, questions A1, B1, B3, B4, C1, C2, C21, C22, C4, C5).

## 4.2 Data collection and sample characteristics

In 2018, surveys were carried out at the University of Applied Sciences Bielefeld, Germany and at the University of Cagliari, Italy. A total number of 598 students with online shopping experience in the last twelve months – 381 in Germany and 217 in Italy – were interviewed using the same standardised questionnaire. The sample does not necessarily represent the general online shopping population (lack of external validity / generalisability) – this nonetheless seems to be acceptable for answering the research question concerned. As empirical studies show, students are one of the mayor groups of online shoppers (Statista 2020b).

With regard to age (on average 22.7 and 23.6 years respectively), and the proportion of male to female respondents (52:48 and 47:54 respectively) both samples were similar. Concerning the purchasing behaviour the samples show differences, which are in line with the findings in the empirical studies used in section 2.1. While in the Italian sample, 33% made more than 10 purchases in the last twelve months, in the German sample the number was almost twice as high at 61%. In Germany, 52% made purchases from no more than four different online shops over a period of a year; 92 % made their purchases from no more than ten online shops. In Italy, 73% made purchases from no more than four different online shops and 97% made their purchases from no more than ten online shops. Earlier empirical studies support these findings (Rüdiger 2008; Rüdiger, Rodriguez 2013). The top five online shops in Germany were amazon.de, zalando.de, asos.de, hm.com, ebay.de and in Italy, amazon.it, ryanair.it, zalando.it, ebay.it and alitalia.it. When the survey was conducted, the only shop with a trust mark was zalando.de (Trusted Shops).

### 4.3 Presentation and diffusion of the analysed trust mark schemes

When the survey was carried out, only two **Italian trust marks** were still in existence. Both of them were integrated into the study: (1) The Netcomm trust mark was launched in 2013 by the Netcomm consortium, which is the Italian member association of Ecommerce Europe. Since 2020, the standard trust mark can be extended to include customer reviews and ratings. In 2021, 264 online shops displayed the Netcomm trust mark, 49 of them additionally displayed the Ecommerce Europe trust mark (Netcomm 2021). (2) The Federcomin trust mark scheme was launched in 2000 by Federcomin, a federation representing telecommunications, radio-television and information technology companies. The trust mark scheme was free of charge for its members, but was closed in 2021. (Federcomin 2007; Ferro 2001).

In Germany, more than twenty **German trust marks** could be identified (Schulz, Froschmeier, Rothhaar 2017). Two trust marks were selected because of their high recognition values in former studies and a high appearance among the top 100 online shops: (1) The trust mark “Geprüfter Online-Shop“ exists since 1999 and it is offered by the EHI Retail Institute e. V. In 2017, 39% of the top 100 online shops were among the 700 certified stores. Recently the trust mark scheme is also offered in combination with customer reviews (EHI Retail Institute GmbH 2021; Rüdiger 2008; Schulz, Froschmeier, Rothhaar 2017). (2) The trust mark “safer shopping“ was launched in 2001 by the TÜV SÜD Management GmbH. Since March 2021, no new certifications are offered; existing certifications are still supported. In 2017, 12% of the top 100 shops were among the 200 certified online retailers (Rüdiger 2008; Schulz, Froschmeier, Rothhaar 2017; TÜV SÜD 2021).

Additionally, the two **pan European trust marks** were integrated: (1) The Trusted Shops trust mark was introduced in Germany in 2000 by the German private company Trusted Shops GmbH. In 2013, the trust mark expanded into the Italian market (Business Community 2013). It is the only trust mark scheme, which is operated in nearly all European countries with 30,342 certified shops in Germany and 1,431 in Italy in 2021. In 2017, 55% of the German top 100 online shops had the trust mark on their website (Schulz, Froschmeier, Rothhaar 2017). Trusted Shops was the first trust mark provider who introduced a money back guarantee and who offered customer ratings and reviews, both for the shop and the sold products, as additional trust services (European Commission 2012; Rüdiger 2008; Trusted Shops Germany 2021; Trusted Shops Italy 2021). (2) The Ecommerce Europe Trustmark was introduced in 2015 by Ecommerce Europe. With 24 national associations, it is the major representation of interest of the European digital commerce sector (Ecommerce Europe 2021). Online stores that bear a trust mark from one of the national member organizations are automatically entitled to bear the Ecommerce mark as well, i.e. the Ecommerce Europe Trustmark is not a trust mark scheme on its own right, it cannot be displayed as stand-alone trust mark. When the written survey was carried out in Germany, the member association was the Händlerbund with its trust mark “Käufersiegel“. In 2017, 5000 shops were entitled to display the trust mark, among them not one of the top 100 German shops. (Ecommerce Europe trustmark 2017; Ecommerce Europe trustmark 2021; Schulz, Froschmeier, Rothhaar 2017).

Both questionnaires also contained a fake, non-existent seal with an identical design but a slightly different text in the national language, and the Norton SSL seal, which is not a trust mark as defined here. Both labels were included because they provide an indication of how well an online buyer can actually recognise or distinguish certain marks and labels on a website.

## 5 FINDINGS AND INTERPRETATION

### 5.1 Awareness

Both the national and the pan European trust marks received an increased awareness in Germany compared to Italy (see table 2, question Q1).

Figure 1. Analysed trust marks / seals and their valuations

EHI Retail Institut	TÜV Süd	Trusted Shops	Ecommerce Europe	Norton	Fake	Netcomm	Federcomin
← GERMANY (DE)					← ITALY (IT)		
<b>Q1: I have seen the trust mark before:</b>							
13,6%	90,9%	85,4%	34,4%	60,2%	13,0%		
		17,5%	30,3%	83,6%	17,3%	7,7%	6,2%
<b>Q2: Now please select the two trust marks that would increase the most your trust in the online retailer if you would see one of them on the online retailer's website. (Missing percentage = "non of the trust marks".)</b>							
3%	36%	36%	12%	6%	3%		
		13%	30%	30%	16%	1%	3%

At an aggregate level, this corresponds to the higher prevalence in Germany. At the level of individual trust marks / seals, diffusion alone seems not able to provide an explanation for the differences. Three results stand out. First, the relatively high recognition rates of the Ecommerce Europe trust mark in both countries. In both countries, not one of the five preferred shops of the respondents had this mark. In Germany, not one the top 100 shops displayed the mark, and in Italy it can only be displayed together with the Netcomm trust mark, which got a 22.6% percent lower recognition rate – and not all shops with the Netcomm trust mark displayed the Ecommerce Europe mark (see section 4.3). Second, the very high recognition rate of TÜV SÜD trust mark compared to the low rate of the EHI trust mark, which has a higher diffusion especially under the top 100 shops. Third, the high recognition rate of Trust Shops mark in Germany seems also too high to explain it exclusively with the high diffusion (see again EHI rates under the top 100 shops).

The authors believe that in the case of the Ecommerce Europe and the TÜV SÜD trust marks spillover effects from similar labels / brands are responsible for the high recognition rates (Homburg 2020). The TÜV brand is one of the best-known brands in Germany because of its numerous certifications and testing activities; also outside of e-commerce. The octagon logo forms the basis of a wide range of TÜV SÜD certification marks, which look all very similar and are nearly omnipresent in Germany (Rüdiger 2008; TÜV SÜD 2021).

The Ecommerce Europe trust mark uses typical "EU" design elements, which many other labels are using as well. See for example the EU ecolabel ([www.ecolabel.eu](http://www.ecolabel.eu)).

The Trusted Shops trust mark probably generated high recognition values not only because of its high diffusion, but also because of its additional services. Each customer who buys in a

certified shop gets at least two E-mails from Trusted Shops, one related to the money back guarantee, and later a second related to the dealer evaluation. Both E-mails attract attention. The fake seal received relatively high recognition rates in both countries. It shows how vulnerable consumers are to counterfeits. Other studies showed similar results (Moore 2005; Rodríguez, Rüdiger 2013). Finally, the Norton SSL seal received high levels of recognition in both countries, especially in Italy. The seal has a very wide distribution all over Europe; under the top shops, Ebay is using it. But the Norton seal is not a trust mark.

## **5.2 Perception of the trust mark schemes**

The findings concerning the perception of internet trust marks are shown in table 3 on the next page. The correct statements, which the respondents full knowing the trust mark scheme should have ticked, are highlighted in grey. The results paint a consistent picture that leaves nearly no room for interpretation and is in line with other study results: a significant proportion of the online shoppers do not know what internet trust mark schemes stand for (Moore 2005; Rüdiger 2008; Rodríguez, Rüdiger 2013). This applies to all examined trust marks and the Norton SSL seal. Of particular concern is that many respondents believe that the offered products/services are also being certified (see table 3, “true” answers of item 4, Legal requ.). There are no significant differences between the countries, as evidenced by the correlation coefficients. The results were to be expected as 60.5% of the Germans and 56.9% of the Italians do not check if a visited website has a trust mark, and 93.7% of the German and 96.3% of the Italian respondents stated, that they never had visited a website of a trust mark provider to get informed about the trust mark scheme. So, a greater online shopping experience, a higher diffusion of internet trust marks, and the fact that seals of approval are a very common tool in Germany, has no impact on perception compared to Italy.

Besides this, two results should be highlighted: (1) Many trust mark schemes are incompletely documented on the websites of the trust mark providers. (2) In several studies, identified by the authors, trust marks, SSL seals, and other certification services, which sometimes not even include a mark / seal for the website, were not clearly distinguished or unconsciously confused (For example, Jiménez, Dittmar, and Vargas Protillo (2021) list in their article on page 9 three trust mark schemes for Italy. The authors of this paper could only identify one trust mark scheme among the three certification service providers listed.). This has influence on the validity of the findings, and shows how difficult it must be for consumers to find their way through the jungle of trust marks.

## **6 CONCLUSION**

The analysis shows, that diffusion and awareness of trust marks depends on the country. Based on the theory of Fukuyama, we assume that high trust countries like Germany tend to show higher levels of diffusion and awareness as low trust countries like Italy. The problem of misperception of trust marks on the other hand is an enduring one and, as shown here, it is a cross-national phenomenon. This means that higher diffusion and awareness does not lead to a better understanding of the trust mark scheme. This is a serious issue, since it can lead to wrong, harmful consumer decisions (Laric, Sarel 1981). Even for research, the results concerning misperception have strong implications. Many scientific publications on trust marks are based on the assumption that respondents know what a trust mark stands for and that the trust transfer process follows the trust theory as described here. Since this is not the case, these research results are called into question.

In summary, the current situation could be described as follows. **Consumers** concentrate their shopping on very few well-known shops. The vast majority of these top shops do not display any trust mark. A minority of the customers may be aware that there is a trust mark on a website, but they don't know what it stands for and cannot differentiate it from other seals or labels. Even if consumers wanted to get informed about a trust mark scheme, they would notice that they are often poorly documented and of great variance.

**Table 2.** Perception of the trust marks

	Trusted Shops (DE: N=245, IT: N=50)						Ecommerce Europe (DE: N=74, IT: N=108)						
	True		False		Not sure		True		False		Not sure		
	DE	IT	DE	IT	DE	IT	DE	IT	DE	IT	DE	IT	
Data protection	63,7	66,0	6,5	2,0	29,8	32,0	73,0	65,7	5,4	9,3	21,6	25,0	
Data security	56,7	64,0	9,8	8,0	33,5	28,0	60,8	73,1	8,1	3,7	31,1	23,1	
Payment	60,7	46,0	7,9	10,0	31,4	44,0	51,4	39,3	8,1	9,3	40,5	51,4	
Legal requ.	66,4	72,0	11,9	4,0	21,7	24,0	68,9	72,2	4,1	1,9	27,0	25,9	
ADR	19,3	28,0	25,8	10,0	54,9	62,0	14,9	32,4	28,4	5,6	56,8	62,0	
Website cont.	79,6	66,0	4,1	6,0	16,3	28,0	71,6	67,6	5,4	0,9	23,0	31,5	
Liability	16,7	26,5	47,8	20,4	35,5	53,1	23,0	31,5	35,1	8	41,9	53,7	
Correlation DE - IT: 0.89						Average Not sure: 33.9	Correlation: 0,91						39.0
31.9							Average: 34.6						
	Norton (DE: N=48, IT: N=115)						Fake (DE: N=19, IT: N=57)						
	True		False		Not sure		True		False		Not sure		
	DE	IT	DE	IT	DE	IT	DE	IT	DE	IT	DE	IT	
Data protection	68,8	67,8	12,5	7,8	18,8	24,3	68,4	68,4	5,3	3,5	26,3	28,1	
Data security	77,1	82,5	8,3	2,6	14,6	14,9	52,6	58,9	15,8	7,1	31,6	33,9	
Payment	77,1	37,4	2,1	8,7	20,8	53,9	52,6	44,6	0,0	8,9	47,4	46,4	
Legal requ.	31,3	50,4	31,3	8,7	37,5	40,9	66,7	67,9	0,0	1,8	33,3	30,4	
ADR	10,4	21,7	39,6	13,9	50,0	64,3	26,3	23,2	21,1	5,4	52,6	71,4	
Website cont.	66,0	67,0	12,8	7,0	21,3	26,1	73,7	73,2	5,3	3,6	21,1	23,2	
Liability	10,4	34,8	47,9	14,8	41,7	50,4	26,3	39,3	31,6	7	42,1	50,0	
Correlation DE - IT: 0.71						Average Not sure: 29.2	Correlation: 0.94						40.5
39.3							Average: 36.3						
TÜV (DE: N=253)													
	True	False	Not sure				True	False	Not sure				
Data protection	77,0	4,0	19,0	ADR			22,2	28,6	49,2				
Data security	64,7	6,3	29,0	Website cont.			79,8	3,2	17,0				
Payment	62,4	7,2	30,4	Liability			17,0	40,7	42,3				
Legal requ.	73,6	5,6	20,8	Average Not sure: 34.8									
Values in italics do not exceed the critical $\chi^2$ value at the 1 % confidence level (deviation from an even distribution)													

**Trust mark providers** are mainly trade associations or private companies. Especially the latter need sustainable financing and achieving profits (Balboni, Dragan 2018; European Commission 2012; Löbbers et al. 2020). The more consumer-friendly the scheme (i.e. comprehensive award criteria in combination with strong compliance and enforcement mechanisms), the more costs it causes and the higher the price for certification will be. Online retailers' willingness to pay seemed to be not high enough for a consumer-friendly, comprehensive trust mark schemes (Löbbers et al. 2020). Consequently, trust mark providers, who entered the market with a comprehensive scheme according to the recommendations of trust mark studies (see e. g. the excellent study from de Bruin et al. 2005), have to leave the market again, downgrade their trust mark scheme to reduce costs and/or find other sources of income. That is exactly what can be observed in the market: (1) Many trust mark schemes have disappeared. Most recently, TÜV SÜD has discontinued its service. They offered a comprehensive (e.g. covering IT security criteria and on-site inspections) and a consequently very expensive trust mark scheme. (2) Trusted Shops has removed IT security from its award criteria (Trusted Shops 2007; Trusted Shops Germany 2021). (3) Trust mark providers started to offer additional services. These are further trust services for online shoppers like customer ratings and reviews (see section 4.3), but also additional services for online shops, which have nothing to do with services of a trust intermediary. These services are comprised of any kind of legal advice, e.g. to avoid costly written warnings, and marketing measures, e.g. to create conversion and customer retention (Trusted Shops Germany 2001; Händlerbund 2021; see also section 4.3).

In the end, one question remains: What is the lesson learned? From the point of view of the authors, the idea that a pure trust mark service works as trust intermediary in an unregulated market was based on misguided assumptions of consumer behaviour and of other market players, e.g. the emergence of very many different schemes run by trade associations. Nearly all studies and analysis conducted forgot to integrate a comprehensive consumer perspective; especially they ignored the problem of misperception, although studies suggest that this is a fundamental problem with any kind of trust marks (Beltramini, Stafford 1993; Laric. Sarel 1981; Moores 2005; Parkinson 1975). What is needed is a new mindset, an outside-in approach, putting consumer needs (and its behaviour) in the centre. For sure, consumers want privacy, IT security, fulfilment, and may be even some kind of trust mark, but they also want convenience, simplicity, and no cognitive overload. Additionally, there is one important constraint to be considered here. The aims of trust mark providers are not identical or fully complementary with the aims of consumers (Balboni, Dragan 2018; Löbbers et al. 2020). This makes the search for a solution more complicated and creates challenges for research and policy. For researchers may be the theory of two-sided markets will offer additional insights. Politicians may reconsider the option of a fully-fledged European trust mark (European Commission 2012).

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# ***Building-as-a-Service: The Opportunities of Service-Dominant Logic for Construction***

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## **ABSTRACT**

Construction as one of the largest industries worldwide is not necessarily a frontrunner in the application of digital technologies, tools, procedures, and processes. This has been demonstrated in innumerable reports and scholarly work. The industry has a reputation for delivering projects late, over budget and with improvable quality; all of this combined with a certain digital ignorance. Moreover, it is known for having a Goods-Dominant Logic, which is focused on distribution and management of tangible units of output. This is combined with Taylorism resulting in separation of the role of managing the work from the actual execution of work. The planning and erection of a building is cross-cultural, cross-country project setting due to the diverse nature of the industry and its globalised value chain.

Building Information Modelling (BIM), a three-dimensional representation of information including its corresponding management in asset's life cycle is considered as one of the enablers for the digital future of construction. However, the development of service-dominant logic within the construction industry has not kept pace with technological and technical possibilities or is not discernible. This is based on a very traditional approach of money for goods which in this case means money for planned and built assets. Service as a unit of exchange is very rarely considered in the sector. As has been shown in other sectors, this can lead to further (more profitable) business models and further increases in efficiency and effectiveness.

The aim of the paper is to show the opportunities that exist if buildings are not considered as amalgamation of materials and goods but as a service model. The paper shows what Service-Dominant Logic (SDL) in combination with BIM could offer to the industry and discusses the term Building-as-a-Service (BaaS) from an SDL perspective.

## **1 INTRODUCTION**

Construction industry is not intertwined with digital advancements, as shown in various reports and scholarly work, such as Egan 1998; Farmer 2016; Wolstenholme 2009; Wu et al. 2021. This status quo, in addition to low productivity and efficiency gains in recent decades, has led to the construction industry having a reputation for being digitally ignorant due to its handcrafted products and not service-centered (Bertschek, Niebel, and Ohnemus 2019; Gallaher et al. 2004). Moreover, a certain degree of reluctance to embrace information management over the life cycle (Borrmann et al. 2018, pp. 2–5) completes the unfortunate picture of the industry. The first normative approaches were taken by means of ISO standards, such as the 19650 series (International Organization for Standardization 2018). Initial approaches are discernible, such as the consistent, lifecycle-based approach of Building Information Modelling (BIM). Information management with its constant exchange of data also requires a service orientation in addition to communication and collaboration. However, it will be considerable time before a holistic information management is implemented at national and more importantly, project level.

For the necessary increase in efficiency and effectiveness in the construction industry, it is purposeful to think about a combination of information management and service-dominant logic in order to provide services along the value chain and, above all, for the customer.

## 2 CONSTRUCTION

### 2.1 Status Quo

The construction industry is subject to many suggestions for improving of its digital capabilities and the obligatory improvements for the efficient and effective completion of tasks and projects over the life cycle (Zinke, Rifai, and Liebchen 2021, pp. 6–8). Construction is considered an “incidental innovator” with unstructured innovation, a lack of innovation strategies and innovation organisation (Pohl and Kempermann 2019, p. 6). Overcoming this status quo here requires emphasising standardisation through innovative information management based on Building Information Modelling and the underlying logics for structuring and allocating data (Kern 2019). Focusing on the availability of data over the life cycle is a first step towards a service-oriented logic in the industry to be able to create further innovations (cf. the fundamental work of Ingram 2020, pp. 213–234).

#### 2.1.1 Building Information Modelling (BIM)

Among market participants and researchers, BIM is described as a disruptive information and communication technology within the construction industry, enabling project teams to manage a project via a model-based cooperative approach (cf. Ma et al. 2018). Data that provides the basis for the provision of services, such as planning, construction and facility management services, is stored on a common data environment and made available to everyone as a trusted information, called “single source of truth” (Deubel 2021, pp. 114–116). This is normative backed in ISO 19650 (International Organization for Standardization 2018, p. 13), defining BIM as

“use of a shared digital representation of an asset to facilitate design, construction and operation processes to form a reliable basis for decisions”.

In this definition, the holistic lifecycle approach and the need to make decisions on a reliable (data) basis are particularly noteworthy. This can only be achieved by the mean of a structured information management as discussed by Cerovšek 2021. Studies show significant savings in terms of costs and schedule with an increase of quality of the erected asset (amongst others Bryde, Broquetas, and Volm 2013). This leads to the necessities of communication and teamwork skills as well as computer skills in practice for construction professionals (Becerik-Gerber et al. 2012; Kim, Mostafa, and Park 2022). The use of data-based methods in the construction industry is not prevalent and has not evolved organically in the industry (Harkonen, Mustonen, and Haapasalo 2020) but has primarily been passed within an organisation from project to project or within a team (Radley and Lever 2018).

However, this may only be the beginning of the digital transformation in the sector, which some see as the heralds of an Industry 4.0 movement in the construction industry (Bolpagni, Gavina, and Ribeiro 2022; Casini 2022). Here, the approaches of Industry 4.0 are based, among other things, on the constant availability and exchange of data, automation and a high level of service provision (Heßler 2019). An emerging question is in what period can the construction industry make the leap from a process- and phase-driven, craft-based industry to a highly automated,

digitized, service- and data-driven industry? For this change in approach and implementation of projects, it would be a possibility to emphasize the service-oriented approach, as described by Lusch and Nambisan 2015. They authors describe it as *“innovation as collaborative process occurring in an actor-to-actor network, [...] application of specialized competences for the benefit of another actor [...] and resource integration”*. Considering the aforementioned prerequisites and the requirements for a service-oriented approach, BIM can serve to overcome gaps along the way in the sense of a communication- and collaboration-supporting technology (Demirkesen and Tezel 2021).

### 2.1.2 Building-as-a-Service (BaaS)

The approach of understanding buildings not only as an amalgamation of materials and labour, but as a service-based approach to the provision of needs and functions is subject to scientific investigation. Therefore, there are yet few, overarching, holistic approaches to this term. In the context of construction, the term "BaaS" is strongly influenced by the required energy performance of assets. Rodriguez Santiago et al. 2014, p. 783 describe it as a

“system which aims to optimize energy performance in the application domain of non-residential building [sic!] in operational stage”.

This definition relies on a technical/technological idea that does not imperatively address the basic functions of a building as proposed by Asadian, Azari, and Vakili Ardebili 2018, p. 92: structures, systems, services, management and the interrelationship between them.

Thus, it is not about the service(s) IN a building, but ABOUT the building as a service-dominant logic-based asset. In this context, a (commercial) building is understood to mean the following:

“whole building or structure or unit of construction works, or a system or a component or part thereof” (International Organization for Standardization 2017).

The Suffix “as-a-Service” can be defined according to Fehling and Leymann 2018 and adjusted to the context as

“demand-oriented deployment of resources respectively assets. Costs for these resources arise mainly from their use (OPEX) [...] with usually no costs for their initial acquisition (CAPEX)”.

The concept is comparable to a conventional tenancy. However, it differs in that the cost and ownership responsibility changes. The client as owner and investor used to have a cost-relevant influence in the planning and realisation phase. With the discussed approach, the costs for investment, planning, construction and operation are now transferred to the planners and constructors of the buildings. This changes the role of the "classic" building owner as investor and later operator; they become the user of a building with significantly lower financial obligations.

Construction companies, in contrast, will increasingly become intermediaries and provide services related with the temporary use of assets – and become a comprehensive real estate provider. The consequence is a shift in the financial risk of erecting an asset in the value chain and is likely to lead to a more service-oriented perspective due to a higher degree of collaboration and knowledge exchange (Schönbeck, Löfsjögård, and Ansell 2021). Construction companies must endeavour to make these buildings rentable and to offer attractive services behind them. The provision of assets could be compared to pop-up stores

that are given to companies to and for certain times, e.g., for interim use, or in the case of BaaS for medium to longer-term use.

### 2.1.3 Service-Dominant Logic (SDL)

Bitner, Ostrom, and Morgan 2008 see services as processes, characterized by their

“dynamic, unfolding over a period of time through a sequence or constellation of events and steps [...], a chain of activities that allow the service to function effectively”.

The construction industry faces a particular contradiction in this context. Construction (including real estate, infrastructure and related services) contributes on average 5-15% of the national GDP of most countries in the world (UNECE 2021) and yet has the reputation of being one of the most indolent sectors in terms of developing service approaches with the first study in this context conducted Sivunen et al. 2013. The industry faces a paradox: It is a service-driven industry, but at the same time it is a project-based industry that is known for not having a high customer (respectively client) satisfaction rate (Nzekwe-Excel 2012).

However, this state of lack of customer satisfaction and lack of service need not remain a dichotomy (Kärnä, Junnonen, and Kankainen 2004). The predominant model of classical barter is "goods for money". These goods are mostly manufactured, easily tradable products, which are offers which render services which create values (Gummesson 1995). According to Lusch and Vargo 2004, the primary focus in this logic is on material resources, values, and transactions. They point to an evolution of this traditional logic and a change in focus to intangible resources, value creation and relationships, and an emphasis on providing "services for money", respectively "buildings for rent" in a BaaS context.

Smyth 2015, pp. 231–240 points out that in construction several features that SDL draws particular attention to are neglected, which is supported by Syben 2018, pp. 196–197. Instead, the focus is more on the negative characteristics:

- Focus on surface appearance of market demand
- Overvalue tangible contents
- Undervalue service contents
- View as provider/producer rather than co-creator
- Undervalue client perception of value

Chapter 2.2 describes these opportunities and their added value for the construction industry. The fundamentals of the SDL and its applicability in construction make it purposeful for the construction industry to focus on these values as well. This is partly already observed, as discussed by Preuß and Schöne 2016, p. 5, but this slow change still contrasts with an administrative rather than a service culture.

## 2.2 Opportunities

It should be emphasised that there is not one single approach to a solution, but a combination of diverse concepts and approaches. However, SDL's combined approach of BaaS and BIM could be an opportunity to lead the construction industry to a higher level of service orientation. Koskela 2000 described the underlying approach two decades ago which can be aligned:

- A chain of transformations (BIM, SDL, BaaS),
- a flow of work (BIM, SDL) and
- a generation of value for the customer (SDL, BaaS)

### 2.2.1 *Focus on customer needs*

Without understanding the requisites, expectations of the customer and their underlying values, the concept of value is undefined (cf. the extensive research of Lavikka et al. 2021). Adding to this, it is necessary to understand that clients do not necessarily represent one person that acts as a single entity. It is rather to be interpreted as a placeholder where diverse, conflicting values, interests, requirements, temporal perspectives and different data demands have to be reconciled (Emmitt and Bertelsen 2005, pp. 73–74). It is necessary to elicit these differing requirements together with the client, evaluate them and elaborate feasible solutions by the use of simplification and systematization (Çıdık, Boyd, and Thurairajah 2017). Moreover, assets are planned and built without necessarily knowing the individual (later) user/customer. This leads to the occurrence of modifications in the actual realisation. BaaS in combination with SDL addresses this by building for a target group and not a specific customer.

Tzortzopoulos, Kagioglou, and Koskela 2020, pp. 29–30 call for a combination of better requirements management, collaborative interactions, sharing of information and knowledge and the expedient management of design activities to increase value. In the early design phase, the foundations are laid for more efficient further processing of the asset, so the authors. Here, BIM can help to create this value in the early phases of a construction project by clearly structuring data and transfer it to the operational phase. BIM can act here as a data supplier for the life cycle (Dalla Valle, Campioli, and Lavagna 2020, p. 49) and supply in the operational phase BaaS with occupational data, e.g. occupancy, equipment, accessibility, cleaning intervals, etc.

### 2.2.2 *Appropriate valuation of tangible contents*

The first approaches and considerations of value management and value engineering can be observed in the construction industry, but they are mostly related to the project realisation phase. (Kelly, Male, and Graham 2015, p. 427). What is more, the industry is characterised by the fact that an immobile product is produced in which the involved parties each contribute a specific fragment (Borrmann, Lang, and Petzold 2018). Due to increasing complexity and regulatory, individual and sustainable requirements of construction projects, it is becoming increasingly impractical to manage sophisticated assets without the help of IT (Coss 2017). Overcoming these requirements for IT-supported project management has been a key issue in recent years in order to remain competitive in the marketplace and still is (Kamble, Gunasekaran, and Gawankar 2018). This results in different depths of processing, involvement and implementation of every participant and different aspects of quality management, often due to information asymmetries, as discovered by Zeng, Lou, and Tam 2007. BIM is seen as having a bridging function that allows both worlds to be united: linking classic construction activities in the physical world with digital models. However, this can only be an intermediate state in the further development, as it cannot be fully ascertained which information is accurate – a classic question of trust: How much can a recipient of information trust the information given? (Bowe, Robles, and Mathews 2017). Overcoming this phenomenon by the use of structured, comprehensive information management can result in a higher, physical quality of the overall asset, as discussed by Yarnold et al. 2021.

### *2.2.3 Increase Service Productivity*

Kuusi, Junnonen, and Kulvik 2020 point to the fact that the construction supply chain in the European Union (and beyond) is experiencing severe fragmentation - a development that has been observed for decades. This is combined with sustained low growth and low profit margins. Neither is this a new, sudden phenomenon, but a manifestation of a saturated industry that has matured over decades (Cain 2004; Gallaher et al. 2004). These developments are based on an on-site approach, i.e., the necessary materials are delivered to a construction site and assembled by hand to form an asset (Maxwell and Couper 2022).

To enable higher service productivity, various considerations exist, such as moving manual work to a protected factory environment to achieve higher manufacturing quality on the one hand and to meet the needs of customers on the other (Lavikka et al. 2021, p. 839). The application of lean principles, known from the automotive industry, are supposed to have a facilitating function here (Aureliano et al. 2019). Furthermore, well-known and proven techniques such as just-in-time and prefabrication shall be utilised to enhance the handling and use of the three M's: manpower, machinery and material (Sui Pheng and Meng 2018). This shall be backed by the increase use of robotics (Spengler 2021) or the use of Augmented Reality (Alavi et al. 2021).

However, Milakovich 1995, p. 123 already recognised that it is necessary to permanently provide services at a level of performance that complies with or surpasses all customer expectations. For this, an internal quality management system is necessary, the author continues, which not only checks the quality standards, but also records the customer requirements and reconciles them. This requires data literacy along the value chain. The conflict here is that this competence must first be built up but cannot be implemented without practical experience from projects. As a result of this inadequacy, either too little, too much or incorrect data is ordered, generated or provided by clients, which then leads to an overflow of information (Wildenauer and Basl 2021, pp. 118–120). This information must first be evaluated before it can be utilised into services. This approach ties up resources and leads to no added value.

### *2.2.4 Establishment of Co-Creation*

Although being the fundamentals of successful and long-term cooperation, especially in the labour- and coordination-intensive construction industry, Co-Creation has attained attention over the last few years. To some extent, this can be reconciled with Sánchez-Fernández, Iniesta-Bonillo, and Holbrook 2009 observations that customers (clients in this case) are increasingly better informed and prepared and thus actively demand higher value generation. As already indicated by Liu, Fellows, and Chan 2014, p. 121, a more intensive knowledge exchange in a trusting client-contractor relationship can promote the innovation process for the parties involved. However, the limitation associated with this is that due to the high defragmentation of the industry, lack of coordination and communication, among other things, these project businesses are less dynamic and innovative. It should be noted that according to the SDL paradigm, firms do not create value, but instead elaborate value proposals. It is the client that creates value by using these proposals (Vega-Vázquez, Revilla-Camacho, and Cossío-Silva 2015). Based on the work of Vargo and Lusch 2008, Galvagno and Dalli 2014, p. 644 defined in their research Co-Creation as

“joint, collaborative, concurrent, peer-like process of producing new value, both materially and symbolically [...] as a general concept”.

Co-Creation is considered crucial and needs to be combined with innovation to reach the promoted benefits (cf. the work of Smyth, Razmdoost, and Kusuma 2016) with an early involvement of the client(s) and their needs (Wei and Lam 2014). Based on the research findings of Tommasetti, Troisi, and Vesci 2015 it is necessary to consider eight interdependent dimensions in their value co-creation measurement conceptual framework:

- Cerebral activities (positive attitude, expectations, trust, tolerance)
- Cooperation (compliance, responsible attitude)
- Collation (researching, sorting and assorting of information)
- Changing Habits (pragmatic adaption, change management)
- Co-production (Co-design, Co-delivery, both to provide value in use)
- Co-learning (sharing information, feedback)
- Connection (relationship building and their maintenance)
- Combination of complimentary activities

Research has shown that interdisciplinary cooperation according to the above eight interdependent points may be essential in the construction industry (Michna, Kmiecik, and Czerwińska-Lubszczyk 2020). BIM serves as a facilitator here (Miao 2022). However, this cannot be implemented by a single party but requires everyone along the value chain, as construction project parties have little experience creating [...] digital services according to Lavikka, Lehtinen, and Hall 2017, p. 544. It is the responsibility of the individual involved in the construction industry to give these eight points the necessary attention, but a compulsory requirement for the implementation of SDL in the sector.

### *2.2.5 Establish long-term mutual benefits*

In the standard work on innovations in the construction industry by Jones and Saad 2003, pp. 193–195, one of the primary approaches to enabling long-term mutual benefits is described as partnering. This approach is defined as increasing the collaborative advantage through inter-organisational alliances. In addition to mutual learning, this also includes the sharing of risks that arise in the processing of an asset. It is a mutual commitment for the benefit of all participants, in which resources are disclosed and can be accessed by all participants. This requires working with greater transparency and accountability and to involve users and stakeholders in life-cycle based decision-making processes (Haugbølle and Boyd 2017, p. 5). The basic service concept is evident in this context: each commissioned party is part of the project team for the respective commissioned part only. The respective value-generating work can be taken over by other parties in their work packages. The idea is to replace price competition with competence competition with corresponding services (Habib 2020, pp. 76–81). This open concept can only work with the kind of information management that BIM enables in a structured way. According to the findings of Fewings and Henjewe 2019, p. 243 extensive case studies, five points of improvements are necessary to achieve this ambitious goal:

- (1) developing people in construction,
- (2) adopting smart and digital technologies,
- (3) contributing more to infrastructure-based economic growth,
- (4) investing more in sustainability and efficiency,
- (5) provide strong leadership.

Leadership shall be seen according to the definition of Partington 2003, which focusses on the involvement, participation and empowerment of followers.

Points 1 and 5 concern social skills, point 2 technical and points 3 and 4 economic issues.

However, Langford and Retik 1996 points out a crucial importance: The industry needs to agree on whether this approach is a real rethink of the industry's project delivery or merely a new contracting method that cannot meet the high standards it has set for itself. Given the long timespan between the publication of the work 26 years ago, it remains a legitimate objection how much longer the industry can afford to merely discuss these issues. Previous literature research by Bygballe, Jahre, and Swärd 2010 showed that this partnering philosophy was predominantly implemented on a per-project basis and was not holistically conceived. BaaS would be a valuable possibility to use buildings for (medium- to long-term) purposes and thus save resources for not building new assets.

### 3 RÉSUMÉ

Considering the aforementioned five demands according to Smyth 2015 in their interrelated dependency with the formulations thereunder, it becomes apparent that they cannot be implemented in an unconnected context and manner. As long as old ways of thinking prevail in the construction industry and assets are seen as mere objects, the necessary innovations to increase efficiency and effectiveness will not be successful in the long-term. A shift in thinking is needed in the light of scarce resources, not to build buildings for the sake of buildings, but to think of assets as BaaS that can be used as flexible and timely as appropriate. The construction industry can develop impressive, new, long-term and sustainable business models here, in which the service-dominant logic is applied throughout the life cycle of an asset to be realised. To achieve this mutually beneficial state, further academic research and practical application is inevitable. This concerns in particular the financial and legal aspects associated with this new form of building allocation.

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# ***The role of the theory of planned behavior in cause-related lottery systems: A cross-cultural study***

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## **ABSTRACT**

Cause-related marketing provides the commercial link between a charity and a business for mutual benefit, namely a win for business, a win for the cause or charity, and a win for the consumer. One element of cause-related marketing is “cause-related lottery” (CRL) which is governed and administered by the state with proper rules, regulations, and due transparency to fund significant state projects or for important causes. In this study, by applying the Theory of Planned Behavior, the attitude, intention, and buying behavior of CRL consumers are researched in two emerging economies of India and Russia. This paper presents the underlying theory and the research setup. Later, it is planned to collect data from Indian and Russian respondents and to analyze using structural equation modeling. Respondents’ attitudes towards CRL, subjective norms, behavioral control, and buying intention will be investigated. This study would offer some compelling implications for policymakers of both the countries, India and Russia, that could be used to encourage the society to invest in CRL and help developing societies to create more funding for different pressing issues in the economy. It will also give insight to policymakers of both the countries to come out with regulation of CRL to make the process transparent for all the stakeholders to have the credibility of CRL.

