

Short Paper

An ERP SAP Implementation Case Study of the South African Small Medium Enterprise Sectors

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Abstract

Purpose – This research examines the enterprise resource planning system (ERP) SAP implementation in SMEs. Small and Medium Enterprises (SMEs) are challenged by their use of manual working style and operations preparations. Human errors in the preparation and execution of important documents such as financial statements, invoices, purchase orders, and internal sales orders have been overcome by business Intelligence processes that computerize every document, efficiently store, Retrieved, and quickly send or receive copies.

Methodology – This research proposed solution is an ERP theoretical proposed solution and information evaluation pertinent to the investigation of how to continue and monitor the performance of the ERP SAP procurement process in SMEs. This research technique examines difficulties and suggests solutions. It also includes the stages of the procurement process and the benefit of the enterprise resource planning process, use cases and tables were used to represent the findings generated. Other elements contributing to the ERP procurement process are examined, including the challenges and solutions SMEs face. Furthermore, research on enterprise resource procurement and business intelligence (ERPBI) is conducted to gain in-depth knowledge on how the



performance of ERP procurement, including ERP SAP, has been monitored in the existence of SMEs.

Findings - ERP implementation and SMEs' outcomes were studied using the explorative approach. To validate the model being created, eight individuals from Business and academia with experience in ERP systems were contacted during the development of the tools. The overall findings offer helpful hints on how organizational and operational elements interact to ensure the successful implementation of ERP. Implementing ERP systems is considered both from the process and organizational learning and knowledge management perspectives.

Practical Implications – ERP companies concentrate more on SMEs due to the nearsaturation of ERP adoptions in Large Enterprises (LE). Additionally, many SMEs are implementing ERP systems due to globalization, collaboration, value networks, and the massive information flow between and within SAMEs today. Adoption risks stem from SMEs' limited resources and unique qualities that set them apart from Large Enterprises (LE). This article's primary goal is to highlight the aspect of the ERP in the SME domain that needs further research, suggest future research directions, and give the most recent research findings that could help buyers, suppliers, and SMEs when starting ERP projects. More so, there are advantages to implementing an ERP system successfully. However, there is already evidence of substantial failure risks in ERP implementation projects. The non-technical parts of the implementation project are frequently neglected or given less attention by the project managers, who, instead, concentrate primarily on the technical and financial aspects of the project. Therefore, the study of ERP deployment success is one of the key research topics in ERP systems today.

Research Limitations – This study contributes to the knowledge of SMEs' ERP intelligence and procurement process implementation.

Keywords – Enterprise Resource Planning (ERP), Business intelligence (BI), Procurement Process, SAP, Small and Medium Enterprises (SMEs)

INTRODUCTION

Enterprise Resource Planning (ERP) is a measured programming system intended to incorporate the vitally useful region of an organization's business processes into one coordinated system (Kayan 2020; Aroba et al., 2023, Aroba & Mnguni 2023). Enterprise Resource Planning (ERP) procurement software is increasingly being introduced into both new blooming Small and Medium Enterprises. This is to enhance the performance of procurement activities which are perceived as one of the most common and significant factors that help SMEs to manage purchases in departments within the organization (Dezdar & Ainin 2020). Thus, Enterprise Resource Planning (ERP) continues to be adopted worldwide. It has become an essential part of organizational practices, guiding the operations of many organizations. ERP is known to improve efficiency, performance as well as productivity, and it is regarded as a strategic resource by organizations, providing a competitive advantage and a strong market position (Huang & Palvia 2018; Aroba Oluwasegun 2022; Aroba et al. 2021, 2022). It integrates the functional areas via a shared database, increasing organizational productivity (Rouhani & Mbin 2018). ERP system empowers precise tracking of significant business agreements and transactions and acts as interdepartmental and authoritative reconciliation and coordination instrument (Larreina et al. 2013).

