

**DURBAN UNIVERSITY OF TECHNOLOGY**



**ECOMMERCE ADOPTION BY SMALL MEDIUM ENTERPRISES IN FASHION:  
THE CASE OF DURBAN FASHION FAIR DESIGNERS.**

**BY**

**CHIEDZA ELIZABETH NHUVIRA**

**STUDENT NO. 21557378**

**A THESIS IN FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE:**

**MASTER OF MANAGEMENT SCIENCES: ENTREPRENEURIAL STUDIES**

**FACULTY OF MANAGEMENT SCIENCES**

**DEPARTMENT: ENTREPRENEURIAL STUDIES**

**Approved for final submission**

11.03.2021

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Supervisor: Prof Nirmala Dorasamy

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Date

## **Abstract**

Small Medium Enterprises are one of the country's engines for transformation through economic growth, innovation and employment creation. The fashion industry is rated the second largest manufacturing curbing unemployment for both formal and informal sectors of fashion through providing one of the human basic needs. Due to the low entry barriers, the competition is rife both locally (other fashion designers) and internationally (imports) which has led to initiatives such as 'fast fashion' which represents the process of selling designs showcased on the catwalk in stores in the shortest possible. However, this is a challenge without the right platforms to advertise and sell the clothing. Initiatives such as Durban fashion fair have been good in providing the Durban designers with a local platform to showcase but Small Medium Enterprises greatest challenge is that Durban market is flooded despite designers offering niche products because it's the same customers with limited income to buy the offerings, such that customer acquisition beyond the confines of the Durban is a necessity for business sustenance.

Durban fashion designers are creative business people, knowledgeable in the fashion industry, however with the challenges that they are facing, there is limited research of their use of ecommerce in solving the stated problems. Ecommerce is perceived as an innovation that has transformed Small Medium Enterprises in developed nations such as China and America however the case is unknown for developing nations such as South Africa.

The purpose of the case study is to determine how far the fashion designers have used ecommerce in their businesses and the factors that influence them to adopt taking into account the benefits and challenges that they face. The case study encourages multiple sources and techniques to gather data. Mixed method approach was conducted for data collection, for the Durban fashion fair designers quantitative study was undertaken while the Durban fashion fair management were interviewed. The data was analysed using statistical method SPSS and use of thematic analysis for qualitative. Results from the study supported the literature while other results revealed gaps for further research.

The study revealed the following results, that the majority of fashion SMMEs are cognisant that the South African population is moving to online buying and that there are business opportunities to be exploited online.

Secondly, the challenges hindering the fashion SMMEs was the low profits and internet fraud. The findings revealed that the greater percentages of fashion SMME are survivalist entities earning profits of less than 50 000 rand annually. The low profit margin affects the acquisition of gadgets and infrastructure is deemed costly; moreover the SMMEs lack the financial collateral security to borrow from the banks. The other challenge mentioned was that internet fraud was the lack of digital training literacy and training such that fashion SMME perception of internet fraud was exaggerated.

Thirdly, the results highlighted that the management benefited from the adoption by making better decisions. The better decisions can be attributed to knowledge of customer, the promptness of making decisions and the management's previous online experience. Fashion SMME highlighted the benefits accrued from implementation of effective ecommerce practices, were increase in sales despite the number of years the business has been trading.

The use of ecommerce, the results indicate that the fashion designers use free applications available since their profitability margins are low. Most of the SMME advertise on the social media Facebook and Instagram, they also use the social platforms for product research and prevailing trends too. And lastly they use banking applications to make payments to suppliers as well as receive payments from customers. The fashions SMME have not adopted ecommerce by using second parties such as paid second party sites.

## **Declaration**

I, the undersigned, Chiedza Elizabeth Nhuvira, do hereby declare that unless or otherwise indicated this dissertation is solely the result of my own work. This work has not been submitted to any other university for a degree award or any other purposes, and all the authors whose work contributed to this study have been referenced accordingly. I hereby give consent for this work to be made available for inter-library loan, photocopying and that it be made available to the outside interested organisations and students globally.

11/03/2021

Chiedza Elizabeth Nhuvira

Date

## Dedication

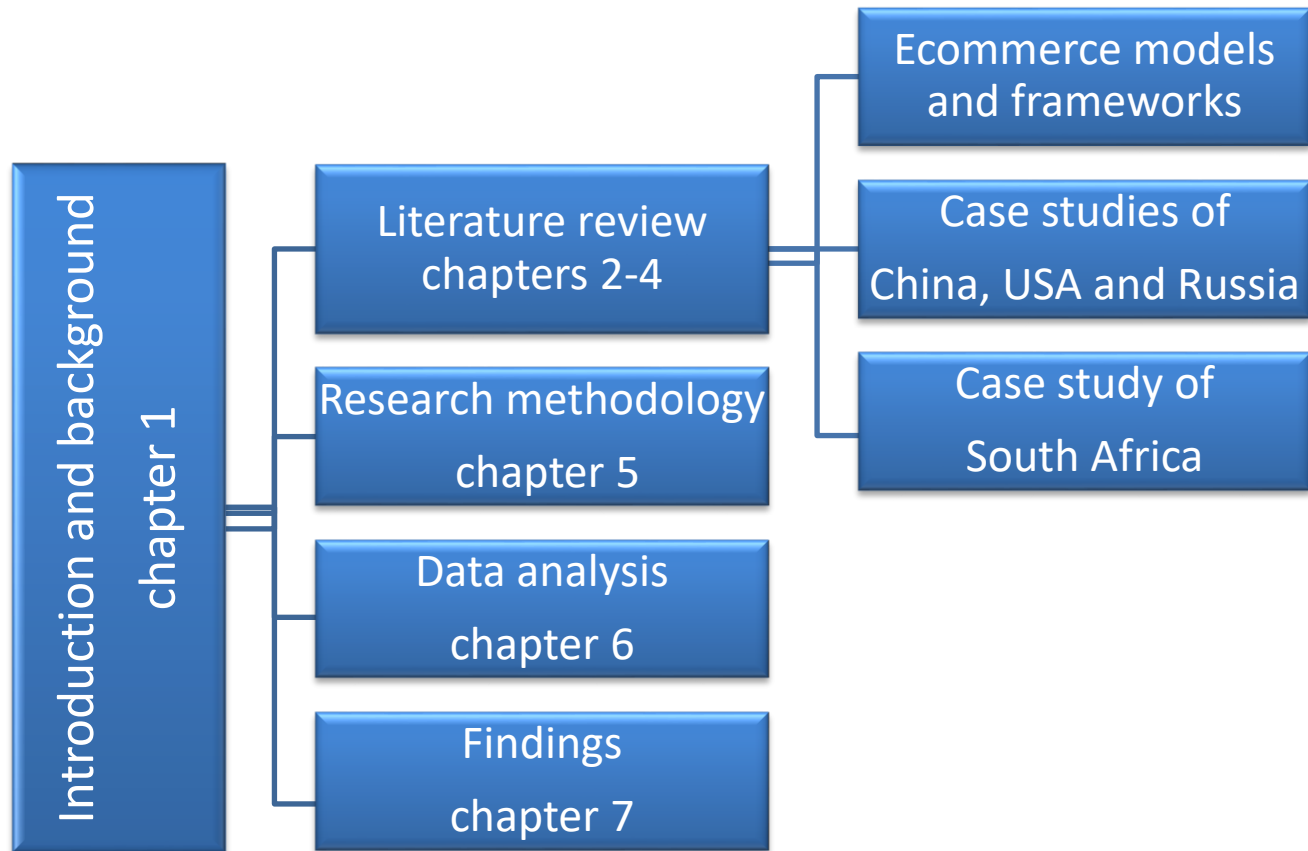
This study is dedicated to technology revolutionists, the creative minds, the crazy ones, the misfits, the trouble makers, the round pigs and square holes, the ones who see things differently who have no respect for the status quo. These are people who can't be ignored, because they change things and push the human race forward. They are crazy enough to believe they can change the world and they will continue to do so.

## Acknowledgements

I wish to express my gratitude to the following people who made this study possible:

- My best dad God the Almighty who orders my steps and career, so many answered prayers and the beauty of the journey with him by my side.
- My sincere appreciation is extended to Prof Nirmala Dorasamy she pushed me out my comfort zone.
- My two friends Shame Mugova and Washington Tsokota for their guidance, insightful criticism and drive in the writing of the dissertation.
- Anna Bengesai for being an ever loving, tough sister.
- Patrick Nhuvira, my dad for always encouraging me to reach beyond the skies.
- Alice Nhuvira, my mom for believing in me and encouraging me in my journey.
- Sis Emilia, Sis Charity, Charles and makhoti Trish for their sacrifices along the journey.
- The "CB" family for their love and moral support.
- Blessing and Faith for being people that inspired me on the journey.
-

## Overview of the study



## Table of contents

<b>1.1 Overview of Chapter One .....</b>	<b>1</b>
<b>1 CHAPTER ONE .....</b>	<b>2</b>
<b>1.1 Chapter introduction.....</b>	<b>2</b>
<b>1.2 Context of research.....</b>	<b>2</b>
<b>1.3 Statement of the problem .....</b>	<b>5</b>
<b>1.4 The Primary aim of the Study.....</b>	<b>6</b>
1.4.1 The objectives of the Study .....	7
1.4.2 Research Questions.....	7
1.4.3 Other Research Questions.....	7
<b>1.5 Importance of the study.....</b>	<b>8</b>
<b>1.6 Limitations of the study .....</b>	<b>8</b>
<b>1.7 Overview of the study .....</b>	<b>8</b>
<b>1.8 Chapter conclusion.....</b>	<b>10</b>
<b>2 CHAPTER TWO .....</b>	<b>12</b>
<b>2.1 Chapter introduction.....</b>	<b>12</b>
<b>2.2 E-commerce.....</b>	<b>12</b>
2.2.1 EC definition.....	12
2.2.2 Unique characteristics of ecommerce technology .....	14
<b>2.3 Ecommerce models .....</b>	<b>18</b>
2.3.1 Business to business (B2B) .....	19
2.3.2 Business to Consumer (B2C).....	23

<b>2.4 Developmental adoption stage of e-commerce.....</b>	<b>28</b>
<b>2.5 Conceptual framework.....</b>	<b>29</b>
2.5.1 Unique contributions of the study:.....	32
<b>2.6 Theoretical framework.....</b>	<b>34</b>
2.6.1 Introduction .....	34
2.6.2 Theory of planned behaviour .....	34
2.6.3 Rogers' Diffusion of Innovation (DOI) theory.....	37
2.6.4 Technology Organisation-Environment Model (TOE).....	45
<b>2.7 Components of TOE.....</b>	<b>46</b>
<b>2.8 Integration of the three theories- DOI, TOE and TPB .....</b>	<b>53</b>
<b>2.9 Benefits of e-commerce adoption for fashion SMMEs .....</b>	<b>56</b>
<b>2.10Chapter conclusion.....</b>	<b>61</b>
<b>2.11Overview of Chapter Three.....</b>	<b>61</b>
<b>3 CHAPTER THREE.....</b>	<b>63</b>
<b>3.1 Chapter Introduction.....</b>	<b>63</b>
<b>3.2 China .....</b>	<b>63</b>
3.2.1 Introduction of China .....	63
3.2.2 Factors influencing ecommerce adoption.....	64
3.2.3 Challenges faced by designers .....	67
3.2.4 Fashion SMMEs in China.....	68
3.2.5 Benefits of online shopping .....	70
3.2.6 Conclusion of China .....	73
<b>3.3 Russia .....</b>	<b>74</b>
3.3.1 Introduction of Russia .....	74
3.3.2 Factors influencing adoption .....	75



3.3.3	Challenges .....	77
3.3.4	Benefits of Ecommerce in Russia .....	80
3.3.5	Conclusion of Russia .....	81
<b>3.4</b>	<b>America .....</b>	<b>82</b>
3.4.1	Introduction of America .....	82
3.4.2	Factors influencing adoption .....	83
3.4.3	Challenges .....	84
3.4.4	Benefits of ecommerce .....	86
3.4.5	Conclusion of America .....	86
3.4.6	Chapter conclusion .....	87
<b>4</b>	<b>CHAPTER FOUR .....</b>	<b>89</b>
4.1	Chapter introduction .....	89
4.2	Internet penetration in South Africa .....	89
4.3	Factors influencing adoption .....	92
4.3.1	Local policies supporting SMMEs .....	92
4.3.2	Trade policies supporting fashion SMMEs to adopt ecommerce .....	93
4.3.3	SA culture and Ecommerce .....	97
4.3.4	Media related fashion influencing events in South Africa .....	99
4.3.5	The trickle-down ecommerce-fashion .....	99
4.3.6	Trickle-up ecommerce-fashion .....	103
4.3.7	The trickle-across ecommerce-fashion .....	103
4.4	Challenges facing SA fashion designers .....	104
4.5	Chapter conclusion .....	107
<b>5</b>	<b>CHAPTER FIVE .....</b>	<b>109</b>
5.1	Chapter introduction .....	109

<b>5.2 Research problem.....</b>	<b>109</b>
<b>5.3 The aim and objective.....</b>	<b>110</b>
<b>5.4 Research design .....</b>	<b>110</b>
5.4.1 Research Methodology: A Case Study Using Mixed Methodology .....	112
5.4.2 The Sampling Procedure .....	114
5.4.3 Criteria for the selection of the sample and sampling methods.....	115
5.4.4 Sampling methods .....	116
5.4.5 Sample size .....	116
5.4.6 Data collection techniques .....	117
5.4.7 Administration of questionnaires .....	117
5.4.8 Face-to-face interview schedule .....	118
5.4.9 Questionnaire design .....	119
5.4.10 Face to face interview construction .....	120
5.4.11 Pilot study.....	121
5.4.12 Triangulation.....	122
5.4.13 Limitations of the study.....	123
5.4.14 Delimitations/ elimination of bias .....	123
5.4.15 Anonymity and Confidentiality .....	124
5.4.16 Ethical considerations.....	125
5.4.17 Editing and coding of data .....	126
5.4.18 Data analysis.....	126
5.4.19 Validity and reliability .....	127
<b>5.5 Chapter conclusion.....</b>	<b>130</b>
<b>6 CHAPTER SIX.....</b>	<b>132</b>
<b>6.1 Chapter introduction.....</b>	<b>132</b>
<b>6.2 Quantitative data analysis and findings.....</b>	<b>132</b>
6.2.1 The sample .....	132
6.2.2 The Research Instrument.....	133

6.2.3	Section analysis .....	137
6.2.4	Section A: Biographical data .....	137
6.2.5	Section B: The business .....	140
6.2.6	Section C: Use of e-commerce .....	147
6.2.7	Section D: Factors influencing adoption of e-commerce .....	154
6.2.8	Section E: benefits of e-commerce .....	157
6.2.9	Section F: Challenges faced in adoption of e-commerce .....	161
<b>6.3</b>	<b>Qualitative data analysis and findings .....</b>	<b>163</b>
6.3.1	The sample .....	164
6.3.2	The research instrument .....	164
<b>6.4</b>	<b>Comparative analysis of qualitative and quantitative analysis .....</b>	<b>174</b>
<b>6.5</b>	<b>Chapter conclusion .....</b>	<b>176</b>
<b>7</b>	<b>CHAPTER SEVEN .....</b>	<b>178</b>
<b>7.1</b>	<b>Chapter introduction .....</b>	<b>178</b>
7.1.1	Summary of the findings .....	178
7.1.2	Recommendations .....	184
7.1.3	Limitations of the Study .....	188
7.1.4	The scope for further research .....	189
<b>7.2</b>	<b>Chapter conclusion .....</b>	<b>189</b>
<b>8</b>	<b>REFERENCES .....</b>	<b>190</b>
<b>9</b>	<b>APPENDICES .....</b>	<b>206</b>
9.1.1	Appendix A: Letter of consent .....	206
9.1.2	Appendix B: Questionnaire .....	208
9.1.3	Appendix C: Interview questions .....	214
9.1.4	Appendix D: Ethical clearance letter .....	218
9.1.5	Appendix E: Gatekeepers Letter .....	219

9.1.6	Appendix F: Correlations.....	221
9.1.7	Appendix G: Turnit report.....	222

## List of Tables

Table 3-1: Ecommerce Models.....	18
Table 3-2: Types of B2C Models .....	25
Table 5-1: Countries SA exports clothing .....	94
Table 6-1: Sample Size tabulated .....	116
Table 7-1: Sections of the questionnaire .....	133
Table 7-2: Cronbach's alpha scores.....	134
Table 7-3: KMO and bartlett's test.....	135
Table 7-4: Rotated Component Matrix .....	136
Table 7-5 : Rotated component matrix .....	136
Table 7-6 : Descriptive of the sample: .....	138
Table 7-7: Number of employees .....	142
Table 7-8 : Use of the email for communication .....	145
Table 7-9 : Company owns a website .....	146
Table 7-10 : Use of e-commerce .....	147
Table 7-11 : The company market and selling its product .....	149
Table 7-12 : Advertising and using other companies to sell products.....	149
Table 7-13 : Factors influencing adoption of e-commerce.....	154
Table 7-14 : Revenue benefits due to e-commerce use .....	157
Table 7-15 : previous experience an management decision making.....	159

Table 7-16 : Challenges faced in adoption of e-commerce .....	161
Table 7-17: Qualitative Analysis - Thematic analysis .....	166
Table 7-18 : Comparative analysis of qualitative and quantitative analysis .....	174

## **List of Figures**

<b>Figure 3-1: Unique featurer of e-commerce innovation .....</b>	<b>14</b>
<b>Figure 3-2: Stages of ecommerce adoption .....</b>	<b>28</b>
<b>Figure 3-3: Conceptual framework .....</b>	<b>30</b>
<b>Figure 3-4 :Innovation- decision Process .....</b>	<b>39</b>
<b>Figure 3-5: Diffusion of Innovation Curve .....</b>	<b>43</b>
<b>Figure 3-6 : Technological, Organisational and Environment Context.....</b>	<b>46</b>
<b>Figure 3-7: Organisational structure .....</b>	<b>49</b>
<b>Figure 3-8 : Integration of DOI, TOE and TPB theories .....</b>	<b>55</b>
<b>Figure 4-1: China's cross border business.....</b>	<b>70</b>
<b>Figure 4-2: Ecommerce online journeys .....</b>	<b>71</b>
<b>Figure 4-3 : Turnover of Russian online sales.....</b>	<b>78</b>
<b>Figure 4-4 : Total online sales of goods and services .....</b>	<b>81</b>
<b>Figure 5-1: Vodacom Durban July Theme for 2019 .....</b>	<b>98</b>
<b>Figure 7-1: Nature of the business .....</b>	<b>140</b>
<b>Figure 7-2 : Number of years of operation of the Fashion SMME .....</b>	<b>141</b>
<b>Figure 7-3 : Profit for the year .....</b>	<b>143</b>

## **List of abbreviations**

B2B - Business to business e-commerce

B2C - Business to consumer e-commerce

C2C - Consumer to consumer e-commerce

DOI - Rogers' Diffusion of Innovation

DFF- Durban fashion fair

EC - E-commerce

EDI - Electronic data interchange

ERP - Enterprise resource planning

G2C - Government to consumer e-commerce

G2B - Government to business e-commerce

G2G - Government to government e-commerce

M2M - Machine to machine e-commerce

M - Mobile e-commerce

RFID - Radio frequency identification

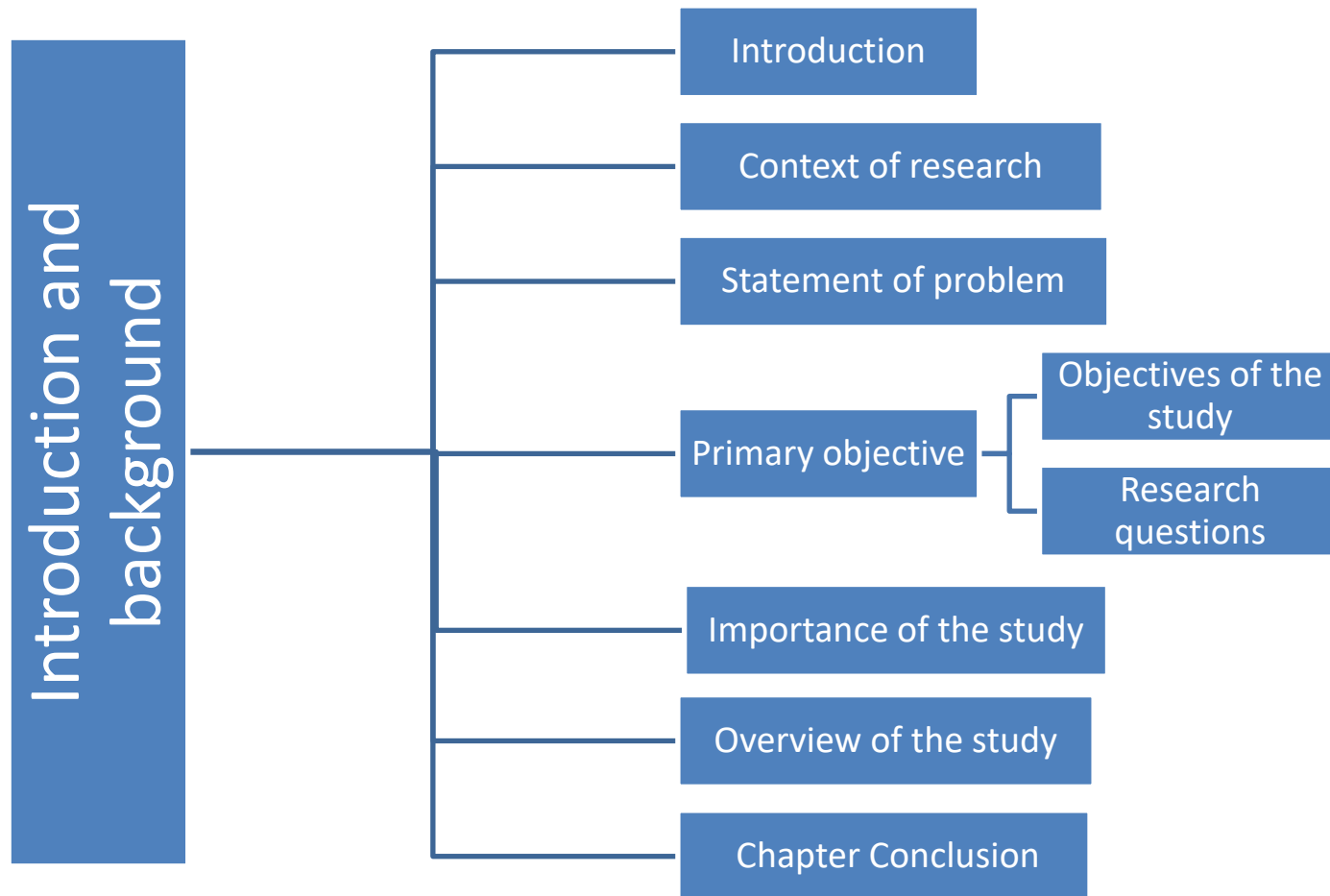
SMME- Small Medium Enterprises

SPSS - Statistical Package for Social Sciences

TOE-Technology Organisation-Environment Model

TPB - Theory of Planned Behaviour

## Overview of Chapter One





# **CHAPTER ONE**

## **THE STUDY INTRODUCTION AND BACKGROUND**

### **1.1 Chapter introduction**

This chapter illustrates the background of the study. It further outlines the research problem, the research questions, and the reason why the study is important and potential limitations. Finally the overview of the study and the summary of the chapters are given.

### **1.1 Context of research**

Small Medium Enterprises (SMMEs) have been viewed as important engines of money creation, transformation of economic growth, innovation and job creation in South Africa. In 2012 the South African government recognised the importance of Fashion designers as SMMEs and an incubator programme was established for fashion designers under Ethekezi municipality that focused on mentorship, creating opportunities for entrepreneurship, creativity, access to markets around South Africa under the name Durban Fashion Fair (DFF). The program has been a success and has trained many Durban fashion designers who have become successful in their own rights.

The Durban designers however have been experiencing a limitation that fashion is a highly perishable product in that needs to be sold while it's on trend and it has a short timeline ( Lidia, Arai, Ishigaki. and Yudoko 2012.) . Secondly, they must deal with fast fashion, where fast fashion is the process of designs moving from catwalk to the store in the shortest possible time. Fast fashion has forced a product driven environment where Durban designers need to have quick manufacturing times to produce new designs to service new and returning customers. Third limitation is that the Durbanites have adopted the western culture of visual civilisation, where social media influence purchasing decisions since online viewing is increasing every year.

Research has indicated that a large percentage of SA residents utilise internet in selection of finding relevant products and services for their daily needs (Worx 2018)

The fashion designers face the hard realisation of the importance of online presence to satisfy the visual appetite of existing and potential customers as well as sell products. The SMMEs are defined as the formal and informal sectors. These SMMEs comprises of well-set up orthodox family businesses that hire over a hundred employees to small informal businesses with only a few employees (Small Enterprise Development Agency 2016). The forth limitation is that the greater majority of Durban fashion designers are condensed on the very lowest end, where they offer backyard manufacturing and services, and occasional home-based evening jobs with low capital start-ups, fewer employees and capital for expansion and are still growing their customer base (Small Enterprise Development Agency 2016).

Durban fashion designers find themselves in a state where they need to improve organisational capacity to both provide for fast fashion, business and customer growth, profitability and lowering costs. According to Small Enterprise Development Agency (2016) results indicated that the majority of SA's SMMEs fail to exist after the budding phases, with most of them having an average years of less than 3.5 years. The reality of failed businesses makes one ponder how to improve the fashion business for sustainability after the mentorship under Durban Fashion Fair Designers?

Ecommerce has been noted as a business paradigm that challenges the traditional norms of doing business, and it has the commercial infrastructure that provides cost effective ways for SMEs to market their business and possibly alleviate the challenges of the Durban fashion designers.

In a study conducted in Turkey by Mohammed, Almsafir and Alnaser (2013), the benefits accrued from technology adoption are access to new customers, improved competitiveness and favorable pricing to customers due to economies of

scale. Other benefits derived from ecommerce findings are improves and consistent communication with suppliers and customers, simplified systems of internal systems, quick response to customer suggestions and queries and better productivity for the company (Wanyoike, Mukulu and Waititu 2012).

The major factors that threaten the business sustenance have been noted as access to vibrant markets, poor profitability and limited resources such as marketing and time (Radder 1996). Another challenge is that boutiques offering retailing services across the country where fashion designers can sell their merchandise charge high fees for example one of the Durban boutique charge a fixed monthly rental and an additional 23% commission of the selling price of the product. The rentals and commissions inflate the clothing price higher than the competitors leading to loss of some of the customers. The DFF boutique offers subsidised rent however it is located a few kilometres from town which is a disincentive for some of the customers to travel to purchase the clothing items. The stated problems of Durban fashion designers can be addressed by ecommerce adoption and findings show e-commerce in SMMEs remains a critical area of investigation in information systems research.

The e-commerce technology has much to offer to Durban fashion designers yet the underlying question remains that how far have the Durban designers adopted and implemented e-commerce in their businesses. "The key challenge thus confronting the SA apparel sector is not whether to participate in global processes, but how to do so in ways which provide for sustainable growth." (Moodley 2003: 557). Fashion designers are still grappling with lack of knowledge and skills to fully make use of the advantages of ecommerce in doing their businesses. They face various challenges such as the capital to deploy the necessary technology and the innovations compete in ecommerce. The research investigates ecommerce adoption by the Durban fashion designers.

## 1.2 Statement of the problem

The apparel industry in South Africa (SA) is highly competitive with local designers having to compete with cheap imported products that are of high quality particularly from China. The fashion industry is very dynamic with customer tastes and preferences always changing hence designers need to be abreast with developments and trends in the market. SMMEs and fashion designers in Durban, SA is looking for strategies to follow trends and develop competitive advantage. Ecommerce due to the stated benefits was identified as one of the business strategies being suggested as a tool to fight the Durban fashion designer's challenges. It is touted adoption of ecommerce strategies will increase and quicken turn-over of their clothes thereby increasing cash flow, increase customer base and improve modern production systems (Dyerson, Harindranath and Barnes 2009).

Despite ecommerce being a familiar innovation for doing business and its advantages, the rate of its adoption is considerably slow amongst small businesses, a challenge that is also typical amongst Durban fashion designers. It should be noted that challenges of ecommerce adoption affect all businesses but they are most dire amongst small businesses. Park and Kang (2014) that despite ecommerce being introduced a decade ago in Africa, only 30% of businesses has fully adopted ecommerce; the rate of adoption is considerably slow.

There are various factors, which affect the adoption of ecommerce, which include size and ownership. A research by Dyerson, Harindranath and Barnes (2009) on UK SMMEs show that the rate of adoption of ecommerce is influenced by the profitability, size and ownership structure of the business (Dyerson, Harindranath and Barnes 2009). The majority of Durban designers mostly offer backyard manufacturing services, with a small staff size (Small Enterprise Development Agency 2016). According to Comins (2017), the Durban fashion designers have huge problems namely finance, fabric, distribution and competition from international brands.

These problems can be alleviated by ecommerce adoption, where ecommerce has been noted as a commercial infrastructure that provides cost effective ways for SME's to market their business and possibly alleviate the challenges of the Durban fashion designers (Comins 2017; Liégeois 2017).

Liégeois (2017) describes that fashion designers lack of business-savvy skills and most upcoming designers are struggling to make ends meet such that they cannot afford to rent a shop. E-commerce application can help with managing the business and providing the necessary reports for decision making from costing garment for profitability to calculating profit and you can set up an online store at a very low cost compared to brick and mortar stores, thereby making e-commerce adoption a necessity for the fashion designers in order to sustain their business.

SA fashion designers are very talented and creative yet they lack the business skills. Comins (2017) noted that the creative individuals often are lacking in business skills to scale the SMMEs by increasing the profits that aid in sustaining and growing the SMME. The required skills for such are financial knowledge, marketing, pricing models, general management skills and information technology (Comins 2017; Liégeois 2017).

The study aims to evaluate the current state of ecommerce adoption by fashion SMMEs in Durban and gives insight to the fashion SMMEs perception of ecommerce benefits, influencers and challenges from the fashion SMME perspective using the DFF designers as the target population.

### **1.3 The Primary aim of the Study**

The primary aim of the study is to evaluate the current state of the adoption of e-commerce for transactions by the SMMEs in the fashion industry in Durban. This is to enable the study to gain insights on the perception of stakeholders on the benefits of e-commerce.

### **1.3.1 The objectives of the Study**

The objectives of the study are:

1. To examine the extent to which Fashion Designers in Durban are using e-commerce.
2. To examine the factors influencing the adoption of e-commerce by Durban fashion designers.
3. To assess the extent to which managers and employees of fashion SMMEs in Durban understand the benefits of ecommerce.
4. To assess the extent to which managers and employees of fashion SMMEs in Durban understand the challenges associated with ecommerce.

### **1.3.2 Research Questions**

The primary research question is: What is the current state of e-commerce adoption by the SMMEs in the fashion industry in Durban?

### **1.3.3 Other Research Questions**

1. To what extent do the Fashion Designers in Durban are using e-commerce for their transactions?
2. What are the factors that influence the adoption of e-commerce by Durban fashion designers?
3. What are the benefits of using e-commerce by SMMEs in the fashion industry?
4. What are the challenges militating against the adoption and the use of e-commerce by SMMEs in the fashion industry in Durban from the SMME perspective?

## **1.4 Importance of the study**

1. The study aims to identify the current e-commerce usage trends amongst fashion SMMEs in Durban.
2. To identify the digital divides within the fashion SMME in comparison to international fashion SMMEs.
3. Establish the strength of the influencing factors against the inhibitors or enablers of ecommerce adoption.
4. The study becomes a conscientising tool for the fashion designers who are not familiar with ecommerce practices.
5. The study becomes an informational tool for the management of the various Durban fashion councils and gives an overall picture of the fashion designers ecommerce practices in Durban.

## **1.5 Limitations of the study**

The possible limitations of the study were that firstly, the research was conducted in one geographical area, which is Durban and that the study might not be generalizable for the whole country. Secondly the research derived its information from only English language papers which excludes other case studies from non-English speaking countries which could have provided useful insight into the study.

## **1.6 Overview of the study**

The study comprises of the following chapters:

### **Chapter one: The study introduction and background**

It provides the introduction and background of the study. This chapter provided the outline of the study including the objectives, problem statement, research questions and limitations of the study. The whole outline is discussed in this chapter.

## **Chapter two - four: literature review**

This chapter encompasses of three chapters which focuses on the literature of the study. Chapter two discusses e-commerce in depth the e-commerce models, conceptual and the theoretical frameworks (Diffusion innovation theory; Theory of planned behaviour; Technology, organisational and environmental theory). Chapter three delves on the case studies of three countries namely, United States of America, China and Russia on their ecommerce adoption and their strong success points. Chapter four focuses on South African e-commerce, influencing factors and challenges.

## **Chapter five: Research methodology**

The chapter focuses on the research design, target population, sample size, data collection methods, data analysis, reliability and validity of the research.

A mixed method methodology was utilised for the study. The study employed a sequential and nested mixed methods study where quantitative data was the main form of data enriched by qualitative data, where the former being collected first and then the latter. The target population was Durban fashion fair designers and the Durban fashion fair management. Census study was employed for data collection.

## **Chapter six: Data analysis**

This chapter presents the results, interpretation, and discussion of the findings obtained from a quantitative and qualitative study. The data collected from the responses were analysed with SPSS version 26.0. Inferential techniques were included in correlations and chi-square test values, which are interpreted using the p-values. The qualitative study made use of interviews, content and thematic data analysis methods were used to analyse data the qualitative data.



## **Chapter seven: concludes the study.**

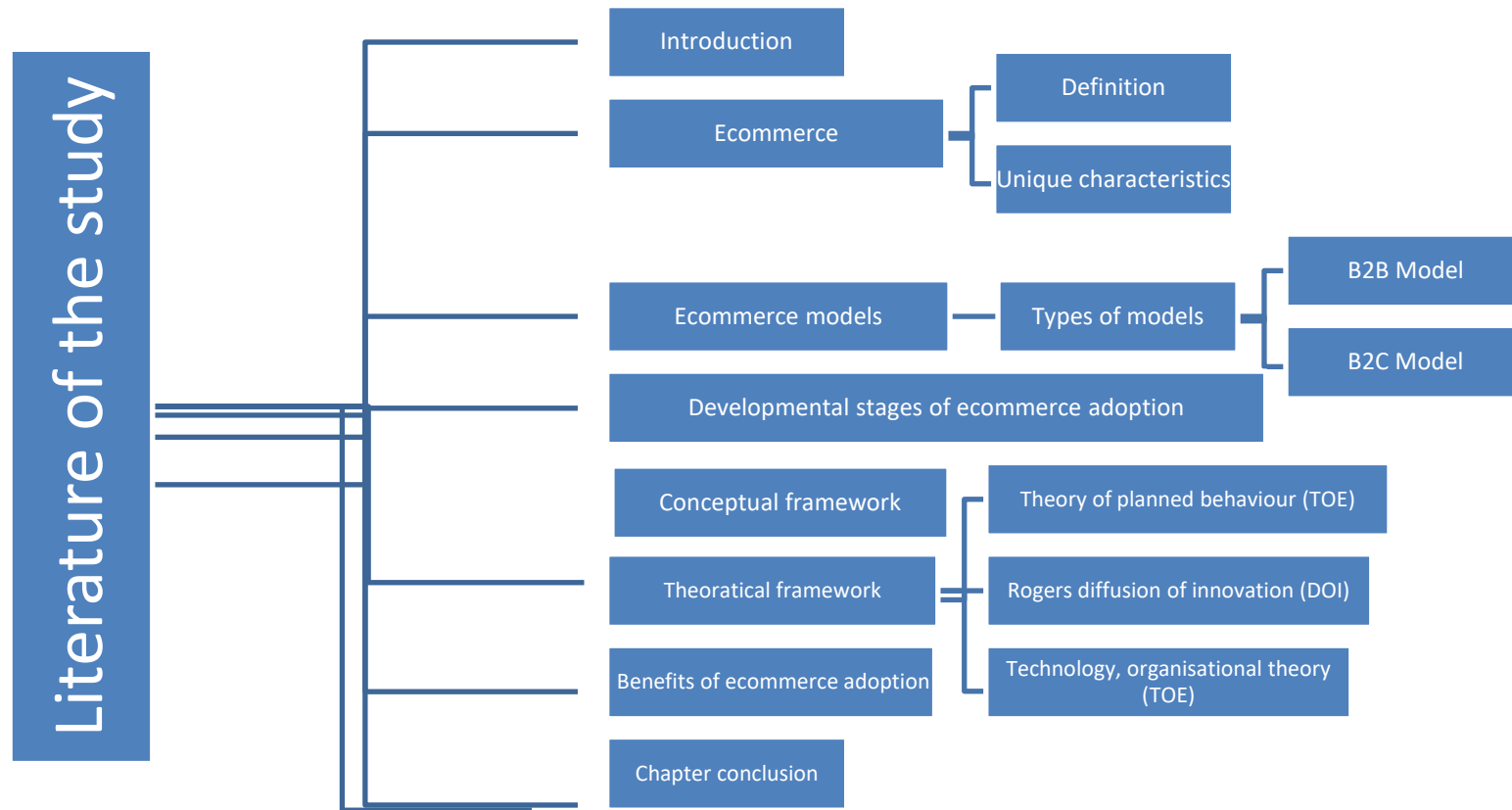
This chapter presents a summary of the study. It also gives recommendations and conclusions of the study. The conclusion links with the objectives, literature review and the findings from the analysis. This chapter answers the extent that the objectives of the study were met.

### **1.7 Chapter conclusion**

This study presents the overall condition of ecommerce adoption. The study provided the definition, noticeable benefits and the prevailing SMME environment. The increase in smartphone use and availability of data shows promising incentive for the adoption of ecommerce by fashion SMMEs.

The SA is very supportive to the fashion industry with many trade policies and national holidays that provides a conducive environment for fashion business growth. Moreover, the chapter outlined the problem statement and the connected sub problems for the study, the theoretical framework, limitations of the study and the study overview.

## Overview of Chapter Two



# **CHAPTER TWO**

## **LITERATURE REVIEW**

### **2.1 Chapter introduction**

Chapter two focuses on the conceptual framework, theoretical framework and empirical study. Ecommerce is stated as EC in the study. The chapter analyses various definitions of EC from different authors, while stating the different types of ecommerce available for SMMEs. The chapter further discusses the significance of the study.

### **2.2 E-commerce**

#### **2.2.1 EC definition**

Smith (2018) suggests that EC is a term “used by consumers and businesses conducting transactions online and involves buying and selling products using the World Wide Web or internet”. Drigas and Leliopoulos (2013) states EC as “any transaction completed over a computer-mediated network that transfers ownership of, or rights to use, goods or services”. According to Guo and Hu (2014) EC is a “new business model in the world; it has triggered a major change in the mode of production of the whole world” and further denotes EC as “a new economic industry attracts that can break the boundaries of time and space, reduce transaction costs, expand two-way communication, the most greatly reduce product inventory, promoted the innovation of business mode”.

Li, Frederick and Gereffi (2019) states that Apparel e-commerce is not limited to online buying and selling compared to physical stores, but in addition it also includes the production, pre-sales and after-sales activities along the supply chain system. E-commerce encompasses the technology to carry out the entire range of business with electronic procedures and tools for information and communication (Li, Frederick and Gereffi 2019).

From the EC definitions it is important to note that fashion SMMEs usually focus on three business elements namely i) production process, ii) customer-aimed process and iii) internal management (Sheikh and Basti 2015) as discussed :

- Business elements of ecommerce .The production processes are the electronic links between the fashion SMMEs with their suppliers, distributors or agents and this also includes the procurement, ordering and refurbishment of stocks; payment processing; electronic links with other company's; and production control processes (Andam 2014).The 4<sup>th</sup> industrial revolution provides systems that process the facilitation of relevant information at every stage of the manufacturing process such as units produced per time unit (World Economic Forum 2016).The information available in real time from the production processes, to fashion SMMEs makes the manufacturing industry part of the information industry and it is relevant in the digital age for speed and quick decision making (World Economic Forum 2016).
- Customer-aimed processes, include fashion SMMEs creating online relationships with the customers, through marketing and promotional efforts (Andam 2014) and some of the good examples are the social media platforms such as Facebook, Instagram. In South Africa 38% of the population are millennials , and this population is well-versed with cell phones, internet and the latest technologies such that technology is key for fashion SMMEs to reach this target group (Moavenzadeh 2015; Mbumbwa and Chigada 2018).
- The third business element is internal management. These are internal systems that support the in-house activities of fashion SMMEs, which include training, employee services, recruiting and internal communication. The electronic systems enhance information flow between production and sales productivity. The workgroup communication channels enhance

teamwork motivating working towards a common goal of the company (Andam 2014).