## **1 INTRODUCTION**

Lotteries have a long tradition in different countries, e.g. in the Anglo-American area mainly because of the possible winnings (Clotfelter and Cook 1991; Norton 1991), but also in Japan, where social motives play a role (Miller and Terrell 1991). The lottery is a game of chance to raise money in which people win cash if they have bought a winning ticket. This can be an important source of revenue also for the state. According to the North American Association of State and Provincial Lotteries, in 2014 lottery ticket sales in the United States exceeded \$70 billion. In 2014, Americans preferred investing in lottery tickets (Damianov and Peeters 2017). Lotteries were donated to fund scientific advancement and facilitate public amenities (Avin 2019; Damianov & Peeters 2017). Fundraisers understood that crowdfunding through a lottery can be very effective (Du et al. 2019). Key to reward-based crowdfunding campaigns is extensive networking, preparedness for investment, and pitch presentation, as well as skills to influence the crowd (Kunz et al. 2017). The present study highlights the importance of cause-related lotteries in the context of state-governed lotteries. CRL is beneficial for the state and the buyers because if the buyer has the satisfaction of meaningful investment, the state utilizes the lotteries to fund e.g. students’ education with “voluntary” tax dollars (Stanley and French 2003). Moreover, lotteries have become a popular funding instrument because it has been linked to the positive affect (Krawczyk 2009).

## 2 HISTORY OF LOTTERY IN THE WORLD

The concept of lotteries is old as evidence can be found in Old Testament and Greek mythology already. In general, the process of deciding by chance is very old. Earlier, lottery systems were widely used for allocating unique task assignments, property rights, and settling legal disputes (Willmann 1999). It had an important, but controversial role in different cultures. Japanese and Chinese used to predict the future whereas the Quran prohibits gambling and lotteries at all. The recent definition of lottery narrowly aligns with the context in which Romans used the concept of chance. Certain instances of the use of lottery in the past are:

- The first recorded history of lottery in the Chinese dynasty dates to 205 and 187 BC, which helped to finance the building of the Great Wall of China.
- The earliest records of lotteries in Europe were held in European Empire organized by Emperor Augustus Caesar. The funds were collected and used for repairs in the city of Rome.
- Francis I of France permitted the establishment of lotteries to raise money for helping the poor.
- Possibly the European public lottery first to award money prize was Ventura held in 1476 in Italy. It quickly spread to other parts of Europe and the US.

## 3 CAUSE-RELATED LOTTERY

CRL essentially creates crowdfunding through people buying lottery tickets in very small denominations but in large numbers, creating a win-win situation for all. CRL intends to find funds for relief efforts, not to create lucky tickets. Those who buy a CRL ticket pay a small amount and know that they have contributed to a good cause, but they also have a chance to win prize money, because CRL awards prize money worth less than half of the money raised and gives the rest away to a good cause.

### 3.1 Economic & Social Perspective of CRL

Lotteries today operate in many countries around the world. This is government-operated regressive gambling. It has always been challenging for economic theorists to explain risk-averse consumers about purchasing lottery tickets as it can be considered as an unfair bid (Perez and Humphreys 2013). CRL is an income source for the government and a prospect to the customers at the same time. As it gives a feeling of self-satisfaction to the people who buy lottery tickets that their money will be utilized for a better cause even though they lose it. A demerit of state lotteries is that it is perceived as socially unfair as the mostly low-income group invests in buying lottery tickets, yet it provides a profitable business for higher-income groups. But CRL can be seen as to be a little bit different as its benefits are always shared with low-income people which in turn motivates the people to opt-in for CRL. It is a win-win for both the government and people who buy lottery tickets.

### 3.2 Feasibility of CRL & Risks

The legal requirements for national and charity lotteries are comparatively few. There is a need for legitimacy. The national lottery demands transparency in all financial dealings and audit reports. Risks involved include:

- Mismanagement and misallocation of funds (reputational risks). Lack of regulatory framework for gambling can put questions of the legitimacy and independence of the national lottery authority system.
- National lotteries have to compete with other forms of gambling.
- Elevation of operating costs due to the inefficiency of cost-effective distribution channels for sales.
- Trouble in selecting key projects and beneficiary organizations to capitalize on lottery opportunities.
- Difficulty in monitoring needs can be stressful if capacities are inadequate.
- International legislation for the internet-based charity lotteries can challenge to manage as they are dynamic.

### 3.3 Marketing dimension of CRL

Apart from the economic and risk perspective of CRL, the marketing perspective must also be considered. There exist approaches to answer the question “why do people buy lottery tickets?” (Faustino et al. 2009; Kwang 1965; Ariyabuddhiphongs 2011). Different explanations, ranging from rational and irrational arguments to psychological needs or social inclusion models exist. If CRLs are to be offered to fulfill the triple goal of satisfying the customer, the government, and the presentee, it is useful to know under what conditions potential customers decide to buy lottery tickets. This primarily concerns an assessment of those variables that influence the purchase intention and ultimately the purchase decision. In this paper, the theory of planned behavior is used as the basis for an empirical investigation of these issues. Lotteries in general and CRL specifically do not fall into one of the broad categories of “products” or “services”.

## 4 THEORY OF PLANNED BEHAVIOUR

This study takes up an explanation that can contribute to the understanding of lottery participation, more specifically, CRL participation. We claim that lotteries are popular due to positive anticipatory emotions (Krawczyk 2009). Most lottery buyers invest in it to increase their financial power (Forrest et al. 2002). They relish the hope of winning a million in the period between buying a ticket and the drawing. Therefore, they will accept less expected value than getting involved in gambling. Buyers are aware of the fact that their investment is for a good cause, and therefore they are motivated to contribute to CRL and thus encourage the state to come up with more such opportunities.

The theory of planned behavior (TPB) is a theory based on the theory of reasoned action (Fishbein 1979) and extends it by the construct of "perceived behavioral control (Ajzen 2006). The TPB, which is an expectancy-value model, assumes that human behavior is a result of the manifestation of behavioral intention that can be explained by one's attitude, subjective norm, and perceived behavioral control. In Ajzen's model, behavior predicted behavioral intention, which is the extent of effort a person desires to expend to perform an action.

The construct "attitude toward behavior" is conceptualized as a general affective evaluation of behavior. It excludes cognitive and conative aspects and describes whether the performance of a certain behavior is evaluated as positive or negative by the acting person. Concerning cause-related lotteries, general attitudes towards gambling, having a fortune, or good Karma can play a role in establishing attitudes.

Perceived social or subjective norm is the interpretation of the expectations that important reference persons have of the person. These perceived expectations of others affect the formation of a person's will. Subjective norms refer to the person's perception of the social environment to perform or refrain from performing the behavior. The intention to invest in cause-related lotteries may be influenced by people close to the person, with whom one consults and in whose judgment one trusts.

Perceived behavioral control is defined as the subjective perceived difficulty or ease of performing a behavior. It considers the extent to which the behavior being predicted can be controlled at all by the person acting. Perceived behavioral control is based on the person's knowledge, skills, experience, and observations of others' behavior (Frey et al. 1993). In the present case of cause-related lotteries, behavioral control may be influenced, for example, by the presence of adequate resources (financial resources) and the ability to control obstacles to behavior (the possibility of also performing corresponding transactions or the ease/difficulty of participating in the lottery at all). If resources are plenty with limited challenges, then perceived behavioral control is greater which strengthens the intention to perform a behavior.

The theory of planned behavior has been used recently in many contextual settings where decision making is not easy and dependent on the individual as well group related variables (e.g. DeMaria et al. 2019; Passafaro et al. 2019). This paper is using TPB to understand the buying behavior of CRL from two emerging economies of the world Russia and India. It is a step forward to understand consumers' buying behavior by applying the TPB, for buying small denominations of cause-related lotteries in big numbers and thereby helping the state with more monetary resources to support the welfare activity of the state.

Following the above, the relationships between the three main antecedents of behavioral intention under TPB are postulated for the case of cause-related lotteries:

**Hypothesis 1 (H<sub>1</sub>):** There is a positive and direct relationship between attitude towards use and the intention to invest in cause-related lotteries.

**Hypothesis 2 (H<sub>2</sub>):** There is a positive and direct relationship between social and subjective norms and the intention to invest in cause-related lotteries.

**Hypothesis 3 (H<sub>3</sub>):** There is a positive and direct relationship between perceived behavioral control and the intention to invest in cause-related lotteries.

## 5 THE CULTURAL VARIABLE

The theory of planned behavior uses variables of influence that are particularly interesting about cultural differences. Hassan and Shju's (Hassan and Shiu 2017) study has revealed significant cross-national variations in the TPB constructs and their relationships.

Based on Hofstede's (2011) work, Russia and India show significant differences in the variables of masculinity/femininity, Uncertainty avoidance, and power distance. Farrukh et al. (2019) showed that attitude, social/subjective norms, and perceived behavioral control contribute differently to behavioral intention depending on the cultural setting (namely the dimension of individualism and collectivism). For subjective norms and moral considerations, Mittelman and Rojas-Méndez (2018) have suspected a cultural influence in the presence and expression of cultural norms and values. Concerning charity donations, Kashif and colleagues (Kashif et al. 2015) found that subjective norms were a significant, strong, and positive predictor of the intention to donate in a collectivistic country.

Masculinity/femininity defines the extent to which a society values traditional masculine values of ambition and achievement over values (typically associated with women) such as caring and interpersonal harmony (Hofstede 2011). Societies dominated by masculine values tend to promote the importance of material possessions and money, while cultures with a distinct feminine emphasis prioritize the values of social relevance, the well-being of others, and quality. Concerning the dimensions of "attitude" "social norms" and "perceived behavioral control," one can certainly infer opposing influences here. In masculine-dominated societies, personal influence (Attitude) as well as perceived behavioral control will exert a stronger influence on behavioral intention than consideration of social norms, since these are more strongly anchored in cultures where caring and interpersonal harmony prevail.

Uncertainty avoidance is defined as the extent to which individuals in a society are tolerant of uncertainty or ambiguity (Hofstede 2011). Societies characterized by high levels of uncertainty avoidance are uncomfortable when confronted with the unknown, novel, or surprising situations (Neira et al. 2017). Previous research has shown that a positive attitude toward gambling is related to the tendency to take risks (Kassinove 1998). In cultures with high levels of uncertainty avoidance, gambling (which involves risk-taking and general uncertainty of outcomes) is generally viewed with more suspicion than in societies with low levels of uncertainty avoidance. Attitudes (i.e., personal assumptions about reality) are influenced by levels of uncertainty avoidance, such that attitudes contribute to a lesser extent to the behavioral intention to purchase lottery tickets. In terms of subjective norms and moral considerations, the expectations of others play a large role. We hypothesize that risk-averse societies place less importance on what others say when shaping their behavioral intentions. Uncertainty aversion might also moderate the valuation of personal capabilities (having money, being able to carry out transactions, etc.) in such a way that these considerations become less relevant in societies with low uncertainty aversion.

Power distance refers to the way power is distributed in a society and the extent to which the less powerful accept that power is unequally distributed (Hofstede 2011). Concerning the antecedents of the behavioral intention to purchase cause-related lottery tickets, this dimension is relevant in that many lotteries are established and sponsored by authorities such as governments, etc. Therefore, the attitude and personal acceptance of such an instrument might play a greater role in high power distance cultures than in low power distance societies, as the authority of these institutions is more easily accepted. The same is true for social and subjective norms to be represented to others. If they have higher perceived power (e.g., parents, teachers, etc.), meeting their expectations matters and is thus important. Third, the assumption that decision-making power in monetary transactions is unequally distributed could lead to a higher importance of perceived behavioral control than for representatives of society with low power distance. In this sense, we argue:

**Hypothesis 4 (H4):** In Russia as a feminine, high power-distance and uncertainty-avoiding culture, (a) attitude, (b) social and subjective norms, and (c) perceived behavioral control have a stronger effect on behavioral intention to invest in cause-related lotteries than in India, with lower levels on these dimensions.

## 6 PROPOSED RESEARCH METHODOLOGY

We aim to test the proposed model by adopting existing measurement scales of the constructs under study from Ajzen (1991). The questionnaire will be administered to the Russian and Indian respondents who invest in buying lottery tickets. Responses will be recorded on 5-point Likert scale (strongly disagree-> disagree-> neutral-> agree-> strongly agree). Demographic details such as educational qualification, employment sector, annual income of the individual will be measured to understand the buying behavior of the people from different backgrounds. Data will be screened, and valid responses will be subjected to statistical analysis. Data will be tested to determine the item's reliability and the proposed model will be tested for its validity using confirmatory factor analysis.

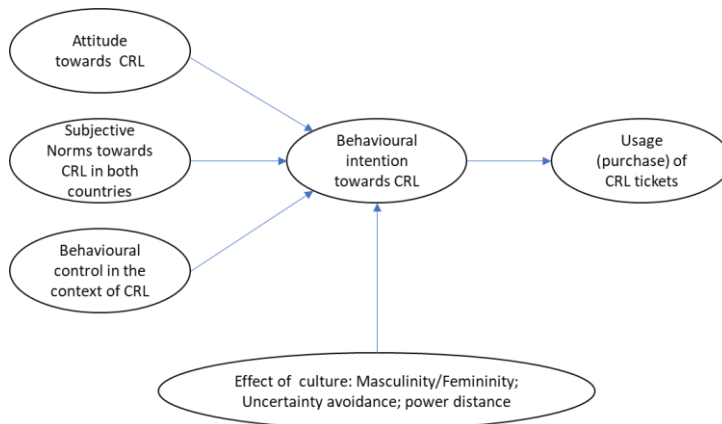


Figure 1. Proposed conceptual model

## 7 EXPECTED RESULTS

As this research is in a conceptual stage, it is too early to present conclusions. Rather, it is expected that attitude, subjective norm, and perceived behavioral control will have an indirect impact on actual usage through behavioral intention which can be explained by the theory of planned behavior. Based on the assumption that Russia has a feminine, high power-distance, and uncertainty-avoiding culture, (a) attitude, (b) social and subjective norms, and (c) perceived behavioral control will have a stronger effect on behavioral intention to invest in cause-related lotteries than in India which possesses lower levels on these cultural dimensions.

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# ***Insight Into Biases When Measuring Socioeconomics And Demographics Of Consumers Patronizing Retailing Fashion Design Entrepreneurs: Germany's Perspective Vs South African Requirements***

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## **ABSTRACT**

With an increasingly globalised market, it has become more pivotal to provide cross-cultural analytics of the different markets conducting international business. Thus, this paper aims to study demographic and socioeconomic variables inherent when conducting a cross-cultural analysis of consumer needs when patronising retailing fashion design entrepreneurs in Germany and South Africa. The primary problem was identified when the research team tried to match German and South African demographics and socioeconomic variables. A discrepancy in variables was recognised, delaying an appropriate cross-cultural analysis. Currently, fashion design entrepreneurs are becoming increasingly interested in the global market. Consequently, this research intends to provide information about consumer differences between one of the Southern African economies and one of the central European economies. Hence, this paper recognises that it does not need to compare “apples with apples” but instead acknowledges that cross-cultural analytics are still possible in different societies if similarities are not forced but rather acknowledged and appropriately managed. As a result, the diverse demographic and socioeconomic variables identified when conducting a cross-cultural analysis between German and South African consumers patronising fashion design entrepreneurs were scrutinised, and necessary recommendations were provided. Accordingly, the main question interrogated in this paper is that of demographic and socioeconomic differences between Germany and South Africa. Secondly, the question related to how bias can be avoided when comparing demographic and socioeconomic variables between Germany and South Africa is studied. Finally, the question connected to German consumers' characteristics and levels of patronage towards retailing fashion design entrepreneurs was addressed. The empirical data was collected through quantitative measures, through a survey and from 469 respondents in Germany. The findings indicated that construct, method and item biases all needed to be carefully considered for a cross-cultural analysis between Germany and South Africa. Secondly, the results revealed that the profile of consumers patronising retailing fashion design entrepreneurs in Germany as highly educated millennial females with an upper-middle-income living in metropolitan areas with no children. Finally, it was found that just over 10% of the population patronised retailing fashion design entrepreneurs in Germany.

Keywords: Biases, Cross-Cultural, Retailing, Fashion Designers, Entrepreneurship, Germany, South Africa

## 1 INTRODUCTION

Fashion is one of the most globalized markets; Statista (2021) reported a fashion revenue of over €700,000m; Germany ranked sixth with over €25,000m, and South Africa ranking fifty-fourth with over €750m (which is over R1,200m). These figures highlighted significant differences with respect to size between the two markets.

In this paper, we debate essential factors to consider when researching cross-cultural differences between German and South African consumers, specifically with respect to those consumers interested in fashion products designed and produced by entrepreneurs in the retail-clothing environment. To achieve success in the global retail market, this paper assumes that it is essential for fashion design entrepreneurs to understand cross-cultural factors influencing consumer decisions.

The primary problem was identified while preparing to research cross-cultural differences between German and South African consumers patronizing retailing fashion design entrepreneurs. The demographic and socioeconomic variables considered for this paper were initially based on the German market; it soon became clear that utilizing the same variables would not holistically address the South African market. Considering the differences in demographic and socioeconomic variables, an initial empirical study was conducted in Germany to establish the primary differences and biases which needed consideration for cross-cultural analysis. Subsequently, this paper's main aim is to evaluate the difference in demographic and socioeconomic variables between Germany and South Africa to appropriately conduct a cross-cultural analysis of consumer needs to patronize retailing fashion design entrepreneurs. With that in mind, the objective of this paper is to identify the different cross-cultural biases that could potentially occur between the diverse demographic and socioeconomic variables recognized. As a result, the following research questions are addressed in this paper:

- (1) What are the demographic and socioeconomic differences between Germany and South Africa?
- (2) How can bias be avoided when comparing the different demographic and socioeconomic variables between Germany and South Africa?
- (3) What are the demographic and socioeconomic characteristics of people patronising fashion retail entrepreneurs in Germany?
- (4) What is the percentage of German consumers willing to patronise retailing fashion design entrepreneurs?

The bias and equivalence frameworks discussed in the literature review (section 2) were studied in order to outline the apparent and potential demographic and socioeconomic differences between Germany and South Africa.

## 2 LITERATURE REVIEW

Cross-cultural analysis assists the process of investigating, developing and comparing different cultures (Gallagher & Savage 2013, p.1029). At the same time, the bias and equivalence framework guides the process of identifying potential systematic errors and quality inferences in cross-cultural studies (van de Vijve 2018, p.4). Equivalence is generally at the opposite end of bias; thus, bias is reduced when an investigation is more equivalent (Symen et al. 2017,

p.3). Fundamentally, equivalence and bias address methodological challenges in cross-cultural studies, with the primary aim being to reduce bias and ensure a sufficient level of equivalence (He & van de Vijver 2012, p.3).

By definition, an instrument is biased when cross-referenced scores have different psychological meanings that have not been considered (Van de Vijver 1998, p.43). Equivalence, on the contrary, is defined as the ability to demonstrate the actual differences in psychological meanings of cross-referenced scores (Fernández & Abe, 2018, p.5). Bias can be distinguished as either construct bias, method bias or item bias, while equivalence can be characterized as construct inequivalence, structural and functional equivalence (van de Vijve 2018, p.5-8; Schultz et al. 2014, p.269). Generally, bias addresses the implications of systematic error, and equivalence is more applicable at the measurement level, where scores obtained from different countries are compared (He & van de Vijver 2012, p.5).

Since data from South Africa has not yet been collected, the literature review will only focus on the bias framework to identify potential systematic errors that could occur in the cross-cultural analysis between South Africa and Germany. Firstly, construct bias will be discussed in this section, followed by method bias which includes sample bias, instrument bias, and administrative bias. Lastly, literature related to item bias will be revised.

## **2.1 Construct Bias**

The manner in which humans comprehend the world enables them to develop mental models that are understandable to them, and those models are called constructs (McArthur, 2007, p.28). For construct bias to be avoided, different psychological meanings associated with specific variables must be considered by acknowledging that particular constructs cannot wholly overlap in certain cultures (He & van de Vijver 2012, p.5). Therefore, for this paper, the different retail formats need to be considered in order to determine whether there are differences in constructs that overlap across cultures.

This paper measured the difference in consumer patronage between three different retail formats. Those retailers were referred to as independent small designer brands, small corporate brands, and corporate international/national designer brands. The independent 'small' designer brands refer to fashion design entrepreneurs with (potential) access to the global markets and self-employed with registered sole proprietorship, partly or self-owned limited liability companies and partnerships (Berglann Moen, Røed, & Skogstrøm 2010, p.181-182). Furthermore, independent 'small' designer brands are fashion design businesses pushing the global industry forward through innovative designs and new business models with the ambitions of scaling up their global businesses (Business of Fashion n.d).

The independent 'small' designer brands are differentiated from small corporate brands and corporate international/national designer brands. The small corporate brands and corporate international/national designer brands refer to retail outlets which are not independently owned, operating either as specialty stores with a narrow product offering or department stores, which categorize their (wide and deep variety) products by grouping them in similarities and brand names (Diamond et al. 2015; Lee 2010, p597-598). The only difference between retailers which are designated as small corporate brands and corporate international/national designer brands is their size and their ownership of the brands.

With a clear construct of independent small designer brands, small corporate brands, and corporate international/national designer brands, examples of country-specific retailers can then be provided to consumers to ensure the constructs are clear and relevant for both Germany and South Africa. For further clarity in the survey, a brief definition of independent

small designer brands, small corporate brands, and international/national designer brands could be provided in brackets after the question.

Another area where construct bias occurred in this paper is connected to the target population and is discussed in further detail in the methodology section in section 3.1.

## **2.2 Method Bias**

Method bias directly addresses the empirical process through sample bias, instrument bias and administration bias (van de Vijver 2018, p.5).

### *2.2.1 Sample Bias*

In cross-cultural studies, sample bias can occur when population groups are incorporable (He & van de Vijver 2012, p. 5). While sampling bias in intracultural studies “occurs when some members of a population are systematically more likely to be selected in a sample than others. It is also called ascertainment bias (...).” (Bhandari 2021). This paper, however, will not concentrate on ascertainment bias but rather on cross-cultural sample bias.

To avoid sample bias, it should not be assumed that the variables such as residency and education in western and non-western countries are the same (Fernández & Abe 2018, p.9-10; He & van de Vijver 2012, p. 5). Potential sample bias between German and South African consumers was explicitly identified with the residency variable and discussed more in section 3.1. Consequently, the comparison of remote cultures will not be possible, so the sample bias identified results in unavoidable cross-cultural differences, which will then be attributed to the target construct (Van de Vijver & Tanzer 2004, p.269)

### *2.2.2 Instrument Bias*

Instrument bias can be dependent on the stimulus material, response procedures or different response styles related to the actual data collection instrument (Fernández & Abe 2018, p.9-10). Alternatively, instrument bias occurs due to the level of familiarity with testing processes. Different cultures have different practice systems that need to be considered during the data collection process (Els et al. 2016, p.5). Generally, instrumental bias results from the difference in the familiarity of response procedures and due to the different response styles (Van de Vijver & Tanzer 2004, p.270).

### *2.2.3 Administrative Bias*

Administration bias then addresses the communication problems encountered during the data administration process (Fernández & Abe 2018, p.9-10). For administration bias to be reduced, communication needs and the testing conditions of respondents need to be taken into consideration during the data collection process (van de Vijver 1998, p.46; van de Vijver, 2018, p.5). Overall, administrative bias occurs due to different social or physical administrative environments, ambiguity in instructions for respondents or administrators, and differences in the expertise of administrators (Van de Vijver & Tanzer 2004, p.270).

## **2.3 Item Bias**

When specific words or phrases associated with a culture or country are used in the data collection process, the item/s may be deemed incomprehensible to other cultures or countries, leading to reduced participation (Brouwers et al. 2017, p.3). Item bias also emerges from poorly translated items and ambiguous items with additional traits (He & van de Vijver 2012, p.7).

There are various cases where item bias occurred, such as with the naming tests administered across different countries, which comprised of pictures such as pretzels and beavers, which are only known in specific European countries; another example is the 'famous face recognition test', which used country-specific celebrities that were unknown in other countries (Fernández & Abe 2018, p.11-12). It is thus vital to ensure that the items tested are familiar in both countries. In the case of this study, item bias was identified as a potential issue when it came to analysing the levels of education; again, this is discussed in section 3.1.

### 3 METHODOLOGY

A quantitative research approach was followed. A cross-sectional research design was chosen, which means data was collected at one particular period in time (Kumar 2014, p.368) during the 1<sup>st</sup> quarter of 2021. The study can be categorised as descriptive because the purpose was to answer the 'what and how' questions outlined in the introduction and to define and describe the populations (McCombes, 2020) in Germany and South Africa. In essence, this paper is regarded as an exploratory study, in preparation for the actual cross-cultural study between Germany and South Africa.

A quota sample size of 450 participants from Germany was set, considering the gender, income, and age, as illustrated in Table 1. Formula (1) explains how the targeted quota sample was initially set.

$$n = \frac{\sigma^2 \cdot z^2}{E^2} \quad (1)$$

- $\sigma = 1$  ;  $z = 1,96$  (because  $\alpha = 0,05$ ,  $1 - \alpha = 0,95$ ) ;  $E = 0,1 \rightarrow n = 384,16$  (385)
- Failure rate consideration:  $n \cdot 0,10 = 38,5$  (39)  $\rightarrow n + 39 = 424$
- Sample size: rounded up to 450

Ultimately, 685 respondents were reached in Germany and  $n$  was reduced by 216.  $n$  was decreased due to the quality management process, which ensured that the answers obtained were of high quality; as a result, the following were excluded:

- Answers with a working time of  $< 1/5$  median.
- Unreasonable answers with no correlation.
- Respondents who did not meet the requirements of the control questions.

This resulted in a final sample of  $n=469$  being analysed. Participation was entirely voluntary from readily available respondents, thus denoting a convenience sample (Waterfield 2018, p403). Convenience sampling is the prevailing non-probability approach. Units were included with unknown probabilities based on availability and opportunity through social ties of friends, colleagues, social media, and acquaintances (Vehovar et al. 2017, p329). In order to accomplish this, the target group was recruited through social media platforms (such as Facebook, WhatsApp and LinkedIn), real-life interaction (through relatives, friends, leisure/hobby groups, colleagues and referrals) and the internet using a poll pool-survey participation platform.

The survey was electronically administered, with the landing page explaining the purpose of the study and assuring the respondents of anonymity and confidentiality. Once the respondents had indicated informed consent, they would then proceed to the survey divided into four sections. The questions covered a series of subjects related to consumer buying behaviour (focused on shopping frequency, average money spent, information channels, shopping motivation and shopping behaviour during COVID-19), consumer needs, consumer preferences along with a consumer profile (demographic and socio-economic profile).

## 4 RESULTS

The data was computed using Statistical Package for the Social Sciences (SPSS). The results demonstrated that 50% of the quota was below the required measures, while the other 50% exceeded the needed measures. In summary, the most significant number of responses were collected from women ( $n=50\%$ ), 25-39 years old ( $n=35.8\%$ ) with an income between 2.600€ and 4.499€ ( $n=37\%$ ). Table 1 illustrates the calculated quota sample expectations versus the actual data collected from respondents in Germany.

**Table 8.** Quota Sampling

Variable	Category	Expected n	Expected %	Actual %
Gender	Men	225	50%	49%
	Women	225	50%	50%
	Diverse	0	0%	0.4%
Age	25 - 39	133	29.53%	35.8%
	40 - 49	87	19.44%	17.9%
	50 - 64	159	35.36%	30.9%
	65 - 74	71	15.67%	15.1%
	75+	0%	0%	0.2%
Income	0 - 1.299€	83	18.40%	14%
	1.300 - 2.599€	165	36.60%	27%
	2.600 - 4.499€	129	28.70%	37%
	≥4.500€	73	16.30%	22%

Authors own

Overall, all method bias and construct bias measures were identified as potential problems in this section. One of the variables often deliberated for data collection and census in South Africa is ethnicity. South Africa is known as the 'rainbow nation', meaning it is a heterogeneous country. "The government uses it [ethnicity] (...) to help readdress (*sic!*) the stark imbalances in income and economic opportunities that are a legacy of the official racism of the past." (BBC News 2021). More importantly, ethnic data and census in South Africa are regarded as human capital. The data collected is perceived as imperative in informing government and private sector decision-making at all societal levels (StatsSA 2011).

On the other hand, Germany only has an estimation of national minority groups, as no population or socioeconomic census based on ethnicity has been collected in Germany since the end of World War II due to the persecution of minority groups under the Nazi regime (Federal Ministry of the Interior and Community n.d.). Another argument against "the measurement of ethnic minorities" is that the study of ethnicity could divide German citizens (Mohdin 2017). Despite that, for other minority groups in Germany, these ideas have been described as:

“Lofty principles aimed at boosting equality. But, many feel they harm racial progress (...) In a country that prides itself on the use of data and evidence, the lack of information speaks volumes. The result, says Gyamerah, is that if ‘you’re not counted, then you don’t count.”

With two opposing viewpoints from countries trying to rectify their discriminatory past, it is crucial to approach the collection of ethnic data in this study with sensitivity. The South African views cannot be ignored, while the German standpoint cannot go unnoticed. As a result, due to the lack of information in Germany regarding ethnicity, the variable cannot be included in the quota sampling. Regardless, it would be recommended to have a question about race in the survey and provide an option to divert from the question considering German sensitivities. Overall, while South Africa addresses ethnicity in terms of skin colour or native culture, Germany addresses ethnicity in terms of nationality (cia.gov 2022). This differentiation poses a challenge with construct bias, which requires further deliberation with the research team. Bearing in mind that this study focuses on adding value to retailing fashion design entrepreneurs, ethnicity is considered a ‘relevant casual construct’ which is vital in consumer behaviour and business analysis as race separates (i) biological and physical characteristics, (ii) personality traits and (iii) cultural values and norms (Rossiter and Chan 1998, p127).

#### *4.1.1 Demographic and Socioeconomic Variables*

Other demographic and socioeconomic variables measured (and not part of the quota sampling) were marital status, children in the household, education and residency. According to the demographic and socioeconomic measures of the respondents (see Table 2), the majority of respondents are married ( $n=43.9\%$ ), with no children in the household ( $n=61.2\%$ ), mainly obtaining a Bachelor’s or FH-Diploma ( $n=30.3\%$ ), living in large cities or towns ( $n=29.4$ ). Therefore, these results suggest that the consumers in Germany have combined incomes, with the majority of those households not utilising that income towards childcare. These results could be attributed to consumers with additional disposable income, a higher education, and living in urbanised developed areas. Consequently, all forms of bias need to be safeguarded, from construct bias to method bias and item bias, discussed below.

##### *Marital Status*

In terms of marital status, the researchers would need to acknowledge that South African law recognises two types of marriages: civil unions and customary marriages (gov.za n.d.). A customary marriage by western culture and some Christian groups in South Africa is viewed as an engagement (Eduafo-Abraham 2019), but on the contrary, it is a lawful marriage. Thus, the construct of marital status in South Africa needs to be well defined, and that could be achieved through an additional description in brackets. For example, another delineation in brackets stating customary or civil marriages should be included with the ‘married’ category.

**Table 2.** Demographic and Sociographic Information

Variable	Category	Actual %
Marital Status	Married	43.9%
	Single	27.9%
	Living in Partnership	7.2%
	Divorced	19.6%
	Widowed	1.3%
Children in Household	Yes	38.6%
	No	61.2%
Education	Haupt or Realschulabschluss	7.2%
	Berufsausbildung	27.1%
	Abitur	19%
	Bachelor or FH-Diploma	30.3%
	Masters order Universitätsdiplom	14.1%
	Post Abitur	2.3%
Residency	Metropolis	17.3%
	City/Large Town	29.4%
	Small Town/Village	26.4%
	Rural Areas	26.9%

Authors own

### *Level of Education*

The second bias that needs to be avoided is item bias, which is in conjunction with the level of education. The German education system is unique, with certain overlaps with South Africa occurring only in higher education. On that premise, the items used to measure the level of education need to be country-specific. Once the data is collected, matching the educational items during the cross-cultural analysis would be recommended. For example, Grundschule would be paired with primary school, Hauptschule would be paired with middle school, or Gymnasium paired with high schools, as demonstrated in Table 3. Furthermore, each educational level would need to be separated instead of grouping academic levels (for convenience), as initially done with the study in Germany. This separation would ensure that administration bias is avoided. Table 3 illustrates a complete list of grouped educational level categories according to their level of study.

**Table 3.** Differences in Education Levels

Germany Education	South Africa
Grundschule	Primary School
Hauptschule	Middle School
Realschule (not possible University Entrance)	Technical School (possible University entrance)
Gymnasium	High School
Berufsausbildung (possible after Hauptschule or Realschule)	Vocational Work (only after High School)
	Diploma
	Degree
	Masters
	Doctorate

Authors own

### *Residency*

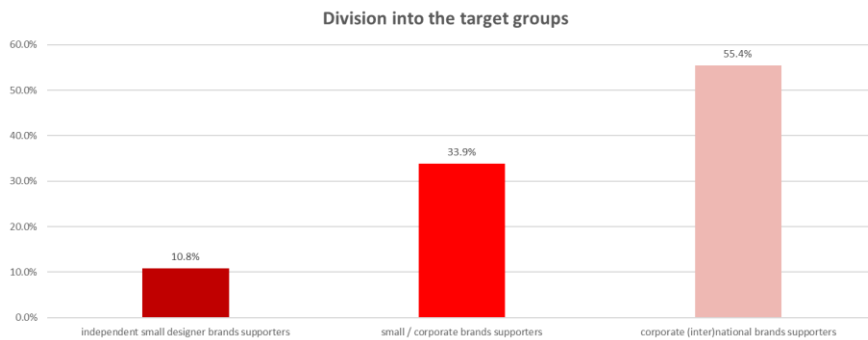
The final potential bias to be deliberated in this section is method bias, specifically, sample bias concerning residency. It is important to note that residency categories such as villages and rural areas are entirely different between Germany and South Africa. Over and above that, South Africa records other residential formats, such as township and informal settlements. This particular variable, as with ethnicity, will not be comparing “apples to apples” or instead focusing on the diversity and differences between the two categories. Inevitably, when reporting on the residential areas in Germany and South Africa, the similarities are only with metropolitan areas, city/large towns and small towns. Otherwise, the rest of the sample reports cannot be matched.

#### *4.1.2 Consumer Patronage of Retailing Fashion Design Entrepreneurs*

As the survey results are a consequence of non-probability convenience sampling and electronic administration, the data represented respondents residing predominantly in the South Western part of Germany with internet access. Thus, this indicated instrument bias, as individuals without or with limited internet access would have difficulty participating in the survey. Likewise, some generations are uncomfortable with online data collection processes, even with the surety of confidentiality and anonymity. Thus, they would have preferred offline methods. Consequently, this is one area where this research would remain limited.

Overall, the profile of consumers patronising retailing fashion design entrepreneurs in Germany was determined. It was found that the typical profile of retailing fashion design entrepreneurs supporters in Germany were female, born between 1982-1996, married or single with no children in their household, lived in cities or large towns, obtained a Bachelor’s or Master’s degree and were earning between 2.600-4.499€ (upper-middle-income group).

Unfortunately, a limited amount of 10.8% of consumers patronised retailing fashion design entrepreneurs within that target group, while 33.9% of the German population preferred to shop at small/corporate retailers. The majority of the population shopped at corporate national and international retailers. The level of consumer patronage in Germany is summarised in figure 1 below.



**Figure 3.** Division of Target Groups (Authors own)

## 5 CONCLUSION

This paper has presented a descriptive account of the demographic and socioeconomic differences between Germany and South Africa. The differences shown are an exploratory study in preparation for the cross-cultural analysis between German and South African consumers and their patronage towards retailing fashion design entrepreneurs. Specifically, this paper was able to identify which types of biases could potentially challenge the cross-cultural analysis between Germany and South Africa. Fundamentally, this exploratory study would improve the reliability and validity of the final research.

In light of the findings suggested in this paper, the demographic and sociographic profiles of consumers patronising retailing fashion design entrepreneurs in Germany were identified. This paper addressed a specific research gap by providing the percentage of consumers patronising various formats of fashion retailers. Therefore, the findings presented here are practically informative for national and international fashion designers in retail to appropriately market and organise their retail businesses for the relevant consumer markets.

In terms of future work, the findings help pose a range of research questions. Firstly, questions related to ‘why’ consumers would prefer to patronise retailing fashion design entrepreneurs instead of other fashion retailers could be deliberated. Secondly, questions about efforts required to educate (or even persuade) consumers to patronise local retailing fashion design entrepreneurs in different cultures could be considered. Lastly, the cross-cultural differences in support required for retailing fashion design entrepreneurs to achieve greater market access could finally be researched.

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# Session C

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Intercultural or  
International  
Perspectives in  
Higher Education  
Research, Teaching  
and Learning

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# ***Cross-Cultural Podcasts: How creating interview podcasts increases intercultural sensitivity***

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## **ABSTRACT**

Increasing intercultural sensitivity is a complex endeavour, especially in higher education. Students in Higher Education Institutions (HEI) traditionally grasp themes like determinants of culture, managing cultural change, and cultural diversity by reading textbooks and attending lectures. Missing practical cross-cultural experiences caused by a passive interaction with learning material hinders the development of a deeper understanding of critical aspects of cross-cultural business.

