# Developing Strategies to Improve Organizational Readiness for Knowledge Management System Implementation

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Abstract. This study aimed to identify strategies to improve organizational readiness for knowledge management system (KMS) implementation by determining the key influencing factors. Escalating rivalry in the business sector, organizations recognize the paramount significance of harnessing their knowledge assets. This knowledge can serve as a competitive edge, setting them apart from their rivals. By implementing effective knowledge management, companies can devise innovative solutions to enhance business operations and augment overall revenue. Many organizations have adopted Knowledge Management Systems (KMS) to capture, record, manage, and disseminate knowledge among their workforce. Numerous studies have delved into identifying the essential factors that organizations must consider before embarking on knowledge management implementation. Factor analysis of survey data from 89 employees revealed four key factors impacting readiness such as Organizational Agility, Collaborative Infrastructure, Knowledge Empowerment, and Lack of Engagement. The findings provide insights into strategies to enhance these factors to successfully facilitate KMS implementation. This study contributes to the existing body of knowledge by providing insights into the dynamics that go beyond the technical aspects of KMS, ultimately developing strategies for more effective knowledge utilization and organizational growth.

Keywords: Factor Analysis, Organizational Readiness, Knowledge Management System

# 1. Introduction

In today's fast-paced and highly competitive business landscape, organizations are constantly seeking ways to gain a competitive edge and drive sustainable growth. One critical resource that has emerged as a game-changer is knowledge - the collective intelligence, expertise, and experience residing within an organization. Recognizing the paramount importance of knowledge, companies are increasingly turning to Knowledge Management Systems (KMS) to harness this invaluable asset and propel their businesses to new heights (Tadesse, 2019). While past research has explored critical success factors in knowledge management, few studies have empirically examined strategies to improve organizational readiness. This study aimed to address this gap by identifying the key factors influencing KMS implementation readiness and devising targeted strategies to facilitate successful adoption.

Knowledge is the driving force behind organizational success, as it empowers companies to adapt to changing environments, capitalize on opportunities, and overcome challenges. In the knowledge economy, organizations that can leverage their knowledge assets effectively gain a competitive advantage over their rivals. As such, Knowledge Management Systems play a pivotal role in unlocking the potential of knowledge and ensuring its seamless flow throughout the organization.

Knowledge Management Systems (KMS) encompass a range of tools, processes, and strategies designed to capture, store, organize, and share knowledge within an organization. By effectively managing knowledge, companies can optimize decision-making, foster innovation, enhance efficiency, and improve overall performance. A well-implemented Knowledge Management System fosters a culture of continuous learning and knowledge sharing, where employees are encouraged to exchange ideas, best practices, and lessons learned from past experiences (Sadad Mahmud et al., 2020). This knowledge-sharing ecosystem nurtures collaboration, breaks down silos, and enhances problem-solving capabilities, ultimately leading to increased innovation and efficiency. Moreover, KMS aids in retaining organizational knowledge, safeguarding vital expertise even when employees leave the organization or transition to new roles. This continuity of knowledge is crucial in maintaining organizational performance and avoiding the loss of valuable insights and intellectual capital.

While the benefits of Knowledge Management Systems are vast, organizations often encounter challenges in effectively implementing and optimizing these systems. One of the primary hurdles is the cultural shift required to foster knowledge-sharing behaviors among employees. Resistance to change, fear of job insecurity, or a lack of understanding of the benefits of knowledge sharing can impede the adoption of KMS. Furthermore, the successful implementation of KMS relies on robust technological infrastructure and user-friendly interfaces.

Lastly, the human factor plays a significant role in KMS success. A lack of knowledge management champions and effective training programs can lead to underutilization or misuse of the system, limiting its potential benefits. By recognizing the crucial role of Knowledge Management Systems, organizations can harness their knowledge capital and propel themselves towards a prosperous and sustainable future. Embracing KMS as a strategic enabler will be the key to enduring success in the ever-changing world of business. This study aims to identify factors influencing organizational readiness for KMS implementation and offers strategies to enhance readiness. By investigating these dimensions, the research seeks to contribute to a deeper understanding of effective KMS integration, fostering improved organizational preparedness and subsequent system optimization.

