

## **Knowledge Management, Competitive Advantage, and Organizational Performance in the Fashion Retail Industry: Examining the Moderating Effect of Product Complexity**

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The fashion retail industry is a constantly evolving landscape that is marked by changes in consumer preferences, technological advancements, and global market forces (Salvietti et al., 2022). In addition to these aspects, another important factor that is becoming increasingly critical to organizational success is knowledge management capabilities (KMC) (Rana and Ha-Brookshire, 2023; De Bem Machado et al., 2022). This includes the ability to capture, store, and share information across the organization, including data on customer behavior, product trends, and supply chain management using a robust organizational infrastructure (Lee and Choi, 2003). By leveraging data insights and sharing knowledge across departments, retailers can optimize their operations, reduce costs, and develop innovative products that meet customer needs (Ratchford et al., 2022). Moreover, as the industry becomes more complex and competitive, retailers must leverage the knowledge and expertise of their employees to gain a competitive advantage (CA). In turn, this can enhance their overall organizational performance (OP) and drive long-term success in the industry. However, product complexity (PRC) is an additional factor that could potentially impacts competitive advantage and performance of fashion retail companies. As products become more complex, retailers must be able to manage and share knowledge about various elements of a complex product, including design, production, and supply chain management (Eckstein et al., 2015). Therefore, the goal of this study was to investigate the relationship between KMC, CA, and OP in a fashion retail company and how PRC could moderate these relationships.

As the theoretical framework of this study, knowledge-based-view (KBV) of the firm considers knowledge as a critical intangible resource that has strategic importance (Grant, 1996). The capability of a firm to create and utilize knowledge contributes to its objective of gaining sustainable CA (Zheng et al., 2010). KMC can be defined as “the ability to mobilize and deploy knowledge-based resources in combination with other resources (e.g., land) and capabilities, leading to sustainable CA” (Gold et al., 2001). There are two types of KMC: (1) knowledge infrastructure capabilities (KIC) (culture, structure, technology) and (2) knowledge process capabilities (KPC) (acquisition, conversion, application, protection). CA refers to the degree to which a firm can establish a strong and secure position relative to its competitors (Lusch, Harvey & Speier, 1998). This involves possessing distinct capabilities that enable a firm to set itself apart from its rivals through its strategic management choices (Madhavan and Grover, 1998). OP pertains to the extent to which a firm accomplishes its objectives related to the market as well as its financial targets (O'Dell and Grayson, 1999). It evaluates the competence and operation

efficiency of the firms (Chan, Ngai & Moon, 2017). PRC has been associated with a decline in firm performance due to higher holding costs, increased inventory levels, and decreased service and delivery reliability (Eckstein et al., 2015). However, sales growths were also experienced through added product assortment and product rationalization (Eckstein et al., 2015). Hence, this study aims to answer the following questions: (1) how KMC effects the CA and OP of a fashion retail company? and (2) how PRC moderates these relationships?

An online survey was used to collect the data in Fall 2021 through Qualtrics. Participants were screened out based on their total professional experience in the fashion retail industry, current department of work, and total work experience in their current company. In this research, the KIC measurement scale was adopted from Hock-Doepgen et al. (2019); the KPC measurement scale was adopted from Hock-Doepgen et al. (2019) and Valaei et al. (2017); CA and OP measurement scale was adopted from Lee and Choi (2003), and PRC measurement scale were adopted from Eckstein et al. (2015). All items were measured on a 5-point Likert-type scale. A total of 322 usable survey responses were recorded. After satisfying the reliability and validity assumptions, the data were analyzed using partial least squares structural equation modeling (PLS-SEM).

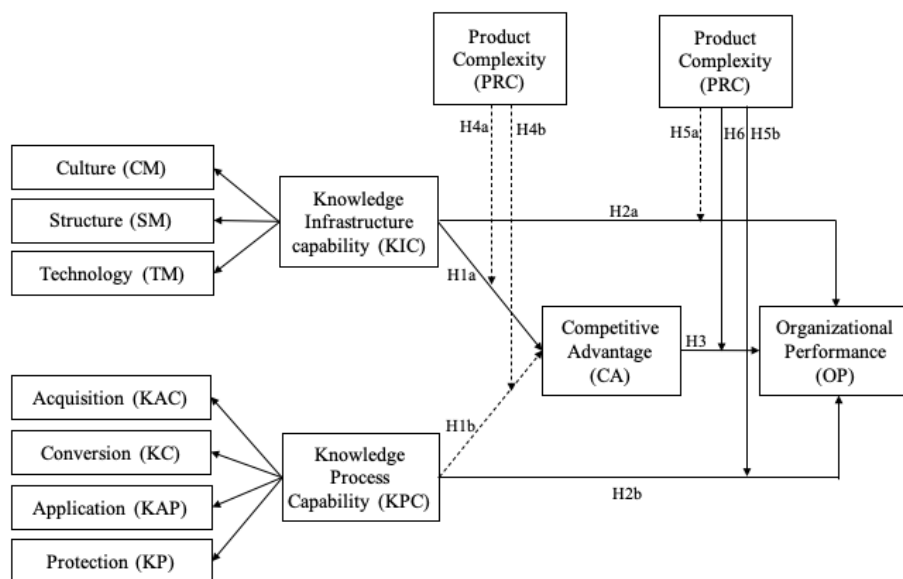


Figure 1. Research Model

The results confirmed that KIC positively enhanced CA (H1a:  $\beta = .30$ ,  $p < .001$ ) while KPC did not influence it (H1b:  $\beta = .14$ ,  $t = 1.67$ ). Thus, H1a was accepted, while H1b was rejected. Results also confirmed that KIC (H2a:  $\beta = .31$ ,  $p < .001$ ) and KPC (H2a:  $\beta = .25$ ,  $p < .01$ ) enhanced OP, accepting H2a and H2b. We found that CA positively enhanced OP (H3:  $\beta = .31$ ,  $p < .001$ ); thus, H3 was accepted. Regarding the moderation role of PRC, we found that PRC did not moderate the

influence of KIC on CA (H4a:  $\beta = -.06$ ,  $t = .83$ ). Also, it did not moderate the influence of KPC on the CA (H4b:  $\beta = .07$ ,  $t = .88$ ). Thus, H4a and H4b were not supported. In addition, the moderation effect of PRC in the influence of KPC on OP was not detected (H5a:  $\beta = .05$ ,  $t = .69$ ), which did not support H5a. However, there was a positive moderation effect of PRC in the influence of KPC on OP (H5b:  $\beta = .18$ ,  $p < .05$ ). Thus, H5a was not supported while H5b was supported. That means when PRC increases, KPC positively influences OP. Further, we found the negative effect of PRC in the influence of CA on OP (H6:  $\beta = -.19$ ,  $p < .05$ ), thus, H6 was supported. That means when PRC increases, the CA negatively influences OP. In addition to the hypotheses, we found that PRC positively influenced CA ( $\beta = .35$ ,  $p < .001$ ) and OP ( $\beta = .16$ ,  $p < .05$ ) of a fashion retail company.

The implications of the study findings are significant for fashion retail companies as they highlight the importance of managing knowledge, especially when considering the complexity of fashion products and their management. Retail companies can leverage their KPC to improve OP when faced with complex products. However, in such complex product environments, simply relying on CA may not be sufficient for enhancing OP. As such, companies should focus on developing and improving their KPC to achieve better performance. Future research could investigate the impact of product complexity on other aspects of a company's operations, such as supply chain agility or customer satisfaction.

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