This research aims to outline how lecturers in HEI can increase their students' intercultural sensitivity by allowing them to create their own digital media in the form of an interview podcast with international partners from over ten different countries. 70 mechanical engineering students' part of a cross-cultural management class created 26 podcasts from April 2021 to September 2021. Afterwards, we conducted interviews with these students to evaluate the process of creating podcasts in HEI.

Creating podcasts in the context of cross-cultural business allows students to develop (1) a high level of self-reflection of personal and foreign cultures, (2) an increased openness to explore cultural differences and (3) a deeper understanding of the relevance of intercultural sensitivity in today's business world. Our students had to (1) use a variety of digital tools like audio editing and cloud-based video conferencing services, (2) systematically research digital and analogue media resources like videos and academic papers, and (3) interview international partners with a prepared question guideline. As a result, creating a podcast guarantees hands-on experience for students. It addresses valuable aspects of learning, such as resolving misconceptions about cross-cultural concepts through verification with their interview partners. Our research goal in this paper is to elaborate on our teaching concept and discuss our lessons learned to derive strategies for lecturers to use podcasts in teaching intercultural sensitivity in Higher Education Institutions.

## **1 INTRODUCTION**

The minority of international projects fails because of technical, financial or strategic problems. The majority fails because of cultural issues. One lever to address that issue is for managers to develop a tolerance for cultural differences, gain expertise in the values of foreign colleagues and develop intercultural sensitivity (Apfelthaler, 1999; Möllenberg, 2003). To develop intercultural sensitivity, an understanding of culture is required. Culture can be defined in many ways, depending on social, psychological or linguistic perspective, and each perspective will include different aspects of culture (Tietze et al., 2003). However, most definitions focus on a set of values, beliefs, and behavior patterns that form the core identity of organisations, nations and groups of people (Schein, 2004). Intercultural sensitivity in the context of an engineer in a management position is thus the skill to be aware of different behavior based on people's cultural background and the ability to embrace cultural differences and be able to motivate and manage a culturally diverse team (Triandis, 2000)

Considering the significance of intercultural sensitivity, the class International Business and Cross-Cultural Competence is taught in the mechanical engineering bachelor program of our Higher Education Institution. We taught the subject for several years in a traditional way, where weekly lectures in form of frontal teaching were offered. Students received summaries of the lecture and the presentation slides each week and they took a written exam at the end of the semester. After receiving student feedback requesting for more interactivity and hands-on experiences, the teaching concept changed, and we took a new approach in the summer semester 2021.

The new approach incorporates the usage of a variety of digital media. Instead of weekly lectures, the students attend inverted classroom sessions where they discuss case studies from a cross-cultural textbook with the instructors and use a virtual online collaboration platform. The written exam is replaced with an oral examination. Moreover, students need to submit two assignments during the semester. On the one hand, students create an interview podcast about a cross-cultural topic with international partners. On the other hand, students write individually a report where they reflect on how they created their podcast, what the key results were and how those results can be connected to the cross-cultural concepts learned in the textbook and inverted classroom sessions.

Different media tools have particular advantages in teaching complex concepts, which enable a wide range of learning experiences (Kozma, 1994). Podcasting is one form of digital media, which received the last years a lot of attention. Podcasts are typically audio media files distributed via the internet and played mainly on mobile devices (Jham et al., 2008). There has been a growing interest in podcasting which led to a quadrupling of the number of podcasts to a total of 2 million in the last 4 years and 33 % of all Germans regularly listen to Podcasts (Winn, 2021). Given the challenges of developing intercultural sensitivity, we consider the use of podcasting in our class to be particularly useful. Podcasting enables our students to interact with a real person with a different cultural background. Our study shows that the creation of cross-cultural podcasts led to hands-on experience and allows cultural differences to play out live in the interview conversation. The students explore with their interview partner cross-cultural concepts and deepen their understanding and appreciation for cultural differences.

## **2 TEACHING CONCEPT**

The four main learning objectives and competencies students should build after successful completion of the class *International Business and Cross-Cultural Competence* are:

- (1) can explain the influences of different cultures on the management of companies
- (2) can apply models for the analysis of cross-cultural contexts
- (3) can explain the influences of different cultures on interpersonal communication and the handling of conflicts and select suitable communication strategies
- (4) can explain possible approaches to dealing with cultural diversity in companies and teams and select suitable approaches

The class International Business and Cross-Cultural Competence is designed for mechanical engineering students in a German University. There are no prerequisites for attending. It is a mandatory class in their 4th semester in the bachelor program, and it is offered every summer semester (April till September). The class is taught completely in English and over a duration

of 15 weeks. Every week, the instructors offer an online inverted classroom session and every three weeks, they offer online tutorial sessions for the students. It was planned to offer all sessions in person at the campus, but we were forced to an online format due to the ongoing Corona pandemic. The students receive five ECTS credit points. This corresponds to an expected workload of 150 hours per student over the entire semester (incl. video conferences, preparation and follow-up, as well as preparation and completion of assignments and examinations). The expected workload for self-study is 100 hours, and the workload for participating in the inverted classroom sessions, tutorials and feedback conversations is 50 hours. In the summer semester of 2021, when we introduced the Project Student Podcast Creation, 70 mechanical engineering students participated in the class.

The grading of the module was divided as follows: (1) oral examination 60 % of the grade, (2) interview podcast 20 % of the grade and (3) report about the podcast creation 20 % of the grade. Different individual oral examination dates were offered for the oral examination at the end of the semester. The oral examination is 20 minutes long, and students are asked mainly about the case studies of the cross-cultural textbook, which are analyzed together in the inverted classroom sessions. The student podcast creation project is created in a team of 2-3 students. The report is written individually and a maximum of two pages.

## 2.1 Teaching Elements

Eight relevant teaching elements were developed. The class is based on three main teaching elements, including an inverted classroom concept, self-passed studying of a cross-cultural textbook and the student project of creating their own podcast about cross-cultural topics. Five supporting teaching elements were implemented to create a foundation for the students to thrive in class and achieve the learning. Table 1 provides an overview of the relevant teaching elements used in class. In the following, the individual elements are presented, and their didactic concept is explained.

**Table 9.** Teaching Elements.

#	Element	Abbr.	Teaching Element	Used tools and links to other Teaching Elements
1	Main	ICS	Inverted Classroom Sessions	Case studies from CCT, Zoom and Miro
2	Main	CCT	Cross-Cultural Textbook	Textbook Understanding Cross-Cultural Management by Browaeys and Price
3	Main	SPC	Student Podcast Creation	Audacity, Miro, Zoom
4	Support	IP	Instructor Podcast	Audacity, Supporting: CCT, SPC
5	Support	EI	Expert Interviews	Zoom, Supporting ICS, CCT, SPC
6	Support	NL	Newsletter	Moodle, E-Mail, Supporting: SPC, ICS
7	Support	TS	Tutorial Sessions	Zoom, Miro, GoogleDocs, Supporting: SPC
8	Support	IQ	Interactive Quiz	Mentimeter, Supporting CCT, ICS

Overview of relevant teaching elements used in class.

**1. Inverted Classroom Sessions (ICS):** The Inverted classroom approach is a concept where students prepare and learn the foundations of the content of the class at home and engage in an interactive way and more profound level with the instructors inside the classroom (Strayer 2012). The ICS were offered every week on Monday afternoon, 90 minutes long and used Zoom as a video conference tool and Miro as a virtual online collaboration platform. The

general procedure of an ICS was: (1) 0 to 20 minutes interactive quiz, (2) 20 to 40 minutes instructor input, (3) 40 to 70 minutes solving case studies in small groups in Breakout sessions in *Zoom*, (3) 70 to 90 min presenting the results in the plenum and the discussion of them. The goal was to engage with the students and enable them to solve misconceptions in cross-cultural management and learn from and with each other. The foundation for the interactive solving of cross-cultural problems were case studies from the CCT. Each case study presents a real business case centered along the cross-cultural concepts presented in the assigned reading chapter.

**2. Cross-Cultural Textbook (CCT):** We used the textbook *Understanding Cross-Cultural Management* by Browaeys and Price. The reading was mandatory, and students were assigned to read in average one chapter (between 20 and 50 pages) per week. The book covers a wide range of topics, including culture management, organization and communication. At the end of each chapter are points of reflection, case studies and activities, which were used to create a framework for ICSs. Buying the printed book was recommended. An e-book was available but with limitations. It was usable only by one person at a time, and printing and copying were limited to 5 % of the book per user within 24 hours.

**3. Student Podcast Creation (SPC):** Students conduct and record an interview with a person with a non-German background about one of the following five following topics: (1) feminism, (2) climate change, (3) public rudeness, (4) failure culture or (5) teaching kids. The topics are inspired by the Podcast *Rough Translation* by Gregory Warner, which explores how cultural topics are discussed in different world regions from an US-American perspective. The didactic concept behind the selection of the topics is that students who might have experienced aspects of the topics themselves, will have easy access to their topic and find easily potential interview partners. Within the interview, students should start with the exploration of their chosen topic and progressively dive deeper towards more theoretical cross-cultural management concepts with their interview partner. Students form teams of 2-3 students. Every team member should have an equal share of interview time, edit and cut the interview together and will submit an edited podcast as an MP3 audio file in Moodle. The total duration of the final podcast is maximum 15 minutes. The podcast project started beginning of May and students had time to submit the final podcast until beginning of July.

**4. Instructor Podcast (IP):** Two instructors recorded a weekly podcast in which they discussed their impressions of the reading assignment of the CCT. The goal is to motivate the students to keep on reading the CCT and join the discussion in the ICS. Moreover, the goal is to demonstrate how a self-recorded podcast could sound like.

**5. Expert Interviews (EI):** Every four weeks, a manager who worked for more than two years abroad was invited to an ICS where the instructors interviewed the guest for around 30 minutes and students could ask their own questions. The expertise of the guest typically matched the reading assignment of the textbook and topic of the session. For example, a case study about the challenges of multinational firms like airline manufacturers was discussed in one session. The guest for that session was a Dutch engineer who works for Airbus in Germany. Four managers, all of them with an engineering background, joined our sessions. Our guests were former students from our university. The goal was to give students opportunities to practice their interviewing skills for the SPC and deepen their understanding of the practical relevance of the presented topics of the CCT by engaging actively with the guests.

**6. Newsletter (NL):** At the end of every week, a newsletter with recommendations for videos, podcasts and articles about cross-cultural topics and the creation of podcasts was sent out to the students via e-mail. The maximum word count was 400. The goal was to share current

news of cross-cultural management and provide students with learning material for the SPC and ICS.

**7. Tutorials (TS):** Four tutorials were offered to support the SPC: (1) Starting a podcast, (2) Conducting an interview, (3) Editing a podcast (4) Reflecting on the project. The first tutorial was designed to provide support in understanding what a podcast is, what equipment is needed and how to start researching the podcast topic. The second tutorial provided strategies to find potential interview partner, presented a framework for conducting interviews in qualitative research (Kaiser, 2014) and introduced the laddering method (Reynold et al., 1988) to help students to conduct a deep diving interview. The third tutorial mainly contained a live Demo of the audio editing program Audacity and provided tips for cutting the interview. The fourth tutorial was used to solve issues during the podcast creation process. Moreover, writing exercises were introduced and the students patriated in a peer-review process. The tutorials were offered every three weeks on Tuesday morning, and they were 90 minutes long. They used *Zoom* as a video conference tool and *Miro* and *GoogleDocs* were used as virtual online collaboration platforms. The general procedure of a tutorial was: (1) 0 to 30 minutes instructor input, (2) 30 to 60 minutes activities in small groups in Breakout sessions in *Zoom*, (3) 60 to 90 min reflection and discussion.

**8. Interactive Quiz (IQ):** At the beginning of every ICS an interactive quiz about the assigned reading chapter of the CCT and main takeaways from last ICS was conducted. The goal was to create a shared understanding of the content of CCT and start with ease into the new ICS. The presentation software *Mentimeter* was used. *Mentimeter* allows to create multiply choice questions, give the students points for correct answers and create rankings. It also allows to create polls and invites students to submit short messages with their experiences and opinions, which can be discussed in the plenum together.



**Figure 4.** QR-Code to access examples of all teaching elements, including a student podcast creation.

### 3 EVALUATION

We employed a qualitative evaluation approach to get feedback on our teaching concept (Yin, 2018). We chose semi-structured interviews to ensure that all relevant teaching elements were addressed and evaluated (see table 2). Our study was conducted from December 2021 to February 2022. A total of ten interviews were conducted. The sample contained five male and five female students. All interviews were audio-recorded with a total duration of 336 minutes and notes were taken while interviewing. In the editing of the interview notes, relevant audio passages are relistened too and quotes transcribed. The interviews provide useful data for evaluating the class and deriving strategies for further improvement.

**Table 2.** Student Feedback.

#	Sex	Duration
1	Male	44 min
2	Male	62 min
3	Male	28 min
4	Male	27 min
5	Female	26 min
6	Female	28 min
7	Male	31 min
8	Female	26 min
9	Female	29 min
10	Female	35 min

Overview of conducted evaluation interviews.

The focus was to evaluate the student's perceived usefulness of the used teaching elements in class. First, students were asked to elaborate on the acquired skills and gained competencies and give an overall statement about the class International Business and Cross-Cultural Competence. Afterwards, their methodological approach regarding the creation of the podcast was evaluated. Finally, all eight teaching elements were analyzed individually. The students started by grading the teaching element in a scale from 0 (not valuable) to 10 (highly valuable) of achieving the learning objectives and building their competencies. Consequently, the strengths, weaknesses, and suggestions for improvement of every teaching element were discussed. A similar procedure was followed by the instructors to evaluate the effort of each teaching element (see figure 2).

## 4 RESULTS

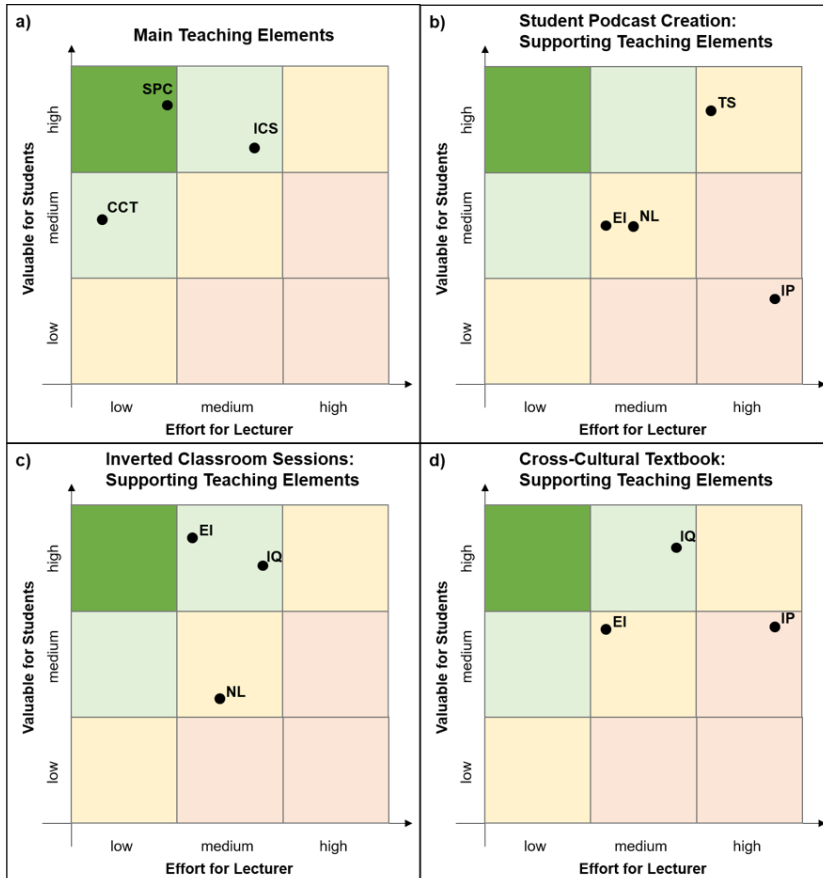
In total 26 teams formed and submitted their podcasts. People with 19 different cultural backgrounds were interviewed by the students. Most interview partners were found through the extended circle of family and friends. The two social media platforms *Instagram* and *Facebook* turned out to be also useful. Students searched for organizations and individual people active in their correspondent theme and contacted them. Most student teams contacted up to five potential interview partner and mostly got a positive response of two potential interview partner within two weeks.

**Table 3.** Distribution of interview partner.

Theme	Cultural background from interview partners
Climate Change	Bangladesh, Kazakhstan, 2xUSA, UK
Failure Culture	Brazil, Bulgaria, Sweden, Turkey, USA,
Feminism	2xKosovo, Rumania; Switzerland, USA
Public Rudeness	Egypt, France, Morocco, Syria, Turkey
Teaching Kids	Algeria, Afghanistan, India, Mexico, 2xTurkey,

Overview of podcast themes and interview partners.

The total workload for the student podcast creation is around 17 hours. Understanding the theme and the preparation of the interview questions took most teams around four hours. Finding an interview partner and planning the interview took in average five hours in total, which was spread out over several days. Students reported that a pre-interview with their interview partner a couple days before the recording the podcast helped them significantly to give them the confidence to succeed in the interview. The podcast recording sessions took most students about one hour. Editing and cutting the podcast down to 15 min took most teams around seven hours.



**Figure 2.** Overview of teaching portfolio and the perceived usefulness of teaching elements.

The most valuable main teaching element from the student’s perspective is the student podcast creation (SPC). The inverted classroom sessions (ICS) were also described as highly valuable. The cross-cultural textbook (CCT) got a medium grade (see figure 2a). Due to the focus of this paper on the usage of podcasts in teaching intercultural sensitivity, the following paragraphs will mainly address the evaluation of the student podcast creation with its four supporting teaching elements (see figure 2b).

The student podcast creation fosters students' creativity and allows them to experience cross-cultural concepts hands-on and helps them to reflect on the learned concepts from the CCT and ICS.

"The variety in this course was great. A lot of things complemented each other. The best part was the podcast project. To adapt my way of communication, my behavior in business context, how to ask about sensitive topics, how to talk about cultural background. I developed a real awareness of this." Student 8

"I asked myself, what do the interview statements actually mean, like between the lines. Culture really plays a role. Of course, conducting interviews creates pressure, but listening to my interview partner forces me to think through complex issues from a different perspective." Student 5

Students mainly complained about the feeling of being overwhelmed in the beginning because they did not create a podcast before. Students reported that they listen to podcasts in private, but have not yet thought about the meta-level of podcasts. The given podcast themes received mixed feedback. The majority reported that the themes were too far away from the context of the CCT and ICS sessions. They struggled to connect the themes to the learned cross-cultural concepts. Moreover, students did find it tricky to talk about those themes with a stranger. Especially, students with the theme failure culture and feminism did find it uncomfortable to talk about it with strangers.

"Maybe I have too much respect and my English is too bad. Shame certainly also plays a role. But I felt uncomfortable." Student 3

Other students saw the same point, but interpreted it as a strength. On the one hand, the broad themes gave them the freedom to try things out for themselves, and on the other hand, they found it personally exciting to learn more about them.

"Finally, not passively soaking up everything from a lecture. Out of the comfort zone into the cold water, when do I ever talk to people about such important topics who may have a completely different opinion like me." Student 1

The **tutorial sessions (TS)** were received as highly valuable. Especially, the tutorials *Starting a podcast* and *conducting an interview* were praised. Students mentioned that the usage of *Miro*, the virtual online collaboration tool, allowed them to gather their thoughts and kick-start their project. Most students reported that leaning about interview techniques proved to be helpful even after the project. It sharpens their skill to gather more and better information in like team meetings or social encounters in their free time.

"I didn't even know that interviewing is a kind of art. First, I thought that the laddering method will not work and is kind of stupid, but once you are interviewing someone you realize that you have to listen carefully and ask the right questions." Student 4

The tutorial *Editing a podcast* were perceived valuable as well, but students mentioned that the timing was poor because they did not conduct the interview at the time of the tutorial session and found professional tutorials about editing a podcast on platforms like *YouTube*, which they watched on demand.

The **expert interviews (EI)** conducted in the ICS as a teaching element supporting the student podcast creation was received from most students as medium valuable. Most students reported that they were shy to ask the expert questions in the ICS and that's why didn't improve their interviewing skills. The students which did ask questions and interacted with the expert did report that the expert interviews are the most memorable moments of the entire class.

"No offense to you and the other instructor team, but as a student I just believe people from the business world more than academics. And when the expert answered my question and described his challenges in everyday life, they stayed directly in my head." Student 3

"The experts, as well as my interviewee in my podcast project was an engineer. Kind of a role model. I asked myself during the interviews how I would act in the reported situations. I rarely ask myself that in a normal lecture" Student 2

The **newsletter (NL)** as teaching elements supporting the podcast creation was received from most students like the EIs as medium valuable. Few students received through the newsletter inspiration for their podcast project and reported they felt more motivated because they got the feeling that the instructor team was as well invested in the project. But most students didn't read the e-mail newsletter because of a high workload in other classes. They did not see the direct benefit of reading it for our class.

The **instructor podcast (IP)** was graded as a low valuable teaching element supporting the podcast creation. Students reported that, they didn't find time to listen to it because the high workload during the semester and the inspirational value was low. For inspiration they preferred listening to professional podcasts on platforms like *Spotify*. A few students, especially the ones, who reported having difficulties reading an English textbook, mentioned that the instructor podcast is valuable for supporting the main teaching element cross-cultural textbook. The students appreciated the summaries of the chapters in audio form. They felt motivated to get at least an overview of the chapter, especially during busy times, when they couldn't manage to read the assigned chapter of the CCT. It helped them in this case to prepare for the ICS by listening to the instructor podcasts.

## 5 LESSONS LEARNED

In summary, the creation of podcasts by students is, from the didactic perspective, a promising teaching element that is highly valuable for students to improve their intercultural sensitivity. The prerequisite is that the instructor team and the students need to agree on using several teaching elements since digital media competence is not part of the curriculum of engineers and building competencies in cross-cultural management is a complex endeavor that is best taught interactively. For those reasons, both students and instructors are expected to continue their education on their own across classroom boundaries and keep an open-mind set towards the usage of different teaching elements. The concept has also shown that even in times of a worldwide pandemic, that students attending a purely online class can gain practical cross-cultural experiences.

In general, we suggest keeping the podcast themes on the same broad level but require that the student teams formulate a research question for the interview podcast which they connect to specific concepts from the CCT, such as cultural dimensions by Hofstede et al. (2010) or Hall (1990).

The first tutorial sessions should still allow students to use virtual online collaboration tools but should also emphasise the analysis of the meta-level of a podcast. It is not enough to explain what a podcast is and which tools are used to create one. Best practice examples should be listened to together and jointly analysed on a meta-level, for example, how the interviewer introduces the podcast, what stylistic choices have been made, and how the podcast has been edited to develop a shared understanding of what characterises a great interview podcast. The tutorial session about editing can be replaced with more exercises to practice interview situations. Even if, for example, the laddering method was well received by the students, more opportunities to test their interviewing skills should be made available. The students can acquire the necessary skills to edit and cut a podcast via online videos on platforms like *Youtube*.

The newsletter and the instructor podcast are unnecessary considering the effort for instructors and value for students. The newsletter's content, such as podcast recommendations, can be incorporated into the tutorial sessions. The strength of the instructor podcast was described as helping students in times with high workloads to get a brief summary of the assigned chapter of the CCT. The effort for creating this advantage is disproportionate. Our conclusion is not to create an instructor podcast and reduce the number of pages needed to be read per reading assignment. This should help students not to feel overwhelmed and realistically integrate the reading assignments into their week.

Even though the expert interviews were ranked as low as the newsletter, we see higher potential and opportunities for improvement here. Especially, because the expert interviews are seen as a valuable teaching element supporting ICSs and the CCT. We suggest inviting several experts to the same ICS. And we recommend creating Breakout sessions in Zoom, so each team can pretest their questions in a protected environment, instead of letting students ask their questions individually in the full plenum where they feel shy.

All in all, our approach demonstrates that podcasting is an effective teaching element to increase intercultural sensitivity and helps students develop cross-cultural competence. We appeal to the higher education community and researchers to design approaches where students can gain intercultural experience, actively participate during the lectures and use the learnings in their private life and their future professional careers.

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# ***Academic Difficulties, Wrong Choice Of Study Programme Or A Lacking Sense Of Belonging? - Reinvestigating The Reasons For Early Dropout***

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## **ABSTRACT**

What leads beginner students to break off their higher education experience and drop out? Based on Vincent Tinto's seminal analysis of student departure, the following study identified three main reasons for early dropout: (1) the wrong choice of study programme, (2) academic difficulties and (3) the "failure to become or remain incorporated in the intellectual and social life of the [higher education] institution" (Tinto 1993). Feeling out of place, having little to no contact with other students or just difficulties in finding one's way in the new, often anonymous university environment can make it hard to start out and succeed in higher education.

Using a survey developed within the international ENTRANTS project that investigates beginner students' sense of belonging in detail (habitus issues, relationship to students and teachers, motivation, anonymity, family support etc.) while also gauging the other two reasons (ability to follow content, satisfaction with chosen study programme/discipline etc.), the following study tests Tinto's model at one university and arrives at surprising results. It can show for this specific institutional case which aspects of Tinto's model weigh most strongly on the dropout-decision and for which groups of students.

The study is thus able to delineate clear-cut recommendations to counteract and prevent early dropout and to focus support in the areas and to student groups that need it.

## **1 INTRODUCTION**

In his seminal study on student departure Vincent Tinto (1993, 1975) identified three major reasons or sources for early dropout: 1. The wrong choice of study programme ("the inability of individuals to resolve their educational and occupational goals"), 2. academic difficulties and 3. the "failure to become or remain incorporated in the intellectual and social life of the institution" (Tinto 1993, 176). Tinto strongly focuses on the latter. The further differentiated model by Spady (1970) also stressed the lack of social and academic integration as a reason students decide to break off their studies early. In recent years, there has been a renewed interest in such approaches: "In dropout research there is a trend to a heightened recognition of the relevance of 'soft' factors, including relationships, pedagogy, trust, emotional security and sense of belonging" (Nairz-Wirth 2017, 12, see also Kahu 2020).

## **2 METHOD AND AIM/DESIGN OF STUDY**

Based on Tinto's model a questionnaire was developed within the international Erasmus+ project ENTRANTS. The project aims at enhancing beginner students' sense of belonging and

their social and academic integration by developing tailor-made support offerings. The survey thus also serves as a needs assessment for the project’s outputs.

While the survey also addresses the choice of study programme (Tinto 1) as well as academic difficulties and workload issues (Tinto 2), the main focus of the questionnaire is on students’ academic and social integration (Tinto 3) which is explored in detail.

Framing students’ “sense of belonging” is achieved by addressing various layers or aspects of belonging, among them the perception of the entry phase and adaptation to higher education, the relationship with teachers and social contacts with fellow students, habitus issues, motivation and notions of anonymity as well as the sense of belonging per se.

This questionnaire was sent out to all beginner students of the fall semester 20/21 at the University of Applied Sciences Upper Austria after their first semester in the spring of 2021. On the one hand, the survey was carried out among beginner students who had continued on with their studies and thus were still enrolled at the time of survey (n=128, response-rate: 9,4%). On the other hand, the survey was also sent out to students who had dropped out during or immediately after the first semester (n=57, response-rate: 32%, this second group is referred to as “dropouts” below). While students who had continued on were asked for the likelihood of dropout, the questionnaire was adapted for dropouts to explicitly gauge the reasons for their departure.

The aim of this case study was to find out which of the three “Tinto-reasons” carried the most weight in the decision to leave university (1. Wrong choice of study programme, 2, academic difficulties and 3. Lacking social and academic integration) in order to identify adequate support offerings that might counteract and prevent early dropout. The research team expected to find that the level of social and academic integration plays a decisive (possibly the most important) role in whether students decide to leave university or continue their studies further.

### 3 RESULTS

Not surprisingly, the overall satisfaction with the first semester differs between both groups (hereafter referred to “first semester students” and “dropouts”). While 75% of first semester students rate their experience (“How was your first semester?”) with 4 or 5 stars (out of five), this was only the case for 33% of students who had dropped out. Also not surprisingly, dropouts wondered significantly more often if “they fit in” (17% vs. 65%, see Table 1).

**Table 10.** Choice of study, academic difficulties, workload

	Beginners	Dropouts	Spearman Rho
Sometimes I wonder if I really fit in	17 %	65 %	-,456**
I feel I have chosen the right study programme for me	87 %	39 %	,544**
It was easy for me to adapt to university life	66 %	41 %	,288**
It is easy for me to follow the content in my classes	62 %	32 %	,323**
I was able to handle the workload.	75 %	23 %	,463**

Please indicate to what extent you agree or disagree with following statement. Scale of 1 (do not agree at all) to 5 (fully agree), Percentage of agreement (>3) shown, Spearman Rho correlation coefficient.

Significant differences between both groups also arise with regard to the choice of study (Tinto 1): 87% of beginner students claim to have chosen the right study programme, while this is only the case for 39% of dropouts. In fact, this represents the survey item showing the most

strongly pronounced differences between both groups (difference of 48 percentage points, highly statistically significant Spearman correlation coefficient of 0,544\*\*). Also, adapting to university life was harder for dropouts.

In a similar vein the results for academic difficulties and workload issues (Tinto 2): Especially pronounced differences occur with „It is easy for me to follow content in my class“ (62% vs. 32%) as well as with „It was easy to handle the workload“ (75% vs. 23 %).

However, the results for the item intended to frame „academic habitus“-issues were surprising („The way people express themselves at university is very different from what I am used to“). Here, no difference between both groups could be observed, with 27% of respondents in each group agreeing that this is the case (see Table 2).

**Table 2.** Social and Academic Integration

	Beginners	Dropouts	Spearman Rho
The way people express themselves at university is very different from what I am used to	27 %	27 %	
Overall, I have a good relationship with my teachers	77 %	60 %	,129*
Most of my teachers knew my name	34 %	36 %	
My teachers are concerned when I am absent from classes	22 %	27 %	
Looking back, it was easy for me to work together with other students	72 %	77 %	
It was easy for me to make new friends	55 %	59 %	

Please indicate to what extent you agree or disagree with following statement. Scale of 1 (do not agree at all) to 5 (fully agree), Percentage of agreement (>3) shown, Spearman Rho correlation coefficient.

Also, questions related to social integration, i.e. contacts with fellow students and the relationship with teachers, do not exhibit strong differences. Partly, dropouts claim to have had closer exchanges with teachers („teachers were worried“, „knew my name“) and rate their contacts with other students better, for example that it was somewhat easier for them to work together with other students or to find new friends. With regard to social integration differences are minor and hardly any statistical correlations between the respective items and belonging to one or the other group could be observed.

However, the sense of belonging per se, is still less developed among dropouts They claimed to „like it less at university and to a lesser degree felt „that they belonged“ (see Table 3).

**Table 3.** Sense of Belonging

	Beginners	Dropouts	Spearman Rho
I feel that I belong at university.	77 %	58 %	,238**
I liked it at university.	88 %	71 %	,200**

Please indicate to what extent you agree or disagree with following statement. Scale of 1 (do not agree at all) to 5 (fully agree), Percentage of agreement (>3) shown, Spearman Rho correlation coefficient.

Respondents' sociodemographic background was also gauged in the survey. In how far does the social background affect student success or the first-semester experience? Here a clear, somewhat concerning influence of the social dimension emerges: With the exception of gender and disability all sociodemographic characteristics apply stronger to dropouts: They are older,

more often have a migration background, they are more often part-time, working students or the first in their families to study at university (“First Generation”); more frequently, they have care responsibilities and have started their studies on alternative access routes.

Especially students on alternative entry paths show the strongest instances of academic difficulties and workload issues, they are also the one group that agrees most strongly that “the way people express themselves is different from what I am used to”, thus habitus issues might particularly affect this group (mostly men) which overall emerges as the most challenged one in this study

The data seem to suggest, that in the present case is it less a lack of social and academic integration (contacts to fellow students, relationship to teachers, habitus issues), but rather the wrong choice of study programme as well as academic difficulties and workload issues that affected the decision to drop out of university most strongly.

Dropouts were also asked explicitly for the reasons for their departure. Their answers also confirm the above assumption: „Workload was too high” is named as the number one reason (by 50% of respondents), followed by “wrong choice of study programme” (48%), academic difficulties and workload issues/time constraints (both 43%). Lagging far behind with 9% and 5% respectively and thus occupying the last spots are social reasons, such as not “having gotten along with people (teachers, students) at university” or a lacking sense of belonging.

The hypothesis is further corroborated by the answers in open question fields where dropouts repeatedly stressed that their previous knowledge, especially in mathematics, was not sufficient for their studies and that the academic demands were simply too high (“too hard”, “too difficult”). On the other hand, respondents who dropped out also claimed repeatedly that they “liked the personal interactions” or “the human factor”. Further, dropouts stressed that they were not sufficiently informed about the academic demands of the study-programme and expressed a need for preparatory learning materials or bridging courses beforehand.

#### **4 CONCLUSIONS**

In the present case it seems to be the wrong choice of study programme or academic difficulties (Tinto 1 and 2) that contribute most strongly to the decision to drop out of university, while social and academic integration seems to present less of a problem. Does this mean that social and academic integration are less important for student success? Probably not. Rather, it seems likely (and this supported by other data, for example the Austrian Student Social Survey), that at universities of applied sciences due to smaller group sizes, the school-like structure of classes/curricula and a closer interaction between teachers and students, students are comparatively well integrated. At mass universities, habitus issues, anonymity and lacking social contacts could present more of a problem. A currently running Europe-wide instance of the above survey will hopefully be able to deliver more insights.

What could further be shown is that the social and educational background impacts on student success.

Mainly, however, the results of this institutional survey point towards concrete measures to be taken at the institutional level to alleviate problems faced by first-semester students in order to prevent and counteract early dropout. This could take the form of clearer information regarding the academic demands of the study programme ahead of the semester start. Mostly, this pertains to providing prospective students with learning materials or bridging courses to prepare for their studies beforehand which could be especially useful (especially in the area of

mathematics). The further development of such support offerings represents an explicit recommendation derived by the data in this study.

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# ***Measuring Intercultural Competence: lessons from a pilot project***

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## **ABSTRACT**

There is an agreement among scholars that we need to prepare students to be ready-for-life, as well as the agreement that the future might be characterized by, broadly defined, diversity. Although the benefits of diversity are numerous and praised, there is also an understanding that diversity on its own does not necessarily mean that these benefits will be realized. Working (and living) in a culturally diverse environment poses a challenge and requires skills and mindset to overcome obstacles and reap the benefits. It is no surprise that the global contemporary business world induces discussion on globally competent employees. But employees of tomorrow are today's students, and therefore, to prepare them for culturally diverse workspaces, the question of intercultural competence and its development during studies becomes relevant. Future employees are to work with a diverse group of stakeholders outside the organization (customers, clients, intermediaries, partners) and to work in a diverse team of colleagues inside their organizations. The internationalization of HEI created an environment that offers opportunities to engage in cross-cultural contacts and advance cross-cultural competence.

The aim of this paper is to contribute to the debate about advancing and measuring intercultural competence by presenting findings from a pilot study. We conducted 45 interviews on internationalization and diversity in a HEI from the multistakeholder perspective (management, teachers, staff, students) across four schools belonging to a university in southern Sweden. Parallely, we assessed the intercultural competence of different student groups using Ang's Cultural Intelligence Scale collecting 177 responses in the process. We will present our experience from the project, initial findings and share a suggestion for a practice that can serve as an alternative to measuring intercultural competence.

## **1 INTRODUCTION**

The contemporary world is characterized by globalization (Perraton 2020) and according to OECD (2018) globalization and migration have a profound impact on multiple spheres of everyday life. According to Gozzoli and Gazzaroli (2018) socio-demographic, political, and business trends made diversity an omnipresent phenomenon. In the organizational context (*and not limited just to business organizations*) intercultural competence (ICC) becomes valuable skill and desirable educational outcome (Alon et al. 2015; Beneroso and Alosaimi 2020; Lin and Shen 2020). This poses a challenge, and a question of how educational institutions should respond to the need for interculturally competent professionals and leaders. The goal of education can be defined as creating work-ready (Ewing and Ewing 2017) or more broadly as ready-for-life graduates (Kreber 2010). In fulfilling this mandate, the focus is on professional/disciplinary knowledge that is in the function of directly fulfilling work tasks as described by job position, but also a set of skills that support and facilitate the utilization of professional knowledge and work towards organizational goals (Schlee and Harich 2010). With

the increasing diversity of work and life context it is not a surprise that “improving human interactions across the difference, whether within a society (differences due to age, gender, religion, socio-economic status, political affiliation, ethnicity and so on) or across borders”, as Deardorff (2020, p. 5) defines ICC, becomes a worthy goal.

Higher education institutions (HEI) were driving diversity by democratization and internationalization of education, and at the same time being transformed by the process. According to Engwall (2016) internationalization is not new to academia, so there is no surprise that HEI are considered to be “...truly a melting pot of human identities” (Crittenden et al. 2020, p. 3). The globalization of economies and societies is still making internationalization of HEI a high priority for most stakeholders of Swedish and European universities (European Parliament, 2015; Statens offentliga utredningar SOU, 2018:3). A similar idea can be found in the USA context as Hunter, White and Godbey (2006) report that the world needs far more people who can understand how other cultures think, work or how they will react to actions taken by cultures different than their own. The two important questions seem to be A) how the internationalization is interpreted (and experienced) – what it means to different stakeholders; B) are the universities contributing to the development of ICC of their graduates.