### 2. Literature Review

This study delves deeper into the intricate dynamics of organizational readiness for Knowledge Management System (KMS) implementation. While prior studies have recognized the significance of KMS, they often emphasize technical aspects, overlooking the readiness of organizational stakeholders. In this study, the authors extend the Knowledge Management Critical Success Factors (KMSCF) as it mentioned that successful implementation of knowledge management directly enhances organizational

performance (Shahizan & Al-Hakim, 2011).

## 2.1. Organizational Performance

Innovation is the engine that propels organizations forward. It involves the generation of novel ideas, processes, products, or services that create value and address market needs. Organizational performance is the culmination of various elements working in harmony to achieve the best possible outcomes in pursuit of the organization's goals. Among these elements, human resource performance stands at the forefront, as it encompasses the knowledge, skills, and competencies of individuals, all bolstered by effective teamwork and collaboration. In the fast-paced and ever-evolving business landscape, organizations rely on knowledge as a strategic resource to drive innovation, achieve strategic goals, and gain a competitive advantage (Tajpour et al., 2022).

# 2.2. Knowledge Management Critical Success Factor

Critical Success Factors (CSFs) play a crucial role in the successful implementation of Knowledge Management (KM) initiatives within organizations. Creating an innovative environment that fosters knowledge sharing and utilization is essential for enhancing overall organizational performance. By carefully considering and addressing CSFs, organizations can ensure that KM implementation thrives and ultimately contributes to the company's growth and success (Shahizan & Al-Hakim, 2011). There are several CSFs as follows:

# 2.2.1. Human Resource Management

The management of human resources (HRM) holds immense significance in capturing and endorsing the knowledge and expertise possessed by the workforce, which is indispensable for the organization. HRM plays a crucial role in providing employees with the necessary support and resources to facilitate a seamless exchange of ideas, opinions, and experiences, thereby fostering a dynamic environment of knowledge creation. Nevertheless, employees may sometimes exhibit reluctance in sharing their valuable knowledge, attributed to personal interests and trust issues. Therefore, HRM assumes a pivotal role in ensuring the acquisition and sustenance of the essential knowledge and skills within the organization.

### 2.2.2. Information Technology

Incorporating information technology is the key to simplifying and expediting the organization's KM implementation. Through leveraging information technology, the organization can seamlessly manage newly acquired knowledge, facilitate its smooth transfer, and ensure continuous knowledge storage. Additionally, employees can benefit from accelerated knowledge transfer, allowing them to make the most of their time. Furthermore, information technology contributes to enhancing efficiency, elevating quality standards, and fostering active employee participation in knowledge transfer.

### 2.2.3. Leadership

The significance of leadership in the successful execution of KM cannot be overstated. The type of leadership in question pertains to the style adopted within the organization. Leaders have the capacity to serve as exemplars, motivating others to embrace a culture of perpetual learning. To attain the utmost organizational performance, KM necessitates a brand of leadership that defies convention and explores new avenues of guidance.

### 2.2.4. Organizational Learning

The attainment of outstanding organizational performance rests on forging an organizational climate that seamlessly incorporates organizational learning and knowledge management. Organizational Learning embodies the collective capability of a company, drawn from experience and cognitive processes encompassing knowledge acquisition, sharing, and utilization. The fundamental purpose of Organizational Learning lies in harnessing its knowledge assets to achieve unparalleled performance.

### 2.2.5. Organizational Strategy

The triumph of knowledge management implementation is intricately tied to the efficacy of organizational strategies, attained through the judicious selection and application of essential organizational approaches, fostering a sustainable reserve of competitive resources. As such, concerted endeavors must be undertaken to align KM implementation with organizational strategies, culminating in the realization of the envisioned organizational performance. Knowledge creation serves as a pivotal factor in shaping organizational strategies, as it equips the organization with insights into customers, services, technologies, and markets – all deemed paramount in driving strategic decision-making within the corporate realm. Consequently, KM implementation must wholeheartedly reinforce the organization's strategic trajectory.

