

# EFFECT OF KNOWLEDGE MANAGEMENT PRACTICES ON ORGANIZATIONAL AND FINANCIAL PERFORMANCE:- A STUDY ON MSMEs (MICRO, SMALL AND MEDIUM ENTERPRISES) IN INDIA

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**Abstract**-The paper aims to develop a research model to determine the constructs important to knowledge management with respect to MSMEs, to ascertain the impact of these constructs on organizational performance, and to establish the impact of organizational performance on financial performance. To achieve the objective of the study, primary data was collected from the top management team of Micro, Small & Medium Enterprises (MSMEs) in India. The research model was developed and analyzed using Partial Least Squares Structural Equation Model (PLS-SEM) to determine the constructs important to knowledge management and its impact on organizational performance and financial performance. It was found that the Knowledge Management Culture, Knowledge Management Systems, Knowledge Management Strategic Planning & Implementation, and Knowledge Leadership had a positive and statistically significant impact on the organizational performance of MSMEs. Additionally, organizational performance had a positive and statistically significant impact on financial performance. However, Knowledge Management Capacity and Knowledge Management Benchmarking had no impact on the organizational performance of MSMEs. Further based on the Importance-Performance Map Analysis (IPMA) it was found that Knowledge Management Strategic Planning and Implementation (KMSP) was the most important construct under study that has an impact on organizational performance of MSMEs. Based on the findings the study will help top management understand the importance of strategic planning and implementation of knowledge management for organizational performance. Further, as organizations grow, especially in the case of MSMEs, where the growth potential is huge, implementing Knowledge Management Systems will help MSMEs streamline information gathering, storage, and distribution, and transform tacit-to-explicit knowledge.

**Keywords**:- Knowledge Management, Knowledge Leadership, Knowledge Benchmarking, Organization Performance, Knowledge Generation

## 1. INTRODUCTION

Knowledge management, in its broadest sense, refers to all measures aimed at improving and enhancing the importance of knowledge building, sharing, and implementation (Wiig, 1997; Choy and Suk, 2005; Du Plessis, 2007). This, in turn, helps to improve customer service by providing employees with the information they need to respond quickly and effectively to customer inquiries (García-Murillo and Annabi, 2002; Davenport and Klahr, 1998), enhance collaboration and teamwork by making it easy for employees to share knowledge and work together on projects (Mohamed, Stankosky and Murray, 2004; Goh, 2002), increase organizational flexibility (Phillips and Wright, 2009) and adaptability by making it easy for employees to access and use the information they need to respond to changing business conditions (Shahzad et al., 2013; Nkurunziza et al., 2018), promote innovation by making it easy for employees to access and use the information they need to generate new ideas and improve existing products and services (Carneiro, 2000; Du Plessis, 2007). Knowledge and its management seem to be viewed as more crucial elements for an organization's success, sustainability, and maintaining of its strategic advantage (Davenport and Prusak, 1998; Martensson, 2000; Ferreira et al., 2016; Farooq, 2018).

Over recent years, the premise of knowledge management has rapidly gained popularity in the corporate world, particularly in India (Goswami, 2008; Chawla and Joshi, 2010). Some of the trends in knowledge management in Indian organizations include leveraging digital technologies such as cloud computing, big data analytics, and artificial intelligence to capture, store, and distribute knowledge more effectively (Gangwar et al., 2015); promoting collaboration and teamwork to share knowledge and expertise across different departments and functions (Zahedi et al., 2016);

empowering employees by providing them with access to the information they need to perform their jobs more effectively; employee engagement to improve the overall performance of the organization and to give the employees sense of ownership of the knowledge in the organization, etc. (Kandathil and Varman, 2007; Atapattu and Huybers, 2022). For this, organizations in India are investing in knowledge management systems such as customer relationship management (CRM) systems, enterprise resource planning (ERP) systems, and enterprise content management (ECM) systems to manage and share knowledge (Migdadi, 2021; Ranjan, et al., 2016). Organizations are also investing in Artificial Intelligence (AI) and Machine Learning (ML) technologies to automate the process of knowledge management (Sahay, 2021).

The implementation of knowledge management is prevalent, but only a few businesses are able to put it into action successfully enough to harness its full potential (Singh et al., 2006; Pillania, 2008; Chawla, and Joshi, 2010; Singh et al., 2014).” However, it’s not just the implementation but the measurement of its performance that is crucial for an organization to make sure the goal of knowledge management is fulfilled. Knowledge management can contribute to organizational performance and financial performance in several ways. Some of the key ways in which knowledge management can contribute to organizational performance and financial performance include:

