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Operations Strategy and Operational Competencies in Organizational Performance: A Rapid Review

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Abstract

Increased competition in the business space calls for operations practitioners to make decisions continuously and implement necessary changes to gain and sustain competitive advantage. This rapid review sought to unravel linkages between operations strategy, operational competencies and organizational performance. Based on the core competency theory of strategy, the resource-based view and the open systems theory, it was hypothesized that operations strategy and operational competencies interrelate, and both predict organizational performance. Organizational performance was conceptualized by performance measures of return on investment (RoI), customer satisfaction and inventory turnover. The review established that more research has been done around operations functions in manufacturing compared to the service sector. It was further established that organizational performance highly rests on the existence of capabilities and services of each specific organization and hence, operational competencies mediate the relationship between operations strategy and organizational performance. Additionally, the achievement of a firm's operations tactics depends highly on its ability to achieve the priorities of cost, quality, speed, flexibility and dependability. Recommendations in line with objectives were presented.

Keywords: Operational competencies; operations strategy; organizational performance; theory.

1. Introduction

Organizations face a complex environment where changing technology and competitive approaches impact overall performance [1]. Of great concern to researchers is why some organizations perform better and attain competitive advantage over others. In this respect, decisions made by operations managers' link with the overall configuration of systems in operations based on the organizational resources. Consistency in the decisionmaking patterns determines the organization's capacity and capability to support its competitive priorities and which directly influence the operational performance such as quality and delivery time.

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Today's business challenges require businesses to strengthen operations plan formulation in order to achieve organizational performance not only for competitiveness but also to remain in the market.

The primary purpose of an organization's operation is to produce goods and services for consumers. The operations function lies at the core of any organization and interrelate with all other functions. Slack et al. [2] argued that there are five operations performance goals namely cost (capability to produce at a low rate), quality (capability to manufacture in harmony with description and without mistakes), speed (expertise in responding to consumers requests swiftly and thus offering convenient time between when a client places an order on a particular product or service and when he/she gets it), dependability (ability to deliver products and services in accordance with the clients expectations) and flexibility which is the ability to transform operations with respect to the volume of production, time taken to produce, mix of diverse items or services produced and to invent and produce new products and services. Pozo et al. [3] pointed out that the accomplishment of any operations business strategy in an organization is influenced by the ability of its operations to attain excellence in the operations performance goals. The findings suggest that application of an operations strategy which properly aligns with the overall business strategy increases the competiveness of a firm through delivery of high quality products.

Besides, organizational performance is variously defined as the capability of an organization to access and use the limited resources through exploitation of its environment [4]. Jenatabadi [5] isolates two main aspects in the definition of the concept of organizational performance, that is, organizational goals and the elements that must be evaluated in terms of their efficacy, efficiency, and relevance. According to Almatroosh et al. [6] the goals and objectives of a company; which are primarily influenced by employee performance and leadership qualities, constitute the basis of organizational performance. This is considered to have deep impact on the organization processes, employees and performance of the various elements of organization structure.

Available research also considers organizational performance as a multidimensional construct that requires measurement in operational terms (customer satisfaction, loyalty, competitive edge) and market and financial outcomes that assess return on investment, profit and sales [7]. The measurement of organizational performance quantifies the effectiveness and efficiency of an organization's actions. Accordingly, performance measurement systems need to be enhanced for effective monitoring and maintenance of performance control [8]. This ensures that the organization pursues action plans that enable accomplishment of the overall business strategy which directly manifests the organization's mission and strategic orientation.

Against the background provided, the study set out to investigate the following research questions:

- 1. What is the extent to which operations strategy predicts organizational performance?
- 2. What is the extent to which operational competencies predict organizational performance?
- 3. What theories anchor the relationships between operations strategy, operational competencies and organizational performance?

2. Methods

This was a desktop research study that involved a review of literature from open access sources. Both peer reviewed and grey literature was reviewed in line with research objectives.

3. Results

3.1 Operations strategy and organization's performance

An organization's operations strategy directs its operations by demonstrating how the firm will achieve its goals, the sort of product to be manufactured, how consumers should be satisfied, its specific competencies and competitive advantages and its long-term success [9]. Operations strategy focuses on broad issues of the acquisition and deployment of significant resources for the achievement of superior organizational performance. Wandiga et al. [10] pointed out that the formulation of an operations strategy is based on the organizational competitive priorities of excellent quality, cost-effectiveness, quick delivery, reliability, and flexibility and it ought to be aligned with the overall business strategy. This contributes immensely on how the firm competes in terms of product and service design.