## **2 CONTEXT OF THE STUDY**

In aforementioned context, and having in mind the stated questions, our university applied for and won a grant from The Swedish Foundation for International Cooperation in Research and Higher Education (STINT) during the academic year 2020/2021 with the project “Towards inclusive internationalization: international understanding and intercultural competence of students and faculty”. Within the broader scope of the project authors of this paper were involved in one of the work packages related to campus and college readiness in the context of the intercultural campus. Furthermore, authors of this paper received research funding from Jan Wallanders och Tom Hedelius Stiftelse and Tore Browaldhs Stiftelse for the project “Intercultural competence at higher education institutions”.

The starting premise of the project is anchored in Knight’s (2003) definition of internationalization of HEI as “the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of postsecondary education”, and acknowledging that we need to be open towards working-life characterized by pluricultural contexts and global careers. The project further elaborates that being exposed to diversity (e.g. through exchange or multicultural classroom) does not lead automatically to the enhancement of ICC – but rather requires active intervention. Resulting from that work package aimed at:

- (1) Assessment of experiences, attitudes, benefits and obstacles, as well as needs related to teaching and learning in intercultural context from the multistakeholder perspective (management, teachers, staff, students) across the university.
- (2) Assessment of different tools for measuring ICC and suggesting an assessment model based on the pilot test.

To answer the first question we conducted 46 interviews across the university with different stakeholders, and although this paper contains reflections on some of the findings from the qualitative study, our main focus is on the pilot project measuring ICC. Answering the second question required us to choose one of the available alternatives for measuring ICC and test it

on a small-scale pilot with collecting experiences, reflections, and conclusions on the process and results.

The project is particularly relevant in the context of the debate on misconceptions of internationalization of higher education (de Wit 2017), the dominance of focus on the structural (compositional) diversity (Spencer-Oatey and Dauber 2019) and conclusion of Knight and de Wit (2018) that the idea of comprehensive internationalization in HEI is yet to be achieved. Many HEI reached internationalization goals framed as numerical targets, like number of international students or staff, number of partner universities across national borders, number of publications, or revenues from foreign students. Maringe and Woodfield (2013, p. 2) discuss comprehensive internationalization, resulting in increased quality of learning and teaching – and emphasize “transformative process that aims to integrate people from different places, their cultures and knowledge systems in ways that create added value for everyone involved”. Therefore, internationalization should not be seen as a goal on its own, but rather as a means towards the goals, creating preconditions to grow future professionals and leaders readier for embracing and learning from diversity, and building upon its benefits. Regardless do we phrase it as global competence (Hunter, White and Godbey 2006), intercultural competence (Deardorff 2020), cross-cultural competence (Bartel-Radic and Giannelloni 2017), or in some of twenty other terms Sinicope, Norris and Watanabe (2007) found to be used in literature as close equivalents – this might be considered as one of the critical skills to advance internationalization of HEIs. The fact that there is no common agreement on the name, let alone the definition of the concept is creating difficulties in deciding on the universally accepted measure.

### **3 INTERCULTURAL COMPETENCE: THE IDEA AND MEASUREMENT**

Intercultural competence (ICC) has been in the researchers’ focus for several decades. Arasaratnam (2015) reflects on the early research in the field mainly revolving around intercultural communication competence, however over the recent years the focus lands on ICC researched from multiple disciplines (Leung, Ang and Tan 2014). Nature of ICC might pose a difficult assignment in capturing its complexity in universally acceptable name, definition and/or measurement.

Reflecting on all available definitions, models or measures is beyond the purpose of this paper. Leung, Ang and Tan (2014) discuss defining ICC in the context of five measurements addressing traits, attitudes and capabilities. Griffith et al. (2016) provided an extensive overview of the available models categorized as: compositional, co-orientational, developmental, adaptational and causal. Both articles also engage with ICC measurements. Further, Fantini (2009) reviews more than ninety instruments for measuring ICC, while Matsumoto and Hwang (2013) in their article provide comparative analysis of the ten tests measuring ICC.

Without choosing one specific definition, we argue that ICC should be regarded as a set of personal traits, attitudes and capabilities that are mobilized towards purposeful fulfillment of the task or role in the context of a situation/environment described as culturally diverse (Pantelic, Brandstaetter, and Florin-Samuelsson 2021).

The next premise we adopted is that ICC can be enhanced over time (Arasaratnam 2015; Deardorff 2015; Regh, Gundlach and Gregorian 2012) through meaningful activity (e.g. Eisenberg et al. 2013; Kurpis and Hunter 2017; Wang and Kulich 2015). Consequently “...higher education institutions have identified ICC to be a valuable student outcome and a marketable indicator of student and overall institutional success, it is imperative to develop valid

and reliable measures of ICC in the context of higher education.” Griffith et al. (2016, p. 2). Deardorff (2006) reports a broad set of measures used to assess the intercultural competence in the practice, as well as inclination by administrators, compared with scholars, to accept quantitative measurements and pre- and posttest measures. According to the same author there is an agreement that “intercultural competence can be measured in its separate components and not holistically” (ibid. p. 258) and that best results are achieved with combination measures, both qualitative and quantitative. Griffith et al. (2016) confirm multidimensional nature of the construct and report on two dominantly used methods for assessment: surveys (in essence self-reported measurement, surveys range from 9 to 160 items) and portfolio assessments (existing in various formats as a collection of different measures, usually reported over a period of time, conversationally beginning and the end of education, or before and after exposure to intercultural experience).

We were not looking for the ideal measure of capturing students’ ICC (and literature suggested that such solution is yet to be found), but solution good enough to provide us with overview and insights that give us pretext to engage further with promoting, facilitating and working with cultural diversity at the university.

The choice was made to use Cultural Intelligence (CQ) Scale (Ang et al. 2007). The scale is frequently used by researchers (e.g. Beneroso and Alosaimi 2020; Bücken, Furrer and Lin 2015; Eisenberg et al. 2013; Kurpis and Hunter 2017; Richter et al. 2020), which resulted in considerable evidence of validity, especially with samples from multiple cultures (Matsumoto and Hwang 2013), the scale is available (no cost associated with the use of the scale) and relatively simple to administer with 20-items, promising lower rate of incomplete responses.

Cultural intelligence consists of cognitive, metacognitive, motivational, and behavioral cultural intelligence. According to Leung, Ang, and Tan (2014) metacognitive CQ can be interpreted as the capability to acquire and understand cultural knowledge and enables a person to be aware of own and other cultures before and during intercultural encounters. Cognitive CQ is based on broad areas of knowledge about different cultures acquired through education and experiences. Motivational CQ is basically a capability to mobilize energy and focus on learning from intercultural situations. The first three dimensions are mental capabilities, and the last one is behavioral CQ, a capability to navigate culturally diverse situations/environments by demonstrating appropriate verbal and non-verbal actions.

Further, it is important to emphasize that Ang et al. (2007) present CQ as an aggregate multidimensional construct, allowing interpretation of the overall aggregate construct of cultural intelligence and as separate capabilities (Eisenberg et al. 2013). We assumed that there was a value in understanding which capabilities were less developed at the group level and counteract by devising activities or opportunities targeted at enhancing one or several components of CQ. E.g., if the data show a lack of cognitive capabilities it would be advisable to create opportunities where an individual could learn more about “norms, practices and conventions in different cultures” (Ang et al. 2007, p. 338).

At a smaller scale, we tested the proprietary tool – Intercultural Readiness Check (IRC). IRC is an online based assessment tool providing personalized feedback on four key dimensions: intercultural sensitivity, intercultural communication, building commitment and managing uncertainty (Van der Zee and Brinkmann 2004). The tool is appealing and quite practical, however the price point offsets the benefits for the purpose of testing with a larger number of participants given budget limitations. Furthermore, there are issues related to access to data and data aggregation to act upon results in designing activities that would help advance intercultural competence at individual and/or group level.

The initial plan for the data collection was created in early 2020, during the process of applying for funding. Unfortunately, by the time project was granted the COVID19 pandemics significantly changed the operations, and we faced the problem of collecting responses from students, that could not be reached during lectures on campus. However, the pilot project, with all limitations, brought insights and conclusions that resulted in steering away from the idea of measuring intercultural competence with self-reporting measures on the level of university. This was anchored both from the project experience, but also with two significant findings resulting from following questions:

RQ1 Is there a significant difference between Swedish students and foreign students in ICC measured by Cultural Intelligence (CQ) scale?

RQ2 Is there an advancement of ICC in student population after participating in the course based on experimental learning design, where students are working in multicultural teams with real client projects and received training on intercultural communication?

#### 4 METHOD AND FINDINGS

In this study, convenience sampling was used to recruit participants. The sample used for answering the first research question (R1) consisted of 183 bachelor and master students who were enrolled in the various programs at a university in the south of Sweden (please see Table 1. for details).

**Table 11.** Participating programs and students.

Group label	Description	Study language	Class size	Collected responses	Repeated measure
M1	Master-level; the course based on experimental learning design, where students are working in multicultural teams with real client projects and received training on intercultural communication. Approximately 75% foreign students.	English	70	56	47
M2	Master-level; students allowed to form project groups themselves; no instructions or content explicitly related to working in a culturally diverse environment. Approximately 75% foreign students.	English	100	62	n.a.
B1	Bachelor-level; students distributed in randomized groups; no emphasis on cultural diversity in a group setting; no content explicitly related to working in a culturally diverse environment. Approximate 35% foreign students.	English	222	50	n.a.
B2	Bachelor-level; no foreign students in the course.	Swedish	55	15	n.a.

Participants were reached during classes, ZOOM sessions, in mid-January 2021, and they have been presented the purpose and content of the research. The survey was administered through Qualtrics, and an anonymous link was sent to participants by using the learning platform Canvas and the course pages. Several reminders were sent over following weeks.

The final analysis for the first research question included N=177 students, since six participants submitted incomplete responses. The sample consisted out of 117 females, 57 males, and 3 participants declared themselves as non-binary/third gender; the participants' age ranged from 19 to 39 years old (mean age = 24,10; SD = 3,18). The sample consisted of 62 Swedish students and 115 foreign students.

There was no statistically significant difference in overall cultural intelligence (CQ) among foreign and Swedish students in our sample. (*Detail statistics available on a request, a journal article in progress*). Further, we tested the difference on the level of four components of cultural intelligence (a similar approach can be found with other researchers using the CQ scale, e.g., Beneroso and Alosaimi 2020; Kurpis and Hunter 2017). Results from the pilot study showed that the place where participants grew up has a significant effect on both Metacognitive and Cognitive dimensions of cultural intelligence (CQ). Foreign students scored significantly higher than Swedish students on these two dimensions. There was no evidence of the statistically significant difference between these two groups related to Motivational and Behavioral dimensions of cultural intelligence.

We argue that foreign students are to a greater extent exposed to the foreign environment compared to domestic students. Studying (and living) in a foreign country induces a greater need for “planning, monitoring and revising mental models of cultural norms” (Ang et al. 2007, p. 338), as well as better knowledge about foreign cultures based on personal experience. Foreign students operate in a less familiar, foreign-culture environment, while Swedish students have the advantage of mainly operating in the more familiar, home environment. In the interviews we conducted with teachers at the university, frequent opinion was that regardless of the international character of the university, it is placed in the context of the Swedish educational system and rather a small municipality, that still lags behind larger administrative centers (like Stockholm, Malmo or Gothenburg) in openness and cosmopolitanism. We find partial confirmation of our findings in the previous studies. Kurpis and Hunter (2017) found in their study that foreign students significantly exceeded domestic students only on the cognitive dimension of CQ. The length of stay abroad has been found to be an important factor in boosting the cognitive dimension (Beneroso and Alosaimi 2020), and both metacognitive and cognitive dimensions of CQ (Bücker, Furrer, and Lin 2015).

The lack of a difference between these two groups on the remaining two dimensions can be anchored in the assumption that Swedish students have consciously made choice to study at the university, and especially business school, that is highly international and where most of the programs and courses are delivered exclusively in the English language. The behavioral dimension stretches beyond cognitive dimensions – and requires appropriate responses to the observed cultural differences, it is action-oriented – which is more difficult and requires greater interaction with people from other cultures. Our experience shows that in group work at school students frequently choose to work with other people from their own culture, confirmed also by Trice (2003) and Leask (2009), subsequently leading to a narrower assortment of behavioral responses even when there is some knowledge about foreign cultures.

To answer the second research question (RQ2) we administered the cultural intelligence (CQ) scale twice. In January 2021, prior to the beginning of the course (56 responses), and in April 2021 when the course was finished (47 responses). The course has an elaborate group

composition mechanism that, among other parameters, secures that students work in a multicultural team on real-client-based projects (see Pantelic, Brandstaetter, and Florin-Samuelsson 2021). In the first week of the course, students are instructed to work on group cohesion and the topic of intercultural communication is introduced, as well as theoretical anchoring for benefits and perils of a multicultural team. Students are guided and coached and reflect on their intercultural experience in a separate course assignment.

We expected that there will be a progression of intercultural competence in this student group, however, the data showed no significant difference between the first and repeated measure neither at the level of overall cultural intelligence nor in any of the four dimensions.

Our findings do not correspond with the previous research. Eisenberg et al. (2013) report enhancement in metacognitive and cognitive dimension after the cross-cultural management courses, while Fischer (2011), Jackson (2015), and Wang and Kulich (2015) report increased ICC as a result of courses students took.

We can argue that literature also claims that ICC is developed over a longer period (Deardorff 2015) and that three months and a single course did not facilitate the enhancement in the desired format in our sample. Furthermore, we can assume that the fact that the entire course was delivered as a distance course, and that students' interaction was limited to online communication, due to pandemics – has impacted the result too.

Although faced with limitations of sample size and reach these initial findings can serve as a starting point for continuing discussion on needs, benefits, and perils resulting from internationalization and increased diversity.

## **5 LESSONS LEARNED AND MOVING FORWARD: DISCUSSION**

Measuring intercultural competence (ICC) is a complex assignment. The fact that there are many names and definitions in the field, as well as different ways and instruments of measuring makes the assignment even more elusive. Numerous authors are making attempts to define and measure the concept, since without the effort to measure ICC will remain just a catchphrase and buzzword in strategies and documents of HEIs wishing to advance towards inclusive internationalization.

### **5.1 Lessons learned**

Our initial approach was focusing on measuring “aggregate” ICC for groups, courses, or programs, and ultimately at the campus level – there are constraints in resources, and more important in the usability of such results. Measuring ICC at the level of a single person, might have meaning and justification with professionals in the organizations, preparing ex-pats, diplomats, sales representatives, business developers – where the investment is justified by expected return-on-the-investment. At the university level, a sheer number of students might require a different approach.

It became evident during the pilot project that there are multiple obstacles for setting up the university-wide ICC assessment system, the critical points of such a system are:

- (1) Assuring students' participation in the assessment, especially repeated measures (e.g. measuring ICC at the beginning and at the end of students' educational journey).
- (2) Assigning resources and responsibility for the assessment and data collection.
- (3) Creating a database and tracking state and change in ICC over schools, programs, groups and/or individuals.
- (4) Incorporating findings into the broader efforts (activities, initiatives, events, tools) with the purpose to develop ICC and secure inclusive internationalization.

The last point precedes the idea of measuring ICC – measurement is not a purpose, but a tool. As Perry and Southwell (2011, p. 460) state “a method of measurement must suit its purpose”. Collecting data only makes sense if has the purpose to a) understand experiences, attitudes, and needs in student (and or teachers/staff) population; and more importantly b) create a context in which ICC is a worthy and supported goal at the university level, accompanied with the institutional support for developing it.

Previous research gives us a strong pretence for reformulating our goal and moving from a measurement-centered to a development-centered view. Eisenberg et al. (2013) in their study confirmed that the university courses are more likely to impact metacognitive and cognitive dimensions, and less so motivational and behavioral. The later dimensions should be developed by fostering intercultural interaction and experiences. The experiences are effective in developing ICC if structured, managed, and reflected (Lilley, Barker, and Harris 2015; Tarique and Takeuchi 2008). According to Bücken, Furrer, and Lin (2015) ICC for them is a type of knowledge that is better gained through experiences than through formal teaching. Although we demonstrated one alternative way of measuring ICC (and its change over time) – that does not exclude that there are other available alternatives. Given the complexity of the concept and difficulties in measuring it – we are also keen to suggest an alternative approach that does not only measure ICC per se – but provides a platform for exposure, interaction, self-reflection, and learning in an intercultural context.

## **5.2 Moving forward**

While conducting interviews we discovered the approach of one of the sister schools at the university. We think about this practice not only as an alternative to measuring the ICC itself but rather as a creative incentive-based system where the ICC has the opportunity to be developed. If we think in terms of Ang et al. (2007) Cultural Intelligence framework we still are aiming at boosting metacognitive, cognitive, motivational, and behavioral components of cultural intelligence by making sure (and assessing) students' effort (investment) in mobilizing themselves in pursuit for enhancing ICC.

The reason why we are in favor of such an approach is that it moves away from just measuring the state of the ICC, but rather incentivizes the individual to engage in activities that are relevant for enhancing ICC. Designing such a system also assumes a scientifically based development of the assignments that are meaningful and have a purpose to develop ICC. Jackson (2015) claims that even a diverse campus will not contribute to increased ICC if there is no meaningful intercultural interaction and intervention in developing and encouraging students to engage with different cultures.

This alternative approach is based on the student portfolios. These are commonly used in higher education, and they are considered being the most influential method to assess

students' intercultural competence (Rahimi 2019). Portfolios enable students to learn through reflection and self-reflection on experiences that are significant to them, and as Castro et al. (in press) point out, it makes learning "concrete and visible" (p. 5). Typically, a portfolio assessment is created by a student's material produced over time following the specific objectives. Up to now, there is no standardized version of portfolios as factors as the content, objectives, assessment method, platform, the context of institutions, and studies vary among higher education institutions (HEIs) (Rahimi 2019). However, a recently developed 'Portfolio of competences for democratic culture' by the Council of Europe might pave the way for change (Council of Europe 2021).

At the School of Health and Welfare at our university, an intercultural portfolio facilitates students' journey to obtain the Certificate of International Merits (CIM). CIM is a formal recognition of the international and intercultural activities that students undertake during their study on the campus, outside of campus and/or abroad. It builds on the idea of internationalization abroad and at home and supports the inclusive and sustainable internationalization available to all students (and not limited just on those that can participate in exchange abroad).

The workflow is as follows: students choose an activity from the predefined list or create their own; they undertake the activity and submit the reflection (in any form) in their digital intercultural portfolio in Padlet. The reflection is designed to stimulate students' intercultural awareness, strengthen their intercultural competencies, and connect these with students' future professions. Submitted reflections are then examined, and if successful, students are rewarded CIM points that are collected toward the awarded CIM. The portfolio design enables students to be creative in designing their reflections and learn and inspire from each other as students have access to each other's portfolios.

CIM can also be seen as additional merit that can be presented to future employers as proof of experience, but also willingness and competence to work in a culturally diverse environment. Given flexibility, it is not unimaginable to create similar portfolio assessments for different stakeholders at a university (teachers or staff). Furthermore, the portfolio assessment can be placed at a program level or a school level. Designed as a voluntary activity supported by proof of achievement can be seen as a positive, and counteract some of the obstacles our respondents in the qualitative part of the study emphasized (e.g. lack of time, lack of opportunities, aversion towards forced solutions, fear of failure in formal course assessments). While our data was collected in the business school at our university (with the highest level of compositional diversity) – the project is aimed at the entire university. The value of such initiative can be found in starting dialog and collegial learning across the campus. Interest in internationalization and ICC is not bound only to business schools. Literature confirms this, e.g. Beneroso and Alosaimi (2020) discuss intercultural competence in engineering education, while Lin and Shen (2020) conduct their research at the university level covering students majoring in different disciplines. If the future is bringing more diverse work (and life) context intercultural competence will continue to be in the focus of researchers and practitioners from various fields, and intercultural competent professionals and leaders in high demand.

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# ***The Potential of Critical Incidents - A Cross-Cultural Comparison***

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## **ABSTRACT**

This cross-border contribution seeks to shed light on potential answers and solutions for selected critical incidents (CI) happening to tertiary students during social encounters in various settings. For these purposes, two well-defined CIs were chosen that allow for a wide range of possible interpretations. Against the background of the international Erasmus+ project entitled 'Critical Incidents in Intercultural Communication and Promoting Diversity' five project partner countries, namely Czechia, Finland, Germany, Italy, and Austria have participated in this exploratory study to identify how the respective societal sample may interpret the critical incidents at hand and how they affect their personal and professional growth. At each partner institution, a purposive sample consisting of 33 student participants was asked to elaborate on the CIs and provide possible answers and further introspection of their train of thought. In a second step, a thematic analysis was conducted to allow for the extraction of subthemes and the creation of a thematic map. The findings were then sketched in line with specific cultural theories to verify if prevalent and hard-wired assumptions are still valid at a generation of young born into a globally interconnected world. This is all the more relevant in view of the dynamic VUCA world where volatile, uncertain, complex and ambiguous situations dominate our digitalized and globalized knowledge society. To account for these complexities, it was sought to not only look at societal cultures as a source of possible interpretations. In addition, it was attempted to also take account of demographic, cognitive, disciplinary, and functional diversity. As such, it was possible to obtain a profound and differentiated picture of potential societal answers that incorporate a broad potpourri of possible explanations of how to approach specific CIs, including their use for didactical purposes.

## **1 INTRODUCTION**

The current globalization tendencies are gradually leading to a new framework in which merged and expanded boundaries of travel, work and trade become omnipresent. In this context, there is an increased interest in globalized experiences of different cultures as well as interactive misunderstandings of people who study and work across borders (Goodman, 1994; Arthur, 2001). To examine the process of adaptation in response to cultural immersion, numerous models were developed, ranging from culture shock (Oberg, 1960), to adjustment strain (Crano & Crano, 1993) and acculturation stress (Berry, Kim, Minde, & Mok, 1987). To describe

complex encounters in cross-border contexts, so-called Critical Incidents (CIs) were found to be useful. Such brief descriptions of vivid events were identified as meaningful in the experiences of the narrators. This contribution seeks to identify specific perceptions, reactions, and responses to work and study-related incidents, while at the same time attempting to provide a societal meta-picture of the cultural patterns prevalent within a certain geographical group. It is conceivable that specific group behaviour is clustered in terms of territorial boundaries, social coding, demographic characteristics, cognitive socialisation, or even disciplinary affiliation (Gaisch et al., 2019). In this way, it is possible to obtain a deeper and more nuanced picture of possible societal responses, encompassing a broad potpourri of possible explanations for dealing with specific CIs.

## **2 THEORETICAL FRAMEWORK**

The multifaceted critical incidents technique (CIT) has proven useful as a research methodology in a variety of academic disciplines. Flanagan (1954, p. 327) described CIs as “any observable human activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act”. As such, the technique is designed to help people understand the essential factors that are or are not applicable in a particular job or profession. Based on the analyses of critical incidents, it is possible to identify similarities, differences, and patterns of specific cultural groups and to find out how and why people engage in certain activities or react similarly in certain situations (Hugs, Williamson & Lloyd, 2007).

When taking a closer look at critical incidents in the cross-cultural literature, it becomes obvious that cultural differences are largely considered in the context of implicit cultural standards, expectations, and dimensions (Tarchi & Surian, 2016). So far, intercultural research has been predominantly addressed in terms of quantitative and comparative studies that help to examine differences at a macro-societal level (Pyle, 2014). Hence, it is only logical that the studies and findings of e.g., Hofstede (1984), Hampden-Turner & Trompenaars (2008), Hall (1988) and Lewis (2010) have been taken up by intercultural researchers and educators around the world. Based on this, cultural dimensions were elaborated to describe the behavior of specific nations and their citizens at the macro level. Such cultural values and dimensions range from the expression of emotions, the separation of spheres of life, task versus people orientation, to issues of ambiguity, hierarchy, and work ethics. Some of these dimensions fall under the categories described by Hofstede (1984), e.g., uncertainty avoidance, strength of social hierarchy (power distance) or ego orientation (individualism versus collectivism), while others relate to time orientation (monochronic versus polychronic) or communication patterns (direct versus indirect) according to Hall (1976).

Although (or maybe especially because) these macro approaches have been intensively used over recent years, that have also come under scrutiny and critical voices were raised that they tend to overgeneralize and simplify cultural encounters. It was increasingly pointed out that they lack a more differentiated view and have a tendency to apply a one-size-fits-all approach. For these purposes, Thomas (2010) draws on micro-level experiences and refers to personal narratives that are embedded in a cultural-sensitive environment. What he describes as cultural standards are forms of perception, judgement, thought patterns and interactions that are shared by most people by the culture at hand. To adopt a broader perspective of diversity, a number of additional aspects need to be considered that go beyond societal and cultural settings. The concept of the HEAD (Higher Education Awareness for Diversity) Wheel (Gaisch et al, 2019) seeks to build a bridge between diversity management and intercultural competence as a key transversal skill. It is argued that heightened awareness of the interplay

of a variety of diversity aspects allows for more informed decisions based on personality traits, demographic factors as well as functional, disciplinary, and cognitive socializations while considering the geographical embeddedness of the individuals involved (Gaisch & Linde, 2020).

### 3 SETTING THE SCENE

This study was conducted as part of the international Erasmus+ project "Critical Incidents in Intercultural Communication and Promoting Diversity" (CIICPD). The research consortium consists of five institutions of higher learning, namely the Skoda Auto University/ Czechia, FH Zwickau/Germany, FH Upper Austria/Austria, University of Siena/Italy, Seinäjoki University of Applied Sciences/Finland. It was sought to shed light on two well-chosen CIs and to explore how the local students would react to these university-specific situations.

Given that the aim of the CIICPD project is to further develop and additionally identify CIs of all kinds, it was a fruitful experience to see how CIs unfold among this cross-border project team that draws on a wide variety of disciplinary and demographic backgrounds. Hence, a total of 33 students (at least 6 from each institution) were identified to explore their informal strategies and interpretations and to evaluate how they deal with conflicts, challenges, and ambiguous situations.

### 4 RESEARCH APPROACH AND METHODOLOGY

This research was based on two well-chosen university-specific CIs. They were jointly selected by the project team to gather impressions and representations from a sample of national students of each institution of higher learning at hand (Czechia, Germany, Finland, Austria, and Italy). To identify possible reactions to the two selected CIs, a qualitative research design was chosen involving 33 students consisted of 17 females and 16 males in an age range of 20-40. Table 1 gives an overview of the interview data.

**Table 12:** Overview of the interview data

Gender	Male	16
	Female	17
Age	20-25	25
	26-30	5
	< 30	1
Countries	Austria	6
	Czechia	9
	Finland	6
	Germany	6
	Italy	6
Total participants		33

Purposive sampling (Bryman, 2006, p. 415) was identified as the appropriate form of data collection. As such the participants were deliberately selected by each higher education instruction with an eye on an equal gender distribution. In a second step, thematic analysis (Braun & Clarke, 2006) was used as an analytical method which involved looking for corresponding patterns in the data. Structured as a data analysis method around the 1970s,

this form of qualitative methodology has become widely used around the globe and was also considered by the researchers of this study to be an appropriate instrument. Since it is a relatively flexible method of qualitative research, independent of theory and epistemology, it can be "applied to a range of theoretical and epistemological approaches" (Braun & Clarke, 2006, p. 6) without being comprehensive in the description of the data. Rather, it aims at a more detailed analysis of certain aspects of the data set. Given its constructivist approach, this type of analysis does not require the same level of transcript detail as discourse or narrative analysis. After initial codes were created, the data were categorized into comprehensive and meaningful groups (Tuckett, 2005).

## 5 SETTING THE SCENE AND RESEARCH FINDINGS

In the following, the two university-specific critical incidents are provided and related to each institutional context. After the first CI, the findings drawn from the answers of the minimally six students of each societal culture are briefly sketched.

### 5.1 Critical Incident 1

#### **Job internship abroad**

When I worked as an intern in Bentley, there was a moment when my supervisor told me he was taking a three-week vacation. The two of us were kind of an independent team, because while the other team was doing sales, we were dealing with the change management. We communicated with the salespeople about how much it would cost from the supplier, then we went to a meeting where there were representatives from finance, quality, logistics, but also engineers, and there the two of us discussed whether the change and investment were fine. So, his position was quite high, and suddenly he said he was going on vacation and that I can manage it on my own, that I didn't have to worry. I saw it as a big responsibility, and I was very stressed about it.

#### *Austria*

In view of the situation described in the first critical incident, five out of six Austrian respondents would feel a little insecure or apprehensive at the beginning because of the responsibility they get. Nevertheless, pride, excitement and enthusiasm would prevail due to the trust placed in them by the supervisor. Therefore, they would accept the challenge, but also ask for support in making difficult decisions. For three of the students this situation is not unthinkable. In this regard, five off the participants noted that they feel well prepared by the universities to manage such situations. During the interview, students also highlighted that expertise is most important in Austrian companies and that there are no big differences in terms of age, gender, and heritage. However, they also pointed out that it also depends on the company or department whether an intern is given this level of responsibility. This shows that Austrian culture is predominantly characterized by achievement, individualism, and low power distance. Strategically, students would try to do the tasks by themselves as much as possible but are not afraid of asking for help from colleagues that have similar experiences. Some of the participating students would also discuss their findings with colleagues before presenting them

in the meeting. Moreover, communication, organization and preparation are seen as important ingredients for success. Regardless of the success of the task, five of the students would be motivated to invest even more time and effort, reflect on the situation, and learn from mistakes. Only one student stated that he/she would not be motivated to learn or study more. All in all, the participants would see it as an experience to grow and gain self-confidence. Most of them also pointed out that if they had successfully completed the task (depending on how long and extensive the project was), they would mention this in their CV or at a job interview, or even use it as an argument in salary negotiations. This could be associated with a certain degree of masculinity and assertiveness.

### *Czechia*

One of the permeating themes in the Czech data refers to power distance and status. Most of the respondents pointed out that interns should not be given high responsibilities and, correspondingly, assessed the boss as “*irresponsible*”. Two students saw the student being misused, and some were surprised an organization like Bentley would not have internal processes set to cover the boss’s responsibilities by a qualified employee. A preference for high power distance and collectively shared responsibilities was further seen in how the students would act in the situation. Most of them would seek “*allies within the company*”, help and cooperate with their colleagues or would expect the boss being accessible during his/her vacation for questions and support. However, an obvious generational shift can be tracked in the data. First, despite their perceived status as interns, two of the students interpreted the boss’s request as a sign of trust and most of them would grasp it as an “*opportunity*”, “*life-changing chance*” or a “*challenge*”. Second, there seems to be no correlation in gender. Both male and female students also showed equal distribution of the degree of confidence. In case of success, some would seek promotion, use the experience for improving their CVs or aspire for a managerial position in the future, others would be motivated internally to work or study harder. Last, there is an obvious practical attitude to life, work and studies in the current time student generation. When discussing possible impacts of failure in the situation, most students saw it as a learning opportunity that would activate their motivation to improve rather than damage their self-confidence. They also mention that to be better prepared for their career, school should start putting emphasis on teaching not only hard skills, among which they mention IT and language skills, but also soft skills, such as presenting, argumentation, teamwork, management and leadership, creativity, stress resiliency and management, dealing with uncertainty, or strategic thinking.

### *Finland*

According to the Finnish students, a situation like the one described at CI 1 would be quite possible in Finland, but they had very different feelings about it.

In a situation like that the male student would be confident trying to take the responsibility and doing his best to succeed, because he would not have been given the responsibility if it was not likely that he could manage. He would feel taken and proud whereas the female student would mainly see it as if someone was trying to avoid their own project or their own tasks. According to the male students the level of responsibilities given to interns highly depends on their knowledge and experience. According to the students neither gender nor culture plays a role here. It is more dependent on the people and the personal view than a cultural thing. The female students would want the boss to be there because it was a shared responsibility for them to do the project together. She would comply but ask for an assistant, and she would

make it clear that she was unsatisfied with the situation. If the male student was certain about his skills, he would work by himself and learn by doing. When almost ready with the task he would check from a co-worker or a superior that everything is ok. In case he did not have enough information, he would find out everything that is necessary for the task. According to the students they are given a lot of teamwork practice at school. They found it good preparing for these kinds of situations. For the male student success would mean that he is appreciated and respected by the supervisor and could be given other responsibilities in the future. If the female student was very impressed with herself, she would also like to discuss it with the boss. A failure for both would be a big personal disappointment, but they would do their best to fix the situation. Failures are opportunities to learn more and get better.

### *Germany*

According to the students at the German university, a situation like the one described would initially surprise them. Pressure, being overwhelmed and the fear of making mistakes were mentioned as associated feelings. However, positive effects were also mentioned, such as the feeling of pride and gratitude that would be fulfilled with such a request. The situation did not seem completely absurd to anyone, but it was pointed out that the size of the company, the structure of the company and the area of work would play a role in whether an intern would be given responsibility to this extent. Strategically, the students would rely in such a situation on communication and clarification of their own concerns and cooperation with other employees. Nevertheless, the students tended to see responsibility for the situation primarily with themselves. With a positive or negative outcome, it would offer the opportunity for personal development.

### *Italy*

In the situation described, the male students indicated that they would feel proud and gratified and would have complied with the supervisor's request without much hesitation, while the female participants were more hesitant. Most of the students stated that rejection by the trainees is possible. However, two of the participants also mentioned that this would have damaged the working relationship. Also, for cultural reasons (respect for older people) they would have had great difficulty in expressing their refusal and would therefore have agreed in spite of everything. When asked whether the critical incident situation could have occurred in Italy, the prevailing answer was "it depends". Respondents among the aspects they mentioned that might affect this situation are the company's size, whether it is a young or long-standing company, or whether it is a private or public sector job. While for male students the gender is generally seen as an irrelevant element in the dynamics of entrusting an essential task to somebody else, the female respondents stated that in Italy, the supervisor would most likely have delegated the job to a male intern. All respondents stated that the Italian school/university do not adequately prepare to manage a situation like that. Among the skills they have mentioned most frequently, the respondents affirmed that they learned to communicate and approach a superior when they studied at school. Someone also mentioned linguistic and organizational skills. The strategy that respondents would have applied in most cases is to ask for help from others to manage the situation they found themselves in. In the remaining cases, they would have informed their boss upon his return that they are just interns and that they do not have the skills for that type of job. If the tasks had been successfully completed, this would have been a source of pride for all respondents and increased self-confidence. If unsuccessful, all respondents replied that they would feel demoralized and lose confidence. The male

students tended to respond that they would talk to their boss, while the female participants stated that they would try to react starting from themselves (improve; in the future, they would have chosen more carefully an internship or a job).

## 5.2 Critical Incident 2

### English lesson

This critical incident took place in our English lesson. We were divided into two groups and one of them was sent out of the room. Both groups were given a different task. The whole situation was to show the arrival of the other group as delegates from another culture to organize an event together. Our group was the recipient organization and event organizer. We were given the task of planning the first meeting between our groups. Within our team, I was elected as a leader. So, I immediately decided to analyze the main challenges that we must cover using a brainstorming method. The individual team members then took up the tasks and started working. After the time had elapsed, the second group arrived, representing a delegation from Russia. I immediately realized that we did not ideally welcome our guests, so I decided to improvise. As a leader, I took the introductory word and started welcoming our guests and introduced myself as the manager. Then, I introduced my friend sitting next to me as my assistant. Immediately after saying this sentence, I realized that this was probably not the right position description towards her, and I paused for a moment.

### *Austria*

It is not clear from Critical Incident 2 that the roles of leader and assistant were agreed beforehand, so most Austrian students would feel belittled as female colleague. Therefore, four of the students also pointed out that this is an offensive situation and refer to the gender stereotype and the automatic categorization. In addition, they all agreed that, in the situation of the "leader" they would correct the statement and apologize to their colleague. None of the participants believed that he was chosen because he is a man. In this context, the students noted that this could be for several reasons, e.g., that no one else wants to be the leader or that he is the type of person/character who acts like a leader and has enough confidence or that he already has experience in leading a team. It was also highlighted that although women are considered equal in many areas due to their experiences, knowledge and skills, they are still heavily underrepresented in leadership positions in Austria. Moreover, other disadvantages for women in terms of equality in society, such as the gender pay gap, were emphasized during the interviews. Further, all agreed that such a situation could also occur in Austria. A comparison of the generations in the same situation showed that the younger generation appears to be more open-minded and differently socialized about gender equality. Although there is still room for improvement, participants mentioned that women were in a better position today than in previous generations. Therefore, students also indicated that there is a shift in thinking in Austria towards a positive attitude in addressing gender issues. However, it was

also noted that the generation itself cannot be generalized. It always depends on the environment, the experience, and the person itself.