- **Improved decision-making:** By making the best use of the knowledge and expertise available within the organization, knowledge management can help to improve decision-making at all levels. This can lead to better strategic planning, improved operational efficiency, and more effective problem-solving (Holsapple, 1995; Boumarafi and Jabnoun, 2008; Abuezhayeh et al., 2022).
- **Increased innovation:** By making it easy for employees to access and use the information they need to generate new ideas and improve existing products and services, knowledge management can promote innovation and help organizations to stay competitive in the marketplace (Mehrabani and Shajari, 2012; Inkinen et al., 2015).
- **Reduced costs:** By reducing duplication of effort and improving the efficiency of business processes, knowledge management can help organizations to reduce costs and improve financial performance (Sanchez and Mahoney, 1996; Davenport et al., 1998).
- **Increased revenue:** By providing employees with the information they need to respond quickly and effectively to customer inquiries, knowledge management can help organizations to increase revenue by improving customer service and satisfaction (Bell DeTienne and Jackson, 2001).
- **Improved customer service:** By providing employees with the information they need to respond quickly and effectively to customer inquiries, knowledge management can help organizations to improve customer service and satisfaction, which can lead to increased revenue and improved financial performance (Smith and McKeen 2005; Wilde, 2011).
- **Better employee engagement:** By providing employees with the information they need to perform their jobs more effectively, knowledge management can improve employee engagement, which can lead to increased productivity and improved financial performance (Juan et al., 2016; Juan et al., 2018; Atapattu and Huybers, 2022).

Given this, knowledge management is a key component of organizational performance and must be carried out effectively in order to achieve organizational goals. There are a few approaches and text references that researchers and authors have proposed for measuring the effectiveness of knowledge management initiatives in a company, but there are relatively few references that explicitly link knowledge management to organizational performance with respect to MSMEs (Lloria, 2008; Tzortzaki and Mihiotis, 2014).

## 2. LITERATURE REVIEW

### 2.1 Knowledge Management Strategic Planning & Implementation

The significance of knowledge management for organisations and their personnel were investigated by Quintas, Lefrere, and Jones (1997). The utilisation of an extensive interpretation of knowledge raises inquiries regarding the conception of 'knowledge' and presents various apprehensions concerning the potential of knowledge management to serve as a competitive edge. The authors



provided a concise summary of the region and examined various challenges that managers could encounter. This leads to the development of a plan for the formulation of action-oriented objectives for managers, organisations, and networks of organisations. This encompasses the formulation and implementation of strategies for the advancement, acquisition, and utilisation of knowledge, along with the evaluation and appraisal of knowledge resources and procedures to ensure their effective administration. The existing body of literature on strategic management highlights the benefits of strategic planning for achieving exceptional performance. However, the process of cultivating a dynamic strategic planning capability remains a subject of uncertainty. This gap in knowledge is addressed in the present paper, which employs knowledge-based theory to provide insights into this area. The research by Aliaga (2000) focused on the strategic planning requirements of the knowledge management (KM) deployment process. The study resulted in the development of a framework tailored for implementing KM in engineering organisations. The importance of knowledge management as a critical element of strategic planning has been recognised by managers, and it has emerged as an essential aspect of business enterprises. The approach is founded upon a corporate tactic that involves the development of diverse knowledge-focused business procedures and the establishment of corresponding organisational frameworks to facilitate their implementation. The practice of Knowledge Management (KM) involves leveraging the knowledge within an organisation to yield sustained benefits for the firm. In order to effectively capture, systematise, archive, disseminate, and recycle the knowledge contained therein, the utilisation of technology is imperative. The implementation of Knowledge Management (KM) is a complex and intricate process that requires careful planning and execution to achieve success. Shankar, R., Singh, A. Gupta, and R. Narain (2003) authored the aforementioned publication. The present study argues that the absence of a well-defined strategic plan to guide the implementation process constitutes a fundamental element in the unsuccessful outcomes of numerous knowledge management initiatives. Muhammad Shujahat, Saddam Hussain, Sammar Javed, Muhammad Imran Malik, Ramayah Thurasamy, and Junaid Ali (2017) have examined the utilisation of knowledge and intelligence, through knowledge management and competitive intelligence, in various stages of the strategic management process, both in a synergistic and independent manner. The discourse also encompassed an analysis of the consequences of every phase of the strategic management procedure on knowledge management, competitive intelligence, and the reciprocal relationship. The authors proposed A strategic management model, utilising the perspectives of knowledge management and competitive intelligence. The knowledge management process has an impact on both competitive intelligence and vice versa at every level. Moreover, the proficient decision-making that ensues from the collaborative and autonomous utilisation of expertise and intellect confers a competitive edge. The research conducted by Hodgkinson and Hughes (2021) revealed that an organization's strategic planning capability is enhanced by comprehensive information diffusion and organisational memory. The acquisition of values may be deemed inconsequential, while the utilisation of symbolic data may impede the development of strategic planning proficiency. The study showcases the manifestation of strategic planning within organisations by scrutinising the contributing activities that facilitate the acquisition of strategic planning competencies. Moreover, the empirical research indicating that knowledge plays a crucial role in strategic planning is expanded upon by examining the varying impacts of knowledge management initiatives on the enhancement of strategic planning proficiency.