### 2.2.6. Organizational Structure

The Organizational Structure embodies a harmonious coordination of diverse business processes within a company, delineating the allocation of tasks and responsibilities. To foster a perpetual drive for new knowledge creation, an organization must astutely select a befitting organizational structure that bolsters team cohesion and nurtures a free-flowing exchange of ideas, marked by low formalization and decentralized decision-making. Hence, the facilitation of social interactions among employees cultivates an environment ripe for the generation of novel knowledge.

### 2.2.7. Organizational Culture

Organizational Culture, commonly referred to as company culture, emerges as an indispensable component in guiding and supervising the implementation of knowledge management within a company. Organizational culture is elucidated as the bedrock of shared principles instilled within a group, enabling them to surmount internal integration and external adaptability hurdles. The intrinsic connection between Organizational Culture and the human dimension (people) forms the very core of establishing an inclusive culture that fosters a harmonious exchange of knowledge.

#### 2.3. Knowledge Management System Cycle

The KMS life cycle is a systematic approach that organizations use to manage their knowledge effectively throughout its various stages. It involves the creation, capture, storage, organization, sharing, and utilization of knowledge to facilitate learning, innovation, and decision-making processes (Turban et al., 2011). There are 6 (six) steps of KMS Cycle such as Create Knowledge, Capture Knowledge, Refine Knowledge, Store Knowledge, Manage Knowledge, and Disseminate Knowledge. Create Knowledge focuses a strong emphasis on people engaging in creative activities on their own initiative and incorporating outside knowledge to advance cognitive development. By focusing the identification of numerous sources as essential to creating organisational value, such as human capital, records, and industry trends, Capture Knowledge takes significant relevance. Refine Knowledge outlines the critical need to contextualise recently acquired insights with a focus on the intricate interplay between tacit and explicit knowledge conversion. In Store Knowledge, the essential practise of preservation within searchable repositories is described as fostering smooth knowledge transmission among stakeholders. Manage Knowledge explains how to consistently and methodically verify organisational knowledge in order to maintain its accuracy and utility. Disseminate Knowledge refers to the ongoing and formatflexible dissemination of knowledge resources to satisfy internal constituencies' shifting informational requirements. Together, these conceptual threads weave a picture that supports the development of organisations by fostering the effective use of information.

# 3. Research Methodology

The study's focal demographic comprised personnel within an IT consultancy enterprise, particularly those who had interacted with the Knowledge Management System (KMS), constituting a cumulative workforce of 114 individuals. The application of the Slovin technique was instrumental in determining the requisite sample size for this research endeavor, carried out in accordance with the subsequent procedure which equivalent to 89 respondents. Surveys are thoughtfully crafted and delivered to the

participants through Microsoft Forms, wherein they are required to click and provide responses via the provided link without needed to input their personal information. The questionnaires provided in this study will be assessed using the well-known Likert Scale from 1 to 5.

Following the acquisition of questionnaire data from the survey involving a relevant sample size of respondents, the subsequent action entails data processing through Factor Analysis methodology to find new factors as the independent variables. By employing Regression Analysis, we aim to understand how independent variables affect the dependent variable.

### 3.1. Research Model

This research adopts a comprehensive approach to assess the comprehension of KMS by combining KM Critical Success Factors with KMS Cycle. The original model by Shahizan includes basic variables like HRM, Organizational Structure, Organizational Learning, Leadership, Strategy, Culture, and IT. Moreover, the study introduces extended variables from KMS Cycle, which are Create, Capture, Refine, Store, Manage, and Disseminate Knowledge by Turban.



#### Fig.1 Research Model

As shown in Table 1, the outcome of this factor analysis will be utilized to assess organizational readiness for implementing a knowledge management system

