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INVENTORY MANAGEMENT IN FIRM PERFORMANCE

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Abstract:

Different organizations follow different type of inventory management practices; Inventory management practice is the type of activities that an organization follow in is the process of ordering, issuing, storing and trading inventory products held by that organization. Inventory management plays a key role in order management and acts as an integral part in supply chain management. Based on the existing literature, the present paper investigates types of inventory management practices followed by different form of organization. The main objective of the paper is to develop a conceptual framework of inventory management practices.

Introduction

A firm performance, especially in healthcare organizations, involves many stakeholders; like government, clinicians, patients, and public sector organizations (Hashmi, Amirah, Yusof, & Zaliha, 2020), which creates the evident distinction of healthcare from other services in terms of performance (Shabbir et al., 2016). Public healthcare facilities have little managerial autonomy to act as absolute conformity on public health issues (Hashmi, Amirah, Yusof, & Zaliha, 2020). Furthermore, unaccountability, maladministration, and resource mismanagement are associated with public sector healthcare facilities (Silva & Ferreira, 2010).

Subsequently, the importance of healthcare services, in Pakistan RS168 billion are allocated to primary healthcare in the 2015 to 2016 budgets (Rashid et al., 2019). Despite that, the Punjab Institute of Cardiology was exposed to 46,000 high risks and 112 deaths because of the expired and out-of-stocked batches of restorative medicines in December 2015. Consequently, the department has to make a hasty purchase of RS. 5.6 billion, all along with RS 56 million to provide compensation to the expired victims' families. Furthermore, the country's 149th position in the world's healthcare reflects the severity of the situation (Rashid & Amirah, 2017). A vital attribute of any healthcare sector is to deliver high-quality performance in a sustainable way not only to capacitate but also to increase the value of healthcare services. Therefore, there is a need to conduct research in Punjab's

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public healthcare to facilitate and support the healthcare system. The current study aimed to uncover the strategic importance of certain elements through the identification of the direct and indirect impact of knowledge through inventory management on firm performance.

Literature Review

Naidoo and Wu (2011) researched 570 inventory control experts from New Zealand, Australia, the United States, and the United Kingdom and established that the designated staff could professionally plan and control the inventory effectively if knowledge had been imparted to them. Though the knowledgeable labor force is a preference of every business, and implausible unskilled and non-professional staff negatively influences the business from planning to execution (Dragoni et al., 2011). Moreover, Cook et al. (2011), and Ruankaew and Williams (2013) described that sometimes staff with (knowledge even show reluctance to have active participation and cause inventory inaccuracy. Therefore, researchers urge the learning environment at the workplace. Moreover, a complex inventory control system requires a clear understanding and professional qualification (Castejón-Limas et al., 2011), and may also require assistance from other staff members to understand processes, design complexity, and business policies (Birkinshaw & Heywood, 2010). Therefore, to understand the complex inventory control models, certain principles or theories adoption is imperative for professional knowledge acquisition. However, relevant knowledge may be critically required in some business problems (Dragoni et al., 2011).

Knowledge and Firm Performance

To operate effectively and to understand organizations better, learning skills is an essential job. The growing demand for learning skills, specifically or at the organizational level, is getting more attention. Learning skills come from schools, universities, business advisers to governments, bodies representing the business community, and senior business leaders. Knowledge development benefits teams, performance, and productivity of individuals. Further, knowledge enhancement also proved job satisfaction, enhance career opportunities, build coalitions, reduce employee turnover, and improved organizational commitment (Bing et al., 2011; Gallagher & Laird, 2008; Jam et al., 2011; Valle & Perrewé, 2000). Researchers recommended that knowledgeable employees are strategic assets, and they should mentor their subordinates. Subsequently, performance does not happen randomly but is a combination of motivation, relevant knowledge, skills, and individual domains. Despite differing paradigms, the importance of a knowledgeable workforce is common (Huselid & Becker, 1996). Ferris et al. (2007) and later cited by Sheehan et al. (2016) argued that knowledge influences self and firms' performance.