## 2.2 Knowledge Management Benchmarking


O'Dell, C., Wiig, K. and Odem, P. (1999) explored the methods used by best-practice organizations to identify, capture, and exploit knowledge based on the results of large-scale benchmarking research. The descriptions of six developing knowledge management techniques found throughout the benchmarking process are supported by case study examples from various firms. The study illustrates how businesses attempt to apply different knowledge management strategies to their operations and gives insight into how knowledge management as a whole is evolving. Knowledge management (KM) benchmarking was done at British Energy Power and Trading (BEPET), according

to Carpenter, S., and Rudge, S. (2003). The British Standard Guide to Good Practice in Knowledge Management, PAS 2001, was used as a benchmark for comparing current knowledge management practices. The management of knowledge efforts should fall within the purview of the systems team, and managers should also assume the title of "Chief Knowledge Officer" for EPET. Employees from various departments of the company should form a small team. This group should develop the fundamental and aspirational ideals of BEPET, such as knowledge sharing. Large UK construction groups' knowledge asset management is examined by Robinson, H.S., Carrillo, P.M., Anumba, C.J., and Al-Ghassani, A.M. (2005). In order to benchmark an organization's knowledge management maturity, STEPS is then suggested. The analysis reveals that UK-based businesses with global operations are outperforming their national counterparts in terms of their efforts to apply knowledge management. The article concludes that if proper thought is given to the formulation of strategies, implementation challenges are addressed, and the connection between KM and business strategy is enhanced, construction firms are likely to succeed in adopting KM. The report suggests a method, called STEPS, for comparing the maturity of knowledge management practices across major construction enterprises. Based on their research into effective KM practices, Jafari, Akhavan, Fesharaki, and Fathian (2007) created a knowledge management (KM) method for the Iranian aerospace industries. The case studies investigation produced generally favourable results, demonstrating the suitability for benchmarking. The principles that were extracted give guidance on how to implement a KM strategy in a company. This method has been used in a significant case study in Iran, and it has been put into practice in the Aerospace Enterprises Organisation (AIO), one of Iran's most significant high-tech enterprises.

### 2.3 Knowledge Management Systems

The performance of businesses was studied by Shehata, G.M. (2015) in relation to the adoption of knowledge management systems (KMSs). The study's findings demonstrate a favourable relationship between each of the six components of a KMS—knowledge creation, acquisition, codification, sharing, transfer, and measurement—and the perceived knowledge management performance. In addition, there is a strong correlation between perceived knowledge management performance and the overall KMS adopted. The study offered convincing proof that KMSs are necessary to raise organizations' performance. The findings of the t-test and the analysis of variance showed that the respondents' age, gender, and business type do not significantly affect how well they believe KMS is performing in terms of knowledge management. Iskandar, Karto & Jambak, Muhammad & Kosala, Raymondus & Prabowo, Harjanto. (2017). The current research agenda is to assess the state of the art, identify the most prevalent difficulties on KMS, and provide recommendations. The results of this paper's review of fifty-four papers from six internet databases produced fourteen contemporary knowledge management system challenges. The growth of KMS's capabilities and features, problems with KMS's use of big data, and adoption of new technologies are the top three concerns that users are most concerned with. In addition to the expansion of necessary KMS capabilities and feature development, the big data phenomena were highlighted as the most contemporary topic for future research in this study's conclusion. In order to address operational challenges in the oil and gas industry, Ochieng, E.G., Ovbagbedia, O.O., Zuofa, T., Abdulai, R., Matipa, W., Ruan, X., and Oledinma, A. (2018) investigated the effectiveness of knowledge management (KM) based systems and best practices. The steps identified included KM strategies, value-enhancing practices, knowledge management technology approaches, and knowledge management people approaches. Yee, Y.M., Tan, C.L., and Thurasamy (2019) focused on human capital management, tool selection, and how knowledge processes affect an organization's strategic capabilities to explore the significance of developing a knowledge management system in today's knowledge economy. Building a knowledge management system is advised for transitioning into data analytics to capture business trends in the knowledge economy, according to an analysis of several theoretical models in the field of knowledge management and an explanation of how motivation and tool selection can improve the utilisation of knowledge management systems. The use of a knowledge management system is influenced by motivation and tool selection.

### 2.4 Knowledge Management Culture



Sabri, H. (2005) concentrated on the organizational environment of knowledge management. It contends that knowledge management encompasses organizational methods intended to improve people's ability for creativity and innovation and goes beyond computer and information technology. The study focuses on how organizational structure and corporate culture must be compatible in order for modern organizations to activate a knowledge base culture. The paper lays forth a suggested framework for transforming Arab bureaucracies into knowledge-producing cultures by building the proper organizational structure in which knowledge generation, learning, and information exchange should be standard operating procedures. Rai, R.K. (2011) endeavours to develop a theoretical integrative framework for organizational knowledge management and organizational culture and formulated six propositions about the propensity of organizations of different dominant cultural styles to engage in the four processes of knowledge creation and conversion. Prystupa-Rządca, Kaja (2017) used a symbolic-interpretive approach to investigate the organizational culture in small Polish businesses. The study's findings provided a number of crucial cues for further research into how organizational culture affects knowledge management procedures in small businesses. First off, organizational culture was crucial for knowledge management because the small businesses under investigation adopted a personalization strategy and made little investments in cutting-edge IT systems. These firms' cultural values improved knowledge management systems in a number of ways. Second, the study emphasized the significance of the founder and the industry itself as actors who have an impact on organizational culture. The study also highlights how important organizational growth is for maintaining cultural coherence. Despite being highly valued by management, it can create a threat to organizational performance if it is not properly handled in light of organizational culture. In 2019, Stojanovi-Aleksi, V., Eri Nielsen, J., and Bokovi looked into the organizational requirements for knowledge creation and sharing. The objectives are to ascertain whether and to what extent the characteristics of organic structure contribute to the creation and sharing of knowledge as well as to demonstrate how a knowledge-supportive organizational culture fosters these activities. The findings demonstrated that while knowledge sharing is positively influenced only by an organization's knowledge-supporting culture, both the organic structure and organizational culture that foster knowledge have beneficial effects on knowledge generation.

