Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online):0493-2137
E-Publication: Online Open Access
Vol: 57 Issue: 06:2024
DOI: 10.5281/zenodo.12515989

THE IMPACT OF KNOWLEDGE MANAGEMENT STRATEGY ON THE ENTERPRISE'S DECISION MAKING

Dr. MAGED MUSTAFA MAHYOUB AL-DUBAI

Associate Professor, Management Development Institute of Singapore in Tashkent, Uzbekistan.
Email: mmustafa@mdis.uz

ZIYAD MARIE

Public Administration Department, Faculty of Administrative Sciences and Informatics, Al-Istiqlal University, Jericho, 10, Palestine. Email: Ziyad.marie@pass.ps

HANI MOHAMMED AL-DUAIS

International Office, Business School, Windesheim University of Applied Sciences, Netherlands.
Email: h.al-duais@windesheim.nl

Dr. BELAL ALIFAN

Assistant Professor, Faculty of Information Technology Philadelphia University, Jordan.
Email: Balifan@philadelphia.edu.jo

Dr. MAZEN MOHAMMED FAREA

Associate Professor, Faculty of Finance & Administrative Sciences, Al-Madinah International University, Malaysia. Email: mazen.farea@mediu.edu.my

Dr. TS. YOUSEF A. BAKER EL-EBIARY*

Professor, Faculty of Informatics and Computing, UniSZA, Malaysia.
*Corresponding Author Email: yousefelebiary@unisza.edu.my
ORCID ID: https://orcid.org/0000-0002-4392-8015

Abstract

In today's dynamic and competitive business landscape, enterprises face ever-increasing challenges in making timely and informed decisions to maintain a sustainable competitive advantage. Knowledge Management (KM) has emerged as a vital organizational process aimed at harnessing, creating, sharing, and utilizing knowledge to enhance decision-making capabilities. This research paper explores the significant impact of knowledge management strategies on enterprise decision-making processes. The primary objective of this study is to investigate the extent to which the implementation of effective knowledge management strategies influences decision-making outcomes within organizations. To achieve this, this article proposes that information systems have four dimensions, each influenced by the strategic planning process, knowledge activities, and macro environment. A conceptual model based on structuration theory is used to illustrate how these factors influence the significance and characteristics of these four dimensions. The research delves into the various dimensions of knowledge management, including knowledge acquisition, storage, dissemination, and application, and evaluates their impact on the decision-making processes at different hierarchical levels. Moreover, the paper analyzes the role of technology and information systems in facilitating knowledge management practices and their implications for decision-making. Furthermore, the study examines the challenges and barriers faced by enterprises in adopting and executing knowledge management strategies effectively. It investigates the influence of organizational culture, leadership support, and employee engagement on the successful integration of knowledge management initiatives into the decision-making framework. The findings of this research reveal the direct correlation between a well-structured knowledge management strategy and improved decision-making processes within organizations. The results demonstrate that enterprises that

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online):0493-2137
E-Publication: Online Open Access
Vol: 57 Issue: 06:2024
DOI: 10.5281/zenodo.12515989

prioritize knowledge management practices experience enhanced problem-solving abilities, more effective risk assessment, and better overall decision outcomes. The implications of this research contribute to both academic understanding and practical applications for business leaders and managers. By emphasizing the value of knowledge management in enhancing decision-making capabilities, organizations can be better equipped to adapt to the ever-changing business environment and gain a competitive edge in their respective industries. Overall, this research sheds light on the pivotal role of knowledge management strategies in influencing enterprise decision-making processes and emphasizes the need for organizations to invest in and implement robust knowledge management practices to achieve sustainable success in today's knowledge-driven economy.

Keywords: Knowledge Management System, Data Analysis, Decision Making Framework, Leadership.

I. INTRODUCTION

In today's dynamic and highly competitive business environment, enterprises face ever-increasing challenges in making informed and effective decisions. The success and sustainability of any organization heavily rely on its ability to make the right choices at the right time, which can be achieved through a systematic and well-informed decision-making process. In this context, knowledge management (KM) has emerged as a vital tool that can significantly influence an organization's decision-making capabilities, thereby enhancing its overall performance and competitive advantage [1].

Knowledge management can be broadly defined as the process of capturing, organizing, storing, and leveraging an organization's knowledge assets to facilitate learning, innovation, and problem-solving. It involves creating a culture of knowledge sharing and collaboration among employees and stakeholders, enabling the seamless flow of information across the enterprise. The effective implementation of knowledge management practices can empower decision-makers with timely and relevant insights, leading to better-informed, more confident, and strategic decision-making [2].

The centrality of knowledge management in the contemporary business landscape is further accentuated by the rapid pace of technological advancements and the advent of the knowledge-based economy.

Organizations across industries are realizing that their intellectual capital, in the form of knowledge and expertise possessed by their workforce, is an invaluable resource that must be harnessed and leveraged to gain a competitive edge [3]. As a result, there has been a growing interest in understanding the impact of knowledge management strategies on the quality and effectiveness of enterprise decision-making.

While extensive research has explored the domains of knowledge management and decision-making individually, there remains a considerable gap in comprehending how the two interrelate and influence each other within an organizational context. This research seeks to bridge this gap by investigating the intricate relationship between knowledge management strategy and the enterprise's decision-making processes.