Table 1. Development of Research Instrument							
Factor	Indicator	Reference					
	Training (HR1)	Naqvi & Khan, 2013.					
Human Resource Management	Performance Appraisal (HR2)	Iqbal et al., 2013					
(HR)	Compensation (HR3)	Darma et al., 2017					
(IIIC)	Staffing (HR4)	Everhart et al., 2013					
	Participation (HR5)	Kesting et al., 2016					
	Network (IT1)	Oseledchik et al., 2018					
Information Technology	Data Store (IT2)	Mao et al., 2016					
(IT)	Scalability (IT3)	Sultan, 2013					
	Security (IT4)	Manhart et al., 2015					
Landarshin	Charisma (LE1)	Micic, 2015					
Leadership	Supportive (LE2)	Akhavan et al., 2014					
(LE)	Consulting (LE3)	Analoui, 2013					
Organizational Learning	Commitment (OL1)	Garrido-Moreno et al., 2014					
	Open-mindedness (OL2)	Taylor, 2016					
(0E)	Knowledge Transfer (OL3)	Argote, 2016					
Org. Strategy (OS)	Knowledge Strategy Alignment (OS1)	Stephen, 2017					
Organizational Structure	Formalization (OT1)	Mahmoudsalehi et al., 2012					
	Decentralization (OT2)	Lee et al., 2012					
(01)	Cross-functional Teams (OT3)	Ton et al, 2021					
	Trust (OC1)	Samadi et al., 2015					
Organizational Cultura	Motivation (OC2)	Kanaan et al., 2019					
Organizational Culture	Collaboration (OC3)	Haitao, 2021					
(00)	Interaction (OC4)	Lashari et al., 2018					
	Innovation (OC5)	Di Vaio et al., 2021					
Create	Acquisition (CK1)	Zellmer-Bruhn, 2003					

Knowledge (CK)	Tacit and Explicit Knowledge (CK2)	Nickols, 2013
Capture	Suitability (CA1)	Mohajan, 2016
Knowledge (CA)	Fusion (CA2)	Dong et al., 2015
Refine	Identification (RK1)	Ortiz et al., 2017
Knowledge (RK)	Evaluation (RK2)	Paulheim, 2017
Store	Repository (SK1)	Gröger et al., 2014
Knowledge (SK)	Accessibility (SK2)	Gressgård et al., 2014
Manage	Usefulness (MK1)	Flexner, 2017
Knowledge (MK)	Quality (MK2)	Demirkan et al., 2013
Disseminate	Knowledge Sharing (DK1)	Zhang, 2017
Knowledge (DK)	IT Infrastructure (DK2)	Mohapatra et al., 2016

#### **3.2.** Data Analysis Method

This quantitative study was carried out to assess the organization's readiness to establish a knowledge management system. Reliability Tests conducted to decide whether the instruments contained in the distributed questionnaires can be used as research data or not. The reliability test will use Cronbach's Alpha value. Cronbach's Alpha is a coefficient that can describe how closely the elements in a set are related to each other. The reliability test is declared good if it produces Cronbach's Alpha value > 0.60.

Validity Test using KMO & Barlet Test Values to determine whether the data meets the requirements for performing factor analysis. KMO uses the Measure of Sampling Adequacy technique where the tolerable or acceptable value is above 0.5. While the Barlet Test (Barlet Tet of Sphericity) uses a significant limit value (Sig.) less than 0.05.

Looking at the results of Anti Image Correlation to determine whether the variable is feasible to use in Factor Analysis, as seen from the diagonal value above 0.5 and see the Total Variance Explained value to determine how many factors can be determined by looking at the Initial Eigenvalues with a value greater than 1.

Looking at the Rotated Component Matrix that has been compiled using the Varimax Method to determine which variables can be classified on which factor by paying attention to which component column is the largest and finally give naming to the newly discovered factors.

Regression analysis is carried out to understand the impact of independent variables on the dependent variable. In this research, data analysis is executed using SPSS software.

#### 4. Result

In this study, the total of respondents are 89 employees. Based on table 2, the respondents are dominated by male with 71 respondents (80%), and the rest are 18 female respondents (20%). In terms of age, the majority of respondents are 31-40 years old as many as 37 people (41%), the rest are 20-30 years old (28%), 41-50 years old (18%) and > 50 years old (12%). Regarding the experience of using KMS, majority of respondents are having experience for less than 2 years with 61 respondents (69%), the rest are 2-4 years (26%), 8-10 years (3%) and 5-7 years (2%).