## 2.5 Knowledge Leadership

Singh, S.K. (2008) examined the connection between leadership styles and knowledge management practices in an Indian software company. According to the research's findings, both supportive and directive leadership philosophies are significantly and negatively related to knowledge management best practices. It also shows that managing knowledge in a software organization is favourably and strongly associated with consulting and delegating leadership styles. Finally, it was discovered that only the delegating mode of leadership behaviours was significant in predicting knowledge creation and management for competitive advantage in Indian software firms. In 2020 An inverted U-shaped association between knowledge leadership and knowledge concealment is demonstrated by a Chinese study. According to the authors, there is an inverse U-shaped relationship between knowledge leadership and knowledge hiding. This association was discovered while researching the causes of knowledge hiding from a leadership perspective. The relationship between knowledge leadership and knowledge concealment is moderated by psychological ownership. Individuals with higher psychological ownership showed a stronger inverted U-shaped association between knowledge leadership and knowledge concealment, whereas individuals with lower psychological ownership showed a lesser inverted U-shaped relationship. The links between knowledge-oriented leadership (KOL), knowledge management capability (KMC), innovation performance (IP), and organizational performance (OP) were studied by Gürlek, M. and Çemberci, M. (2020). The results demonstrated that the effect of KOL on OP is serially mediated via KMC and IP. KOL establishes the prerequisites for the improvement of KMC in light of the findings. Improved KMC transforms into innovation, which raises OP. This study demonstrates that Turkish enterprises led by knowledge-oriented leaders exhibit high KMC, innovative performance, and company performance.

The ethical climate is an important factor to affect knowledge contribution loafing among designers, and three types of ethical climate (self-interest, social responsibility, and law/professional codes) have different degrees of influence on it. In addition, knowledge leadership has a mediating effect on knowledge contribution loafing, which Zhang, L. and Sun, H. (2021), examined. Ma, F., Zhao, H., and Wu (2022) investigated how task-oriented leadership influences the knowledge generation behaviour of subordinates. The study makes the claim that motivation for performance and perception of a competitive climate might act as mediators, both of which are based on the organismic integration theory (OIT). According to the findings, task-oriented leadership will considerably encourage subordinates to take initiative in learning new things. Task-oriented leadership and subordinates' knowledge generation behaviour are mediated by the perception of the competitive climate and accomplishment motivation. Task-oriented leadership and subordinates' knowledge creation behaviour are sequentially mediated by the perception of competitive climate and accomplishment motivation.

## **2.6 Knowledge Management Capacity**

From the standpoint of social interaction, Hsiao, Chen, and Chang (2011) looked at the connection between knowledge management capability and organizational performance. According to the findings, organizational success is positively correlated with two measures of knowledge management capability: knowledge acquisition and dissemination, as well as the communication aspect of social interaction. Additionally, social interaction and knowledge management capabilities have additive or synergistic effects on organizational performance. Firms must be mindful that social interaction will limit the relationship between knowledge management capacity and organizational performance given the requirement to employ knowledge management capacity as an enabler to improve organizational outcomes. As a result, businesses should pay close attention to creating the ideal social interaction settings that will most likely improve information acquisition and distribution. Knowledge management (KM) and company performance were investigated by Chawla, Kundu, Kumar, Gahlawat, and Kundu (2022) through the mediating impacts of strategic human resource management (HRM) and organizational innovations. The results support the idea that efficient knowledge management in businesses promotes improved innovation capabilities and improved firm performance. The study also demonstrates that a relational chain (serial mediation) made up of strategic HRM, administrative innovation, and technological innovation mediates the impacts of KM capabilities on firm performance.

## **2.7 Organization Performance**

The performance of businesses was studied by Shehata, G.M. (2015) in relation to the adoption of knowledge management systems (KMSs). The study's findings demonstrate a favorable relationship between each of the six components of a KMS—knowledge production, acquisition, codification, sharing, transfer, and measurement—and the perceived effectiveness of knowledge management. In addition, there is a strong correlation between perceived knowledge management performance and the overall KMS adopted. This study offers compelling evidence that KMSs are crucial for enhancing corporate success.