By exploring this connection, we aim to shed light on the mechanisms through which knowledge management practices can contribute to better decision-making outcomes,

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online):0493-2137
E-Publication: Online Open Access
Vol: 57 Issue: 06:2024
DOI: 10.5281/zenodo.12515989

fostering organizational success and resilience in a rapidly changing business landscape.

The objectives of this study are threefold:

- To examine the various knowledge management strategies employed by organizations and their impact on decision-making processes.
- To identify the key factors that mediate the relationship between knowledge management and decision-making effectiveness.
- To provide practical recommendations for organizations seeking to enhance their decision-making capabilities through effective knowledge management implementation.

To accomplish these objectives, a comprehensive review of existing literature on knowledge management, decision-making, and their interplay will be conducted. Moreover, empirical data will be collected through surveys and interviews from a diverse sample of enterprises representing different industries and scales [4]. This mixed-method approach will provide a holistic understanding of the subject matter and allow us to draw robust conclusions.

The findings of this research are expected to offer valuable insights to business leaders, managers, and knowledge practitioners, guiding them in formulating and implementing effective knowledge management strategies that positively influence their enterprise's decision-making processes. Additionally, the study's contributions to the academic community will aid in advancing the understanding of knowledge management's strategic significance and its role in shaping the competitive advantage of organizations in the knowledge-driven economy.

In the subsequent sections of this research paper, we will delve deeper into the theoretical underpinnings of knowledge management and decision-making, present the methodology employed, analyze the findings, and conclude with implications and recommendations for both theory and practice. By undertaking this exploration, we aspire to contribute meaningfully to the ongoing dialogue on knowledge management's impact on the contemporary business landscape and its potential for driving sustainable organizational success.

II. LITERATURE REVIEW AND BACKGROUND OF THE STUDY

The success of knowledge management in an organization is dependent on the implementation of a knowledge management system. The term "knowledge management" has been used previously, but the new term for this fundamental concept is heavily focused on technological aspects [5]. It is proposed that a conceptual model structural theory be used to demonstrate the significance and characteristics of these four dimensions, which are essential in strategic planning, knowledge activities, and the macroenvironment, respectively. The knowledge management system has four elements (technology, human resources, process, and context), and the model recommends a

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online):0493-2137
E-Publication: Online Open Access
Vol: 57 Issue: 06:2024
DOI: 10.5281/zenodo.12515989

conceptual model that demonstrates the significance and character traits of these four components concerning the external environment.

In today's rapidly evolving business environment, organizations strive to maintain a competitive advantage through effective decision-making processes. Knowledge Management (KM) has emerged as a critical approach to harness and leverage knowledge within organizations to enhance decision-making capabilities. This literature review aims to explore existing studies related to the significant impact of knowledge management strategies on enterprise decision-making processes.

A. Knowledge Management and Decision-Making:

Knowledge Management and Decision-Making are two interconnected concepts that play vital roles in organizational success and efficiency.

Knowledge Management refers to the systematic process of creating, capturing, organizing, storing, and sharing knowledge within an organization. It involves collecting both explicit knowledge (documented information, data) and tacit knowledge (expertise and insights possessed by individuals) to make it accessible to relevant stakeholders. The goal of knowledge management is to improve decision-making, foster innovation, enhance learning, and boost overall performance by leveraging the collective intelligence of the organization.

Decision-Making, on the other hand, is the process of selecting the best course of action among various alternatives to achieve a specific goal. It involves identifying the problem, gathering and analysing relevant information, evaluating options, and choosing the most suitable solution. Effective decision-making relies heavily on access to accurate, up-to-date information and the ability to apply relevant knowledge and experience to assess potential outcomes.

The relationship between knowledge management and decision-making is symbiotic. Knowledge management provides decision-makers with valuable insights, lessons learned, and best practices, enabling them to make more informed and rational decisions. Conversely, the process of decision-making helps identify gaps in knowledge and areas where more information or expertise is needed, prompting the organization to refine its knowledge management strategies.

In essence, effective knowledge management enhances decision-making capabilities, leading to better-informed choices, improved problem-solving, and increased organizational performance [6].

B. Knowledge Management Dimensions and Decision-Making:

knowledge management dimensions play a crucial role in decision-making processes within organizations. By effectively capturing, organizing, and disseminating knowledge, decision-makers can access valuable insights and data, leading to more informed and strategic choices. Implementing robust knowledge management practices fosters innovation, enhances problem-solving capabilities, and empowers employees, ultimately driving the overall success and competitiveness of the organization. Emphasizing

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online):0493-2137
E-Publication: Online Open Access
Vol: 57 Issue: 06:2024
DOI: 10.5281/zenodo.12515989

knowledge management in decision-making is a key factor in thriving in today's rapidly evolving business landscape [7].

C. Organizational Culture and Knowledge Management:

The relationship between Organizational Culture and Knowledge Management is crucial for an organization's success. A positive organizational culture that values open communication, collaboration, and continuous learning fosters an environment where knowledge sharing and retention thrive. On the other hand, a negative culture can impede knowledge management efforts, hindering innovation and growth [8]. Therefore, organizations must proactively nurture a supportive culture that encourages knowledge sharing, embraces learning, and leverages the collective intelligence of its employees to stay competitive and adaptable in an ever-changing business landscape.