- EC can be summarised as the exchange of electronic mediated information within a company, and communication of a company with its external stakeholders (Sheikh and Basti 2015). Fashion businesses are labour intensive, and fall under the manufacturing industry (Li, Frederick and Gereffi 2019) that accounts for the second largest job creator in South Africa (Charles 2019). It is a sector with low entry barriers, thus easy way for employment creation. Thus through the adoption of EC, fashion SMMEs can upgrade their value chain (Li, Frederick and Gereffi 2019) due to the unique characteristics of EC and these characteristics sets EC apart from other innovations.

### 2.2.2 Unique characteristics of ecommerce technology

Laudon and Traver (2017) describe EC as a technology that has eight unique characteristics, as depicted in Figure 2.1. Previously there were innovations such as data interchange (EDI), radio frequency identification (RFID) and Enterprise resource planning (ERP) systems (Lyytinen and Damsgaard 2001; Alrousan 2015).

**Figure 2-1: Unique featurer of e-commerce innovation**



Source: Laudon and Traver (2017)

- ***Interactivity***

Laudon and Traver (2017) describe interactivity as a two-way communication between fashion SMMEs and customers. Previous innovations such as television prohibited businesses conversing with customers and getting feedback from multiple customers which one major positive characteristic of ecommerce. For instance, fashion SMMEs can engage in a conversation with the customer through social media features such as share, like, comment and react. Take the case of Mr Price website that has linked its website to fashion influencers Instagram posts, where they use the posts to advertise the various merchandise in the store.

In addition, Mr Price also encourages customers to tag the Mr Price Instagram page with their favourite looks from the store, thus there is interaction between the company and its clients. Fashion SMMEs can interact with their clients through websites functionality, for example a clothing item can have different angles and the images can be zoomed or rotated (Mr Price 2019b). These functionalities interact with the customers and offer added experience, and value to the online shopping as if the fashion SMME is having a face-to-face experience with the customer (Laudon and Traver 2017).

- ***Richness***

Ecommerce richness allows fashion SMMEs offer more information about their products to customers (Laudon and Traver 2017). With previous innovations such as television and radio there was a trade-off between richness and reach due to high advertising costs. Fashion SMMEs can now offer more to the customers through ecommerce as they can have a video call, chat online, and have a video to illustrate the product such that businesses can sell complex goods to a larger market as if it's face to face communication (Laudon and Traver 2017).

One of the examples is the Foschini group website that has integrated its various fashion brands such that the customer can choose if they want to shop at Foschini, Markham, EXACT, Total , Fix , Donna (Foschini 2019). Also Truworhts.co.za advertises the looks that the Idols participants wear during the show on their website.

- ***Ubiquity***

Technology is available just about everywhere, always. The smartphone is like a mini-computer that allows customers to purchase at their own convenience even while pursuing other engagements(Laudon and Traver 2017). The smartphone thereby provides incentive for SMMEs to own an online store amid the high rental costs.

- ***Global reach***

The global reach expands the horizons of the business, beyond the city or country in which the business is located, such that fashion SMMEs can market and sell their products all over the world and geographical boundaries are of no effect to the business.

The ecommerce gives business access to the country's target audience that was previously not accessible in the previous technologies like television and radio. The study by Laudon and Traver (2017) posited that online market has approximately 3.3 billion in 2016.

- ***Universal standards***

The technical standards are the same all over the world. While entry costs are low; the businesses pay commission to bring their businesses to the market. The effort of searching for products and finding content is the same (Laudon and Traver 2017).

- ***Personalisation and customisation***

Laudon and Traver (2017) denote that due to customer profiles and online history, fashion SMMEs can make personalised marketing messages for individual customers. The business can message or email customers with their name, interests and previous online purchases. The products can also be adjusted to suit the particular needs of the customer with only a few clicks by the customer (Laudon and Traver 2017).

- ***Information density***

Ecommerce increases the amount of information available in the marketplace for both fashion SMMEs and customers.

The ecommerce members can get accurate information in a short space of time. However; higher quality information becomes more expensive. There is ease of price transparency where customers can obtain information from multiple sellers in a short space of time. They are sites available compare prices such as Google Shopping, Pronto.com. Fashion SMMEs can capitalise on creating different market segments thereby price differentiating the products like how Foschini group has done it on Foschini.co.za. The niche products can be easily sold by reaching the intended customers globally (Laudon and Traver 2017).

- ***Social innovation***

Ecommerce social networks are the backbone of B2C ecommerce, as it strengthens the social relations through creation and sharing of content, which was similar to word of mouth before the innovation. Mass media was previously through magazines and newspapers and it was from one printing media to many people. Now customers have a sphere of influence in which they can share their preferences or latest clothing trends. Ecommerce has made customers co-marketers or advertisers of their products, and they have a voice that can support the business activities (Laudon and Traver 2017; Biggs, Chande, Chen, Matthews, Mercier, Wang and Zou 2018).



## 2.3 Ecommerce models

Heimo, Mäkilä, Korkalainen, Viinikkala and Lehtonen (2016) posited ecommerce models as online strategies available for fashion SMMEs to generate income. Ecommerce models also provide a technological structure for an organization and ensures that fashion SMMEs differentiate themselves from other fashion SMMEs for competitiveness and profitability (Smith 2018). There are many forms of ecommerce models available that can be utilised by businesses as depicted by the Table 2.1.

**Table 2-1: Ecommerce Models**

	<b>Business</b>	<b>Consumer</b>	<b>Government</b>	<b>Machine</b>	<b>Mobile</b>
<b>Business</b>	<b>B2B</b>	<b>B2C</b>	<b>B2G</b>		
<b>Consumer</b>	<b>C2B</b>	<b>C2C</b>	<b>C2G</b>		
<b>Government</b>	<b>G2B</b>	<b>G2C</b>	<b>G2G</b>		
<b>Machine</b>				<b>M2M</b>	
<b>Mobile</b>					<b>M-commerce</b>

Source: Adapted from Sheikh and Basti (2015)

Table 2.1 is further explained below:

- B2B is ecommerce where one business sells to another business and is one of the largest forms of ecommerce,
- B2C is when businesses sell directly to consumers,
- C2C is when customers sell to other customers, consumer prepares the product for the market, finds the market to display the product which offers the catalogue, search engine, and logistics series to deliver the product to the other customer,
- G2B is when the government buy or sell to businesses, this includes the tender processes for SMME and BEE,

- G2C its when government directly offer services or products to the ordinary citizens,
- G2G is when the government does business with other government departments or other government bodies in other countries
- M2M is the communication of devices with each other using an internet connection.
- M-commerce is conducting business transactions through use of wireless mobile devices such that customers can conduct online transactions with a few taps on their devices anywhere and anytime.

(Raaju 2015; Laudon and Traver 2017)

The ecommerce models are diverse as depicted in Table 2.1; the researcher focused on Business to Business (B2B) and Business to Consumer (B2C) since they are the prominent ecommerce models applicable to fashion SMMEs globally.

### **2.3.1 Business to business (B2B)**

Business to business is an internet technology that allows SMMEs to conduct electronic business both internally and externally with other businesses (Ghobakhloo and Tang 2015). B2B allows for Fashion SMMEs to research and develop fashion trends; create business networks that facilitate the multi-labour intensive processes required to meet the short product life cycles and seasonal trends with speed and efficiency, while involving logistics providers for delivery of the garments in time (Fernie and Azuma 2004 ; Kurnia, Choudrie, Mahbubur and Alzougool 2015). B2B is about fashion SMMEs which want to sell their products and services directly to other businesses (Kumar and Raheja 2012).

B2B supports business partnerships that include local and international outsourcing of fabric and trims, fashion production processes and labour activities to CMTs, offshore activities, joint ventures, franchising, private and public sector alliances to name a few (Ndubisi and Nataraajan 2016).

B2B enhances the businesses of the SMME by giving them competitive advantages and fashion SMMEs are able to compete with large enterprises in

international markets (Smith 2018). The global trends when adopted are key for ecommerce growth and companies can benefit from economies of scale from B2B investments (Smith 2018).

Fashion SMMEs use B2B tools for communication and collaboration internally amongst employees, thus building strong teams that work with speed and efficiency in servicing the market and creating added value to the products (Kumar and Raheja 2012; Elbeltagi, Hamad, Moizer, and Abou-Shouk 2016).

#### 2.3.1.1 Types of B2B Models

Types of B2B models can be referred to as e-marketplaces. These are online-based systems that allow businesses to exchange information on products and services and transact with other businesses. They act as intermediaries in the B2B ecommerce model (Dai and Kauffman 2001; Thitimajshima, Esichaikul and Krairit 2015).

The B2B e-marketplaces benefit fashion SMMEs as they improve the efficiency within the industry.

Secondly, it creates incentives for fashion SMMEs to adopt ecommerce as market fragmentation is eliminated and SMMEs have a wider market to source goods at low prices (Thitimajshima, Esichaikul and Krairit 2015).

There are three main types of B2B e-marketplaces, namely public, consortium and private e-marketplaces (Thitimajshima, Esichaikul and Krairit 2015). According to Wang, Mao and Archer (2012), public e-markets are independently run businesses by third-parties, while consortium is an e-marketplace formed by a group of major industry players, and private e-marketplaces are run and owned by a single leading player in an industry to ease their business activities of buying and selling. Fashion designers can benefit immensely from public e-markets and through the formation of industry consortiums. The three types of B2B e-market places are discussed:

- ***Public e-market places***

Under public market places there are three business models namely e-distributor, e-procurement and exchanges. E-distributor represents an online retail store or a wholesale, while e-procurement is an online store that serves a specific industry or niche market. Lastly, exchanges are online sites with a large pool of buyers and sellers and owners make money through commission from sales made from the site.

- ***E-Distributor***

It is an online version of a retail or wholesale store. It is a supplier oriented marketplace with many catalogues of suppliers in one place, and the companies can sell their products and services directly to individual businesses (Elnaga and Shammari 2016). E-distributor is one company serving many customers (suppliers or manufacturers) and they offer a variety of products and services. It is deemed a 'one-stop shopping site' because a single-company will have an online version of retail and wholesale stores and SMMEs can select several products without searching for a different site (Dai and Kauffman 2001; Laudon and Traver 2010) for example Grainger.com.

- ***E-Procurement***

These are custom-built sites created to serve a specific industry or niche market. The e-procurement company's offer SMME or businesses; services of setting up mini-digital markets and offer an online platform for setting up product catalogues, buying and selling products including the policies, shipping information, and processes to manage the transactions up to big purchases (Laudon and Traver 2010). The buyers from one SMME can put an offer, bid for products or services and make purchases (Kumar and Raheja 2012). Since the e-procurement companies offer value chain management services, they make money through transaction fees and yearly licensing fees such as ariba.com (Laudon and Traver 2010).

The more companies that use the supply and sourcing tools, the cheaper it is for companies due to economies of scale. Using e-procurement services is cheaper

for SMMEs than building their supply chain management system as they save development costs, upgrading costs as well as upkeep costs and related transaction costs from the bank or other outsourced services for the running of the site (Laudon and Traver 2010).

- ***Exchanges***

According to Laudon and Traver (2010) exchanges are online marketplaces where hundreds of suppliers meet and transact with a smaller number of very large commercial buyers (Dai and Kauffman 2001; Laudon and Traver 2010). The owners of exchanges make revenue from commission on the transaction conducted by the suppliers and buyers. This kind of business usually serves a single vertical market such as steel, fabric and accessories.

The B2B exchanges benefit the buyers by providing information on the latest prices, suppliers and new product offerings, while suppliers have a large market for selling its products (Dai and Kauffman 2001).

The simplicity, speed, and volume of transactions are referred to as market liquidity. The other benefits of exchanges are that they make it easy to identify suppliers, buyers and partners to conduct business with and this can help lower costs of inventory as the products are sold at a faster rate. However, there is a limitation regarding price competition for suppliers leading to low priced product offerings (Laudon and Traver 2010).

- ***Industry Consortia***

This is when companies combine to achieve a common purpose. There are two types of consortia suited for the fashion industry namely, buyer consortiums and supplier consortiums. The buyer consortium is when a large group of Fashion SMMEs collaborate, thereby increasing their buying power which will force price drops for the required products or they can earn discounted prices, which is especially useful in fabric buying (Kalakota and Robinson 2000).

Another type of consortium is supplier-led where a few industries of companies aggregate leading to powerful market power, this kind of consortium succeeds

through offering differentiated products and engaging, with key suppliers and supplying quality products and value-added services (Kalakota and Robinson 2000).

The supplier led consortium can be a vertical market that serves a specific industry. The vertical markets supply SMMEs with specific products and services in their industry, while horizontal marketplaces supply companies in a different industry with a particular type of product or service (Laudon and Traver 2010). Fashion SMMEs can benefit from supplier led consortiums because the businesses are financially stable companies (Laudon and Traver 2010).

- ***Private industrial networks***

These private trading exchanges constitute about 75% of the expenditure incurred by large companies (Laudon and Traver 2017). The private industrial network is the digital network between companies that help with communication between companies conducting business together for example, Wal-Mart has a private network where customers can monitor the status of their products, sales records, shipment status and inventory levels (Laudon and Traver 2010).

### **2.3.2 Business to Consumer (B2C)**

Business to consumer ecommerce is an online technology used by businesses to sell their fashion products, information or service delivery to individual customers (Drigas and Leliopoulos 2013). B2C ecommerce allows businesses to develop relationships with customers, by engaging with them on their latest collections and fashion designers get feedback on product offerings through response rates. According to Guzzo, Ferri and Grifoni (2016) customers are favouring online buying due to benefits like it is convenient, saves time and travelling costs.

The impact is that fashion entrepreneurs are gradually being replaced by fashion Netpreneurs as businesses need to have an online presence. There are different types of B2C that fashion SMMEs can incorporate into their businesses to target

their customers and the different types of B2C models can be referred to as B2C models.

#### 2.3.2.1 Types of B2C Models

Günzel and Holm (2013) undeniably illustrate B2C models as online business roles and strategies used by the fashion SMME for their targeted customers. In fact, Foss and Saebi (2017) emphasised that a well-organised business model identifies with the target market, the value of the network, a value proposition, and a revenue strategy. Fashion designers can adopt multiple B2C models depending on the availability of resources and the fashion SMME objectives. Table 2.2 illustrates the different B2C models available in the market and the table also includes online South Africa business examples linked or in support of ecommerce fashion.

**Table 2-2: Types of B2C Models**

Types of B2C Models				
TYPE OF BUSINESS MODEL	VARIATIONS	FASHION EXAMPLES IN SOUTH AFRICA.	DESCRIPTION	REVENUE MODEL
E-tailer	Virtual merchant	Zando.co.za, Spree.co.za, Next South Africa, and Takelot.com	Like a retail store but it is purely online store. Available 24hours and very convenient for customers.	Sales of goods
	Bricks and clicks	MRP, H&M, Thespace, Amandalaidcherry, DavidTlale, Kingsleyheath, Cotton On	The companies own both online store and a physical store.	Sales of goods
	Catalogue merchant	Makro, Woolworths, Netflorist	It's an online version of direct mail catalog, which sells personal products in different categories.	Sales of goods



	Manufacturer direct	Speedzipper, Ugfabrics, Wastecentre, Gembutton, Mavprint	The manufacturer uses an online channel to sell directly to customer, they also have a physical store.	Sale of goods
<b>Community providers</b>		Facebook LinkedIn Twitter Pinterest Instagram Google+	Sites were individuals with particular interests, hobbies, common experiences, or social networks can come together and “meet” online	Advertising, subscription, affiliate referral fees
<b>Content providers</b>		Elle, Peoplemagazine, Visi, News24, Mzansimagic, Safashionweek, Forbesafrica	Offers customers newspapers, magazines, books, film, television, music, games, and other forms of online content.	Advertising, subscription fees, sales of digital goods
<b>Portal</b>	Horizontal/ General	Yahoo AOL MSN Facebook	These companies offer fashion SMMEs a comprehensive package that includes content, emails, chatting platform, news and social networking platforms, video streaming, downloading content etc as	Advertising, subscription fees, transaction fees

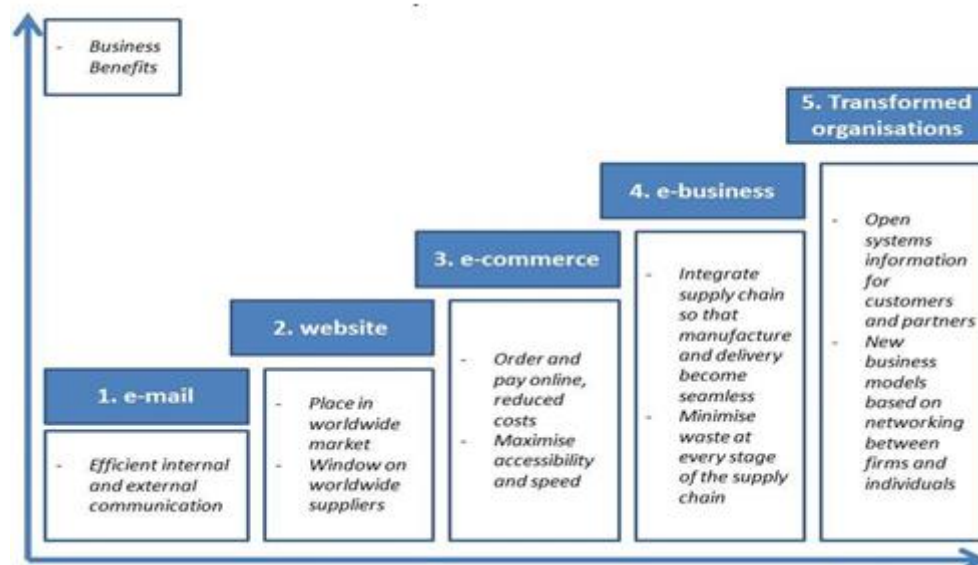
			its objective is being to be user's home base	
	Vortal	WGSN, Trendation, Dtelepathy, Trendfriend, Urstyle, Lookbook	Offers fashion online services and products to the specialized marketplace.	Advertising, subscription fees, transaction fees
<b>Market Creator</b>		Bid/buy, Loot, EBay, Priceline.com, and Alibaba.	Businesses create online marketplaces to allow interaction between buyers and sellers.	Transaction fees
<b>Service provider</b>		Fashion bloggers and fashion Stylists	Business that offers services as a product of the business.	Sales of services

Source: Adapted from Laudon and Traver (2017)

## 2.4 Developmental adoption stage of e-commerce

Elbeltagi *et al.* (2016) posit that for a business to adopt ecommerce it has to go through certain stages. The progression of the ecommerce adoption is further explained by five stages in the ecommerce developmental depicted in Figure 2.2. The adoption stages include both the Business to Business (B2B) and Business to Consumer (B2C) of the fashion SMME.

**Figure 2-2: Stages of e-commerce adoption**



Source: Adapted from Elnaga and Shammari (2016)

According to Figure 2.2, the first stage is the establishment of internal and external communications through email.

Elbeltagi *et al.* (2016) stated the second stage as the publishing stage where a company focuses on creating an online presence. At this stage the fashion SMME creates an online presence, making available the company's products, services, and company's address. The website tends to be simple and static providing the necessary information about the company but customers cannot purchase. Various forms can be used for this stage which includes a website or a blog or social media (Botha, Bothma and Geldenhuys 2004: 98; Elbeltagi *et al.* 2016).

The third stage is where the website is active and customers can browse products, place orders, and make payments. The website is dynamic allowing for two-way communication, where customers give feedback through comments and recommendations and the fashion SMMEs can improve products and services through customer's requests. The website will have all the e-commerce system features namely database, security features, and payment gateway with the different payment options available to customers (Elbeltagi *et al.* 2016).

The fourth stage is where the company integrates its website into the back-end systems. The website product interface, for example, is linked to the inventory management system, instant messaging for customer queries is added onto the website. The integration happens progressively, and at this stage most but not all systems are integrated (Elbeltagi *et al.* 2016).

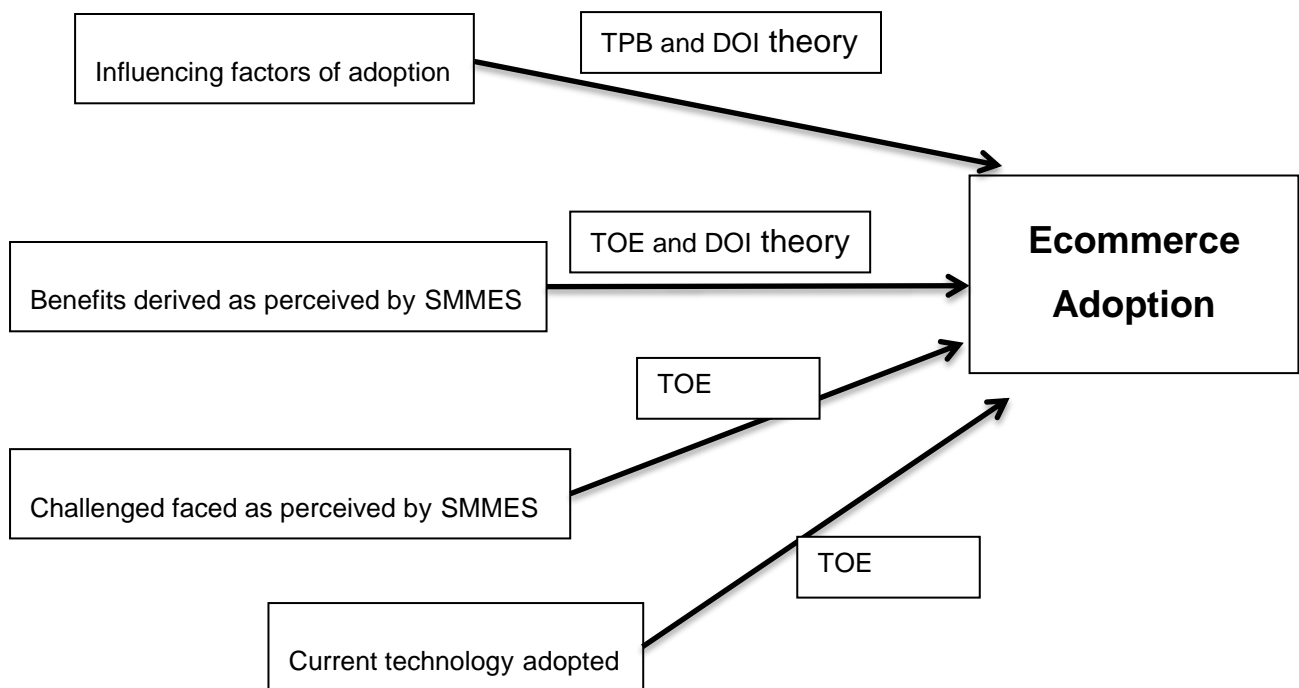
The fifth stage is the last stage where the company is fully integrated with its partners, buyers, suppliers across all the operations (Botha, Bothma and Geldenhuys 2004: 98). Thus it's called a fully integrated e-business company (Elbeltagi *et al.* 2016).

The extent of e-commerce adoption will differ from one fashion SMME to another. This is because influencing factors are different for each fashion SMME. However, the next section highlights the advantages that fashion SMMEs can enjoy from e-commerce adoption. Due to the 4<sup>th</sup> industrial revolution, the wave of entrepreneurs is transitioning to Netpreneurs, where fashion SMMEs need an online presence for survival and growth (Razak and Pital 2016).

## **2.5 Conceptual framework**

This subsection explains the link between the independent variables, theories, and the dependent variable. It further illustrates the rationale of using each theory or a combination thereof to the objectives of the study. This section also highlights the unique contributions of the study.

**Figure 2-3: Conceptual framework**



Source Adopted: Generated by the researcher

From the conceptual framework, we have four independent variables namely the *influencing factors*, *benefits derived as perceived by SMMES*, *challenges faced as perceived by SMMES*, and *current technology adopted* that feed the dependent variable, "*Ecommerce adoption*". Three theories were utilised in the study namely Theory of Planned Behaviour (TPB), Diffusion of Innovation (DOI), and Technology Organisation-Environment Model (TOE). According to Fig 2.3, each of the independent variables links to the study with one or more of the theories as depicted on the diagram.

- ***Influencing factors of adoption***

Influencing factors are the motivations behind the adoption. This construct deals with the behavioural intention of the user in the adoption of technology and the social factors associated.

The TPB theory was selected for this construct because it rationalises that influence is a result of behaviour embarked on after one considers the desired intention, attitude and perceived behaviour (Kiriakidis 2015; Wang 2016b). According to Kiriakidis (2015) intention is influenced by the environment both internal and external hence we supported this notion by combining the TPB with DOI theory. The DOI theory emphasizes the social system of innovators such as the early adopters and late adopters etc. as strong influencers in the value placed on the new technology. Hence the social system bears a strong factor in influencing adoption because it is the community in which the fashion SMME conducts business such that it can shape the perception of the fashion SMME (Banjara 2016).

- ***Benefits derived as perceived by SMMEs***

These are the advantages that will be enjoyed by the fashion SMME from adoption. The independent variable *benefits derived as perceived by SMME* were linked to the dependent variable *Ecommerce adoption* through two theories namely DOI and TOE theory.

According to the DOI, there are five different groups of people and each group has certain advantages. Benefits derived come from the social system that the fashion SMME is interacting with. For example, the fashion SMME interacts with the banking sector which is advanced in their digitalisation which in turn the SMME can assess the advantages of the convenience of bank digitalisation to its business (Towett 2019). Another example is if the government has shifted to online services the SMME that provides services to the government can weigh the advantages of having online systems to service its client, the government.

The benefits are considered from the TOE theory perspective, where the SMME weighs the compatibility level of the technology to the SMME values, culture, and its processes. Moreover, the SMME can evaluate the advantages of the current technologies being utilised in the business compared to the new technology (Brand and Huizingh 2008; Choochinprakarn 2016).

- ***Challenges faced as perceived by SMMEs***

The challenges faced by the SMMEs are best assessed using TOE theory because it looks at the internal and external environment. The internal environment includes the organisational size, number of employees, the financial resources, and currently available resources of the company (Choochinprakarn 2016). The management can also assess the challenges brought about by its environment that is, the macroeconomic and from its competitors. This gives the SMME a tool to measure its readiness and associated prohibitions (Ghobakhloo, Sabouri, Hong and Zulkifli 2011).

- ***Current technology adopted***

The TOE theory is important as it considers the core factors of technology from the technology context of the firm. It's ability to have relevant technologies that effectively improve both internal operations and external operations that deal with the customers. The TOE also considers the management readiness, their organisational culture and the environmental contexts (Choochinprakarn 2016). The organisational resources are also considered.

The theoretical framework section explains fully in detail what each theory entails and further clarifies the use of the three theoretical models. An "integrated model" was constructed that combines the three theories while depicting the process of adoption by the fashion SMME.

## **2.5.1 Unique contributions of the study:**

### **2.5.1.1 The integrated theoretical model**

The integrated model diagram combines the three theories, TPB, TOE, and DOI theories. It shows the process of how fashion SMMEs reach technology adoption decisions. The model is unique, yet it caters for start-up fashion SMMEs, emerging fashion SMMEs and the established SMMEs. The three theories are relevant as follows, TPB more applicable to the Start-up and Emerging fashion

SMMEs because their business decisions are individually made. When we explore, the TPB theory is about individual perceptions when deciding however its limitations can be subverted when it is combined with the DOI theory because it caters for the communication stages as well as the social system. TOE is more relevant to Established designers who have different standardised systems and have stakeholders or partners in the business that they must enquire to when deciding. These institutions when planning consider comprehensively the organisational, environmental and technological aspects of the business. And if the TOE is unified with the DOI theory, the management can be able to deduce the different social systems that affect their organisation and can evaluate their decision as the innovation goes through the communication stages to reach adoption decision. The integrated model is under theoretical framework, illustrated in Figure 2.8.

2.5.1.2 Research methodology utilised compared to previous thesis  
on  
2.5.1.3 e-commerce

A mixed method approach will be utilised as it expands and strengthens the research conclusions (Schoonenboom and Johnson 2017). Most studies on ecommerce adoption focused on quantitative research methodology through use of surveys (Ibrahim, Turyakira and Katumba 2018; Ocloo, Xuhua, Akaba, Addai, Brown and Kwofie 2018). This research will make use of a sequential and nested mixed methods study where quantitative data was the main form of data enriched by qualitative data (Graff 2016). The strength of mixed method is that the qualitative research affords further insight into the important factors that the researcher might have overlooked while conducting quantitative research (Graff 2016). The use of mixed method provides a unique contribution to the ecommerce studies and a heightened validated knowledge thus contributing to the body of knowledge.



## **2.6 Theoretical framework**

### **2.6.1 Introduction**

This research adopted three theoretical frameworks to guide in the quest of identifying possible determinants of e-commerce adoption. Cragg and King (1993) outlined e-commerce determinants as the influencing factors for motivating or inhibiting the adoption of e-commerce. The study explored the theories that influence the adoption of ecommerce. These frameworks are i) Theory of Planned Behaviour (TPB), ii) Diffusion of Innovation (DOI) and iii) Technology Organisation-Environment Model (TOE). The following sections provide a comprehensive study of these frameworks, and examples from other studies. Moreover, the discussion highlights the relevance of the theories concerning the study.

### **2.6.2 Theory of planned behaviour**

This theory was proposed by Icek Ajzen to rationalise an individual's intention to engage in certain behaviour at a specific place and time (Alomary and Woollard 2015). The Theory of Planned Behaviour (TPB) was developed in 1980, but it was introduced in 1985 after having been derived from the Theory of Reasoned Action. The Theory of Reasoned Action explains that the intention of the individual or company is the main determinant of specific actions performed. Lin and Chen (2011) stated that the magnitude of action is based on the magnitude of the intention; such that the stronger the intention, the greater the chances of acting out the behaviour and the weaker the intention; the less likely to engage in the behaviour (Kiriakidis 2015).

However, the TPB associates beliefs and behaviour in that more factors influence action besides intention (Wang 2016b). Kiriakidis (2015) argued that behaviour is not based only on the fashion SMME's intention or will, but there are other contributing influences such as internal and external factors that affect the extent of the accomplishment. When the fashion SMME has a very high degree of control over the behaviour, intention alone is a sufficient predictor for the fashion SMME to take action to adopt ecommerce (Ajzen 1991; Kautonen, van Gelderen and Fink

2015). Nevertheless, according to Park and Kang (2014), the TPB theory uses three constructs to determine the intention of adopting ecommerce namely attitude, subjective norm, and perceived behavioural control (PBC).

According to TPB, the intention is assumed to reproduce the motivational factors that influence behaviour (Liao, Palvia and Chen 2009). Wang (2016b) described behaviour as fashion SMME's overall evaluation of people, objects, event, activities, ideas and environmental factors that can be either positive or negative (Asiri 2012). Whereas, attitude is a formulation of beliefs based on the likely outcome of adopting ecommerce and the value of importance placed on that outcome by the fashion SMME(Kiriakidis 2015).

Subjective norm is the fashion SMMEs estimate of the social pressure to perform or not and the negative and positive judgments about the beliefs. When customers or businesses in the supply chain favour ecommerce, the intention to adopt ecommerce by fashion SMMEs will be higher than it would otherwise be (Asiri 2012). Also, the degree of the subjective norm is dependent on the fashion SMME's willingness to adhere to the group's belief system (Asiri 2012).

Perceived behavioural control (PBC) can be explained as the degree of confidence the fashion SMME has in its ability to understand and successfully use ecommerce in its business, thereby influencing behaviour for adoption or as the easiness or drawbacks of implementing ecommerce due experiences in previous innovations as well as challenges. PBC is based on the belief that the fashion SMME makes a judgment whether adoption of ecommerce will support or hinder the business objectives and its growth thereof (Leue and Jung 2014; Wang 2016b). The TPB suggests that behaviour is directly related to intention. The common findings in the TPB is that the higher the attitude and subjective norms, the greater the rate of perceived behaviour which in turn increases the rate of motivation (Kiriakidis 2015).

Shemi (2013) in her findings based in Botswana, agreed with the TPB theory yet the findings showed that attitude was the major factor compared to the subjective

norm and perceived behaviour. The study found that the decision to adopt ecommerce in Botswana using the TPB provided a better insight into the usage behaviour and intention for IT adoption (Shemi 2013).

The study by Gangwal and Bansal (2016) on m-commerce adoption in India revealed that Mobile commerce was influenced by attitude. The study proved that attitude is a strong influencer of behavioural intentions. The TPB theory showed that trust, perceived usefulness, perceived ease of use and perceived enjoyment influenced the adoption of m-commerce. The study revealed perceived usefulness was the strongest predictor of the attitude towards the m-commerce. The study revealed that the greater the use of innovation in everyday life, the greater the attitude for adoption.

The second determinant of attitude for m-commerce was trust, where market vendors need to invest in marketing to gain the trust of customers. The third determinant of attitude from the findings was perceived ease of use showing that customers also prefer m-commerce applications with easy to use services and require little effort to learn. The least determinant of attitude was perceived enjoyment because it seemed that a few people enjoy using m-commerce services (Gangwal and Bansal 2016).

Although the theory of TPB defines the three conceptually independent determinants of intention and the first determinant being attitude, the research based on TRA and TPB confirmed that attitude reliably predicts intentions and behavior even without considering underlying factors (Beck and Ajzen 1991; Lin and Chen 2011). However, Kiriakidis (2015) argued that according to Fishbein, attitude can be a learned way of acting in a certain way to events either favourably or unfavourably. Kiriakidis (2015) viewed attitude as being based on the TPB definition as an inaccurate measure of predicting behaviour because different individuals might hold the same attitude although the extent of them favouring or not favouring a technology might be different. The author argued that attitude cannot be measured based on a uni-dimensional measure because behaviour

might either be influenced by intention supported by the punishment or rewards accrued by the person despite the attitude (Kiriakidis 2015).

The TPB theory highlights the mindset of an adopter when factoring out an innovation. In this study most SMMEs have been formed by one or few individuals and the insight of TPB helps us delve deeper in what influences the fashion SMME to adopt ecommerce.

### **2.6.3 Rogers' Diffusion of Innovation (DOI) theory**

According to Simin and Janković (2014), the Rogers' Diffusion of Innovation (DOI) theory was initially developed in 1962 by Everett Rogers, a professor of rural sociology. Rogers amalgamated over 508 diffusion studies to produce the theory for the adoption of innovations that he used among businesses as well as individuals to describe the process of change. Lewis (2016) described DOI as a theory that predicts the behaviour of a social group to adopt innovation over a period. The theory predicts behaviour as a process that involves personal traits, social relations, time and characteristics of innovation (Simin and Janković 2014). Rogers' DOI theory implies that an adopter's decision about innovation is not an immediate act, but a decision-making process that occurs through a series of communication channels over a period. The DOI theory seeks to explain how, why and the rate of new ideas and technology are spread through the society.

Alrousan (2015) identified four main elements relevant to the diffusion of Rogers' model that consists of Innovation, Communication Channels, Time and Social System.

#### **1. Innovation**

The first element of DOI theory is 'Innovation<sup>1</sup>', which is defined as a new idea. Based on the study, the innovation under investigation is ecommerce, and past innovations include televisions (TV), electronic data interchange (EDI), radio

frequency identification (RFID) ,ERP system, customer relationship management (CRM) and knowledge management E-business(Lyytinen and Damsgaard 2001; Alrousan 2015).

## **2. Communication channels**

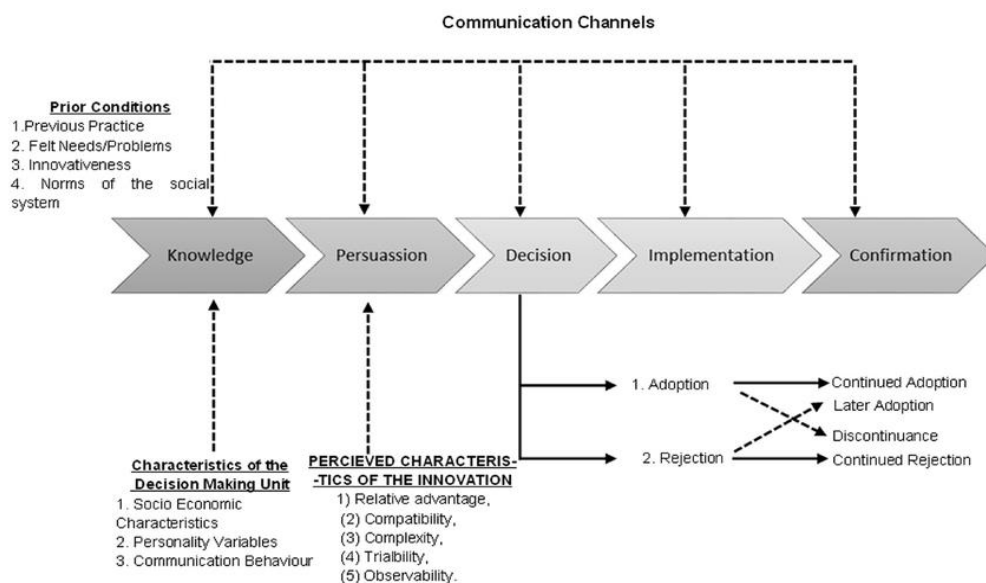
The second element of DOI is communication channels. Communication channels are processes where the people involved generate and distribute information and draw a generalised understanding from it. The sharing of information can be deemed as diffusion which is a special way of spreading new ideas or innovations (Banjara 2016). Diffusion can further illustrate the rate of acceptance of the innovation as it spreads within a society or social system as depicted in Fig 2.4 below (Banjara 2016).

The innovation value as perceived by members of a social system influence time taken and extend of adoption. Social system is the “set of interrelated units engaged in joint problem solving to accomplish a common goal” (Banjara 2016). Alrousan (2015) mentions that mass media such as television, radios, mobile phones, the internet, and interpersonal communications are the main forms of sharing information which in turn influence adoption of an innovation within a social system. Yet for ecommerce, major factors that influence adoption are growth of internet penetration, mobile penetration, and affordability of data (ICASA 2019).

In South Africa, smartphones have become the main communication tool in the homes, due to affordable online interpersonal communication through the use of communication applications like WhatsApp, Snapchat, Imo, Facebook Messenger (ICASA 2019). ICASA (2019) describes smartphones as a mobile phone with advanced features for Wi-Fi and internet connectivity, web browsing capabilities and the ability to use applications. The affordable communication has led to faster adoption of smartphones, and the millennials use mobile applications for social interaction such that this speeds the rate of adoption among fashion SMMEs as they attempt to sell their products to various target groups (ICASA 2019).

According to Lyytinen and Damsgaard (2001) the structure of the social system influences communication channels. The social structure includes the management support, availability of agents for change and the frequency of the media communications (Lyytinen and Damsgaard 2001). For example, a Nigerian company, Jumia is an online company that was launched in 2012, it speeded the ecommerce rate of adoption through the use of agents called the J-Force. Jumia commissioned agents (J- Force) extended the online services by assisting the community members who lacked online access to place orders on the Jumia site and build confidence and training of those who were not comfortable ordering online (Badran 2018). Jumia, has grown and successfully operates in 23 African countries, and focuses on creating a platform for SMMEs in Africa to trade. It is considered the Amazon of Africa (Kitukutha and Oláh 2018).

**Figure 2-4 :Innovation- decision Process**



Source: Adapted from Wani and Ali (2015)

### 3. Time

The third element of the DOI is time. The time element consists of several phases as illustrated in Figure 2.4 namely knowledge, persuasion, decision, implementation, and confirmation phase.

- ***Knowledge phase***

The first stage is called the knowledge phase. The knowledge arises when the fashion SMME acquaints itself with the innovation and learns about it though it might lack information on how it works.

According to Wani and Ali (2015) during the knowledge phases, the idea will not have been evaluated from a scientific vantage point but Rather from individual opinions. After the knowledge phase, the fashion SMME gets persuaded.

- ***Persuasion stage***

This is when the adopter gets interested in the innovation and gathers information on the new technology and makes a decision on benefits to be derived from the utilisation of the innovation which results in either positive or negative attitudes.