Variabel	Data	Percentage		
Gender	Male	80%		
	Female	20%		
Age	20-30 years old	28%		
	31-40 years old	41%		
	41-50 years old	18%		
	>50 years old	12%		
KMS Experience	<2 years	69%		
	2-4 years	26%		
	5-7 years	2%		
-	8-10 years	3%		

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#### 4.1. Reliability Test and Validity Test

The Reliability Test is conducted to assess the credibility of the questionnaire instruments used in this research. The test employs Cronbach's Alpha as a coefficient to gauge the interrelatedness among elements within the set. SPSS version 26 is utilized to perform the reliability testing on a sample of 89 respondents. The decisions regarding the reliability are based on the Cronbach's Alpha values, where values > 0.70 are accepted, > 0.80 are considered commendable, and > 0.90 are seen as highly commendable. The obtained Cronbach's Alpha value from 36 indicators is 0.964, signifying that the instrument variables utilized in this research exhibit high reliability.

Reliability S	Statistics
Cronbach's Alpha	N of Items
.964	36

#### Fig. 2 Reliability Test using Cronbach's Alpha

The Validity Test using KMO & Barlett's Test is conducted to ascertain whether the collected data meets the criteria for factor analysis. KMO employs the Measure of Sampling Adequacy technique, where a value above 0.5 is deemed acceptable. On the other hand, Barlett's Test (Barlett Test of Sphericity) uses the significance threshold (Sig.) with a value less than 0.05 to determine the suitability of the data. The outcomes of the KMO-MSA validity test, with a remarkable value of 0.803, and the Barlett's Test value of 0.000. This suggests that the collected data is highly suitable for factor analysis, ensuring its credibility and accuracy in the analytical process.

кмо	and	<b>Bartlett's</b>	Test
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Bartlett's Test of Sphericity Approx. Chi–Square 2412.131 df 630	Kaiser-Meyer-Olkin Meas Adequacy.	.803	
Sphericity df 630	Bartlett's Test of	Approx. Chi-Square	2412.131
Sig	Sphericity	df	630
Sig000		Sig.	.000

Fig. 3 Validity Test using KMO and Bartlett's Test

#### 4.2. Total Variance Explained

The Total Variance Explained value serves as an indicator to ascertain the number of factors that can be determined based on the Initial Eigenvalues, considering those greater than 1. Upon factor extraction from a set of variables, a remarkable outcome unfolds—four novel factors emerge, encompassing the entirety of components with an impressive cumulative extraction value of 57.373%.

Total Variance Explained

Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings			
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	16.082	44.674	44.674	16.082	44.674	44.674	5.341	14.836	14.836
2	1.716	4.767	49.441	1.716	4.767	49.441	5.336	14.822	29.658
3	1.550	4.307	53.748	1.550	4.307	53.748	5.294	14.706	44.364
4	1.305	3.625	57.373	1.305	3.625	57.373	4.683	13.009	57.373
5	1.270	3.526	60.900						
6	1.182	3.282	64.182						
7	1.100	3.055	67.237						

Fig. 4 Total Variance Explained

#### 4.3. Rotated Component Matrix

Upon completion of the factor extraction process, the subsequent stage involves identifying the

indicators for each newly derived factor. The robust correlations among these indicators signify their potential for homogenous grouping, thereby facilitating the formation of common factors or construct factors for each indicator.

The first new factor is Organizational Agility, where this factor is the depiction of these variables: Performance Appraisal, Scalability, Decentralization, Collaboration, Innovation, Acquisition, and Quality.

The second new factor is Collaborative Infrastructure, where this factor is the depiction of these variables: Data Store, Consulting, Knowledge Transfer, Tacit & Explicit Knowledge, Fusion, Accessibility, and IT Infrastructure.

The third new factor is Knowledge Empowerment, where this factor is the depiction of these variables: Compensation, Staffing, Participation, Networks, Supportive, Open-mindedness, Strategy Alignment, Trust, Evaluation, and Repository.

The fourth new factor is Lack of Engagement, where this factor is the depiction of these variables: Commitment, Formalization, Interaction, Identification, Usefulness.

#### 4.4. Regression Analysis

By pinpointing four novel factors derived through factor analysis, these factors will serve as a means to evaluate the organizational readiness pertaining to KMS implementation. These factors are categorized as Organizational Agility, Collaborative Infrastructure, Knowledge Empowerment, and Lack of Engagement. Figure 2 provides an insightful overview of these newly identified components. The culmination of the research has led to the formulation of an equation that can be employed as a formula to gauge the level of organizational preparation for KMS implementation.