D. Leadership Support and Knowledge Management:

leadership support is vital for the success of any knowledge management initiative within an organization. Effective leaders play a crucial role in fostering a culture that values knowledge sharing, encourages collaboration, and supports learning and innovation. Their commitment to allocating resources, setting clear objectives, and promoting knowledge-sharing behaviours among employees creates an environment where knowledge management thrives. With strong leadership support, organizations can harness their collective knowledge, enhance decision-making processes, and gain a competitive edge in the ever-evolving business landscape [9].

E. Technology and Knowledge Management:

Technology and Knowledge Management" is a crucial aspect of modern organizations. Leveraging technology to capture, store, share, and utilize knowledge effectively can lead to improved decision-making, increased productivity, and enhanced innovation. Emphasizing knowledge management practices allows businesses to stay competitive in a rapidly evolving digital landscape and fosters a culture of continuous learning and improvement [10]. By integrating technology into knowledge management processes, organizations can unlock their full potential and achieve long-term success.

III. PROBLEM STATEMENT

It is difficult to define "knowledge management" precisely. The term "knowledge" has various meanings for different people. In addition, certain scholars focus on knowledge management at the individual level, while others focus on knowledge management at the social or corporate level. As an example, Dennis and Vessey utilize financial theories of agency and transaction costs [11] to highlight three different types of knowledge strategies: knowledge hierarchies, knowledge economic sectors, and knowledge stakeholders. Three: Many knowledge typologies can be misleading in their wide range. Because knowledge is both complicated and intangible, it the difficulty to explain knowledge management. There has been a proliferation of definitions of knowledge

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online):0493-2137
E-Publication: Online Open Access
Vol: 57 Issue: 06:2024
DOI: 10.5281/zenodo.12515989

management over the last few decades, some of which are contradictory. There is not much difference between these two interpretations aside from that.

By learning how to organize and disseminate accumulated knowledge and information, a business's resources' inventiveness can be increased. The domain of an information system is defined by a process called knowledge management. Implementing knowledge management systems makes it possible to improve control over the flow of information and knowledge within an organization. Management of knowledge is vital to success in the information technology field.

IV. THE STRUCTURATION THEORY

Several scholars have asserted that technology impacts organizational change, and they have determined between two perspectives: tool-oriented perception and comprehensive-oriented perception. When viewed through the lens of tool-oriented conceptions, technology is seen as a collection of engineering artifacts designed to influence an organization's circumstances on its own. It is a substitute formation for describing the relationship between knowledge technology and social systems [12] [13] [14] that is useful for holistic perception.

For Orlikowski and Iacono, information technology is a procedure that embraces elements of organizational management across a wide range of different aspects. These elements include organizational commitment, organizational actions; organizational training and policies; and inter-organizational systems. Based on Giddens's theory of structure [15], the holistic view asserts that technology changes society, implying that technologies and social structure directly influence each other [16]. Technological planning is viewed as human social planning by Orlikowski and Robey [17]. They assert that technology can change both social and administrative structures [18] by shaping the way individuals think, the choices they make, and their objectives of potential consequences [19] [20].

Recasting structure and organisation as an interdependent duality is the goal of structural theory. The Giddens' 'dimensions of the duality of structure' model has been a central part of previous structuration thinking about information systems.The origins of knowledge management place greater significance on the psychological legacy of organizational communication rather than the technological legacy of information management systems. Social theories, such as Anthony Giddens' structuration theory, emphasize that workplace interactions extend beyond mere communication. Therefore, successful knowledge management demands a shift away from simplistic knowledge transfer models towards addressing more complex challenges, including harnessing the power of social interaction to benefit organizations.

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online):0493-2137
E-Publication: Online Open Access
Vol: 57 Issue: 06:2024
DOI: 10.5281/zenodo.12515989

V. KNOWLEDGE MANAGEMENT CONCEPTS AND TOOLS

A thorough examination of knowledge tools requires understanding fundamental concepts such as data, information, and knowledge management. As a result, distinct data sources can be associated with identical data and classified according to the used interpretation model. The combination of experience, values, contextual information, and experienced professional viewpoints in the design of a workflow is referred to as knowledge [21], a combination of knowledge, context, and experience. Members of an organization can learn something new through hands-on experience when they use structured knowledge management.

Organizations risk losing valuable information in the future if most of their organizational knowledge is not documented. Customer knowledge management becomes critical in assisting businesses in identifying, addressing, and remediating management vulnerabilities. Therefore, organizations should document their knowledge to be accessed at any time. In other words, knowledge management can be thought of as a systematic approach to organizing and disseminating information [22] [23] [24] [25]. According to Ruggles [26], organizational management applications can benefit from so-called knowledge management systems. Tyndale asserts that knowledge management instruments improve decision-making processes by stimulating and facilitating knowledge-based processes [27].

Through knowledge structuring and sharing [28], the system can construct knowledge management objectives as a transformational process in managing knowledge. Grantham and Nichols [29] emphasized that knowledge management technologies aid in clarifying expectations, accelerating communication, acquiring implicit knowledge, and the innovation and knowledge frameworks for future use. A typology in knowledge management study was developed better to understand IT-based knowledge management instruments [30].