Under the persuasion stage, there are five determinants important in the adoption process since they determine the outcome of the decision phase (Ndayizigamiye 2012). The determinants are namely relative advantage, compatibility, trialability, observability, and complexity. Of the five attributes, Mannan and Nordin (2014) suggest that the most relevant ones that help in deciding for adoption are compatibility, relative advantage, and ease of use.

Relative advantage is the benefits accrued from the innovation compared to the cost of acquiring the innovation. These include the lowered costs, prestige, time-saving benefits and profitability to the fashion SMME (Ndayizigamiye 2012). Compatibility is how well ecommerce fits with the fashion SMME's immediate resources and values(Datta 2011).

Simplicity or complexity is the scope which fashion SMMEs believe ecommerce as an easy innovation for both use and understanding.

Observability is the range which an innovation is visible and communicable to fashion SMMEs and trialability is the ability of fashion SMMEs to experiment with innovation and evaluate its benefits (Yuksel 2015). All of the attributes stated

above persuade the adopter to be certain about all the facts about the innovation and the results influence the response to the next stage of the Innovation-Decision Process.

The fashion SMME after evaluation of the persuasion factors moves to the third stage, which is the decision phase.

- ***Decision phase***

At this stage the fashion SMME decides to adopt or reject the innovation. If the fashion SMME decides on adoption, then the process continues to the fourth stage which will be the implementation stage.

- ***Implementation phase***

This is where fashion SMMEs put innovation into used; the last stage is confirmation stage.

- ***Confirmation stage***

This is where the adopter evaluates the innovation and decides either to continue employing it or to stop using the innovation (Ndayizigamiye 2012; Alrousan 2015).

#### **4. Social system**

The social system is the last element in the DOI theory. The social system is an important element, since the DOI takes place in the social context and the influence of the individuals that interact and live together can increase the rate of adoption of an innovation. The fashion SMME's social system includes the community of suppliers and customers that the fashion SMME services such as the Nonprofit Organizations that support fashion designers like KZN fashion Council, Durban Fashion Fair (DFF), Centre for social entrepreneurship (CSE) and agents of change.

The social system influences adoption by making the individuals aware of the innovation, leading to the further categorization of adopters. The fashion SMMEs



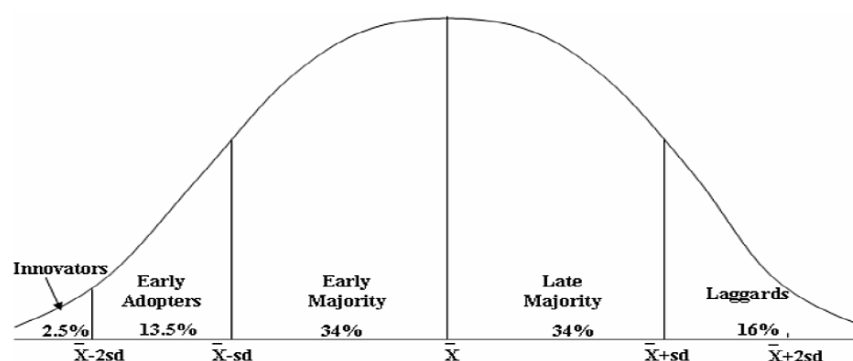
are categorised under the following : innovators, early adopters, early majority, late majority, and laggards (Woodcock 2014; Banjara 2016).

The innovators are adventurous, who enjoy taking challenges, are the initiators who have control of substantial financial resources to absorb possible loss from an unprofitable innovation, have the technical know-how of the innovation and can survive the loss and precarious innovations (Woodcock 2014). The innovators consist of the smallest percentage of the social system, almost only 2.5% (Woodcock 2014).

The early adopters are part of the local social system, representing 13.5% of the population who are the opinion leaders, are looked upon by the community as role models, and are successful in their own right (Woodcock 2014). The early majority are integrated into the social system, very sociable with lots of friends, are ordinary people in the society without a voice and they are cautious when adopting a new idea, they represent 34% (Woodcock 2014).

The late adopters consist of one-third of the members of a system, are susceptible to peer pressure, they focus on things of survival; they are sceptical and very deliberate when adopting an innovation (Woodcock 2014). The laggards are the last people on the adoption line, which are the isolated group who always refer to past activities, very suspicious of anything new and they enjoy being in the comfort zone with limited resources (Woodcock 2014). The adopters are the 16% of the social system.

**Figure 2-5: Diffusion of Innovation Curve**



Source: Adapted from Wani and Ali (2015)

Ndayizigamiye (2012) used the DOI theory, in his research on the determinants of e-commerce adoption on South African SMMEs in the Durban area. The research tested the study using the persuasion variables namely relative advantage, compatibility and complexity. The results revealed that relative advantage and compatibility are the DOI variables that motivated the adoption of e-commerce in Durban (Ndayizigamiye 2012). The Durban SMMEs were motivated by the factors that increased the two-way communication with customers, access to the international community, expansion of customer base and the use of websites to display company information and exchange of information with suppliers on the different platforms that need to be compatible (Ndayizigamiye 2012).

Banjara and Poudel (2016) on their study on the implication of the diffusion model in the process of adoption and practices of organic farming in Nepal, Asia found out that the spread of information affects adoption. The findings showed that the first farmers to be involved in organic farming after being satisfied influenced other farmers to adopt the innovation.

As the early adopters encouraged other farmers, there was an improvement in the economic lifestyle of all the farmers involved. The farmers who faced difficulties

reported the challenges to the relevant authorities leading to government intervention thus it making it an incentive to other farmers to adopt. Banjara and Poudel (2016) unquestionably revealed that the DOI theory is very significant in influencing adoption and their findings revealed the positive influence of a social system and also the power of communication channels in making timely decisions (Banjara and Poudel 2016).

Results from e-Procurement in the South African construction industry revealed that most construction companies were in the early stages of the ecommerce adoption where; majority used emails and websites for their businesses (Ibem and Laryea 2015). The highest factors impacting the adoption of ecommerce in the construction industry were the advantages derived from using the technology namely the speed of transactions, the cost and how easy it is to use the technology. The DOI was affected because the respondents highlighted that the innovation lacked human touch in that it was not interactive and the system responses were not helpful when using the innovation, thus it negatively affected the use of e-procurement innovation as most of the respondents believe in positive feedback or assistance. The barriers faced during adoption were the IT infrastructure, high internet rates, resistance to change due to cultural values of individuals and organization involved and the security factors of ecommerce (Ibem and Laryea 2015).

The negative perceptions affected the spread of the innovation. Ibem and Laryea (2015) suggested that to improve the rate of adoption of e-Procurement the software companies

- Interact on regular basis with the users to offer support and also develop innovative features to meet the human relationship and cultural elements required, moreover have updates on their current systems.
- Embark on aggressive skills and development campaigns, advertising their innovation to construction companies (Ibem and Laryea 2015).

The process of adoption of innovation has been investigated for more than forty years. DOI has been accepted as one of the most popular adoption models in

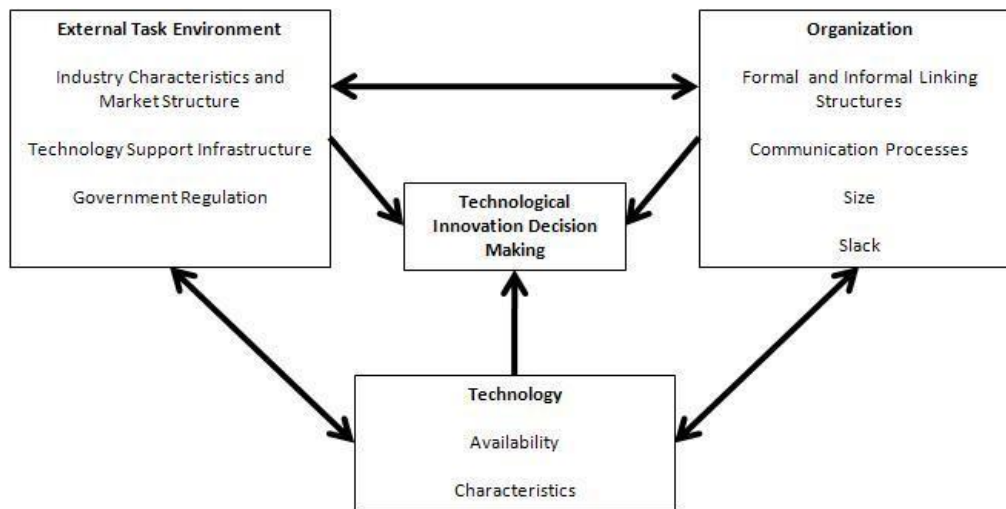
different disciplines(Yuksel 2015). Yuksel (2015) highlights that when an individual or organization as an individual unit comes across an innovation that is when the adoption process starts therefore the DOI is focused on innovation as perceived by the individuals, organizations, clusters, social networks, and even countries (Chiu, Chen and Chen 2017). The individual units are depicted to show also groups that can come up with innovation, take the case of this study, ecommerce. DOI is an important theory that is relevant to this study.

#### **2.6.4 Technology Organisation-Environment Model (TOE)**

The third theory is the Technology Organisation-Environment Model (TOE) framework that was developed by Tornatzky and Fleischer in 1990 to investigate innovation adoption at an organisation level. The TOE framework provides a holistic picture of the factors that influence the adoption of technology. Boonsiritomachai (2014) noted the advantage of the TOE framework is that it compensates on arears overlooked by the DOI theory and it identified a group of variables that are important in the diffusion of innovations. It is the most used theory in the adoption of innovation.

Choochinprakarn (2016) mentioned that decision-makers take into account the role of three components namely technology, organisation and environment when adopting new technology and the implementation decisions thereof. The TOE framework consists of internal and external factors that influence technology adoption. The factors that influence technology adoption are categorised as technological context, organisational context and environmental contexts (Boonsiritomachai 2014).

**Figure 2-6 : Technological, Organisational and Environment Context**



Source: Adapted from Maragia (2016)

## 2.7 Components of TOE

- **Technology context**

Technology context is the current technological practices relevant to fashion SMMEs. These are both internal and external technologies. Internal technologies are the existing technologies used by the company, while external technologies are the available technologies on offer on the market. When deciding on the technological context, the fashion SMME management looks at the relative advantage and compatibility of the technology (Choochinprakarn 2016).

Compatibility is how well ecommerce fits in with the company's culture, values, and existing business processes while, the relative advantage is the degree that an innovation is viewed as being better than the previous innovations such as the benefits and potential value (Brand and Huizingh 2008; Choochinprakarn 2016).

- **Organisational context**

Organisational context is typically referred to as the descriptive measures about the organisation which are the size, human resources, employee

interrelationships, financial resources, organisational hierarchy and managerial structure and the amount of company's available resources (Choochinprakarn 2016). An organisational context considers two aspects namely organisation readiness and top management support.

#### ❖ Organizational readiness

Organizational readiness is in two dimensions namely, the financial and technological readiness. The financial resources is the budget set aside for ecommerce while technological readiness is the technology available and its capacity to be used for the ecommerce (Choochinprakarn 2016). The top management enthusiasm, attitude and close involvement in the adoption and implementation of an innovation can lead to higher and faster technology adoption (Thong 1999; Choochinprakarn 2016).

Ndayizigamiye (2012) advocated that technological resources available within an SMME are important determinants of e-commerce adoption. The current technological resources reveal how ready the fashion SMME is for e-commerce adoption as well as the level of e-commerce adoption. The technological resources of internetworking infrastructures include; networks, processing systems, and facilities. The network refers to the hardware and software that allow for two-way communication between organisations and individuals, for example, the processing units like a till point or a website (Ndayizigamiye 2012).

Aljowaidi (2015) stated the importance of a sufficient budget by an SMME for ecommerce adoption and growth thereof. When technology readiness is backed up by adequate and appropriate financial investment, the adoption of an innovation is easy (Aljowaidi 2015).

Findings by Aljowaidi (2015) on Saudi Arabia SMMEs revealed that successful adoption of an innovation was directly linked to a proper budget for the innovation, which resulted in yielding high returns of adoption compared to other companies that did not plan well financially (Aljowaidi 2015).

When proper organisational resources are in place and backed up by the support of top management, then innovation adoption is made easy. Top management determines the culture of the organisation which is a great force when considering innovation adoption.

❖ Top management support

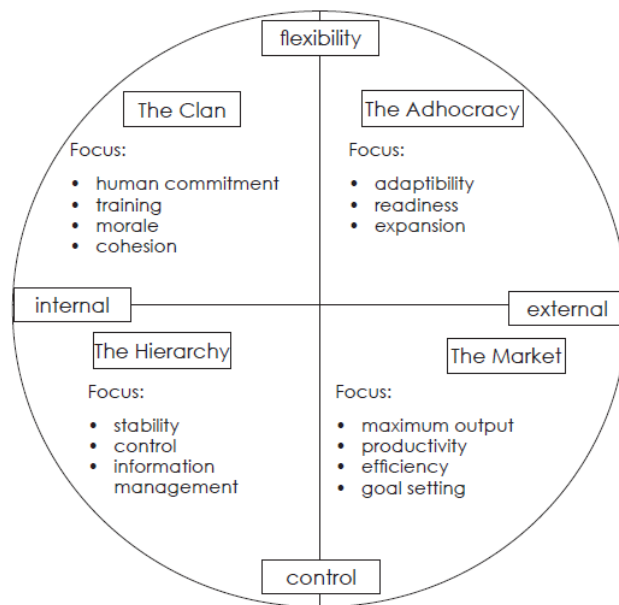
Top management's belief systems are a great influencer in the adoption, for example Mr Price, it established its first online store in 2013 and by 2014 the online store was global and of importance it was the first one in Nigeria. As noted Mr Price adoption was in line with the top management's, vision of the company hence the company adopted ecommerce early on compared to other companies (Anon 2015).

The organisational structure that the top management builds around their business determines the degree of teamwork and can stimulate employees to commit to ecommerce adoption or vice versa(Harinarain, Bornman and Botha 2013).

Harinarain, Bornman and Botha (2013) define culture as a powerful, silent force that influences the behaviour of individuals and groups on how they view things, the intrinsic values and, the thought patterns. The culture of an SMME derives its meaning from usually the founders and the top management which becomes the 'personality' of the organisation.

Harinarain, Bornman and Botha (2013) depict the organizational structure in the four categories namely the clan, the adhocracy, the hierarchy and the market.

**Figure 2-7: Organisational structure**



Source: Adapted from Harinarain, Bornman and Botha (2013)

- The clan

Culture is open to flexibility to accept new ideas and places a high value on workers' morale. The organisation is based on the family value of close relationship and each member plays their part in building the company. The culture builds its members and is customer-focused, and the management allows for the participation of the workers in the decision-making (Harinarain, Bornman and Botha 2013).

- The Adhocracy

This business focuses on adapting to the ever-changing business environment. They can adapt, flexible and it focuses on competitive advantage in the external environment, such that they embrace innovation (Harinarain, Bornman and Botha 2013). The business is focused on innovation and development. Such companies are risk-takers and dedicate their resources to the development of product innovation (Rameezdeen and Gunarathna 2003).

The company values being trendsetters and staying as leading companies in product development (Hooijberg and Petrock 1993). However, this type of culture



is prominent for temporary organisations that focus on accomplishing a specific project and disintegrates thereafter.

- Market culture

This type of organisation focuses on the external environment. The organisation is goal-oriented led by tough and demanding bosses. The organisation focuses on achievement, maximum returns and being recognised in the market. The management provides clear direction, and the employees are rewarded financially for their performance.

- Hierarchy culture

The culture has a structure with standardised rules and procedures and each worker has well-stated duties (Harinarain, Bornman and Botha 2013). All the activities follow a formal procedure that is well documented. The company goals are predictable, and they trade in a stable and efficient business environment (Cameron and Quinn 2011).

- ***Environmental context***

The third aspect of TOE theory is the environmental context which includes the arena in which a company conducts its business structure of the industry, the government policies, macroeconomic environment, and the competitors (Ghobakhloo *et al.* 2011). Ramamurthy and Premkumar (1995) argued that strategies to adopt the innovations in business are of prime importance since it gives business competitive advantage over competitors.

Business is about serving people and satisfying a need or want with the easiest convenience. Relatively, Choochinprakarn (2016) considers competition intensity as a determinant for innovation adoption in an environmental context (Premkumar and Ramamurthy 1995). Guo and Hu (2014) describe ecommerce as important for business model innovation, which is the "innovation" of the enterprise.

The encouragement and support of government creates an incentive or disincentive for innovation adoption (Guo and Hu 2014). Government intervention

and policies, play an extremely important role (Guo and Hu 2014). Ecommerce is a new industry, which is not yet mature and for it to grow and take root, ecommerce needs government rules and regulations and incentives in favour of the adoption of ecommerce by SMMEs (Guo and Hu 2014).

A case study from Pakistan, probed into government support as a determinant of e-commerce adoption, the findings showing that governmental policies and initiatives encouraged e-commerce adoption in SMMEs in Pakistan (Ndayizigamiye 2012). The greater the value derived, from the government incentives and support, the greater the adoption in organisation to adopt e-commerce in Pakistan (Ndayizigamiye 2012).

Additionally, New Zealand according to Van den Berg (2014), the SMME's were influenced by technological and organisational factors and less by environmental factors. The factors identified that had an influence on IT adoption by SMME's were the qualities of the company, competitiveness and organisational structure (Van den Berg 2014).

TOE framework gives a better advantage to the study compared to other technology theories when studying technology use, adoption and the value derived from technology innovation. The TOE emphasises that technology relevancy is key when considering innovation adoption and that organizational readiness (both financial and technology capacity) is a fundamental determinant of innovation adoption which is used by researchers of technology innovation (Tornatzky, Fleischer and Chakrabarti 1990).

In Malaysia (Ahmad, Bakar, Faziharudean and Zaki 2015), Tanzania (Kabanda and Brown 2017) and Ghana (Awiagah, Kang and Lim 2016) the studies revealed similar results that showed that the environmental factors were the strongest determinant of ecommerce adoption in SMMEs followed by organisational factors. For Malaysia, the two most prevalent factors were external factors and perceived compatibility. The environmental factors were government influence and support, competitors' pressure and influence of the players within the same industry.

The second important factor was the perceived compatibility of the existing technology, as this affects the implementation of ecommerce leading to success or failure (Ahmad *et al.* 2015). The Tanzanian SMMEs were facing challenges where they lacked support from the ICT industry (Kabanda and Brown 2017). In Ghana, the managerial attitude and the government policies affected SMME e-commerce adoption (Awiagah, Kang and Lim 2016).

According to Gareeb and Naicker (2015), the results from study which indicated that technological factors were the main influencers for SMME to adopt ecommerce compared to environmental and organizational factors.

Of importance to note in the study was that bigger companies had a higher incentive for adoption compared to those smaller companies because they enjoyed economies of scale and have resources to buy the technology infrastructure. On environmental factors, it was noted that customer influenced adoption, not the competitors because some of the products offered by the SMMEs are for niche markets (Gareeb and Naicker 2015).

Gareeb and Naicker (2015) study highlighted that government support increased ecommerce adoption by SMMEs and that telecommunication barriers such as high data charges by telecommunication providers (Gareeb and Naicker 2015). Thompson revealed the same findings in the study on higher education institutions that technological factors were found to be the main determinants of adoption and the environmental and organizational factors like competitors, the government, suppliers and company stakeholders had little influence on adoption (Thompson 2016).

Apart from fashion SMMEs, it is an important tool in the South African hospitality sector, especially ecommerce as an integrated system for managing inventory, the revenues, and the finances seems to work best (Nkosana, Skinner and Goodier 2016). According to Nkosana, Skinner and Goodier (2016) the area where the restaurant is situated affected by adoption due to infrastructure and resource availability.

The management understanding of the technology and its efficiency for growth also influenced the extent of ecommerce adoption. It was evidenced that the 'High class' restaurants were enjoying the full-integration of the ecommerce in addition to speed points as well as updating their website regularly.

These restaurants attracted tourists due to their online presence (Nkosana, Skinner and Goodier 2016). It was noted from the findings that there was a large discrepancy between the high-class SMMEs and the Medium class SMMEs restaurants and the level of organisational resources affected the ecommerce adoption and high-class restaurants offered WIFI to their customers. The main determinants were highlighted as the cost factor, managerial attitude to the technology, lack of skilled IT staff and compatibility issues of the software to the business (Nkosana, Skinner and Goodier 2016).

The TOE theory is important as it considers the core factors of the SMME namely, technology, organisational and environment. The fashion SMMEs may find gaps in the market and hinge on the available opportunities to create niche products to satisfy the market. SMMEs tend to be flexible and adapt quickly to market needs and due to limited resources, they always allocate resources to the most profitable business causes such that for ecommerce adoption if they see the competitive advantage they might put ecommerce as priority in the budget for it.

## **2.8 Integration of the three theories- DOI, TOE and TPB**

This is the summary of the amalgamation of the three theories, TOE, DOI and TPB. It draws the strengths of each theory to be used in decision making buy fashion SMES when considering ecommerce adoption, moreover, upgrading the ecommerce.

Alkhalil, Sahandi and John (2017) undeniably deem TOE as an integrative theory that provides a holistic approach and guidance in influencing innovation adoption in an organisation. Conversely DOI is deemed as the progression of adoption of an innovation from its birth up to its usage within an organisation. The author further illustrated DOI theory as processes and procedures involved in adoption as

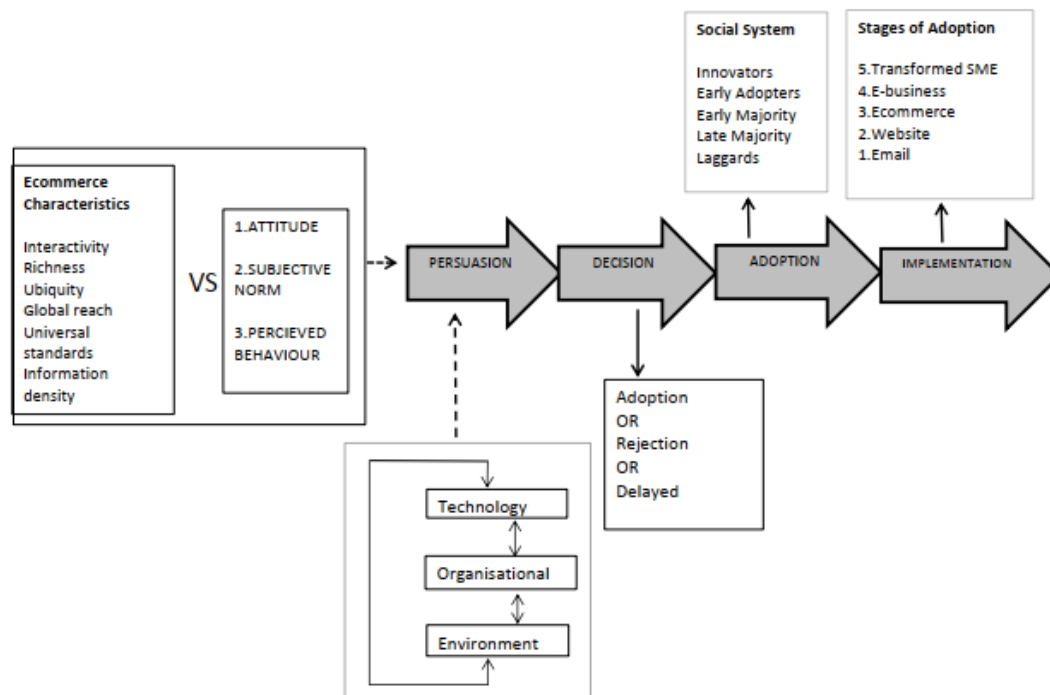
well as facilitating the prediction if the innovation can be successful (Alkhalil, Sahandi and John 2017).

Combining the three theories namely TPB, TOE and DOI enhances the understanding of the adoption of ecommerce (Chiu, Chen and Chen 2017). The similarities in the theories are that DOI and TPB consider individual perception in the adoption that is the top management and the users of the innovation while TOE and DOI both consider the technology and organisational contexts (Alkhalil, Sahandi and John 2017). There is however some differences in the theories in that DOI overlooks the environment context which are integral in deciding innovation adoption in TOE, unlike in contrast DOI takes into account the innovation characteristics.

On the whole, TOE helps the study by highlighting the appropriate categories on the factors that influence adoption while DOI identifies the specific variables within each category (Alkhalil, Sahandi and John 2017). Thus, integrating the theories strengthens and the shortcomings of one theory are offset by the strengths of the other theory. Also, of special note is that the DFF designers are categorised in three namely: Mentee designers those who are still being trained, Emerging designers who are designers with a few years in the business and Established designers who have stable businesses.

The TPB is relevant to the Mentee and Emerging designers because their business decisions are individually made and TPB is about individual perceptions when deciding however it needs to be combined with DOI because it does not the innovation itself such as the relative advantage. TOE is more relevant to Established designers who have different standardised systems and have stakeholders in the business that they must consider comprehensively the organisational, environmental and technological aspects of the business and it also needs to be integrated with DOI since DOI unifies the different categories of designers which both have a social system and go through the communication stages to reach adoption decision. Figure 2.8 illustrates the relationship between the three theories TPB, TOE and DOI.

**Figure 2-8 : Integration of DOI, TOE and TPB theories**



Source Adopted: Generated by the researcher

With reference to Figure 2.8, the top management or the user who has heard about ecommerce innovation gathers information on the innovation. The individual then makes a comparison of the characteristics of ecommerce against TPB factors namely attitude, subjective norm and perceived behaviour. If the individual gets interested in the innovation, the user proceeds to persuasion stage where a further research is done to compare the TOE attributes (technology, organisational and environmental) with the five attributes on the persuasion stage of the DOI (relative advantage, compatibility, trialability, observability, and complexity) factors before making a decision. At the decision stage, having considered all the facts gathered at persuasion stage, ecommerce is either adopted or rejected.

When ecommerce is adopted by the SMME, the fashion SMME can be categorised in a social system as an early adopter, late majority or laggard. According to Figure 2.8 the SMMEs that have adopted ecommerce enter the

implementation stage where they can move up the stages of ecommerce adoption from the first stage of email usage until the last stage where the whole system is fully integrated.

## **2.9 Benefits of e-commerce adoption for fashion SMMEs**

In discussing the advantages that the fashion SMMEs can enjoy when they adopt ecommerce, the benefits enjoyed by large fashion retailers which have adopted ecommerce technologies have been highlighted:

- ***Smart manufacturing***

Smart manufacturing is the application of information and communication technologies to the manufacturing sector. According to Beju and Milojević (2018), due to information density, prices are transparent to customers that they can choose affordable fashion (Laudon and Traver 2017).

On the other hand, fast fashion has become prevalent, where fashion has short life cycles due to changing trends. Fashion SMMEs face small profit margins due to competitive pricing. However, they capitalise to maximise profits by maximising sales during the peak periods of the short seasons (Ye, Lau and Teo 2018). This can only be achieved when SMMEs have efficient systems.

The use of sensor enabling services in the smart manufacturing benefits businesses by showing real-time status of work cells and the timeline of production such that they can be able to distribute the products to their customers and through the data decide whether to increase capacity or customise the product differently (Ezell 2017). Further, smart manufacturing enables communication on all stages of the production chain, while also separating production sectors and it processes related information and combining the process for inventory taking and efficiency. This is beneficial to businesses with diversified products, as they can reallocate resources to the most profitable ones (Moavenzadeh 2015).

Zara is a good clothing manufacturer well known to use data to respond to customer preferences such that they have one of the shortest product life cycles of

two weeks. Moreover, Zara has managed to successfully reduce supply-chain costs and one example is through attaching radio frequency items (RFID) to their clothing items in the stores of over 700 products in their 2000 stores. This technology has improved efficiency in that ten employees can update store inventory in a couple of hours, a task that used to take 40 employees more than 5 hours to complete. As fashion SMMEs see the benefits derived by big retailers, they can also copy the ecommerce technologies that simplify business and reduce costs (Hartmann, King and Narayanan 2015).

The operational benefits derived from smart manufacturing are inventory management, product innovation, faster reaction to market changes and optimising factory operations (Gorla, Chiravuri and Chinta 2017). For fashion SMMEs that do horizontal manufacturing, they get a clearer picture of raw materials used, and the state of the operations such that they can schedule factory operations and style deliveries to cut costs improve efficiency and save on energy consumption (Hartmann, King and Narayanan 2015). All the stated operational benefits are a motivation for fashion SMMEs to adopt e-commerce for their business (Ezell 2017).

- ***Digital manufacturing support***

The ICT deficient SMMEs do not need to worry about IT support as there are companies that remotely offer online support globally (Guo and Hu 2014; Laudon and Traver 2017). The businesses provide technical support to SMMEs through high-level computing tools. The tools can be in the form of web application tools or online sites. The 4th industrial revolution has also introduced 'Uberization', where there is free movement of labour and expertise (World Economic Forum 2019).

Through 'Uberization', SMMEs can hire employees on short-term contracts or free-lance basis with the assistance of online systems (Moavenzadeh 2015). Ecommerce being a global platform with global reach capabilities (Laudon and Traver 2017) is very advantageous to fashion SMMEs in need of manufacturing support as digitalisation allows for :



- i) Flexibility of instant services from highly specialised freelance technicians (Moavenzadeh 2015).
- i) Offers information on the available independent freelancers at that time for the related problem, giving a wide variety to hire from.
- ii) It is cost saving to the fashion SMMEs that does not need to employ a full-time technician.

All these advantages can be derived from the manufacturing applications such as Upwork.com, Freelancer.com, TaskRabbit.com, 99designs as well as social platforms such as LinkedIn.com. SMMEs can also get advice and support from experts on running the business, on applications like Clarity.com (Moavenzadeh 2015).

- ***Creation of strong relationships between SMMEs and customers***

Ecommerce has created a strong relationship between the fashion SMMEs and the customer. Previously, fashion SMMEs determined fashion trends and the customer would buy what was available in the shops. Due to ecommerce, the customer is a co-participant in the creation of new fashion trends through an interactive platform (Laudon and Traver 2017). Regarding ecommerce in China, the fashion SMMEs dress celebrities with their latest creations and the celebrities would post on their social pages and the management would consider styles with the highest responses from the social media when making new styles for the season to maximise sales.

The Alibaba site, one of China's ecommerce giants with the largest pool of online customers, promotes customer(s) to rate services and products purchased. The rating system has forced SMMEs to be accountable to offer high-value products and services as the ratings by current customers motivates the new customer to buy from the same fashion SMME and repeat business. Thus rating has become a marketing tool for SMMEs (Biggs *et al.* 2018; Li, Frederick and Gereffi 2019). South African companies such as Zara, Mr Price, and Forever 21 are marketing through collaboration with influencers (Mr Price 2019a).

Ecommerce also helps customers to become knowledgeable about the products that they are purchasing, the production processes, raw materials used and the origination of the fashion brand (Nason 2016). A good example is Mazuri designs, a Ugandan brand that was formed by a non-profit organization, 'Girl Up initiative' to create employment for young women.

Mazuri designs trains ladies on how to make African inspired clothing and accessories from ethically sourced raw materials and the products are sold locally and internationally. They can be contacted through their website for a custom made design. Customers' through information on the website, become knowledgeable and the information creates loyalty to purchase the products (Nason 2016).

- ***SMME Visibility to potential global partners***

Matsongoni and Mutambara (2019) discuss the importance of technology in increasing the capacity of SMMEs through domestic and foreign business partnerships and ecommerce creates the company's visibility to potential global partnerships or investors.

Most South African SMMEs are birthed out of the need to earn a living or supplement low wages, the lack of income limits continuous product innovation processes and marketing (Small Enterprise Development Agency 2016; Matsongoni and Mutambara 2019). In 2011, Youtube.com created visibility for a rural-based Mozambique group Tofo Tofo that led to song collaboration with the celebrated singer Beyoncé (Onyewuchi 2011; W TOFO Official 2016). The collaboration created exposure for the group and thus created greater opportunities for the group in Africa and globally (W TOFO Official 2016).

Chigwenya and Mudzengerere (2013) describe the brains behind successful SMMEs as intelligent entrepreneurs with semi-skills, innovators and youthful. Most of them are cognisant of the culture and moreover are zealous to alleviate problems in their local communities. The global recession, the digitisation era and realisation of the African potential through the youth population have prompted

international companies to invest in Africa (Al Jazeera 2019; World Economic Forum 2019).

Global or large corporations are always looking for fresh and diversified ideas to birth new products on the market, such that fashion SMME can adopt ecommerce to increase business exposure. A notable example is H & M's collaboration with a South African fashion SMME, Mantsho in August 2019 which has allowed the fashion brand to expand its operations due to the financial resources of the global company and Mantsho can now diversify products (Hlaalethwa 2019).

Ecommerce provides opportunities for funding through sites like Kickstarter.com, Indiegogo.com and RocketHub.com. According to Laudon and Traver (2017), the sites have raised capital approximately 530 million dollars in 2009 and in 2015 the funds raised were over 34 billion dollars and it is estimated that by 2025 the capital raised will be around 93 billion dollars. Ecommerce allows SMMEs in need of funds to find funders or investors in line with their values or causes around the globe (Laudon and Traver 2017).

- ***Up-to-Date management decisions***

Chinese fashion SMME collaborations with online merchants, content providers, promoters and most importantly celebrities have improved business as they are able obtain real-time data for decision-making (Biggs *et al.* 2018).

Information creates a competitive advantage as SMMEs can offer value-added services, from data collected on customer spending. They can determine customer segments and gain knowledge of peak periods they can maximise sales (Elbeltagi *et al.* 2016). SMMEs obtaining accurate data can speedily decide on business strategies to adopt and make the necessary changes needed by the environment for the achievement of their goals and business growth (Elnaga and Shammari 2016). The information is obtained from B2C ecommerce like customer online buying histories, their most liked or shared clothing pictures and trending items in other countries (Mbumbwa and Chigada 2018).

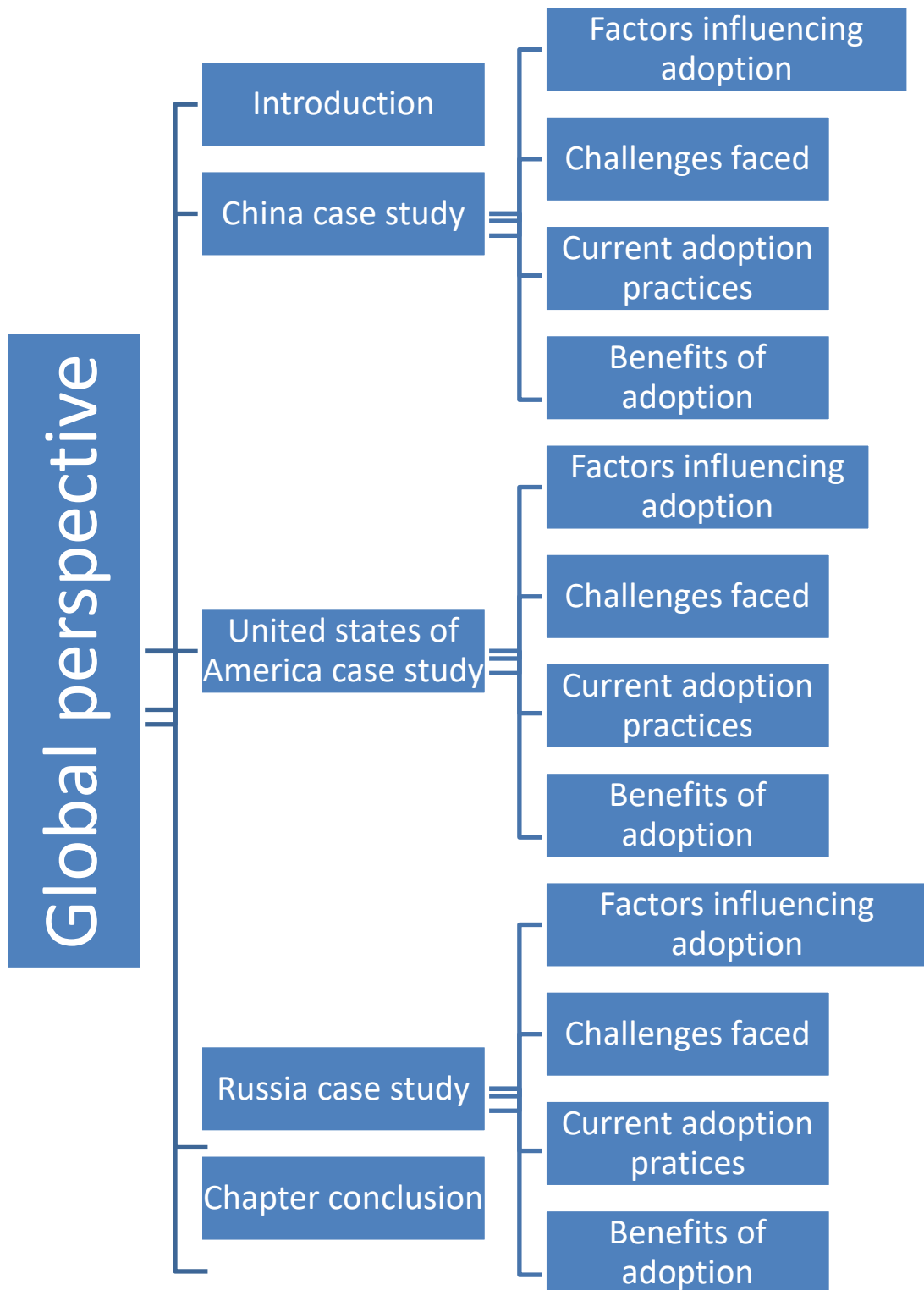
Digitisation has brought fashion from different socio-economic groups. The availability of multiple information channels from different cultures and nationalities creates new fashion. For instance, Ankara clothing has now become a trend in South Africa (Mbumbwa and Chigada 2018). Fashion SMMEs who are digital savvy can identify gaps quickly or niche markets and benefit immensely as innovators in the area discovered. The advantage comes through data collection where the SMME can incorporate emerging societal trends in their decision-making (Mbumbwa and Chigada 2018).

The benefits highlighted motivate fashion SMMEs to adopt ecommerce. However, there are other influencing factors that affect ecommerce adoption. The study clarifies some the factors that fashion SMME may consider when adopting ecommerce through the illustration of three theories namely the Theory of Planned behaviour, Diffusion of Innovations theory and Technology, Organisational and Environmental theory.

## **2.10 Chapter conclusion**

The three theories TPB, TOE and DOI having been used previously in innovation research has provided a comprehensive illustration that SMMEs can consider when adopting ecommerce. The fashion SMMEs can also gauge the extent of the success of the innovation through and the rate that it can be absorbed through use of DOI. The next chapter will discuss the global perspective of three developed countries, America, China and Russia.

## **Overview of Chapter Three**



# **CHAPTER THREE**

## **GLOBAL PRESPECTIVE**

### **3.1 Chapter Introduction**

This chapter discusses three countries China, Russia and America that have advanced in ecommerce. China and America are the leaders with developed economies and advanced in ecommerce while Russia is a developing country. The chapter discusses the factors influencing adoption, benefits and challenges of ecommerce adoption in each country to be used in comparison with SA to also identify new trends and methods that lead to successful adoption.

### **3.2 China**

#### **3.2.1 Introduction of China**

Gnezdova, Bari, Semenov, Yakutin, Lenko and Sharova (2017) asserted China as one of the largest ecommerce countries in the world and most contributory factors are the nation's large population and the offshore ecommerce business. Choi, Liu and Wang (2015) research reveals that ecommerce growth was attributed to mobile penetration, disposable income, the rate of urbanization and computers available in each household and internet penetration.

The advent of ecommerce in China was around 1997-1998 being initiated by companies such as ChemNet, 8488, Alibaba, Joybuy, and Dangdang emerged to service the Business to Business (B2B) customers and this led to B2B to possess the largest share of China's e-commerce market (Kwak, Zhang and Yu 2018). According to Kwak, Zhang and Yu (2018) contend 2004 as the year that triggered the growth of ecommerce in China, when a national epidemic of 'severe acute respiratory syndrome' broke out leading to a travelling ban on all Chinese citizens. The travelling ban on created an opportunity for ecommerce traders to grow their businesses as Chinese nationals relied on ecommerce for shopping (Kwak, Zhang and Yu 2018).

Additionally, Kwak, Zhang and Yu (2018) stated a worldwide financial crisis that took place in 2008 leading to a global recession on the world market, this negatively affected the Chinese exports. The SMMEs producing daily products including clothing and textiles were affected severely leading to some of the SMMEs shutting down while others reduced production (Cunningham 2011). However, China turned the crisis into an opportunity, when they used the products; they were exporting to grow their local ecommerce market (Cunningham 2011).