### *Czechia*

In assessment of the male student decision to assign his female classmate an assistant position, most of the Czech respondents pointed out that he must have acted under pressure, needed to improvise, and did not intend to be offensive to his female classmate. A few acknowledged his initiative to take over the responsibility to lead the activity, raising the theme of the students' involvement in lessons. While some male respondents mentioned women tend to lack of assertiveness in school, others admitted that all students, including themselves, often appreciate someone else to take over the initiative, especially in English lessons. Some even presumed that the young man might have been selected as a leader for his confident English skills. The status of an assistant position was discussed greatly. While some students pointed out assistants are quite respected in the western countries as they carry a great amount of independence, influence and responsibility, others raised the topic of gender stereotypes admitting that calling the lady an assistant was somewhat "*degrading*". Based on this, all of the respondents agreed about existing prejudices against women in their country, although none of them experienced them at their own work practices yet. Some female respondents, nonetheless, were aware of some limitations in particular sectors, such as IT, engineering or car industry, and also realized they would have to make choices between career and family later in life. This again opened the theme of generation shift. All of the female students show bold career ambitions. The respondents also agree their generation is more open to the topics of gender and sexuality and see equal opportunities for both genders. Using the term "*girl power generation*", they saw a women potential even if not broadly represented in management yet. The students saw this as a result of family support and encouragement of girls to study and pursue their careers, an intensified social dialogue about gender inequality, company good practices implementing diversity as one of their strategic goals, and schools raising discussions about social issues across subjects.

### *Finland*

As to CI 2, the male Finnish students did not see any problem in the situation. Why should it be offensive? According to the female students the problem was that they had not discussed the roles before. Both students pointed out that the group had chosen the leader. The male students thought that the leader acted like a leader should, whereas the female students found the situation offensive to the group. The leader was chosen by the team, so the gender was not the point. The male students stated that when choosing a leader nowadays, it was the skills, goals, outcome, and confident attitude that mattered, not gender. The female students thought that men are perceived as leaders more than women in some areas, but this would not prevent women from getting that position. The situation could take place in a class in Finland, but it would not be a problem. For older people the roles between genders used to be stricter, but younger generations are different. The generation of interviewed students has grown in a society where there is very little difference between genders regarding a workplace or a school. Success in life depends on your attitude and what you are willing to do to reach your goals. Gender is not the point in this.

### *Germany*

Interviewees from the German institution tended to associate the term 'assistant' in this context with a downgrading of the student. They saw the core of the irritation in this aspect and can well imagine that such a situation could also happen in their environment. Gender was not initially made relevant by the interviewees, but only when the interviewer asked about it. It was assumed that character, self-image, and competence determine role (in the company) and not gender. There was general agreement that gender issues are now treated significantly differently within their generation. The approach was described as more progressive and sensitive.

### *Italy*

In the course of analyzing the critical incident, two of the Italian participants noted that the student in the CI had fallen into the stereotype of the boss and the assistant, which according to the participants is widespread in Italian society. Two others stated that the student in the CI noticed that his partner did not like being described as an assistant. The other participants mentioned that the student in the CI had bullied his colleagues by putting himself in a position of superiority in relation to the group. Nevertheless, five of the participants pointed out that the situation described is offensive. Furthermore, all Italian students stated that it is not appropriate for a man to give the role of assistant to a woman unless this has been agreed in advance. When asked if they think that the choice of the leader in the activity was determined by the fact that he is a male, three people answered yes and three replied no. Students also disagreed on the question of whether men are usually seen as leaders. Two participants each answered no, yes or stated that it depends on the work context. What the group did agree on, however, was that such a situation could also happen in Italy and that there are prejudices towards women but also towards men. Almost all of the students highlighted that the situation of women at work is that they are inferior (women are less paid, occupy less prestigious positions, have to work harder than men before reaching important job positions). Only one respondent replied that all people in Italy, regardless of gender, can reach the position they deserve based on their skills. In terms of generations, students indicated that there is a difference within generations and that this difference becomes more and more evident from generation to generation. Regarding the atmosphere about gender issues among friends almost all respondents stated that there is much openness. At the national level, respondents stated that significant differences in Italy persist. The differences are due to geographic areas, the size of the city and the level of education.

## **6 CONCLUSION**

The aim of this contribution was to identify how students of different disciplinary and demographic backgrounds would deal with conflicts, challenges, and ambiguous situations within a university setting and how they would interpret and evaluate situations as described in the given critical incidents.

The results of the study show that practical orientation (teamwork, project work, case studies, etc.) in higher education can contribute to the degree to which students feel they can cope in a real-life work situation where they would need to assume much responsibility. Although some of the participants (mainly Austrian students) feel well prepared by university to deal with such situations, most of them said that they were not adequately trained with regard to organizational, communicational, language skills, etc. Hence, it was stated that the didactic

design of the higher education programmes needs to be more closely aligned to the actual needs of the labour market. In this context, it became obvious that teaching and learning opportunities must go beyond traditional academic/hard skills and take into account key factors and 21<sup>st</sup> century skills such as communication skills, critical thinking abilities, collaboration, foreign language skills, intercultural competences and interdisciplinary and cross-border teamwork.

Furthermore, the study indicates that both the societal context but also the educational socialization plays an important role in the formation of students' opinions, self-confidence, careers, and sense of citizenship. Society and companies are also seen as key levers in terms of leading social dialogue and progressing controversial issues. With regard to gender equality, all participants agreed that there was still an imbalance between men and women in society. Gender stereotypes and automatic categorizations of groups of people still play out and influence actions, thought and behaviour. All respondents found that compared to previous generations, women have more opportunities, both in their private and professional lives, at the current time. It was added though that to further address this imbalance and to spread awareness among future generations, it was essential to stimulate an intensive social dialogue and to implement diversity in companies and educational institutions as a strategic goal. The inclusion of different topics around diversity in the classroom as well as cross-curricular discussions on social issues were considered helpful for students to learn and ultimately adopt new perspectives. It was interesting to see that the students' perceptions and interpretations of the two CIs appeared to be more in line with a generational shift than a societal coding.

## **7 LIMITATIONS**

While thematic analysis proved to be a helpful instrument due to its flexibility, it may also have some limitations as it does not provide a clear framework on how and what to code. Therefore, a wide variety of codes emerged that were not addressed in their full complexity. This was mainly due to the requirements of this paper in terms of length and focus. For these reasons, only certain parts of the questions were outlined in more detail, while others were largely sidelined. What is more, a qualitative study is always limited in its nature, given the respondents of respondents.

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# ***Developing curricula as part of cross-border Collaboration between Higher Education Institutions (HEI)***

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## **ABSTRACT**

Cross-border collaboration between higher education institutions has been examined widely. In this paper, we look at the cross-border collaboration between Finnish and Russian HEIs and, in particular, developing curricula to expand professional competencies to create new international competitive customer-oriented products and services using modern technologies, new models of management, and marketing in the field of culture. Data for the study, on the Finnish side in South Karelia, was collected from November 2019 to April 2020 using a number of different ways from representatives of the companies and organisations operating within the cultural sector, including festivals, museums, cultural spaces, art galleries. On the Russian side, data was collected using a mixed methodology approach during the period from August 2021 to September 2021 in the North-Western Russian region museums, libraries, theatres, and creative spaces. Educational needs identified by the Russian HEI from data available were the changes in consumer practices and work standards, harmonisation of online and offline formats as well as the sustainable development aspects were also taken into consideration when formulating the series of seminars themes. Furthermore, by examining Finnish data, the following topics were identified: new product development, networking and communication in the intercultural context, marketing and utilising digitalisation in cross-border sales activities, as well as crisis management. The content was developed in collaboration with the outsourced experts and the training programme was tested with the focus group by organising an online training programme from September 2020 to September 2021. Feedback from participants of the training programme was collected.

Keywords: cross-border collaboration, curriculum design

## **1 INTRODUCTION**

Collaboration between higher education institutions across borders has been examined widely (Meltovaara et al. 2021). The participants of this study are Finnish and Russian HEIs, the specific focus being cross-border collaboration in developing curricula. Cross-border education as such is defined as the movement of people, know-how and curriculums across national borders (Chan 2018). The aim of this study is to expand professional competencies to create new international competitive customer-oriented products and services using modern technologies, new models of management, and marketing in the field of culture. One of the aims of this study is to find the key elements for curriculum development cross-nationally that respond to the needs and expectations of the diverse students and address the challenges

faced by both local and international organisations, which are of importance in internationalisation. As Fragouli (2021) notes that internationalisation happens in practice. Internationalisation as well as cross-border collaboration, has emerged as one of the main focuses of higher education institutions. One of the key elements in the LAB University of Applied Science strategy is networking as well as university and industry collaboration (LAB 2020). SMEs and higher education organisations operate in an increasingly competitive and global marketplace where networking and collaboration have become important (Alonso et al. 2010, Meltovaara et al. 2021, Demircioglu and Audretsch 2019). However, regardless of these findings, numerous organisations find it hard to set collaborations into place (de Wit-de Vries et al. 2019). Increased attempts encouraging collaboration exist, and literature depicts different kinds of collaboration means. Universities and SMEs find establishing and maintaining collaboration a difficult undertaking, which again has led to numerous attempts for establishing some practices and principles to guide the initiation, implementation and success of a collaboration (Awasthy et al. 2020). In this study, cross-border curriculum development was undertaken by partner HEIs in Finland. This paper looks specifically at the cultural cross-border collaboration issues between Finland and Russia. The research aims to answer the question of how the curricula in cross-border collaboration are undertaken.

Data for the study, on the Finnish side in South Karelia, was collected from November 2019 to April 2020 using a number of different ways from representatives of the companies and organisations operating within the cultural sector, including festivals, museums, cultural spaces, art galleries. On the Russian side, data was collected using a mixed methodology approach during the period from August 2021 to September 2021 in the North-Western Russian region museums, libraries, theatres, and creative spaces. Educational needs identified by the Russian HEI from data available were the changes in consumer practices and work standards, harmonisation of online and offline formats as well as the sustainable development aspects were also taken into consideration when formulating the series of seminars themes. Furthermore, by examining Finnish data, the following topics were identified: new product development, networking and communication in the intercultural context, marketing and utilising digitalisation in cross-border sales activities, as well as crisis management.

The content was developed in collaboration with the outsourced experts and the training programme was tested with the focus group by organising an online training programme from September 2020 to September 2021.

## **2 METHODOLOGY**

The study was conducted by using a mixed research method. This method employs both approaches separately or simultaneously to create a research outcome stronger than either method individually (Malina et al. 2011). Also, Flick (2009) uses the concept of triangulation to describe the combination of qualitative and quantitative methods and emphasises that different methodological perspectives should complement each other in the study. Different methods remain separate in the study but are operating side by side. Overall, by combining quantitative and qualitative methods, it is possible to explore more complex aspects and relations of the human and social world (Malina et al. 2011).

Flick (2009) notes that the qualitative method is interested in analysing the subjective meaning or the social production of issues by collecting non-standardised data. The qualitative approach is often concerned with interpreting the empirical data and aiming at a holistic understanding of the issues studied, being sensitive to the context of the study (Eriksson & Kovalainen 2008).

Therefore, by using the qualitative method, it was possible to approach the topic of this study deeply, understand the phenomenon and acquire knowledge in order to build curricula in cross-border HEI collaboration.

According to Wilson (2003), the quantitative method uses a structured approach with a sample of the target group to produce quantifiable insights into behaviour, motivations or attitudes. It is useful for describing the characteristics of a population or target group or market but is considered to be not very flexible; data collection is very structured and standardised (McGivern 2009). A quantitative method was used in this study in order to collect data from 65 organisations with a standardised questionnaire.

**Table 1. Details of the data of the study**

Dataset	Timing	Participants	Aims
DACUM workshop notes	30 April 2020	representatives from participating organisations in Finland (n=6)	The educational needs and gaps related to the culture and tourism industry
Panel discussion recording transcription	29 May 2020	Representatives of universities and participating companies from Finland, Russia, UK, Germany (n= 9)	Current and future educational needs and developmental plans
Feedback surveys	September 2020 - September 2021	Participants of the online training programme from Finland and Russia (n=58)	The content, material, organisation, and teaching methods relevance
Notes from the series of unstructured and semi-structured interviews	November 2020 - January 2021	Participating companies and organisations from Finland and Russia in the online training programme (n=17)	Relevance of the themes, teaching methods, and overall satisfaction
Results of semi-structured interviews	August 2021 - September 2021	Representatives of museums, libraries, theatres, and creative spaces St. Petersburg and Leningrad region (n=12)	New trends in cultural organisations activities, assessing the impact of online and hybrid forms for cultural projects' implementation, as well as analysing the communication with customers during the pandemic
Results of the survey	August 2021 - September 2021	Cultural organisations in St. Petersburg and Leningrad region (n=67)	Relevance of the topics
Results of the webometrics analysis	August 2021 - September 2021	Cultural organisations in St. Petersburg and Leningrad region (n=108)	Further educational needs and educational methods
Feedback surveys	October 2021	Participants of the series of seminars in St. Petersburg (n=12)	
Results of unstructured interviews	October 2021	Participants of the series of seminars in St. Petersburg (n=10)	

The data in this paper consists of nine (9) datasets collected in Finland and Russia. The overview of the datasets is presented in Table 1 below and further described in 2.1 and 2.2.

## **2.1 Data from Finland**

Three datasets reflecting the steps of the curriculum development process were used to analyse the data for this study on the Finnish side. The first and second datasets contain the findings of interviews with experts in the sphere of culture and tourism about the future skills required in the business, which were collected during the Spring 2020 events. The third and fourth datasets contain the feedback of the online professional training programme organised in September 2020 – September 2021 by the Finnish partners, LAB University of Applied Sciences and Humak University of Applied Sciences.

### *2.1.1 Description of the datasets related to the analysis of the educational needs in Finland*

The DACUM workshop was held online on 30 April 2020, utilising Zoom and the online collaboration platform Padlet. Representatives of SMEs and organisations working in the sphere of culture and tourism in South Karelia, Finland, were interviewed at the workshop (for more information on the DACUM workshop and the DACUM procedure, see Vuorela et al. 2021). The outcomes of the interviews were recorded and extracted in Padlet. One of the interview questions was on future competencies, and it comprised five competency areas, as well as skills and work responsibilities.

One of the authors organised a panel discussion titled "Culture and Tourism: Life in the New Normal," which took place in Zoom on 20 May 2020. During the panel discussion, participants from higher education institutions (HEI) and culture and tourism industry practitioners from Finland, Russia, Germany, and the United Kingdom were interviewed by the project experts. One of the topics discussed was future competencies in the culture and tourist industries. In June 2020, the project trainee recorded and transcribed the panel discussion.

### *2.1.2 Description of the feedback collection from participants of the online training programme in September 2020 - September 2021*

The EDUCRO training programme was organised online in Zoom from September 2020 to September 2021 using the results of the analysis of datasets 1-3. The curriculum was designed in such a way that learners grow rationally and provide actual results for their company. The participants of the training programme included representatives of the culture and tourism organisations and SMEs from Finland and Russia, as well as the degree programme students in LAB University of Applied Sciences, Humak University of Applied Sciences in Finland and Higher School of Economics in Russia. The total number of participants in the educational events exceeded 400 people. The training program was divided into six parts that were designed to be integrated and meet constructive alignment criteria. Lectures, group discussions, small group assignments, and optional individual mentorship were all included in each educational module. In addition to the educational sessions, monthly networking events were held online and were designed to allow attendees to communicate and collaborate.

After the training program sessions, the feedback was collected in multiple ways. After each educational session, the study participants were given feedback questionnaires to fill out. To guarantee a higher participation rate and level of information, the survey was anonymised. The questions were designed to analyse the topics' relevance to the participants and to examine how the material, organisation, and teaching methods address their needs. The response rate

was very low, and only 58 responses were received. In addition to the feedback surveys, a series of unstructured and semi-structured in-depth interviews with participating organisations from Russia and Finland was organised by the students and staff of Humak University of Applied Sciences from November 2020 to January 2021 (Bogdanova et al. 2021). The total number of respondents was 17. The questions discussed were related to the relevance of the themes, teaching methods, and overall satisfaction.

## **2.2 Data from Russia**

Empirical data was collected on the Russian side during the period from August 2021 to September 2021. The geographical area included mainly St. Petersburg, and about 10 % of the data is collected from the Leningrad region. The data collection was aimed at studying new trends in cultural organisations activities, assessing the impact of online and hybrid forms for cultural projects' implementation, as well as analysing the communication with customers during the pandemic.

There are three different data sets in the study: interviews, survey, and webometrics, and the organisations represented in all three data sets can be divided into four types: museums, libraries, theatres, and creative spaces. The combination of interviews, surveys and webometrics was designed to cover the broadest possible range of different organisations, from state-owned organisations to non-profit organisations. The interviews, surveys and webometric analysis were accomplished by the specialists of the Sociological Institute of the Russian Academy of Sciences (branch of the federal Centre of Theoretical and Applied Sociology of the Russian Academy of Sciences).

### *2.2.1 Description of the datasets related to the analysis of the trends in Russia*

Qualitative interviews are considered to be research vehicles, as the purpose might be to collect different facts about participants' experiences but also how the meanings are produced through the interaction (Eriksson & Kovalainen 2008). In this study, interviews were organised as semi-structured interviews in 12 organisations, and they were conducted either in person or online. All interviews were also transcribed.

Surveying usually involves structured questionnaires which are sent to the population or sample of the population. The data gathered this way usually provides answers that can quantify the particular experience, facts, behaviour, attitudes or motivations in the population under investigation (Wilson 2003). This study survey was conducted by sending questionnaires to 65 organisations altogether 67 completed questionnaires were received back.

In the study also webometrics analysis was used; altogether 108 cultural organisations were studied. The social network Vkontakte was chosen as the main object of webometrics, based on the fact that all the selected organisations in this study are an active part of this social network. An analysis of changes in the activity of the audience and the organisations themselves in social networks was carried out for four different types of organisations: creative spaces, museums, theatres, libraries. For visualisation, museums, theatres and libraries, due to their large number, were divided into subgroups of several pieces, and the indicators were compared within groups and between groups.

On 28 September 2022, the round table for cultural professionals and experts in the creative economy and cultural tourism was held in St. Petersburg to validate the results of the study and discuss them among the adepts. The results of the study became a foundation for the series of seminars designed for St. Petersburg cultural managers.

### *2.2.2 Description of the feedback collection from the series of seminars in St. Petersburg*

Program of series of seminars "Creative Management of Cultural and Tourism Projects in a Changing Reality" included presentations and workshops by experts and practitioners in culture, creative industries, and creative economy, as well as study visits to cultural organisations and art spaces. As a closing event for the program, the study trip to the Tikhvin town in the Leningrad region was organised for meeting with colleagues and visiting efficient cultural centres.

After finishing the program of seminars, participants (n=12) were asked to fill out a feedback form where they report their impressions and ideas about the relevance of the topics and assess the usefulness of the series of seminars for their professional activities. The organisers of the events also conducted interviews (n=10) to identify further educational needs and educational methods and design of the future seminars.

## **3 RESULTS**

### **3.1 Results of the analysis of Finnish datasets**

The thematic analysis was used to analyse the results of the DACUM workshop. The responses of the DACUM workshop participants related to future skills were categorised. The panel discussion was transcribed and analysed using thematic analysis. Altogether the analysis resulted in identifying 5 major categories or competence areas for professional development:

- (1) Communication and audience relationship (intercultural communication, understanding of different work cultures, cross-border networking, communication with target groups, understanding the needs of the audience)
- (2) Digital skills (use of digital sales and marketing channels, digital opportunities, development of SoMe channels, online and hybrid events planning and organising)
- (3) Sales and marketing (planning and implementation of cross-border marketing and sales, use of digital sales and marketing channels, storytelling,
- (4) Crisis management (financing in changing situations, crisis preparedness)
- (5) Value creation (designing cultural tourism products, new product funding, service design, business development strategies)

Communication skills, such as intercultural communication, relationships with the audience, and networking, were mentioned by the majority of respondents, followed by sales, marketing and digital. COVID-19 influenced the focus of the panel discussion participants towards crisis management skills and online (communication with the audience online, organising online and hybrid events, and online presence relevant skills).

The identified topics laid out the foundation for the online cross-border training programme. The feedback collected after the implementation of each module of the programme revealed that participants of the study positively evaluated pragmatic content aimed at developing of concrete work-life skills. Besides, participants of the study were engaged in establishing cross-border collaboration and professional networks. The interactive format of the session was challenging for some of the respondents who preferred the face-to-face format.

### **3.2 Results of the analysis of Russian datasets**

As the survey showed, communication with the audience within the changing circumstances, keeping the attention of customers, as well as attracting new participants for online projects had become a challenge for the main part of cultural organisations. In addition to the rapid development of technical capabilities and innovations offered by various instant messengers and social networks, cultural managers of St. Petersburg and the Leningrad Region were faced with the importance of building a completely new strategy for interacting with the audience and quickly responding to its needs. Jumping up to a new level of communication has helped many cultural organisations to become closer to their consumers of cultural services, to understand better their desires and even to share their anxious feelings about the challenging environment. Moreover, the study reflected that, despite the challenges of the pandemic, this time was a favourable period when cultural projects got a boost to development. It is about the creation and promotion of online projects in culture, as well as creative initiatives that combine online and offline formats.

It's worth mentioning that some organisations that worked in the field of culture and tourism noticed the topics of online projects environmental friendliness, availability of online cultural events for a wider range of participants, integration of culture and education, great opportunities for networking and partnerships making. As a result, some survey respondents emphasised the positive changes due to the pandemic. However, the process of adaptation to the new situation has to be properly managed.

In general, flexibility in art management in an everyday changing world turned out to be the main skill of cultural workers, which allow overcoming the challenges. During the pandemic, those cultural managers who follow the methods of agile and react immediately to the audience responses as the IT developers do become successful.

Thus after the discussion at the Round table, several topics for a series of seminars for St. Petersburg cultural professionals were chosen:

- (1) Current practices of working with an audience in the field of culture and tourism
- (2) Sustainable development of projects in culture and tourism during the pandemic period
- (3) Agile for projects in culture and tourism
- (4) Harmonisation of online and offline formats for the implementation of cultural projects

The participants highly appreciated the quality of the series of seminars, emphasising the relevance of the topics they studied that proved the study's major outcomes. At the same time, the organisers received requests to include in the project topics related to recruiting managers for making effective project team; development and effective implementation of a marketing strategy; creation and promotion of digital services; content marketing and studying best Russian and foreign cases of sufficient work in changing reality.

## **4 CONCLUSION**

This paper presents the findings of cross-cultural curriculum development in Finland and Russia. It should be noted that the COVID pandemic occurred during the course of the study, and this may have affected the results. Rapid digitalisation occurred. The results in Finland highlight the importance of communication skills, including intercultural communication, networking and relationships with the audience. The sales and marketing development and digital skills were the second and the third popular categories. The focus being on online

communication with the audience, development of new online and hybrid events and digital and legal skills to enable online presence, crisis preparedness and resilience. Moreover, the study reflected that in Finland, despite the challenges of the pandemic, the time of the study was a favourable period when cultural projects were increasingly developed. Combining online and offline formats was also seen as the future path.

In Russia, the topics of online projects also emerged. Furthermore, environmental friendliness, availability of online cultural events for a wider range of participants, integration of culture and education, great opportunities for networking and partnership making. Thus, the main finding in both countries was the need for greater online skills, with cultural events moving to either an entirely online or a combination of online and offline format.

Future research should be undertaken to further highlight inclusion, diversity and ethical issues within the field of cross-border curriculum design.

The results of this study will further be utilised as a basis for compiling an online course. The next steps after this study will be to examine the currently available university courses in Finland to develop a curriculum to address the needs arising from this study. New online course topics for curriculum development were jointly devised, namely sustainable value creation and value in business, digitalisation, ethics & change management and hybrid services, Metaversum as a platform for cultural products.

## 5 ACKNOWLEDGEMENTS

The authors are grateful to the representatives of the collaborating SMEs in South Karelia and Saint-Petersburg for their contributions. LAB University of Applied Sciences, Saint-Petersburg Institute for Cultural Programs collaborated on this work as part of the EDUCRO project. The project is supported by the European Union, the Russian Federation, and the Republic of Finland and is part of the CBC 2014-2020 South-East Finland-Russia program. The authors also grateful for the contribution of the specialists of the Sociological Institute of the Russian Academy of Sciences (branch of the federal Centre of Theoretical and Applied Sociology of the Russian Academy of Sciences).

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# ***Diverse Intercultural Competence Assessments at a Swiss University of Applied Sciences***

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## **ABSTRACT**

This exploratory study is a start to approach the development of intercultural competence in a more systematic way. Today different assumptions form the basis of the current measures in place in the learning environment. However, these might not be addressing the needs of the different target audiences efficiently. With the goal to determine training and development measures for students and staff at a Swiss University of Applied Sciences and Arts (UAS) data was collected from November 2020 to October 2021 from different stakeholder groups. The Intercultural Development Inventory® (IDI®), developed and globally validated by M. Hammer and M. Bennet, was used to identify a more targeted approach to intercultural competence development.

180 participants (33 staff members and 147 bachelor students) completed the IDI during the assessment period, with debriefing sessions provided in person for the staff members and online via the IDI student tool for students. This data provided a baseline of mindsets prevalent in both the staff and student groups for which targeted individualized training measures could be developed. While on the whole participants were open and curious to learn more and develop themselves some were taken by surprise with the results and the majority felt comfortable with their developmental orientation.

The IDI instrument was critiqued with regards to the terminology used as it is perceived as judgmental however, through further explanation, participants understood more readily that the assessment is to be seen as the mindset/orientation an individual reverts to on a daily basis. The tool is not a measurement of behavior and should be used as a reflection instrument.

The outcome of the study showed that participants felt this was an interesting assessment and are open to further development. However, staff members felt that the IDI and follow-on measures need to be concretely embedded into the institution's strategy where training and development are concerned. This would lead to credibility with regards to the strategic goal Global Competence Development of all employees.

## **1 INTRODUCTION**

The Swiss University of Applied Sciences and Arts (UAS), where the data collection took place is a wide range higher education institution, offering practice-oriented bachelor and master degrees since its foundation in 1997. Even though graduates have fantastic employability prospects it is argued that the future labor market requires specific skillsets, that are at least to a major part depending on international and intercultural competence development and experience (Davis, 2011). Different analyses of 'future skills' report that intercultural communication skills and the ability to collaborate in highly diverse teams are among the most important future requirements in the labor market (Richard L. Griffith, 2016).

Historically universities of applied sciences in Switzerland are very much locally anchored. Their research and development activities are predominantly financed by private-public partnerships within existing collaboration with the often highly specialized SME's, that form a fundamental part of the quite resilient Swiss economic system. It can also be noted that the international perspective has not always and automatically been understood as an important element of the educational offers.

Swiss UAS have not had the same amount of time as traditional academic institutions to establish themselves with regards to internationalization and thus took on a predominantly regional focus and a practice-oriented approach. As the importance of internationalization in higher education has grown in recent years, Swiss UAS have been pushed to broaden their global perspective through various initiatives in order to provide all students, both domestic and international, opportunities to have their global competence development acknowledged.

To stimulate and consciously foster the acquisition of intercultural competencies, the UAS introduced the Certificate of Global Competence (CGC), an add-on certificate open to all registered students, in 2014. Since then, more than 150 students, mainly from business management and social work, have acquired this certificate in addition to their regular Bachelor or Master diploma.

It became obvious through student demand of the CGC that one of the requirements for an institution that claims to leverage multidisciplinary and multiculturalism as assets for innovation and success on the labor market, continuous training offers needed to be further developed not only for its student body, but for all members of its community. Student generations today have been exposed during their former education to a much more diverse environment, than the employees of the institution who typically are from a slightly older generation and hypothetically with more homogeneous early school experiences. Thus, an important additional target group for intercultural competence initiatives was identified to be the technical, administrative, and teaching staff.

Furthermore, through discussion forums at the institution, it was gauged that there is an existing link between a highly diverse and a highly inclusive community, what bridges these two concepts is intercultural competence. Intercultural competence is fundamental to transform a diverse environment into an inclusive one (Hammer, Bennet, & Wiseman, Measuring intercultural sensitivity: The intercultural development inventory, 2003). Hammer et al. go on to state that international and domestic cross-cultural outcomes are achieved through the development of intercultural competence consisting in the capability to shift cultural perspective and appropriately adapt behavior to cultural differences and commonalities.

The development of intercultural competence involves gaining a more complex understanding of how one engages cultural diversity.

This is reflected in two areas:

- Deeper cultural self-understanding (how one makes sense of and responds to cultural differences in terms of one's own culturally learned perceptions, values and practices)
- Deeper cultural other-understanding (different ways people from other cultural groups make sense of and respond to cultural differences).

Furthermore, traditional governance structures which have failed to correspond with the growing diversity of the local population and its hidden structural issues must also be considered. Ideally, they should foster diversity, specifically demographic and cognitive diversity as defined in the HEAD Model (Gaisch & Aichinger, 2016).

Since 2015, the UAS has taken part in different projects to enhance the quality of its intercultural training offers, however sound evidence is lacking with regards to detailed aspects as to shaping the individual and institutional learning process. Further questions which arise include, what intensity of an immersion in a diverse environment provokes the best results. What implications do the characteristics of a diverse workforce have in regard to the management of the group processes? Finally, what are the needs of the individuals themselves, who indicate readiness and willingness to develop their intercultural competences?

Thus the need to characterize the level of intercultural communication competence among students and staff and at the same time to learn more about their needs and expectations is strongly evident and an intended outcome of the study. Furthermore, it will shed light on what measures should ideally be developed in line with the institution's vision and diversity strategy.

## **2 GOAL OF THE STUDY**

The primary objective was to conduct an exploratory needs assessment using the Intercultural Development Inventory (IDI) questionnaire and conducting qualitative debriefing interviews to gain insight as to training and development needs of students and staff at the UAS. Likewise addressing which measures which could be developed and how these could be embedded into the service portfolio of the institution's global competence lab.

Likewise, the results provided baseline data and information as to the aspect of cognitive diversity of the included target groups. The results of two staff groups (n= 33) and three student groups (n=147) are included and described in this paper.

### **2.1 Pilot-study and baseline assessment at the UAS Business School**

#### **2.1.1 Staff Assessment**

The internationalization strategy of the Business School (June 2020) emphasizes the importance of linguistic, inter-cultural and global competence development for all students. Likewise, all teaching, research and administrative staff are provided with development opportunities to operate in a global teaching and learning environment.

Thus, two priority measures were defined to achieve the above goal, namely employee mobility and professional development. In the area of professional development, all employees are developed with regards to English language acquisition, international expertise, didactic and intercultural competences as per their position. The Business School has set the required language competence for modules taught in English at C1 level according to CEFR. It was decided to use the IDI as a tool to identify the diverse mindsets within one specialized workgroup in order to then develop global competence measures to address the aforementioned professional development goal.

The study was conducted between November 2020 and January 2021 and included the ten members of the specialized workgroup "Global Management".

#### **2.1.2 Assessment of three different student groups**

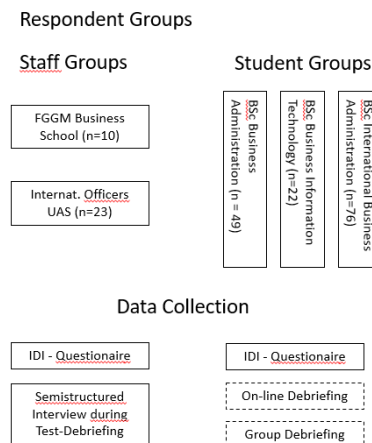
As per the aforementioned goal in 2.1.1, students from three bachelor programs were also included in the baseline assessment. The Degree Program Heads of these bachelor programs at the Business School decided on using the IDI as tool which would support first year students in their intercultural competence development. The assessment is accompanied with an online development program which takes place over a 14-week period. During this time, students worked on developmental measures based on their respective development orientation.

76 Bachelor International Business Administration (BSc-IBA) students, 22 Bachelor in Business Information Technology (BSc-BIT) students and 49 Business Administration (BSc-BA students).

## 2.2 Pilot-study and baseline assessment at the International Office Team

The central International Relations Office is responsible for and acts as the support center for international matters at the UAS. Besides being the traditional internationalization hub of the UAS, it is also the competence center for intercultural and global competence development. Since the implementation of the university wide Certificate of Global Competence it is instrumental in coordinating the implementation and quality assurance of that offer. Furthermore, the Internationalization Committee’s strategic plan highlights the development of global competences and has thus launched a project focusing on setting up a university wide Global Competence Lab.

As international coordinators, by nature of their position, regularly interact with members of different cultural groups, a second pilot assessment was performed with this target group. 23 persons were invited to take the IDI assessment with the open choice to decide on an individual development plan during a debriefing session. The main aspect was to gather data regarding their individual competence development, the range of orientations in that specific group as well as understanding which further measures met the needs of this group.



**Figure 1:** Respondent Groups:

FGMG = Specialized Workgroup Global Management; IDI = Intercultural Development Inventory

## 3 METHOD AND INSTRUMENTATION

The Intercultural Development Inventory® (IDI®), developed and globally validated by M. Hammer and M. Bennet, was used. Log-in codes were purchased and automatically distributed via the IDI Administrator site. All participants completed the 50-item questionnaire in their own time. Staff participants received their results during a one-on-one semi-structured debriefing session which lasted approximately 90 minutes.

Student groups received an additional student debriefing code as this took place online via the IDI Student Portal. Students were additionally provided with a generalized group debriefing where the five resulting development orientations of the Bennett’s Developmental Model of

Intercultural Sensitivity (DMIS) (Bennet, 1986): Denial, Polarization, Minimization, Acceptance, Adaptation) were discussed in depth and questions could be answered. This allowed for a better understanding of the instrument rather than depending solely on the online debriefing.

## 4 RESULTS

### 4.1 Baseline comparison of the five Pilot Groups

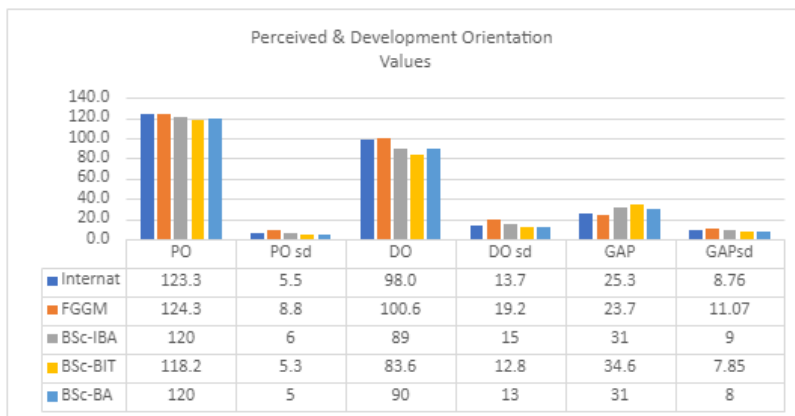
The results allowed for a baseline comparison of the five pilot groups with respect to their Perceived Orientation (PO) and their real Development Orientation (DO)

It can be observed in Figure 2, that both staff group, International Officer Group (Internat) and Global Management Group (FGGM) have similar self-perceptions, which is depicted in the PO value. Both correspond to the stage Acceptance with FGGM having a slightly higher variance. Likewise, both groups have the same DO resulting in Minimization (Figure 3), where FGGM displays a slightly higher level of intercultural competence.

Although the three student groups have almost the same PO as the staff groups, their DO is clearly lower. This contradicts the introductory formulated assumption that since students have been exposed to a much more diverse environment during their former education, they would require less interventions than the staff groups. It may be deduced, that exposure to diversity alone does not automatically lead to an increase in intercultural competence.

The larger orientation gap (GAP) of the student groups likewise confirms an even more prominent tendency to overestimate one’s competence to deal with differences.

Similarly, it can be argued that despite the group FGGM displaying the highest rates in DO and PO with the lowest gap (GAP), it would not automatically reflect a much higher level of intercultural competence across the group but could result from the intercultural expertise of certain members within this group.

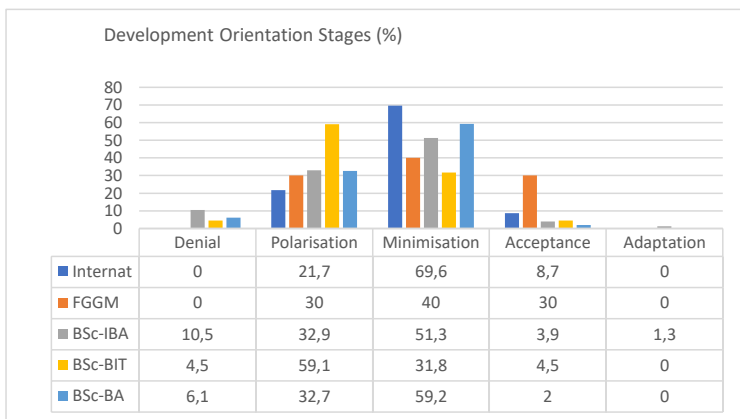


**Figure 2:** Perceived and Development Orientation & Orientation Gap – all Respondent Groups

The orientation ‘Denial’ was found only among the three student groups as shown per Figure 3. As mentioned above, these orientations are based on the DMIS (Bennet, 1986). One may also argue that to a certain degree the initiation of the developmental process is correlated with the age of the participants.