Furthermore, operations strategy aims at developing consistent operations and long-term plans on the effective use of production resources for full support of organizations strategic vision to improve competitiveness [11]. Research indicates that operations strategy formulation should focus on continuous improvement of competitive priorities such as quality, cost, flexibility, dependability, and delivery performance. Operations strategy should also clearly integrate all the functions along the supply chain and consistently align with the consumer demands. This calls for effective coordination of various operational competencies along the supply chain with the overall objective of gaining competitive advantage with regard to the operations strategy.

Besides, the correlation between operations strategy and organizational performance is best described by considering the three dimensions of operations strategy: content, process, and context [12]. However, most studies have based this relationship in the context dimension only and in relation to the competitive priorities of quality, time distribution, flexibility and cost. Furthermore, research has returned mixed findings on the relationship between operations strategy and organizational performance based on the industry or sector under study. For instance, in Sri Lanka, Jagoda and Kiridena's [13] study on operations strategy and organizational performance in the manufacturing business found that operations strategy process leads to superior firm performance. In another related study, Oltra and Flor [12] revealed that a strong alignment between the operations policy and the business plan improves organizational performance. The findings of these studies show that operations strategy development influences firm performance positively and that alternative strategy process configuration leads to superior organizational performance.

Contrastingly, Amoako and Acquah's [15] study in Ghana on the connection between operations plan, competitive advantage and organizational performance found that organizational performance in the developing economy context is influenced by quality only among manufacturing firms. The study findings indicate that

there is a positive correlation between operations strategies which are based on product development and organizational performance. Further investigations by Bosire [14] on the effects of operation strategies on organizational performance at Scania East Africa Limited in Kenya, revealed that operations strategies which are based on customer focus, product development, personnel development and competitive advantage had a positive correlation with organizational performance.

3.2 Operational competencies and organization's performance

Szasz et al. [16] defined competence as a collection of abilities, talents, and technology that a company excels in over its competitors. According to them, operational competency includes the extent to which a company's business plan is reinforced by its manufacturing procedures, the level to which its competitive objectives correspond to production power, and the degree to which manufacturing efficiency promotes a company's strategic significance. Competencies combine the expertise and knowledge that sets a company apart from its rivals. They should be rare, valuable and not easy to imitate in order to contribute to sustainability of a firm's competitive advantage [17]. According to Halley and Beaulieu [18], operational competencies are a combination of tangible and intangible resources that enable a company to satisfy market demands. In today's extremely competitive market, businesses must succeed at all levels of production, including quality control, manufacturing and marketing. However, studies also report on the challenge involved in measurement of operational competencies owing to the gradual way they emerge and the different perspectives in which they manifest across organizations [19]. Wu and colleagues developed a framework that guides the operationalization of operational competencies via means of operational enhancement, customisation, innovations, collaboration, capacity, and recognition.

Consequently, the capacity of a business to promote a set of skills and the effective utilization of operational competencies leads to the successful use of organizational resources and as a result, the improvement of organizational performance [19]. Therefore, operational competencies represent the ability to efficiently utilize the organizational resources through learning skills, process refinement and sustainability of past successful experiences. Put together, operational competencies are defined by organizations' skills and knowledge in controlling quality, cost, flexibility, speed and dependability.

Operational competencies combine tangible and intangible resources of an organization and enable production decisions which are consistent with its operations strategy. In his study to establish areas of unique proficiencies in the operations management in e-commerce companies in Argentina, Silveira, [20] pointed out that the introduction of e-commerce system has changed operations and business strategy in modern organizations which is evidenced in three main areas of integration, customization and internalization. Operational competence is a determinant of business performance and therefore its development should be based on the overall business strategy and aligned with the competitive priorities of the firm. Fredi et al. [21] established that companies must provide high-quality products and services at a lower cost with current developments in technology to achieve a competitive edge in terms of operations strategy. This necessitates the efficient coordination of several operational capabilities along the supply chain. Using data from representatives of steel, automotive, pulp processing and manufacturing companies, Zatta et al. (22) found out that to meet

consumer needs, expertise improvement should be enabled to match with product customization, process technology, flexibility, cost, quality and large-scale technology innovation capability.

