

THE EFFECT OF THE ERP AND BUSINESS STRATEGY ON THE LEVEL OF SUPPLY CHAIN INTEGRATION AND BUSINESS OVERALL PERFORMANCE AT A POTASH COMPANY IN JORDAN

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Abstract

The research main objective is to enter deeply in investigating the impact of enterprise resource planning system (ERP) and business strategy on the level of supply chain integration and business overall performance in potash firm in Jordan. The primary goal of this research is to develop a theoretical framework for examining the most important aspects that may affect integrating supply chain and enhancing business overall performance. The research also shows that supply chain integration and business overall performance is impacted by ERP presented by utility, modules, and implementation effectiveness. Also, the research summarized that business strategy which included business low-cost, business differentiation strategy, and business mixed strategy has a positive impact on supply chain integration and business overall performance. The novelty of this research is in its focus on the major roles played by ERP and business strategy on business overall performance at potash firm in Jordan.

Keywords: Enterprise resource planning (ERP). Business strategy, Supply chain integration, Business overall performance

INTRODUCTION

Companies realized the benefits of integrating their supply chains in order to manage business processes while working within increasingly complicated supply chain networks (Osarenkhoe, 2010). Increasing the company's capacity to employ its resources in light of the expanding economy can be accomplished through fostering supply chain collaboration with other components (Hanandeh A. et al., 2017). Having partners that are highly qualified can help reduce costs more than operating the organization alone without having effective partners, and the productivity of the organization has increased because business networks are becoming more unified, which has an effect on better managing businesses' supply chain networks, thereby decreasing overall costs and increasing business overall performance (Schoenherr & Swink, 2012; Hanandeh A. et al., 2022). Because of this, a number of academics have backed the idea that competition now begins more amongst businesses in the supply chain than it does between firms (Hanandeh A. et al., 2015).

This integration enables the transfer of information, services, and products between all components of the supply chain, which increases the added values for customers and supply chain networks' firms. Managing a business supply chain represents the integration between supply chain main components starting from resources, suppliers, firms, distributers, and customers (Hanandeh A. et al., 2022). To be in a position to compete more effectively in a market that is saturated with multiple supply chain networks, it is necessary to have an efficient



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management system that is able to coordinate the flow of information, products, and raw materials from their respective origins to their final consumers (Hanandeh A. et al., 2022).

Researchers and academics have conducted a number of studies on the topic of supply chain integration, specifically focusing on how to establish integration amongst the chain's primary components, which include its sources, suppliers, distributors, and customers (Fan et al., 2017). According to the researchers, the study of supply chain integration is necessary because of the changing environment of competition, which has become more complex as a result of the worldwide pressures brought about by globalization and the introduction of the knowledge economy (Hanandeh A. et al., 2018). Other researchers have investigated the issue of consolidation depending on the level of relationship and proximity between the components of the supply chain as an external constraint, and the readiness of the internal work environment as an internal constraint. Both of these factors are considered to be internal constraints (Kauppi et al., 2016).

LITERATURE REVIEW

Enterprise Resource Planning (ERP)

To link the transfer of data and information from sources to customers, supply chain integration management requires the use of advanced technological systems. One of the most important forms of advanced technology is enterprise resource planning (ERP), which has demonstrated its capacity to influence an increase in customer requests and demands, as well as an increase in the efficiency with which business operations, functions, and methods are carried out, as well as an enhancement of the relationship between distributors and customers (Neil s., 2018). There have been studies that have shown that implementing enterprise resource planning can have a positive impact on an employee's overall work performance. Despite this, it can be challenging to include all of the processes of the manufacturing department's main and sub processes within an ERP system due to the different mismatches that exist between the production methods for various products (Carr j., 2018). According to the findings of other research, the successful implementation of an ERP system is dependent, in general, on the robustness and preparedness of the organization's technological infrastructure, including its hardware, software, and users (Schwartz J. et al., 2018). Nevertheless, the application of ERP systems and its impact on increasing business overall performance through the integration of supply chains requires several additional details that are capable of explaining the nature of the relationship and the nature of the impact. This is because integration of supply chains is the means by which business overall performance can be increased.