The highest Polarization was found in the student groups, with a maximum of 59% in the BSc-BIT group, while the BSc-IBA and BSc-BA groups show a more ethnorelative distribution. Quite often it is assumed that the more international a group is (BSc-IBA) the higher the intercultural competence may be. Likewise, some staff members from the FGGM group who typically had a Polarization orientation assumed they were teaching a homogenous Swiss group and therefore did not need to develop their intercultural competences any further as they did not teach the international group. However, since intercultural competence development is not an “internationalization” topic, but rather the ability to shift our perspective and behavior based on what we see as similar and different in our own and other cultural backgrounds. Furthermore, typical Swiss learning environments (German-taught bachelor programs) comprise of a very heterogenous student population. Thus, the perception therefore that the Swiss student group is homogenous indicates a need for intercultural competence development. It was also noted that the Polarization groups often judged differences as constructs which are negative, during all debriefing instances they were encouraged to view differences as learning opportunities, thus re-orientating the mind to perceive the difference as less threatening.

The best share of individuals within the orientation ‘Acceptance’ is found in the specialized Workgroup Global Management (FGGM), whilst only one respondent in Adaptation is found in the BSc-IBA group.



**Figure 3:** Development Orientation Stages (%) - all participants

## 4.2 The Result of the Staff Groups

On the whole, the 33 participants of both staff groups were open and curious to learn more and develop themselves. While some participants were taken by surprise with the results, the majority felt comfortable with their developmental orientation.

All participants were assured that their individual results and feedback would remain confidential and anonymized. Furthermore, participants confirmed that they had completed the assessment honestly and that they were not experiencing any professional or personal transitional experience which could skew the IDI assessment results.

During several debriefing sessions it was brought up that the terminology used sounds judgmental however, through further explanation, participants understood more readily that the assessment is to be seen as the mindset/orientation an individual reverts to on a daily basis. The tool is not a measurement of behavior and should be used as a reflection instrument.

Some participants found the assessment questions “strange”, “suggestive” and one participant believed them to be very simplistic and that the results may change significantly when the test is taken again after a short period of time. Two other participants didn’t feel comfortable to answer some of the questions as they found inconsistencies with the instruction text of the instrument itself and that some questions suggest an outdated notion of culture. Participants were reassured that the IDI Assessment is grounded in a comprehensive, cross-culturally validated model of intercultural competence.

The perceived orientation in the two staff groups reflected an orientation that recognizes and appreciates patterns of cultural difference in their own and other cultures' values. This is aligned to an Acceptance orientation in the IDI individual profile report (Hammer, Intercultural Development Inventory Individual Profile Report, 2021) which is an orientation that typically recognizes and appreciates patterns of cultural difference in its own and other cultures' values, perceptions, and behaviors. Generally, individuals do rate their competence or ability higher than what it is, this is not unusual. Research indicates that human beings often feel they are more effective in a variety of pursuits than they are. For example, people consistently rate themselves as using communication skills more effectively and frequently than they do.

The development orientation of the group on the other hand lies within Minimization. This reflects a tendency to emphasize cultural similarities that might conceal major cultural differences in beliefs, perceptions and behavior (Hammer, Intercultural Development Inventory Individual Profile Report, 2021).

Figure 3 above shows that 21.7% (Internat) and 30% (FGGM) of the participants use broad stereotypes when discussing cultural differences during the debriefing sessions, thus indicating a Polarization orientation. According to Hammer, this could potentially lead to less complex perceptions and experiences with regards to cultural differences and similarities. In order for this group to develop an intercultural mindset, they will need to be provided with learning opportunities that focus on tolerance building.

Our observation is supported with statements from participants which suggest that some individuals make sense of cultural differences based on their own cultural values and practices as opposed to sense-making within the own and the other culture's values and practices:

“Equally as critical of my culture as of others, sometimes feel the other is better”, “Swiss students / classes are more homogenous”, “I don’t need to adapt as long as I don’t offend others”, “Students are expected to adapt”, “I do see myself in this “us vs them” approach and have difficulties with it”, “Sometimes our organizational culture does not allow for us to acknowledge differences. It doesn’t feel open”, “Yes, I do have negative stereotypes”, “I am currently less interested in this internationalization topic and more interested in understanding young people whom I teach”, “The recent media reports about movements like Black life matters and #MeToo creates difficulties and polarization between students and staff. My role as an experienced teacher isn’t fully respected anymore.”

69.6% resp 40% of the participants of the two staff workgroups are within a transitional (Minimization) orientation, where individuals tend to emphasize cultural similarities and prefer not to focus on differences with regards to beliefs, perceptions and behavior. Generally, these individuals try to avoid stereotyping and biased behavior by treating each person as an individual. They are interested in differences but have a limited ability to adapt to other cultural practices as these may not be deeply understood. Likewise, they may not be fully aware of how their own ideas and behaviors are culturally grounded (Hammer, Intercultural Development Inventory Individual Profile Report, 2021).

It was noted during the debriefing sessions that on the whole these individuals draw on developing common ground in their interactions in projects, the classroom etc. however, they feel and demonstrate the lack in expertise to fully engage in differences:

“Sometimes felt ambiguous in the answers, found questions strange, or suggestive”, “My culture causes problems”, “I don’t want to offend people”, “I am not Swiss, but is that wrong? I am interested in differences, but tend to go to commonalities”, “I am not afraid of exploring differences, but feel that I lack the expertise of how “they” tick”, “No one is better anywhere else”, “I try to get to know the person, but in some cultures, this might be the wrong thing to do”, “I am blind to differences”, “I try to be sensitive and do not overgeneralize”, “I hate stereotyping and don’t like to be categorized”, “Diversity is challenging and interesting”,

8.7% resp. 30% of the participants are within an Acceptance orientation, which means that they are able to make sense of cultural differences and commonalities based on their own and the other culture’s values and practices. They are curious to learn about cultural patterns in different cultural communities, so they typically use cultural generalizations to recognize cultural difference, which leads to more complex perceptions and experiences of cultural difference and commonality (Hammer, Intercultural Development Inventory Individual Profile Report, 2021).

Our observation is supported with statements which suggest that on the whole these individuals: “would like to analyze, investigate situations where adaptation is required”, “would like to reflect on situations and behaviors in the past to understand why I have not adapted”, “struggle with ethical or moral decisions and find that one might be judging individuals from a different cultural background”

### **4.3 The Result of the Student Groups**

Initially students were uncertain as to the process and the purpose of completing the IDI assessment. Each of the student groups were closely accompanied during the 14-week semester.

The development orientations in the BSc-IBA group ranged from Denial (11%) through to Adaptation (1%), with most students in Polarization (33%) and Minimization (51%) as depicted in Figure 2. In an organizational setting this wide range of orientations may highlight that the group lacks consensus as to how they should deal with intercultural differences. On the one hand 11% members (Denial) might not realize that culture plays a role in communicative challenges or the work environment as a whole. Those in Polarization may be rather judgmental and feel that their “way of doing things” is superior. The fact that the majority of the members (56%) lie within a transitional or global mindset means that even though the group might struggle with finding consensus, this majority will support greatly in finding common ground.

The BSc-BA program indicates a similar range of monocultural mindsets (Denial 6% and Polarization 33%) and a majority of the participants in transitional (Minimization 59%) and global (2%) mindsets.

A higher proportion of monocultural mindsets (Denial 4.5% and Polarization 59.1%) can be depicted in the BSc-BIT program with a lower proportion in transitional (Minimization 31.8%) and global (4.5%) mindsets.

These differences in mindsets in the three programs may be due to the fact that the BSc-IBA student body is 50% with Swiss secondary education and 50% from an international secondary education background. Whether this plays a significant role as to how we perceive and behave towards different cultural backgrounds needs further investigation.

The BSc-BA program participants, are in their second year of studies, have had international exposure in their studies through courses and incoming exchange students, this may therefore also play a role in this class having a more transitional and global mindset.

On the contrary the BSc-BIT program participants, in their first year, have had limited international exposure and only one incoming exchange student in their class. Thus, most have a Swiss secondary educational background. Whether this limited exposure plays a role in mindset orientation needs to be explored further.

## **5 DISCUSSION**

Staff groups felt that the IDI assessment provided them with a baseline of their intercultural competence, respectively their mindset towards intercultural interactions. However, they felt that the IDI and follow-on measures need to be embedded really well into the institution as a whole. Likewise, management support of this professional development tool needs to be reflected in their (management's) willingness to undertake the assessment as well. The staff group felt this would lead to credibility with regards to the strategic goal Global Competence Development of all employees.

Suggested further topics the staff group want the authors of this paper to consider include:

- Post IDI debriefing sessions which would include intercultural competence goal setting
- Development of monitoring measures which link the assessment, development measures and outcomes
- Providing experiential and applied learning situations which could comprise of Culture Tandems, peer learning activities, action-oriented workshops and so forth.
- Workshops on managing diverse teams and being able to get the most out of them.
- Exploring more commonalities in values and less so in behaviors.

The institution may also consider using the IDI to assess its diversity and inclusion policy in order to reflect on how diverse the institution is and to what degree inclusivity goals are met. It may gauge whether the diverse administrators, faculty, staff and students are aware of the cultural diversity and how is this communicated. HR policies could be addressed in terms of whether and to what extent intercultural competences are considered in the hiring policy (recruitment, new-hire orientation, performance management etc.). Professional development of lecturing staff could be addressed which include adaptive teaching strategies that facilitate cross-cultural learning.

Thus, our findings confirm Poliak (2013) who describes how essential a comprehensive approach including the institution's top-management commitment and an integration into the strategic vision and a clear communication strategy are. And finally, it also highlights the importance of a clear orientation towards increasing teaching performance in a growing diverse student population by not only avoiding stereotyping and discriminating but much more by using differences of individual and cultural backgrounds in the classroom as an asset and innovative source for growing creativity and problem solving.

## **6 CONCLUSION**

This exploratory study is a start to approach the development of intercultural competence in a more systematic way. Today many assumptions are the basis for the current measures in the University's learning environment. However, these might not be addressing the needs of the

different target audiences effectively. Further research would be required to answer the questions outlined in this paper. Likewise, it might be considered to design pre- and post-intervention studies to test the chosen methods of developing these competencies which are generally perceived as important skills which are not only needed in the globalized workplace but enable successful globally engaged citizens and inclusive communities.

In conclusion, at an individual level using the IDI with supported measures has allowed for self-reflection and awareness creation in all five participant groups. To include specifically the management level for example by including the topic into professional development for mid- and top management of the institution deserves specific attention. However, at an institutional level, a framework needs to be created to structure further research, examine policies, procedures and potentially curriculum design, with the goal of employing and developing a more interculturally sensitive workforce. The importance of the topic for the transformation of a growing diverse society into an inclusive, diversity sensitive and innovative society has to be brought to a bigger audience within and beyond the Higher Education Area in Europe.

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# ***Global Competence of Teachers in Higher Education Institutions: A Case Study of Novia UAS***

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## **ABSTRACT**

In university education it is important to ensure that students possess not only professional skills but also global competence to address challenges described in the UN's 2030 agenda. This is relevant for higher education institutions in Finland. Global competence is related to internationalization of higher education. Based on a Finnish Ministry of Education report on global competence, the Finnish higher education should support conditions to work in international environment and actively use opportunities for Internationalization. The purpose of this paper is to provide information on what global competence means and how teaching skills in global competence can be developed. The focus is on conditions, materials and working methods to support the teaching staff's competence development. The findings suggest that for Novia to develop the teachers' global competence, a new way of working should be developed where native students and exchange students meet regularly in multicultural groups during a joint academic semester given entirely in English. Furthermore, teacher training must be arranged. Mentorship and access to a toolbox of knowledge and best practice of global competence could facilitate teachers in their development. This paper is drawn upon findings of a small-scale research of teaching staff of Novia University of Applied Sciences. Qualitative research in this study is based on the results of working groups at Novia and by interviewing the teachers who have experience in teaching multi-cultural students.

## **1 INTRODUCTION**

The world has become smaller, and the increase of global migration has led diversity in schools in the world (Kerkhoff and Cloud 2020). Responsibility of teachers has shifted over the years to include preparing students for a complex, interconnected world. Teachers face increasing pressures to prepare students for today's global, multicultural, and knowledge-based society. This has made global competence become an object of interest not only by researchers but also by other interest groups such as universities, politicians, governmental bodies, public and private institutions.

Finnish higher education must provide students with conditions to work in an international environment and at the same time the universities must offer high-class teaching in foreign languages. To be competitive in the global markets, the universities must focus on their competitive areas and actively utilize opportunities for internationalization. (Ministry of Education 2009)

In recent years, Novia University of Applied Sciences has increased the proportion of educations in English. The university today is facing a reality of teaching multicultural groups. In addition to the English-language educations, Novia also has a responsibility to ensure that Finnish students develop their global competence. It is teaching that provides students with the

foundations to be global minded. This means that Novia needs to prepare all teaching staff to work with multicultural groups now and in the future.

Global education includes themes relating to human rights, sustainable development, peace and conflict prevention, and cultural competence. Global education highlights several perspectives on the world around us and opportunities to see and deconstruct stereotypes. Global Education is described in Novia's strategy 2030 as a growing area that is characterized by flexible models and educational services with relevance in the global education market (Novia University of Applied Sciences 2020). The ambition is that by 2030 Novia will have a wide range of global education services with good international references to work for a global and open society.

Sue, Rasheed, and Matthews Rasheed (2016) have discussed global competence as an approach for a client-oriented work method and this method can also be applied in higher education on a student-centered teaching to promote awareness of global challenges and commitment to sustainable lifestyles. The teaching staff becomes a role model for multiculturalism and respect for the characteristics of different cultures. Cultural competence is fundamental in global competence and for teaching in multicultural groups and for achieving the goal of global education. The cultural competence is not only necessary for teaching in international groups, but we also need cultural competence to teach Novia's native speaking groups because the native speaking groups can also be multicultural. Furthermore, Novia's strategy emphasizes the importance of bringing students, students' learning, and quality at the center, as well as responding to the needs of working life through open-minded, dynamic, and creative working methods.

Through continuous renewal and innovation, Novia guarantees that the university is an attractive and a competitive actor in global markets now and in the future. But a dynamic international teaching environment does not emerge automatically. The process requires investments in the development of structures, knowledge, working methods and attitudes. According to Xu, Hao, and Huennekens (2016), the educations can strengthen the development of teachers' cultural competence. The study also shows that domestic students can benefit from the cultural knowledge they gain through teachers in teaching situations in their own mother tongue.

For Novia to achieve the goal of a global education according to Novia's strategy 2030, new demands are set on the teaching staff. Global education presupposes cultural competence and cultural competence means "that all people, regardless of cultural origin, are respected and that a non-discriminatory atmosphere is built up and safeguarded in society". It also means that services are arranged, provided and available so that the different needs of people with different backgrounds are taken into account (THL 2022).

There is a broad consensus about the need to include global competence in teaching. Furthermore, training of global competence is needed for teachers to relate the global dimension of their disciplines to their current teaching so that the teachers can be critical promoters of student global competence outcome (Fischer 2007). Teachers should therefore be offered training in cultural competences, which in the long run will lead to a paradigm shift. The paradigm shift begins with the teachers' competence development and is then further transformed into the classroom. Cultural competence is required regardless of whether the language of instruction is a native language or English, as today's student groups are multicultural to a greater extent than before.

Novia is a Swedish-speaking university of applied sciences in Finland. Novia has approximately 4,500 students, 300 teachers and administrative staff. Novia offers education for graduate

students at bachelor and master's level, as well as research development and innovation (RDI) activities. Novia consists of four faculties: Natural Resources, Business, Health and Welfare, Technology and Seafaring. Already seventeen of all bachelor and master's degree programs are offered in English to students from all over the world (Novia 2022).

In 2021, working groups for global competence at Novia were established (see Figure 1). The working groups work with the theme of global education. Idea of the establishment of the working groups and the project of global competence at Novia came from international unit at Novia. This paper is based on the project group's work. It aims to provide information on what global competence means for Novia and to describe conditions that are needed for the teaching staff's global competence development. A globally competent staff promotes the development of globally competent students and contributes to the university being able to position itself as a significant player in global education.

### **1.1 Objective and research questions**

The purpose of this paper is to provide information on what global competence means to Novia and to explain how the teaching competence of the teaching staff can be developed. The focus is on conditions, materials and working methods to support the staff's competence development. The following are the research questions:

- What does global competence mean for the teaching staff?
- How can Novia support the teaching staff in developing their global competence?

This paper is structured as follows: firstly, based on concepts of the existing literatures a brief literature review on global competence is presented. Secondly, an empirical study is conducted by using a sample of Novia University of Applied Sciences, Finland. Finally, discussion on the results and future directions will be presented.

## **2 LITERATURE REVIEW**

The UN's 2030 agenda has mentioned crucial role of inclusive and equitable quality in education that enable successful achievement of sustainable development goals. The sustainable development goals have been found in universities' vision and mission plans. In connecting knowledge, skills, attitudes, and cultural competences to global mindset is invaluable to global education. (United Nations General Assembly n.d.)

In the more globalized society, changes happen and are becoming a crucial force to shape the future world. The changes have important aspects for teachers' competence development and responsibilities of teachers have dramatically been shifted by preparing students for a complex and an ever-changing, interconnected world. (Oxley & Morris, 2013).

Global education is a collective concept that has a multifaceted meaning. A Finding from Sinagatullin (2019) has confirmed that teacher education must have a solid global knowledge for teachers with a tolerant attitude to diversity and involve themselves with problems faced globally. Global education means that students must be prepared to work in a global environment, but also that the teaching provided at Novia for example must be viable in a global context. Global education presupposes cultural competence and cultural competence means that all people, regardless of cultural origin, are respected and that a non-discriminatory atmosphere is built up and safeguarded in society. It also means that services are arranged,

provided and available so that the different needs of people with different backgrounds are taken into account (THL 2022).

Three components of cultural competence are cultural awareness, knowledge and skills. This involves awareness of one's own prejudices and openness towards cultural differences, knowledge of other peoples' cultures, their worldview, and expectations. Cultural skills are the ability to intervene in a manner that is culturally sensitive and relevant (Sue 2001; Sue 2016). To strengthen global competences some researchers, argue that going abroad for exchange is an ideal opportunity and it has been known as a catalyst of global competence (Moskal and Schweisfurth 2018) and some argue to integrate skills, knowledge, attitudes and behaviors into learning outcomes of specific modules or course activities. Furthermore, the study of (Cruickshank and Fenner 2007) suggested going beyond technical solutions focused on economy and environment and highlight the social aspect of sustainability in global competence.

Global competence is a toolbox that equips students to reach their aspirations in a diverse, globalized society. Global competence in nature is a multidimensional in understanding cognitive, social-emotional, behavioral domains of learning (OECD 2018). The cognitive domain is knowledge or skills in understanding of the world and its complexities. The social-emotional is about values, attitudes, and social skills that enable individuals to live together peacefully and respectfully. Behavioral is on action, performance, or practical application.

In addition to adapting the teaching methods to meet the requirements of a heterogeneous group, the course literature must be reviewed. The review of literature must offer knowledge from other countries, and not be ethnocentric. Global education presupposes a solid knowledge of different needs and of new research findings that apply not only to a Finnish, Nordic or European context.

Ludwikowska (2019) has discussed teacher competence inventory (TCI) to identify future oriented competences required for teaching in higher education institutions. The TCI has four dimensions: 1) stimulating students for their achievement, 2) using different teaching methods to help students to improve student's learning method 3) to prepare student to be globally competent 4) creating a supportive learning environment. The study revealed the importance of the dimensions for teacher competence development because the teachers are the change agents for students in the changing learning environment. Kerkhoff (2017) has discussed Global Teaching Model (GTM).

The global teaching model consists of four dimensions: situated, integrated, critical and transactional. GTM helps teachers to implement global competence in teaching. The first dimension is practice. The situated practice means that teaching is culturally relevant for both students in the class taking into consideration students' socio-cultural background. This issue highlights the importance of understanding values, norms and beliefs of society. The teachers are also role models to reflect on their own cultures, assumptions and prejudices and guide the students in doing the same. The second dimension is integrated. The integrated dimension means that global competence learning should be incorporated in all disciplines and are integrated in all courses. Teachers can facilitate students with analysis of information about authentic topics communicated or experienced and the students understand how to act or react with other people in multicultural contexts. The third dimension is critical. Global education through a critical framework considers issues of reliability and validity of learning resources. The students are taught to develop their critical literacy to raise socio-cultural awareness. The final dimension is transactional experiences involving engagement in intercultural relationships

and cross-cultural collaborations. The collaboration will engage students in teaching each other and act on social justice, solidarity, and empathy for others around the world.

As the literature review shows there is a wide variety of studies on global competence and on how the teacher's competence can be improved. There is a need to find out how it applies in practice. We will use the GTM-model of Kerkhoff (2017) to describe how the global competence of teachers at Novia can be improved. The next chapter we will focus on conditions, materials and working methods to support the teacher competence development at Novia, where the empirical study is presented and discussed.

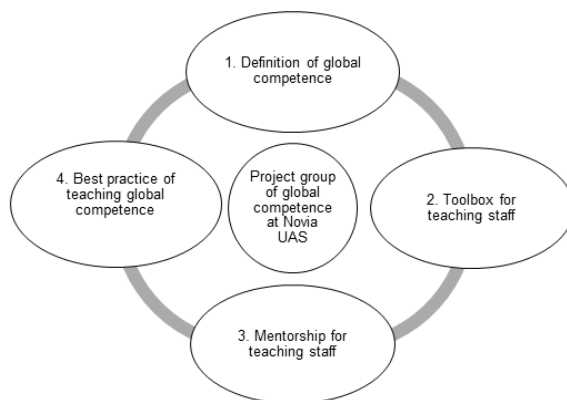
### **3 RESEARCH METHODOLOGY AND DATA GATHERING**

As the purpose of this paper is to provide information on what global competence means to Novia and to explain how the teaching competence of the teaching staff can be developed, a qualitative research method is used. Case studies can be conducted on a single case, multiple cases or embedded cases (Yin 2016). This study is a single case study of Novia, and it is chosen as the most suitable design for the purpose.

According to Olsson and Sörensen (2021) different data collection methods are used in case studies, and the researchers follow or participate in the process of a certain case. The content of the report is based on literature reviews and on working groups at Novia as shown in figure 1. All members of the working groups are teachers in different disciplines and teach in multicultural groups. Each faculty chose the teachers for the working groups, based on the teachers' experience and interest of developing global competence at Novia.

The working groups began their operations in January 2021 under the leadership of a project manager. During a joint meeting with all working groups members, the members reflected together on different ways in which Novia could better support teaching in multicultural groups. Then the members were divided into four different working groups.

The first working group drew up a stipulative definition of the concept of global competence. The description of how the concept of global competence is operationalized at Novia was completed during the spring-winter of 2021, while the other working groups continued to work until the summer and during the autumn of 2021. The second working group focused on the content of a toolbox for teaching staff in multicultural groups, the third working group on how mentorship could be developed to meet the teaching staff's needs, and the fourth on how best practice of teaching global competence could be developed and communicated outside and within the university. As part of the work of the fourth working group for best practice of teaching global competence, open questions were sent to five teachers who have experience of teaching in multicultural groups.



**Figure 1.** The working groups within the Global competence project at Novia 2021

All the four working groups have met separately and together to continuously report and discuss results and proposals with each other. Communication within the project group and between the working groups has taken place via a common channel in Microsoft Teams. Various materials have been published in the channel to support a continuous exchange of information between the groups. The team group's channel has been open to all members.

## 4 RESULT AND ANALYSIS

In this chapter, we first present the result of the working groups within global competence at Novia and then the analysis of interviews. We use the Global Teaching Model of Kerkhoff (2017) to analyse the results (see chapter 2 in literature review).

### 4.1 Global competence at Novia UAS

Novia's description of global competence is based on a few national and international sources, including the OECD's PISA definition of global competence (OECD 2018) and the Finnish National Board of Education's publications on school internationalization and cultural competence. The stipulative description for Novia was prepared by the first working group:

"Global competence is the attitudes, knowledge and skills needed to interact, communicate and work constructively, creatively and ethically in environments with cultural and social diversity".

The concept of global competence is closely related to the concepts of cultural competence and cultural sensitivity. To possess global competence, someone must also be culturally competent and have a culturally sensitive attitude towards other people. According to the Institute for Health and Welfare (THL 2022) culturally competent people possess information, knowledge and skills about other cultures and can at the same time reflect or examine their own habits and values in relation to others.

Cultural sensitivity, on the other hand, is more about the ability to interact respectfully with people from other cultures to value diverse ways of communicating and expressing oneself and to be curious about other people's customs, values, and culture instead of generalizing. Services that are culturally sensitive do not mean that they are transformed into special services, but that they are instead adapted so that more people fit in (THL 2022).

For teaching staff at Novia, cultural sensitivity means that teaching in groups of native speaking students is adapted so that it also provides more space for students from other cultures. For example, by more regularly integrating teachers and exchange students or graduate students from English-language degree programs into classroom activities. In addition, one should also review the course literature, so that it offers knowledge from other countries and increases students' understanding through more globally representative literature.

By integrating the groups in the classroom activities, it contributes to internationalization at home. Internationalization at home means that all Novia's students can also develop their global competence within the walls of their own home university. Eventually, this means that even students who have never been on an exchange can enter a labor market with attitudes, knowledge, and skills to meet the global demands of working life. For the teaching staff to be able to optimally develop their global competence, appropriate methods are needed for teachers in different teaching situations where native speaking and international students meet.

## 4.2 Toolbox for teaching staff

The second working group was working on the development of a toolbox for teaching. The result of the working group was a mind map on global competence and materials to support the teachers who teach in multicultural groups (Figure 2).

The mind map presents various aspects of global competence in teaching. The green thread deals with calendar years, similarities and differences between cultures and countries. The orange thread highlights pedagogical- and working methods as these can vary between different universities in the world. The red thread is on knowledge in global competence from various sources such as literature and videos. The yellow thread deals with literature and materials as well but focuses more on the concept of culture. The concept of culture is treated based on different theories and cultural dimensions from a comparative study 's point of view. The blue thread is on some advice to teaching staff on how they can work with global competence in practice.

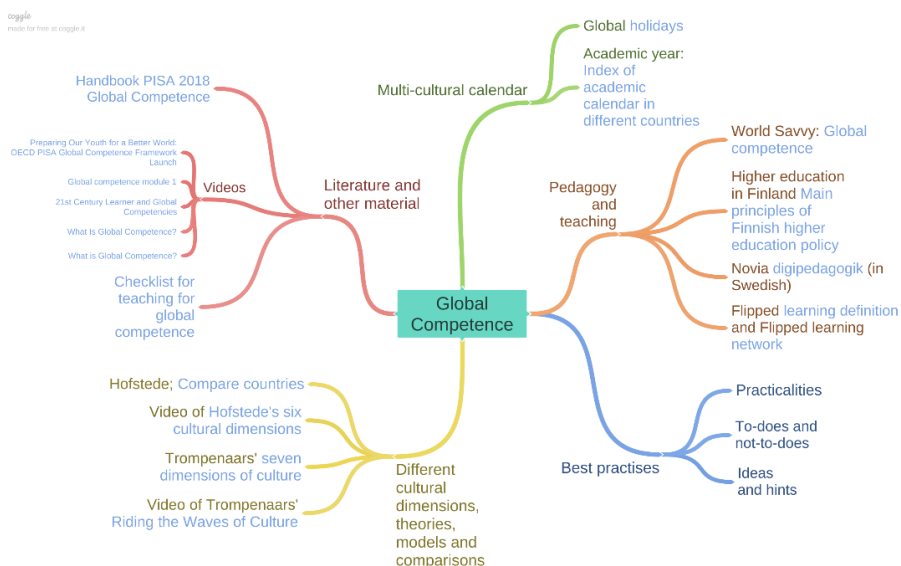


Figure 2. Mind map to support the development of global competence at Novia

The mind map serves as an “introduction” for new teachers to prepare them for teaching in multicultural groups. It can also be used by experienced teachers who have rarely taught in foreign languages. For example, if the teachers need advice in their teaching in multicultural groups, they can easily find information in the mind map on the university intranet. To introduce the teaching staff to the toolbox, Novia needs to appoint specific persons to be responsible for taking on the task. Here, Novia could develop a mentorship to supervise and support the teaching staff's global competence development.

The green, yellow and orange threads in the toolbox on theories of cultural dimensions, knowledge of culture and perspectives of teaching in multicultural groups, can be connected to the first dimension of the GTM-model (Kerkhoff 2017). By using the toolbox, the teaching staff develop their understanding of values, norms and beliefs of a global society and can be transformed into students. The red and orange threads in the toolbox can be connected to dimension two. They provide material that can be useful for teachers in different teaching situations. By using these threads, teachers can help students to understand how to interact in multicultural groups. Dimension three is about how students are taught to develop their critical literacy and global mindset. This can be connected to the red thread in the toolbox, since the thread focuses on materials that support students' learning awareness for global societies. The blue and orange threads are connected to dimension four, focusing on pedagogy and best practice for cross-cultural collaborations.

### **4.3 Mentorship for teaching staff**

A central idea within the Global Competence project at Novia University of Applied Sciences is to investigate how a mentorship as support for teaching in multicultural groups could be designed. A professional mentorship gives credibility and can have a profile-raising effect at the university both internally and externally.

During the project period, a survey was therefore sent out to the teaching staff at the beginning of autumn term 2021. The purpose of the survey was to obtain information about the staff's experiences, to investigate the needs of support and to find out whether current teachers have the skills and interest to support other teachers who teach in multicultural groups. In the survey that was sent out to all teachers at Novia, it emerged that there is a need for mentorship and an interest among some teachers to act as mentors themselves.

The support could be offered through mentors, who should be familiar with Novia's strategic goals and with Novia's investment in global education. The mentors are thus part of Novia's development towards global education. They can initiate discussions about teaching in multicultural groups and supervise teachers so that everyone has a basic cultural awareness and feels competent to teach in multicultural groups. For this to work, the mentors must be prepared to supervise groups of teachers and have set aside resources to be able to function as support and help for colleagues.

After this project, the goal is to have access to six mentors. These mentors are responsible for supporting colleagues at Novias in different campuses which are spread all over Finland. The mentors could form a team to support and share with each other examples of best practice which are then used in the supervision of the teaching staff in their work in multicultural groups. The team was also able to arrange staff workshops on Novia's campus to further develop global competence.

Mentorship includes supporting the teaching staff to be role models in cross-cultural issues (values, norms, beliefs), which fits into the first dimension of the GTM-model of Kerkhoff (2017). Mentorship also facilitates knowledge and support teachers in integrating global competence

in courses and curricula (dimension 2). It supports critical learning and thinking to raise cross-cultural awareness (dimension 3) and encourages working in multicultural groups (dimension 4).

#### 4.4 Analysis of experiences of best teaching practice at Novia

Based on the result of the working groups and in order to validate the acquired empirical results, interviews with experienced teachers in teaching multicultural groups were conducted. Altogether, five teachers were interviewed by e-mail and each one was from a different discipline. The questions were addressed to the selected teachers with many years of experience of teaching in multicultural groups. The questions were designed as open questions on experiences and challenges. The respondents were also asked to give advice and discuss ideas of designing a whole academic semester when all courses are taught in English. The first step was to deduce discussions into several preliminary meaning categories after which the categories were compared and further revised. The second step, they were integrated into four main dimensions: practice, integrated, critical and transactional. We now present the findings and analysis from the interviews.

We have used selected statements from the interviews (see table 1) to facilitate the analysis. This is because we believe that they best reflect the phenomenon under investigation. We use the GTM-model of (Kerkhoff 2017) in order to be able to describe how the teaching competence and best practice of the teaching staff at Novia is practised and can be developed.

**Table 1a.** Analyses of the interviews connected to the GTM-Model of Kerkhoff (2017)

Dimension 1: Practice	Dimension 2: Integrated
Don't take things for granted, as others may understand them in a different way.	Let students describe the most distinctive features of their culture (study techniques, study habits and ways of collaborating).
Be sensitive and read about students' different cultures in advance.	Be specific in advance so that an academic semester in English does not come as a surprise to native speaking students and teachers.
Note that there are variations in terms of education, working life, work community and leadership.	Native students must take curriculum-based courses in English together with the exchange students in multicultural groups.

**Table 1b.** Analyses of the interviews connected to the GTM-Model of Kerkhoff (2017)

Dimension 3: Critical	Dimension 4: Transactional
Show respect by having English as a common language in the classroom.	Let students from different cultures describe the most distinctive features of their culture.
Prepare and arrange discussions and exercises in the multicultural groups regarding ethics in scientific reading and writing.	Allow students to participate in various group discussions, assignments and projects and be prepared to change the group constellation and to intervene in the group dynamics.
Continuity in learning together (native and foreign students) can contribute to both knowledge of global societies and cultural sensitivity.	An academic semester in English becomes a natural arena for intercultural collaboration. As the academic semester progresses, students learn to work together and the teachers' role in guiding the group work decreases.
Review the course literature, so that it offers knowledge from other countries to increase students' understanding through more globally representative.	Cooperation in multicultural groups for an entire semester means that friendships can also arise outside the classroom.

According to Kerkhoff (2017) practice means understanding values, norms and beliefs of society when interacting in the classroom. This is in line with what the respondents highlight regarding preparation of oneself to increase culture understanding and knowledge on how different societies function. Integrated means that global competence should be incorporated in all disciplines and all courses, and that teachers supervise students in how to interact in multicultural contexts. Respondents bring out the importance of self-knowledge, information and preparation when designing an academic semester in English. Critical considers reliability and validity of learning resources and critical literacy to raise socio-cultural awareness. Respondents address the importance of a common language in the classroom and fostering students in ethical themes regarding learning in academic contexts specifically as well as in a global society context generally. Transactional means involvement in cross-cultural collaborations. Respondents point out the importance of letting students present relevant features of their culture. This will contribute positively to the group dynamics and by time students are less dependent on the teachers.

## 5 DISCUSSIONS AND CONCLUSIONS

The purpose of this report has been to shed light on what global competence means for Novia UAS and to explain how the global competence of the teaching staff can be developed. Novia needs to develop global competence at various levels to establish itself as an actor in global education. In line with Kjellgren and Richter (2021) integrating the global competence in vision or mission of the university is important. Novia should have plans and solutions for how global competence is applied in teaching.

According to Novia strategy 2030, Novia aims at strengthening cultural understanding, communication skills and global competence in the curricula of all degree programs. This fits well with the working groups' work to develop a mentorship and a toolbox for teaching staff.

When teachers see cultural and social diversity as a natural part of every student group, global competence will also be seen more clearly in the curricula. Students need to meet people with different social and cultural backgrounds regularly and in several different courses so that their attitudes, knowledge, and skills respond to the needs of global working life. (Novia 2020).

Kjellgren and Richter (2021) have stressed the importance of teacher training in global competence. This is also confirmed in our case, for teachers to be able to easily guide students towards a higher global competence, teacher training is necessary. Teacher training can include mentorship and a toolbox which are pedagogically anchored and fact-based around the theme of global competence. To introduce the teaching staff to the knowledge and material, responsible mentors are needed to take on the task. Novia should take a position on how the mentors should be trained and by whom.

Going abroad is considered being the best catalyst of global competence (Moskal and Schweisfurth 2018), but global competence can also be developed through internationalization at the home university. In teaching, Novia should structure its courses offered in English so that the university is attractive also for shorter student exchanges from abroad. The courses offered to exchange students could be marketed and presented as a "smorgasbord" or buffet, with both interdisciplinary and more area-specific courses. In this way, the different degree programs support each other regarding the range of courses offered in English. When exchange students participate in curricula-based courses from the smorgasbord, local students and teachers interact with the exchange students in multicultural classrooms. When multicultural groups become an everyday concept at the university, students who never go abroad on exchange can develop their global competence and after graduation feel ready to interact in diverse societies and meet the global demands of working life.

Some courses in English already exist in the native speaking degree programs' curricula, so for Novia it is more about highlighting them and packaging them so that they can be marketed more widely to Novia's partner universities abroad. Coordination and packaging of an internationally interesting course offering needs to take place through collaboration between heads of department, education directors, international contact teachers and international coordinators. The courses of the smorgasbord must be planned and fitted into students' and teachers' working schedule. In practice this could be done by creating a whole academic semester when native students and exchange students have all the same courses together in English. To achieve the measures mentioned in the Novia strategy 2030 and to adjust into this new way of working and thinking, mentorship and the toolbox can support teaching staff's global competence development.

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# Session D

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Intercultural or  
International  
Perspectives in  
Innovation and  
Entrepreneurship

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# ***Value orientations of students in Austria and Ukraine: Implications for Leadership***

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## **ABSTRACT**

The aim of this study is to identify cross-cultural value orientations of individuals in different national cultures. To this end, a survey was conducted in Austria and Ukraine using the Rokeach Values Survey (RVS) (Rokeach 1973). This instrument uses lists of final and instrumental values that respondents must rank. 137 Ukrainian and 49 Austrian individuals participated in the study. Respondents had to rank the importance of terminal and instrumental values. Structures of value orientations were determined and analyzed. The results were examined for differences in the importance of terminal and instrumental values between representatives of the two cultures studied. The value orientations of respondents in Ukraine and Austria show differences related to the cultural characteristics of these groups of respondents. Instrumental values differ significantly more among representatives of different cultures. These structural comparisons make it possible to identify universal values in the national and international environment. From this, recommendations for action were derived for management work both within a culture and in an intercultural context.

## **1 INTRODUCTION**

The internationalization processes of markets, production and globalization have led to the need to study the problems of human resources management with all its cultural and national contradictions. In times of unstable development of the world economy, the problem of leadership in human resource management at the intersection of different cultures attracts special attention. The culture of each country has its own guiding values that determine the behavior of the bearers of these values. Thus, leadership in each country has its own cultural validity and different understanding of power and hierarchy in leadership.