### **3.2.2 Factors influencing ecommerce adoption**

- ***Government intervention***

The government of China made the internet a top priority from as early as 2000 and successive initiatives such as 'Internet plus' action plan; which was supported by 'Made in China 2025' which was a ten-year initiative to upgrade industry, develop manufacturing to be innovation-driven. The internet plus aimed initiative at spearheaded online connectivity for businesses thus merging internet with traditional industries, leading to economic growth (Du and Banwo 2015). The Chinese government also invested in the construction of fibre optic and 4G networks that improved the internet coverage and availability in all cities (Li, Frederick and Gereffi 2019). Moreover, the government built an efficient, cost-effective and reliable logistics, which made it easy for SMMEs to sell and deliver their goods to customers. The government intervention greatly influenced fashion SMMEs to receptively embrace ecommerce and grow their ecommerce business both locally and internationally (Du and Banwo 2015).

- **Competition**

China has an oligopoly ecommerce created by a highly centralized ecommerce with a large pool of buyers and consumers on a single platform (Li, Frederick and Gereffi 2019). Alibaba curbed competition by making SMMEs their target market and removed entrance charges which were one of the major barriers to entry. Alibaba strategy eliminated competitors such as EBay were charging its SMMEs listing and transaction fees (Banjara 2016; SABC 2018).

Taobao one of the Alibaba's ecommerce platforms Tmall and Taobao are used as recommendation sites for their first product purchase point and they own 61% of national online customers (Biggs *et al.* 2018). These platforms offered reviews of the success stories through ratings and comments by other customers who have purchased similar products (Biggs *et al.* 2018). The online rankings benefits the fashion SMMEs by authenticating the fashion brands for incentives, loans and growing their market (Biggs *et al.* 2018; SABC 2018).

- **Physical buildings**

China is less-developed on physical retail stores; which made ecommerce more viable and has led to an easier transition from brick and mortar stores to ecommerce. Having ecommerce business for SMMEs is less risky because initially, the infrastructure investment is minimal (Biggs *et al.* 2018). Ecommerce also provides a boost for Chinese brands to connect online stores with physical stores; which increases the engagement between buyers and customers where they can engage (Biggs *et al.* 2018).

- **Population and lifestyle**

China has a huge population of approximately 1.37 billion and a large online community supported in 657 cities by nationals at different income levels and different stages of economic development (Kuah and Wang 2017). China has 720 million mobile phone users, representing over 50% of the total population, and the digital shoppers were around 500million (Du and Banwo 2015; Chiu and Choi



2018).

China has the biggest crowd of online shoppers, doubling that of the United States of America (USA). Chuang and Hu (2016) posited that the digital population of China can be compared to the combined population of France, Germany, Italy, Spain, and the United Kingdom.

Additionally, the Chinese population is comprised of the majority of young people between the ages of 17-35 years and a greater percentage of migrants are from the rural areas working in urban factories. The Chinese migrants are deemed self-conscious and valuing the opinion of their peers and siblings and a favourable image is of importance (Wang 2016). Having an online presence through social media platforms bridges the gap between previous rural life to the aspired life, and it is satisfied by dressing well in line with the trends and celebrity looks (Wang 2016).

Largely peers and celebrities influence the purchase behaviour of the migrants. Fashion SMMEs use the 'online celebrity economy' to convert fans to consumers (Lo and Lam 2016). The fashion firms previously sold low-quantity and poor quality products to wholesale. However, ecommerce has helped fashion SMMEs to increase and offer better product and service delivery to both new and existing customers (Li, Frederick and Gereffi 2019)

- ***Lifestyle***

Mobile payment is the everyday life of Chinese citizens. There is a lot of mobile applications like WeChat that help Chinese simplify their lives, for example, they can use WeChat to book doctor's appointments, purchase products, hire a cab and send money parcels (Ecommerce Foundation 2018). Also, mobile applications offer cashback rewards and third party promotions. All these advantages that make mobile applications indispensable to customers everyday life is a very important reason why fashion SMMEs should have an online presence (Ecommerce Foundation 2018).

- ***Cheap labour***

The Chinese rural migrants based on the 2015 statistics were approximately 277.47 million, who are the backbone of China's economic labour-intensive industries like Fashion (Wang 2016). The rural migrants offer cheap labour to both the fabric manufacturers, trims manufacturers and the Fashion Cut, Make and Trim (CMT) SMMEs leading to cheap production of clothing items some of which are sold online at affordable prices (Wang 2016).

The large pool of the rural migrants available online now help the pure online fashion SMMEs and traditional fashion SMMEs to upgrade and expand their customer base by creating brand awareness and increasing sales through ecommerce activities (Li, Frederick and Gereffi 2019).

### **3.2.3 Challenges faced by designers**

- ***Finance***

The Chinese government encourages citizens to own businesses. The challenge; however, is that most of the SMME businesses in China rely on shadow financing since the banks waiting period for a loan is quite long. Shadow financing is lending activities from companies that are outside the regular banking system and their rates vary and are usually high for example interest rates of 50% per year (Cunningham 2011). Finance is one of the major challenges to SMMEs ecommerce growth (Li Frederick and Gereffi 2019).

- ***Business strategy***

The ecommerce platforms like Taobao make it easy to enter the online selling however; they have been many SMMEs that failed online selling after many years of trading. This has been attributed to the fact that it is difficult to grow or remain online without a successful development strategy. Accommate, a fashion company gives us an example that in order to succeed you need to consistently invest in a development strategy by testing the market and adapting to the needs of the

customers (Han, Yoo and Jeon 2015).

Many SMMEs have information from customer feedback however, they lack the expertise to analyse and successfully implement it for the growth of the business (Han, Yoo and Jeon 2015). Fashion SMMEs are willing to adapt and implement an ecommerce model that attracts customers to their business; however, the process sometimes takes years of learning the business including making losses (Han, Yoo and Jeon 2015).

- ***Omni-channel barriers***

For fashion SMMEs selling both in stores and online, it is difficult to differentiate product assortment between online and offline channels (Ye, Lau and Teo 2018). There is a need to create separate distribution centres used solely for ecommerce. There is a need for real-time information to respond timely and quickly to any adjustments (Ye, Lau and Teo 2018).

### **3.2.4 Fashion SMMEs in China**

The findings by Du and Banwo (2015) reveal that in 2013, SMMEs accounted for 99.7% of all enterprises in China as well as providing 80% of the jobs in China. E-commerce has been a critical tool in aiding the growth of China's economic progress from 2010, accounting for 7.5% of the nation's gross domestic product (GDP) in 2015. It has helped large companies, as well as SMMEs to build customer-buyer relationships (Du and Banwo 2015).

The Chinese market represents one of the largest growing retail markets in the world with characteristics of a developing economy where the market comprises of many SMMEs which are dynamic with fragmented structures (Ye, Lau and Teo 2018). Ye, Lau and Teo (2018) depict the fashion industry of China as comprised of fast fashion with short production cycles with fluctuating demands that make it hard for SMMEs to plan (Ye, Lau and Teo 2018). Chinese fashion is depicted as having four clothing seasons and the product life cycle lasts an average of 45 days. The profits for apparel wear are usually made during the peak periods of each

season (Han, Yoo and Jeon 2015).

Chinese fashion SMMEs focuses on e-tailing business model that comprises of the virtual merchant, which are purely online brands, brick and clicks, and catalogue merchant representing the traditional fashion SMMEs. The traditional fashions SMMEs have both physical stores and online presence. The fashion SMMEs engage with celebrities to wear their clothes for advertising. The celebrities have an online presence with a large following of fans; the fashion designers take advantage of the celebrity followers by making different outfits that they post on their pages. If the online feedback is positive, the fashion SMME establishes a fashion brand either in the company's name or of the celebrity. The market testers helps fashion SMMEs in knowing what to produce for the coming seasons (Li, Frederick and Gereffi 2019).

The online celebrities then direct the fans to the online stores leading to sales. This process is repeated every season. With celebrities, small traditional fashions SMMEs are given a chance to move up the value chain into service-related activities and make them become the original brand manufacturer (OBM) (Li, Frederick and Gereffi 2019).

The second type of fashion SMMEs is pure online brands. These brands do not have physical stores, only warehouses to store the merchandise. Good examples of Chinese pure online stores are Huimei and Handu that reached \$160 million in 2015. The pure online brands can sell their fashion from outsourced production or they can be intermediaries between an international band and the Chinese customers. The pure online brands can have several accounts on the Taobao or other online platforms to meet the different customer categories whether its women, children or men's wear. Consumer feedback influences sales through comments and ratings, this grows the business.

Clothing manufacturing is labour-intensive however, it caters for the largest product category and share of China's online retail sales (Li, Frederick and Gereffi 2019). Han, Yoo and Jeon (2015) mention that the statistics for clothing sold

online in 2012 including accessories like shoes and bags were of 26.8% of total market transaction moreover, clothing and accessories were ranked in the top-selling categories in Asia-Pacific, Europe and North America(Han, Yoo and Jeon 2015). Chinese clothing and accessories make the largest share of China's online retail sales, with around 23% sold online, higher than any other country (Li, Frederick and Gereffi 2019).

### 3.2.5 Benefits of online shopping

- **Cross border business**

**Figure 3-1: China's cross border business**

China's top products exported via cross-border e-commerce.

	Value of cross border e-commerce exports		Category share of total cross border e-commerce exports	
	2013	2015	2013	2015
Total (\$ billion) (B2B+B2C)	375	733		
Electronics (\$ billion)	155	276	41%	38%
Apparel (\$ billion)	44	75	12%	10%
Outdoor products (\$ billion)	30	55	8%	8%

Source : Adapted from Li, Frederick and Gereffi (2019)

According to Figure 3.1, clothing is the second-largest business for cross border trading in China. China is one of the largest suppliers of cross border business and its supplies to Russia constitute 90% of ecommerce business evidence this. After successful implementation of domestic ecommerce it was easy to implement ecommerce for cross border business. Clothing constitutes the second largest value of exports in China. Globally China accounts for 52%, while the European Union constitute 23%, and the United States for 12% of ecommerce offshore business(Gnezdova *et al.* 2017).

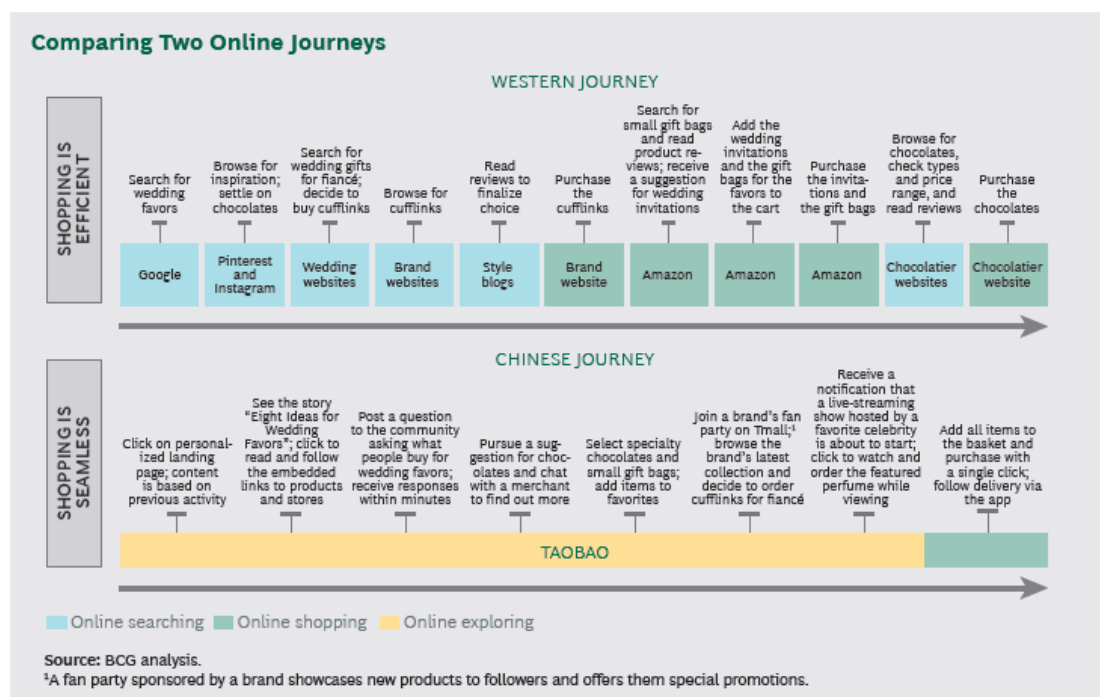
- **Real-time buying**

It was posited by Biggs *et al.* (2018) that in China when a customer embarks on an online journey, it can be compared to a person visiting the physical mall for

window-shopping; where they discover new products that they are interested in. They can buy them instantly as depicted by Figure 3.1 below.

The Chinese customer goes online to check trends, it maybe once or several times within a day, where they will discover new clothing brands and products from a wide range of digital channels and content; these discoveries to some certain extent influence lifestyle choices. In the US and South Africa social media offers suggestions based on previous buying and search history, there is nothing to draw the customer to explore new things or other suggestions. On the contrary, in China online sites like Alibaba Taobao offer new products through digital channels and content in addition to suggestions based on buying and searching history of the customer, they take into consideration the customer's social interaction, location, artificial intelligence and personalized experience thus resulting in a fulfilling experience. Figure 3.2 below, illustrates two comparisons between the Western market and the Chinese market. South African online journey is similar to that of Western countries.

**Figure 3-2: Ecommerce online journeys**



Source: Adapted from Biggs *et al.* (2018)

- ***Transaction focused social ecommerce***

Chinese designers practice transaction-focused social commerce where fashion designers sell directly through social networks (Sun, Son and Chi 2016). Direct selling on social media is achieved because the social media sites have embedded purchasing links, which offers a seamless path from discovery to buying the item, which has led to an increase in ecommerce sales (Biggs *et al.* 2018). A good example is China's version of Pinterest, Xiaohongshu where customers can buy what they see immediately.

In South Africa fashion designers practice information-focused social commerce, where focus is on marketing and advertising such that if customers see what they like on Facebook, Pinterest, or Whatsapp they have to exit the application and search for the product on the designer's website or transfer money to the relevant accounts and provide proof of payment to receive the purchase.

The important difference to note between South Africa and China is that the Chinese buying activities are woven into the online experience. The Chinese have merged the Business to Consumer models with the Consumer to consumer models, such that the social media platform has become both a C2C and B2C platform (Biggs *et al.* 2018).

Sun, Son and Chi (2016) stated that WeChat is one of the largest transaction-focused social commerce platforms in China that provides user-friendly, fast communication, and secured technologies for customers to conduct business. Based on the 2015 statistics, WeChat application had 1.1 billion registered accounts and 650 million active users, the application has a fund transfer function used by many fashion SMMEs (Sun, Son and Chi 2016). There is a strong relationship between fashion SMMEs, merchants, content providers and promoters of the products. For example, the celebrities or experts create an engaging environment that draws customers with an appetite for the new products, and sales are generated through the embedded purchasing links on the content

(Biggs *et al.* 2018).

- **Marketing data**

In China, both the merchants and customers are key influencers of the market. According to Li, Frederick and Gereffi (2019) an average of 70% of the online customers give feedback in terms of scores and comments and a good rating serves as a marketing tool since 90% of the customers read reviews before purchasing products.

Thus, ecommerce provides data for marketing and learning customer preferences for growth and business expansion. Ecommerce gives advantage to fashion SMMEs where they can have an upper hand where they get to understand their market better because consumers are actively involved in the brand formation, design, product testing and marketing (Li, Frederick and Gereffi 2019).

China integrates daily life into business unlike, in South Africa where social life and business life are separate. The South African economy is lacking the merging of social and professional elements into a successful business (Biggs *et al.* 2018). Live streaming tends to engage more customers and it is a powerful tool that is frequently used on Taobao. According to (Biggs *et al.* 2018) the sales from live-streaming reached 246 million in 2016 and for every one million views there are 320 000 purchases ((Sun, Son and Chi 2016; Biggs *et al.* 2018).

### **3.2.6 Conclusion of China**

China has built an online micronism that the citizens use every day, and it has one of the successful fashion ecommerce and extending its businesses globally. The businesses like Alibaba group has helped promote fashion SMMEs, helping them grow beyond their geographical boundaries. The next chapter presents the Russian economy to give a different insight on the developing nation's ecommerce business.



## **3.3 Russia**

### **3.3.1 Introduction of Russia**

Russia is a developing country that occupies a seat on the top ten of ecommerce advanced economies. The country is leading in the European arena with internet usage totalling 84 million users (Gnezdova *et al.* 2017).

In 1998 Russia went through a financial meltdown when Moscow based banks faced a freeze on the short run state bonds and most assets were frozen resulting in a decrease in banks capital. This incident led to a reduction in the national capital from 16.1 billion to 3.1 billion. Most of the citizens lost their savings resulting in a lower standard of living and lower incomes (Doern and Fey 2006).

The second environment-changing factor was the sanctions imposed on Russia by the United States of America (USA) due to war. The sanctions included restrictions on money-transfer transactions between the Russian bank and USA, which adversely affected Russia's online trading.

The effects of the sanctions led to some companies withdrawing their services from Russia, for example, Apple stopped trading online in Russia, thus negatively affecting B2B business (Starostin and Chernova 2016).

The sanctions adversely affected the oil and gas prices, which are the main exported products that contribute significantly to the gross national product of the country (The Guardian, 2016). The companies that were trading online faced stagnation while other businesses their volume of sales declined (Samoilenko, 2016). Thirdly the 2014 recession led to the devaluation of the Russian currency the Ruble, this led to a low budget on GDP due to low export revenue (Samoilenko 2016).

### 3.3.2 Factors influencing adoption

- ***Recession***

Ecommerce presents an efficient way of combatting the recession by giving opportunity to fashion SMMEs the leverage to have niche markets within Russia due to proximity. Local SMMEs can focus on offering exclusive products for small groups, hence, this will give them an advantage especially if they can have a quick delivery system to back up the ecommerce (Gnezdova *et al.* 2017). According to Gnezdova *et al.* (2017), the rural nationals contribute 18% of the ecommerce activities of the economy and there is a greater potential since there are untapped markets due to undeveloped infrastructure.

- ***Large population***

Russia has a large population of 150million nationals that are sparsely distributed in the country, the citizens earn low incomes yet they enjoy indulging in sophisticated items (Doern and Fey 2006). The internet usage is unevenly distributed in Russia which affects ecommerce adoption. The largest populations are found in Moscow and Saint Petersburg cities that have a better standard of living and access to internet resources and a higher level of purchasing power Starostin and Chernova (2016).

- ***Climatic conditions***

The Russian winter is very cold and the temperatures can be of minus thirty degrees and heavy snowfalls (Poberezhskaya 2015; WeatherOnline 2018). This created an advantage for SMMEs to deliver the products at home. The harsh environment makes it inconvenient for customers to shop; moreover, the stores consist of small kiosks which are located in flat buildings and there is a lack of proper signs indicating the place of the stores (Doern and Fey 2006). Ecommerce has created an opportunity for the SMMEs to grow their market as shoppers can view product offerings, tap into un-entered areas, and compare prices in the comfort of their home. Another advantage for fashion SMMEs is that clothing is a

necessity especially in winter as people want to keep warm; they can increase sales and grow their customer base. Additionally, fashion SMMEs can use ecommerce to promote their shops, state their location, thus pushing offline through online (Gnezdova *et al.* 2017).

- ***Best programming country***

Russia is popular for its specialized skill of computer programming with highly qualified programmers who often are Masters graduates, with a strong background of mathematics and sciences (Hawk and McHenry 2005). Programming is a strong arm that supports ecommerce because most web applications like websites are developed using programming languages (Ullah, Alauddin and Zaman 2016). The availability of this specialized skill makes it easy for fashion SMMEs to create a website and have an online presence and the website can be tailor-made according to the fashion SMMEs needs. Russia's mother tongue is different from other countries thus if they focus locally to build a strong ecommerce system they can eliminate competition.

Russia provides programming services to western countries and they have a growth rate of over 50% yearly, with an estimated population of 100 SMMEs focusing on offshore programming business (Doern and Fey 2006). The industry has generated between \$200M to \$450M in 2003 (Hawk and McHenry 2005).

- ***Operational Efficiency***

The political and environmental conditions of Russia, that include sanctions, recession to name a few have led to fertile ground for SMME growth (Kuanyshpayeva 2016). After the financial meltdown crisis, most Russians resorted to self-employment after job losses and, recession is characterized by price fluctuations which sometimes lead to company losses. One way a company can combat price changes is being efficient and this helps to minimize costs and maximize profits such that if the price of the fashion item is reduced the company still makes profit.

Ecommerce when adopted by SMMEs helps efficiency through improved performance and competitiveness and fashion SMMEs can explore approaches of satisfying customers (Ogboja 2018). Ecommerce provides a platform to quickly supply products to customers and they would gauge the customer preferences from the response online. Also ecommerce allows for fashion designers to engage third party sales people that can sell and they collect the money before delivery thus helping combat recession. Fashion SMME can grow rapidly and create employment through ecommerce, this is evidenced by Amazon when it started its online business, it realised that its growth was slow, it was only after they discovered that customers wanted immediate gratification of their purchase that they set up fulfilment centres to quicken delivery and this has resulted employment creation of 132 000 jobs in America (Mandel 2017).

#### 3.3.2.1 Conclusion

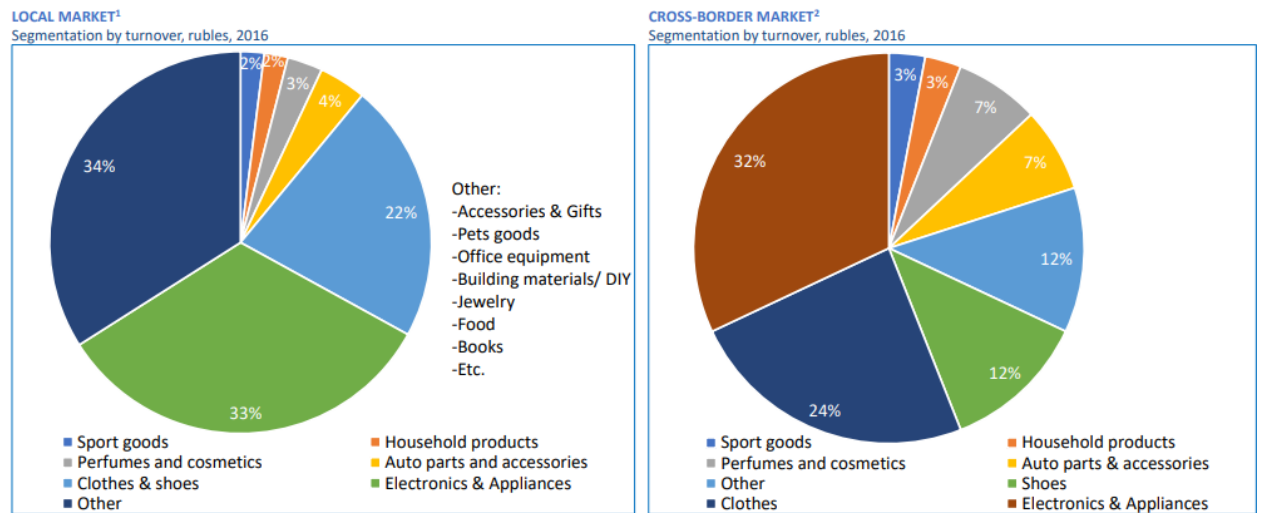
Factors influencing adoption such as recession and the large skilled programming labour force can be related to SA; however, the population is approximately 30 million more than that of SA. The next section gives us an insight on the challenges that Russia faces on ecommerce.

### 3.3.3 Challenges

- **Competition**

According to (Samoilenko 2016; Gnezdova *et al.* 2017) China supplied 80% of Russia's ecommerce products, while 4% was from European Union and 2% from USA. The percentage of local online clothing is 22% while the percentage of clothes bought from other countries is 24% as shown in the diagram below in Figure 3.3. This is because the foreign companies selling to Russia such as China and USA enjoy economies of scale advantage. The country's economic environment does not allow for cheap manufacture of items such that foreign countries are offering affordable prices compared to locals (Gnezdova *et al.* 2017).

**Figure 3-3 : Turnover of Russian online sales**



Source : Adapted from Ecommerce Foundation (2017)

Secondly, foreign companies are making websites specifically for the Russian market, thus eliminating the language barriers which have been the greatest hindrance to foreign companies selling online (Gnezdova *et al.* 2017). The creation of these websites increases cross border online penetration, thus increasing competition to local fashion SMMEs.

- **Infrastructure and logistics**

Telecommunications investments of over 2 billion cater for infrastructure; however, this has not been sufficient considering the country size and climatic conditions (Starostin and Chernova 2016). Due to the limited financial resources, infrastructure in the rural areas is underdeveloped (Starostin and Chernova 2016). The internet connection is very weak and this results in a slow internet search for products as it takes time to download web-pages, which reduces the motivation to buy online by customers as 'ease of search' is compromised (Doern and Fey 2006).

Infrastructure is also seen in the lack of integrated automation in the country making it difficult for the business tax system and support for a healthy environment for ecommerce business (Starostin and Chernova 2016).

The poor infrastructure of the roads leads to delays in product delivery, and this frustrates customers. In addition, the Russian post office is the largest and affordable logistic company with a slow system delivery such that it takes up-to 3months from the date of purchase for customers to receive their products (Samoilenko 2016).

- ***Government support***

The government of Russia was imprisoned by international sanctions and, the recession; thus limiting them from combatting soaring corruption and bureaucracy. For over a decade the government battled with the political and economic upheavals. Furthermore, the government was slow in setting up policies to support ecommerce growth (Samoilenko 2016).

The government lowered custom requirements on imports, thus boosting foreign ecommerce and they implemented a tax fee system to the SMMEs which varied according to the size of business (Samoilenko 2016). This move by the Russian government was not sufficient in supporting the growth of the local online business because the policies were still lacking in promoting fashion SMMEs (Gnezdova *et al.* 2017).The lack of supporting policies in ecommerce prohibited SMMEs entry to the online world.

- ***Online banking***

The electronic system of Russia is still underdeveloped (Samoilenko 2016). There is a low level of trust in Russia pertaining to online payments. People are not confident to divulge their personal and banking details. Most of the transactions done online are completed through cash payment on delivery, as there are few who use debit cards or make payments through online systems (Starostin and Chernova 2016). Trust has been also based on not being sure of the quality of the

product as advertised on the website. Some of the customers only trust once they are sure of the refund or return policies or after making several successful purchases with the same store (Doern and Fey 2006).

Russian ecommerce has been negatively affected by environmental factors which are political and economic (Starostin and Chernova 2016). The country faces severe competition from outsiders since 80% of ecommerce is outsourced from China and other countries. The positive influences are the large population of the country, the climatic conditions and the positive entrepreneurial spirit of the citizens (Starostin and Chernova 2016).

#### **3.3.4 Benefits of Ecommerce in Russia**

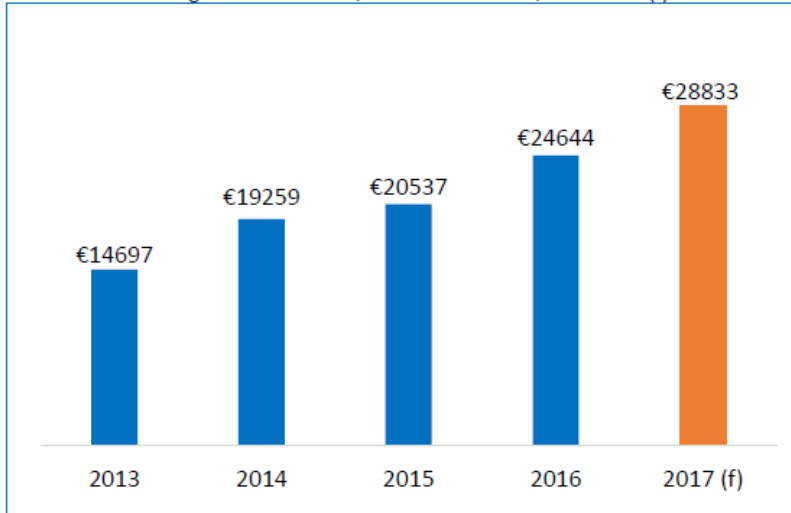
- ***Increase in online sales***

Russia is experiencing an increase in revenue in online sales as depicted in Figure 3.4, where total sales of goods and services increased from 14 697 Euros in 2013 to 28 833 Euros in 2017 experiencing an increase of 14 136 million Euros over 5 years in online sales. Fashion SMMEs experienced an increase in business due to the positive results. Moreover, the report states that there is an increase in smartphone penetration meaning more people can access online services in Russia (Ecommerce Foundation 2017). According to Ecommerce Foundation (2017) 64% of Russian online customers in 2016 made one unplanned purchase, largely, due to advertised product discounts and deals.

**Figure 3-4 : Total online sales of goods and services**

B2C ECOMMERCE<sup>1</sup>

Total online sales of goods and services, in millions of euros, 2013-2017 (f)<sup>1</sup>



Source : Adapted from Ecommerce Foundation (2017)

- ***Clothing is an important sector***

According to statistics, clothing in Russia provides the third-largest online revenue for the country and occupies 22% of the economy (Ecommerce Foundation 2017). On the cross border sales, the clothing and shoes constitute 24% and are the second-largest exported product into Russia (Ecommerce Foundation 2017).

### **3.3.5 Conclusion of Russia**

The chapter gave us an overview of the factors that promote adoption of ecommerce in Russia, the benefits and the challenges of the country such as the cold weather. The country is a good representative of a developing country abroad as it shares similarities with SA. The next section is focused on America a developed nation.



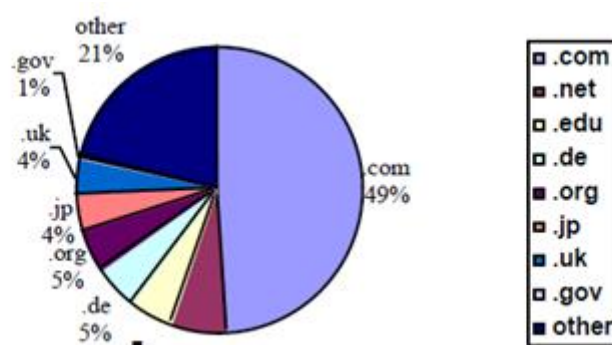
## 3.4 America

### 3.4.1 Introduction of America

The United States of America (USA) is the most technologically advanced nation enjoying the advantages of ecommerce maturity (McGann *et al.* 2002). It is the second-best country in ecommerce after China and in previous years there were competing rivals with China, interchanging positions (Gnezdova *et al.* 2017).

It was one of the initiators of electronic trade in the 1970s (Albinsaad, 2016). SMMEs comprise of 99% of the USA firms and are around 5million companies, the SMMEs and they are innovative and the US government supports the culture of innovation (Elbeltagi *et al.* 2016). Another notable innovator quality of SMMEs is that more than half of the leading domain names in the world are owned by the USA and SMMEs have the highest number of internet hosts and users (McGann *et al.* 2002; Kovalenko 2015). According to Figure 3.4 examples of domain names that are under the USA are namely .com, .edu, .org, .gov, .mil, .net.

**Figure 3-5 : Leading Top-Domain Name Composition**



Source: Adapted from (McGann *et al.* 2002)

The USA is the wealthiest country that is supported by a high GDP and a small gap in the digital divide.

The population of the USA is ranked the 3rd in the world after China and India comprising of 273 million people (McGann *et al.* 2002). USA is a member of

OECD a 33-member state that has policies and initiatives supporting economic growth and employment creation.

The USA constitutes quarter of the OECD population and the collaboration with the other countries has promoted ecommerce cross border trading, which is one area that has contributed to the economic growth of the country (McGann *et al.* 2002). America leads in the world in B2B ecommerce (Elbeltagiet *al.* 2016). This has also helped in growing the cross border ecommerce where the USA and China account for more than 50% of the global ecommerce sales (McDermott and Payvision 2015).

### **3.4.2 Factors influencing adoption**

- ***Cross border ecommerce trading***

The USA is leading in domain sites. However, one-fifth of the traffic comes from countries located outside America. EBay and Amazon occupy 80% of the USA traffic because they are trusted sites worldwide (Kovalenko 2015). USA has a trading base with Organisation for Economic Co-operation and Development (OECD) member states countries, Africa and the other continents making it a strong trading country. Cross border trading contributes significantly to the ecommerce sales in the USA and provides an area of growth and profitability for the SMMEs (Kovalenko 2015).

- ***Government intervention***

The USA government has supported the SMMEs by improving the infrastructure and the business models and putting in place initiatives to educate the community and promote ICT literacy (McDermott and Payvision 2015). The government also supported innovation within the universities and the creation of new technologies, while offering incentives to the private sector into building a better economy (McDermott and Payvision 2015). The government has given tax cuts for the companies investing in technology research and development like Amazon (Yglesias 2019).

According to McDermott and Payvision (2015), the government supported the SMMEs through allowing the private sector to lead in the innovation while removing ecommerce barriers, such as the government gave rights to SMMEs opportunities to sell encrypted products abroad. The US government also changed the administration of laws and policies governing online sales, increased online protection laws, and also gave administration to the industry bodies to guide the different sectors and other policies supporting SMMEs (McDermott and Payvision 2015).

- ***Lifestyle***

USA is the most innovative country and the innovations are shaping the new lifestyle of convenience and instant gratification. With the 4th industrial revolution, there has been 'smart shopping' using the innovations that include mobile applications, web pages and 'near field' technology, closed-loop systems and card readers. The new notable technologies are Google wallet where you shop and when customers use the applications they avoid standing in the queues, Starbucks app to name a few (Hillman and Neustaedter 2017). The innovations improve business sales because customers see the value by saving time and getting more things done in the day.

### **3.4.3 Challenges**

- ***Integrated applications***

The USA is facing the challenge of improving cross-border applications. China has been successful in implementing a streamlined ecommerce for customers. This involves integrating the different applications making ecommerce a more explorative and enjoyable journey. The USA has very innovative applications, yet even the new applications like Google Wallet are standalone applications and still to collaborate with other applications. Moreover, the purchasing links are embedded in their social media that increases impulse buying thereby, increasing sales (McDermott and Payvision 2015).

- ***Culture barrier***

The USA SMMEs backed with the government have more than enough resources to cater for the growing foreign market; as evidenced by the high GDP and the SMME sector in the country. However there have been language barriers when investing in non-English speaking countries like Russia (Gnezdova *et al.* 2017). Having a good product and selling online but if the local residents cannot read the content the business will fail. There are non-English speaking countries, for example, Russia that has the potential for ecommerce, yet language stands as a barrier (Gnezdova *et al.* 2017).

Another barrier is that different countries and continents have different cultures and different belief systems that are different from American culture. Having resources for expansion is not sufficient and this was evidenced by Ebay closing its doors in China after three years of operation, due to failure to fit the business model to the China society (Kwak, Zhang and Yu 2018 ; McDermott and Payvision 2015). Localising the product to the market is of importance (McDermott and Payvision 2015)

- ***Policies for offshore trading***

The tax and law compliance policies differ from one country to another or from region to region. The consumer laws that apply to return and privacy policies differ. The collection of customer data is based on the governing rules and some of the laws are a burden to foreign companies as well as the Tax and VAT thresholds. All these are factors show the need for experienced personnel as well as a sound budget when setting up cross border business (McDermott and Payvision 2015). Due to resources being diverted because of compliance issues, consumer experience is altered such that is of a lesser standard (McDermott and Payvision 2015). SMMEs might find it hard to expand because of the limited funds unless supported by a financial secure body (McDermott and Payvision 2015).

#### **3.4.4 Benefits of ecommerce**

- ***Competitive advantage***

According to Elbeltagi *et al.* (2016), SMMEs received a competitive edge after ecommerce adoption. The competitive advantage extends to manufacturing, since fashion is considered under the manufacturing sector; fashion SMMEs can enjoy 'smart manufacturing' benefits helping to enhance teamwork coordination in working for the growth of the SMME (Elbeltagi *et al.* 2016).

Ecommerce helped SMMEs to grow their international customer base through the use of sites like Ebay and Amazon, thereby increasing profits since the ecommerce giants offer the selling platform as well as cover the logistics of warehousing and delivery (McDermott and Payvision 2015).

- ***Sustaining relationships***

The USA society values relationships and family support and is innovative this is evidenced by Silicon Valley. Ecommerce is an innovation that supports interaction and bonding, thereby facilitating the community to enhance collaboration with families and on projects. The B2B (Amazon, Ebay) ecommerce facilitates the interaction on the business level, while the B2C (Yahoo, Excite and Geocities) and C2C (Facebook, LinkedIn, Instagram) facilitate relations within the businesses and with other businesses and failure to adopt makes the business irrelevant to the society (McDermott and Payvision 2015).

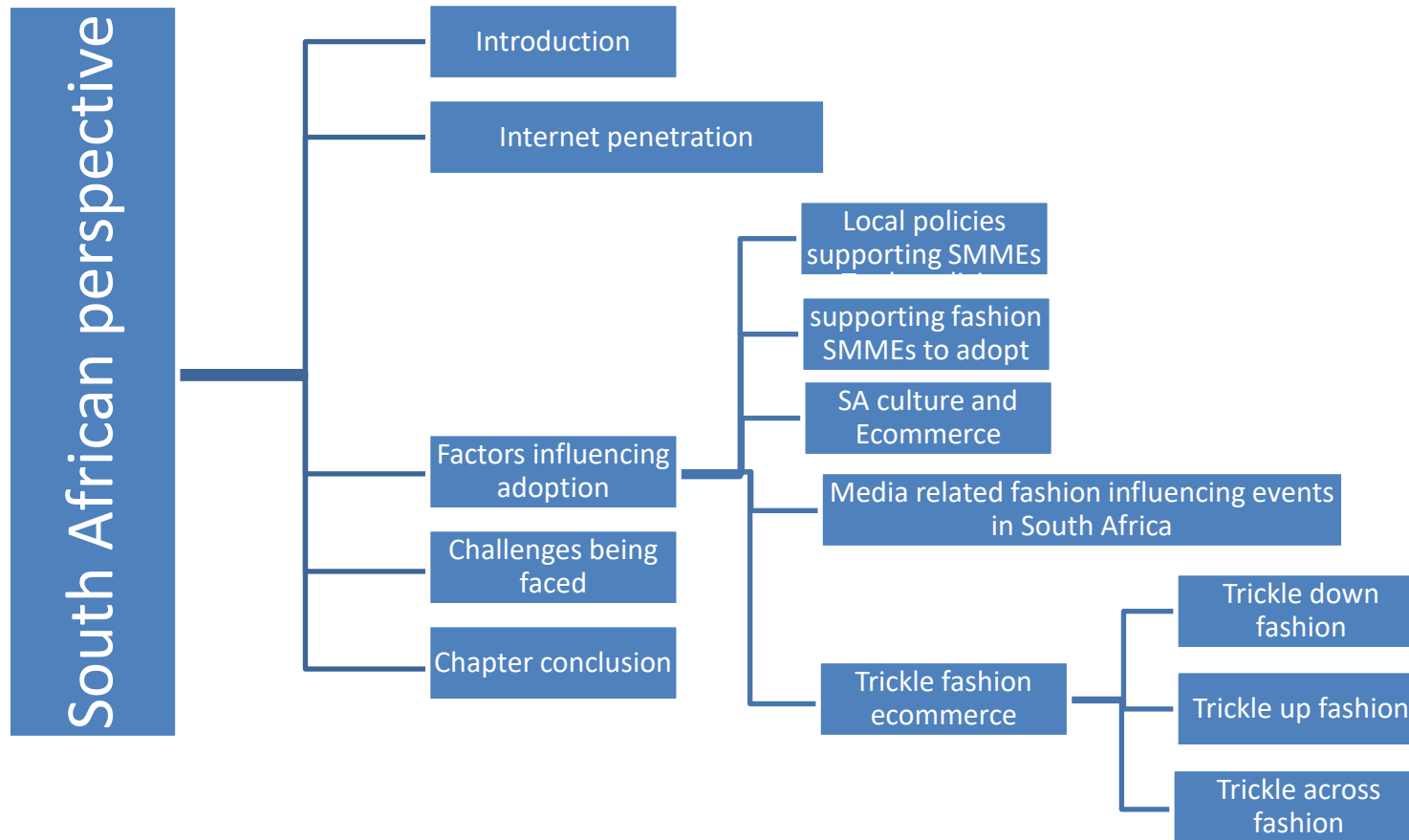
#### **3.4.5 Conclusion of America**

USA has the innovation culture and due to its high GDP their ecommerce problems are less compared to other countries. The economy enjoys the fullness of ecommerce adoption. Their challenges are based on cross border trading not locally.