Lee and Hong divide knowledge management into four activities: knowledge integration, knowledge acquisition, knowledge transfer, and information exploitation. We will discuss the various types of information technology that can assist with knowledge management in this framework. The authors have used networked technologies (email, groupware, video conferencing, and blogs) to evolve and transfer knowledge. Multimedia technologies are expected to play a significant role in various knowledge applications [31].

VI. MODEL OF KNOWLEDGE MANAGEMENT SYSTEM

Software tools are ineffective at managing knowledge because they may lead to knowledge misconceptions due to the wide variety of types of knowledge available to be managed. Developing software tools entails some complex task streams to cultivate knowledge sharing. Mellor [32] pointed out that software solutions for knowledge management are not limited to data management but also include design development, dissemination, knowledge sharing, and data management. The organization must

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online):0493-2137
E-Publication: Online Open Access
Vol: 57 Issue: 06:2024
DOI: 10.5281/zenodo.12515989

develop a definition of knowledge related to management strategies to accomplish this. Knowledge management tools, which combine experience and information, provide a framework for decision-making. Understanding the function, how it relates to the employee, the scope of the work, and the methodology used to perform the function. Therefore, it is critical to place a high value on knowledge management systems, including tools, environments, and human resources.

Each of the four elements of a knowledge management method constantly interacts with the other two elements. The figure depicts a technological structure model [33] [34] or adaptive structuring theory [35] that illustrates the relationship between technological components, human components, and organizational context components of knowledge management systems [36].

Thus, the effectiveness of a knowledge management system is determined by four factors: technology, human resources, processes, and the environment. The diagram of knowledge management strategy illustrates the flow of an organization's strategic plan. Along with knowledge accumulation and sharing concepts, it is recommended that four elements of the knowledge management method be implemented as part of the knowledge management strategy: software tool features, incentive structures, necessary communication and training resources, and activity priorities.

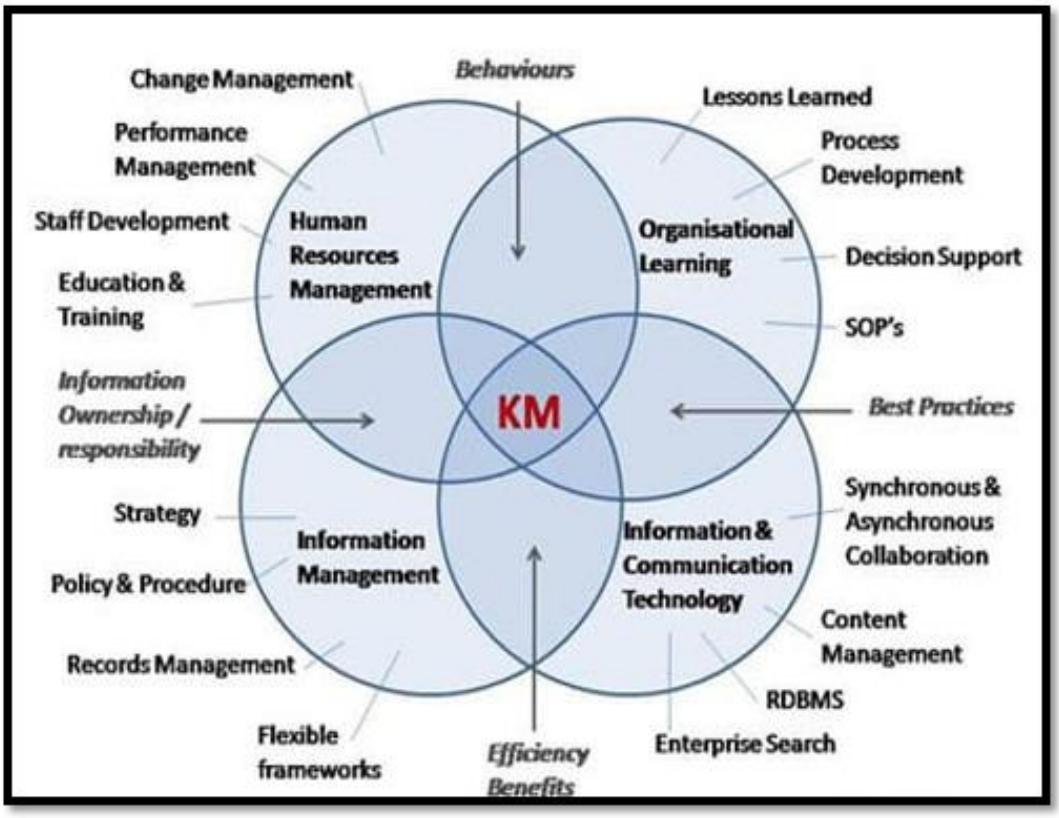

Fig 1: Four elements that comprise a knowledge management system

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online):0493-2137
E-Publication: Online Open Access
Vol: 57 Issue: 06:2024
DOI: 10.5281/zenodo.12515989

VII. KNOWLEDGE MANAGEMENT AND ENTERPRISE SYSTEMS

Enterprise systems and knowledge management contribute to an organization's ability to remain relevant and competitive [37]. Enterprise systems require a diverse group of people, each with varying knowledge and expertise, to be effectively managed. According to the literature on enterprise systems, to get the most out of an enterprise system, it is necessary to manage knowledge carefully throughout its lifecycle throughout its entire lifecycle.