Leadership is a special kind of interaction that effectively combines different sources of power and encourages people to achieve common goals. One of the components of effective human resource management is the influence of cultural factors on the company's employees, which comes into play in the interaction of national cultures.

The culture of each country has its own core values that determine the behavior of the bearers of those values; therefore, leadership in each country has its own cultural imprint. To lead a multicultural team, a leader should assess the cultural characteristics and culturally determined needs of his or her subordinates, as he or she must meet the expectations of his or her subordinates. At the same time, leaders need to assess the characteristics of their national leadership style. Therefore, one of the main tasks of leaders in such companies is to recognize and understand these cross-cultural differences and to take them into account in their practical activities. This makes it possible to develop a cross-cultural approach to human resources management in the company. The results of cross-cultural studies, conducted by A. Laurent

(1983), indicate that there are huge differences between leadership styles in different national cultures. Therefore, a leader who wants to be as effective as possible cannot use a single leadership style throughout his or her career, because leadership is contingent on environmental and cultural characteristics.

## **2 PERSONAL VALUE ORIENTATIONS**

Personal value orientations have been the subject of various studies since the 1950s. Today, the value-based approach is one of the most important approaches in cross-cultural management. Values are defined as deeply rooted abstract motives that guide, justify, and explain attitudes, as well as norms, opinions, and actions (Rokeach 1973; Schwartz 1992). At the same time, values do not exist separately, they constitute an integral system, and each society or group of people has its own value structure typical for most of this society (or group). Woodward and Saffakat (2016) noted that each personality has their own unique system of values in the form of hierarchy. Each personality has different value priorities, and therefore the prevailing value emphases in societies are also different. Values have predictive and explanatory potential at the personal, organizational, and societal levels. In addition, values can reflect important social changes in society and even globally.

Various approaches by e.g. Almond et al. (1971), C. Kluckhohn (2013) and M. Rokeach (2008) use value surveys to understand social behaviour. This contribution is based on Rokeach's (2008) approach, who, in 1973, created a method, which is still used as a research tool in sociology, psychology and cross-cultural management. According to Rokeach value is "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence" (Rokeach 1973, p. 5). This value system serves as a general blueprint for conflict resolution and decision making. Two types of values represent two separate but functionally related systems in which all values relating to behaviors are relevant to the achievement of all values relating to end states (Tuulik et al. 2016). The Rokeach Values Survey (RVS) is based on the direct ranking of value lists of two types (Rokeach 2008):

- (1) terminal values represent the belief that an end goal of individual existence is worth craving from a personal and societal point of view (18 values);
- (2) instrumental values are the belief that a way of action is the best in any situation from personal and a societal point of view (18 values).

Terminal values are achieved by instrumental values in the priorities determined by the respondent at a certain stage of reflection on the life situation and himself. Respondents determine for each value its place in their life: from 1 to 18 (1 - most important value; 18 - least important value). Final values are evaluated first, followed by instrumental values.

## **3 CULTURAL DIFFERENCES OF AUSTRIA AND UKRAINE**

Historically, Austria and (at least the western part of today's) Ukraine had some things in common, but the societies have developed very differently since then. It is undisputed that culture has an impact on how children are raised, educated, and prepared for their future careers. Manikutty et al. (2007) related Hofstede's dimensions of culture to approaches to teaching and learning. They discussed positive, negative, or neutral relationships of learning with power distance, collectivism vs. individualism, uncertainty avoidance, short-term vs. long-

term orientation, and masculinity vs. femininity. Apfelthaler et al. (2007), in a cross-cultural study, reported about differences between Western and Eastern cultures in terms of the role of teacher endings and in the power distance between teachers and students. In relation to students' education and subsequent careers, Akosah-Twumasi et al. (2018) discuss various intrinsic and extrinsic factors related to culture that play a role in students' career choices. According to them, the cultural background of teachers and educators plays an important role in the process of adolescents' career decision making. Lee (2001) analyzed young people's outcome expectations and career development opportunities and found that career maturity, self-confidence, and outcome expectations are culturally determined.

#### **4 METHODOLOGY AND DATA ANALYSIS**

The purpose of this analysis was to apply descriptive analyses to examine the differences in the ranking of instrumental and terminal values of Austrian and Ukrainian respondents and to derive conclusions for management and leadership in both countries. The instrument used, the Rokeach Value Survey, is based on comparative ranking scales for different instrumental and terminal values. An online survey was conducted in 2021 among students of the Upper Austria University of Applied Sciences and the Simon Kuznets Kharkiv National University of Economics.

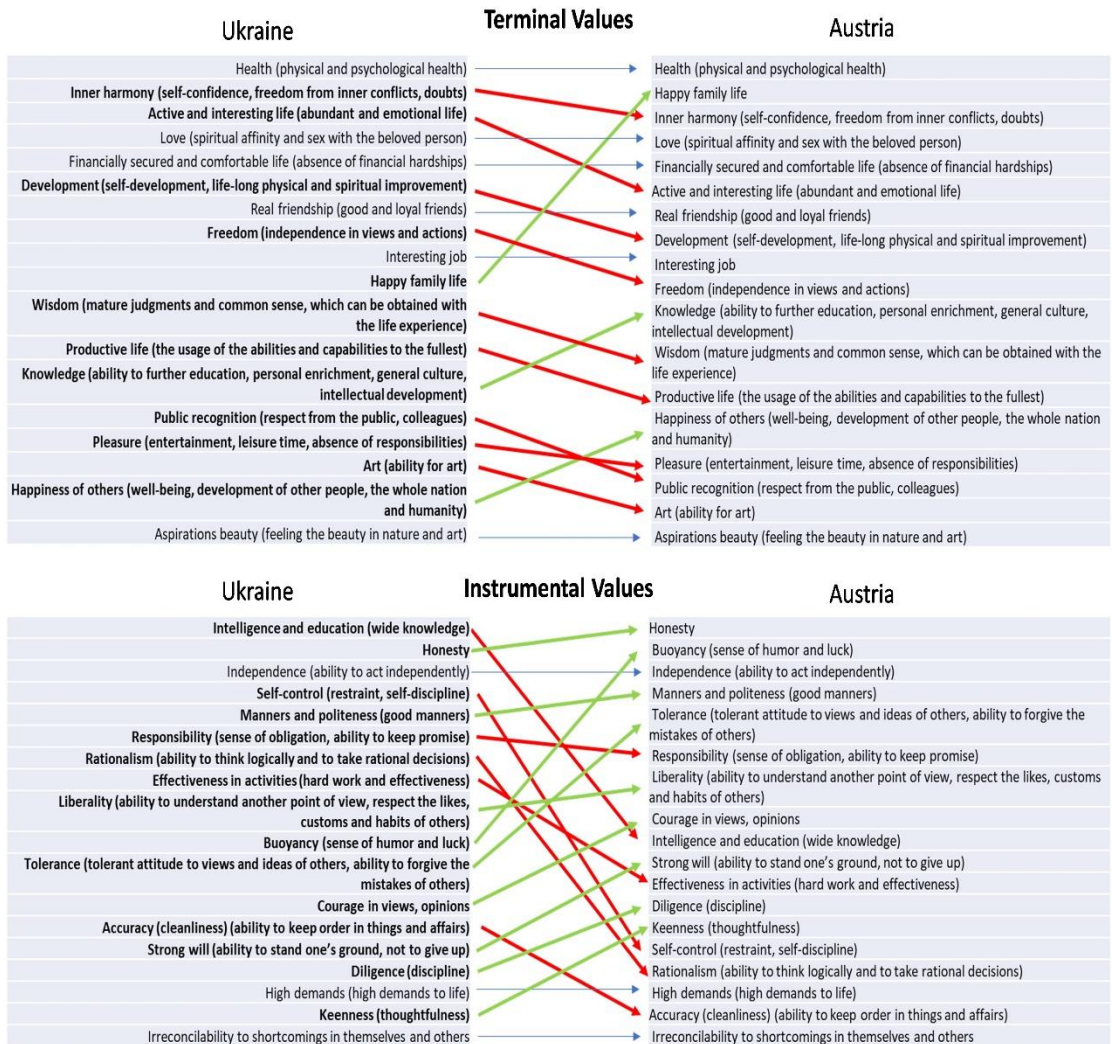
An online questionnaire was used, and respondents rated eighteen items each for terminal and instrumental values according to their own preferences. The completed responses of 137 Ukrainian citizens and 49 Austrian citizens studying in their respective home countries were included in the analysis. Students were only business students. To obtain comparable rankings, first, for each value at each position in the ranking, its relative frequency was calculated (number of mentions compared to all mentions). Then, all values were weighted in descending order according to their position in the ranking list, with first place receiving a weight of 18, second place receiving a weight of 17, and so on. The last place received a weight of 1. This procedure ensured that both frequency of mention and position in the ranking were included in the analysis. Finally, the weighted results for each value were summed across all ranking positions to obtain an overall position for each value. These rankings were compared for both countries. The results are discussed below.

#### **5 DISCUSSION AND CONCLUSIONS**

Exhibit 1 displays the comparison of terminal and instrumental value for both countries ranked top-down from most important to least important. To visualize differences, arrows indicate whether a certain value is more important in Ukraine (red) or more important in Austria (green). For terminal values, health (physical and physiological) is ranked as most important for both, Ukraine and Austria. "Happy family life", "Knowledge (ability to further education, personal enrichment, general culture, intellectual development, and happiness of others)" and "Happiness of others (well-being, development of other people, the whole nation and humanity)" are more important for Austrian than for Ukrainian respondents, while "Active and interesting life (abundant and emotional life)" is more important for Ukrainians.

From a cultural perspective, the findings are interesting. Terminal values (this term encompasses the goals that a person wants to achieve in the course of his or her life) may be different for different groups of people in different cultures (Tuulik et al. 2016). Accordingly, some (but few) differences between countries were found in our study. Those refer mostly to the larger importance of happiness for oneself and others and the possibility to get further

education, both being more important in Austria. From a cultural perspective, this can be explained by economic differences between the two countries, where in Austria the immediate need to acquire a certain standard of living through education is not present to the same extent as in Ukraine. Ukrainian respondents (students) are striving to sustain themselves healthy and emotionally stable, trying to develop themselves and create freedom and independence. The smaller importance of happiness for oneself and others for Ukrainian students is result of influence of such a feature of the mentality as “hutorianstvo” (farming) (Lepeyko and Blyznyuk 2010), which means elimination from participation in solving social problems, lives on the principle: "none of my business".



**Figure 5.** Comparison of terminal and instrumental value rankings. Own illustration based on findings.

With respect to instrumental values, “intelligence and education (wide knowledge)” was much less important for Austrian respondents than for Ukrainian ones. The same holds for “self-control”, “rationalism”, and “accuracy (ability to keep order in things and affairs)”. “Buoyancy (sense of humor and luck)”, “Tolerance (tolerant attitude to views and ideas of others, ability to forgive the mistakes of others)” and “Courage (in views and opinions)” was much more important to Austrian respondents. Instrumental values can be seen as preferable modes of behaviour and the means of achieving the terminal values. Through the lens of culture, the results are much more in accordance with assumptions from cultural research. Ukrainian students have an understanding that straightforward education, compared with self-discipline, rationalism and accuracy are main instrumental values through which terminal value aspirations can be achieved. Austrians, in contrast, bet on humour, luck, tolerance and courage to achieve their terminal values. These findings can be explained by different educational systems as well as by a generally more individualistic, less power-distant, and less uncertainty-avoidant cultural perception in Austria, where the individual sees him/herself free of external constraints, as it were, and trusts in himself, his luck and his courage.

## **6 IMPLICATIONS**

For cross-cultural research, this study contributes to a better understanding of the Rokeach Value Inventory in a cross-cultural context. Terminal and instrumental values are ranked in different ways by representatives of different cultures. Both confirming and contradictory findings have been obtained. For leadership research, the study shows that value-based leadership must take into account a cross-cultural context.

For managers and future leaders, this study contains suggestions for leadership work with different cultures. Employees from different cultural backgrounds have to be guided by different values. Some values are similar, but instrumental values in particular - those used to fulfill terminal values - are very different among representatives of different cultural groups.

## **7 LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH**

This cross-cultural study is not without limitations. First, sample sizes, especially in Austria, were small, which might reduce reliability. Replicating the study with larger samples and comparing the results would increase the robustness of this research. Secondly, the study was conducted in a “COVID”-year. This was an extraordinary situation which can only be compared to a limited extent with years without such a direct and immediate threat. Different values (e.g., the value of health) may have been overly expressed in the study. Replicating the study with the same sample structure in a “post-COVID” year would help to isolate pandemic effects. Finally, replicating this study in different countries with different cultural dimensions would help to better isolate the contribution of culture to terminal and instrumental values of future employees.

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# ***Managing Diversity: How does foreignness turn into normality?***

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## **ABSTRACT**

The prerequisite for cultural diversity management is intercultural competence. Intercultural competence refers to the capability of individuals to successfully operate in a diversified culture. In this regard, it is necessary to investigate how intercultural competence can facilitate the behaviour of successfully operating in a diversified culture. The purpose of this paper is to develop guidelines for managers on how to cope with diversity and transform the perceived foreignness into normality. In particular, the paper investigates how the process of this transformation takes place and which personality traits are relevant for it. In addition, the paper examines whether the theoretical notion of intercultural competence as a cultural producer shows applicability in practice. We chose a qualitative approach and conducted four expert interviews with managers in international firms working in cross-cultural settings for at least two years. The experts' perceived foreignness and normality are analyzed on the basis of cultural studies. With the qualitative empirical verification of the conceptual development, the work contributes to research and practice. The findings broaden the understanding of intercultural competence and add value to the scientific debate about its concept. By examining the theoretical conception in its applicability, it also contributes to intercultural practice. Four personality traits are identified that are relevant for the transformation of foreignness into normality. These four personality traits are (1) Distinct self-image (2) Low tendency to self-assertion (3) Recognition of cross-collective commonalities and (4) Access to collective thinking. The findings show that developing an understanding of foreign cultural differences is crucial for the transformation towards normality. The expanded understanding specifies the basis for practical applications, on which measures for training and further education of intercultural competence can be built. To produce accurate results, the work combines the experts' assessments of the research objective.

## **1 INTRODUCTION**

Management of cultural differences has become one of the most important characteristics for competitive advantage (Alhendi 2021). Especially, due to globalization it has become essential to understand the heterogeneity in organizations (Martins and Parsons 2007). In this regard, it is important to investigate the field of diversity management and implement strategies to deal with foreignness (Wyatt-Nichol and Antwi-Boasiako 2012). Therefore, it is necessary to take a closer look at how managers cope with diversity and transform the perceived foreignness into normality. To explore this research purpose, we firstly take a closer look at the relevant literature related to intercultural competence and intercultural sensitivity to derive a better understanding of how diversity and differences have been approached in the literature so far and which terms and concepts exist to manage differences. In the next step, we present the methodological approach and justify our research purpose. In section 4 the results of expert interviews with managers are presented, where we shed light on how the process of this

transformation takes place and which personality traits are relevant for it. Section 5 provides a discussion of the practical implications, limitations, and a call for more interdisciplinary research on diversity management followed by a conclusion.

## **2 FUNDAMENTALS**

### **2.1 Intercultural Competence**

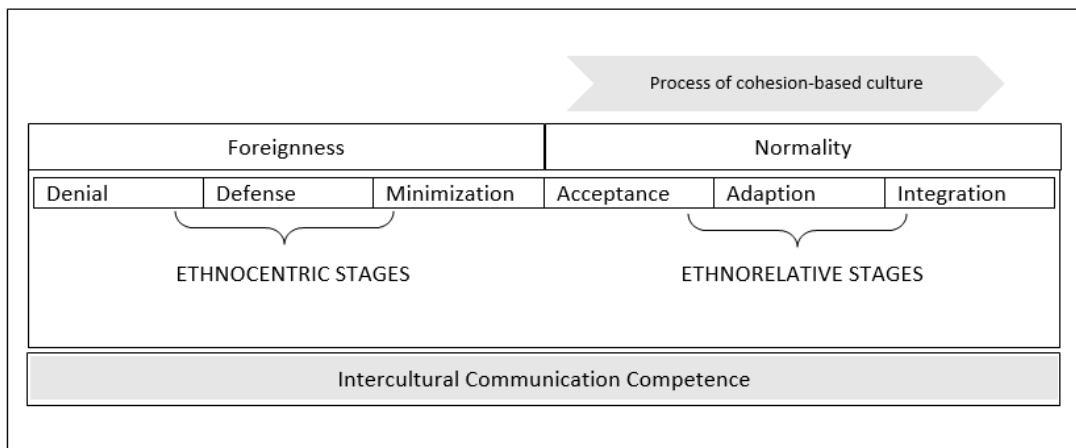
Repečkienė et al. (2011) show in their study how intercultural competence serves as a precondition for cultural diversity management (Repečkienė et al. 2011). Therefore, it is necessary to take a closer look at the concept of intercultural competence to derive practical implications for diversity management. Bennet & Bennet (2004) define intercultural competence as the ability to communicate effectively in cross-cultural situations and to relate appropriately in a variety of cultural contexts (Bennett & Bennett 2004). They further elucidate that the primary goal of diversity initiatives in organizations is to develop this kind of intercultural competence for which an intercultural skillset is necessary. This intercultural skillset contains three essential behavioral features: firstly, the ability to analyze interaction, secondly predict misunderstanding, and thirdly a fashion adaptive behavior. Hammer et al. (2003) argue that a greater intercultural sensitivity is associated with greater potential for exercising intercultural competence (Hammer et al. 2003). To conceptualize the relationship between intercultural sensitivity and intercultural competence, Bennet (1986) suggests the Developmental Model of Intercultural Sensitivity (DMIS). This model serves as an explanation for how people construe cultural differences (Bennett 1986; Hammer et al. 2003) DMIS contains six stages of intercultural sensitivity with three stages being ethnocentric (denial, defense, and minimization), and the other three stages are ethnorelative (acceptance, adaptation, integration). Bennett (1986) defines ethnocentrism as the concept that one's own culture is central to all reality, whereas ethnorelativism, assumes that cultures can only be understood relative to one another and that behavior can only be understood within a cultural context (Bennett 1986). Chen and Starosta (2016) highlight that DMIS not only requires change of affection and cognition, but also the behavioral ability to reach the state of intercultural communication competence (Chen & Starosta 2016). Similarly, according to Rathje (2007) the application of intercultural competence requires that human interaction takes place, where the role of intercultural interaction and communication steps in (Rathje 2007). Rathje (2007) defines Intercultural interaction as an interaction between individuals from different collectives who experience disorientation and foreignness due to unfamiliarity and incongruity. In addition to this, Rathje argues that intercultural competence should be understood as the ability to bring out the missing piece which is seen as "normality" and therefore create cohesion in the situation (Rathje 2007). She frames this as the cohesion-based concept of culture and portrays the transformation from foreignness to normality in her model. Normality thereby consists in the awareness of cultural differences within collectives (Hansen 2000; Rathje 2006, p. 16). Accordingly, the outcome of intercultural competence is a cohesion-based culture. However, in her concept she does not reveal how the transformation takes place and what features of intercultural interaction and communication are beneficial to create a cohesion-based culture. She further does not provide recommendations how this kind of culture can be established, nor does she provide examples for practical implications of such a cohesion-based culture. To fill this gap, we combine the DMIS with the concept of a cohesion-based cultural view. We propose an extended version of DMIS with considering the intercultural communication aspect and derive questions from this model for our expert interviews. Through the expert interviews we aim to deduce more information about how the transformation process from foreignness to normality takes place, which initially was missing in the proposed concept of Rathje (2007).

Furthermore, we aim to provide recommendation on how to implement the findings in the practice to design a smooth transformation process and derive implications for diversity management. Accordingly, the main objective of this study is to answer the following research questions:

- (1) How does the transformation process from foreignness to normality takes place?
- (2) Which personality traits are relevant in this process?

## 2.2 Intercultural competence as a producer of culture

Figure 1 demonstrates the extended version DMIS, where the ethnocentric stages of acceptance, adaption and integration are seen as the process towards establishing normality and creating a cohesion-based culture. These stages reflect exactly the behavioral features that were missing in Rathjes concept to define how the transformation process towards normality takes place. As an overall feature that is relevant through all the stages the development of intercultural communication competence is seen, as many authors mentioned that human interaction is essential for intercultural competence and argued that this was missing the DMIS (Baker 2011; Moon 1996; Rathje 2007).



**Figure 1.** Extended Conceptual Framework of DMIS (Bennett, 1986)

Based on this framework, we considered three essential dimensions. The first one is foreignness, the second one is normality and the third one is communication. Based on these three dimensions the following sets of questions were derived. Table 1 demonstrates the three dimensions and subcategories of topics to which the questions are related.

**Table 1.** Sets of questions

Dimension	Foreignness	Normality	Communication
Set of questions:	1. Prejudices	5. Willingness to internalize	8. Role of language
	2. Foreign perception	6. Institutions	9. Relationship
	3. Self-perception	7. Collective commonalities	10. Expectation
	4. Self-assertion		

The dimension foreignness as a contrast to normality, is decisively shaped by four factors: Need for interpretation, individually limited experiences, interplay between self-understanding and understanding of the foreign, and self-assertion in the face of foreignness. How foreign something is perceived as is related to the distance from one's own everyday perception, since the foreign seems incomprehensible due to the absence of normality, plausibility and meaningfulness and creates a need for interpretation (Bolten 2007, p. 51). To be able to perceive something as foreign at all and not as nothing, a minimal basis of experience is necessary (Bolten 2007, p. 55). Prejudices are derived from this which serve as orientation but are characterized by non-objectivity (Hansen, 2011). Since self-perception requires a differentiation from the foreign, the reference to oneself is important for foreign perception, which is why foreign perception has a subjective character (Bolten 2007, p. 52). Self-assertion in the face of foreignness takes place based on five phases described by Oberg (1960, pp. 177-182): After initial euphoria and high willingness to adapt (phase 1), misunderstandings (phase 2) and collisions (phase 3) cause the willingness to adapt to reach its low point and one's own culture is revalued and asserted. Over time, progressive understanding of cultural backgrounds leads to an acceptance of differences (phase 4) and finally to acculturation (phase 5), in which the foreign cultural standardizations are internalized and declared as one's own (Bolten 2007, p. 58). The phase of acceptance of differences is also referred to as accommodation and represents a functional adaption, since foreign cultural knowledge and behavior are absorbed in order to ensure one's own ability to act (Bolten 2007, p. 58).

### 3 METHODOLOGICAL APPROACH

To find out how the transformation process from foreignness to normality takes place and which personality traits are relevant for this, four semi-structured expert interviews are conducted. The experts are people who have worked abroad for at least six months in the past or at the time of the interview. The structure of the interview guideline is based on Kaiser (2014). Table 2 provides an overview of the interviews conducted. The method of Kaiser (2014) provides a systematic approach of operationalizing the research questions into comprehensible interview questions. The proposed method of Kaiser consists of three steps, where the first step is related to translating the abstract research questions into analysis dimensions (Kaiser 2014). The next step is to derive question complexes from these analysis dimensions by determining a criterion according to which dimensions are to be observed. For this step, knowledge of the relevant research literature is essential. In the last step the question complexes are translated into

interview questions. According to this approach of Kaiser, we firstly derived analysis dimensions from our research questions. For this step, we selected the theoretical foundation of DMIS and Rathje to derive three analysis dimensions, which are foreignness, normality and communication. After this we developed based on these analysis dimension subcategories, which were finally translated into interview questions.

**Table 2.** Overview of the interviews

	Interview 1	Interview 2	Interview 3	Interview 4
Date	22.04.2020	14./15.05.2020	15./22.05.2020	18.05.2020
Duration	2:05 h	1:15 h + 0:35 h	1:30 h + 0:35 h	1:15 h
Sex	Male	Male	Female	Male
Origin	Germany	Germany	Kazakhstan	Germany
Role abroad	Deputy plant management	Team leader with authority to issue directives	Marketing, Consultant	Sales Consultant
Country of employment	China	Romania	United Arab Emirates	Brazil
Length of stay	12 months	6 months	For 8 years	For 18 months

At the beginning of the interviews, the understanding of culture and intercultural competence is examined. The sets of questions on the dimensions of foreignness and normality conclude with an assessment of the subjective perception of foreignness (perceived foreignness at the beginning of the stay and perceived foreignness at the end of the stay or at the time of the interview). The interviews conclude with a query of relevant personality traits and a statement on the thesis that intercultural competence represents the ability to change foreignness into normality. To avoid distortions in the understanding of terms, the terms foreignness and normality are avoided in the sets of questions.

## 4 RESULTS

### 4.1 Process of transformation from foreignness to normality

The transformation from foreignness to normality follows a certain process. Accordingly, the answer to the first research question *How does the transformation process from foreignness to normality takes place?* is examined in the following:

First, the foreign behavior is met with curiosity. To understand the background of the foreign behavior, an observer role is chosen. In the observer role, one's own habits take on a rather passive role, while active attention is directed to the foreign behavior. This attention is influenced by prior knowledge of cultural standardizations. Especially expert 01 undermines this process by saying: *„I was an observer. Because this is something that for me was totally new, totally unexpected.“* However, curious observation plays a more important role in dealing with foreignness than strict behavior according to mediated prior knowledge. Although prior knowledge can sensitize people to observe differences, it can also be counterproductive if actions are strictly based on it.

During the stay abroad, the perception of foreignness decreases, and normality is created. Understanding of intercultural differences emerges through intercultural dialogue and personal

contacts, but also through observation and participation in cultural institutions. Through understanding of intercultural differences, the need for interpretation disappears, making the foreign normal. The internalization of standardizations of the encountered culture, on the other hand, is not a necessity for the perception of normality.

#### **4.2 Relevant personality traits for normality generation according to expert testimony**

Regarding the second research question *Which personality traits are relevant in this process?* the experts indicate three personality traits that they believe are crucial for the transformation from foreignness to normality: (1) Curiosity about the foreign, (2) willingness to internalize, and (3) high empathy.

According to the experts, **curiosity** represents the starting point for building understanding for the foreign culture and is thus a prerequisite for creating normality.

**Openness** to the internalization of cultural standardizations enables the reduction of foreignness. It is also important to leave one's own comfort zone and to cultivate an open attitude toward self-reflection. The willingness to reconsider one's own internalizations and to consider new internalizations is thus a decisive characteristic for the generation of normality.

**High empathy** and good communication skills enable appreciation of the other person and help to perceive and understand one's own and other people's emotions. It thus forms the basis for understanding and internalization and is thus fundamental for the generation of normality.

#### **4.3 Relevant personality traits for normality generation according to analysis of the answers**

From the analysis of the answers to the individual sets of questions, four personality traits emerge that are relevant for the change from foreignness to normality: (1) a distinct self-image, (2) a low tendency to self-assertion, (3) openness to the recognition of cross-collective commonalities, and (4) access to collective thinking.

A **distinctive self-image** is required to create normality. The ability to self-reflect is necessary to question one's own cultural standardizations. Therefore, it is a prerequisite of a distinct self-image. Self-reflection together with a desire for personal development and a willingness to adapt enables the process of identity formation. In this process, the foreign is internalized as one's own and normality is created. The experts report having adopted for themselves those characteristics that seemed effective, efficient, or likeable to them. The acculturative process, in which the previous foreign is internalized as one's own identity, leads to further development of the personality and self-image. Total acculturation is not necessary, however, since normality can also be generated without internalizing every standardization.

A **low tendency to self-assertion** is required to transform the foreign into normality. In intercultural contact, differences arise that should not be rejected but viewed from a different perspective. A sensitive approach to differences and the ability to observe in a value-free manner help to avoid valorizing one's own culture in conflict situations.

The **openness to recognize cross-collective commonalities** affects the degree of perceived foreignness. Furthermore, it results in the expectation that instead of otherness there is a coexistence of sameness and difference in the intercultural interaction. Expert 02 underlines this finding with the following statement: *„I want, so badly, to build a connection with a person that I look for similarities.“* Also, Expert 03 supports this with the following statement: *„ I look for explanations for the differences and in these explanations, I can also find certain similarities.“* Accordingly, the extent to which the openness to discover commonalities is

present and to which fundamental equality of people is recognized is decisive for the generation of normality.

**Access to collective Thinking** is crucial for generating normality. The ability to speak the local language facilitates contact and the establishment of personal relationships. Social contact has a significant impact on gaining cultural understanding. In addition, the local language provides access to collective thinking. Insight into collective thinking generates a more comprehensive understanding of culture. This insight is also enhanced by cultural objects such as music. The ability to access collective thinking shapes the level of cultural understanding gained and, as a result, the level of normality generated.

#### **4.4 Intercultural competence as a producer of culture**

The study that intercultural competence represents the ability to transform foreignness into normality is confirmed by the experts. However, three different details are emphasized: the reduction of distance in communication, the recognition of foreign and own cultural characteristics, and the ability to understand a culture. All the experts state that they have become more competent by reducing the perceived foreignness. It is emphasized, however, that intercultural competence does not have an absolute character: In every new culture, a new foreignness is felt, which must be transformed into normality. Finally, the statement of expert 03 summarizes what mindset people should inhibit for this transformation process to happen: *„You feel like now you are open-minded enough but there’s always things to surprise you in the world. So, I think it is always good to go back and feel strange again. Every culture is different, and you should be open to those strange moments.”*

## **5 DISCUSSION**

### **5.1 Practical Implications**

The major findings indicate that managers need to develop certain personality traits in order to deal with diversity. In this regard it is firstly necessary to self-reflect the own personality and increase the willingness to understand and adapt to other opinions as well as other perspectives. From a practical point of view managers can train their employees by using the technique of role play to further promote this kind of thinking and sensitize their employees in the context of diversity management. Role play would enhance especially the aspect of self-reflection and the ability of adapting to other situations. This role play would make it easy for employees to self-reflect and compare the self-image with the foreignness. In addition to this, managers can wrap up the role play with a final discussion which would lead to a situation where the employees would question their own cultural standardizations and would develop their personality as well as their self-image.

Secondly, the findings show that the recognition of cross-collective commonalities is important. From a managerial point of view this can be achieved by analyzing the particular aspect that seems foreign or diverse. This step would lead to a situation where managers would not immediately push away things that seem different to them. Instead of this, they would rather take a closer look at it, analyze it and try to find commonalities. Finding commonalities form the basic ground to build a connection to something new. In addition to this it is necessary to develop a company culture, where communication is used to promote curiosity about something which is different or foreign. A healthy communication regarding topics such as diversity, where leaders serve as a role model by showing a curious behavior about things that are different, would serve as an indicator to welcome other thoughts or foreignness. At the

same time managers need to portray a personality of acceptance and cultural understanding to internalize things that are foreign to them. Not only managers but also employees need to be trained to accept change, to accept diversity and foreignness. As the findings show, observation and curiosity are the key to transform foreignness to normality. In this regard takeaways for diversity management are that every member in a company needs to develop the aforementioned traits. A company as a collective can only pursue this transformation from foreignness to normality if the culture of the company promotes this kind of thinking and develops learning programs to train employees and managers the traits that were identified in this study.

## **5.2 Limitations and Further Research**

The first limitation of this study is that we did only 4 expert interviews. More interviews might provide further insights and new perspectives on the research subject. Another limitation of our study is that it was a qualitative approach. Maybe a quantitative approach in terms of a survey might enhance the understanding to a higher extent. Moreover, it would be interesting to not only capture the manager's perspective but also the employee's perspective. Further research might investigate this topic from both perspectives and identify differences and similarities. In addition to this it would be interesting to further differentiate between young managers and senior managers and analyze their approach in dealing with the transformation process from foreignness to normality. In this context the following research question would be important: Do age and experience have an impact on the duration of pursuing the transformation? Are young managers able to transform earlier than senior managers? Are young managers more open and portray a more adaptive behavior than senior managers or is there a correlation between certain leadership styles and ability to change faster from foreignness to normality?

## **6 CONCLUSION**

The aim of this study was to develop guidelines for managers on how to cope with diversity and transform the perceived foreignness into normality. To achieve this aim, we took a closer look on how the process of this transformation takes place and which personality traits are relevant for it. To investigate this matter, first the relevant basics for the understanding of the concept of culture and the concept of intercultural competence as a cultural producer were elaborated and an extended version of the conceptual framework of DMIS was derived. Based on this, an interview guide was developed, which enabled the investigation of the research subject. In addition to this, four expert interviews were conducted with managers in international firms working in cross-cultural settings for at least six months. With the interviews, the process of change from foreignness to normality, the relevant personality traits and the applicability of the concept were examined.

For the evaluation of the results, the concrete statements of the experts on the research subject were compared with their reflective statements, which were analyzed regarding the research subject. Finally, the results were discussed against the background of cultural studies. From the results, it emerged that the ability to change foreignness into normality is primarily related to the extent to which a distinctive self-understanding is present. Through the understanding of one's own identity as well as of the foreign identity as a product of cultural standardization, it is easier to create normality. This goes hand in hand with the recognition of fundamental commonalities in intercultural encounters.

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# ***Cultural profile of Ukrainian generation Y: influence of COVID-19***

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## **ABSTRACT**

The pandemic of the coronavirus infection COVID-19 caused large-scale socio-economic changes in the world and affected all spheres of society in all countries of the world. The interruption in work activity and the closure of companies and enterprises led to changes in the labor market, an increase in unemployment, and significantly reduced the quality of life of millions of people. Negative labor market trends associated with the economic crisis and the COVID-19 pandemic have led to job losses in many sectors of the economy. An additional factor causing increased stress and the emergence of fears is the uncertainty of the economic situation, the impossibility of planning and building a professional perspective. The inability to predict one's life and influence what is happening, a high degree of uncertainty in the economic situation, cause stress and, as a result, emotional exhaustion, which deprive a person of self-confidence, lead to a sense of instability in life and loss of future prospects. A person's involvement in a negative information space and a long stay in conditions of uncertainty causes a decrease in all types of activity, blocks the desire and ability to find and use even simple ways to overcome difficult situations. This study analyzes how the cultural profile of Ukrainian most economically active generation, generation Y, has changed. The cultural profiles of this generation before the start of the pandemic (2018) and during the pandemic (2020) were compared.

## **1 INTRODUCTION**

The globalization tendencies and the impact of the COVID-19 create a need to increase attention to changes in personal management and business communications at all levels (in each country and for the entire business community). In addition, nowadays, there is a change in the age structure of representatives of the business community, both leaders and managers at all levels. Therefore, an important aspect of research is the analysis of the characteristics of new generations, which are now becoming economically active, entering the stage of adulthood.

Thus, in the structure of the Ukrainian labor force in 2021, generation Y is about 25%, only Ukrainian generation X is greater (43%). Nevertheless, tendency of increasing share of generation Y is has a constant character. This factor is indicating an increase in the role of this generation in society.

This generation has unique attributes such as its technological savvy, tolerance and independence, and its aversion to large institutions (Frey, 2018) and it is very important to understand all features of the generation Y.

## **2 GENERATIONAL THEORY**

Howe H. and Strauss W. (2007) created the present generational theory in 90s of XX century. Torocsik M., Szucs K. and Kehl D. (2014) noted the generational approach to the description

of the society and the examination of social problems mean the acceptance of the simple principle, which involves research based on groups by birth age, which results in groups with perceivably different behavior.

That is why it is critical to review how different scientists dealing with the generation boundaries (birth ages). Howe H. and Strauss W. (2007) mentioned that Generation Y has the period of birth 1982-2000 years. Oblinger D. and Oblinger J. (2005) noted that this period is 1985-1991 years. According to the opinion of Reeves T. and Oh E. (2007), this period is 1981-2000 years. As for Ukrainian generation Y in paper (Lepeyko, Blyznyuk 2016), it was proved that period of birth is 1987-2005 years.

### **3 METHODOLOGY**

Torocsik M., Szucs K. and Kehl D. (2014) mentioned the study of generations is based on the differences in their value orientations.

One of the most common survey of values is the value survey developed by Rokeach M. (Rokeach, 1979). Method of Rokeach M. is based on the direct ranking of values that are included value lists: terminal (value-aims) values and instrumental (value-ways) values. In general, there are 18 values in each list and each value has a short description.

The Rokeach values survey was distributed to students of the Simon Kuznets Kharkiv National University of Economics during the COVID-19 pandemic (2020 – 2021). Completion of the survey was anonymous and voluntary. The number of respondents was 100 students. In order to assess demographic characteristics, we asked for information about their age. According date of birth all respondents concern to Generation Y. Respondents were offered the list of terminal values and instrumental values and for each of them the respondents had to determine the significance in their lives and to choose the ranking number from 1 to 18.

In order to examine changes for values and value systems for Generation Y in a period of COVID-19 pandemic, the results were compared with the findings of the Blyznyuk T. (2017) study.

### **4 ANALYSIS OF DATA AND RESULTS**

The results of the survey are shown in the Table 1. For comparative purposes between the before pandemic and in a pandemic of COVID-19 periods, the results of the Blyznyuk T. study of the Generation Y values in a 2016 are also shown in Table 1.