Fig. 5. New Factors Affecting the Organizational Readiness

The model result above shows that:

- 1) The first factor, which is a composite of numerous variables, can contribute 0.316 to respondents' understanding of the organization's KMS implementation.
- 2) The second factor has a positive value of 0.006, indicating increased indicator quality can raise respondents' understanding of the organization's KMS implementation.
- 3) The third factor, has a positive value of 0.184, which may contribute to respondents' understanding of the organization's KMS implementation.
- 4) The fourth factor, which represents many variables, can contribute -0.218 to respondents' understanding of the organization's KMS implementation.

The shape of the mathematical equation from the model described above is shown below:

$$\mathbf{Y} = 7.517 + 0.316\mathbf{X}_1 + 0.006\mathbf{X}_2 + 0.184\mathbf{X}_3 - 0.218\mathbf{X}_4$$

where the X value limit:

 $-2.441 \le X_1 \le 2.155$  $-2.436 \le X_2 \le 1.956$  $-3.063 \le X_3 \le 2.166$  $-2.813 \le X_4 \le 1.980$ 

#### 5. Discussion

This study holds theoretical significance in the academic realm, bridging gaps to uncover novel factors that pertain to organizational readiness for Knowledge Management System (KMS) implementation. Empirical validation scrutinizes the impact of these factors on organizational readiness, offering fresh perspectives. The study's dynamic capability approach not only probes organizational readiness but also prescribes strategies for optimal KMS integration. By delineating dimensions of KMS and organizational readiness, this research enriches the literature. Unlike prior studies, which separated KMS composition and organizational readiness, this study pioneers their conjoined analysis.

Following the simulation of the model, an illustration was obtained to reach the optimum value of organizational readiness toward applying KMS is 9.221 on a scale of 1.000 to 10.000. If the requirement is ignored, the degree of organizational readiness falls to 5.736s, as indicated in Table 3.

Tabal 2 Madal Simulation

Table 5. Model Simulation								
Variable Condition	Y	B <sub>0</sub>	X <sub>1</sub>	X2	X3	<b>X</b> 4		
Normal	7.517	7.517	0	0	0	0		
Unexpected	5.736	7.517	-2.441	-2.436	-3.063	1.980		
Optimum	9.221	7.517	2.155	1.956	2.166	-2.813		

Below is the description of each model simulation above:

- Normal condition, where in this state the analysis score of respondents' understanding regarding the implementation of the knowledge management system is 7.517. This score falls within the category of fairly good. In this scenario, there is no increase or decrease in the value due to new identified factors. Based on this, it indicates that the level of understanding among the respondents is sufficiently strong regarding the knowledge management system, thus making it a viable source of information and a tool for problem-solving for employees in their work.
- 2) Unexpected condition, where in this state, new factors with positive values are reduced to their lowest extent, while new factors with negative values are elevated to their highest potential. The analysis score of respondents' understanding regarding the implementation of the knowledge management system decreases in this extreme condition, placing it within the category of moderate, compared to the previous normal condition categorized as fairly good. Consequently, in this condition, the organization needs to enhance the quality of all newly identified factors in order to address this decline in understanding of KMS.
- 3) Optimal condition, where in this state, the analysis score of respondents' understanding regarding the implementation of the knowledge management system is 9.221. In this ideal state, new factors with positive values are elevated to their highest potential, while new factors with negative values are reduced to their lowest extent. The analysis score of respondents' understanding regarding the implementation of the knowledge management system in this ideal condition experiences an increase, placing it within the category of excellent, in contrast to the previous normal condition categorized as fairly good.

Following the simulations, it is crucial for the organization to attain an optimum state to ensure that

respondents perceive the implementation of the knowledge management system as "Very Good," indicating a high level of preparedness for its integration within the company.

The simulation results highlight the necessity for the company to bolster factor  $X_1$ , denoted as Organizational Agility, to reach an ideal state. Organizational Agility signifies the organization's nimbleness in adapting to the ever-growing knowledge landscape. Strategic solutions to enhance this factor encompass the following:

- a) Develop a performance evaluation mechanism that connects employees' contributions not only to the company's business performance but also to their utilization of the knowledge management system.
- b) Cultivate a culture of decentralized decision-making, encouraging employees at all levels to make decisions in their daily work, thereby facilitating the acquisition of new knowledge through their experiences.
- c) Appoint charismatic leaders who prioritize problem-solving, fostering a collaborative and innovative environment within the organization.