#### **3.4.6 Chapter conclusion**

This chapter discussed three countries China, Russia and America their fashion SMMEs ecommerce adoption strategies. In China the fashion industry is broad and online fashion brings huge income to the country. The ecommerce is centralised that fashion SMMEs have a large customer base where they sell their products. In America having a large population and being the most technologically advanced country, its ecommerce is ahead and it also has significant sales across the borders. Russia on the other end it's still developing and it has huge potential, its ecommerce was hindered by the language barriers for the companies that were interested in investing in ecommerce.

## Overview of Chapter Four



## **CHAPTER FOUR**

### **ECOMMERCE AND FASHION IN SOUTH AFRICA**

#### **4.1 Chapter introduction**

This chapter discusses general background information about South Africa fashion market, ecommerce, and specifically Durban. It focuses on the current trends in fashion, ecommerce and trade agreements, also the market regulations, government intervention and the main players on the market. Moreover, the chapter provides the buying options available for fashion customers and case studies for SME, in Durban, South Africa.

#### **4.2 Internet penetration in South Africa**

The internet penetration in Africa has grown from 4% in 2007 to 28, 3% in 2018 and is projected to reach 50% within ten years; Africa constitutes 10% of the internet users of the world. The focus areas for ecommerce in Africa have been Agriculture, Health and Clothing. South Africa is among the top three-ecommerce countries in Africa with Nigeria leading, followed by South Africa and Kenya lagging behind South Africa (CGTN 2019).

South Africa (SA) is a developing economy that was ranked the 28<sup>th</sup> largest economy in the world according to the World Bank with an average economic growth of 3.26% per annum (Johnston *et al.* 2015). The SA population is approximated at 58.8 million which is a tenth of the Chinese population, and a fifth of the USA economy despite the diverse nationalities residing in SA (Mubangizi 2012; Stats SA 2019).

The population of the country is directly linked to ecommerce growth especially in developed economies like China and the USA (Du and Banwo 2015). However, for developing economies like SA, the ecommerce growth is affected by technology penetration, household incomes and the country's economic and physical infrastructure (ICASA 2019). Mobile penetration and data subscription charges are



strong influencers of ecommerce adoption for both individuals and SMEs. Gareeb and Naicker (2015) posited South Africa's internet growth rate for 2015 was at 5% per annum from the expected 18% per annum for growing economies (Johnston *et al.* 2015). However, from 2015 to 2018, there has been an increase in internet growth based on mobile data subscriptions. Between 2015-2018 mobile data subscriptions increased by 12.3% and the greater increase is from 2017 to 2018 where there was a 7.1% increase from 61.4 million in 2017 to 65.8 million in 2018 (ICASA 2019). Mobile statistics shows that internet usage has increased in SA.

The mobile data statistics reveal that the population owns more than one cell phone considering that the country's population is approximately 58.8 million (Stats SA 2019). According to ICASA (2019), mobile phones have become the main communication tool in SA homes, due to affordable online interpersonal communication and evidently among the millennials. Growth of business for Fashion designers was based on word of mouth and with the advancement in technology, it's now digital through online communities (Dasgupta and Kothari 2018).

Facebook, Instagram, and YouTube are the most prominent online communities used for advertising by fashion designers. The trend is moving towards video advertising with Instagram.com live video's growing its popularity, and also YouTube.com where subscribers are growing daily, which has launched monthly subscriptions which was previously free.

The statistics reveal smartphone penetration doubled from the period of 2016-2018 according to Figure 4.1 allowing more access to online platforms and also positively influencing the growth of trust of customers in media social influencers especially fashion (Rodney and Wakeham 2016). Fashionistas obtain information on the latest fashion products and the good fashion designers from their friends and family, moreover experts that are current with experience without limitations of geographical location (Dasgupta and Kothari 2018).

According to Ecommerce Foundation (2018a) local online purchases are higher than international online purchases indicating that:

- South Africans prefer locally made products.
- South African Customers are informed on the advantages of shopping online locally in terms of time, courier costs and availability of quality products locally and no customs duties.
- The efficiency of local ecommerce.

The notion of local sales is supported by the increase in online fashion sales yearly, IT News reported that in 2018, Mr Price Apparel sales grew by 35.4%, while the Foschini group grew by 35% in their first year of online presence and cosmetics and jewellery were the selling items backed up by the black Friday sales (Gilbert 2019).

Gilbert (2019) highlighted that Superbalist.com, SA in 2018 cloaked 40 million in revenue from the black Friday sales that were spread over a five day period. The company recorded an annual growth of 115%, and it was noted that black Friday drew 35 000 customers and the items purchased were approximated at 180 000 (Gilbert 2019).

The SA clothing sector is deemed the fastest growing industry with high business turnover that is still growing its ecommerce space because the online sales occupy 2% of the retail sales (Gilbert 2019).

The statistics attest that people are buying online and that business opportunities are available. The fashion SMMEs offering unique products from culture-infused designs online for example the Zulu neckpieces, headgears, bangles or the Xhosa Nguni leather pieces will grow their business. Furthermore, Durban is a tourist destination such that ecommerce adoption allows tourists to transact online as it is not always safe to carry large amounts of cash.

## **4.3 Factors influencing adoption**

### **4.3.1 Local policies supporting SMMEs**

According to ILDP (2014), the SMMEs account for 91% of the formal business in South Africa, and they contribute between 52% and 57% of the national GDP (ILDP 2014). MTN one of the largest telecommunications company in Africa derives 12% of its revenue from business activities and 8% of this revenue comes from SMME business (World Economic Forum 2019). The total number of fashion designers in South Africa is 289 and 273 supply boutiques and departmental stores across (SAFW 2018). One of the prominent policies in South Africa for small business is Black Economic Empowerment (BEE) policy. BEE was birthed to eradicate after inequalities due to racial discrimination in wealth, skill and means of production (RSA 2003). The BEE policy also addresses business inequalities by prioritizing incentives to black-owned companies or women-owned companies through government tenders and funding opportunities (RSA 2003).

BEE compliant SMMEs get priority and in recent years the SA government has taken serious action in reviving the garment and textile industry since fashion SMMEs are key job creators in the manufacturing sector (Charles 2019). The government policies and incentives on their own do not provide long term competitive advantage for fashion SMMEs; however, if policies are combined with technology acquisition and adoption with the necessary skills fashion SMMEs will have leverage (Charles 2019).

The government is advancing in online systems such that they can check SMME compliance documentation online and some of the tenders are applied online. There has been growth in M2M ecommerce network subscriptions from 18.7% from 5.8 million in 2017 to 6.9 million in 2018 (ICASA 2019). The growth in M2M is a reflection of the atomization of tasks, which helps both the government and in smart manufacturing of the fashion business such fashion designers will have available information to make informed management decisions (ICASA 2019).

Fashion SMME's online presence coupled with the growth of M2M ecommerce makes it easy for fashion designers to improve efficiency and to plan for growth or expansion of business to other regions. The SA government has several trade agreements with other countries that can be utilized by the DFF designers to expand their operations.

#### **4.3.2 Trade policies supporting fashion SMMEs to adopt ecommerce**

- ***International trade agreements***

African growth and opportunity Act (AGOA) is a trade agreement with the USA and SA. SA is a beneficiary and fashion designers can export their products for free to the USA (AGOA 2019). The conditions that qualify fashion designers for free export are that the textiles should have been made a greater percentage in the AGOA beneficiary country and the other condition is that the product being exported is adding value to the citizens for example by employment creation (AGOA 2019). AGOA benefits DFF designers as they can grow their market base internationally and according to Table 4.2, the USA is one of the countries South Africa exports clothing to (Information 2019). Fashion SMME by adopting ecommerce gives them leverage to advertise in their businesses and products to USA customers and create effective communication (AGOA 2019).

**Table 4-1: Countries SA exports clothing**

Countries SA exports clothing

Ranking	<i>Ranking For Countries That Buy South African Exported Fashion Products</i>		
	WEARABLE ITEMS	LEATHER	FOOTWEAR
Export total value	6 236.79	3 291.12	2 260.14
<b>First</b>	Namibia	Poland	Namibia
<b>Second</b>	Botswana	Italy	Botswana
<b>Third</b>	Lesotho	Germany	Lesotho
<b>Forth</b>	Swaziland	Namibia	Forth
<b>Fifth</b>	Zambia	Bulgaria	
<b>Sixth</b>	USA	China	Zimbabwe
<b>Seventh</b>	Mozambique	France	Mozambique

Source: Adapted from (Information 2019)

The South African fashion designers mainly specialize in three main categories: wearable apparel, accessories, and footwear as depicted in Table 4.1. According to Information (2019), the most exported items are leather trunks, leather suitcases, leather camera cases, and leather handbags. Under wearable items,

exports range from apparel tracksuits, ski suits, and swimwear; while footwear exports are shoes with upper textile materials or leather (Information 2019). South Africa is rich in raw materials used in fashion manufacturing, and KZN is known for leather raw materials and it used to be a hub for textile manufacturing with companies such as David Whitehead Textiles which is in the process of being revived (Information 2019). Durban is rich in beadwork accessories from the Zulu culture influence and notably, soon the beadwork will bring significant revenue from exports.

Africa is the next driving force after China due to natural resources and the large pool of educated youths, this is further endorsed by America, Russia, and China having trade agreements with African countries and they are channelling their business investments to Africa. South Africa is part of the G20 and has been in talks with the BRICS (Brazil, Russia, India, and China) countries in Japan on June 2019 (CTGN 2019).

The developed countries are using different strategies to entice Africa. Russia on the other end, from 2015 has been building military, political and business partnerships with African countries namely DRC, Uganda, Central African Republic and Cameroon, Zimbabwe, Sudan cancelling debts in African countries that were over 20 billion dollars.

- ***African trade agreements***

South Africa is also a member of the COMESA-EAC-SADC Tripartite Free Trade Agreement (TFTA) that consists of 26 countries (Walters 2016). Under the SADC Free Trade Agreement, the closest trading partners are Namibia, Botswana, Zambia, Zimbabwe and Lesotho (Information 2019). DFF fashion designers have an opportunity to export fashion products in 26 countries at low trade tariffs and with the growth of mobile phones and lower rates for internet connectivity, affords DFF fashion designers to enjoy the benefits of ecommerce adoption (Walters 2016).

The COMESA-EAC-SADC TFTA creates an opportunity for the drop-shipping business, which is B2B model where a fashion designer(s) in another country selects a niche product from another fashion designer from another country and creates a website with the same products and order the products when they have received a purchase (Long 2019). Drop-shipping is effective and advantageous to SA fashion designers because of similar body shapes and are familiar with cultures in their neighbouring African countries. Considering the statistics in Table 4.2 where Namibia, Botswana, and Lesotho are South Africa's neighbouring countries and are the top three revenue contributors to SA exports in fashion, there is room for growing the business further.

In February 2019, SA signed the African Continental Free Trade Agreement (AfCFTA), a new trade policy that will influence technology and business. The AfCFTA focuses on improving the flow of goods and services within Africa and by African countries by increasing market access, productivity levels and promoting all countries including the marginalised ones (Parshotam 2017). The AfCFTA intends to benefit 55 African countries however, 27 countries in July 2019 had signed the agreement and South African fashion designers can benefit from the trade. The AfCFTA talks emphasised technology as a business enabler, supported by the main African countries that control the 1 trillion capitals in financial markets, which are Nigeria, SA, Abija, Morocco, Kenya through the mobilisation of infrastructure investment and improving digital systems (World Economic Forum 2019).

According to World Economic Forum (2019) around 1992 women supported their families through clothing businesses. They would go to neighbouring cities or countries and buy bulk clothing, and when they would travel by airplanes, they would wrap bales of clothes around their bodies to avoid high customs taxes to reduce the costs of clothing when reselling. AfCFTA aims to reduce custom tariffs when member states are trading, if the agreement is successful, African clothing will be cheaper making them competitive to the Asian cheap clothing.

However, and with online buying, people with boutiques the market ladies will have the convenience of ordering and replenishing stock without leaving their selling places or incurring long tedious journeys. AfCFTA's success will open a bigger market for fashion designers as they can make clothes for different age groups and due to the diversity of the fashion designers, will have a market for their designs. Annushkafashions.co.za is one successful ecommerce fashion brand that sells wholesale women's fashion, and businesses buy for reselling not just in SA but surrounding countries like Zimbabwe, Zambia, and Botswana. Annushka is a good example of how technology has simplified the inter-trade fashion business.

The three biggest economies that dominate ecommerce are Nigeria, South Africa, and Kenya. Nigeria comes as a West African country that has the most e-Commerce sites with around 40% of Africa's e-Commerce companies headquartered in the country while internet penetration only 48%. The African trade agreements can benefit South Africa through partnerships with powerful ecommerce companies in Nigeria. To further explain, Nigeria has advanced in ecommerce following the launch of the Jumia marketplace in 2012, which is considered the Amazon of Africa. The ecommerce is in 14 countries and is focused on creating a platform for SMMEs in Africa to trade. The Jumia platform is based in Nigeria and prominent in Kenya and they are making inroads in SA as well. Fashion is one of the selling commodities on the platform and Zando, and SA ecommerce fashion part of the Jumia group.

#### **4.3.3 SA culture and Ecommerce**

Mbumbwa and Chigada (2018) posit fashion is a culturally or socially influenced way of dressing at a given time in a social system. The Durban fashion designers who include cultural influences in their designs reveal this.

South African population is deemed a rainbow nation because of the five ethnic groups of Blacks, Coloureds, Indians, and Whites. Also in addition, the population from the influx of foreigners from war and economically depressed countries, for

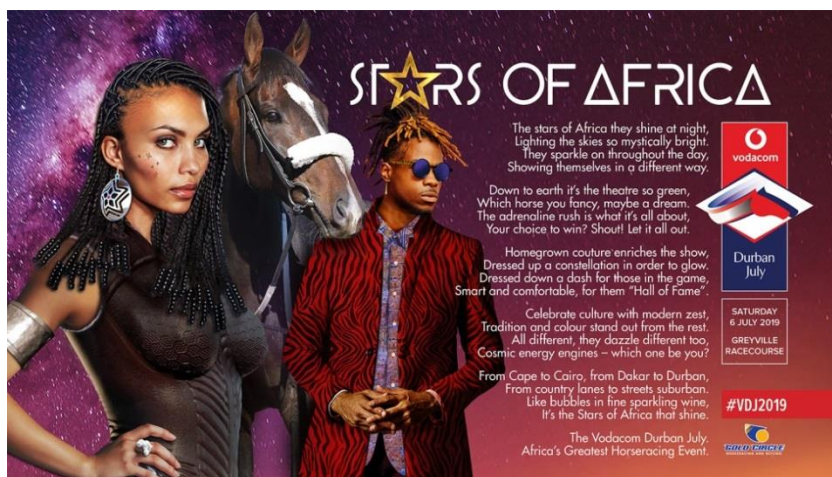


example, Congolese and Zimbabweans (Mbumbwa and Chigada 2018). Facebook.com attests to the fashion designers' influences on social pages such as 'Durban fashion fair', 'SA fashion week' and 'Indoni' and cross-culture elements.

The South Africans are not ashamed of wearing ethnic attires for major events and a good example is a presenter for the SA investment summit dinner who wore an African attire, even though it was a business event (SABC 2018). The event being aired on the main television channel and it becomes a B2C advertising technique. The country also celebrates Heritage Day (24 September) a national holiday to celebrate the diversity of cultural beliefs and traditions creating an opportunity for DFF designers to grow their business as SA nationals require outfits for the day. The fashion designers that advertise their clothing on social media like Facebook before the national holidays increase the fashion brand's visibility thereby increasing their chances for obtaining more orders from clients.

Another notable event of the African pride in 2019, was the theme for Vodacom Durban July (VDJ) 'Stars of Africa' that was inspired by the American movie 'Black Panther' please see Figure 4.1. VDJ is one of the publicized fashion events hosting around 55 000 people on the day (Gold Circle 2018).

**Figure 4-1: Vodacom Durban July Theme for 2019**



Source: Adapted from Durban Fashion Fair (2019a)

#### **4.3.4 Media related fashion influencing events in South Africa**

South Africa is considered the future hub of technology in Africa with one of the thriving African economies and the garment industry is the second largest employer in the manufacturing sector of South (Walters 2016; Charles 2019). By adding technology elements in the garment sector leads to tremendous economic benefits for fashion designers and the country. Fashion designers are cognizant that technology influences fashion adoption thereby influencing the purchasing behaviour of customers hence the need for ecommerce adoption in their businesses.

Two important factors that make technology a strong influencer is:

- a) Technology is a cheap communication tool that allows various Media to be shared.
- b) SA population the majority are millennials and the age below 14 who are techno-savvy (Mubangizi 2012).

According to (Mbumbwa and Chigada 2018) there are three ways a fashion is communicated in a social system and being in the 4<sup>th</sup> industrial revolution, technology is one of the main ingredients for the SA population.

#### **4.3.5 The trickle-down ecommerce-fashion**

- ***Socio influenced fashion***

This is when the high-socio economic class gains access to new trends, and they publicize them leading to imitation by lower-socio economic class, the higher-socio economic class is mostly celebrities while the lower-socio economic class is the ordinary people (Dyerson *et al.* 2009). It involves the vertical link of early adapters of newly introduced fashion (celebrities) to the imitators of the fashion (ordinary citizens) (Mbumbwa and Chigada 2018).

There are many events in SA where celebrities adorn the latest fashion creations from local designers. One of the events is Idols, a national musical competition

show that is broadcasted on Mzansi Magic, a DSTV channel. Idols have approximately 1700 000 followers on Facebook (IdolsSA 2019) and the last show in 2018 had 326 687 views on YouTube (Idols 2018).

Idols recruit candidates from all of the South African provinces to compete in Johannesburg for the trophy. It is a well celebrated and well-publicized event that runs for a couple of months on all media platforms such as television, radio, and social media and it allows for the interaction of the nationals where they are allowed to vote for their favourite musician at each stage of the elimination process (IdolsSA 2019). The musicians and judges are dressed by top fashion retailers and fashion designers and it is one of the most viewed shows in South Africa with 142 million votes in 2018 and 98 million votes in 2017 (Idols 2018). The fashion displayed by Idol contestants during music performances inspires the local people and the same fashion is seen on streets worn by fans as they imitate the celebrity looks.

- ***Event influenced fashion***

The second example of trickle-down fashion is event-influenced fashion. This is where organisers come up with the theme for the event and fashion designers and SA citizens dress according to the theme. The theme drives the tone and for the big events which are broadcasted on television and radio platforms, the fashion trends can be replicated internationally by SA community in the country and the ones in the diaspora.

This can be related to VDJ, the most elegant racecourse event in Durban that has a yearly fashion theme for the day. The VDJ is hosted on the first Saturday of July every year and the VDJ theme for 2019 is 'Stars of Africa', see Fig 4.1. The theme is communicated a few months prior to the event allowing for fashion designers and ordinary people ample time to make their outfits. The VDJ event collaborates betting, race horing and fashion thereby drawing celebrities, the and ordinary people from all over South Africa and approximately 55 000 people are in attendance on the day (Gold Circle 2018).

Fashion designers are on the spotlight on the day as they get to showcase their creativity with various competitions aimed at that. Both celebrities and ordinary are adorned in exquisite outfits which also markets the fashion designers (Gold Circle 2018). The VDJ has various activities including fashion show from top SA celebrated fashion designers, betting, race horsing and fashion competition (Gold Circle 2018).

The VDJ platform inspires fashion designers and customers gather inspiration from different sources from movies, art, previous works of established designers to name a few as they strive to make outstanding designs for the day that focus on the theme of the day. Online platforms, Facebook.com, YouTube.com, Instagram.com, and other websites are rich sources for inspiration when making new outfits and availability of cheap mobile phones and affordable internet connectivity charges and free WIFI makes technology first preference for fashion browsing.

- ***Established fashion designers to emerging fashion designers influenced fashion***

The third example of trickle-down fashion is from established fashion designers to emerging fashion designers. SA Fashion week, which is a week-long of celebrated fashion shows hosted in Johannesburg to publicize the creativity of South Africa's established and upcoming fashion designers with the support of other African designers in neighbouring countries. The SA fashion week is divided into three areas namely; i) fashion shows, ii) retail which are the pop up shows to sell merchandise from the fashion designers and iii) the trade fair which is a business to business interaction(SAFW 2018). The fashion designers can trade and showcase ladies, menswear, children's wear, jewellery, footwear, and accessories.

The SA fashion week platform offers fashion designers an avenue to connect with both customers and other businesses that include retail buyers, media, stylists, bloggers, manufacturers, and other designers and offers B2B ecommerce. The SA

Fashion week website builds awareness for fashion designers by making fashion show collections available online, including the contact details and the social media details of the fashion brands (SAFW 2018). According to SAFW (2018), ladies-wear designer made a profit of 67 430 079 million rand within two months before and after the fashion show and for the menswear designer, it was 62 430 079 million rand.

The SA fashion week website is a trend forecasting platform for upcoming fashion designers, giving an insight into the standards of the South African fashion with other fashion designers (SAFW 2018). The SA fashion week allows the trickle-down fashion from established fashion designers to upcoming fashion designers as well as the trickle-down fashion from fashion designers to fashion-forward people.

Durban Fashion Fair is an EThekweni municipality initiative that gained momentum in the city, the fashion shows are hosted on several days at different times for the fashion designers from the local emerging fashion designers, to local established fashion designers and the supporting African designers (Durban Fashion Fair 2019a). Before the fashion show, there are different selection processes in place that a fashion designer has to qualify.

The selection process starts early in the year from the selection on the fashion mentees and models and the respective invites. The fashion show is supported by pop up shops in the venue and public places. The events are publicized on the host website and social media such as Facebook and Instagram. The Facebook page following is growing every time and currently, the page has 28 000 likes (Durban Fashion Fair 2019a). Durban Fashion Fair has similar advantages as the SA Fashion week where fashion is communicated from the celebrities and established fashion designers to emerging fashion designers and fashion-loving individuals.

Another relatively new event is the Indoni, Cultural Pageant that celebrates the black cultures of South Africa. The event is a cultural fashion show for the South

African ethnic groups represented in the eleven constitutionally recognised official languages (Mubangizi 2012). Indoni event attracts the youth of the country, and the event gives a platform for accessory fashion designers mainly the beaders, the headgears and footwear designers who specialize in cultural wear (MissCultural 2019).

Also, there have emerged online celebrities that are prominent on Instagram, Facebook and other social platforms that advertise the latest fashion items, these are both local and international and South Africa's e domain names for social sites are based in the US and other international countries (McGann 2002;Kovalenko 2015).

#### **4.3.6 Trickle-up ecommerce-fashion**

This when fashion trends are influenced by ordinary people; in SA due to diversity there are varied social trends. Fashion designers get to see the street styles and factor them in when planning production (Mbumbwa and Chigada 2018). The street trends are mostly influenced by events, past or current music.

#### **4.3.7 The trickle-across ecommerce-fashion**

This is the diffusion of fashion from the same level of socio-economic groups; and is largely influenced by migration, liberalization, and technology. The trickle-across fashion is evidenced by the adoption of Ankara wear, an African dressing from East Africa now adopted by South Africans (Mbumbwa and Chigada 2018). Another special note is that SA weddings in the past three years have been moving towards cultural wear where the bride, groom, and bridal team adorn African wear where they have been influenced by the weddings in East, Central, and West African countries, for example, Nigerians and Congolese and Ghanaians. The millennial generation is affected more by trickle across because they are computer savvy and have a social media presence; it makes them be easily influenced by trends from peers and even other nationalities (The Nielsen Company 2014).

## 4.4 Challenges facing SA fashion designers

- ***Fashion is a perishable product***

Van Den Berg and Almanza (2016) stated that fashion is a seasonal product, which poses challenges to DFF Designers. According to Mbumbwa and Chigada (2018), fashion is a culturally endorsed form of expression that is shown by an individual or group of individuals in a social system at a given time and it changes over time. Fashion usually has four clothing seasons and the product life cycle can last an average of 45 days and a critical component is that the profits are made during the peak periods of each season (Han, Yoo and Jeon 2015). Ecommerce offers services to advertise and market fashion items to a greater geographical area leading to increased sales in the shortest possible time.

Clothing is an expression of current customs, in a social system, the challenge for DFF designers have been i) to keep up with the skills and resources needed to rapidly respond to changing customer preferences (Van Den Berg and Almanza 2016) ii) selling fashion items in the shortest possible time, while it is on-trend and avoid imitation and maximise sales (Han, Yoo and Jeon 2015). According to (Van Den Berg and Almanza 2016) results indicate that once a garment is placed in a retail store, it has a life expectancy of two months.

- ***Competition***

The South African fashion industry is a highly competitive industry from both local and non-local producers of fashion thus affecting both continental and international (Mbumbwa and Chigada 2018). In addition, Durban is a coastal area that enjoys proximity to the harbour such that there are low transport costs for goods from the east are shipped where many Chinese and Indonesian order their stock from. The DFF designers have differentiated products focusing on niche markets however; the challenge is that the Durban market is already saturated. Although the DFF offers the designers local exposure through local trade fairs, fashion shows, and the DFF Emporium boutique there is a need to expand the market beyond the

confines of Kwazulu Natal. Durban is rich in the Zulu cultural dressing, the accessories among other cultural dressing, if only they could sell to other cities or African countries or internationally it would increase the customer base and allow for growth of the DFF Fashion Brands (Francis 2010).

- ***Lack of information to make the right management decisions***

Lacking business skills is another great challenge faced by fashion designers. Van Den Berg and Almanza (2016) in their study revealed that most fashion designers are creative people motivated by intrinsic rewards such that they find themselves lacking in money management skills of running a successful business and they under-price their products and this leads to business failure (Malem 2008). DFF designers can alleviate the business skill challenge by having the necessary applications that compensate for the lacking skills thus creating a 'right balance' of creativity and business skill (Van Den Berg and Almanza 2016).

Another challenge for DFF fashion designers is that their products do not meet the market requirements and expectations since some of the fashion items will be over-priced (Van Den Berg and Almanza 2016).

The DFF designers need a business tool that can assist them with accurate information during the product development process from cost, appearance, materials selection, innovation, performance and quality since all these factors influence the final product (Van Den Berg and Almanza 2016).

The lack of business skill can be neutralized by use of ecommerce applications and already in the market for fashion designers are ecommerce accounting packages, for example, Sage which offers easy management of accounts even to people with the lack of accounting knowledge and calculates profitability, there is also Sync an ecommerce software for costing of fashion products, buying and despatch to retailer (iSyncsolutions 2018; Sage 2019).



- ***The high cost of production***

Jacobs *et al.* (2016) mentioned that the need to overcome production minimums is a great challenge to upcoming fashion designers. DFF designers face the challenge of lack of resources especially at the initial start of the business that further complicates finding a manufacturer. Outsourcing production is a challenge because local suppliers are not willing to produce small quantities at a reasonable cost (Thompson, Okon and Nwonye 2015).

The DFF designers lack the infrastructure for efficient resource management to secure established manufactures who will carry out their production thus ensuring low cost of manufacture and quality garments (Thompson, Okon and Nwonye 2015). This is a very big challenge for upcoming Fashion designers forces them to experience Slow Fashion as they do not have links of cheap manufactures available and other designers who they might combine with to reach minimums (Malem 2008; Štefko and Steffek 2018).

Slow Fashion concept is the time taken in the production of garments, from conceptualization up to the final product, this includes the in-house development and manufacturing. Slow fashion in this instance is a longer duration of manufacture. The production process affects designers in that there is time investment which leads to both higher overhead and variable costs and this affects the price of the final making it higher moreover sales are lost clientele due to changing trends (Štefko and Steffek 2018).

- ***Fabric sourcing raw materials and buying (Availability)***

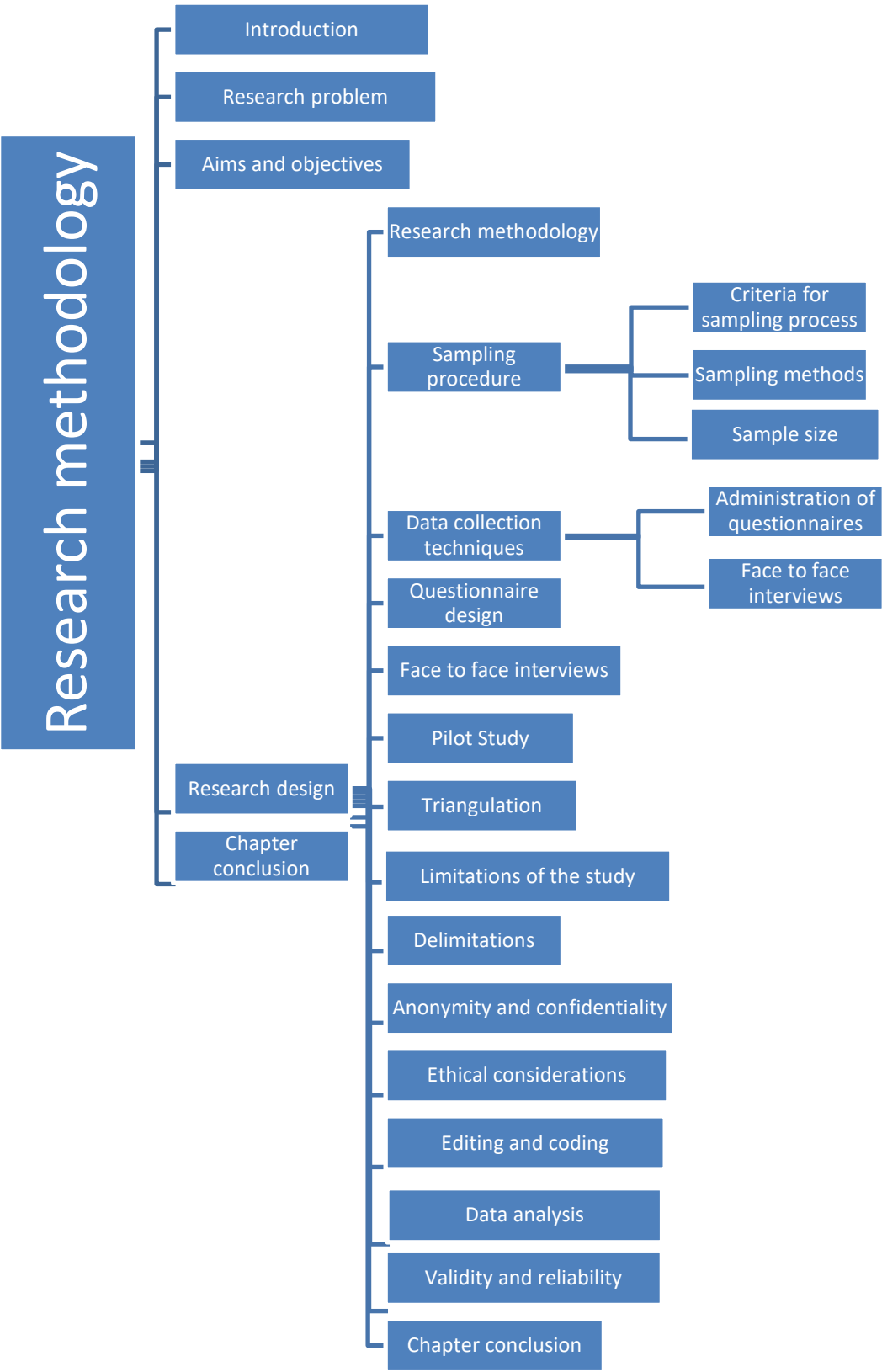
The Durban Fashion Fair Designers find it very difficult to procure fabric from South African suppliers that is affordable, of high quality and unique. The few suppliers that sell affordable fabric are the same suppliers used by many Fashion designers. The limited range of fabric in stores also limits the creativity of designers. Fashion designers do not have the buying power to import fabric from overseas like China since they cannot afford minimum order quantities (MOQ), and for fabric quantities below the MOQ, the surcharge and commissions involved

are too high for the Fashion Designers to afford (Malem 2008). Fashion designers need to establish business relationships with fabric suppliers, manufacturers, customers, distributors, and agents to reduce their expenses and increase control over the processes. Also, the relationships can help the Fashion designers to negotiate for credit terms with fabric suppliers for thirty to sixty days while they grow their cash flow (Malem 2008).

#### **4.5 Chapter conclusion**

The chapter gave insight on the influencing factors of fashion in SA from the policies by the government, the media exposure and the challenges that the fashion designers face that could be alleviated by ecommerce. The next chapter will focus on the research methodology.

Overview of Chapter Five



# **CHAPTER FIVE**

## **RESEARCH METHODOLOGY**

### **5.1 Chapter introduction**

The previous chapters have examined various studies on the literature on e-commerce application, scope of e-commerce adoption, and the associated benefits and seek to understand the extent of e-commerce adoption by fashion SMMEs in Durban. (Ranjit 2011); Silverman (2017) posited that research methodology addresses research strategy (the reality of data observation, role of the researcher, population, sampling as well as instrumentation and data management) and data analysis methods.

The chapter is divided into three sections; the first section focuses on the research methodology and design, while the second section focuses on the data collection methods. The third section deals with issues of validity and reliability of the data, including potential limitations in the chosen methods.

### **5.2 Research problem**

Guo and Hu (2014) described e-commerce as a recent business model that has led to major changes in the modes of production globally. Small Medium Enterprises (SMME's) have been viewed as key drivers of economic growth, innovation and job creation in South Africa. This is true in the fashion Industry, which accounted as the second-largest job creator in South Africa (Charles 2019). However fast fashion from other countries like China has affected the fashion industry, and Durban being a port with harbour provides a cheap inflow of clothing items leading to designers struggling with selling prices while the costs are high in Durban and South Africa as a whole.

The DFF program has been a successfully incubated fashion designers giving them opportunity to showcase their products for selling in boutiques and at trade fairs. However, the designers experienced challenges as fashion became a rapidly

changing industry requiring quick response times to seasonal fashion trends with respect to both production and marketing (Lidia *et al.* 2012).

The extent of e-commerce adoption among fashion designers in developing countries is limited because of unavailability of comprehensive data and also limitations in the scale of internet based technologies in the business processes. The challenges of fashion such as fast fashion and competition forced a product-driven environment where DFF designers needed quick manufacturing times, fast production of new designs, service new and returning customers, and market and sell their products in the quickest way possible, while creating relationships with their customers in a cost effective manner. The purpose of this framework is to assess the contributing factors of e-commerce adoption such as challenges, influences, and benefits of e-commerce adoption and determine the extent it has been adopted by fashion designers. The anticipated benefits of the research are to assess and improve e-commerce adoption among fashion designers, discover ways to mitigate the challenges of e-commerce adoption as well as inform designers of the benefits derived from implementing e-commerce in their businesses.

### **5.3 The aim and objective**

This study sought to address the following aim:

An investigation of the extent of e-commerce use by fashion SMMEs focusing on Durban Fashion Fair Designers. This central objective was corroborated by recourse to outlining the influencing factors of e-commerce adoption, identifying the challenges and the benefits of e-commerce and establishing the scope of e-commerce adoption.

### **5.4 Research design**

According to Moloantoa (2015), research design is a set of instructions and principles that direct the study in answering the research problem. Giving the researcher foresight to make the required resolutions that will give the closest

results that are valid and reliable (Moloantoa 2015). The resolution gave direction for the researcher to choose a strategy for data collection and analysis best suited to the study. A case study approach was adopted in this study and nested on a mixed-methods study design with respect to the use of both qualitative and quantitative data.

Mixed-methods designs made use of survey questionnaires and interview guides to collect quantitative and qualitative data, organised and analysed the facts and attained the conclusions of the study (Creswell *et al.* 2003; Graff 2016; Creswell and Creswell 2017). A number of variables established through extensive literature review such as; extent of use of e-commerce, challenges of e-commerce adoption, benefits of e-commerce adoption and influential factors in use of e-commerce technologies in business processes, were collected using a structured questionnaire quantitatively. Through quantitative data, the research was able to redress the 'what' and 'how' questions of the inquiry. On the other hand, qualitative research focused on narrative analysis that helped derive realities during interaction with the participants and helped more analytical questions. The combination of these data collection methods provided the best analysis of the current usage of e-commerce and a review of the objectives of the study.

According to Ganesh (2018:153), "mixed methods research is both a method and methodology for conducting research that involves collecting, analysing and integrating quantitative and qualitative research into a single study or a longitudinal program of inquiry". The quantitative data collection was achieved through the administration of a comprehensive questionnaire to the DFF designers. The questionnaire items were derived from objectives of the study and relevant themes adopted. On the other hand, qualitative data collection was carried out through face to face interviews. The mixed-method design in the study permitted the researcher to analyse the DFF program in its current real-life setting to perceive and assess the challenges of e-commerce adoption, influencing factors and potential benefits of e-commerce adoption. It also allowed the researcher to interact with the DFF executive team and better understand their experiences

during mentoring the fashion designers, the challenges they perceived the fashion designers faced to draw conclusions and make recommendations for successful adoption and capitalising on the e-commerce benefits.

The study involved inquiries on e-commerce adoption by fashion SMMEs and hence it did not involve online customers. The researcher sought to find out what the reasons behind fashion SMMEs adopting e-commerce and the study focused on DFF designers, which are a group of designers that get support from the Durban fashion fair initiative, a department operating under the EThekweni municipality.

#### **5.4.1 Research Methodology: A Case Study Using Mixed Methodology**

A case study research can be composed of single or multiple case studies analysing individuals, groups, events, decisions, policies or systems holistically using single or multiple methods (Ndayizigamiye 2012; Tight 2017). This approach was valuable for the fashion industry as it opened an opportunity to develop the theory, evaluate influencing factors for e-commerce adoption, current usage of e-commerce and challenges. The case study methodology was advantageous to the researcher in the development of necessary interventions due to the mouldability and thoroughness.

The case study emphasised on using multiple sources and techniques to gather data which made the approach ideal for the study. J.W Creswell et al. (2007:75) defined a case study as “a systematic inquiry into the event or a set of related events which aims to describe and explain the phenomenon of interest.” Yin (2009:187) stated qualitative research as “a case study is an intensive investigation of a single unit and uses multiple variables”. Therefore a case study was selected to determine the reality of e-commerce use by fashion designers by providing statistics, trends and offered a multi-perspective evidence (Creswell *et al.* 2007).

A case study due to its acceptance of a handful of approaches and purposes thus made the approach ideal for the current study. Data collection used various methods that encompassed quantitative and qualitative research methodologies. The collations of the data collection methods provided critical analysis of e-commerce adoption to yield competitive advantage through the use of digital systems by fashion designers.

According to Ganesh (2017) case studies are regarded at the epitome of understanding social issues since they include human understanding and experience. Below are cited the benefits and challenges of this approach.

#### 5.4.1.1 Benefits:

- I. Case studies enhanced analytical thinking, communication and allowed for the open-mindedness of different views over the same subject of study (Ganesh 2017).
- II. The case study allowed for the study of innovations or new experiments or inventions.
- III. The case study was a good approach to test theoretical assumptions and provided alternatives or supplements to the focus group (Singh 2014:12).
- IV. The case study was not limited to exploring data in a real-life environment, it also assisted in giving insight to complexities of real-life which are not easily comprehended in experimental or survey research (Zainal 2007; Ganesh 2017).

#### 5.4.1.2 Challenges:

- I. The case studies are depicted as long and difficult due to the enormous documentation (Zainal 2007).
- II. Case studies are based on the point of view of the researcher which might be a biased view (Ganesh 2017).



The qualitative research in mixed-method gave further insight into the important factors that the researcher might have overlooked using quantitative research (Graff 2016). The study employed a sequential and nested mixed methods study where quantitative data was the main form of data enriched by qualitative data, where the former being collected first and then the latter (Graff 2016).

The mixed-method provided a better understanding of a research problem because it gave different perspectives to the research. Graff (2016) posited that the mixed method was a relevant way of addressing research problems and it enhanced applicability as it combined procedures into specific research design (Small Enterprise Development Agency 2016) .

#### 5.4.1.3 Description of the population and the target population

Ganesh (2017) described the population as the entire set of individuals of interest or individuals with common characteristics where a sample will be selected from. The population of the study was Durban designers which consisted of approximately 600 formal designers from KZN fashion council and DFF (EDGE 2014; Ngobese 2016).

According to Bhattacharjee (2012), the target population was described as the group of individuals, which the researcher generalised the findings. The target population was the DFF designers and the DFF executive team. Given that e-commerce adoption by fashion SMMEs formed the focus of the research, the target population selected for Durban fashion fair which consisted of 70 DFF designers and 10 members of the DFF executive team (Durban fashion fair 2019b).