A comprehensive review of the academic literature on the relationship between knowledge management, knowledge transfer, and organizational performance in a particular segment of the creative industry, namely arts and crafts organizations, was the goal of a study by Manfredi Latilla, Frattini, Messeni Petruzzelli, and Berner (2018). Additionally, this paper examined how knowledge management and transfer within arts and crafts organizations help boost output and increase the value of the work of the so-called "knowledge workers" (i.e., craftsmen), who are the true knowledge owners in the value creation process. The results revealed three key issues: the internal management and knowledge transfer practices of arts and crafts organizations; the effects of these practices on organizational performance; and the crucial position of craftsmen. The literature study demonstrates how the notions of "performance" and "tacit knowledge" have a significant relationship in arts and crafts organizations, even if addressing this relationship can be challenging for a number of reasons that are covered in the paper. Only after the importance of knowledge management, transfer, and knowledge workers (i.e., artisans), in gaining a competitive advantage,



has measuring performance in arts and crafts organizations become a topic of academic study. Peer knowledge sharing's effects on firms' financial and innovation performance, as well as the method by which such a relationship is realized, were studied by Muhammed, S. and Zaim, H. in 2020. The study assesses how much leadership support functions as a crucial precursor to peer knowledge sharing. The findings show that employee knowledge-sharing behavior with peers and management support has a positive impact on an organization's knowledge management success, which can then have a positive impact on an organization's innovation performance and, ultimately, its financial performance. The respondent's peer knowledge-sharing behavior is found to be significantly influenced by the immediate manager's leadership support. Following the resource-based view theory, Shahzad, M., Qu, Y., Zafar, A.U., Rehman, S.U., and Islam, T. (2020) investigated the contribution of the knowledge management process to corporate sustainable performance with the integration of green innovation and organizational agility. The results of this study showed that the knowledge management process and all of its components—acquisition, dissemination, and application—lead to green innovation. In addition, green innovation has an impact on corporate sustainable performance and all of its components—environment, economy, and social—as well. The relationship between the knowledge management process and business sustainable performance is partially mediated by green innovation. The multi-dimensional relationship between total quality management (TQM) and knowledge management (KM) was examined by Abbas, J., and Kumari, K. (2021). They looked at how the various TQM dimensions affected KM processes and how this nexus affected organizational performance (operational and financial performance) by taking into account KM as an intermediary variable between TQM and organizational performance. The findings revealed that TQM, KM, and organizational performance had a positive association. The relationship between TQM and corporate performance is demonstrated to be partially mediated by KM, which is also proven to have quite a large and beneficial influence on the operational and financial performance of the organization. Dimensional research reveals that all KM processes are significantly improved by leadership, strategic planning, customer focus, and HRM, whereas process management and information and knowledge management have had mixed outcomes. According to the contextual study, the majority of manufacturing facilities and service businesses place an equal emphasis on TQM and knowledge creation, with the exception of knowledge creation. Knowledge management (KM) and company performance were investigated by Chawla, A.S., Kundu, S.C., Kumar, S., Gahlawat, N., and Kundu, H. (2022) through the mediating impacts of strategic human resource management (HRM) and organizational innovations. The results support the idea that efficient knowledge management in businesses promotes improved innovation capabilities and improved firm performance. The study also demonstrates that a relational chain (serial mediation) made up of strategic HRM, administrative innovation, and technological innovation mediates the impacts of KM capabilities on firm performance.

## 2.8 Financial Performance

Knowledge management (KM) enablers and performance indices were compared by Ho, C. (2009). It was discovered that across all of the KM process performance indices, the factor strategy and leadership appear to have one of the most significant positive associations among KM enablers. The significance of the financial performance index is positively and significantly correlated with the relevance of performance indices in knowledge production and knowledge internalization on the operational and customer sides. The relationship between KM practices, company competitiveness, and economic performance was explored by Andreeva, T., and Kianto, A. (2012). The findings reveal a high correlation between HRM and ICT knowledge management practices, as well as a statistically significant impact on the firm's financial performance and competitiveness. The results also show that ICT practices only enhance financial performance when combined with HRM practices.

To examine the impact of knowledge management orientation (KMO) dimensions (organizational memory, knowledge sharing, knowledge absorption, and knowledge receptivity) on balanced scorecard outcomes (learning and growth, internal process, customer satisfaction, and financial performance), Lin, H.-F. (2015) set out to develop the decomposed model. According to this study,

information absorption is essential for raising customer satisfaction while knowledge sharing is the best predictor of internal process success. The findings also demonstrate that non-financial performance indicators, including learning and development, internal operations, and customer happiness, have both direct and indirect effects on financial performance. In the year 2016 with a focus on the industrial sector, researchers looked into how knowledge, information, and technology management techniques affect an organization's financial performance. The results demonstrated that using information technology results in much-improved productivity, particularly when combined with decentralized decision-making. The financial productivity of a company can be considerably increased by managers who manage information resources and technology well. The effectiveness of an organization's information management and technology management strategy directly affects its financial success. Additionally, through mediation, knowledge management strategies have an indirect but beneficial impact on financial performance. Al-Dmour, H. Zaidan, and A. R. Al Natour (2021) The objective of this study is to conduct an empirical investigation into the role of accounting information quality (AIQ) as a mediating factor in the relationship between knowledge management (KM) procedures and the business performance (BP) of Jordanian financial institutions (FI). The primary conclusions endorsed accounting information as a mediating element in increasing the link between BP (FI) operating in Jordan and the KM process of the FIs. Al-Dmour, H., Asfour, F., Al-Dmour, R. and Al-Dmour, A. (2022) Through the mediating function of digital financial innovation in Jordanian commercial banks, this study seeks to examine and validate the impact of marketing knowledge management (MKM) (assets and capabilities) on business performance (BP). The MKM significantly influenced BP, according to the primary findings. In this interaction, digital financial innovation served as a partial mediator.