**Table 13.** Changes in values of Generation Y: impact of COVID-19 pandemic.

Value	Ranking of values		Increase/dec rease (+/-)
	COVID-19 pandemic (2020- 2021)	Without / before COVID-19 pandemic (2016)	
<b>Set A. Terminal values</b>			
Active and interesting life	1	1	-
Inner harmony	2	2	-
Wisdom	3	3	-
Health	4	4	-
Interesting job	5	5	-
Love	6	6	-
Financially secured and comfortable life	7	7	-
Knowledge	8	10	+2
Real friendship	9	8	-1
Public recognition	10	9	-1
Development	11	12	+1
Productive life	12	11	-1
Aspirations beauty	13	14	+1
Freedom	14	13	-1
Happy family life	15	15	-
Happiness of others	16	16	-
Art	17	17	-
Pleasure	18	18	-
<b>Set B. Instrumental values</b>			
Accuracy (cleanliness)	1	1	-
High demands	2	2	-
Manners and politeness	3	3	-
Intelligence and education	4	5	+1
Buoyancy	5	4	-1
Rationalism	6	10	+4
Irreconcilability to shortcomings in themselves and others	7	8	+1
Independence	8	7	-1
Self-control	9	11	+2
Responsibility	10	9	-1
Diligence (discipline)	11	6	-5
Tolerance	12	14	+2
Courage in views, opinions	13	12	-1
Strong will	14	13	-1
Liberality	15	16	+1
Honesty	16	15	-1
Effectiveness in activities	17	17	-
Keeness (thoughtfulness)	18	18	-

In the period of COVID-19 the order of terminal values for Generation Y did not change dramatically apart from knowledge, which increased in importance by 2 ranks. Several terminal values, however, were ranked much differently before and in the COVID-19 pandemic period. The following shows those values, which experienced an important increase or decrease of two ranks or more.

Diligence (discipline), which was ranked 6th most important in a period without/before COVID-19, saw the largest decrease. Respondents in the period of COVID-19 pandemic ranked it as being 11th most important. A likely explanation for this is the fact that live was moved to distance format, the people were restricted in free movement, habitual duties have become irrelevant, and deadlines have become flexible. The largest increase was for rationalism, which saw an increase in importance of four ranks. In the survey instrument used, rationalism as ability to think logically and to take rational decisions. This is because people understood that their health and life depend upon rational decisions; and in pandemic period it is necessary to abstract from emotions in order to control the situation.

Self-control and tolerance increase by two ranks. Self-control, which is defined by the restraint, self-discipline, may have increased due to Generation Y's desire for financially secured and comfortable life. Rey-Ares L., Fernández-López S., Castro-González S. and Rodeiro-Pazos D. (2021) emphasizes that the members of Generation Y are willing to spend money without first thinking about the benefits of the items they are willing to buy, thus often struggling with self-control in spending. However, the COVID-19 pandemic changed this attitude, because of restrictions to visiting public places, in particular shops, and also because of the uncertainty and misunderstanding when everything will end, which stimulated members of the Generation Y to control their spending.

Tolerance is defined by tolerant attitude to views and ideas of others, ability to forgive the mistakes of others. COVID-19 has affected the relationship of people to each other regardless of the generation, people have become more tolerant.

## **5 LIMITATIONS OF THE STUDY AND FURTHER RESEARCH**

The conducted research and its results have some limitations:

- the possible subjectivity of the respondents;
- limited research by one country, namely Ukraine, since the ranking of values in different countries may differ;
- limitations of the method of Rokeach, to which the ambiguity of the ranking criteria, expressed in the fact that some respondents, when ranking the list of values, take into account the degree of their relevance, while others are guided only by their absolute significance, some relate them to their individual life, others take into account their significance for society and humanity as a whole.

## **6 CONCLUSIONS**

This study provides two major contributions. First, this research details how values have changed over time under the influence of the COVID-19 pandemic. Second, the results of the study contribute to generational research by generalizing two profiles of Generation Y using a time-lagged study.

The study showed that the COVID-19 pandemic had practically no effect on the formation of the terminal values of the Ukrainian Generation Y. Based on the analysis of ranking of terminal values of Ukrainian Generation Y, it can be argued that the leading ranks of terminal values are defined by five common values of individual interaction: active and interesting life, inner harmony, wisdom, health and interesting job. The least significant terminal values for Generation Y are happiness of others, art and pleasure.

However, at the same time, the structure of the instrumental values of the Generation Y changed. In the hierarchy of instrumental values, the most significant values are accuracy, high demands, manners and politeness, intelligence and education, buoyancy. In a pandemic period, two values became more important than before: rationalism and self-control.

Thus, changes in incremental and terminal values show that the psychological stress experienced by Generation Y during the COVID-19 pandemic leads to a change in their behavior patterns. Thus, health remains one of the 5 priority terminal values, however, the importance of such incremental values as discipline and responsibility are declining, as well as tolerance and self-control are raising. This means that in order to organize remote work in a pandemic, it is impossible to directly use Western experience, but it is necessary to develop models that will take into account the specifics of the Ukrainian mentality and the value characteristics of Generation Y.

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# Young Scientists

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Graduates present  
their research

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# ***Virtual Negotiations – The new Way to seal the Deal? A Comparison of virtual B2B Negotiation Developments between Europe and China***

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## **ABSTRACT**

**Motivation:** The outbreak of the global COVID-19 pandemic in the beginning of 2020 forced many global industrial companies to switch their business negotiations from a face-to-face setting to a virtual setting. Board room meetings, pitches and presentations in person were replaced by digital forms of communication and online mediums such as Zoom or Microsoft Teams have become the new standard for most companies nowadays. But even prior to the pandemic, business negotiations occasionally happened to occur online with the aim of eliminating unnecessary business traveling, saving time and money and helping reduce environmental costs. Although virtual negotiations are no longer new to the business world, companies still struggle with the digital setting, especially in the intercultural negotiation world. Social norms such as body language, emotional intelligence and cultural backgrounds can tremendously impact a negotiation and its result. Yet, these behaviors are difficult to be transferred to a virtual world and as a result, intercultural negotiations are even more complex. Thus, this study aimed to develop strategies and managerial implications that global B2B companies in the industrial sector can use to succeed in virtual intercultural negotiations as well as recommendations, which respond to future virtual negotiation developments emerging out of the study. The authors selected Europe and China as the two main areas for investigation as they tremendously differ in culture and hence in negotiation styles. Both Europe and China are considered as economically significant partners for companies across the globe and thus engage increasingly in intercultural and virtual business negotiations with each other.

**Methodology:** Expert interviews with 30 employees from 19 global industrial B2B companies based in Europe and China were conducted. The data collected provides opinions, insights and best practice examples from individuals who actively negotiate via online mediums and are hence considered as experts in the field of virtual negotiations.

**Findings:** The proper preparation, an increased communication with negotiation counterparts, the establishment of rules and guidelines as well as offering virtual negotiation training were identified as the key success factors to master virtual negotiations. Conducting pre-meetings before the negotiation, proactive research about the negotiation partners, being reliable and transparent throughout the entire process, connecting with negotiation partners on social media in advance, as well as doing follow ups and being consistent throughout the entire negotiation process are ways of how negotiators can establish trust in a virtual environment. A hybrid model of both virtual and face-to-face negotiations is predicted to become the future way of negotiating. In the mid-to long-term future, the metaverse, seen from the collective concepts perspective and utilizing a fully decentralized infrastructure with Avatar set ups, will revolutionize even more the virtual negotiations research field.

**Conclusion:** Consequently, the extent to which the implementation of the virtual negotiation study stimulated the dialogue between the academic and business community led to strategies and managerial recommendations for international B2B companies in the industrial sector which can be used to successfully negotiate with parties from different cultures in a digital setting. In conclusion, virtual negotiations are an efficient tool, helping to keep business operations running even in times of a global pandemic. Companies can save a lot of time and costs, mostly related to travel expenses that no longer occur. Outpacing competition by continuous cost-/efficiency management and simultaneous 24/7 hours availability for negotiation partners is the key success factor. Nevertheless, various challenges are associated with virtual negotiations, which make negotiators want to switch back to face-to-face

negotiations. Therefore, a hybrid negotiation model, including both virtual and face-to-face negotiations in combination with the metaverse, seems to be most reasonable for the future of intercultural business negotiations.

## 1 INTRODUCTION

When over 30 years ago Marty McFly's movie "Back to the Future II" projected that, in the foreseeable future, interactions via videoconferencing would be the norm, nobody would have thought that this prognosis is not too far from today's reality (Ebner 2017). The global COVID-19 pandemic has restricted face-to-face meetings and travel for countries around the world, and most areas of the business world were turned upside down, including negotiations. For roughly two years now, the majority of business negotiations has been occurring virtually. Board room meetings, pitches and presentations in person were replaced by digital forms of communication (Ballard 2020) and online mediums such as Zoom or Microsoft Teams have become a lifeline for many companies nowadays (Prendergast 2020). What might have been thought to be just a temporary measure during a global pandemic has turned into a new norm, a concept that every company has to adjust to (Movius 2020).

Although the COVID-19 pandemic undoubtedly triggered the switch to a virtual world, the origins of virtual negotiations go farther back in history. Over the last 15 years, advances in technology as well as increasing digital communication have risen the popularity of online communication for all kind of purposes, including negotiations (van der Toorn, van der Wijst, and Damen 2013). Apart from that, the realization that a large part of business traveling is not essential, and that technology and digital tools can substitute travel has a significant impact on the way how negotiations are performed (Ghooi 2020). In fact, remote negotiations save companies a vast amount of money in travel expenses, spare managers hours on planes and trains, and help reduce environmental costs (Nasher 2020). All these changes and a general social trend towards more sustainability has led many companies to hold intercultural negotiations virtually through online communication tools instead of traveling abroad to perform the negotiation face-to-face.

Culture can tremendously affect how executives organize themselves to negotiate a deal. Every culture is different and hence, people from different cultures and countries also negotiate differently. Europe and China, the two selected research areas for this research paper, are both economically significant partners for companies in the whole world but fundamentally differ in terms of culture and cultural values and accordingly pursue a different negotiation style (Gunia, Brett, and Gelfand 2015). Consequently, this results in the need to truly understand the nuances of human communication surrounding nonverbal messages, emotions, soft exposing language, and instinct and intuition in order to understand the other party's mind (Gallaher 2020). The way in which international negotiators demonstrate their feelings and perceptions can tremendously influence the counterpart's opinions and the progress of the entire negotiation (Marchi, Targi, and Parlangei 2018).

Especially intercultural business negotiations thrive on physical presence: Handshakes, eye contact, long meetings in conference rooms, coffee breaks, or going for dinner together afterwards – all these interpersonal aspects matter and help negotiators to create a deep bond with their business partners (Shonk 2020). Without these contextual hints, miscommunication and misunderstanding is likely to occur. Additionally, the lack of these nonverbal cues can generate distrust, exacerbate contention, reduce accountability, and create a fear of deception, thus possibly leading to failure of the negotiation and resulting in no outcome (Yu III 2020). Through communicating face-to-face, these social norms and human behaviours guide the

negotiator's behavior and ease the negotiation process (Brooks 2015). Yet, they are difficult to be transferred to a virtual setting: Paying close attention to each other for hints about how to behave or reading the other party's body language is practically impossible when negotiating via an online medium (Movius 2020) and accordingly, negotiators lose a significant portion of implicit communication with their business partners (Iwasaki 2020). Further challenges such as different time zones, internet speed, hardware or software access and security issues have all become additional obstacles for the traditional face-to-face negotiator to maneuver (Movius 2020). As a result, intercultural negotiations are even more challenging.

To overcome these obstacles, this research paper aimed to develop strategies and managerial implications that international B2B companies in the industrial sector can use to succeed in a virtual intercultural environment. Research on intercultural business negotiation and its challenges has been studied for more than 30 years (Gang-yi, Hoque, and Zhangwen 2018), but a clear research gap can be observed when it comes to intercultural negotiations in a virtual setting. What are the challenges when negotiating interculturally in a virtual setting through online communication tools, how can trust be established in a virtual world, and what is the role of culture and emotions in virtual intercultural negotiations?

## **2 METHODOLOGY**

Throughout the research, the authors aimed to answer the following three research questions:

- 1) What are the challenges for industrial B2B companies in virtual intercultural negotiation and what is the role of culture and emotions in virtual intercultural negotiations?
- 2) How can negotiation cultures and behaviors be transferred to virtual negotiation communication and how can trust be established in a virtual negotiation environment?
- 3) How can industrial B2B companies prepare and finally succeed in virtual intercultural negotiations?

Europe and China were selected as the two main research areas for this paper, as they tremendously differ in culture and hence, negotiation styles (Lügger et al. 2015). In the wake of globalization, Europe and China have increasingly engaged in negotiations with each other and nowadays, both areas are of significant economic importance across the globe (Graf, Koeszegi, and Pesendorfer 2012). While this study exclusively focuses on virtual negotiation developments in Europe and China, the findings may be transferable to B2B companies in other industries and countries as well.

In order to develop strategies that help to overcome the afore-mentioned challenges occurring in virtual intercultural negotiations, a qualitative study in form of in-depth expert interviews was conducted in the time frame from March 20<sup>th</sup>, 2021 until May 6<sup>th</sup>, 2021. Overall, thirty employees from nineteen different global industrial companies based in Europe and China were interviewed for the empirical study. The interview partners are employees from numerous departments (Sales, Management, Procurement, Business Development) who have already participated in virtual intercultural negotiations between Europe and China. Their experience in negotiating cross-culturally in virtual settings provided a profound input for this study and built the basis for answering the research questions.

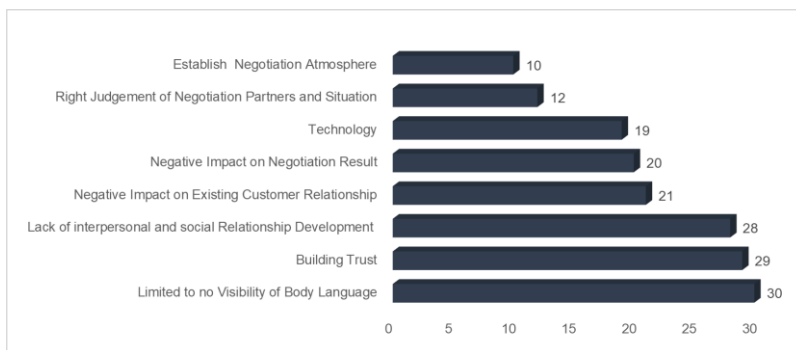
The interview question set was split into three different parts: The first part was a brief introduction to the interview partner and their role in their company. Divided into two subparts, the second part aimed to identify the challenges occurring in virtual B2B negotiations, as well as to find ways and strategies of how to cope with these. Additional objectives of this part were

to find ways of how trust can be established in a virtual environment, if a special skill set is needed for succeeding in a virtual negotiation and how negotiation behaviors, cultural elements and traditions can be transferred to a virtual negotiation environment. The third and last part of the interview concentrated on the topic of emotions and body language. Here, the participants shared their opinions regarding the role of culture and emotions in intercultural virtual negotiations.

### 3 FINDINGS

#### 3.1 Challenges in virtual intercultural B2B Negotiations

Based on the interview results, eight main challenges occurring in virtual intercultural B2B negotiations were defined: limited to no visibility of body language (100%), the creation of trust (97%), the lack of interpersonal and social relationship development (93%), a negative impact on both existing customer relationships (70%) and the negotiation result (67%), technology related challenges (63%), the right judgement of negotiation partners and the negotiation situation (40%), and the establishment of a proper negotiation atmosphere (33%). Figure 1 shows how often each identified challenge was mentioned by the interviewees.



**Figure 1:** Challenges mentioned by interviewees (chart compiled by authors)

##### 3.1.1. Limited to no visibility of body language and facial expressions

The fact that body language and facial expressions can be seen only limited or not at all was mentioned by all thirty interviewees and therefore identified as the biggest challenge in virtual negotiations. Virtual meetings (be it teleconference or videoconference) limit the ability of the participants to fully see and interact with each other, whether because one cannot see the overall body language, or because a weak internet connection or background noises restrict or harm the transmission of audio and video signals.

##### 3.1.2. Lack of interpersonal and social Relationship Development

According to 28 out of 30 interview partners, virtual negotiations are primarily focused on the negotiation subject itself, making it hard to build up interpersonal and social relationships. Informal conversations are missing in the virtual world: chit chats on the corridor, coffee breaks, off-business activities – or in China, primarily the socializing events before and after the negotiations. However, all these interpersonal things do matter a great deal, sometimes they even form the prerequisite for a successful negotiation. Connecting just virtually makes it hard to build up a social or interpersonal relationship with any negotiation partner.

Particularly in China, the lack of personal relationships is seen as a major challenge or the main obstacle for virtual negotiations. This is not surprising, considering that China's business culture is primarily built on relationships ("guanxi"). Trust and a profound relationship with the customer must be established before any business is conducted, which is usually done by off-business activities such as business dinners or other socializing activities.

### *3.1.3. Negative Impact on existing Customer Relationships*

About two thirds of all interviewees stated that the switch to a virtual meeting world has impacted their relationships with existing customers. Through not being able to meet face to face, the relationship to the customer becomes more distanced and unpersonal. Also, the cultural aspect plays a role in this matter: In China, traveling to a customer's business site is very meaningful - it shows that one is truly interested in doing business with someone and creates a certain commitment. However, with the COVID-19 related travel restrictions, customers in China were no longer able to visit their customer at site which clearly resulted in a negative impact on the customer relationship. Local competitors who are able to travel within China happen to be in a better position or might even outperform their international competitors - just by being with the customer physically. In the end, deals are lost to other companies just because one could not be there in person.

### *3.1.4. Negative Impact on Negotiation Result*

Apart from a negative impact on the customer relationship, twenty out of thirty interviewees argued that the switch to a virtual world also impacted the result of the negotiation. The main argumentation regarding this point was that the lack of social relationship building leads to a completely different negotiation situation, resulting in a rather distanced and cold atmosphere.

### *3.1.5. Technological challenges*

Even two years after the outbreak of the COVID-19 pandemic, companies still struggle with technological challenges. 63% of all interviewees claimed they are repeatedly encountering technological issues, be it on their or their customer's side. Connecting to the call, maintaining good and clear audio and video signals, suddenly losing the internet connection during the meeting as well as signal transmission time lags which can lead to unnatural gaps in the conversation flow among the participants were among the main technical difficulties mentioned. Moreover, the location of the negotiating parties turned out to have a major impact on the technology: Low-speed or low-bandwidth internet connections often affect developing countries more than developed countries due in many cases to telecommunications infrastructure constraints as well as technology availability. Learning to cope with these challenges is crucial because fact is: *In a virtual world, negotiators are entirely dependent on technology.* Four main points related to technological challenges were mentioned: an unstable internet connection, the functionality of the equipment (microphone, video camera), the selection of the virtual communication medium, and the acquaintance with virtual communication tools.

### *3.1.6. Right Judgement of Negotiation Partners and Situation*

The virtual environment makes it hard to evaluate the negotiation partner or situation. Judging the other person's character or their intentions is almost impossible in a virtual setting. In virtual negotiations, people exclusively focus on the topic of the negotiation itself - social and personal activities such as coffee breaks or dinner afterwards are missing. Yet exactly these events are

essential to establish a good relationship and personal bond with the customer, outside of business.

### 3.1.7. *Establishing Negotiation Atmosphere*

One third out of all thirty interviewees mentioned that establishing the right negotiation atmosphere is difficult in virtual negotiations. Negotiators need to create a relaxed atmosphere, set the tone and drive the agenda, which is difficult to be established in a virtual meeting room. In a digital environment, negotiators are most likely not able to feel the energy and the negotiation ambiance – two things that are truly important when dealing in sales.

### 3.1.8. *Privacy and security issues*

One further challenge not mentioned by the interviewees is the lack of privacy and security in a digital setting. Although most virtual meeting applications and services highlight their security features, it cannot be prevented that virtual meeting conversations are documented, resulting in leaks of sensitive information during the negotiation. Confidential information can be recorded, ideas can be stolen and third parties or competitors can get access to information that is strictly private (Yu III 2020).

## 3.2 Ways of how to establish Trust in virtual intercultural B2B Negotiations

Unless the negotiation partners already know each other, it is difficult to establish trust in a virtual environment. 97% of all interviewees mentioned they struggle to build up trust in virtual negotiations, and that customer acquisition is impossible in a virtual setting due to the lack of trust. Yet, trust is the basis for entering into any negotiation. After the analysis of the interview results, the authors defined five ways of how trust can be established in a virtual intercultural B2B negotiation:

- 1) **Pre-meetings before the actual Negotiation:** Reaching out to the key players prior to the negotiation helps to get to know the other person and their motives better, resulting in a more transparent and trustworthy negotiation ambience.
- 2) **Proactive Research about the Negotiation Partners:** Conducting proactive research about negotiation partners and their company demonstrates one's interest in the other party and helps to build trust.
- 3) **Reliability and full Transparency:** Being reliable and transparent throughout the entire negotiation process is the key to the successful establishment of trust. If negotiators are not committing to what they have agreed on with the other party, trust can be lost entirely.
- 4) **Connection on Social Media Platforms:** Connecting on social media channels creates a certain personal bond between the negotiating parties and builds up trust. Especially in China, this is *the solution* to create a trust: WeChat, China's primary communication channel, is used by the majority of business partners to discuss off-business topics and establish an interpersonal relationship.
- 5) **Regular Follow Ups and Consistency:** After any virtual negotiation, a follow up meeting is a must. Negotiators can reflect together, gather direct feedback about the last meeting and make sure that everybody is on the same page.

### **3.3 Role of Culture and Emotions in virtual intercultural B2B Negotiations**

One objective of this research was to find out which role culture and emotions play in a virtual negotiation environment. The overall answer given by the interviewees was that, although virtual negotiations lead to less visibility and recognition of culture and emotions, both factors are still present in a virtual negotiation. People do not change, and accordingly culture and emotions can yet be seen in a virtual negotiation.

### **3.4 Transfer of Negotiation Styles and cultural Traditions to virtual Negotiations**

Throughout the interviews, it became clear that the transfer of negotiation cultures and cultural traditions is difficult to accomplish. The main finding in this regard was that negotiation cultures can be best transferred by verbal communication. All thirty interviewees claimed that virtual negotiators should try to get as close as possible to a face-to-face negotiation situation. Having some small talk in the beginning can also help to understand the other party's culture. Moreover, involving local language (e.g., "Servus" when dealing with an Austrian negotiator), following the hierarchical order of the negotiators (China), including cultural holidays and traditions in the communication, and sending business gifts prior to the negotiation (China) can help to transfer negotiation cultures to a virtual environment. Yet, it is hard to account for what you lose in a virtual negotiation.

### **3.5 Closing a Deal virtually in China – Mission Impossible?**

*"It is impossible to close a deal in a virtual negotiation."*

This was a clear statement mentioned by all interviewees from and in China. According to them, sealing a deal virtually is impossible in China as the impact of the missing personal relationship is too severe. In China, virtual negotiations seem to be useful for the pre-rounds of the negotiation, but the final deal can never be closed online. In a lot of companies, big important projects were put on hold until business travel could be resumed. This was by far the most surprising finding, as it shows how much of an impact the switch to a virtual setting can have on business operations.

### **3.6 Key Success Factors for virtual intercultural B2B Negotiations**

The last research question aimed at identifying ways how industrial B2B companies in Europe and China can overcome the identified challenges in virtual intercultural B2B negotiations. The six key success factors that were identified are discussed below.

#### *3.6.1. Special Preparation*

The majority of interview partners (93%) mentioned that negotiators need to prepare for a virtual negotiation as if they would prepare for a face-to-face negotiation. Three major aspects are important for the preparation of a virtual B2B negotiation: Technical preparation, cultural preparation, and the preparation of the negotiation environment.

- **Technical preparation:** As virtual negotiations involve the usage of technology, special preparation is needed in this regard. The technical equipment has to be verified, the surroundings of the negotiator need to be checked, and supportive documents for the

meeting have to be prepared. A great way to prevent technology-related challenges is to dial into the meeting some time in advance in order to test the equipment. Having a backup device available that can be used in case of software failure definitely helps.

- **Cultural preparation:** Intercultural negotiations generally require a special preparation to make sure both parties are behaving according to the other culture. In a virtual negotiation, this becomes even more important as the limited visibility of body language makes it harder to grasp these cultural differences. As verbal communication is the only way to connect on a cultural basis in a virtual meeting, it might make sense to research about the other culture and bring in some culture-related aspects. For example, Asian people are very focused on written information and communication, therefore it is appreciated if the negotiation material is sent out to the participants in advance.
- **Preparation of negotiation environment:** Prior to entering a virtual negotiation, it is crucial to check and prepare the negotiation environment. Often, it is forgotten that the surroundings of the participants can be seen on the screen, which can result in an awkward situation for both parties (e.g., flipcharts in the background showing company or competitor data).

### *3.6.2. Increased Communication, Information sharing and Feedback*

Virtual negotiators are advised to communicate much more in detail in a virtual setting than they would face-to-face. Information has to be shared upfront and the proper setup needs to be discussed in advance. Collecting feedback after a virtual negotiation is not only a great way of staying in contact with the other party, but it also helps virtual negotiators to continuously improve their performance in a digital world.

### *3.6.3. Rules and Guidelines*

The virtual negotiation world differs tremendously from a face-to-face negotiation, often it is a messy process where a lot of misunderstandings can occur. Thus, establishing certain behavior rules and guidelines (e.g., camera-on policy) is essential. Important is to prepare these rules and guidelines together with the negotiation partners, so that the situation is fair for every participant.

### *3.6.4. Virtual Negotiation Training*

A lot of interviewees mentioned they would like their companies to offer a virtual negotiation training as this could tremendously help to overcome the challenges associated with virtual negotiations. The elderly generation could learn from the younger generation, everybody gets acquainted with the digital tools and nobody is afraid of virtual negotiations anymore – a win win situation.

### *3.6.5. Required Skill Toolbox for virtual intercultural B2B Negotiations*

After the analysis of the interview results, the authors came up with a required skill toolbox that virtual negotiators should apply to succeed in a virtual negotiation. The toolbox contains of the seven skills discipline, patience, attentiveness, interaction, acquaintance with the virtual communication tools, professional appearance, and moderating skills.

- **Discipline:** Being mentioned by 27 out of 30 interviewees, discipline is the most important skill a virtual negotiator needs to have. In a virtual setting, the negotiator needs to be fully engaged in the conversation. Distraction or disruption by factors such as background noises or texts and phone calls must be avoided.

- **Patience:** Technical difficulties (especially in an intercultural set up) can make virtual negotiations very inefficient and lengthy. Thus, patience and high tolerance is needed, otherwise the negotiation ends in a chaos.
- **Attentiveness:** Particularly because of the limited visibility of body language in virtual negotiations, participants need to be more attentive to the other negotiating party than in a face-to-face negotiation to entirely understand their motives.
- **Interaction and Moderation:** Virtual negotiations an sometimes take several hours, making it hard to keep people in front of the screen focused and concentrated. Therefore, virtual negotiators need to be very interactive and well moderated, to avoid that participants are drifting away. Virtual communication tools offer the opportunity to interactively communicate with all participants.
- **Acquaintance with virtual communication tools:** Some people are excellent salespeople in-person but are not able to master virtual negotiations. This is mainly related to their fear of using “new” tools. Consequently, it is crucial that negotiators get acquainted with all digital tools used in a virtual negotiation.
- **Professional appearance:** Even though most people are joining their virtual negotiations from home, it is important that they are attending the meeting in a professional manner. A positive development can be seen in terms of professionalism, however, still some mistakes such as an inappropriate background or wearing informal attire are happening.

### 3.7 Hybrid Model and Metaverse – The Future of Negotiations?

It was mentioned by all thirty interviewees that, in their opinion, virtual negotiations will stay to a certain extent, even after the COVID-19 pandemic. Most likely it will be a combination of both virtual and face-to-face negotiations and therefore a hybrid model is seen as most suitable for the short-term future of negotiations: Virtual negotiations are efficient for fact-based, technical negotiations, which usually do not involve a lot of emotions. Also, the virtual environment might work for internal discussions, where the people involved typically know each other and have most likely already established a personal relationship.

Face-to-face negotiations, however and despite of the current Russia-Ukraine war, are already experiencing a renaissance. Especially for emotional topics, it is important to meet with the customer in-person. Also, new business relationships are impossible to build purely virtually, according to the interviewees. Thus, face-to-face negotiations are needed for customer acquisitions and discussing new projects. On the mid-and long-term perspective of the negotiation future, Meta Platforms will lead to the next level of virtual metaverse negotiations.

The metaverse can be seen as a successor to the mobile internet that ought to

- elevate physical world experiences through mixed reality and physical world experiences (e.g., Spark AR).
- be co-created and build responsibility by a network of thousands of entities which will collaborate together to build the metaverse with integrity, safety and privacy (including creators, policy-makers, etc.)

Based on further discussion with interviewed experts, the authors believe that metaverse negotiations will arise within the next ten years yet expect also in the near term that negotiators will first experience the metaverse through 2D apps, such as Immerse 3D. How to build true intercultural, social and trustful relationship with Avatars within the metaverse remains uncertain, however. The proposed hybrid negotiation model can be seen in figure 2.

**Face to Face:**

- Emotionally
- Establishing new relationships
- Customer acquisition
- strategic topics
- options for complex thinking
- More social interaction
- Quicker Decision management
- Fewer distortions
- No technological barriers

**Virtual:**

- Fact based, technical
- Efficiency monetary and time wise
- Flexibility : in location and time
- Archivation and Transcription
- Better understanding of data driven presentations
- Better home office atmosphere

**Metaverse:**

- Digital social intelligence and competence
- Virtual Relationship Building
- Human Avatar touch points

**Figure 2:** Proposed hybrid-metaverse negotiation model (chart compiled by authors)

## 4 MANAGERIAL IMPLICATIONS

The findings of this study allow to derive suggested strategies for industrial B2B companies to overcome the challenges occurring in virtual intercultural negotiations. As virtual negotiations are expected to stay to some extent, it is important for companies around the world to understand how to overcome the associated challenges.

Limited to no visibility of body language, the creation of trust, the lack of interpersonal and social relationship development, a negative impact on both existing customer relationships and the negotiation result, technology related challenges, the right judgement of negotiation partners and the negotiation situation, and lastly, the establishment of a proper negotiation atmosphere were identified to be the main challenges in virtual negotiations. In order to manoeuvre these challenges, negotiators need to prepare in terms of technology, culture, and the negotiation environment.

Apart from that, virtual negotiators are advised to increase the communication with their partners and try to be in constant contact to account for the lack of building an interpersonal relationship in a virtual world. Furthermore, supportive negotiation material should be shared with all negotiation partners in advance, so that everybody is on the same page in the negotiation and misunderstandings can be avoided. Apart from that, a certain openness is expected from virtual negotiators, and it is crucial that feedback is provided to constantly improve the virtual negotiation process.

## 5 CONCLUSION

Concluding, virtual negotiations are an efficient tool and help to keep business operations running, even in times of a global pandemic. Companies can save a lot of time and costs, mostly related to travel expenses that no longer occur. Nevertheless, various challenges are

associated with virtual negotiations, which make negotiators want to switch back to face-to-face negotiations again. Especially for new customer acquisition, virtual negotiations are not the right mean and technology-related challenges as well as the lack of a personal relationship make virtual negotiations quite inefficient. The most surprising finding of this study was that closing a deal virtually seems to be impossible in China, as their business culture is highly relationship driven and thus virtual negotiations are not the proper tool.

### **5.1 Future Outlook**

Virtual negotiations are expected to stay, even after the COVID-19 pandemic. In the future, negotiations are expected to be performed in a hybrid form, including both virtual and face-to-face negotiations. Fact-based and technical negotiations that do not involve any emotions might occur entirely online in the near future, whereas negotiations that cover emotional topics such as price or contracts will still take place face-to-face. Moreover, a trend towards the decentralization of the sales force might evolve, as it eliminates the challenge of not being able to travel outside the country to a customer. In the mid-to long-term future, the metaverse, seen from the collective concepts perspective and utilizing a fully decentralized infrastructure with Avatar set ups, will revolutionize even more the virtual negotiations research field.

### **5.2 Study Limitations**

This research delivered early insights into the impact of an ongoing global pandemic. The currently available data is not sufficient to make reliable forecasts concerning the impact of the global pandemic on the future of negotiations. Therefore, future developments of virtual negotiations remain uncertain. The study provided challenges and best practice examples that have evolved during the COVID-19 and are likely to shape the negotiation environment in the aftermath of the pandemic. However, the future cannot be foreseen and during the execution of this study, the pandemic was still in the process of evolvement. Accordingly, conclusions may be subject to unexpected changes of circumstances. Apart from that, the study is limited to virtual negotiation developments in Europe and China and thus, findings that are accurate for these two areas might not be fully transferable to other countries.

### **5.3 Further Research**

As the topic of COVID-19 is highly recent, the future of virtual negotiations after the pandemic remains a relatively untapped field of scholarly enquiry in negotiation research. As this study was conducted at a time when travel was still restricted, a study at a later point in time could investigate the feasibility of the suggested hybrid negotiation model of and determine whether virtual negotiations still common practice.

Secondly, as already mentioned in the limitations of the study, this research provides an insight into negotiations between Europe and China. Further research should be carried out with a more geographically diverse sample. By studying other cultures and countries in the research, a broader view of virtual negotiation developments may be provided.

Also, further research could be conducted in the field of AI tools in virtual negotiations. Out of the thirty interviewees, only one person mentioned that they have looked into using AI tools or holograms for negotiations. This might be due to the fact that the industrial industry is a rather old-fashioned industry, where customer contact and analogue negotiations are preferred over the virtual world. Nevertheless, future research on these tools might identify further strategies to overcome the challenges and barriers in virtual negotiations.

Moreover, the study at hand exclusively focused on B2B companies in the industrial industry. Further investigation could be done by researching virtual negotiation developments in other industries.

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# ***Customer Experience: How to turn Customers into Advocates in the Machinery Construction Industry in the Digital Age***

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## **ABSTRACT**

Progressions regarding digitalization and information overload force businesses to rethink their positioning. In this context, unique customer experience leads to increased loyalty. Though, B2B companies find it difficult to create value and reach their customers via the right channels. The result of this research – confirmed along qualitative in-depth interviews – comprises a proposed customer journey (CJ) map that considers the purposeful implementation of digital and non-digital touchpoints that aim at creating customer experience (CX). The CJ-model entails seven phases: initial need recognition, awareness, information, consideration & negotiation, purchase, retention, and advocacy. Customer experience aspirations follow the consideration of the functionality of the machine, human factors & servicing, and new technologies. The research revealed that particularly pre- and postpurchase phases offer potential for the integration of digital channels such as websites or AR/VR applications. When it comes closer to the final purchase decision, traditional channels, mainly face-to-face, remain indispensable.



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# ***Artificial Intelligence and its Impact on Customer Value Co-creation in B2B Sales***

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## **ABSTRACT**

“Putting the customer first” is said to be one of the oldest rules of the long-term organizational success. However, as the world became more complex, fast changing and competitive, organizations not only needed to improve their customer knowledge, but furthermore their understanding of the internal, as well as external business environment. Much more knowhow is nowadays required for organizations to stay economic efficient and competitive. Resulting in the fundamental importance of data, information technologies, and business case applications. As such, artificial intelligence became a buzzword often used by companies, politicians and the general public, yet without understanding its full meaning or potential. Let’s discuss how artificial intelligence, and moreover innovative technologies could enhance today’s organizational success by exploring correlations of customer value, value co-creation mechanisms, and artificial intelligence.



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# Workshops at the CCBC

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# **Artificial Intelligence Applications for Marketing and Sales**

*Laura Casati<sup>1</sup>, Melanie Eggel<sup>1</sup>, Alexander Lang<sup>2</sup>, Elisabeth Frankus<sup>2</sup>,  
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## **ABSTRACT**

All participants were able to take part in a Social Design Thinking Lab dedicated to the discovery and reflection of AI applications for sales and marketing. A selection of some cutting-edge AI applications in the field of sales and marketing including in-ear translators, content marketing applications for copy writing and campaigning as well as AI pricing case studies were put at disposal. Participants were given time to make acquaintance with the applications. Afterwards, all participants have been invited to express their thoughts about what they have experienced.



**AI SDT-LAB**



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# ***Is Culture Socially Learned? The Role of Geography, Genes, Brain, and Behaviors in Shaping Culture***

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## **ABSTRACT**

Taking an interdisciplinary approach, the notion that culture has a dynamic relationship with biology has been explored. Discussing culture without discussing the link with biology may oversimplify the evolutionary role of culture. This relationship manifests itself in the way culture has evolved to be a survival strategy for human beings.



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# ***Doing Business in the USA***

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## **ABSTRACT**

This session discussed the stereotypes and other cultural considerations of doing business in the United States. A brief look at cultural data and key characteristics of the US Business Culture provided a backdrop to the credibility, persuasion, and negotiation aspects of closing a deal in the United States.



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# **Artificial Intelligence Applications for Marketing and Sales**

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## **ABSTRACT**

The workshop's trainers led participants to gather AI experiences and reflect on what they liked or have surprised them the most. A questionnaire with requested open answers was then offered to participants. The objective here was to investigate participants' thoughts regarding the necessary involvement of AI developers, SMEs and public authorities when it comes to the seamless adoption of AI applications and systems within a corporation. The workshop ended with a final rating of the applications according to levels of understandability, complexity, trust, and user-friendly usages.



**AI SDT-LAB**



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