#### 5.4.2 The Sampling Procedure

Ranjit (2011) defined sampling as a process of selecting a smaller representative of the target population to become the base for predicting the answers that the study sought to find. A sample was the subgroup of the total study population (Ranjit 2011). For the sample to be used to generalise results, the sample was to

be representative of the population as a whole (Welman, Kruger and Mitchell 2005). The study utilised a census study.

#### **5.4.3 Criteria for the selection of the sample and sampling methods**

All the DFF designers and the DFF executive team were invited to participate in collection of the data for the study. The sample size for the quantitative phase of the study was estimated at 70 respondents and the sample size for the qualitative phase was 10 respondents. The sample size represented well the population as it had participation from the different categories of the fashion designers.

- ***Inclusion Criteria***

(Ranjit 2011); Moloantoa (2015) emphasised the importance of having a larger sample in quantitative research as it gave certainty of findings and the variation of the sampling population also affected the findings of the study. The larger sample was derived through the use of census study while the variation of the sample was through the three categories of DFF designers, the Mentees who were the designers under mentorship, the Emerging designers who were designers with average experience in the fashion business and the Established designers who were the stable fashion businesses. One of the advantages of census study was that it collected information about individuals and gave more accurate findings of the DFF population (Ranjit 2011).

The DFF executive team was used for the qualitative analysis where the individuals were information-rich on the DFF designers' business and their initiatives (Graff 2016). The qualitative research gave in-depth knowledge about fashion SMMEs and also provided insight into the different aspects overlooked in quantitative research.

- ***Exclusion criteria***

The research did not include fashion designers that are not part of the DFF or executives that are not involved in the DFF initiative.

#### 5.4.4 Sampling methods

Given that the sample size was less than 100, the study utilised census study. A census study was conducted for the DFF designers and DFF executive team, where data was gathered from every member of the population. A census survey collected completed information from all participants in the population. A census survey included establishment and maintenance of a complete list of the primary sampling unit (PSU) components.

#### 5.4.5 Sample size

The estimated number of fashion designers in Durban was 600. The DFF constituted of 70 designers and 10 executive members who were invited to participate in the study. As such, 58 fashion designers participated in filling in the questionnaire under the three categories of the designers and 3 members of the DFF executive committee participated in the interviews.

The interviews were conducted on three DFF executive members that held diverse portfolios such that the sample was diverse and information-rich on the fashion SMME business (Ranjit 2011). Refer to table 5.1

**Table 5-1: Sample Size tabulated**

Population : 600 fashion SMMEs			
Target population : 70 DFF designers and 10 DFF executives			
Categories	Population	Responses	Difference between responses.
DFF Executive team	10	3	7
Mentee Designers	20	15	5
Emerging Designers	30	25	5
Established Designers	20	18	2
<b>Total</b>	<b>80</b>	<b>61</b>	<b>19</b>

Source Adopted: Generated by the researcher

#### **5.4.6 Data collection techniques**

Two approaches were utilised for data collection to allow for triangulation of findings. The one form was through survey design and the second was through interviews.

#### **5.4.7 Administration of questionnaires**

The survey design included the closed-ended questionnaire, Likert scale for fashion SMMEs. Ndayizigamiye (2012) explained the survey design as a data-gathering technique used by asking questions and the respondents tabulating their responses.

The data was collected sequentially from quantitative to qualitative data methods. The researcher obtained the contact details of the DFF designers from the Durban fashion fair website and the social media pages of Durban fashion fair namely Facebook and Instagram page (Durban Fashion Fair 2019a, 2019b). All the DFF fashion designers were enlightened about the research and requested to participate. The researcher sent messages on Facebook messenger, through emails, phone messages and calls, and WhatsApp and those who responded indicated the best option for them for the completion of the questionnaire.

The survey design was in the form of a questionnaire that was distributed in the following forms: i) hard copy printed ii) an MS word questionnaire iii) an online google form. According to Ganesh (2017), there were two types of questionnaire administration, namely self-administered and interviewer-administered.

- Respondents had the freedom to answer at their own time and spend as much time as they need
- The respondent were not under bias from the researcher
- The costs were lower as the respondents administered for themselves
- There was no need to set up interview appointments
- It was a cheaper way of surveying large samples

The survey for printed questionnaires was self-administered by the researcher and participation was voluntary. The fashion SMMEs had three options on how to fill in the questionnaire based on what was convenient and accessible to them. The printed questionnaire was hand-delivered to the respondent; the second option was that of MS word questionnaire that was emailed with also the option of the link of the online google forms, the online google forms link was also sent to respondents via WhatsApp.

The researcher gave the respondents the time allowance they needed to fill in at their convenience and followed up reminding the respondents through phone calls, emails or WhatsApp messages. The hand-delivered completed questionnaires were collected when the respondent informed the researcher of its completeness. Moreover, the researcher was available for those respondents who needed clarity on the questionnaire.

#### **5.4.8 Face-to-face interview schedule**

While the quantitative data used questionnaires, the qualitative data used face to face interviews for collection. The interviews were held with the DFF Executive Management team. The qualitative data was a follow up on specific observations after quantitative analysis which was the basis for what was called a nested approach to mixed methods design as outlined earlier.

The advantages of face to face interview were numerous, firstly they provided rich descriptive information from observation as well as respondent social reality and knowledge (Creswell *et al.* 2007). Interviews also allowed the researcher to understand the world from the interviewee's perspective and it unfolded the voices of many people on the subject of study based on their social situations and thereby giving a perspective of the larger population (Kvale 2006). There were however challenges to interviews namely (Brown 2018).

- Interviews were time-consuming
- Interviewing is a skill that the interviewer needed to gain before applying it and there is no way of measuring competency, otherwise the information might be inappropriate.
- You cannot generalise interviews
- Interviews could easily have been biased;

Knox and Burkard (2009) emphasised that the depth of the relationship between the interviewee and interviewer determined the interviewee's disclosure and the depth of information shared.

The interviewer gained trust and empathy of participants by holding several meetings with the top management of the DFF designers and explaining the challenges faced and how the research could benefit the DFF initiative (Silverman 2017). This allowed the management to open up and give the relevant support for the study.

#### **5.4.9 Questionnaire design**

The questionnaire was designed in a way that collected information such as demographic information and other factual information that addressed the four objectives of the research. All questions were closed-ended questions on a Likert scale with five pre-coded responses. The scale ranged from 1 (strongly disagree) to 5 (strongly agree). The questions were in a positive form and the structure of the questionnaire was kept simple and easy for the respondents to complete without difficulties. The study used a structured questionnaire for the collection of quantitative study.

##### **5.4.9.1 Questionnaire items**

The questionnaire was written in simple English and it was divided into sections. The sections were derived from the objectives of the study. The questionnaire was divided into the following sections as follows:

Section A - Biographical details of the respondent. This section asked the fashion designers their age, gender, the category the designer falls under to name a few. This section is important as it describes the population under study and demographics thereof.

Section B -The Business. This section asked the respondents about their businesses, such as the annual profit, number of current employees and the products that the company focuses on.

Section C - The Use of e-commerce. This section aimed to establish the degree of e-commerce use in communication, documentation, and internet uses by the fashion SMMEs.

Section D - Factors influencing the adoption of e-commerce. This section aimed to assess the internal and external factors influencing the adoption of E-commerce by the designers. Examples included how the designers viewed government support of their businesses.

Section E - Benefits of e-commerce. This section focused on evaluating the advantages that fashion designers derived from the use of e-commerce, for example, if they experienced an increase in revenue or sales.

Section F - Challenges faced in adopting e-commerce. This section appraised the disadvantages such as the bank applications if they were user-friendly.

#### **5.4.10 Face to face interview construction**

The interview questions were based on the research objectives and emergent themes were derived. The researcher developed interview questions to elicit information from the DFF executive team. The questions were open-ended to allow the DFF executive team to explain comprehensively on their responses. The face to face interviews were based on the following themes:

Theme 1: Overview of the purpose of the DFF. This section explored the aim of the DFF, its inception, the statistics of the fashion designers and their focus groups.

Theme 2: The Use of e-commerce. This section asked the executive team to provide their knowledge on the e-commerce systems that they use for selection, communication, advertising and promoting fashion designers. Moreover, their own previous experience of online systems.

Theme 3: Factors influencing the adoption of e-commerce. This section delved into the critical aspects that the executive team has put in place that also influences fashion designers to adopt e-commerce, for example the e-commerce strategy, available infrastructure.

Theme 4: Benefits of e-commerce. This section focused on the perceived and derived benefits of e-commerce adoption. This is critical as it strongly influences adoption. The benefits were discussed broadly as to provide an understanding of e-commerce from the executive perspective.

Theme 5: Challenges faced in adopting e-commerce. Challenges that the executive team faced and the challenges that the fashion designers face in e-commerce adoption were examined. This was critical as it gave an overview of fashion designers in a developing economy.

#### **5.4.11 Pilot study**

Fain (2010) stated the importance of pre-testing research instruments for adequacy and identification of the flaws and weaknesses in the research methodology. The pilot study informed the researcher if the research instrument needed to be further perfected before use. The researcher focused on the following areas for the pilot study i) the amount of time required to complete the research instrument, ii) if the questions were clear and iii) if there was anything offensive or ill-suited (Brink 1998).



The first questionnaire was developed along with the proposal in October 2018 which was an MS word. The pilot study was conducted using non-DFF members. From the pilot study, some of the fashion designers mentioned that they preferred an online form and after two weeks of sending the questionnaires the researcher developed a google form and sent out the online link for the google form to the fashion designers who had mentioned that they preferred the online form. The google form was the same as the MS word.

The fashion designers used the MS word questionnaire where they filled in using the MS word applications or printed, filled in and scanned back the questionnaire. The fashion designers mentioned that the purpose of the research was not clear, and the questionnaire did not have anonymity since there was a section to fill in the name. Additionally, further comments revealed that the biography details were not supporting the objectives of the research.

The researcher amended the questionnaire on April 1, 2019, by adding a section to explain the purpose and ethics of the study, and adjusted the biography details by adding the employment history as it clarified person's behaviour in the adoption. The researcher also changed the survey questions on the benefits, challenges and influencing factors to be more in line with the objectives. The researcher further added the categories under which the fashion designer qualified either as a Mentee, Emerging designer or Established designer.

A pilot study for the interview was conducted on a fashion designer who is not involved at the DFF to check if the questions made sense and the interview was recorded for time measurement. Questions were amended for clarity and integrated for better quality and to ensure the time was within 30 minutes.

#### **5.4.12 Triangulation**

Ganesh (2017) defined triangulation as a methodical comparison of data results on the same research study that has been generated by different research methods. On the other hand, Parikh (2016) explained triangulation as a multi-method through the use of multiple sources to derive a conclusion for the study.

Triangulation had several advantages such as it validated data by cross-referencing more than two sources. This was further supported by Lee (2008) who emphasised that triangulation is one way to enhance validity.

Creswell *et al.* (2007) stated that triangulation reduced the likelihood of “chance associations” and prejudice since the data was gathered from diverse respondents in different settings using various research methods. In addition, the data was contextualised, making the findings credible and the recommendations relevant to the population (Creswell *et al.* 2007).

E-commerce is a dynamically evolving arena in the digital age due to the fast changing of technology in the trading space. It is therefore fundamental that the data from the different sources was carefully examined through triangulation for better decision making and applicable recommendations. The researcher reviewed data collection from two phases of the research study. Phase 1: Quantitative component. Phase 2: Qualitative component, the qualitative component, data was analysed and emerging themes were assessed critically for similarities and differences for an inclusive conclusion. The case study included only fashion designers and was solely focused on DFF designers residing in Kwazulu Natal.

#### **5.4.13 Limitations of the study**

The limitations of the study were that it was restricted to DFF although there were more fashion SMMEs in Durban. Also, the study was census study however not every designer responded to the survey due to their commitments and the DFF executives had a tight schedule such that only three members were available for the interviews.

#### **5.4.14 Delimitations/ elimination of bias**

Kumar (2005: 132) suggested that “the form and wording of questions is extremely important in a research instrument as they have an effect on the type and quality of information obtained.” The research was objective due to the use of suitable words for example on gender words; race and ethnic groups were not included as

they relate to racial discrimination. All participants were asked to participate voluntarily. Furthermore, minimum assumptions were made to the study.

#### **5.4.15 Anonymity and Confidentiality**

- ***Confidentiality***

Confidentiality is the protection of personal information. Ethical guidelines for social researchers were clear that confidentiality and anonymity are important elements of social research. Confidentiality was underpinned in protecting the information collected during research and not disclosing it without the permission of the participants (Wiles *et al.* 2008). The research supervisor has kept the collected data safe at the office and the online data on the cloud storage system and after the lapse of two years, paper surveys will be shredded and online questionnaires deleted. Confidentiality of 'let it slip' where the researcher might have been tempted to share information with a person outside the research team was prevented by the Supervisor's support through briefing sessions. The debriefing sessions allowed the researcher to offload emotionally challenging encounters faced during data collection (Wiles *et al.* 2008). The confidentiality and anonymity allowed respondents the freedom to share their true opinions without fear of being exposed. Confidentiality was supported by anonymity.

- ***Anonymity***

Confidentiality and anonymity informed participants of the people who had access to their data and provided the details of the processes of anonymization (Wiles *et al.* 2008). Anonymity meant hiding an individual's identity, or personally, identifiable information or omitting data or changing key characteristics of the participant thus making the person publicly unknown (Wiles *et al.* 2008).

The researcher withheld the identity of the participant from the Supervisor and the Statistician. For example, participants who emailed and scanned back the questionnaires the researcher kept their emails confidential and when the data was presented in a coded on the MS Excel spreadsheet form, the email addresses

were omitted thereby anonymity was kept. As a result, the coded data were faceless during data analysis. Wiles *et al.* (2008) stated that the anonymity and confidentiality of participants are central to ethical issues in research.

#### **5.4.16 Ethical considerations**

Ethics is an acquisition of values and principles that guide the researcher on the proper behaviour towards the respondents (Moloantoa 2015). “Ethics searches for reasons of why we should act or refrain from acting; for approving or not approving conduct; for believing or denying something about virtuous or vicious conduct or good or evil rules” (Australian law reform commission). Ethics brought fundamental considerations on the standard of conduct during data collection, data analysis and data interpretation (Moloantoa 2015).

The researcher obtained approval from the ethics committee of the Durban University of Technology to proceed with data collection. On the other end, the DFF management did not disclose the contact details of the fashion designers or grant consent; the researcher had to obtain the details from the website, Facebook page and Instagram page of the DFF. Moreover, the consent was obtained individually from the fashion designers.

All respondents were requested to sign a consent form that explained the aims of the study. The respondents could withdraw from participation at any stage of the research process. The research was conducted according to the Durban University of Technology ethical requirements. All respondent information was kept strictly confidential and anonymity will be exercised.

In the qualitative study, the researcher also respectfully waited for the DFF management to assign the people for the interview and respected the boundaries they set, for example, that the DFF designers should not be given surveys during the fashion show. The researcher negotiated where help from the management was needed for the execution of the study.

The researcher maintained both moral and professional conduct during the surveys and the interviews. The researcher explained to the participant the purpose of the study, procedures and the benefits gained from the study. This helped the participant to assess what was required of them as well as the impact of the research (Australian law reform commission).

#### **5.4.17 Editing and coding of data**

The coding of data was facilitated by the researcher in partnership with the Statistician. All data was captured by the researcher. Various methods were utilised as mentioned in the pilot study. The researcher in conjunction with the Statistician conducted data analysis using the selected statistical mentioned next.

#### **5.4.18 Data analysis**

Data forms the backbone of the study since it is the foundation where the study relies on. However, data analysis is the most integral part of the study because it provided the association between the insights on what the researcher had derived from the data concerning the subject matter through the use of statistics.

The Statistical Package for Social Sciences (SPSS) was used to analyse the quantitative data. Moloantoa (2015) stated that data analysis is the process of deciding on focus data and disposing of that which does not apply to the study. Various responses from participants were coded and entered into SPSS, and applicable tests run on the software (See appendix A). Cronbach alpha test was conducted for internal reliability and factor analysis test was run to establish the construct validity of the questionnaire (Al Abdallah, Abou-Moghli and Al-Thani 2018).

The other statistical tests conducted were Fishers exact, which was conducted to scrutinise the relationship between two nominal variables (cross tabulations) and also this test worked well with very small samples which applied perfectly to the study sample (Creswell *et al.* 2007). In addition, fishers test was one of the best

statistical methods because it is computationally intensive giving the exact p-value where the researcher can conclude from.

Data collection was methodological and smart to provide a careful examination, selection, modelling and transforming the data and divulging useful feedback. Furthermore, it provided insights important for decision making.

Content and thematic data analysis methods were used to analyse data from the interviews. The content analysis involved establishing categories and then counting the number of instances in which they were used in a text or image (Joffe and Yardley 2004). It is partly quantitative as it determines the frequency of the occurrence of a particular category. The thematic analysis brought meaning to the material analysed (Joffe and Yardley 2004).

#### **5.4.19 Validity and reliability**

- ***Validity***

Validity referred to the extent to which a test or instrument measured, what we the study wished to measure (Creswell and Creswell 2017: 157). Validity is important to the study as it was a good measure of how the questions are a good representative of the study. To ensure that the questionnaire was valid three constructs were used namely, content validity, construct validity and face validity.

Face validity: was the extent that the instrument 'looks' valid since it's based on a subjective judgement and cannot be quantified or tested (Creswell *et al.* 2007; Ndayizigamiye 2012). The questionnaire required face validity because it needed to look valid to the respondents so as to get the appropriate feedback. Face validity was vital for internal validity because, firstly, the questionnaire construction needed to be easily understood by the participants. In addition, the questions were constructed in a manner that compelled the participants to answer comfortably. And lastly, the questionnaires allowed the researcher to generalise the conclusions of the study because the items of each domain made sense and were applicable to real life settings (Al Abdallah, Abou-Moghli and Al-Thani 2018).

Apart from this, face validity was ensured when; the questionnaire was subjected to expert scrutiny. The experts included the Statistician and two research supervisors from other departments reviewed the survey questions to the research questions and provided the necessary suggestions and changes to the final questionnaire (Phelan and Wren 2006)

Content validity: was the assessment of the extent that “the instrument covers the complete content of the particular construct that it is set out to measure” (Creswell et al. 2007:13). The questionnaire measured “e-commerce” and it covered different elements of ‘e-commerce adoption’ for example ‘Use of e-commerce’ it had several subtopics that included the use of emails, whether the SMMEs owned a website, the social media used by the company to market the products and the internal software systems that make the business to be efficient of e-commerce. All these elements were included to ensure that the questionnaire is a representative of the domain under study (Ndayizigamiye 2012).

The validity of interviews was based on the interviewer's credibility of interpretations and also on the pre-testing. The pre-testing of the interview provided the researcher with an opportunity to “refine, rephrase and clarify” some of the questions as respondents have different conceptions on ‘e-commerce’ (Dikko 2016: 525). On some of the questions, prompts were added so as to obtain better responses, additionally the pilot study opened the researcher to omitted questions that were later included in the interviews (Dikko 2016). The pilot interviews conducted after the stated changes confirmed the ‘interview validity’ from the responses solicited.

The interviewer gained skill and knowledge from the pilot interviews as well as adaptation of the questions (Dikko 2016). After the pilot experience, the interviewer's interpretations proved valid and moreover the interviewees were genuine in that they were open to state their lack of knowledge to certain questions (Creswell et al. 2007). The interviews lasted maximum time of 35 minutes.

- **Reliability**

The reliability of an instrument was the extent to which a measure is consistent and repeatable (Creswell *et al.* 2007). Reliability was achieved such that if a similar research investigation was carried out or repeated under the same conditions and with the same variables, the results of the data will be the same or similar to the research (Bryman and Bell 2015). The study focused on the following reliability tests:

Internal reliability: which can also be called internal consistency, measured the extent of similarity among items under one construct since their purpose is to measure that particular construct (Creswell *et al.* 2007; Ndayizigamiye 2012). Cronbach alpha was used to measure internal reliability of the questionnaire and a reliability coefficient of 0.60 or higher was accepted for the study. The Cronbach alpha coefficients of the questionnaire were presented in the next chapter, Chapter 6.

Internal reliability was important to the study because it revealed the amount of measurement error in the questionnaire items and inter-relatedness of the items within the construct (Mohsen Tavakol 2011). Reliability enhanced accuracy of researchers appraisal and judgement (Mohsen Tavakol 2011). By incorrectly estimating reliability of the questionnaire, it would have affected the standard of measurement such that the recommendations and data interpretation would have been biased due to wrong foundation.

If the reliability was underestimated, it would have led to unwarranted improvements by the researcher and overestimated reliability would have led to replicability of skewed instrument (Viladrich, Angulo-Brunet and Doval 2017).

Test-retest reliability measured the scope on which the questionnaire produced similar results for the same group of people at different times (Ndayizigamiye 2012).

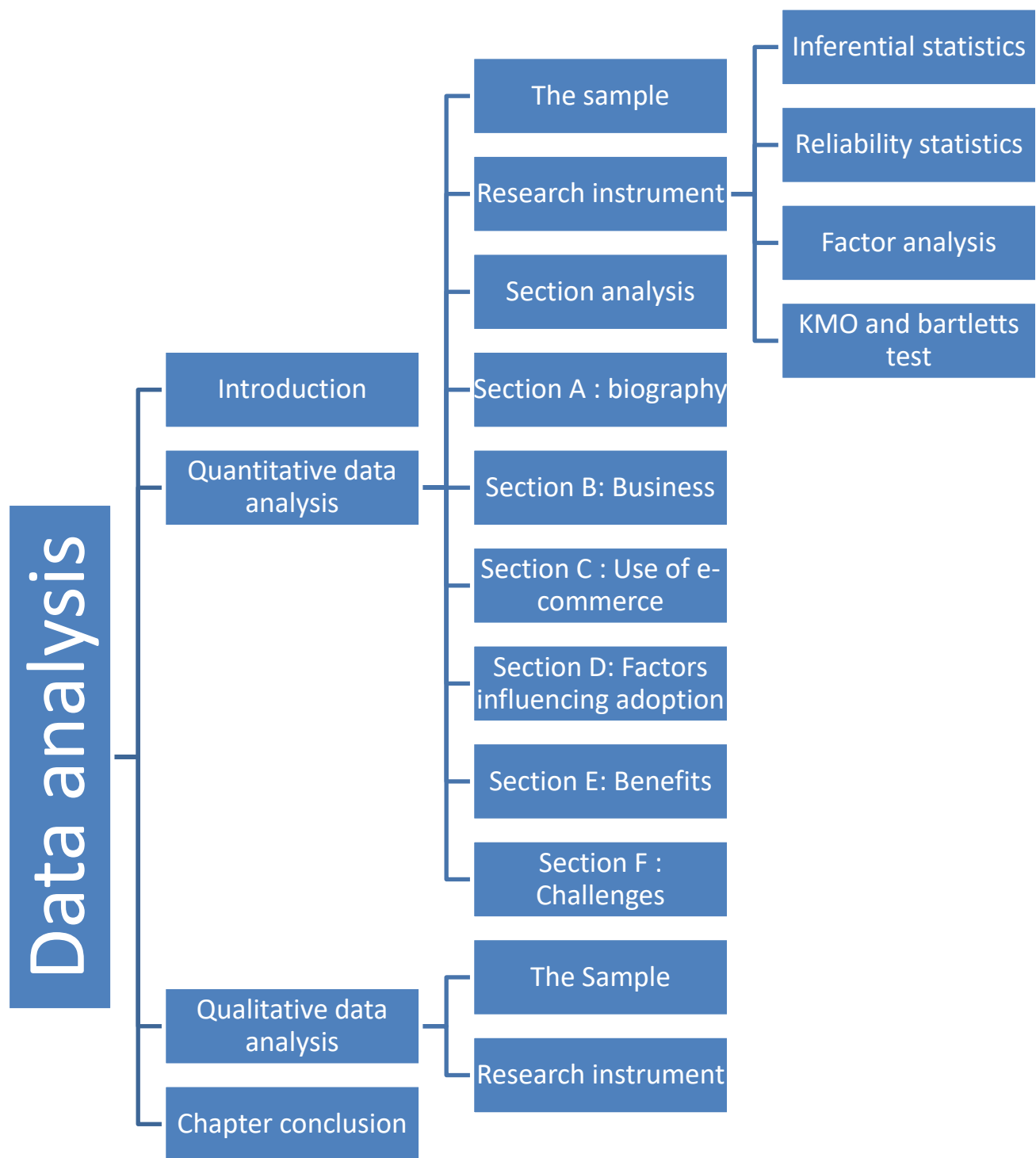


The survey instrument was ensured that it supplied consistent results by making sure the DFF designers answered the questions at their own pace and time to give correct responses. Additionally, the DFF designers were approached individually and the results were collected individually so that the responses were not influenced by other designers (Creswell and Creswell 2017). The study was reliable such that the research can be used for recommendations as well as other researchers can use the study to improve or aid fashion designers on e-commerce. Cronbach's alpha and split-half reliability were used to secure the reliability of estimates.

## **5.5 Chapter conclusion**

The research methodology covered the nature of the study, research design, population, and data collection techniques. The chapter explained extensively on how the data was collected and analysed, the sample and the pilot study of the research. The study used both the qualitative and quantitative research methods and the reasons behind the choice thereof. The next chapter focuses on data analysis and the interpretation of results.

Overview of Chapter Six



# **CHAPTER SIX**

## **DATA ANALYSIS**

### **6.1 Chapter introduction**

This chapter presents the results, interpretation, and discussion of the findings obtained from a quantitative and qualitative study. For the quantitative study, the questionnaire was used to collect data from DFF designers. The data collected from the responses were analysed with SPSS version 26.0. The results will present the descriptive statistics in the form of graphs, cross-tabulations and other figures for the quantitative data that was collected. Inferential techniques include the use of correlations and chi-square test values; which are interpreted using the p-values. The qualitative study made use of interviews, from the DFF executive team. The interviews were analysed according to the themes and objectives of the study.

### **6.2 Quantitative data analysis and findings**

According to Creswell *et al.* (2007:145), quantitative research encompasses important elements that are objectivity, numerical data and generalisability, considering that the researcher wished to remain objective while generalising the findings from the numerical data.

#### **6.2.1 The sample**

In total, 70 questionnaires were despatched and 58 were returned which gave an 83 % response rate. According to Ganesh (2017), the response rate is the percentage of responses received against the sample and, he denotes that the response rate should be at least 70% to avoid bias and compromising of the data.

## 6.2.2 The Research Instrument

The research instrument consisted of 53 items, with a level of measurement with the nominal and ordinal scales. The questionnaire was divided into six sections which measured various themes as illustrated in Table 6.1 below:

**Table 6-1: Sections of the questionnaire**

1	Biographical data
2	The Business
3	The Use of E-commerce
4	Factors Influencing Adoption of E-commerce
5	Benefits of E-commerce
6	Challenges Faced in The Adopting Of E-commerce

### 6.2.2.1 Inferential statistics

Inferential statistics is the generalisations of sample results to the total population which helps assess if the differences between the means and percentages are actual or not. This section explains the inferential statistics of the study.

### 6.2.2.2 Reliability statistics

The two most important aspects of precision are reliability and validity. Reliability is computed by taking several measurements on the same subjects. A reliability coefficient of 0.60 or higher is considered as “acceptable” for a newly developed questionnaire. The table 6.3 reflects the Cronbach’s alpha score for all the items that constituted the questionnaire.

**Table 6-2: Cronbach's alpha scores**

	Section	Number of Items	Cronbach's Alpha
C1	Use of email	3	0.759
C2	Availability of website	2	0.389
C3	Internet systems being used	6	0.857
C6	Marketing and selling of products	3	0.210
C8	Assigning another company to advertise and sell	2	0.264
D	Factors influencing adoption	4	0.606
E1	Communication benefits	2	0.711
E2	Performance benefits	3	0.719
E3	Revenue benefits	3	0.650
E4	Online applications benefits	2	0.780
F7	Bank applications challenges	3	0.617

The reliability scores for all but 3 sections exceed the recommended Cronbach's alpha value. This indicates a degree of acceptable, consistent scoring for these sections of the research. The sections with lower scores (C2, C6, C8) are mainly due to the minimum number of items that constitute the sections (2).

#### 6.2.2.3 Factor analysis

Factor analysis is a statistical technique whose main goal is data reduction by collapsing numerous variables into a few interpretable underlying factors (Chibvura 2017). For example, in this study, 'use of email for communication' under the objective 'use of e-commerce' each question, by itself, would be an inadequate measure of communication to measure the extent of e-commerce, but together they may provide a better measure of the attitude. Factor analysis can reveal whether the three measures do measure the same thing and the possibility of combining the factors to create a new variable.

The matrix tables are preceded by a summarised table that reflects the results of KMO and Bartlett's Test. The requirement is that the Kaiser-Meyer-Olkin Measure of Sampling Adequacy should be greater than 0.50 and Bartlett's Test of Sphericity less than 0.05. In all instances, the conditions are satisfied which allows for the factor analysis procedure.

Factor analysis is done only for the Likert scale items. Certain components divided into finer components. This is explained below in the rotated component matrix.

#### 6.2.2.4 KMO and bartlett's test

**Table 6-3: KMO and bartlett's test**

	Section	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
			Approx. Chi-Square	df	Sig.
C1	Use of email	0.685	43.144	3	0.000
C2	Availability of website	0.500	3.346	1	0.067
C3	Internet systems being used	0.860	108.722	15	0.000
C6	Marketing and selling of products	0.489	2.737	3	0.434
C8	Assigning another company to advertise and sell	0.500	1.327	1	0.249
D	Factors influencing adoption	0.670	22.404	6	0.001
E1	Communication benefits	0.500	26.488	1	0.000
E2	Performance benefits	0.661	30.323	3	0.000
E3	Revenue benefits	0.557	22.022	3	0.000
E4	Online applications benefits	0.500	23.960	1	0.000
F7	Bank applications challenges	0.520	22.191	3	0.000

All of the conditions are satisfied for factor analysis, except for 3 sections (C2, C6, and C8). That is, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy value should be greater than 0.500 and Bartlett's Test of Sphericity sig. value should be

less than 0.05. The sections that violated Bartlett's test also have lower reliabilities according to Table 6.2.

**Table 6-4: Rotated Component Matrix**

Component Matrix <sup>a</sup>	
C1	Component
	1
In-house	0.786
With other businesses	0.855
With customers	0.837
Extraction Method: Principal Component Analysis.	
a. 1 component extracted.	

**Table 6-5 : Rotated component matrix**

Component Matrix <sup>a</sup>		
C6	Component	
	1	2
On social media - Facebook, Instagram, Twitter?	0.792	0.023
On the company's Website	0.294	0.921
Using WhatsApp	0.726	-0.397
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		

Regarding the Table 6.4 and Table 6.5. The principal component analysis was used as the extraction method, and the rotation method was Varimax with Kaiser Normalization. This is an orthogonal rotation method that minimizes the number of

variables that have high loadings on each factor. The relationship of each variable to the underlying factor is demonstrated by factor loading.

Table 6.4a, the items of questions had a loading above 0.5 showing a strong relationship between the variable and underlying factor, thereby confirming that respondents had the same opinion on the variable. For table 6.4b it is noted that the variables that constituted Section C6 loaded along 2 components (sub-themes). This means that respondents identified different trends within the section 'The company markets and sells its product'. The splits are colour coded, the yellow represented the variables that satisfied the relation with component 1 (showing one trend) while green satisfied relation with component 2 (showing a different trend). The remaining factors can be found in the appendix section.

### **6.2.3 Section analysis**

This section analyses the first two sections (Section A and Section B) of the survey namely the biographical data and the business section. The results are first presented using summarised percentages for the variables that constitute each section. Results are then further analysed according to the importance of the statements.

### **6.2.4 Section A: Biographical data**

This section summarises the biographical characteristics of the respondents.



**Table 6-6 : Descriptive of the sample:**

Variable	Counts	Percentage
<b>Designer category</b>		
Mentee	15	25.9
Emerging	25	43.1
Established	18	31.0
<b>Job Title</b>		
Owner	31	53.4
Designer	20	34.5
Other	7	12.1
<b>Gender</b>		
Male	20	34.5
Female	38	65.5
<b>Age</b>		
18-29	26	44.8
30-39	21	36.2
40-49	9	15.5
50-59	2	3.4
<b>Companies you have worked for</b>		
Only one	11	19
Two	11	19.0
Three	8	13.8
Four	4	6.9
Five	2	3.4
More than five	1	1.7
None, just my business	10	17.2
Missing	11	19
<b>Previous online experience</b>		
Yes	25	43.1
No	22	37.9
Missing	11	19
<b>Highest level of education</b>		
Secondary	3	5.2
Matric	6	10.3
Certificate	5	8.6
Diploma	30	51.7
Degree	12	20.7
Postgrad / Masters	2	3.4

The respondents from the DFF designers were in three categories, namely the Mentees who are starting their business under the guidance of a Mentor; they have less than two years in business, then the Emerging designers who have been in business (2-6 years) and then Established designers who have more than 6years in business. The total population was 58 respondents, the Mentees were 15 respondents, 25 respondents were Emerging designers and 18 respondents were Established, designers.

The Emerging designers (between 2-6 years) have the highest population this might be attributed to the inception of DFF which was founded in 2012 since the Emerging designer's group was the first mentored group from inception (Durban Fashion Fair 2019a).

The findings of this study revealed the following in regards to 'Job title', the owners were 53.4%, and while the designers were 43.5% and others which represent other employees were 12.1%. More than half of the respondents are owners which is advantageous to the study as the owners are usually the ones, who started the business, are the decision-makers and are well versed with the business as well as the market that they trade-in. Past statistics indicated that owners contribute 14% to 15% of all employees, a percentage that has remained constant since 2008 (Small Enterprise Development Agency 2016).

According to Table 6.5, the genders of the fashion designers have the ratio of females: males as 2:1 indicated by the females (65.5%) and males (34.5%) respectively. SA statistics revealed that the population with a tertiary qualification who worked in the 'arts/education/hospitality' industry constituted 68.6% female while men were 31.4% (2:1) however males were concentrated on the sciences industry such as math and engineering (Stats SA 2014).

Mbumbwa and Chigada (2018) attested that millennials occupy the majority of the workforce world-wide and it was estimated that by 2025 the millennials will be occupying 75% of the workforce. The results supported this notion because >30 years had the highest percentage of fashion designers of 44.8% followed by 36.2% for the age between 30-40 years of age.

From the results, 59.2% worked for at least one company and therefore have experience as an employee. The statistics are useful to the study as they reflect that the responses are from experienced workers who know work ethics and some of them been exposed to other sectors besides fashion.

The results indicate that there is no big discrepancy between the respondents who had the previous online experience to the respondents who had previous online

experiences ( $p = 0.662$ ). The respondents with previous online experience were 43.1% while the one without previous online experience was 37.9% and sadly 19% did not respond to that section.

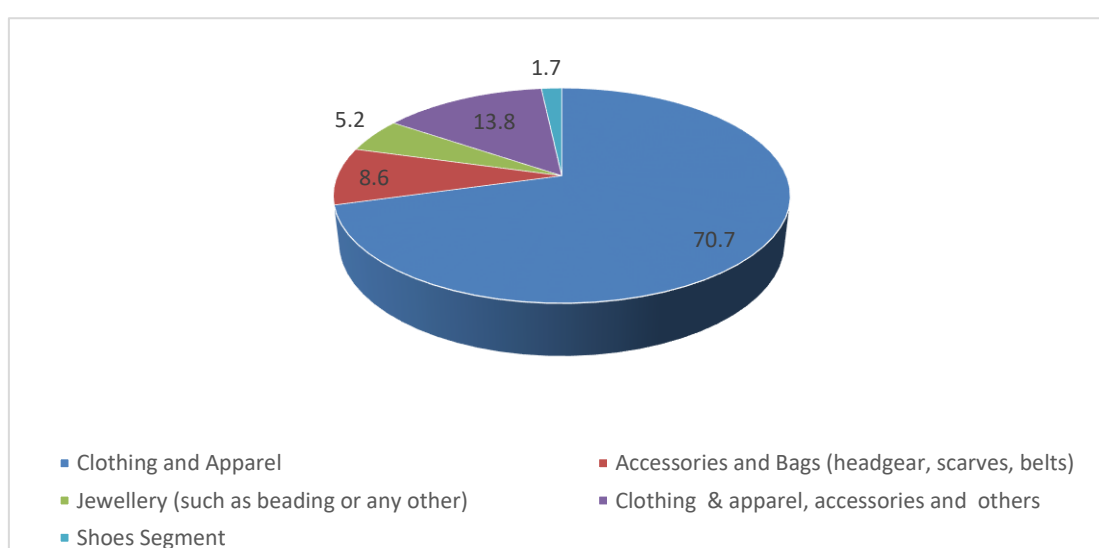
Peters and Brijlal (2011) postulate that education both formal and on the job training forms a base to sustain the growth of the business. The educational exposure makes the entrepreneurs more open to new ideas that improve efficiency and they can easily see hidden business opportunities. According to the findings, the majority of respondents (84.5%) had a post-school qualification. Approximately a quarter of the respondents (24.1%) had at least a degree ( $p < 0.001$ ). This is a useful statistic as it indicates that a fair proportion of the respondents have a higher qualification. This indicates that the responses gathered are from an informed (learned) source.

### 6.2.5 Section B: The business

This section looks at the aspects of business such as the nature of the business, the number of years that business has been trading, the number of employees and the revenue of the business.

- ***Nature of the business***

**Figure 6-1: Nature of the business**

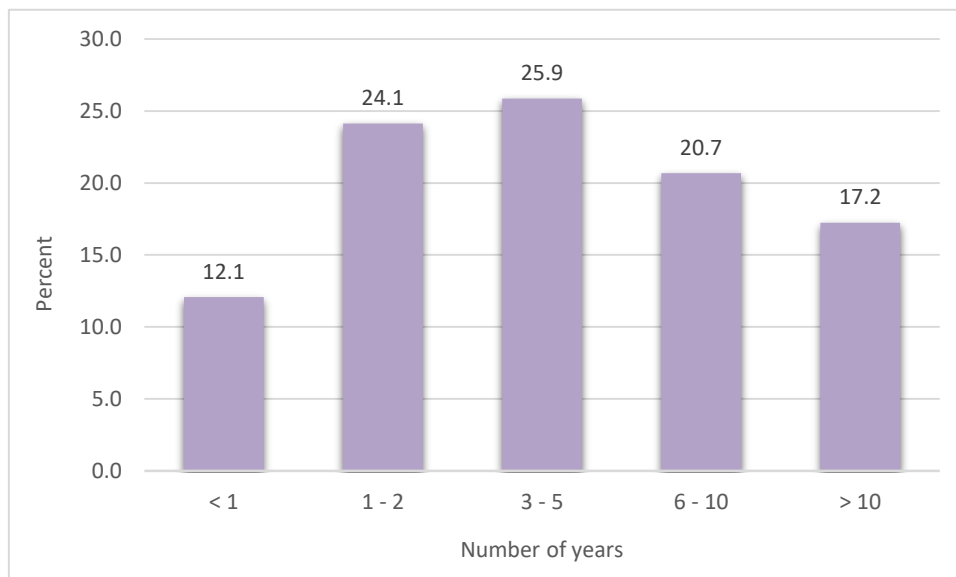


The majority of respondents (70.7%) were in Clothing and Apparel organisations ( $p < 0.001$ ). However, there are 13.8% of the designers have diversified by adding other components to their business such as accessories, beading, and fabric to name a few. This category is followed by the accessories and bags which constitute 8.6 % and this category has been precipitated by the Ankara wear, which promotes the use of African headgears with matching accessories such as bags and belts. The fourth category is the jewellery business which has 5.2% and the last category has the lowest percentage of 1.7% which is the shoe segment.

- ***Number of years of operation of the Fashion SMME***

The study conducted by the Department of trade and industry revealed that most SA SMMEs have a lifespan of 3.5 years or less since the business is started as a means of survival rather than untapped opportunities (Small Enterprise Development Agency 2016). However, the findings of the study reveal the following:

***Figure 6-2 : Number of years of operation of the Fashion SMME***



Nearly two-thirds of the business had been in existence for at least 3 years and 37.9% has had more than 6 years trading. The support extended to the fashion designers by the EThekweni (Durban) municipality has helped the SMMEs sustain their businesses over the 3.5-year mark. The Mayor of Durban mentioned that the Business fair has supported over 33 500 businesses and contributed 15.6 million towards SMMEs, he further illustrated that the goal of DFF is to make Durban the best city for fashion incubation and growth of businesses (Durban fashion fair 2019b).