### 3. RESEARCH METHODOLOGY

#### 3.1 Research Objectives:

To develop a research model to determine the constructs important to knowledge management.  
To ascertain the impact of these constructs on organizational performance.  
To establish the impact of organizational performance on financial performance.

#### 3.2 Hypothesis:

H<sub>1</sub>: Knowledge Management Culture (KMC) has a positive and statistically significant impact on organizational performance  
H<sub>2</sub>: Knowledge Management Systems (KMS) has a positive and statistically significant impact on organizational performance  
H<sub>3</sub>: Knowledge Management Strategic Planning and Implementation (KMSP) has a positive and statistically significant impact on organizational performance  
H<sub>4</sub>: Knowledge Management Capacity (KSC) has a positive and statistically significant impact on organizational performance  
H<sub>5</sub>: Knowledge Management Benchmarking (KMB) has a positive and statistically significant impact on organizational performance  
H<sub>6</sub>: Knowledge Leadership (KL) has a positive and statistically significant impact on organizational performance  
H<sub>7</sub>: Organizational performance (OP) has a positive and statistically significant impact on financial performance (FP)

#### 3.3 Sampling

To achieve the objective of the study, primary data was collected using convenience sampling technique. A questionnaire was mailed to the top management team of 250 Micro, Small & Medium Enterprises (MSMEs) of which 127 valid responses were received.

#### 3.4 Methodology

The research model was analyzed, and hypotheses were tested using Partial Least Squares Structural Equation Model (PLS-SEM) using SmartPLS version 3.0. Reliability and validity were also evaluated for the measurement model of the latent variable under study. Further Importance-Performance Map Analysis (IPMA) was also performed as an extended result of the PLS-SEM.

#### 4. FINDINGS OF THE STUDY

##### 4.1 Research Model

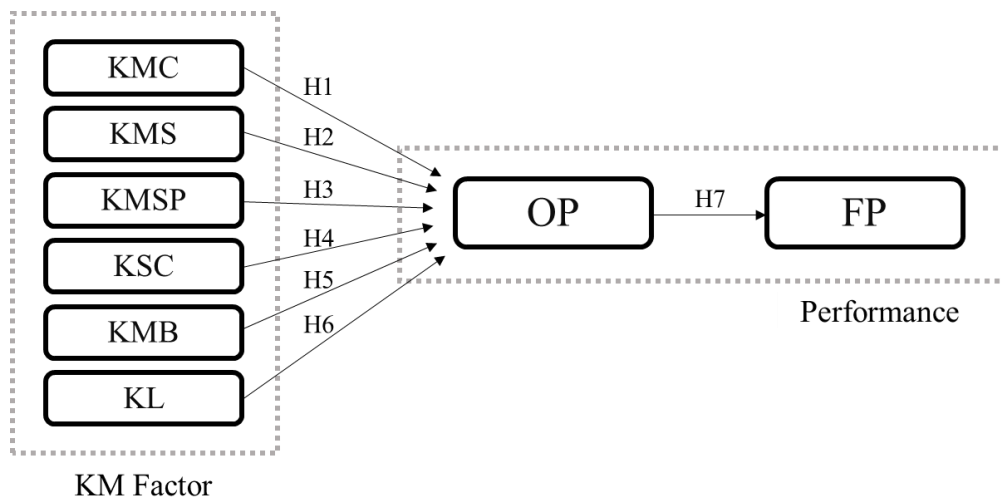


Figure 1.1 Research Model

##### 4.2 Measurement Model

Internal consistency method of reliability, construct reliability, AVE so-called average extracted variance, and convergent validity and divergent validity to assess the construct validity were all evaluated for the measurement model of the latent variable under study.

According to the research conducted by Fornell and Larker (1981), establishing construct validity can be confirmed by convergent validity if for all established items the loadings are greater than 0.65, the AVE value is greater than 0.50 and the construct reliability value is greater than 0.80. Additional establishing construct validity can be confirmed by divergent validity if the square root of AVE for each construct is greater than the correlation values with the other construct.

Table no. 1.1 depicts that for all established items under study, the item loadings are greater than 0.65, the AVE value ranges between 0.523 - 0.790, and construct reliability values exceed the threshold of 0.80. The table also depicts that the square root of AVE for each construct under study is greater than the correlation values with the other construct. Thus, the result indicates the validity of the construct measures.

##### 4.3 Construct Reliability, Convergent Validity and Discriminant Validity

Constructs	Cronbach's $\alpha$	Loading Range	Construct Reliability (CR)
KMB	0.840	0.720 - 0.812	0.864
FP	0.863	0.886 - 0.919	0.898
KMS	0.752	0.793 - 0.834	0.851
KMSP	0.864	0.741 - 0.841	0.892
OP	0.876	0.710 - 0.852	0.921
KMC	0.777	0.803 - 0.901	0.884
KSC	0.739	0.681 - 0.794	0.832
KL	0.779	0.718 - 0.810	0.850