The company should also enhance factor  $X_2$ , which is Collaborative Infrastructure, to achieve an ideal condition. Collaborative Infrastructure signifies the need for the company to prepare a supportive infrastructure to foster knowledge synergy among its employees. Strategic solutions to improve this factor for the company involve preparing a robust and suitable IT Infrastructure to support knowledge management activities within the organization. The preparation of this IT Infrastructure should facilitate activities arising from the knowledge management system, such as knowledge data storage, accessible anytime, and accessible systems from anywhere.

In addition to factors  $X_1$  and  $X_2$ , based on the simulation results, the company must enhance factor  $X_3$ , which is Knowledge Empowerment, to achieve an ideal condition. Knowledge Empowerment factor signifies the strengthening of organizational knowledge to enable sustainable improvement in company performance. Strategic solutions to enhance this factor can be implemented in various ways, including:

- a) The company needs to align its strategies with the utilization of the knowledge management system.
- b) Recruitment activities should be aligned with the company's strategy by placing the right people in the right positions.
- c) The company should provide clear compensation or rewards for employees who contribute significantly to the utilization of the knowledge management system. Conversely, there should be consequences for employees who do not contribute to the utilization of the knowledge management system.
- d) The company should conduct periodic training on the use of the knowledge management system for employees and be open to future system improvements.
- e) The company should conduct performance evaluations transparently to foster a trustworthy and supportive work environment where employees trust and support one another.

The  $X_4$  factor exhibits a negative value, indicating that enhancing its quality could address the organization's lack of preparedness for knowledge management system implementation. As per the simulation results, the company should also consider decreasing the quality or value of factor  $X_4$ , referred to as Lack of Engagement, to achieve an ideal state. Lack of Engagement signifies a condition where employees or personnel within the company experience reduced involvement or connection. When employees feel disengaged or unattached, it hinders the maximum effectiveness of knowledge management system implementation due to their limited contribution resulting from the lack of engagement. Therefore, strategic approaches to improve this factor's quality for the company include:

- a) The company should regularly conduct socialization activities emphasizing the significance of knowledge management within the organization. This will bolster employee commitment.
- b) Organizing frequent and ongoing team-building activities that involve all employees, such as outbound programs, gatherings, boot camps, and more, can enhance the quality of interactions among employees.

# 6. Conclusion

The study's outcomes point out the significant factors influencing organizational readiness for implementing knowledge management systems: Organizational Agility, Collaborative Infrastructure, Knowledge Empowerment, and Lack Of Engagement. Of these factors, Organizational Agility emerges as the most influential (0.316) in determining organizational readiness. Following this, in descending order of importance, are Knowledge Empowerment (0.184), Collaborative Infrastructure (0.006), and Lack of Engagement (-0.218).

To ensure successful knowledge management system implementation, the organization should focus on developing a performance evaluation mechanism linking employee contributions to system utilization, fostering a culture of decentralized decision-making for knowledge acquisition, and appointing problem-solving-oriented charismatic leaders to create a collaborative environment. These strategic approaches will enhance organizational readiness, motivate employees to actively engage with the system, and foster effective knowledge utilization for improved overall performance.

Moreover, the company needs to prepare a robust IT Infrastructure to support knowledge management activities and align its strategies with system utilization. Additionally, it should provide clear compensation for contributors and conduct periodic training while fostering a supportive work environment. Furthermore, addressing the issue of Lack of Engagement is crucial by conducting regular socialization activities and organizing team-building programs to enhance employee interaction and commitment. This particular strategy has the potential to improve the organizational preparedness factor when it comes to effectively utilizing Knowledge Management Systems (KMS). By implementing this approach, the organization can enhance its overall readiness and capability to make the most of KMS, ensuring that the system is utilized optimally to meet its goals and objectives. This strategy aims to bolster the organization's ability to adapt to KMS, thereby facilitating a smoother integration and maximizing the benefits derived from the system's functionalities.

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