Studies have reported positive correlations between operational competency and overall performance. Rose et al. [23] established that innovation orientation positively affects a firm's performance. Another study [24] found a positive association between operational competencies and overall firm performance in their study on the effects of operational competencies on organization performance. An important detail in the study was the inclusion of a non-financial aspect of performance. Further corroboration of this position is provided by Kiragu and Muhoho [25] who found that innovation in strategy implementation has a positive influence on organizational performance. Research also points to the need to develop competencies to increase efficiency and high performance. According to Mattias [26], there is need to develop effective procedures to support the dynamic information and knowledge among individuals. Halley and Beaulieu, [18] found that high integration of supply chain competencies leads to mastery of logistic services. Furthermore, studies point to the need to have operational competencies larger than the capabilities held by individual employees within an organization and should have both notions of knowledge and skill [27].

This line of research underscores the gap in available competencies in relation to organization's performance. For instance, Zatta et al.'s [28] study in Latin America concluded that there exists a substantial correlation between operational competencies' improvement and quality, cost, delivery and flexibility performances. In addition, the study argued that development of operational competencies through customization, innovation, integration and continuous improvement leads to improved organizational performance.

4. Theoretical frameworks

Research on the concept of organizational performance has been approached from diverse theoretical positions. The resource-based view [29] is an interdisciplinary approach which suggests that organizations can create and sustain competitive advantage through collective integration of rare, valuable, inimitable and non-substitutable resources (VRIN). Coordination of all supply chain operations offers value to clients while enhancing the profitability of the network's members. Each operation in the supply chain necessitates a unique set of resources and capabilities. The business's operations management department must guarantee optimal integration of resources and skills in order for the firm to achieve higher cost reduction and increased performance. Leveraging collaborative strengths and resources results in greater and synergistic effects with uncertainty of cause and effect making competitors unable to copy. This approach contends that the interaction between resources, capabilities, profitability, and competitive advantage must be considered while developing an operations strategy in order to maximize the impact of each firm's unique qualities.

The core competency theory of strategy suggests that each firm excels in a certain area in comparison to its competitors [30]. These may include technical excellence, client relationship management, and more efficient procedures. The model consists of four key competencies: resources, skills, competitive advantage, and operations strategy. They pointed out that organizational resources are the primary source of skill and technology development and accomplishment. The theory acknowledges that organizational capabilities aid in

the development of core competences, which leads to the achievement of operational strategy goals and the creation of the greatest possible share of core products. Özbağ [31] claimed that while an organization may have numerous talents and capabilities, only a few of them need to be combined to establish core competencies, which serve as the foundation of competitive advantage. Core skills must meet three criteria: they must add considerably to client profit from products, they must be competitively distinctive and hence difficult for rivals to imitate, and they must give possible access to a diverse range of markets.

The open systems approach developed by Daniel Katz and Robert Kahn after the end of the Second World War assumes a subsystem hierarchy and asserts that both specific environmental influences like network with suppliers, distributors, government agencies and competitors and overall environmental influence such as social ethics, economic settings, lawful/political environment and quality of education affect open systems. The approach identifies the behavior of an organization and maps an input- throughput- output cycle of events. The theory measures organizational effectiveness based on its adaptability to the environment with the aim of maintaining homeostasis. The theory guides on the proper understanding of the organization's critical resources and competence-based bottlenecks that may threaten the firm for effective cooperation with external parties to nurture competence building [32]. A thorough examination of the system's components recognizes the link between the firm's macro and micro changes, as well as the business environment.

5. Recommendations

The literature reviewed indicates that a lot of emphasis is placed on the financial measures of organizational performance such as return on investment and profitability. There is therefore need for further research to consider non-financial performance measurements like employee satisfaction, corporate culture and technological advancements. In addition, none of the studies reviewed combined similar third variables. Whereas many studies have been carried out in the Global North, very little research has focused on possible relationships of these variables in developing countries. There is need to carry out studies in the Global South owing to differences in levels of technology and firm size.

Study findings show that much literature is devoted towards the manufacturing sector and/or a single industry. In many studies cited, the case study method was mostly preferred in addition to narrow samples and use of secondary data [12, 14, 33]. The cumulative impact on external validity cannot be underestimated. There's need for studies that employ wide samples across the world. Most of the theories reviewed have no strong ability to advance knowledge in the field of operations management as they do not clearly capture the correlation levels among the variables of the study. Therefore, a complete understanding and prediction is compromised and raises the need for a meta-theory to explicate the relationships.