They incorporate and coordinate classic, functional, vital, and administrative perspectives by offering progressed programming highlights. Execution of ERP frameworks in SMEs is becoming normal as innovation is more settled and costs decrease. This is obvious because a developing number of ERP sellers are currently centered around SMEs, and by noticing that a considerable large amount of the enormous ERP sellers like SAP and, as of late, Microsoft are effectively growing their business exercises to the SME area (Ahmad and Cuenca 2013). This helps provider contribution in the enhancements cycle of an item. It combines and distributes purchasing data from and to inward and outside parties utilizing web innovation, for example, purchasing management data on an extranet that web clients and suppliers can find (Muscatello et al., 2003). The process of conducting negotiations between business partners through electronic means. This way, e-negotiation saves real money in acquiring labor and products at the level where crucial provider data is assembled for additional assessments and transactions (Olutola et al., 2023; Aroba et al., 2023). An enterprise executing procurement instruments should assess and develop its purchasing interaction for the most outstanding efficiency (Rupcic 2021).

ERP is known for efficiency improvement in businesses, cost reductions, and integration of business processes. These are all drivers for ERP implementation by companies of all sizes. This study aims to identify the requirements of a successful ERP implementation in small and Medium Enterprises, focusing on the Southern African context. An analytical analysis methodology was used in this study to identify themes across different challenges that SMEs experience when implementing ERP. This provided the authors with the scope to investigate the obstacles further and attempt to find

solutions. Based on the identified challenges, the study offers guidelines that can help African SMEs make good decisions when implementing ERP. ERP companies concentrate more on SMEs due to the near-saturation of ERP adoptions in Large Enterprises (LE). Additionally, many SMEs are implementing ERP systems due to globalization, collaboration, value networks, and the massive information flow between and within SAMEs today. Adoption risks stem from SMEs' limited resources and unique qualities that set them apart from Large Enterprises (LE) (Aroba et al., 2023; 2023).

This article's primary goal is to highlight the aspect of the ERP in the SME domain that needs further research, suggest future research directions, and give the most recent research findings that could help buyers, suppliers, and SMEs when starting ERP projects. More so, there are advantages to implementing an ERP system successfully. However, there is already evidence of substantial failure risks in ERP implementation projects. The non-technical parts of the implementation project are frequently neglected or given less attention by the project managers, who, instead, concentrate primarily on the technical and financial aspects of the project. Therefore, the study of ERP deployment success is one of the key research topics in ERP systems today.

LITERATURE REVIEW ERP SAP System Implementation in SMEs

The number of studies on implementing enterprise resource planning (ERP) SAP in SMEs has increased rapidly in recent years. SMEs use knowledge to manage their daily work. When SMEs adopt an ERP system, it tends to be simple. Most SMEs consider costs when considering an ERP system and are reluctant to invest after start-up (Zach et al., 2014). Similarly, some SMEs consider the changes that ERP systems can bring to their Business, primarily those seeking future growth and development. Business Intelligence (BI) has discovered that audit organizations uncovered about 70% of organizations applied information warehousing and business intelligence (BI). At the same time, BI has been shown as a maximum capability need among 1500 boss data officials worldwide (Molina. Business processes have changed into business-client correspondence considering the two-year inclinations, with organizations focusing on development, benefit, and at last, endurance, while clients want more worth (CFI Team 2023).

Furthermore, a study by Bayram et al., (2023), examined the specific benefits of SMEs and the main problems associated with ERP. Based on the work done by Haddara & Zach (2020), the authors defined a list of challenges SMEs face when implementing ERP SAP systems. The challenges have been classified into three groups: getting finance,

expanding income, and embracing technology. Whereas, there is a likely constructive outcome of innovative frameworks, ERP subsystems, BI backing of ERP subsystems, Knowledge Management assists, and context-oriented elements in accomplishing the awaited benefits (Caldwell 2020). The implementation phase involves customization or configuration, adaption of the ERP software acquired according to the needs of the organization, and the training of users. Typically, this task is performed by a vendor or consulting firm and can be achieved via different implementation methods. The use and maintenance phase includes using the product in a manner that reflects the expected benefits and minimizes disruption (Hayes 2022).

Once a system is implemented, it must be maintained because the anomalies must be corrected, optimization requests must be respected, and improvement of general systems must be made (Olutola et al., 2023).