There was no significant difference in the number of respondents per option ( $p = 0.470$ ). This may be attributed to the fact that data was collected from the three categories of designers the Mentees, Emerging and the Established designers (Durban fashion fair 2019b).

- ***Number of employees***

According to Republic of South Africa (2003) the manufacturing SMMEs have four categories, the 'medium' enterprises which have employees below 200 while 'small' enterprises have less than 50 employees,' very small' enterprises which have 20 employees and 'micro' with between 0-5 employees. The findings of the study reveal the followings:

***Table 6-7: Number of employees***

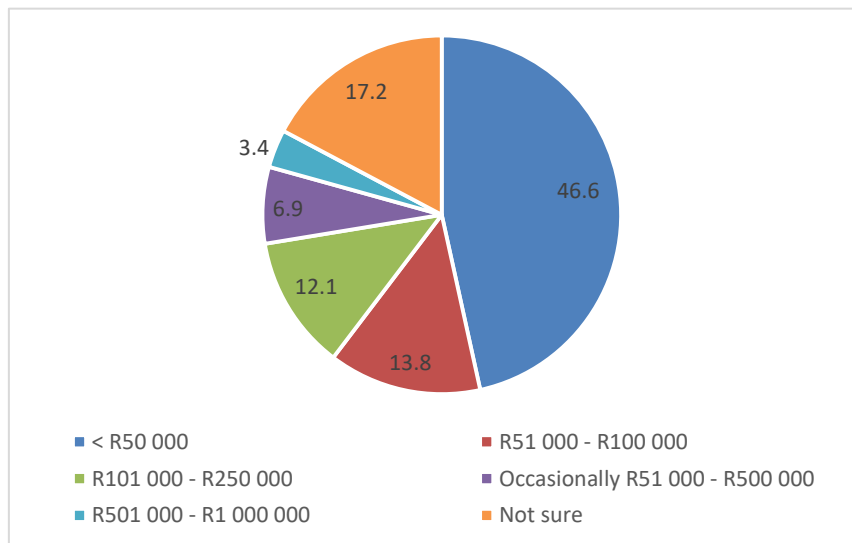
Number of employees	Frequency	Percent
1 - 10	50	86.2
11 - 25	7	12.1
76 - 100	1	1.7
Total	<b>58</b>	<b>100.0</b>

There were significantly more businesses that had less than 10 employees ( $p < 0.001$ ), represented by 86.2%. From the results, it can be concluded that the majority of fashion designers fall into the category of very small enterprises.

- Profit for the year

According to Seda (2016), poor profitability and lack of access to markets are major challenges faced by SMMEs in South Africa. Profitability affects the long term existence of the SMME and SMME sustainability as it is the main influencer of economic growth, innovation, employment creation and technological change within a business (Margaretha 2016).

**Figure 6-3 : Profit for the year**



Almost half of the respondents (46.6%) made less than 50 000 rands annually ( $p < 0.001$ ). While only 13.8% made between 51 000- 100 000 rands, 12.1 % made between 101 000- 250 000 rands and 6.9% made between 250 000 – 500 000 rands and a mere 3.4% made over 500 000 rands.

#### 6.2.5.1 In-depth section analysis

The section analysed each area as per the objectives of the study. Each objective is in three sections namely, i) Analysing of the scoring patterns of the respondents per variable per section. ii) Analysing the data according to the cross-tabulations iii) Analysing the data using correlations.

i) The results are first presented using summarised percentages for the variables that constitute each section. Results are then further analysed according to the importance of the statements.

ii) Cross tabulation is a statistical measurement of data that can either be nominal vs nominal, or nominal vs ordinal. It examines the relationships between data collected in the questionnaire that is not easily evident and brings out the relationships, trends, and patterns between two or more questions in the survey.

The traditional approach to reporting a result requires a statement of statistical significance where the p-value is generated from a test statistic. A significant result is indicated with " $p < 0.05$ ". The cross tab is a second performance of the Chi-square test to assess if there is a significant relationship between the variables (rows vs columns). The null hypothesis states that there is no association between the two therefore; the alternate hypothesis indicates that there is an association.

iii) Correlation is a statistic that measures the degree to which two variables associated with each other and a pattern comes out of the relationship. Bivariate correlation is a test between nominal data and ordinal data. The association can be positive, negative or linear.

The positive correlation is when one variable increases, the other also increases, the negative relationship is when one variable increases the other one decreases and the lack of the relationship is represented by zero. The correlation coefficient is measured between +1 to 0 to -1; the relationship between the two variables can be expressed as either +1 or a -1.

Section C - To establish the extent to which fashion designers in Durban are using e-commerce

- ***Use of the email for communication***

The table below summarises the scoring patterns.

**Table 6-8 : Use of the email for communication**

		Count	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Chi-Square p-value
In-house	C1.1	58	27.6%	8.6%	13.8%	24.1%	25.9%	0.090
With other businesses	C1.2	58	8.6%	10.3%	10.3%	34.5%	36.2%	0.000
With customers	C1.3	57	8.8%	17.5%	14.0%	28.1%	31.6%	0.033

The following patterns are observed. Two of the statements (C1.2 and C1.3) show (significantly) higher levels of agreement whilst C1.1 reveal a lower level of agreement (but still greater than levels of disagreement). There are no statements with higher levels of disagreement. C1.1 ( $p=0.090$ ) showing that there is no significant difference and for C1.1 and C1.2 the p-values  $<0.05$  are significant.

The respondents under the documentation section, for 'Inhouse', 50% confirmed that they use email in their businesses. 'With other businesses', 70.7% indicated that they use email as a communication tool with other businesses. Balteanu and Marcu (2015) posit that email is recognised as the primary means of communication in business with approximately 55.4% emails transmitted worldwide on business issues. Email is considered better than word of mouth as it allows SMMEs to send messages to the right audience and they can support their information with images, videos and even provide links to videos furthermore customers or businesses can refer back as the information since it is available (Sonawane and Chaudhari 2015).

The results for email use 'With customers' had 59.7% pointing out that email was used by fashion designers to communicate with the clients. Brzowska and Bubel (2015) supports that an email is a form of marketing such that if a fashion SMME has an appropriate advertising plan it can build a positive permanent image in the minds of clients. This can lead to the customers sharing appealing information and products to their family and friends (Brzowska and Bubel 2015).



- ***The company owns a website***

***Table 6-9 : Company owns a website***

		Count	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Chi-Square p-value
Static website	C2.1	58	55.2%	1.7%	12.1%	10.3%	20.7%	0.000
Functional website	C2.2	58	51.7%	8.6%	5.2%	12.1%	22.4%	0.000

The following patterns are observed. The two of the statements C2.1 and C2.2 show significantly higher levels of disagreement with percentages over 50% C2.1 (56.9%) and C2.2 (60.3%) respectively and lower levels of the agreement below 50%. Both variables p- values<0.05 are significant.

56.9% indicated that they did not have a website that shows information and products but customers cannot buy (static website), while 60.3% indicated that they did not have a website that shows information and products and clients can buy from the site (functional website) and only 34.5% confirmed that they had fully functional websites.

The results indicate the greater majority of designers do not own a website. However, Brzowska and Bubel (2015) emphasises that a website is a mandatory investment for businesses. Additionally the authors state that the website is a swift business instrument that provides information for education, on current products and services and also provides the business with feedback on customers' preferences or searches (Error, Error and Curran 2019). The fundamental function of the website include advertising the fashion SMMME and its products, creating awareness, increasing the customer base and also as a distribution channel (Brzowska and Bubel 2015).

## 6.2.6 Section C: Use of e-commerce

**Table 6-10 : Use of e-commerce**

		Count	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Chi-Square p-value
Sending of parcels with couriers	C3.1	58	22.4%	15.5%	12.1%	31.0%	19.0%	0.189
Submitting tenders	C3.2	58	44.8%	10.3%	6.9%	24.1%	13.8%	0.000
Order trims/ fabrics	C3.3	58	32.8%	13.8%	12.1%	22.4%	19.0%	0.097
Payment of financial transactions	C3.4	58	17.2%	5.2%	12.1%	29.3%	36.2%	0.001
Payments from customers	C3.5	47	14.9%	6.4%	6.4%	42.6%	29.8%	0.000
Dispatch of goods	C3.6	58	32.8%	12.1%	19.0%	19.0%	17.2%	0.145

The following patterns are observed. According to table 6.9, two statements (C3.4 and C3.5) show (significantly) higher levels of agreement whilst C3.2 reveal a high level of disagreement. The other three statements (C3.1, C3.3, and C3.6) shows a balanced overview of responses.

The tests indicated that there was no significant difference for the statements C3.1 ( $p=0.189$ ), C3.3 ( $p=0.097$ ) and C3.6 ( $p=0.145$ ) since all statements were  $p>0.05$ . However, the other three statements C3.2 ( $p=0.000$ ), C3.4 ( $p=0.001$ ) and C3.5 ( $p=0.000$ ) are significant since  $p<0.05$ .

C3.1 indicated that 50% of the respondents agreed to use online systems for sending parcels. C3.2 statistics revealed that 55.1% did not use online tender system C3.3 showed that 46.6% ordered their trims without using online systems. C3.4 revealed 65.5% are users of the online systems in their businesses for paying salaries and invoicing to name a few. C3.5 showed that 72.4 % use online systems when transacting with their customers. C3.6 indicated that 44.9% did not use online systems when dispatching goods to customers.

The fashion designers use online systems mainly for payments of financial transactions within the business and with other businesses when doing transactions with customers. The use of online payments can be attributed because most banks have gone digital by scaling down human operations leading to most payments being made online or through ATMs (Towett 2019). Banks such as Tyme bank, First National Bank and Capitec, Standard bank have invested in technology as they aim to be at par with international banks due to pressure from multinational corporations that seek the same services and standards as developed markets (Standard bank 2017). Also half of the designers use online courier services; this may be due to improvements in transport services due to e-commerce of products and services "Courier services are known for their demand-responsive transportation which offers on-time and rapid-response customer service" (Neboh and Mbhele 2018:7). It is also noted from the results that most fashion designers do not use apply for tenders online or order trims online as well as use online systems to dispatch their goods.

- ***The company market and selling its product***

***Table 6-11 : The company market and selling its product***

		Count	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Chi-Square p-value
On social media - Facebook, Instagram, Twitter?	C6.1	58	5.2%	5.2%	10.3%	22.4%	56.9%	0.000
On the company's Website	C6.2	57	29.8%	8.8%	17.5%	22.8%	21.1%	0.148
Using WhatsApp	C6.3	47	17.0%	6.4%	2.1%	21.3%	53.2%	0.000

The following patterns are observed:

Two of the statements C6.1 and C6.3 show (significantly) higher levels of agreement whilst C6.2 reveals a more balanced response. The responses across the two options C6.1 and C6.3 had a p-value = 0.000 showing a significant value however C6.2 had a p=0.148 which is not significant.

Over 70% of the designers confirmed to use Social media and WhatsApp for selling and marketing. The use of e-commerce by designers can be attributed to the fact that social media is widely used and Standard bank (2017) recorded 350 million internet users in Africa, with 94% of the internet users accessing applications like Facebook through their phones.

According to statistics, 52% of the South Africans spend time on digital media and in 2015, 25billion IOS android application downloads were recorded and a combined 50 million across mobile devices (Statistics South Africa 2015).

- Advertising and using other companies to sell products

***Table 6-12 : Advertising and using other companies to sell products***

		Count	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Chi-Square p-value
Pays for advertising and marketing on social media.	C8.1	58	36.2%	12.1%	17.2%	24.1%	10.3%	0.012
Company has assigned another company to sell products e.g Zando.co.za	C8.2	58	58.6%	12.1%	12.1%	13.8%	3.4%	0.000

The following patterns are observed:

C8.1 and C8.2 show (significantly) higher levels of disagreement. Both variables C8.1 and C8.2 had p-values of 0.000 showing significance.

Half of the designers indicated that they did not pay for advertising and marketing on social media, and 70.7% disagreed to have assigned other companies to sell their products for them.

Jackson (2018) stated that retailers are transforming their businesses to web-based away from traditional brick and mortar stores, and online stores such as 'Zando', and 'Superbalist' are assisting fashion SMMMEs with a ready market. Zando.co.za increased its market by collaborating with Jumia.com.ng, an e-commerce giant in Nigeria which has a customer base in East and West Africa and is operating in 14 African countries (Jumia 2019). Fashion SMMMEs as they sell on these sites broaden their customer reach.

#### 1.2.14.1 **Cross tab results**

- ***Association between in-house and companies worked***

The Chi-square test was conducted to determine if there was a relationship between in-house email communication and the number of companies the respondent worked for. The p-value between "In-house" and "Companies Worked" was 0.016. This means that there is a significant relationship between the variables. That is, the number of companies that respondents have worked for did play a significant role in terms of how respondents documents being done in-house.

The respondents who worked for two companies scored 81.1% followed by individuals who did not have previous working experience, who worked on just on their business had 80% while respondents who worked for more than two companies had lower percentages of using emails in-house for their businesses. The results show that respondents with less exposure to other companies use email in-house for communication. Thus it is important to unveil influencing factors

or challenges those respondents with more experience yet are reluctant to use email.

- ***Association between in-house and current employees***

The cross-tabulation from Fisher's exact test indicated a p-value of 0.086 showing that there no significant relationship between the use of email for communication in-house and the number of current employees. The fashion designers with 1-10 employees, 46% agreed to use email in-house and for the fashion designers with 11-25 employees 85.7% agreed to use email for in-house communication showing that the greater the number of employees the greater the use of email in-house.

- ***Association between email communication with other businesses and years of business***

The results from the Fisher's exact test revealed  $p=0.258$  which is evident that there is no relationship between email communication with other businesses and the number of years the fashion SMME has been trading.

This is supported by the score of responses for all the business from the business 'less than a year' to the one 'above ten years' is similar. All the businesses agree to use an email with other businesses and four out of five of the responses are above 70% while the lowest is for the business between '1-2years' that has 64.3%.

- ***Association between a static website and the category of designers***

The relationship was scrutinized between the static website and the category of designers, and the p-value was 0.198 which is greater than 0.005 indicating that there is no relationship between the two variables. The statistics revealed that 66.7% of the mentee designers did not have a static website and 64% of the emerging designers did not have a static website however established designers, 55.6% indicated that they have a website. This could mean the two categories mentee and established designers have a different business focus as compared to established designers.

- ***Association between Functional website and profit for the year***

From the test  $p=0.452$ , it was discovered that there was no significant relationship between a functional website (that a customer can view and buy products) and the profit the fashion SMME since the p-value was greater than 0.005. From the statistics, fashion designers with annual profits of less than 100 000rand 40% owned functional websites, whereas fashion designers making profit between 100 000 - 250 000 rand 71.4% indicated that they owned functional websites and the designers earning over 250 000rand 50% responded having a functional website. The results could indicate that website use grows with growth of income and it reaches its peak on the middle-profit earners (100 000 - 250 000) where functional websites act as a driver to expose the businesses to the global world, however as profits increase above 250 000rand website use decrease since the business would have established a loyal client base and have goodwill such that that frequency of website for ordering and viewing catalogues decreases, as the regular customers might be receiving monthly catalogues through email.

- ***Association between financial transactions such as paying bills, salaries, invoicing, etc.and gender***

The test conducted between financial transactions (paying bills, salaries, invoicing) and gender revealed a significant relationship between the two variables since  $p=0.008$ . Females' utilised e-commerce for financial transactions more than males, with a percentage of 71.1% compared to men who had 55%. This might indicate that females prefer activities that save time, convenient as well as easily keeping records of business transactions compared to men.

#### 6.2.6.1 Correlations

According to Swinscow and Campbell (1997) the correlation coefficient within the range of 0.20 to 0.39 depicts a weak correlation, while 0.40 to 0.59 depicts a

moderate correlation, 0.6 to 0.79 depicts a strong correlation, and 0.8 to 1 depicts a very strong correlation.

It was highlighted from the results that 'email communication with customers' and 'email communication with other businesses' had a positive strong relationship of 0.621. The correlation coefficient indicated that as email communication with customers, who enquire and place orders, the email of DFF with other businesses increases as they try to have a quick response to their customers.

The 'dispatch of goods online' and 'sending of parcels with couriers' has a directly proportional relationship of 0.517. This can be explained by that dispatching of the goods is direct the process before sending of parcels with couriers.

The 'Use of e-commerce to order trims and fabrics' undeniably showed a positive relationship with 'payments from customers' (0.532) and 'paying of financial bills like salary' (0.476). The moderate relationship indicates the more that the DFF designers receive payments from customers the more that designers will increase the online ordering of trims as fabrics as they realise its convenience. Also as the designers become familiar with paying for transactions online the more they order their raw materials online.

The variable 'we have accurate information on the website' has a positive relationship with two variables 'the company has assigned another company to sell its products and services, sites like Zando.co.za, Spree.com, Takealot.com on the internet'(0.330) and static website (0.315), however, the correlation is a weak one. The results emphasise that as long as the DFF designers keep up to date information on their website, their use of assigning other companies to sell increases. Moreover, the static website becomes efficient as the customers are aware of the products available and places to buy from.



## 6.2.7 Section D: Factors influencing adoption of e-commerce

**Table 6-13 : Factors influencing adoption of e-commerce**

Variable		Counts	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Chi-Square p-value
My firm sees the internet as a way to see business opportunities	D1	58	3.5%	10.5%	8.8%	42.1%	35.1%	0.000
The government supports e-commerce activities	D2	58	8.6%	10.3%	46.6%	25.9%	8.6%	0.000
Internet markets business globally	D3	58	0%	1.7%	19%	32.8%	46.6%	0.000
Most South Africans have access to the internet and buy online that is the new lifestyle	D4	58	3.4%	10.3%	15.5%	48.3%	22.4%	0.000

The following patterns are observed. D1, D3 and D4 show (significantly) higher levels of agreement, while D2 the highest is the neutral response. The significance of the differences is tested and shown in Table 6.8.

D1 77.2% agreed that the internet offers opportunities to their businesses. D3 79.4% agreed that the internet markets the business globally. On D4 results revealed that 70.7% agreed that Most South Africans are now buying online. Approximately 28.9 million SA population make use of the internet which 53.3% of the country's population (Bushe 2019). Jackson (2018:14) further illustrates that 84% of internet users rely on the internet for price comparison, trends and during the various stages of shopping.

D2 indicated that 18.9% disagreed that government supports e-commerce, and 46.6% were not sure if government supports e-commerce yet 34.5% agreed that government supports e-commerce. The government has set up supporting bodies for SMMEs such as SEDA, ICASA, and the ECT Act amended in 2018 in support of e-commerce use in the country; however, the responses from designers reflect the limited understanding on government position on e-commerce and the supporting bodies (Mkhosi 2017). Moreover, the government took an initiative in looking for e-commerce investment from the Chinese digital giant, Alibaba in 2018 when President Cyril Ramaphosa visited Jack Ma in China (SABC 2018).

Furthermore, in October 2018 the SA government invited Jack Ma to deliver a speech at the Investment Summit in Johannesburg after prior meetings between the two parties on investment (SABC 2018). Jack Ma is the founder of China's e-commerce giant company Alibaba, which helps SMEs to be profitable by selling products online (Yenni, Pan and Cui 2017). According to RSA (2019), the SA government is giving priority to reviving the fashion industry and fashion designers will be offered priority on international online selling platforms like Alibaba.

The chi-square tests done indicated that there was a significant difference for all four statements D1, D2, D3 and D4  $p=0.000$ .

#### 6.2.7.1 Cross tab results

- ***Association between the government supporting e-commerce activities and previous online experience***

The relationship between the government supporting e-commerce activities and previous online experience of the respondent was not significant with a p-value of 0.081. The responses with previous online experience 50% agreed that the government-supported e-commerce, however, the neutral responses were 44 % (previous online experience) and 45.5 % (no previous online experience) indicating that the fashion designers were indifferent to government support.

- ***Association between most South Africans have access to the internet and buy online that is the new lifestyle and job title***

The test was conducted to determine if there was a relationship between 'most South Africans buying online' and 'Job title' the p-value is 0.054. This means that there is not a significant relationship between the variables. The owners, 71% were in agreement that most South Africans buy online, fashion designers 80% also agreed that shopping online is the new trend for South Africans however the 'other' category more than half (57.1%) were uncertain of the online shopping trends for South Africans.

#### 6.2.7.2 Correlations

There is a positive relationship between 'The government supports e-commerce activities' and 'static website' of 0.292 attesting to the fact that as government support of e-commerce increases, the number of designers having static website increases, and vice versa.

Moreover, another positive relationship was identified between 'The government supports e-commerce activities' and 'My firm sees the internet as a way to see business opportunities' and the correlation coefficient is 0.387. When fashion designers identify online opportunities, they can alert the DFF executive team, which is a department under the KZN government which will offer the needed help thereby opening identified opportunities to the designers. Conversely, when the DFF executive team identifies online gaps it trains or offers resources to DFF designers thereby allowing the designers to tap into the e-commerce opportunities.

When 'The government supports e-commerce activities' was tested against 'The transport and courier services are not reliable' the correlation was an inverse one with -0.350 revealing that as government support for e-commerce increases, the reliability of transport services decreases or vice versa.

The relationship between 'Most South Africans have access to the internet and buy online that is the new lifestyle' with both 'company markets and sells its product using Whatsapp' and 'company markets and sells its product Facebook, Instagram, Twitter?' is positive with values of 0.325 and 0.312. The statistics show that there is a directly proportional relationship. As South Africans gain access to the internet through mobile phones and affordable, this opportunity creates a business advantage for the DFF fashion designers to market their products on mobile applications as well as social media platforms.

The results indicated that 'my firm sees the internet as a way to see business opportunities' and 'markets and sells its product on Facebook, Instagram, and Twitter' have a positive relationship of 0.295. This reinforces that as the business sees the internet providing opportunities, the company is motivated to look for

ways to grow its business, this includes the way it markets its product on social media. And vice versa as the company markets and sells on Facebook they get exposed to other products that they can incorporate and what the competitors are selling. The millennials' internet is a way of life and they find a lot of information from it as well as their social groups where they share and recommend products with peers and family (Jackson 2018).

#### 6.2.8 Section E: benefits of e-commerce

- *Revenue benefits due to e-commerce use*

**Table 6-14 : Revenue benefits due to e-commerce use**

Variable		Count	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Chi-Square p-value
<b>Revenue</b>								
The sales have increased	E3.1	58	0.0%	4.3%	23.4%	53.2%	19.1%	0.000
Lower advertising and marketing costs	E3.2	58	4.3%	6.4%	46.8%	34.0%	8.5%	0.000
<b>Performance</b>								
Faster decision making by management	E3.3	58	2.1%	14.9%	31.9%	29.8%	21.3%	0.008

The following patterns are observed:

E3.1, E3.2, and E3.3 show (significantly) higher levels of agreement and neutral responses. The significance of the differences is tested and shown in Table 6.13

E3.1 statistics reveal that 72.2% agreed that sales increased due to e-commerce use. One of SA's largest online fashion retailers, Superbalist (that recently merged Spree and Superbalist) communicated that in 2018 it realised R40 million in sales on Black Friday. According to their statistics, online sales are growing by 115% every year (Rawlins 2018). Black Friday which is one of the biggest online selling days has proved profitable for fashion brands, revealing how much online presence can make a difference for fashion SMMME that have adopted e-commerce (Next level 2019).

E3.2 indicated that 10.7% did not experience a decrease in advertising costs through e-commerce use, the highest percentage of 46.8 was not sure if e-commerce reduced advertising cost and 42.5% did attest that they experienced lower advertising costs. As customers share the opinions, experience, and products with their peers and family, online using WhatsApp and social networks they are advertising on behalf of the fashion designer, and it is one of advertising that is not accounted for by the business (Jackson 2018).

E3.3 indicated 51.1% revealed that e-commerce has assisted management in making faster decision making. E-commerce produces real-time data that can be used to solve business problems. The studies revealed that there should be a strong relationship between analysing the real-time data and decision making by implementing the agreed actionable insights (Akter and Wamba 2016). Information is an important tool in decision making and it helps firms establish trust and loyalty with customers thereby positively influencing their purchasing decision (Baviskar 2016).

The chi-square tests done for all the four statements indicated that the statements were significant since  $p < 0.005$ .

#### 6.2.8.1 Cross tab results

**Table 6-15 : previous experience an management decision making**

Exact Sig. (2-sided)

	Exact Sig. (2-sided)
Increase in performance due to management make informed decisions	0.031
Revenue increased due to faster decision making	0.034

The two categories, 'increase in performance' and 'increase in revenue' due to management decision making the relationship to 'previous online experience' is of significance with p values of 0.031 and 0.034 respectively.

72% of the respondents 'with previous online' experience confirmed that their business is performing better due to management's decision due to information from the internet and 45.5% of respondents 'without previous online' experience which is less than half confirmed that management decision making helped the business become more efficient.

Only 4% of the respondents 'with previous online' experience disagreed with the notion that increase in revenue has been due to management decision making because of the internet while 31.8% of the respondents 'without previous online' experience did not see an increase in revenue as related to quick decision making by management.

#### 6.2.8.2 Correlations

Under 'functional website' and 'customers are experiencing efficient service and are happy' there is a directly proportional positive relationship of 0.378. This indicates that as the performance of a functional website increases, the customer's utilization of efficient services increases.

There is a positive relationship with a correlation coefficient value of 0.322 between 'improvement in communication with customers' and 'markets and sells its product on Facebook, Instagram, and Twitter'. This reveals that as the DFF designers' markets and sells products on social media such as Facebook, communication with customers has improved.

Under the benefits of adoption 'management makes informed decisions from the information from the internet' and 'email communication with other businesses' has a value of 0.470 revealing that as management increases their internet use in decision making, the email communication with other business increases. This can be attributed to that the management will see other companies that they were not conducting business with, that may be overseas and email provides easy communication while also keeping a record of the transaction or conversation.

Importantly, the Bivariate correlation test for 'Bank applications not reliable that customers are afraid to use them' and 'sales have increased' had a negative relationship of value -0.297 showing that as the customers gain confidence in using bank applications and see them as reliable, the fashion SMME sales increases. Furthermore, another negative relationship of -0.333 between 'Bank applications not reliable that customers are afraid to use them' and 'Lower advertising and marketing costs' was revealed. As online transactions become the mainstream, because the customers have embraced bank application use, the costs of online advertising and marketing will increase.

### 6.2.9 Section F: Challenges faced in adoption of e-commerce

**Table 6-16 : Challenges faced in adoption of e-commerce**

Variable		Counts	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Chi Square p value
The internet charges are high	E3.1	47	4.3%	14.9%	36.2%	29.8%	14.9%	0.004
The amount of financial resources required to setting-up, buying necessary ICT for e-commerce high	E3.2	58	1.7%	13.8%	36.2%	34.5%	13.8%	0.000
The government policies on return and privacy policies are very difficult to implement	E3.3	47	6.4%	10.6%	42.6%	38.3%	2.1%	0.000

The following patterns are observed:

The statement show (significantly) higher levels of agreement. The significance of the differences is tested and shown in Table 6.6.

The challenge of internet charges being high, 19.2% disagreed that the internet charges were high and 44.7% indicated that the internet charges were high for their business. It has been noted that SA mobile data and fibre is considered expensive in comparison to other countries (Caboz 2019). A survey conducted from 233 fibre internet providers in 62 nations, SA paid the highest for 100Mbps uncapped fibre used in the homes (Caboz 2019). This is supported by Caboz (2019); Wet (2019) who exposed Vodacom and MTN (who have the largest population of subscribers) as overcharging customers by as much as 30% to 50% on mobile data. In addition, stating that these two service providers have complex pricing structures since there are the innovators of the latest technologies and services such that customers tend to stick with them to enjoy these benefits at the expense of higher prices.

The chi-square done for the variables showed a p-value of 0.004 and 0.000. The highlighted sig. values (p-values) were less than 0.05 (the level of significance), implying that the values are significant.



Amount setting up ICT infrastructure, the F3 statement indicated 17% did not see the cost of setting up ICT infrastructure as high, 42.6% were indifferent to the cost being high and 40.4% agreed that the cost of setting up infrastructure is high.

#### 6.2.9.1 Cross tab results

- ***The decision for adoption to be made collectively and Education***

The test conducted to test the relationship between 'business partners making a collective decision and fully knowing the benefits of e-commerce adoption' and 'education' revealed  $p = 0.038$  showing a remarkable relationship. The respondents with secondary education 33% agreed that the partners were well versed with e-commerce, matric (16.7%), certificate (80.0%), diploma (53.3%), degree (33.3%) while postgrad (50%) in agreement. The response shows that the final decision making of adoption is determined by the understating of every business partner and the differences in the responses reveal that the understanding of e-commerce benefits differ on the business partners according to educational level.

- ***Government policies and category of designers***

The Fisher's exact test between the government policies and the category of designers indicated a  $p = 0.028$ , showing a significant relationship among the two variables. The Mentee designers 66.7% agreed that the government policies were difficult to implement but on Emerging designers, only 37.5% saw the policies as difficult however Established designers had the lowest percentage of 18.2.

#### 6.2.9.2 Correlations

It was noted that there is a positive relationship of 0.521 between 'internet fraud is high' and 'bank applications not reliable that customers are afraid to use them'. As internet fraud increases, the customers desist from using online banking. Another notable practical relationship is that of 'bank applications not user-friendly for our customers' and 'bank not reliable that customers are afraid to use them' which gave a positive value of 0.369.

The results indicated that as customers' perception increases that bank applications are not user-friendly to use, the DFF designers fear to use bank application increases.

There is a positive relationship between 'internet charges are high for my business' and 'ICT costs needed to set up e-commerce are high' of 0.262. As the internet charges increase for the DFF designers, the cost of setting up ICT infrastructure increases.

A positive value of 'the government policies on return and privacy policies is very difficult to implement' and the 'bank applications not reliable that customers are afraid to use them' indicate a directly proportional relationship between the variables. As the government policies become increasingly difficult to implement, the DFF designers' fear of using bank application increases. On the contrary, 'The government policies on return and privacy policies are very difficult to implement' was tested against 'The transport and courier services are not reliable' and it proved to be a negative relationship of -0.326. Thus as the government policies become increasingly difficult, the transport and courier services became reliable.

#### 6.2.9.3 Summary of quantitative findings

Key trends were observed throughout the quantitative data analysis process. These are integral findings that will be compared against qualitative results and will culminate in further discussion towards the conclusions and recommendations in the next chapter.

### **6.3 Qualitative data analysis and findings**

The researcher conducted interviews for the qualitative research. Qualitative method was to support the findings of quantitative method since qualitative approach is all about subjective experiences of the executive team and gives us the interviewer an experience into the DFF fashion designers world (Tsokota 2014).

### **6.3.1 The sample**

Three individual interviews were conducted with the DFF Executives. The sample size was ten however only three members of the executive team were available. The interviews were conducted in the committee's offices, where they were comfortable and at ease.

### **6.3.2 The research instrument**

The interview schedule consisted of 36 questions and was divided into 6 sections as illustrated below:

- A. Interviewee Biographical Details
- B. Durban Fashion Fair initiative
- C. The Use of E-commerce
- D. Factors influencing adoption of E-commerce
- E. The Benefits of E-commerce
- F. Challenges

Three members of the executive team were interviewed that oversee different departments who are knowledgeable about the fashion designers in the different categories. The respondents are all experienced in their respective departments and are of differing ages. The interviews gave further insight into the DFF designer's quantitative responses.

To get a good idea of the expertise of the respondents, the second section of the interview focused on the basic knowledge about the DFF, its inception and what it aims to achieve, also including the theme of 2019 fashion show. The executive team was asked about the DFF initiative, its objectives and how long the program has been running? All of the respondents expressed that the DFF initiative started in 2012. The respondent's interviews are highlighted on the far right of the table,

under the “CONTENT/ INTERVIEWS” section and the middle section “OPEN CODES” reveals the summary of the main points derived from the interviews and “THEMES” are the subjects of each interview.

**Table 6-17: Qualitative Analysis - Thematic analysis**

THEMES	OPEN CODES	CONTENT
<p>Giving designers low cost rent space</p> <p>Localising skill and fashion production.</p> <p>Employment creation</p>	<p>Low-cost rent space for designers</p> <p>Providing a step in retail</p> <p>Profiling a fashion brand.</p> <p>Promoting fashion designers.</p> <p>Encouraging local production</p> <p>Training and skilling local designers</p> <p>Improving designer's standard of living through employment creation.</p> <p>Reduction of poverty through self-sufficiency.</p>	<p><b>DFF initiative</b></p> <p>The boutique has been running for 4 years. Supporting local designers who can't afford to pay rent or open their stores by giving them a step in retail.</p> <p>Profiling designers by promoting the fashion designer or fashion brand and the kind of fashion they offer. Promoting events so that people are aware of the fashion designers and driving these events that people can come and buy.</p> <p>Encouraging local production by training and skilling local designers with relevant skills. Supporting them that they become self-sufficient such that they can create employment, improve their standard of living, reduce poverty and add to SA GDP.</p>
<p>Fashion designers population</p>		<p><b>Designers under your department</b></p> <p>20 young designers.</p> <p>17 emerging and established designers.</p> <p>59 mentee, emerging and established designers.</p>
<p>Fashion innovation</p>	<p>Knowledge of world trends</p>	<p><b>Journey of innovation</b></p>

	<p>Innovation through fabric, design manipulation and technology.</p> <p>Fabric sourced from same suppliers and innovation differentiates the product.</p>	<p>Fashion designers should be aware of world trends. The topic was selected because it's a current trend, the 4<sup>th</sup> industrial revolution. The management used WGSN and the rich SA minerals such as gold and silver for the theme.</p> <p>Innovation is about fabric manipulation and technology since the fashion designers source fabrics from the same suppliers and they might buy similar fabrics for their collections.</p>
E-commerce uses	<p>Most used e-commerce is email, Facebook and Instagram.</p> <p>DFF uses online systems to facilitate applications from designers.</p>	<p><b>Internal e-commerce systems that are used</b></p> <p>Emails, ikhokha payment system, social media i.e Facebook and Instagram.</p> <p>Website, social media i.e Facebook and Instagram, television (Top billing).</p> <p>When fashion designers apply for DFF programs, they fill in the applications online.</p>
E-commerce strategy	<p>Online strategy.</p> <p>Posts made on social media daily.</p> <p>Ecommerce a sub function of DFF</p>	<p><b>E-commerce strategy</b></p> <p>Website publicises the fashion designer that they contribute to the business of fashion, though not the main function of DFF.</p> <p>Every day their posts made to the social media pages.</p>
Benefits	<p>Designers launched their careers.</p> <p>Enlarged customer base</p>	<p><b>Benefits derived</b></p> <p>Fashion designers launched their careers.</p> <p>The customer base has enlarged and one can easily enter untapped areas.</p>

	<p>Low advertising costs</p> <p>Exposure to current trends</p> <p>Increase in sales</p> <p>Increase in followers</p>	<p>Costs are low due to online advertising.</p> <p>Exposure to current trends and influencers.</p> <p>Growth in sales received at the business fair exceeded previous years.</p> <p>Social media followers have increased.</p>
Decision making	<p>DFF executive team makes judgment based on fashion designer online presence and content.</p> <p>E-commerce improves management needs assessment of the fashion designers.</p>	<p><b>Using e-commerce for decision making</b></p> <p>We view the fashion designers on various platforms during selections for various platforms.</p> <p>We see the areas to advance fashion designers.</p>
Challenges	<p>Lack of e-commerce software for designers, for example, WGSN.</p> <p>Lack of digital centers/hubs that offers free digital resources.</p> <p>Designer's social media posting is minimal.</p> <p>Training conducted on designers is not consistent across all the categories.</p> <p>Store's lack of information on 'sold out' items leads to requests of old styles.</p> <p>Fashion designers financial lacking affect e-commerce adoption.</p> <p>Website use and maintenance are challenging to</p>	<p><b>Challenges</b></p> <p>Fashion designers can't afford trend forecasting software like WGSN and DFF does not offer such.</p> <p>Designers need to increase their social media posts and frequency and tag the boutique social page.</p> <p>No training conducted on emerging and established designers.</p> <p>Customers request old styles on social media.</p> <p>Some designers do not own a cellphone and do not understand e-commerce.</p> <p>Designers with websites get returns and need to constantly update their websites and styles. They also run out of sizes on</p>

	<p>established designers.</p> <p>Adaptation and staying abreast of market changes vital for SMME sustenance and growth.</p>	<p>the website.</p> <p>The need for continuous change through the knowledge of the marketplace.</p>
Influencing factors	<p>Designers are influenced to adopt e-commerce to apply online for various programs.</p> <p>The online use by organizations that offer support positively influences adoption by fashion designers.</p> <p>E-commerce exposes fashion designers globally.</p> <p>Young designers enroll on two modules on e-commerce for digital literacy.</p>	<p><b>Influencing factors</b></p> <p>When fashion designers apply for DFF programs, they fill in the applications online.</p> <p>Exposure to the market and reaching people beyond the borders of Durban.</p> <p>The mentees are undertaking 2modules in e-commerce.</p>



## Summary of the interviews

- ***Theme 1: The objective of DFF***

From the responses, it is clear that the DFF objective equips the fashion designers for businesses so that they create employment for themselves and the community at large. Furthermore, DFF creates a platform for fashion designers to sell and promote their products. The SA community is becoming more aware of the local fashion brands where they can buy and promote local products.

- ***Theme 2: Fashion designers' population***

The total number after combining the three departments is 96 fashion designers however, some of the mentees and the fashion designers selling at the boutique also showcased at the DFF 2019 (Durban fashion fair 2019b).

- ***Theme 3: Fashion designers' relevancy in the digital age***

The 2019 theme encouraged the designers to keep abreast of the world trends through the 'journey to innovation' theme and most importantly the interviewees emphasised the importance that innovation is both design creativity with the incorporation of technology. Padhi (2018) describes digital transformation as a mind-set that fashion SMMEs should embrace. The author further denoted that a digital mind-set opens up the fashion designer to empowerment through a learning attitude that prepares management to embrace and support digital transformation in the organisation (Padhi 2018).

The DFF 2019 show theme also incorporated the SA minerals as a way to broadcast to the world the richness of the country reflecting that DFF ingrains social investment practices in its designer. Thus innovation is incorporating current social issues making it relevant while contributing to the environment and global community (Padhi 2018).

- ***Theme 4: E-commerce use***

The responses indicate that email; Facebook and Instagram are the most used e-commerce. The social media has allowed DFF to enjoy social capital where there so mutual gain between the organisation and the fashion designers where draw resources and information from the connections and networks they belong to (McCay-Peet and Quan-Haase 2017).

- ***Theme 5: E-commerce strategy***

When did the interviewer ask the respondents if they have an e-commerce strategy as an organisation? The responses were as follows:

Response 1: "Yes there is a team dedicated to that. Every day they post on social media promoting the designers."

Response 2: "No we do not have a strategy as a boutique; however, we encourage the designers to promote their designs on their Facebook pages."

Considering the responses from the interview on the e-commerce strategy, the management understanding differs. This can conclude that the executive team's understanding of e-commerce is at different stages such that it affects how they implement it for the competitive advantage in the business. Ndayizigamiye (2012); (Parikh 2016) advocated that e-commerce strategy is an impelling force for commerce adoption as it indicates that the SMMEs have planned for e-commerce adoption. According Ndayizigamiye (2012) study, there was a positive relationship between e-commerce strategy and e-commerce adoption from the SMMEs in Durban and Pietermaritzburg since most of the businesses that successfully adopted e-commerce had a strategy in place that they used as a guide.

Consequently, e-commerce strategy shapes intangible ideas with the use of practical tools, skills, steps, and guidelines into a commercialised digital product that supports the mission and vision of the company (Padhi 2018).

- ***Theme 6: Decision making***

From the responses on decision making, the results indicate that the executive team is using e-commerce system to their advantage during decision-making process such as deciding areas to help fashion designers. However, some of the management indicated that they have dual record systems where they can choose either manual or technology-based reports and they preferred manual reports. Phillips (2016) posits e-commerce analysis as a powerful tool that aids in decision making such that through the successful interpretation of the data, SMMEs can increase revenue levels, business growth, and business performance. Hänninen (2017) posit that predictions from the customer online journey can lead to more innovations by the organisation if management incorporates the results into their decision making and the continuous feedback from comments and behaviours leads to further research to improve user experiences.