Constructs	AVE	KMB	FP	KMS	KMPS	OP	KMC	KSC	KL
KMB	0.562	0.750*							
FP	0.790	0.510	0.889*						
KMS	0.631	0.701	0.551	0.794*					
KMSP	0.595	0.669	0.651	0.684	0.771*				
OP	0.597	0.630	0.697	0.711	0.765	0.773*			
KMC	0.692	0.689	0.642	0.735	0.753	0.712	0.832*		
KSC	0.523	0.692	0.501	0.698	0.746	0.687	0.691	0.723*	
KL	0.560	0.600	0.554	0.606	0.661	0.701	0.709	0.665	0.748*

\*Diagonal values are squared roots of AVE; off-diagonal values are the estimates of the inter-correlation between the latent constructs

#### 4.4 Structural Model

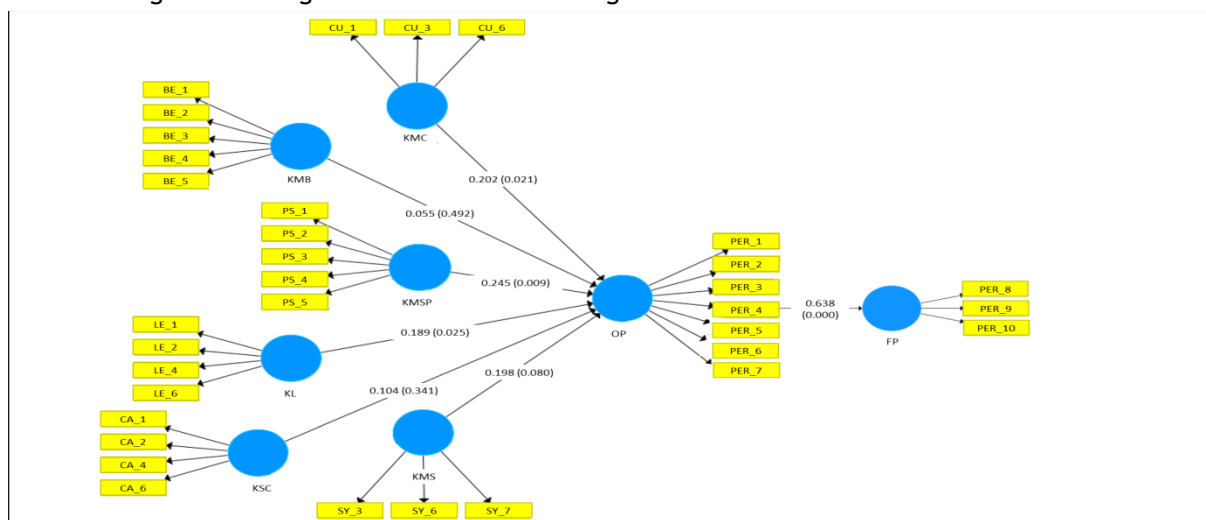
The constructs under study are tested to explain the relationship between each construct (refer research model below for Hypothesis 1 to Hypothesis 7). Table 1.2 depicts the results of the Structural Equation Model (SEM) using Bootstrapping Technique.

The result shows that hypothesis 1, 2, 3, 6, and 7 has a significant impact on organizational performance, and their path coefficient depicts a positive direction (refer to Figure 1.2). Thus, these hypotheses are supported. Hypotheses 4 and 5 have no significant impact on organizational performance but their path coefficient depicts a positive direction. Thus, these hypotheses are not supported.

#### 4.5 Structural Equation Model (SEM)

Hypothesis	Paths	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Decision
H1	KMC → OP	0.202	0.204	0.087	2.322	0.021**	Supported
H2	KMS → OP	0.198	0.199	0.113	1.752	0.080***	Supported
H3	KMSP → OP	0.245	0.254	0.094	2.606	0.009*	Supported
H4	KSC → OP	0.104	0.121	0.109	0.954	0.341	Not Supported
H5	KMB → OP	0.055	0.023	0.080	0.688	0.492	Not Supported
H6	KL → OP	0.189	0.181	0.084	2.250	0.025*	Supported
H7	OP → FP	0.638	0.775	0.051	12.510	0.000*	Supported

#### 4.6 Path Diagram showing Path Coefficients and Significance



As per Hair et al., (2014), the structural model is evaluated using  $R^2$  i.e., coefficient of determination value. Table 1.3 depicts the coefficient of determination value of the overall model to be  $R^2 = 0.767$ , the coefficient represents 76.7% of the variance in organizational performance and 60.2% of the variance in financial performance in the model. Further, Cohen's F-Square and Q-Square were examined to measure the effect size and predictive relevance respectively for the endogenous constructs. The result of F-Square was found to be in the range of 0.206 - 0.362 (refer to Table 1.3) for all the supported hypotheses. As per Cohen (1988), the effect size is small if the F-Square is greater than or equal to 0.02, medium if the F-Square is greater than or equal to 0.15, or large if the F-Square is greater than or equal to 0.35. Thus, the impact of the predictor constructs on an endogenous latent construct i.e., change in the R-Square value was found to be of medium to large for all the supported hypotheses. The Q-Square value using the Blindfolding procedure was found to be 0.364 which is greater than 0 indicating that the model has predictive relevance. Additionally, the predictive relevance of the model as assessed by q-square was found to be of medium effect size for all the supported hypotheses.