Full traceability

This is whether ERP SAP procurement acquirement will give you the advantage to follow your Items handily. A few warnings will show up naturally when the request has been sent and gotten (Ash & Burn 2003).

Increased customer satisfaction

An ERP system helps companies deliver goods to customers faster, improve productivity and implement inventory control. It can foster better customer communication when customer retention is vital (Resdifianti 2022).

Increased return on investment (ROI)

Return on investment is achieved through integrated information sharing, increased efficiency, real-time data access, and governance, improved inventory management, and reduced costs (Dezdar 2017; Fagbola et al.2022, Aroba et al., 2020).

Challenges Faced by SMEs

This is an issue that countless organizations battle with, and this incorporates the prominent players as well. Notwithstanding, more influential organizations with memorable accomplishments behind them, as a rule, find it simpler to draw in new clients as they have areas of strength for supporting them (Miraglia et al., 2023). *Getting finance*

Despite the reality that Business undertaking crediting is, as of now, positively more prominent open than in prior years, going back is as yet a concern. Various SMEs are excused with the guidance of their more respectable option bank. However, this must not be an important decision (Simba et.al., 2023).

Expanding Income

It is not a shocking reality that every business endeavor fights the pressure to stay aware of and support development. While it is incomprehensible for organizations to control the market influences, they are all confronting, and different games can help extend benefits. For instance, if a business works internally in a commercial center, this is unnecessarily little to make the proper advantage. Providing additional items or organizations to broaden people's deals in the venture might be thrilling (Promnil & Polnyotee 2023, Anwana et al., 2022).

Embracing technology

While most businesses have welcomed technological advancement over the past few decades, others have buried their heads in the sand. Technology plays a crucial role in Business, making things easier and simpler for business owners to alleviate some of the challenges they may regularly face (Mico & Cungu 2023).

Embracing E-commerce

E-commerce has discovered it has partitioned into four fundamental classifications, including Business Customer, Business-to-Business, Customer to Buyer, and Government-to-Business (Anwana et al., 2022). Business to Customer exchanges includes trading products, administrations, or data among organizations and the overall population, commonly through inventories utilizing shopping basket programming. Business to Business includes trading items, administrations, or data between "two discrete business parties," like between a maker and a distributor or between a wholesaler and a retailer. It includes a lot more participants than Business to Customer. It requires multiple frameworks, and its volume of exchanges is generally higher than that of Business to Customer exchanges (Batt 1999).

Customers can likewise trade items, administrations, or data between themselves. In Customer to Customer, transactions happen between buyers who manage their organization in barters, online networks, discussion channels, outsider customer posting administrations, and electronic conversation gatherings where they can trade their items and administrations utilizing the web payment system (Piercy 2006; Mattila et al., 2021)). In this manner, Customer to Customer markets extinguishes the "intermediary who otherwise pockets a certain percentage of the selling price as profitability. Associations and shoppers can likewise direct Businesses with the public authority employing devices and an internet-empowered presence. It is a trade of items, administrations, or data between shoppers, organizations, and the public source (Government to Government) with the government (O'Shaughnessy 2017).

PROPOSED SOLUTION

This research proposed solution is an ERP SAP theoretical concept method and information evaluation solution pertinent to the investigation of how to continue and monitor the performance of the ERP SAP procurement process in SMEs. This research technique examines difficulties and suggests solutions. This approach is used to solve and highlight the challenges faced by SMEs. The highlight of different challenges and solutions are proposed.

Challenges of administration backing

The top administration's degree of conviction regarding the significance of innovation capability and its commitment to specialized physical challenges is one of the angles included below the ultimate administration guideline as they struggle.

Proposed Solution

The creators confirmed an incredible or detrimental impact of pinnacle administration aid on embracing innovation. Consequently, the absence of hierarchical help could be one obstruction that forestalls customers from innovation use.