- ***Theme 7: Benefits***

From the interviews, it can be concluded that there are so many benefits accrued from e-commerce adoption by the fashion designers. The DFF executive has indicated the benefits that they have experienced while working with the DFF fashion designers.

McKenna, Vodanovich and Fan (2016) posit social media as a cheap means of long-distance communication, and ease of communication makes SMMEs aware of the customer needs while establishing a relationship. E-commerce also benefits fashion SMMEs to expand its customer base globally (McKenna, Vodanovich and Fan 2016).

- ***Theme 8: Challenges***

Also from the interview, the respondents mentioned that some of the fashion designers do not post as much as they should this may be attributed to the lack of knowledge on e-commerce, limited resources such as smartphones and accessibility of data through price offerings. Challenges that affect e-commerce

adoption include digital literacy, issues of consumer trust, technology scarcity and minimal innovation (EDGE 2014; Parikh 2016; Wet 2019).

On the other hand, the challenges faced by established designers if they do not keep the product offerings fresh and remain active on the company's website adversely undermines the credibility and accuracy of the information on the company's social media (McKenna, Vodanovich and Fan 2016). Marketing is a conversation. Keeping customers engaged is a daunting endeavour. Creating a strong presence in the market requires innovative ways to communicate with new & existing customers. Branding is a marketing term to build and maintain brand identity (Padhi 2018). Adaji, Oyibo and Vassileva (2018) emphasises that there are four types of "online shoppers convenience shoppers, variety seekers, balanced buyers, and store-oriented shoppers" which the SMMEs need to satisfy in the market and stay relevant.

- ***Theme 9: Influencing factors***

When asked if they have well-skilled ICT personnel to assist in adopting e-commerce? The respondents in the interview attested that the DFF has a team of IT experts responsible for posting information on the social media pages. Also, the website was reconstructed in 2019, showing that there is a strong IT infrastructure to support the e-commerce adoption, also the weekly posts on the social pages, attest to the dedication of the DFF executive team

#### 6.3.2.1 Summary of qualitative findings

The key patterns were highlighted in the qualitative data analysis; these are of prime importance as they contribute towards the discussion and recommendations in the next chapter.

## 6.4 Comparative analysis of qualitative and quantitative analysis

**Table 6-18 : Comparative analysis of qualitative and quantitative analysis**

Theme	Quantitative Analysis	Qualitative Analysis
Fashion innovation	One of highest ranking use of ecommerce was using internet to check new styles and for new inspiration.	<p>Fashion innovation is key because prevailing trends are determined by world trends.</p> <p>Being relevant is important as a fashion designer.</p> <p>NB fashion innovation is a collaboration of fashion and technology.</p>
Education	<p>75.6% of the respondents hold at least a diploma.</p> <p>43.1% of the respondents have online experience though a small discrepancy with people without online experience.</p>	<p>Digital literacy for the three categories of the fashion designers is at different stages or levels.</p> <p>Ecommerce is a new phenomenon and focus for DFF has been boutiques and trade fairs.</p>
Ecommerce use	<p><b>Ecommerce use according to highest ranking:</b></p> <p>1a) Social media.</p> <p>1b) To check new styles and for new inspiration.</p> <p>2. Emails with other business.</p> <p>3. Payments from customer</p>	<p>Most used ecommerce is social media and have a social strategy of posting daily.</p> <p>DFF profiles a fashion designer but does not online for the designer.</p>
Benefits	<p><b>Ecommerce benefits according to highest ranking:</b></p> <p>1. Improvement of communication with the customers.</p>	<p>Online platforms such as social media are key in decision making by DFF by knowing the missing gaps and checking the designer's profile.</p>

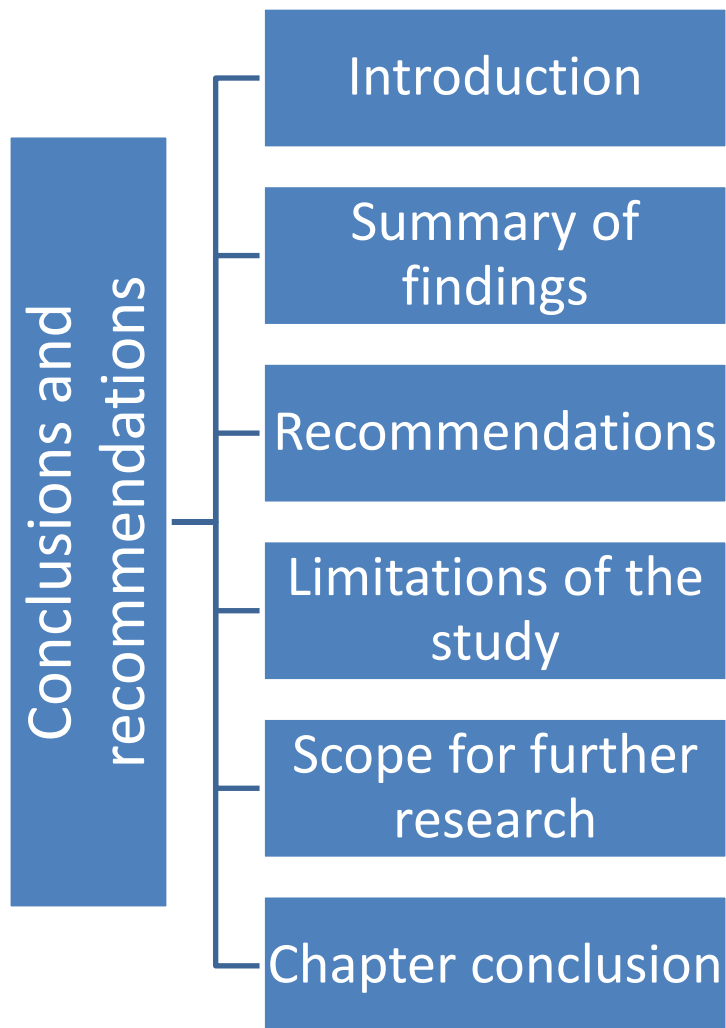
	<p>2. Improvement of communication with the suppliers or manufacturers.</p> <p>3. Increase in the number of customers.</p> <p>4. Increase in knowledge of customer preferences.</p>	
Challenges	<p><b><i>Challenges use according to highest ranking:</i></b></p> <p>Infrastructure cost of set up and maintenance is high.</p> <p>Internet fraud is high.</p> <p>Low profit margins of less 50 000 annually.</p> <p>Internet charges are high for fashion designers.</p>	<p>Affordability of some of the online platforms such as WGSN is beyond the fashion designers.</p> <p>Lack of digital training</p> <p>Designers complain about the high website maintenance.</p> <p>Need for quick adaptation to current market trends.</p>
Influencing factors	<p><b><i>Influencing factors according to highest ranking:</i></b></p> <p>1. Internet markets business globally.</p> <p>2. Seeing business opportunities through internet use.</p> <p>3. Most South Africans have access to internet and buy online that is the new lifestyle.</p>	<p>The benefits derived from adoption of online platforms positively influence adoption of ecommerce.</p>

## **6.5 Chapter conclusion**

The chapter presented the data analysis for quantitative and qualitative data analysis of the study. The chapter corroborated the findings with the study objectives. Both aspects of the study exposed the extent of use of e-commerce by DFF fashion designers and the factors that support or hinder e-commerce adoption, and the two methods gave a clear insight in answering the questions of the study. The data that was generated and analysed provided the input for the discussion chapter for recommendations and concluding of the study.

Despite the enabling factors, the fashion designers were not convinced that the government supports e-commerce despite that DFF is a government initiative under the EThekweni municipality that supports fashion SMMEs (Durban fashion fair 2019b). It has been evidenced from the results as well as the DFF social media pages that, the DFF uses an online platform to facilitate applications to the various programs for the fashion designers and as a communication tool. This has been an influencing factor for the adoption of online systems by fashion designers who want to participate in the DFF programs.

## Overview of Chapter Seven





## **CHAPTER SEVEN**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **7.1 Chapter introduction**

This chapter presents a summary of the study. It also gives recommendations and conclusions of the study. The conclusion corroborates the objectives, literature and the findings from the analysis. This chapter answers the extent that the objectives of the study were met.

##### **7.1.1 Summary of the findings**

Chapter one reviewed the introduction, problem statement, rationale and the objectives of the study. The research evaluated the range of e-commerce adoption amongst fashion SMMEs in Durban, with DFF designers as the target population.

Chapter two focused on the uniqueness characteristics of ecommerce compared to previous technologies, the stages of adoption by fashion SMMEs, ecommerce models used in the businesses and the relevant theories to the study.

Chapter three provided the success stories of ecommerce adoption in the developed countries namely, China, USA and Russia. It was discovered that ecommerce in developed countries was fostered by government support in promoting business innovation, for example, China practices transaction focused ecommerce where fashion SMMEs sell directly to customers on their social media thereby leading to more sales. Developed or reliable infrastructure also paid a big role in ecommerce growth. Fashion SMMEs grow their business through collaborations with influencers or celebrities to market their latest creations.

Chapter four explored the literature of e-commerce adoption based on the SA economy. The literature revealed that SA has opportunity for growth for ecommerce fashion; firstly, SA hosts many globally recognised events that include prevailing fashion trends in their themes, secondly Sa has signed many trade agreements internationally and continentally where fashion designers can export products and lastly the millennials in a few years will contribute the highest

customer base as they have the highest population and are reaching the working class season soon. The challenges experienced were that fashion is a perishable product, cheap import clothing that pose tough competition and high production costs.

Chapter five reviewed the research methodology adopted for the study. This chapter utilised mixed method study that was quantitatively oriented and supported by qualitative study. The pilot revealed areas of weaknesses that were rectified for face and content validity as well as internal reliability. The target population was DFF designers.

Chapter six provided an in-depth data analysis of results using quantitative and qualitative analysis and interpretation. Below are the general findings presented as per the research objectives:

- ***Objective 1: To assess factors influencing the adoption of E-commerce by Durban fashion designers.***

The study concluded that the highest influencer for adoption of e-commerce is that internet markets business globally. This is followed by the impact of fashion SMMEs seeing business opportunities through internet use. Following this is the impact that 'most South Africans have access to internet and buy online that is the new lifestyle' and lastly is the government support for ecommerce activities.

#### *Conclusion of objective 1*

The DFF management indicated that they post and receive the applications online for available opportunities; this is in support with the fashion designers' responses of "seeing business opportunities through internet use". We can conclude that as they have an online presence, they also see different opportunities that they can take advantage of. The business opportunities are both B2B and B2C as the third ranked influencing factor from the study is that the fashion SMMEs believe that most SA citizens. The third scoring factor under influence is that the online population is growing is where the fashion SMMEs find new customers. The largest customer base in the future as highlighted in the literature are millennials

who are digital savvy and online marketing techniques resonate better with them compared to traditional channels and business.

- ***Objective 2: To identify challenges in adopting and using e-commerce by SMMEs.***

The quantitative research results indicate that fashion designers face different challenges when it comes to ecommerce adoption due to the size of the SMME. The study reduced the nine challenges into four main problems that are prominent in the adoption of ecommerce. The first one has two components with the highest average responses which are 'infrastructure cost of set up and maintenance is high' and 'internet fraud is high'. The 'internet fraud is high' is under the challenges of the banking applications. The third component is the low profit margins of less 50 000 annually. The last component is the 'internet charges are high for my business'.

The qualitative research it was derived that the DFF designers' literacy on ecommerce is not at the same levels and that some of the fashion designers struggle to buy a smartphone.

#### *Conclusion of objective 2*

The third objective was to determine factors hindering ecommerce adoption on the Durban fashion designers. From the findings, the majority of the fashion designers realise low-profit margins of less than 50 000rand annually and some of them cannot afford smartphones, the literature confirms that most SMMEs are survivalist entities (Mkhosi 2017). Income affects adoption because fashion designers cannot afford the gadgets needed to secure online services, the infrastructure needed for ecommerce adoption and maintenance and the affordability of data is expensive.

The SMMEs lack the financial assets needed to sustain and grow the business because they are realising low profits margins and borrowing capital is hard due to bank's stringent requirements that needs collateral security backing (Bhorat *et al.* 2018). Also during the data collection, the researcher highlighted that some of the

designers preferred hard copies of the questionnaires and their reasons included data-related issues.

Internet fraud has been highlighted as a major challenge as it puts fear in both SMMEs and customers to divulge their banking information to carry out online transactions. Moreover, fashion designers are discouraged from promoting online transactions to their customers due to their perception. The infrastructure high cost might explain the reason only a few of the fashion designers own websites since most have indicated that they use social media for their business. Social platforms can be easily being operated from a smartphone and the maintenance upkeep is the data cost.

According to the qualitative research the mentees are receiving digital training as part of mentorship; however, there is a need for educate or upskill the other two categories 'emerging designers' and 'established designers' through digital literacy sessions. Digital literacy across the all categories eradicates the digital literacy divide that might exist within the organisation.

Digital literacy is a sustentation skill in the 4th industrial revolution, and the fashion designers should be able to read, derive and interpret information in a meaningful way and format using digital technologies and devices. The digital literacy increases the rate of digital innovation because the fashion designers are capacitated to manipulate technology to solve their business problems or use second parties to create solutions for their problems.

- ***Objective 3: To identify benefits in adopting and using e-commerce by SMMEs.***

The benefits were categorised into four sections namely, communication benefits, business performance benefits, revenue benefits and benefits as perceived by the business.

Objective three was to determine the benefits derived from the adoption of ecommerce by fashion SMME. The benefit with the greatest score was improvement of communication between the business and the customers. This was followed by the improvement of communication between the business and the

suppliers or manufacturers. The third benefit derived by the SMMEs was the increase in the number of customers. The fourth ranked benefit was the increase in knowledge of the company in knowing customer preferences. Lastly, the fifth ranked benefit was the increase in sales.

### *Conclusion of objective 3*

The customer communication benefits ranked the highest and this is the basis of customer acquisition when a relationship is established. The business is then informed on the customer's preferences and choices such that they will make decisions that impact the SMME positively. It was noted from the results that there was a significant relationship between the 'we know customer preferences' with 'age' (0.018) and 'nature of business' (0.024). The knowledge of customer preferences is important as it can determine customer acquisition techniques that the SMME can embark on.

The results highlighted that the management benefited from the adoption by making better decisions. The better decisions can be attributed to knowledge of customer, the promptness of making decisions and the management's previous online experience. The later conclusion is supported by the crosstab results that there was a significant relationship between 'management makes informed decisions and previous online experience' (0.031); and 'faster decision making' and previous online experience (0.034) and the improved communication between the business and the suppliers. We can further conclude that fashion SMMEs increased their customer base by making use of real time data, previous online experience and B2B business.

The increase in sales is the last visible result of the benefits enjoyed after customers are finding products that suit their needs. Fisher's exact test indicates there is no significant relationship between 'sales' and 'category of designers' revealing that it is the implementation of effective ecommerce practices that affect sales is not based on the number of years the business has been trading. 'Sales' undeniably have a significant relationship with 'age' and 'number of employees', with age, certain ages have taken advantage of available business opportunities.

- ***Objective 4: To establish the extent to which Fashion Designers in Durban are using E-commerce.***

Objective four was to identify the extent of ecommerce use in the fashion SMMEs. The findings indicate the most SMMEs use online applications for social media advertising (Facebook and Instagram) (Table 6.10 page 17) and also for trend forecasting or looking for inspiration when designing. This is followed by fashion SMMEs using emails for communication with other businesses. Next used ecommerce by the fashion designers is for payment of financial transactions such as bills, salaries and invoicing. Lastly ecommerce is used to receive payments from customers.

On the other end the lowest ranking applications in ecommerce are, 'company sells its products online using other sites like gumtree and pays a commission for the services', these are free sites where fashion SMMEs can sell, but they are charged a commission when you want your product to be visible to customers. The second lowest ranking was 'company makes all my patterns/designs using computer software' and the third lowest response was fashion SMMEs using other companies to sell and market for them such as Superbalist and Zando.

#### *Conclusion of objective 4*

From the results we can derive that the fashion designers use ecommerce to on the free applications available since their profitability margins are low. The social media they advertise on Facebook and Instagram which is free. For product research and prevailing trends they derive it from social platforms too. And lastly they use banking applications to make payments to suppliers as well as receive payments from customers. The designers have not extended their ecommerce use to services where they pay an extra charge to grow their business, whether it's paid advertising on social platforms or second party sites.

Ndayizigamiye (2012) noted that most SMMEs expansion starts after an average of 4years however early adoption of ecommerce shortens the lifestyle of business expansion. And he noted also those SMMEs that had ecommerce strategy in

place before adoption likely succeeded in the adoption as they had a proper plan in place which also motivated the adoption.

The responses indicated that they use social platforms however extent of use differs for the fashion SMMEs even though most of the fashions SMMEs have similar characteristics of less than 10 employees and most earn profits less than 50 000 rand.

Despite the respondents being fearful of the rate of internet fraud challenges, most of the designers are making payments online and receiving payments from customers, this has been contributed by the bank digitalisation which is one good example of the strong influence of environmental factors under the TOE theory, something beyond the control of the fashion designers. The greater majority of the fashion SMMEs does not own websites.

### **7.1.2 Recommendations**

- ***The DFF***

The analysis indicated that the fashion designers were not convinced that the local government supports e-commerce despite DFF being an EThekweni municipality initiative. The government several years back put in supporting structures for SMMEs and in addition President Cyril Ramaphosa initiated talks with ecommerce guru Jack Ma to develop ecommerce for SA since Jack ma through his company Alibaba have an ecommerce success story. The study reflects that fashion designers have limited understanding on government position on e-commerce. Despite the initiatives in place, there is not sufficient proof for the fashion SMMEs of government support as the fashions SMMEs need relatable affirmation that resonates with their business needs.

This might suggest that there is a need for the government and its stakeholders to increase SMME participation in the digital economy by creating an enabling environment through incentives for SMMEs engaged in e-commerce revenue-generating businesses. The government can initiate a policy that provides a higher ranking on BEE when bidding for tenders or give first preference to ecommerce SMMEs during financial support opportunities.

According to DOI theory, DFF due to its characteristics qualifies as a strong innovator or early adopter of e-commerce in a social system. Banjara (2016) denotes a social system as a set of related units that join together to solve a problem, DFF with the stated objectives in the analysis chapter (qualitative data) is alleviating the problems designers face in selling products and e-commerce supports the DFF objective. Furthermore, DFF is already an innovator by 'bridging a step into retail' such that it will be easier for the organisation to add to its wing as an 'e-commerce innovator'. DFF during its programs has been collaborating with various stakeholders such as SEDA, Workshop Mall and other EThekweni municipal departments, indicating the human, capital and financial resources at its disposal to develop and provide tailor-made solutions for fashion SMMEs in a developing country such as SA.

The DOI structure of the social system influences communication channels as highlighted in Chapter 2 (page 29). The social structure encompasses management support, availability of agents for change and the rate of the media communications. The DFF has over 30 500 followers on Facebook and 9890 followers on Instagram and they post daily on their social pages (Durban Fashion Fair 2019a). The large followers attest to the influence that DFF exerts on the fashion community of Durban. The management can act as "agents of change" to educate the designers they are in charge of. The organisation can also offer regular digital literacy training for the designers for the different stages of e-commerce adoption. DFF can also set up a digital centre specifically tailor-made to support fashion designers using the concept of Silicon Valley thereby putting SA designers on the global map as they will be known for their fashion business.

- ***Digital literacy***

The fashion SMMEs are in need of digital training on the tactical adoption of e-commerce. The training can be in a mentorship form, that is a continuous equipping and guiding of the designers provided by the any of the bodies that support SMMEs or the fashion designers can embark on courses individually to



upskill themselves. The digital training should equip the designers with skills for ecommerce strategy, digital innovation and business digital relevancy.

As fashion SMMEs develop e-commerce strategies, it helps their business compete online through the implementation of their 'clear cut game-plan' to reach and satisfy the desired audience. Participating in social networking sites is a social capital that can yield either negative or positive for the businesses. Fashion SMMEs by being knowledgeable about the platforms they are trading on helps leverage the benefits and test the impact of the implemented strategies otherwise the SMMEs social media presence will be amiss. The positive influence can win the social audience into customers, furthermore mobile and digital experiences add to customer experience like what China has embarked on.

Digital fashion is one of the new technologies, where there is a strong link between wearables and digital technologies which is now called smart fashion. Smart fashion is becoming the second skin to most customers. For fashion designers to take advantage of such opportunities they need an understanding of trending customers' preferences and also new technologies and how they can incorporate the fashion elements in the digital age. Digital literacy opens bring exposure, giving the fashion designers new eyes to see hidden opportunities and possibilities.

- ***Digital innovation of software developers in collaboration with fashion designers***

Fashion SMMEs needs to move from information focused social media to transaction focused social commerce. Most of the respondents indicated that social media is their main advertising tool for the business. The Chinese high fashion sales have been attributed to firstly, the merging of B2C business with the C2C business which has maximised the opportunities for sales and customer acquisition.

Secondly, the Chinese sell directly on their social platforms. Therefore, there is need for the SA software developers to create software's that allow fashion SMMEs to sell directly on social media (Facebook, Instagram and Pinterest)

through embedded purchasing links (ability to make payments from links on social media) for seamless buying experience.

By creating ways where customers' can buy what they see immediately rather than exiting the social application to make the payment on another platform leads to increased sales.

- ***Fashion community collaboration***

There is need for integration and collaboration between SA fashion communities so that the online exploration becomes a journey. The linkages of fashion SMMEs in the different sectors from the fabric suppliers, trims suppliers, accessory designers, shoes designers, bags designers create a holistic information rich journey for one interested in fashion, and they get ideas on what to collaborate into their current fashion pieces and where to buy it locally. Also there is need for fashion SMME to partner with communities include influencers, celebrities, bloggers, software developers, online marketers for growth as well as in creating global solutions for Africa especially considering that majority of the countries are developing nations.

- ***Mobile application (app)***

Designers or the DFF management can make use of mobile application for their advertising and selling. A mobile application is additional software installed for mobile devices that serves a specific purpose in a specific area (Rosell-Aguilar 2017). Literature in the analysis chapter (page 17) indicated that majority of the SA population use smartphones to connect digitally. Moreover, most of the respondents eluded that they do not won websites, and these fashions designers without websites can opt for a mobile app instead. Mobile apps are more advantageous than the website in that:

It is reported that mobile apps are 1.5 times faster than the mobile websites, both in opening and in performance since the mobile apps store data locally on the mobile device and updates with the new content when there is an internet connection. The mobile app offers seamless experience for the B2C business, and the app can be used both online and offline.

This is advantageous as SA has been experiencing electricity shortages resulting in load shedding, mobile app helps the SMME to keep in touch with the customer throughout providing 24/7 interaction. SA is a member of the AfCFTA which is a promising treaty for African countries trading together and a mobile app can be useful when the trade opens up as the infrastructure problems facing SA such as electricity, expensive data charges are typical of many African countries.

The mobile application allows for market segmentation because it offers personalised communication in a language the customers speaks and understands. The tailored content creates value for the customer, and also fashion SMMEs can offer loyalty programs for app subscribers like what Starbucks offers to its customers. This benefits the business through repeated business, thereby increasing profit margins.

As the fashion brand becomes popular, they can charge a premium for their exclusive range that will have exclusive content as well as exclusive designs like Louis Vuitton fashion brand thereby further customer segmenting their product thus making money from the app and higher margins from the exclusive products. Mobile applications are revolutionising the business and lifestyle thus bringing more digital advantage to both parties involved.

### **7.1.3 Limitations of the Study**

The study was conducted in one geographical area, which is Durban. Secondly the research derived its information from only English language papers. Thirdly the research had time limitation, the researcher when the time allocated to data collection elapsed, and the researcher could not extend the time to cater for delayed responses as the study has a fixed duration allocated to it, which affected the study since it was a census study. Due to this limitation, the results might only be applicable to the target population.

Thus the research needs to be conducted in the various provinces, also more time should be allocated to data collection, to have a larger representative so that the results can be generalised for the whole country for fashion SMMEs.

#### **7.1.4 The scope for further research**

The study presents a scope for further research. The study focused on ecommerce adoption for Durban fashion designers, the study can be further investigated in the “The effect of transaction focused ecommerce in developing country vs developed country” and also “How Africa can have built its own ecommerce micronism following the example of China and the feasibility thereof”.

### **7.2 Chapter conclusion**

The results from the study indicate that fashion SMMEs should consider the success stories of the other fashion SMMEs in the developing economies. The important factors from the study are that fashion SMME need be digitally literate and in addition they should have an ecommerce strategy as a guideline for ecommerce adoption and implementation. The study gave insight that ecommerce adoption is not merely having an online presence, but its having master plan for customer acquisition and increasing profitability.

Ecommerce adoption due to the rapid technological changes requires SMMEs to keep abreast of the trends since entrepreneurs are now called Netpreneurs. It was also noted that government intervention is limited however this is not an excuse for fashion SMMEs to thrive because Jack Ma (former Alibaba CEO) reiterated that wherever there is a challenge, that's where the opportunities lies and he mentioned that government is a recipient of the innovations by SMMEs tackling such challenges.

Partnerships with other stakeholders locally or in other countries help to leverage the business and should be embarked on for the benefit of both parties since fashion business in as ecosystem. It has been said that ‘the early bird catches the fattest worm’ and this is true of ecommerce adoption that you can take advantage of being fully knowledgeable to capitalise on the market as an SMME. It is anticipated that the results of this study provides an understanding the extent of ecommerce adoption for the Durban fashion designers.

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# APPENDICES

## 9.1.1 Appendix A: Letter of consent



### LETTER OF INFORMATION AND CONSENT

Dear Participant

My name is Chiedza Elizabeth Nhuvira; student at Durban University of Technology, Durban. My student number is 21557378 and I am being supervised by Professor Dorasamy. I am studying a Masters' degree in Business Administration at Durban University of Technology, under the department of Management Sciences. The topic is "Ecommerce adoption by Small Medium Enterprises in Fashion: The case of Durban Fashion Fair Designers".

I am currently undertaking a research project as part of my studies towards the fulfilment of the Masters Study. The purpose of the research is to see the extent to which Fashion designers have utilised ecommerce in their businesses.

Thank you for agreeing to participate in the research. The questionnaire will take approximately 15 minutes. Participation is voluntary and you are free to withdraw from the study at any time without giving reasons, and without prejudice or any adverse consequences. The information is solely for research purposes only and will be combined with other responses and only the overall or average information will be used. The responses and individual identity will remain confidential. Should you wish to discuss this further please feel free to contact me or my Supervisor [nirmala@dut.ac.za](mailto:nirmala@dut.ac.za).

### CONSENT

#### Statement of Agreement to Participate in the Research Study:

I hereby confirm that I have been informed by the researcher, **Chiedza Elizabeth Nhuvira**, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number:

\_\_\_\_\_

- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.

- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

\_\_\_\_\_

\_\_\_\_\_

**Full Name of Participant**                      **Date**                      **Time**                      **Signature**                      **/**  
**Right Thumbprint**

I, **Chiedza Elizabeth Nhuvira** herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

**Chiedza Elizabeth Nhuvira**                      \_\_\_\_\_                      \_\_\_\_\_

**Date**  
**Signature** \_\_\_\_\_                      \_\_\_\_\_                      \_\_\_\_\_

**Full Name of Witness (If applicable)**                      **Date**                      **Signature**

## 9.1.2 Appendix B: Questionnaire

### SECTION A - BIOGRAPHICAL DETAILS OF THE RESPONDENT

The aim of this section is to get general information about the respondents:

1. Category of designer/ fashion brand at Durban Fashion Fair?

Mentee designer ☐ Emerging designer ☐ Established designer ☐

2. What is your job title?

Owner ☐ Designer ☐ Seamstress ☐ Pattern maker ☐

Other ☐ please state.....

3. What is your gender?

Male ☐ Female ☐

4. How old are you?

18-24 ☐ 25-29 ☐ 30-34 ☐ 35-39 ☐ 40-44 ☐ 45-49 ☐  
50-54 ☐ 55-59 ☐ 60+ ☐

5. How many companies you have worked for?

Only one ☐ Two ☐ Three ☐ Four ☐ Five ☐ More than five ☐

None, just my business ☐

6. Did you have previous experience with email/ website marketing/ website or online in-house systems from the companies you worked for?

Yes ☐ No ☐

7. What is your highest level of education?

Secondary ☐ Matric ☐ Certificate ☐ Diploma ☐ Degree ☐ Postgrad/ Masters ☐

8. Please state location of company and country

.....

### SECTION B-THE BUSINESS

**Please supply the following information by ticking the most appropriate response with an "X"**

The aim of this section is to get general information about the business:

1. Please state the nature of business for your company?

Clothing and Apparel ☐ Accessories and Bags (headgear, scarfs, belts) ☐  
Jewellery (beads or any other) ☐ Crafts ☐ Shoes Segment ☐  
Other (Specify) .....☐

2.How long has the business been operating?

Less than one year ☐ 1-2 years ☐ 3-5years ☐  
6-10 years ☐ above 10 years ☐

3.How many employees are at your company?

1-10 ☐ 11-25 ☐ 26-50 ☐ 51-75 ☐ 76-100 ☐  
More than 100 ☐

4. Do you know your profit for the year (Rands)?

Less than 50 000 ☐ 51 000-100 000 ☐ 101 000-250 000 ☐ 251 000-500 000 ☐  
501 000-1 000 000 ☐ Not sure ☐

### SECTION C- THE USE OF ECOMMERCE

The aim of this section is to establish the extent to which Fashion Designers in Durban are Using E-commerce.

**Please supply the following information by ticking the most appropriate response with an "X"**

1. The company uses electronic mail (E-mail) for communication correspondence?

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
<b>DOCUMENTATION</b>					
1. In-house					
2. With other businesses					
3. With customers.					

2. The company has a website:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
1.That shows information of company but customers cannot buy on the site					
2.Where customers can view products and buy					

3. The company uses internet systems for:



	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
1.Sending of parcels with couriers					
2.For submitting tenders to customers/government					
3.Order trims or fabrics					
4.Financial transactions like paying bills, salaries, invoicing, etc.					
5.Payments from customers					
6.Dispatch of goods					

4. The company uses the internet to check latest styles and for inspiration for new designs/ ideas.

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>

The company makes all my patterns/designs using a computer software.	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>

5. The company markets and sells its product:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
On social media - Facebook, Instagram, twitter?					
On company's own Website					
Using WhatsApp					

The company sells its products online using other sites like gumtree and pays a commission for the services

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>

8. The company:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
Pays for advertising and marketing on social media such as facebook and instagram					
The company has assigned another company to sell its products and services, sites like Zando.co.za, Speree.com, Takealot.com on the internet?					

## SECTION E - FACTORS INFLUENCING ADOPTION OF ECOMMERCE

Assessing the internal and external factors influencing the adoption of Ecommerce by Durban fashion designers. With your experience as a business person, which internal and external factors do you view as important influencers in the use of Web and Internet as an organisation?

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
1.My firm sees internet as a way to see business opportunities					
2.The government supports ecommerce activities					
3.Internet markets business globally					
4. Most South Africans have access to internet and buy online that is the new lifestyle					

## SECTION E - BENEFITS OF ECOMMERCE

1. The communication due to internet has improved with:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
1. Customers					
2. Suppliers or manufacturers.					

2. The business is performing better because:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
1. We have more customers because of internet marketing					
2. We know customer preferences from comments and likes					
3. Management makes informed decisions from the information from internet.					

4. Revenue for the company has increased because:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
1. The sales have increased					
2. Lower advertising and marketing costs					
3. Faster decision making by management because of accurate information from internet.					

4. Due to online applications that work with our main system:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
1. We have accurate information on the website					
2. Customers are experiencing efficient service and are happy					

## SECTION F – CHALLENGES FACED IN THE ADOPTING OF ECOMMERCE

1. The internet charges are high for my business:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>

2. The transport and courier services are not reliable:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>

3. The amount of financial resources required to setting-up, buying necessary ICT for e-commerce implementation, paying consultancy fees, training personnel and maintenance of website are quite high for my company.

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>

4. The decision for adoption we need to make it collectively as business partners and the partners are fully convinced of the ecommerce benefits

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>

5. The government policies on return and privacy policies are very difficult to implement

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>

6. The competition from overseas companies is high and they better websites

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>

7. The bank applications are:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
1. Not user friendly for our customers					
2. Not reliable that customers are afraid to use them					
3. Internet fraud is high					

End of questionnaire

Thank you very much for your participation.

### 9.1.3 Appendix C: Interview questions

#### **Ecommerce adoption by Small Medium Enterprise in Fashion: Evidence from Durban Fashion Fair Designers.**

Position in the executive team of DFF \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Notes:

1. Greet interviewee and introduce yourself.
2. Provide overview of the study and indicate the usefulness of the outcome.
3. Obtain signed consent form. Offer to answer any questions that interviewee may have.
4. Remind interviewee about their volunteer efforts to participate in the study.
5. Remind interviewee about recording the interview and start the recording.
6. Start the interview by recording interviewee's pre-assigned coded name, date, time and location.
7. Start asking interview questions. Allow enough time to answer those questions.
8. Listen carefully to interviewee. Ask probing and follow-up questions, if needed.
9. At the end of the interview, thank interviewee for their participation and time.
10. Provide participant your contact information if they have any questions.

#### **Interview Questions**

Please explain about the Durban Fashion Fair initiative.

Can you describe the initiative in detail, its objectives? How old is it?

How many Fashion Designers do you have in total?

This year's theme, for the DFF, "Journey of innovation" what does it entail to the

The organization

The fashion designers

1. How do you use e-commerce in the DFF Arena?

E-commerce applications	Yes /No
Does the organization have a website	
Is website or information in different language than the South African languages	
What purpose does the website serve?  Does it publish information about designers?  Does it sell the designers products on the website?	
How does the organization promote Durban Fashion Fair designers and upcoming events?	

1. You have worked with fashion designers for a long time; what ecommerce technologies does the organization use to:
  - a) Communicate with fashion designers?
  - b) Bring exposure to their designs?
  - c) To market and sell the fashion designers products?
2. What were the influencing factors for e-commerce adoption in your company?
3. Previous experience in ecommerce before DFF
4. Is technology considered a strategic pillar of the DFF initiative?  
If yes how?      If No why?
5. When you hold the Durban fashion Fair fashion shows or trade fairs, is technology considered an important factor for such events?
6. Do you have internal ecommerce systems that you use in your organization?
7. Do the ecommerce systems help you in decision making for fashion designers?
8. Which systems have been beneficial to the organization?
9. The benefits derived from are they meeting the expectations?

10. Ecommerce strategy for social media platforms or ecommerce?
11. What impact has the ecommerce affected the fashion designers?
12. Do you have seminars or trainings on ecommerce?
13. What challenges have you faced in the ecommerce adoption?

#### Fashion designers

14. What areas of ecommerce have been beneficial to the organization?
15. Having worked with fashion designers for a long time; what ecommerce technologies does fashion designers use in their businesses?
16. What do you think are the influencing factors for the technologies that they are using?
17. Do you think that there are barriers for to adopt more ecommerce technologies?
  - a) If yes please state?
18. Do you see ecommerce bringing positive change in the business for fashion designers?
  - a) If YES in which arears do think ecommerce or online technology will make a change?
  - b) If NO what challenges does ecommerce pose for the businesses?
19. What are the main factors that make the fashion business successful?
20. What challenges do you see that affect the fashion designers?
21. What impact do you think the following has on fashion designers businesses?
  - a) Social media
  - b) Website
  - c) WhatsApp
22. To which degree is the cost factor important to adopt more e-technologies?
  - a) How would you rank it on a scale from 1 to 5, where 1 means less important?  
  
and 5 means very important?
23. What experience did you have before launching your e-commerce platform?
24. How would you describe the challenges you experienced during the initial adoption
  - a. of an e-commerce platform?
25. What was your experience after launching the e-commerce platform?
26. Did you derive any benefits?
27. Did the actual benefits meet your initial expectations?
28. Were you aware of the potential benefits and barriers before you started using e-commerce?
29. What deployment strategies did you use to successfully adopt an e-commerce platform?
30. What do you consider is the most beneficial for your company from ecommerce?

31. What advice would you offer to other SME business leaders who may be in the midst of adopting e-commerce platforms?
32. How is your marketing strategy influenced by e-commerce?
33. What issues, if any, are stopping you today from adopting a higher level of ecommerce platform?
34. Which are the biggest barriers to future e-commerce improvement in your company?
35. How did you determine the requirements for adopting an e-commerce platform in your organization?
36. What changes did you make in your everyday business processes to adopt an ecommerce platform?
37. What impact did external parameters (i.e., end-user awareness, government intervention) have on e-commerce platform adopt.



#### 9.1.4 Appendix D: Ethical clearance letter



#### MANAGEMENT SCIENCES: FACULTY RESEARCH ETHICS COMMITTEE (FREC)

29 March 2019

Student No: **21557378**

FREC REF: 70/16FREC

Dear **Ms CE Nhuvira**

**MManSci: Business Administration**

**TITLE: Ecommerce adoption by Small Medium Enterprise in Fashion. The case of Durban Fashion Fair Designers.**

Please be advised that the FREC Committee has reviewed your proposal and the following decision was made: **Ethical Level 2**

**Date of FRC Approval: 21 July 2016**

Approval has been granted for a period of two years from the above FRC date, after which you are required to apply for safety monitoring and annual recertification. Please use the form located at the Faculty. This form must be submitted to the FREC at least 3 months before the ethics approval for the study expires. Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the FREC according to the FREC SOP's. Please note that ANY amendments in the approved proposal require the approval of the FREC as outlined in the FREC SOP's.

Yours Sincerely

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Prof JP Govender

Chairperson: FREC

### 9.1.5 Appendix E: Gatekeepers Letter



Durban Fashion  
Fair 7th Floor  
199 Anton Lembede  
Street, Durban 4001  
South Africa

10 October 2018

#### **RE: Gatekeepers Letter**

Dear Durban Fashion Fair Management

My name is Chiedza Elizabeth Nhuvira, a student from Durban University of Technology studying a Master's Degree in Business Administration. The research topic for my study is **"Ecommerce adoption by Small Medium Enterprise in Fashion: The case of Durban Fashion Fair Designers"**

I am writing to ask permission to conduct interviews with the Durban Fashion Fair Executive committee as well as ask the DFF fashion designers to fill out a questionnaire. The study has been approved by Durban University Research Ethics Committee and, as part of that approval process. I am required to obtain gatekeeper permission from sites where I recruit or test participants. The first initiative will be to ask permission to access email addresses and phone numbers of the above mentioned people so that I can ask for their permission to conduct the research; and if they agree I will arrange for the interview or filling in of the questionnaire then we will arrange the meeting.

All answers and results from the questionnaires and interviews will be strictly confidential and the results will be available at the Durban University Library in the thesis upon completion of the study.

The goal of the research is to improve our understanding of ecommerce adoption of Durban fashion designers. We have witnessed that ecommerce is one of the fastest growing technologies and embracing it helps fashion designers to improve both internal and external operations. Through the Ethekewini municipality that has helped a lot of designer's kick-start their brand, ecommerce adoption can bring competitive advantages to the fashion designers. The aim of the study is to gather information on how far the fashion designers have embraced

ecommerce tools for their businesses and to assess the technologies available to be utilised by fashion designers. The project consists of a short five-page survey, made up of about 50 questions than can typically be answered by participants within 10-15 minutes) and 24 open ended interview questions.

If you are willing to be involved would you please sign the form below that acknowledges that you have read the Participant Information Sheet, you understand the nature of the study being conducted and the risks and likely benefits of participation in this study, and you give permission for the research to be conducted to the Durban Fashion Fair Designers.

Yours sincerely

Chiedza Elizabeth Nhuvira (Student at Durban University of Technology; Student Number 21557378)

Please tick to confirm your understanding of the study and that you are happy for your organisation to take part?

1. I confirm that I have read and understand the information provided for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that participation of our organisation and students/members in the research is voluntary and that they are free to withdraw at any time, without giving a reason and that this will not affect legal rights. ☐
3. I understand that any personal information collected during the study will be anonymised and remain confidential. ☐
4. I agree for our organisation and students/members to take part in the above study. ☐
5. I agree to conform to the data protection act ☐

Name of Gatekeeper:

Date:

Signature:

Chiedza Elizabeth Nhuvira

10.10.08

Name of Researcher:

Date:

Signature:

Name of Person taking consent: (if different from researcher)

Date:

Signature:

### 9.1.6 Appendix F: Correlations

### **9.1.7 Appendix G: Turnit report**