6. Conclusion

It is evident that the determination of what operation strategies impact effectively on organizational outcome is not easy. Some commonly used strategies identified are quality, delivery, and flexibility, among others. Various production groups need to be coordinated, organizational key abilities and strengths isolated, and a roadmap created to establish goals for building additional operational competencies for a firm to maintain competitive advantage. The study found significant relationships between operations strategy, operational competencies and organizational performance. The outcomes of the study reinforce the need of selecting the operations strategy that leads to excellent achievement of the firm's competitive priorities. Additionally, the findings from the study are mostly suitable for theory building research, which implies that in order to make wider generalisation hypothesis testing should be included in subsequent studies.

References

- [1] N. O'regan and A. Ghobadian, "Leadership and strategy: Making it happen," *Journal of General Management*, vol. 29, no. 3, pp. 76–92, Mar. 2004. doi:10.1177/030630700402900305
- [2] N. Slack, A. Brandon-Jones, and R. Johnston, "Operations Management, 8th edition," the University of Bath's research portal, https://researchportal.bath.ac.uk/en/publications/operations-management-8thedition
- [3] H. Pozo, O. Roque da Silva, and T. Tachizawa, "The influence of performance objectives on the implementation of Lean Manufacturing Practices: An analysis based on strategic groups," *Cogent Business & amp; Management*, vol. 4, no. 1, p. 1405718, Jan. 2017. doi:10.1080/23311975.2017.1405718
- [4] A. Corinna Cagliano, A. DeMarco, C. Rafele, and S. Volpe, "Using system dynamics in Warehouse Management: A fast-fashion case study," *Journal of Manufacturing Technology Management*, vol. 22, no. 2, pp. 171–188, Feb. 2011. doi:10.1108/17410381111102207
- [5] H. S. Jenatabadi, "An overview of organizational performance index: Definitions and Measurements," SSRN Electronic Journal, 2015. doi:10.2139/ssrn.2599439
- [6] B. Almatrooshi, S. K. Singh, and S. Farouk, "Determinants of organizational performance: A proposed framework," *International Journal of Productivity and Performance Management*, vol. 65, no. 6, pp. 844–859, Jul. 2016. doi:10.1108/ijppm-02-2016-0038
- [7] Y. Luo, Y. Huang, and S. L. Wang, "Guanxi and organizational performance: A Meta-analysis," *Management and Organization Review*, vol. 8, no. 1, pp. 139–172, Mar. 2012. doi:10.1111/j.1740-8784.2011.00273.
- [8] S. Hanine, "Organizational performance management and measurement. Improvement Planning Consultant," 2003. 27(3), 26-44.
- [9] D. Walters, "Operations strategy," (9781846289750): Donald Waters: Books, http://www.amazon.com/Operations-Strategy-Donald-Waters/dp/1844801950.
- [10] E. N. Wandiga, J. M. Kilika, and R. James, "Firm performance in the context of knowledge based intensive sector: A theoretical review," *International Journal of Business and Management*, vol. 12, no. 8, p. 234, Jul. 2017. doi:10.5539/ijbm.v12n8p234
- [11] A. Subroto *et al.*, "The Relationship Between Operations Strategy and Competitive Strategy In Improving Firm Performance : A Literatur Review." 2014.https://www.semanticscholar.org/paper/The-Relationship-Between-Operations-Strategy-and-In-Anwar-Subroto/533afb15e4ac46a1c37fa84e67b2388a1b94c4fc (accessed Feb. 28, 2024).
- [12] M. J. Oltra and M. Luisa Flor, "The moderating effect of business strategy on the relationship between

operations strategy and firms' results," *International Journal of Operations & Coperations & Coperations & Coperations & Management*, vol. 30, no. 6, pp. 612–638, May 2010. doi:10.1108/01443571011046049