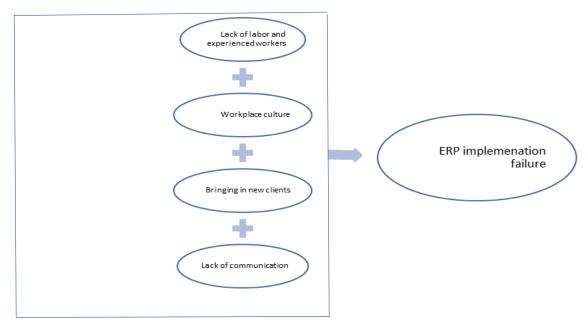
Challenges of Enterprise Intelligence Work Culture Problem

Regarding corporation aid-making plans and enterprise intelligence, people are organized in framework, and quality preparation that drives to get the fundamental data for framework use and interplay preparation planning are significant challenges.

Proposed Solution

The execution of ERP requires clear and successful correspondence in each diploma of task inferable from the association of communique familiarity with the framework among clients, prompting the inability to carry out all processes as highlighted

in the use case in Figure 1 below. Like the earlier hierarchical elements examined, preparing likewise performs a critical component in fruitful ERP utilization, wherein facts are predicted to address fluctuating issues in the version. Clients' absence of such information might cause their interaction use through model parts adjustment. In such a way, now not wholly settled, 42.20% of the ERP SAP use achievement, and at remaining, it is anticipated for framework reception success. Clients outfitted with facts on the new model thoughts might be greater disposed to utilize it, have little obstruction, and acknowledge preparing effectively.



The figure below shows a cause-effect diagram of the challenges identified.

Figure 1. Cause-effect diagram of ERP implementation challenges in SMEs

Bringing in new Clients

This is a challenge that so many companies face, even the major ones. The ability t o draw in new clients is usually made more accessible for larger businesses with a track record of success because they have a solid b rand to back them up.

Proposed solution

Innovative branding is crucial since it leads to improved recognition, increased co mmercial value, and the capacity to attract new clients quickly. To flourish in a cutthroat market, it might be challenging to draw in new clients w hile still providing excellent service to current ones.

Any small firm must also be proactive. This entails making calls, going to relevant network ing events, and being proficient in the many marketing platforms that your company is pr esent on.

Workplace Culture

Organizations lack a cultural structure of trust and open lines of communication, le ading

to breakdowns caused by rigid hierarchies. To address this, the company needs to be mor e open and change its behavioral norms, beliefs, and values to encourage the free flow of information from the top down and bottom-up.

Proposed solution

Providing an environment where everyone can participate in the creative process is crucial, especially by using subject matter experts to pave the way. The leaders are the first to show a lack of commitment to developing a positive and thriving culture, which spreads across the entire organization. The leaders must be willing to prioritize fostering a healthy culture if they want it to succeed. Culture is a living organism that, if left unattended, will develop its own identity without anybody knowing it. The leaders must define it as meaningful work to create a healthy and thriving culture that people desire to work in, and they must then incorporate it into their strategy, demonstrate to their staff how it benefits them, and explain how they fit in.

Lack of labor and experienced people

Understandably, SMEs believe they lack the means to cover the cost of training fin ancially or in terms of personnel depth to release employees for courses.

Proposed Solution Result

They are experiencing a skills scarcity. Therefore putting off training may be a mistake since it is probably simpler to train current employees than to hire new ones. If your funds don't currently allow for training expenses, looking into alternative funding options can be the solution. It is possible you are not seeking the appropriate places if you can not locate the correct audience. Try exploring different recruitment strategies; this might involve switching your recruitment consultant to placing ads in various locations, going to job fairs, and spreading the news on social media.

Lack of internal communication

Communication is a fact of life, especially in the workplace, where teamwork, technology, and remote work are increasingly common. For a business to thrive, meet deadlines and exceed goals, solid communication systems, and relationships must exist.