Business Strategy

The alignment between a company's business plan and its supply chain integration is critical for the development of the company's infrastructure, functions, and relationships with the supply chain components of other companies (Hanandeh A. et al., 2021). The majority of researchers backed the concept that business strategy is the primary driving factor behind the development of businesses and the enhancement of the products that are ultimately sold to





consumers (Meckenstock et al., 2016). The topic of defining the most effective business strategy that is able to change the structure, character, and functions of the company as well as how it influences the ultimate outcomes of the company is one that requires several additional studies. In other words, there is still an issue that needs to be explained in more detail, and that difficulty is choosing which strategy is the most effective and has the greatest impact on the process of supply chain integration.

Supply chain integration and business overall performance

The integration of supply chain is defined as a method to address the growing complexity of the working environment and to lessen the threats that are confronted by enterprises (Yang & Yang, 2010; Hanandeh A. & Mustafa H., 2022). Literary studies have shown that the integration of supply chains between organizations and the external environment contributes to sharing the risks that occur, which contributes to raising work performance, increasing productivity, and meeting the needs and demands of customers. Companies that integrate their supply chains with the external environment are more likely to share risks, which contributes to raising work performance and increasing productivity (Fan et al., 2017, Barakat S. et al., 2022; Hammouri Q. et al., 2022). As a result, businesses need to provide support for the process of supply chain integration in order to link the internal environment of the organization with the external environment, which will result in a more effective and flexible business environment that is better able to deal with risks and challenges.

DISCUSSION AND CONCLUSION

According to the findings of this study, an ERP system has a constructively positive direct impact on the integration of supply chain, particularly in terms of usefulness, modules, and the efficacy of implementation. This finding is consistent with the findings of other research investigations. In addition, the findings of this research indicate that aligning a company's business strategy with its supply chain has a positive impact on the process of supply chain integration. This is true for all three types of supply chain strategies: low-cost strategy, differentiation strategy, and mixed strategy. This finding is consistent with the findings of other research investigations. This is an additional significant point to note. In conclusion, the findings of this study indicate that a positive impact can be made on business overall performance by integrating the supply chain. This can be accomplished by implementing an ERP system and gaining support from business strategy.

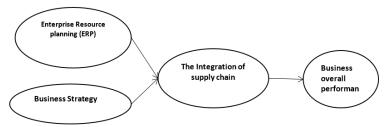


Fig.1: Model of ERP and Business Strategy on supply chain integration and business overall performance Adopted from (Hanandeh A. & Hajij M., 2021).