- [13] K. Jagoda and S. Kiridena, "Operations strategy processes and performance," *Journal of Manufacturing Technology Management*, vol. 26, no. 2, pp. 261–279, Mar. 2015. doi:10.1108/jmtm-10-2013-0156
- [14] D. Bosire, "Effects of operation strategies on organizational performance in the automotive industry in Kenya: A case study of scania east africa limited," *Strategic Journal of Business & Change Management*, vol. 5, no. 2, Apr. 2018. doi:10.61426/sjbcm.v5i2.676
- [15] K. Amoako-Gyampah and M. Acquaah, "Manufacturing strategy, competitive strategy and firm performance: An empirical study in a developing economy environment," *International Journal of Production Economics*, vol. 111, no. 2, pp. 575–592, Feb. 2008. doi:10.1016/j.ijpe.2007.02.030
- [16] L. Szász, K. Demeter, and H. Boer, "Production competence revisited A critique of the literature and a new measurement approach," *Journal of Manufacturing Technology Management*, vol. 26, no. 4, pp. 536–560, May 2015. doi:10.1108/jmtm-09-2013-0120
- [17] A. W. King, S. W. Fowler, and C. P. Zeithaml, "Managing organizational competencies for competitive advantage: The Middle-Management Edge," *Academy of Management Perspectives*, vol. 15, no. 2, pp. 95–106, May 2001. doi:10.5465/ame.2001.4614966
- [18] A. Halley and M. Beaulieu, "Mastery of operational competencies in the context of Supply Chain Management," *Supply Chain Management: An International Journal*, vol. 14, no. 1, pp. 49–63, Jan. 2009. doi:10.1108/13598540910927304
- [19] K.-J. Wu, C.-J. Liao, M.-L. Tseng, and P.-J. Chou, "Understanding Innovation for Sustainable Business Management Capabilities and competencies under uncertainty," *Sustainability*, vol. 7, no. 10, pp. 13726–13760, Oct. 2015. doi:10.3390/su71013726
- [20] G. J. C. da Silveira, "Towards a framework for Operations Management in e-commerce," *International Journal of Operations & Competentiation Management*, vol. 23, no. 2, pp. 200–212, Feb. 2003. doi:10.1108/01443570310458456
- [21] A. Fredi, et al. "Effect of Operations Capabilities on Financial Performance of Firms with Moderating Role of Supply Chain Management Capabilities: A case of Indonesian Pharmaceutical Firms." Systematic Reviews in Pharmacy 11.1 2020.
- [22] F. N. Zatta, E. T. Filho, F. C. de Campos, and R. R. Freitas, "Operational competencies and relational resources: A multiple case study," *RAUSP Management Journal*, vol. 54, no. 3, pp. 305–320, Jul. 2019. doi:10.1108/rausp-12-2018-0146
- [23] S. Rose, S. Nigel, and A. I. Canhoto. "Management Research: Applying the Principles Routledge ISBN-10: 9780415628129." ISBN-13. 2014: 978-0415628129.
- [24] K. C. Tan, V. R. Kannan, and R. Narasimhan, "The impact of operations capability on firm performance," *International Journal of Production Research*, vol. 45, no. 21, pp. 5135–5156, Sep. 2007. doi:10.1080/00207540600871269
- [25] P. Kiragu, J. Muhoho, and P. O. Gesimba, "Influence of innovation in strategy implementation on organizational performance," *International Journal of Research in Business and Social Science (2147-4478)*, vol. 9, no. 5, pp. 48–57, Sep. 2020. doi:10.20525/ijrbs.v9i5.837

- [26] H. Mattias, "Manufacturing Strategy, Capabilities and Performance," Linköping Studies in Science and Technology. 2007. Dissertation No. 1108. ISSN: 0345-7524.
- [27] B. E. William, and A. C. Lockwood. "Organizational competencies: clarifying the construct." *The Journal of Business Inquiry* 7.1. 2008: 21-32.
- [28] F. N. Zatta, E. T. Filho, F. C. de Campos, and R. R. Freitas, "Operational competencies and relational resources: A multiple case study," *RAUSP Management Journal*, vol. 54, no. 3, pp. 305–320, Jul. 2019. doi:10.1108/rausp-12-2018-0146
- [29] J. Barney, "Firm Resources and sustained competitive advantage," *Journal of Management*, vol. 17, no. 1, pp. 99–120, Mar. 1991. doi:10.1177/014920639101700108
- [30] C.K. Prahalad, and G. Hamel, "The core competence of the corporation." *Knowledge and strategy*. Routledge, 2009. 41-59..
- [31] G. K. Özbağ, "Resource based view, core competence and innovation: a research on Turkish manufacturing industry." *Scientific Research Journal* 1.3 2013: 9-17.
- [32] J. Freiling, "A competence-based theory of the firm," *management revu*, vol. 15, no. 1, pp. 27–52, 2004. doi:10.5771/0935-9915-2004-1-27
- [33] N. Shin, "The impact of Information Technology on financial performance: The Importance of Strategic Choice," *European Journal of Information Systems*, vol. 10, no. 4, pp. 227–236, Dec. 2001. doi:10.1057/palgrave.ejis.3000409