There are five distinct types of knowledge required to implement Enterprise Systems successfully. The five types of knowledge management are business knowledge, technical knowledge, product knowledge, company-specific knowledge, and project knowledge.

Knowledge management is frequently referred to as a phased, systematic process. Knowledge Management is conceptualized in this study as a four-phase process consisting of the following phases [38]:

- Knowledge generation,
- Knowledge retention,
- Knowledge dissemination, and
- Knowledge integration.

As defined by Pentland, knowledge management is "a collection of activities embedded in an organization's social and physical structure that generate knowledge." Each phase contributes to the enterprise system knowledge base that will be used later. This study believes that concepts and theories are necessary for an enterprise system knowledge base. There is currently no widely accepted standard methodology for knowledge management that significantly increases enterprise success, according to. Its objective is to understand better the impact of knowledge management on the success of enterprise systems.

Establishing an enterprise system-knowledgebase is a critical objective, and it is necessary to establish and maintain it. A third party's involvement in the implementation of new systems involves more than just getting the system to work; it also involves gaining knowledge of the system's implementation, operation and maintenance, and training. The stakeholder involved in the enterprise system knowledge base is illustrated in Figure 2 [39]. Customers, enterprise system vendors, and consultants (knowledge sources) are all jointly responsible for developing the knowledgebase by pooling their respective software-specific, business process-specific, and organizational expertise.

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online):0493-2137
E-Publication: Online Open Access
Vol: 57 Issue: 06:2024
DOI: 10.5281/zenodo.12515989

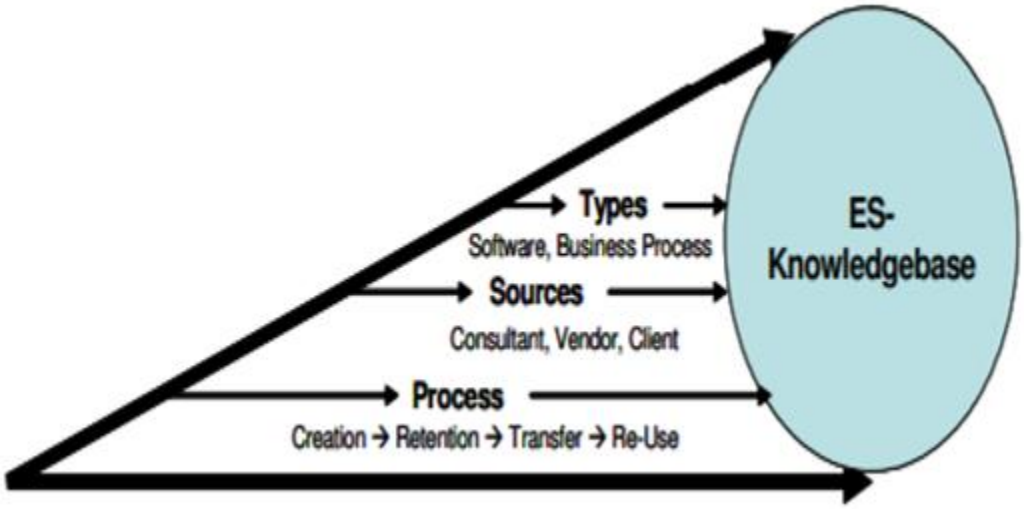

Fig 2: Contributing to the knowledge base of the Enterprise System

It is defined as a collection of software and business process knowledge generated, retained, transferred, and reused by consultants, vendors, and clients throughout an organization. According to DeSanctis and Poole, procurement and order fulfillment structures are technology procedures, skills, and knowledge that influence and impact the system's involvement in these processes.

They classify six significant sources of influence on an organization's structure [40] [41]:

- System outputs,
- Task and
- Internal environment outputs and
- Inputs, and
- External environment outputs and
- Inputs.

When applied to the context of scientific investigation, structuration theory states that software and business process knowledge can be defined as enterprise system-knowledgebase structures.

VIII. CONCLUSION

The model's application demonstrates that a focus on human resource functionality and organisational aspects is a priority in achieving knowledge management technology effectiveness, as demonstrated by the model's application of strengths in knowledge management process activities. In addition, the integrity of the knowledge management system is supported by the organization's culture, which is described below. When it

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online):0493-2137
E-Publication: Online Open Access
Vol: 57 Issue: 06:2024
DOI: 10.5281/zenodo.12515989

comes to knowledge management, organisations must combine the advantages of both centralised and decentralised strategies, while also taking into consideration the need to manage both explicit and implicit knowledge.

References

1) Deeba K, O. Rama Devi, Mohammed Saleh Al Ansari, Bhargavi Peddi Reddy, Manohara H T, Yousef A. Baker El-Ebiary and Manikandan Rengarajan, “Optimizing Crop Yield Prediction in Precision Agriculture with Hyperspectral Imaging-Unmixing and Deep Learning” International Journal of Advanced Computer Science and Applications(IJACSA), 14(12), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0141261.