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References

- 1. Li, G., Fan, H., Lee, P. K., & Cheng, T. (2015). Joint supply chain risk management: An agency and collaboration perspective. International Journal of Production Economics, 164, 83-94.
- 2. Lazzarini, S., Chaddad, F., & Cook, M. (2001). Integrating supply chain and network analyses: the study of netchains. Journal on Chain and Network Science, 1(1), 7-22.
- 3. Sodhi, M. S., Son, B. G., & Tang, C. S. (2012). Researchers' perspectives on supply chain risk
- 4. management. Production and operations management, 21(1), 1-13.
- 5. Shou, Y., Hu, W., Kang, M., Li, Y., & Park, Y. W. (2018). Risk management and firm performance: the moderating role of supplier integration. Industrial Management & Data Systems, 118(7), 1327-1344.
- 6. Osarenkhoe, A. (2010). A study of inter-firm dynamics between competition and cooperation—A coopetition strategy. Journal of Database Marketing & Customer Strategy Management, 17(3), 201-221.
- 7. Schoenherr, T., & Swink, M. (2012). Revisiting the arcs of integration: Cross-validations and
- 8. extensions. Journal of operations management, 30(1-2), 99-115.
- 9. Flynn, B. B., Huo, B., & Zhao, X. (2010). The impact of supply chain integration on performance: A contingency and configuration approach. Journal of operations management, 28(1), 58-71.
- 10. Fan, H., Li, G., Sun, H., & Cheng, T. (2017). An information processing perspective on supply chain risk management: Antecedents, mechanism, and consequences. International Journal of Production Economics, 185, 63-75.
- 11. Kauppi, K., Longoni, A., Caniato, F., & Kuula, M. (2016). Managing country disruption risks and improving operational performance: risk management along integrated supply chains. International Journal of Production Economics, 182, 484-495.
- 12. S. Neil, Blockchain Meets the Manufacturing Supply Chain, https://www.automationworld.com/blockchain-meets-manufacturing-supply-chain, 2017. Accessed 11 January 2018.
- 13. J. Carr, Manufacturing ERP: What Are Your Pain Points in 2014? https://ultraconsultants.com/manufacturing-erp-pain-points-2014/, 2013. Accessed 23 January 2018.
- J. Schwartz, Microsoft Pitches Blockchain to Help Troubled Retail Supply Chains, https://redmondmag.com/blogs/the-schwartz-report/2017/01/microsoft-pitchesblockchain-to-etailers.aspx, 2018. Accessed 15 February 2018.
- 15. Beckmann, M., Hielscher, S., & Pies, I. (2014). Commitment strategies for sustainability: How business firms can transform trade-offs into win– win outcomes. Business Strategy and the Environment, 23(1), 18–37. https://doi.org/10.1002/bse.1758.
- 16. Meckenstock, J., Barbosa-Póvoa, A. P., & Carvalho, A. (2016). The wicked character of sustainable supply chain management: Evidence from sustainability reports. Business Strategy and the Environment, 25, 449–477. https://doi.org/10.1002/bse.1872.
- 17. Liu, C.-L., & Lee, M.-Y. (2018). Integration, supply chain resilience, and service performance in third-party logistics providers. The international journal of logistics management, 29(1), 5-21.







- 18. Yang, B., & Yang, Y. (2010). Postponement in supply chain risk management: a complexity perspective. International Journal of Production Research, 48(7), 1901-1912.
- 19. Hanandeh Ahmad, Hanandeh Rami, Alhwiadi Maram, Ahmad A Al-Naimi, Mustafa Hajij. (2022). Business process and digital self-efficacy as a mediate role on customer relationship management and customer loyalty. Central European Management Journal, 30(4), 2028–2033.
- 20. Ahmad, H. (2018). Measuring the impacts of entrepreneurial orientation factors: innovativeness, proactiveness on the organizational knowledge capabilities Case Study: Jordan Tourism Board. International business management, 12(2), 155162.
- 21. Ahmad, H., Hanandeh, R., Mustafa, H., Alzagheer, H., & Barakat, S. (2021). The effects of ERP system implementation on the integration of Supply Chain. Uncertain Supply Chain Management, 9(4), 10991106.
- 22. Barakat S., Khalil Yaghi, Hanady Al-Zagheer. (2022). The Use of NFT for Patent Protection. Advances in Dynamical Systems and Applications. 17(1):107-113.
- 23. Qais Hammouri, Asmahan Altaher. (2020). The Impact of Information system on Employees Satisfaction. International Journal of Psychosocial Rehabilitation, 24,10.
- 24. Barakat, S., & AlZagheer, H. (2021). Business Intelligence application in COVID-19 Vaccine Distribution. Annals of the Romanian Society for Cell Biology, 25(6), 17973-17980.
- 25. Hanandeh Ahmad, Hanandeh Rami, Alhwiadi Maram, Hanandeh Raed, Hajij Mustafa. (2022). The Impact of Self-Efficacy, Mobility, and Benefits Awareness on adoption of mobile banking applications in Jordan. Central European Management Journal, 30(4), 2034–2038.