Proposed solution

SMEs must use internal communication effectively for knowledge transfer to assist them in sharing critical business knowledge and innovations. The use of emails, brochures, and word of mouth are internal communication tools to strengthen employees' values. Effective internal communication allows SMEs to share deals using open and direct communication strategies. However, no studies have examined the nexus between business-IT alignment and SMEs' communication patterns in South Africa to measure how rigid their communication is, but this study covers this aspect. Therefore, SMEs' internal communications may either negatively or positively affect their productivity and sustainability; however, rigid communication culture/strategies will stifle innovation. But the small and medium-sized enterprises in the continent require creation and productivity to break the shackle of unemployment.

Limitations

SMEs are confronting many difficulties and problems in each inner and outer element. Outside difficulties and troubles incorporate external variables like adjustments in legitimate frameworks and assessing monetary conditions. Natural variables comprise political, valid, social, conservative, and ecological variables, which decide businesspeople's situation becoming commercial enterprise visionary. Extreme difficulties for SMEs include socio-social variables like schooling, status, religion, own family foundation, and organizations that affect a person. Internal factors include all administration-related elements like creation, marketing, human asset development, and financial and framework-related aspects. In thinking about each inner and outer variable, SMEs can oversee and manage interior elements; however, outside factors can be vanished by government affiliation by cleverly executing a few detailed plans and packages for individual regions and by class of industry. Inward problems are creation, showcasing, economic, human asset advancement, and foundation. Creation-demanding situations include the absence of force, property, scarcity, full-size fee herbal substances, a low fine of unrefined components, and a lack of hardware. Showcasing challenges include the absence of constrained time strategies, lack of market channels, absence of organizing, absence of coordinated dispersion channels, and lack of conveyance time. Financial challenges include the absence of credit scores from banks, mindfulness of plans and administrations, postponed process in banks, and lack of working capital. Thus, from the above verbal exchange, many difficulties affect SMEs. Among them are creation, showcasing, economic, human asset development, and framework. From general issues and problems, outdoor challenges are not avoidable as they manifest due to ecological changes not in association management. Still, as an alternative, indoor problems, and troubles can live on and be avoidable through specific security features and management associations.

CONCLUSIONS

Small providers want to integrate with their giant suppliers' ERP structures, but their inner strategies and requirements will regularly be very one-of-a-type. Many will buy the ERP software program to use and are trying to find to mix it with applications that many organizations can use. In other words, tier- fragmentation of ERP is not sincerely something that exists in large companies; it is also a truth of lifestyles across broader enterprise communities. The ERP customers are so diverse that the market will maintain to guide a vast range of products, which consist of those for corporation-extensive needs and people for specialist niches, and the numerous merchandise will usually need to talk to each other at a few levels. Think approximately the hours and try that bypass into shopping for developing tracking numbers, filing orders, checking stock, making a buy history, and coordinating with suppliers. An ERP SAP simplifies shopping by automating those responsibilities and supplying accurate actual-time information. Because an ERP SAP always deals with inventory degrees, it realizes what inventory you have and what desires to be ordered to finish a job. An ERP SAP may even assist in supervising buy orders, breaking down charges to include particular lines that confer with unique devices, and allowing for more than one transport date to be remarkable. With an ERP, SAP may additionally boost the negotiating power of your shopping branch through aggregating buy orders, giving you greater electricity to negotiate with companies.

RECOMMENDATIONS

The further recommendation for SMEs is to imbibe ERP SAP to help schedule production easily, anticipate needs, and automatically register stock goods with

effortless control of your staff, money, inventory, customers, and purchases. Boost communication. Understand the accurate lead time and reporting on production.

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DECLARATIONS

The author declares no conflict of interest or financial or personal relationships that may have inappropriately influenced him in writing this article.

Conflict of Interest

The author declares no conflict of interest.

Informed Consent

Not applicable

Ethics Approval

The article followed all ethical standards for research without direct contact with human or animal subjects.