2) S. Bamansoor et al., "Evaluation of Chinese Electronic Enterprise from Business and Customers Perspectives," 2021 2nd International Conference on Smart Computing and Electronic Enterprise (ICSCEE), 2021, pp. 169-174, doi: 10.1109/ICSCEE50312.2021.9498093.

3) Artika Farhana, Nimmati Satheesh, Ramya M, Janjhyam Venkata Naga Ramesh and Yousef A. Baker El-Ebiary, “Efficient Deep Reinforcement Learning for Smart Buildings: Integrating Energy Storage Systems Through Advanced Energy Management Strategies” International Journal of Advanced Computer Science and Applications(IJACSA), 14(12), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0141257.

4) Altrad et al., "Amazon in Business to Customers and Overcoming Obstacles," 2021 2nd International Conference on Smart Computing and Electronic Enterprise (ICSCEE), 2021, pp. 175-179, doi: 10.1109/ICSCEE50312.2021.9498129. IEEE Explore, Scopus

5) Y. A. Baker El-Ebiary et al., "Mobile Commerce and its Apps - Opportunities and Threats in Malaysia," 2021 2nd International Conference on Smart Computing and Electronic Enterprise (ICSCEE), 2021, pp. 180-185, doi: 10.1109/ICSCEE50312.2021.9498228.

6) Lakshmi K, Sridevi Gadde, Murali Krishna Puttagunta, G. Dhanalakshmi and Yousef A. Baker El-Ebiary, “Efficiency Analysis of Firefly Optimization-Enhanced GAN-Driven Convolutional Model for Cost-Effective Melanoma Classification” International Journal of Advanced Computer Science and Applications(IJACSA), 14(11), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0141175.

7) G. Kanaan, F. R. Wahsheh, Y. A. B. El-Ebiary, W. M. A. F. Wan Hamzah, B. Pandey and S. N. P, "An Evaluation and Annotation Methodology for Product Category Matching in E-Commerce Using GPT," 2023 International Conference on Computer Science and Emerging Technologies (CSET), Bangalore, India, 2023, pp. 1-6, doi: 10.1109/CSET58993.2023.10346684.

8) F. R. Wahsheh, Y. A. Moaiad, Y. A. Baker El-Ebiary, W. M. Amir Fazamin Wan Hamzah, M. H. Yusoff and B. Pandey, "E-Commerce Product Retrieval Using Knowledge from GPT-4," 2023 International Conference on Computer Science and Emerging Technologies (CSET), Bangalore, India, 2023, pp. 1-8, doi: 10.1109/CSET58993.2023.10346860.

9) P. R. Pathmanathan et al., "The Benefit and Impact of E-Commerce in Tourism Enterprises," 2021 2nd International Conference on Smart Computing and Electronic Enterprise (ICSCEE), 2021, pp. 193-198, doi: 10.1109/ICSCEE50312.2021.9497947.

10) F. H. Zawaideh, W. Abu-Ulbeh, S. A. Mjlae, Y. A. B. El-Ebiary, Y. Al Moaiad and S. Das, "Blockchain Solution For SMEs Cybersecurity Threats In E-Commerce," 2023 International Conference on Computer Science and Emerging Technologies (CSET), Bangalore, India, 2023, pp. 1-7, doi: 10.1109/CSET58993.2023.10346628.

11) International Conference on Smart Computing and Electronic Enterprise (ICSCEE), 2021, pp. 199-205, doi: 10.1109/ICSCEE50312.2021.9498175.

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online):0493-2137
E-Publication: Online Open Access
Vol: 57 Issue: 06:2024
DOI: 10.5281/zenodo.12515989

12) F. H. Zawaideh, W. Abu-ulbeh, Y. I. Majdalawi, M. D. Zakaria, J. A. Jusoh and S. Das, "E-Commerce Supply Chains with Considerations of Cyber-Security," 2023 International Conference on Computer Science and Emerging Technologies (CSET), Bangalore, India, 2023, pp. 1-8, doi: 10.1109/CSET58993.2023.10346738.

13) S. M. S. Hilles et al., "Latent Fingerprint Enhancement and Segmentation Technique Based on Hybrid Edge Adaptive DTV Model," 2021 2nd International Conference on Smart Computing and Electronic Enterprise (ICSCEE), 2021, pp. 8-13, doi: 10.1109/ICSCEE50312.2021.9498025.

14) S. M. S. Hilles et al., "Adaptive Latent Fingerprint Image Segmentation and Matching using Chan-Vese Technique Based on EDTV Model," 2021 2nd International Conference on Smart Computing and Electronic Enterprise (ICSCEE), 2021, pp. 2-7, doi: 10.1109/ICSCEE50312.2021.9497996.

15) Moresh Mukhedkar, Chamandeep Kaur, Divvela Srinivasa Rao, Shweta Bandhekar, Mohammed Saleh Al Ansari, Maganti Syamala and Yousef A.Baker El-Ebiary, “Enhanced Land Use and Land Cover Classification Through Human Group-based Particle Swarm Optimization-Ant Colony Optimization Integration with Convolutional Neural Network” International Journal of Advanced Computer Science and Applications(IJACSA), 14(11), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0141142.