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Inventory Management and Firm Performance

Sustainable firm performance is imperative and is closely linked with organizational goals and mission (Mohrman & Edward, 2014). Moreover, inventory management is indispensable for small businesses as well as for large-scale businesses. Effective inventory management can enhance the strategic competitiveness of any organization (Chopra & Meindl, 2013; Fattah et al., 2016; Hartley et al., 2002). Various companies control inventory by adopting various techniques by confirming the lowest cost and product availability (Bin-Syed et al., 2016). For better performance and due to the expensive and largeness of inventories, it is necessary to dodge superfluous costs by understanding and supporting inventory management.

Theories suggest that for enhanced performance, effectiveness of inventory management avoids stock pile up, inventory inaccuracy, obsolete inventory, and profligate. Also, evade funds tied down, stock-out, theft, holding cost, reduced utilization of equipment or machines, and obsolescence or spoilage (Beier, 1995; Buffa, 1983; Ondari & Muturi, 2016). Therefore, effective inventory management is among the key features for success, whereas, ineffective inventory virtually disrupts profitability, productivity (Hatefi et al., 2014), and loss of shareholders' wealth (Hendricks & Singhal, 2003, 2005). Organizations must neither maintain excessive inventory to avoid tying down funds and carrying costs nor maintain too low inventories as these two conditions always affect firm performance. That's why giant firms need rigor efforts for enhanced performance as inventory may alone involve a cumbersome amount of invested capital to keep the firm's wheel moving (Araujo et al., 2016; Hatefi et al., 2014). Many researchers instigated that ineffective inventory management can prompt incomplete supplies (Ku et al., 2014), which upshot hasty buying and stimulates poor performance (Silver et al., 1998).

Knowledge, Inventory Management, and Firm Performance

Knowledge creation and knowledge transfer are imperative to improve staff skills. More explicitly, skills development involves transferring, retaining, interpreting, acquiring, and creating knowledge (Garvin et al., 2008), and these attributes got empirical attention (Alipour et al., 2011). Generically, firms mimic those companies that are successful in implementing a knowledge base. It helps them to legitimate for better performance (Tsai & Lasminar, 2021). Conversely, if knowledge flow is blocked, then it will confine to a single division and will not support enhancing other parts of the organization (Dee & Leisyte, 2017). The knowledgeable and professionally qualified staff helps to improve inventory management and should be considered in conjunction with influencing factors affecting organizational outcomes (Boxall, 2012; Sheehan et al., 2016).

Townsend et al. (2012) expressed that knowledgeable staff substantially contributes to performance outcomes and allows inventory functions to augment organizational performance. However, empirically this attribute has not been examined thoroughly (Galang & Ferris, 1997; Sheehan et al., 2016). Ogbo and Ukpere (2014) stated that a firm must educate its staff to reach optimal inventory levels. Consequently, the role of

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inventory management is increasing, and understanding the right vendor, the right time, the right price, the right quantity, and the right purchasing could only be possible with knowledgeable professionals.

H1: Knowledge has a significant effect on firm performance.

H2: The effect of knowledge on firm performance is significantly mediated by inventory management.

Relevant Theory

As the theories are imperatively being applied in the realm of supply chain management (Alrazehi et al., 2021; Hsu et al., 2009; Rashid et al., 2020). This research employed RBV Theory to build the framework for the present study, which includes one predictive variable, one dependent variable, and one mediator. There are two hypotheses in the created model, one of which is the direct hypothesis (*H1*), and the second is related to mediation (*H2*).