REFERENCES

- Ahmad, M. M., & Cuenca, R. P. (2013). Critical success factors for ERP implementation in SMEs. Robotics and Computer-Integrated Manufacturing, 29(3), 104-111.
- Anwana, E. O., & Aroba, O. J. (2022). African women entrepreneurs and COVID-19: Towards achieving the African Union Agenda 2063. HTS Theologies Studies/Theological Studies, 78(2), 7.
- Aroba, O. J., Chinsamy, K. K., & Makwakwa, T. G. (2023, May). An ERP Implementation Case Study in the South African Retail Sector. In Hybrid Intelligent Systems: 22nd International Conference on Hybrid Intelligent Systems (HIS 2022), December 13–15, 2022 (pp. 948-958). Cham: Springer Nature Switzerland. 10.1007/978-3-031-27409-1_87
- Aroba, O. J., Mabuza, P., Mabaso, A., & Sibisi, P. (2023). Adoption of Smart Traffic System to Reduce Traffic Congestion in a Smart City. In *Digital Technologies and*

Applications: Proceedings of ICDTA'23, Fez, Morocco, Volume 1 (pp. 822-832). Cham: Springer Nature Switzerland.

- Aroba, O. J., & Mnguni, S. B. (2023). An Enterprise Resource Planning (ERP) SAP Implementation Case Study in South Africa Small Medium Enterprise Sectors. In Digital Technologies and Applications: Proceedings of ICDTA'23, Fez, Morocco, Volume 1 (pp. 348-354). Cham: Springer Nature Switzerland.
- Aroba, O. J., Naicker, N., & Adeliyi, T. (2021). An innovative hyperheuristic, Gaussian clustering scheme for energy-efficient optimization in wireless sensor networks. *Journal of Sensors*, 2021, 1-12.
- Aroba, O. J., Naicker, N., Adeliyi, T., & Ogunsakin, R. E. (2020). Meta-analysis of heuristic approaches for optimizing node localization and energy efficiency in wireless sensor networks. International Journal of Engineering and Advanced Technology (IJEAT), 10(1), 73-87.
- Aroba, O. J. (2022). Improving node localization and energy efficiency for wireless sensor networks using hyper-heuristic optimization algorithms (Doctoral dissertation). Retrieved from

https://openscholar.dut.ac.za/bitstream/10321/4319/3/Aroba_OJ_2022.pdf

- Aroba, O. J., Xulu, T., Msani, N. N., Mohlakoana, T. T., Ndlovu, E. E., & Mthethwa, S. M. (2023, March). The Adoption of an Intelligent Waste Collection System in a Smart City. In 2023 Conference on Information Communications Technology and Society (ICTAS) (pp. 1-6). IEEE.
- Ash, C. G., & Burn, J. M. (2003). A strategic framework for the management of ERPenabled e-business change. European Journal of Operational Research, 146(2), 374-387.
- Batt, R. (1999). Work organization, technology, and performance in customer service and sales. *Ilr Review*, 52(4), 539-564.
- Bayram, F., Ahmed, B. S., Hallin, E., & Engman, A. (2023). DQSOps: Data Quality Scoring Operations Framework for Data-Driven Applications. *arXiv arXiv:*2303.15068.
- Caldwell. A, (2020), 7 Key ERP implementation challenges and Risks. Available: https://www.netsuite.com
- CFI Team. (2023). Business Intelligence (BI). Retrieved from https://corporatefinanceinstitute.com
- Davenport, T. H. (1998). Putting the enterprise into the enterprise system. *Harvard* business review, 76(4). Retrieved from https://dl.acm.org/doi/10.5555/280994.280995
- Dezdar, S. & Ainin, S. (2020). Management decision. The influence of organizational factors on successful ERP implementation. Retrieved from https://www.academia.eda/50125652/the-influence-of-org./erp