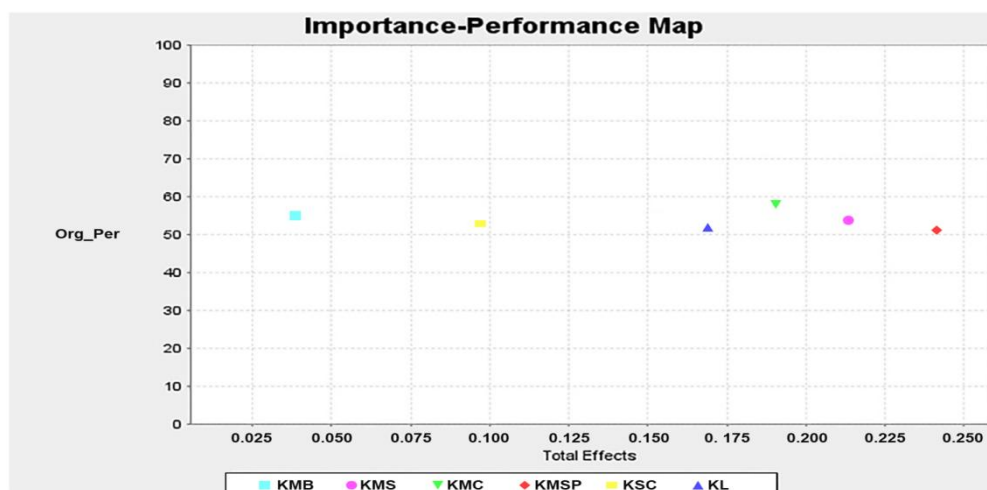
#### 4.7 Results of F<sup>2</sup> and Q<sup>2</sup> Effect Sizes

Constructs	Path	$R^2$	F <sup>2</sup> Effect Size*	Q <sup>2</sup>	q <sup>2</sup> Effect Size*
All		0.767		0.364	
KMB excluded	KMB → OP		0.017	0.354	0.018
KMS excluded	KMS → OP		0.354	0.354	0.186
KMC excluded	KMC → OP		0.206	0.350	0.200
KMSP excluded	KMSP → OP		0.271	0.345	0.117
KSC excluded	KSC → OP		0.008	0.354	0.002
KL excluded	KL → OP		0.362	0.349	0.122

\* Assessing effect size F<sup>2</sup> value:  $\geq 0.02$  is "Small",  $\geq 0.15$  is "Medium", 0.35 is "Large"

Importance-Performance Map Analysis (IPMA) introduced by Martilla and James (1977) examines the performance of each construct, thus IPMA is an extended result of the PLS-SEM. Considering the target construct as organizational performance, the results of IPMA combine the high importance and low performance of constructs under study.

#### 4.8 Importance - Performance Map



As shown in Figure 1.3 the identified sequence of importance is KMSP, KMS, KMC, KL, KSC, and KMB, where KMSP is the most important construct under study that has an impact on organizational performance. Additionally, the performance score of the constructs under study was in the range of 50 to 60, this indicates that all the constructs under study show almost equal performance. Thus, the total effect on target construct i.e., organizational performance, KMSP is considered to be a relatively important construct and KMB is considered to be least important.

## 5. CONCLUSION & RECOMMENDATION

Based on the results of hypothesis testing, Knowledge Management Culture, Knowledge Management Systems, Knowledge Management Strategic Planning & Implementation, Knowledge Leadership had a positive and statistically significant impact on organizational performance. Additionally, organizational performance had a positive and statistically significant impact on financial performance. However, Knowledge Management Capacity and Knowledge Management Benchmarking had no impact on organizational performance. The researcher believes the probable reason for the findings is that Knowledge Management Benchmarking in MSMEs is not well developed, and respondents may perceive this to be time-consuming and subject to budget constraints.

The coefficient represents 76.7% of the variance in organizational performance, this shows that although organizational performance is influenced by other factors, knowledge management does have a strong impact on organizational performance. Knowledge management-induced organizational performance represents 60.2% of the variance in financial performance. This shows that knowledge management does act as an antecedent to organizational performance and that knowledge management has an indirect impact on financial performance. Based on this impact, future research could examine how organizational performance plays a role as a mediator.

Further based on the Importance-Performance Map Analysis (IPMA) it was found that Knowledge Management Strategic Planning and Implementation (KMSP) was the most important construct under study that has an impact on organizational performance. "Further, empirical studies suggest that knowledge is always a central tenet of strategic planning Shujahat et al., 2017; Hughes and Hodgkinson, 2021)." To manage knowledge as a strategic tool, the development of long-term plans for the growth and harnessing of an organization's knowledge is necessary. Additionally, for Knowledge Management plans to be successfully implemented in an organizational environment, a strategic understanding of knowledge requirements, information, and procedures is needed. Therefore, planning & implementation of strategies for developing, acquiring, and applying the knowledge is crucial for the organisational performance of MSMEs. Consequently, one of the recommendations based on the findings is that top management support is essential for strategic planning and implementation of knowledge management. Further, as organizations grow, especially in the case of MSMEs, where the potential for growth is huge, implementing Knowledge Management Systems will help MSMEs streamline information gathering, storage, and distribution and transform tacit-to-explicit knowledge.

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