16) Sweety Bakyarani. E, Anil Pawar, Sridevi Gadde, Eswar Patnala, P. Naresh and Yousef A. Baker El-Ebiary, “Optimizing Network Intrusion Detection with a Hybrid Adaptive Neuro Fuzzy Inference System and AVO-based Predictive Analysis” International Journal of Advanced Computer Science and Applications(IJACSA), 14(11), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0141131.

17) N. A. Al-Sammarraie, Y. M. H. Al-Mayali and Y. A. Baker El-Ebiary, "Classification and diagnosis using back propagation Artificial Neural Networks (ANN)," 2018 International Conference on Smart Computing and Electronic Enterprise (ICSCEE), Shah Alam, Malaysia, 2018, pp. 1-5. 19 November 2018, DOI: 10.1109/ICSCEE.2018.8538383.

18) B. Pawar, C Priya, V. V. Jaya Rama Krishnaiah, V. Antony Asir Daniel, Yousef A. Baker El-Ebiary and Ahmed I. Taloba, “Multi-Scale Deep Learning-based Recurrent Neural Network for Improved Medical Image Restoration and Enhancement” International Journal of Advanced Computer Science and Applications(IJACSA), 14(10), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0141088.

19) Nripendra Narayan Das, Santhakumar Govindasamy, Sanjiv Rao Godla, Yousef A.Baker El-Ebiary and E.Thenmozhi, “Utilizing Deep Convolutional Neural Networks and Non-Negative Matrix Factorization for Multi-Modal Image Fusion” International Journal of Advanced Computer Science and Applications(IJACSA), 14(9), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0140963.

20) Moresh Mukhedkar, Divya Rohatgi, Veera Ankalu Vuyyuru, K V S S Ramakrishna, Yousef A.Baker El-Ebiary and V. Antony Asir Daniel, “Feline Wolf Net: A Hybrid Lion-Grey Wolf Optimization Deep Learning Model for Ovarian Cancer Detection” International Journal of Advanced Computer Science and Applications(IJACSA), 14(9), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0140962.

21) N. V. Rajasekhar Reddy, Araddhana Arvind Deshmukh, Vuda Sreenivasa Rao, Sanjiv Rao Godla, Yousef A.Baker El-Ebiary, Liz Maribel Robladillo Bravo and R. Manikandan, “Enhancing Skin Cancer Detection Through an AI-Powered Framework by Integrating African Vulture Optimization with GAN-based Bi-LSTM Architecture” International Journal of Advanced Computer Science and Applications(IJACSA), 14(9), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0140960.

22) Maddikera Krishna Reddy, J. C. Sekhar, Vuda Sreenivasa Rao, Mohammed Saleh Al Ansari, Yousef A.Baker El-Ebiary, Jarubula Ramu and R. Manikandan, “Image Specular Highlight Removal using Generative Adversarial Network and Enhanced Grey Wolf Optimization Technique” International Journal of Advanced Computer Science and Applications(IJACSA), 14(6), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0140668.

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online):0493-2137
E-Publication: Online Open Access
Vol: 57 Issue: 06:2024
DOI: 10.5281/zenodo.12515989

23) K. Sundaramoorthy, R. Anitha, S. Kayalvili, Ayat Fawzy Ahmed Ghazala, Yousef A.Baker El-Ebiary and Sameh Al-Ashmawy, “Hybrid Optimization with Recurrent Neural Network-based Medical Image Processing for Predicting Interstitial Lung Disease” International Journal of Advanced Computer Science and Applications(IJACSA), 14(4), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0140462.

24) Yousef Methkal Abd Algani, B. Nageswara Rao, Chamandeep Kaur, B. Ashreetha, K. V. Daya Sagar and Yousef A. Baker El-Ebiary, “A Novel Hybrid Deep Learning Framework for Detection and Categorization of Brain Tumor from Magnetic Resonance Images” International Journal of Advanced Computer Science and Applications(IJACSA), 14(2), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0140261.

25) Y. A. Baker El-Ebiary et al., "Blockchain as a decentralized communication tool for sustainable development," 2021 2nd International Conference on Smart Computing and Electronic Enterprise (ICSCEE), 2021, pp. 127-133, doi: 10.1109/ICSCEE50312.2021.9497910.

26) Ravi Prasad, Dudekula Siddaiah, Yousef A.Baker El-Ebiary, S. Naveen Kumar, K Selvakumar “Forecasting Electricity Consumption Through A Fusion Of Hybrid Random Forest Regression And Linear Regression Models Utilizing Smart Meter Data” Journal of Theoretical and Applied Information Technology, Vol. 101. No. 21 (2023).

27) Franciskus Antonius, Purnachandra Rao Alapati, Mahyudin Ritonga, Indrajit Patra, Yousef A. Baker El-Ebiary, Myagmarsuren Orosoo and Manikandan Rengarajan, “Incorporating Natural Language Processing into Virtual Assistants: An Intelligent Assessment Strategy for Enhancing Language Comprehension” International Journal of Advanced Computer Science and Applications(IJACSA), 14(10), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0141079.