- Dezdar, S. (2017). An integrative model for realising benefits from enterprise resource planning implementation. *International Journal of Business Information Systems*, 24(4), 423-451.
- Fagbola, T. M., Fagbola, F. I., Aroba, O. J., Doshi, R., Hiran, K. K., & Thakur, S. C. (2022). Smart Face Masks for Covid-19 Pandemic Management: A Concise Review of Emerging Architectures, Challenges, and Future Research Directions. *IEEE Sensors Journal*. vol 23, 2, 877-888. 10.1109/JSEN.2022.3225067
- Haddara, M., & Zach, O. (2011, January). ERP systems in SMEs: A literature review. In 2011 44th Hawaii International Conference on System Sciences (pp. 1-10). IEEE. 10.1109/HICSS.2011.191
- Hayes. K, (2022) Benefits of ERP, Advantages, and Disadvantages of an Enterprise Resource Planning System. Retrieved from https://light-itnet
- Huang, Z. & Palvia, P. (2018). ERP implementation issues in Southern Africa. Business process management. Retrieved from https://reflexes.com/business-process-management-and-erp-implementation
- Kanya. (2020). An Easy Introduction to Enterprise Resource Planning Software. Retrieved from https://www.hashmicro.com/blog/introduction-to-erp-software/.
- Larreina, J., Gontarz, A.; Giannoulis, C., Nguyen, V.K., Stavropoulos, P. & Sinceri, B. (2013). Smart manufacturing execution system(SMEs). The possibilities of evaluating the sustainable production process. Proceedings of the 11th Global Conference on Sustainable Manufacturing, GCSM 2013. P.517-522. Retrieved from https://doi.org/10.3929/ethz-a-010038053
- Mattila, M., Yrjölä, M., & Hautamäki, P. (2021). Digital transformation of business-tobusiness sales: what needs to be unlearned?. *Journal of Personal Selling & Sales Management*, 41(2), 113-129.
- Miço, H., & Cungu, J. (2023). Entrepreneurship Education, a Challenging Learning Process towards Entrepreneurial Competence in Education. *Administrative Sciences*, 13(1), 22.
- Miraglia, F., Pappalettera, C., Di Ienno, S., Nucci, L., Cacciotti, A., Manenti, R., ... & Vecchio,
 F. (2023). The Effects of Directional and Non-Directional Stimuli during a Visuomotor Task and Their Correlation with Reaction Time: An ERP Study. Sensors, 23(6), 3143.
- Molina-Castillo, F. J., Rodríguez, R., López-Nicolas, C., & Bouwman, H. (2022). The role of ERP in business model innovation: Impetus or impediment. *Digital Business*, 2(2), 100024.
- Muscatello, J. R., Small, M. H., & Chen, I. J. (2003). Implementing enterprise resource planning (ERP) systems in small and midsize manufacturing firms. *International*

Journal of Operations & Production Management. Vol. 23 No. 8, pp. 850-871. https://doi.org/10.1108/01443570310486329

- O'Shaughnessy, K. (2017). Benefits of ERP: Advantages and Disadvantages of an Enterprise Resource Planning System.
- Olutola, T., Balen, J., Lotisa, V., Johnima, A., & Browndi, I. (2023). Algebraic Multigrid and Cloud Enterprise Resource Planning System: A Powerful Combination for Business Efficiency. Asian Journal of Basic and Applied Sciences, 10(2023), 197-202.
- Piercy, N. F. (2006). The strategic sales organization. The Marketing Review, 6(1), 3-28.
- Promnil, N., & Polnyotee, M. (2023). Crisis Management Strategy for Recovery of Small and Medium Hotels after the COVID-19 Pandemic in Thailand. *Sustainability*, 15(5), 4194.
- Resdifianti. F, (2022). ERP System Procurement: Definition, Benefits, and Features. Retrieved from https://www.hashmicro.com
- Rouhani, S. and Mobin, M. (2018). Empirical study of firms. Journal of Systems and Information technology. Empowering benefits of ERP system implementation. Retrieved from https://eprints.glos.ac.uk/id/eprints/7967
- Rupčić, N. (2021). Implementing enterprise resource planning in SMEs: the consultants' perspective. International Journal of Business Information Systems, 37(4), 467-490.
- Simba, A., Tajeddin, M., Dana, L. P., & Ribeiro Soriano, D. E. (2023). Deconstructing involuntary financial exclusion: a focus on African SMEs. *Small Business Economics*, 1-21.
- Zach, O., Munkvold, B. E., & Olsen, D. H. (2014). ERP system implementation in SMEs: exploring the influences of the SME context. *Enterprise Information Systems*, 8(2), 309-335.

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