In quantitative research, theories are critical for answering research questions (Creswell, 2014; Hashmi, Amirah, Yusof, & Zaliha, 2020; Hashmi & Tawfiq, 2020). As a result, the effect of variables was determined using the Resource-Based View (RBV) Theory. Further, theories are imperative for answering the research questions (Creswell, 2014). Thus, in the present research, the effect of variables was determined by using the RBV Theory. The work of Barney's (1991) "Firm Resources and Sustained Competitive Advantage" gave birth to RBV Theory. This theory was developed on the basis of Wernerfelt's (1984) "Resource Position Barriers." RBV Theory has two main assumptions; (i) organizational resources within an industry may differ, and (ii) those resources may not be totally movable across firms. RBV Theory focuses on resources and capabilities, which include the well-organized procedures/processes, conventions, investment, equipment, tools, expertise, abilities, and staff data (Wernerfelt, 1984). RBV Theory overwhelms the inventory control intricacy over recognizing the considerable resources that enhance the firm performance. Further, RBV Theory helps firms in amplifying agility, compliance, and ally with the supply chain management requirements. Firms' unique resources, allocation strategy, and limited ability not only create a competitive edge for the firm but also enhance its performance (Walker & Brewer, 2008).

Data Analysis

Positivist research philosophy is applied in the current quantitative research (Creswell, 2014). In addition, an interval scale as a survey method was used to test the proposed hypothesis in this research (Hashmi, Amirah, Yusof, & Zaliha, 2021; Rashid, 2016). IBM SPSS 22.0 version is used to measure the Exploratory Factor Analysis (EFA) whereas, researchers used AMOS version 22.0 to measure the Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM). Furthermore, different sample sizes were used to conduct the CFA and EFA analysis (S. K. Khan et al., 2021; Rashid et al., 2021; Worthington & Whittaker, 2006). For EFA, data of 100 respondents, and for CFA data of 200 respondents using a multistage cluster sampling procedure was used. The total number of healthcare units in Punjab was clustered into nine divisions, and a sampling frame of 343 facilities was drawn from one district of each division. Later, 200 respondents were

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chosen at random from the selected populations (J. F. J. Hair et al., 2010; Hashmi, Amirah, & Yusof, 2020, 2021; Hashmi & Tawfiq, 2020). Additionally, the demographic characteristics of respondents were also tested to check the pragmatic impacts before being tested to EFA, CFA, and SEM analysis (Agha et al., 2021; Das et al., 2021; Hamed et al., 2021; Haque et al., 2021; Hashmi, Amirah, Yusof, & Zaliha, 2021).

Exploratory Factor Analysis (EFA)

Table 1 shows 27 items in the rotated factor matrix for each variable on Varimax rotation using principal axis factoring (Tabachnick & Fidell, 2013); where three items (K7, FP7, FP5) with factor loadings <0.60 were deleted. Lastly, eigenvalues of one a total of 23 items were retained with (cross-loadings more than 75% on any other item (Field, 2013; J. F. J. Hair et al., 2010). The Kaiser-Meyer-Olkin (KMO) for knowledge, inventory management, and firm performance was waster than 0.60 (acceptable) (Rashid & Amirah, 2019); and Bartlett's test of sphericity was found significant (Field, 2013). The communalities scores were greater than 0.2, with the exception of one item in knowledge (0.147), which was deleted (Child, 2006). The 60% of the total variation was explained by the first two factors of each construct (Hashmi, Amirah, Yusof, & Zaliha, 2020).

Conclusion, Limitations, and Recommendations

Current research only looked at three factors, although they may all be discussed using a variety of different variables. Perceptions were used instead of absolute values in this investigation. The study also had limitations, such as a geographically limited study area, time, cost, limited and refused access to restricted evidence, and erroneous and poor record-keeping. Furthermore, contradicting or overlapping system behavior should be eliminated through staff training and enhancing their competency level. Finally, professional qualifications should be prioritized, and skill enhancement programs should be planned in the future to maintain skill levels. Other population designs with different predictors could be used in future studies. The effect of inventory management on fiscal reporting, prominent factors, and how these are related to inventory management can also be empirically tested in the research.