28) Y. A. Baker El-Ebiary et al., "Track Home Maintenance Business Centers with GPS Technology in the IR 4.0 Era," 2021 2nd International Conference on Smart Computing and Electronic Enterprise (ICSCEE), 2021, pp. 134-138, doi: 10.1109/ICSCEE50312.2021.9498070.

29) Venkateswara Rao Naramala, B. Anjanee Kumar, Vuda Sreenivasa Rao, Annapurna Mishra, Shaikh Abdul Hannan, Yousef A.Baker El-Ebiary and R. Manikandan, “Enhancing Diabetic Retinopathy Detection Through Machine Learning with Restricted Boltzmann Machines” International Journal of Advanced Computer Science and Applications(IJACSA), 14(9), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0140961.

30) K. N. Preethi, Yousef A. Baker El-Ebiary, Esther Rosa Saenz Arenas, Kathari Santosh, Ricardo Fernando Cosio Borda, Jorge L. Javier Vidalón, Anuradha. S and R. Manikandan, “Enhancing Startup Efficiency: Multivariate DEA for Performance Recognition and Resource Optimization in a Dynamic Business Landscape” International Journal of Advanced Computer Science and Applications (IJACSA), 14(8), 2023. http://dx.doi.org/10.14569/IJACSA.2023.0140869.

31) S. I. Ahmad Saany et al., "Exploitation of a Technique in Arranging an Islamic Funeral," 2021 2nd International Conference on Smart Computing and Electronic Enterprise (ICSCEE), 2021, pp. 1-8, doi: 10.1109/ICSCEE50312.2021.9498224.

32) Y. M. A. Tarshany, Y. Al Moaiad and Y. A. Baker El-Ebiary, "Legal Maxims Artificial Intelligence Application for Sustainable Architecture And Interior Design to Achieve the Maqasid of Preserving the Life and Money," 2022 Engineering and Technology for Sustainable Architectural and Interior Design Environments (ETSAIDE), 2022, pp. 1-4, doi: 10.1109/ETSAIDE53569.2022.9906357.

33) J. A. Jusoh et al., "Track Student Attendance at a Time of the COVID-19 Pandemic Using Location-Finding Technology," 2021 2nd International Conference on Smart Computing and Electronic Enterprise (ICSCEE), 2021, pp. 147-152, doi: 10.1109/ICSCEE50312.2021.9498043.

34) Y. A. Baker El-Ebiary et al., "E-Government and E-Commerce Issues in Malaysia," 2021 2nd International Conference on Smart Computing and Electronic Enterprise (ICSCEE), 2021, pp. 153-158, doi: 10.1109/ICSCEE50312.2021.9498092.

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online):0493-2137
E-Publication: Online Open Access
Vol: 57 Issue: 06:2024
DOI: 10.5281/zenodo.12515989

35) S. T. Meraj et al., "A Diamond Shaped Multilevel Inverter with Dual Mode of Operation," in IEEE Access, vol. 9, pp. 59873-59887, 2021, doi: 10.1109/ACCESS.2021.3067139.

36) Mohammad Kamrul Hasan, Muhammad Shafiq, Shayla Islam, Bishwajeet Pandey, Yousef A. Baker El-Ebiary, Nazmus Shaker Nafi, R. Ciro Rodriguez, Doris Esenarro Vargas, "Lightweight Cryptographic Algorithms for Guessing Attack Protection in Complex Internet of Things Applications", Complexity, vol. 2021, Article ID 5540296, 13 pages, 2021. https://doi.org/10.1155/2021/5540296.

37) Y. A. B. El-Ebiary et al., "Determinants of Customer Purchase Intention Using Zalora Mobile Commerce Application," 2021 2nd International Conference on Smart Computing and Electronic Enterprise (ICSCEE), 2021, pp. 159-163, doi: 10.1109/ICSCEE50312.2021.9497995.

38) S. Bamansoor et al., "Efficient Online Shopping Platforms in Southeast Asia," 2021 2nd International Conference on Smart Computing and Electronic Enterprise (ICSCEE), 2021, pp. 164-168, doi: 10.1109/ICSCEE50312.2021.9497901.

39) Ghanem W.A.H.M. et al. (2021) Metaheuristic Based IDS Using Multi-Objective Wrapper Feature Selection and Neural Network Classification. In: Anbar M., Abdullah N., Manickam S. (eds) Advances in Cyber Security. ACeS 2020. Communications in Computer and Information Science, vol 1347. Springer, Singapore. https://doi.org/10.1007/978-981-33-6835-4_26

40) Y. A. B. El-Ebiary, S. Almandeel, W. A. H. M. Ghanem, W. Abu-Ulbeh, M. M. M. Al-Dubai and S. Bamansoor, "Security Issues and Threats Facing the Electronic Enterprise Leadership," 2020 International Conference on Informatics, Multimedia, Cyber and Information System (ICIMCIS), 2020, pp. 24-28, doi: 10.1109/ICIMCIS51567.2020.9354330.

41) Y. A. B. El-Ebiary, "The Effect of the Organization Factors, Technology and Social Influences on E-Government Adoption in Jordan," 2018 International Conference on Smart Computing and Electronic Enterprise (ICSCEE), Shah Alam, Malaysia, 2018, pp. 1-4. 19 November 2018, DOI: 10.1109/ICSCEE.2018.8538394.