International Journal of Knowledge Processing Studies
(KPS)
Homepage: http://kps.artahub.ir/

ORIGINAL RESEARCH ARTICLE

Ranking of the Critical Success Factors of Knowledge Management in the Central Bank of the Islamic Republic of Iran

Azizeh Sarmadi [1], Mohammad Hassanzadeh[2,*], Fahimeh Babalahavaeji[3], Nadjla Hariri[4]

[1]*PhD. Student of Department of Information and Knowledge Science, Science and Research Branch, Islamic Azad University, Tehran, Iran. azamsougol@gmail.com*
[2]*Full Professor, Department of Information and Knowledge Science, Tarbiat Modares University, Tehran, Iran. (Corresponding author) hasanzadeh@modares.ac.ir, 0000-0002-6175-0855*
[3]*Professor, Department of Information and Knowledge Science, Azad Islamic University, Tehran, Iran. f.babalhavaeji@gmail.com*
[4]*Professor, Department of Information and Knowledge Science, Azad Islamic University, Tehran, Iran. nadjlahariri@gmail.com*

ARTICLE INFO

Article History:
Received: 2024-06-13
Revised: 2024-08-18
Accepted: 2024-08-29
Published Online: 2025-03-01

Keywords:
Knowledge Management, Critical Factors, Central Bank.

Number of Reference: 61
Number of Figures: 3
Number of Tables: 6

DOI: 10.22034/kps.2024.462748.1186

ABSTRACT

The research aims to rank the critical success factors of knowledge management within the Central Bank of the Islamic Republic of Iran. This research employed a mixed-methods approach, combining qualitative and quantitative techniques. In the qualitative phase, the metasynthesis method was utilized, following the seven-step protocol established by Sandelowski and Barroso, using NVivo software. The quantitative phase was based on a fuzzy hierarchical approach implemented in Excel software. A checklist was developed which was distributed to 20 experts in the fields of information science and epistemology, as well as professionals with experience in knowledge management. Selected bank managers were purposefully included in the study and were asked to determine the weight of the indicators by selecting from nine options in a pairwise comparison format The findings reveal that leadership, with a weight of 0.213, ranks first; human resources, with a weight of 0.173, ranks second; and education, with a weight of 0.157, ranks third. Organizational structure follows in fourth place with a weight of 135.4, while infrastructure technology ranks fifth with a weight of 0.124. Evaluation and measurement of knowledge is ranked sixth with a weight of 0.103, and organizational culture ranks seventh with a weight of 0.095. Considering the complexities of the central bank and its sensitive role in regulating and monitoring the country's financial system, attention to these critical success factors of knowledge management not only enhances internal productivity but also directly influences the development of financial policies and the improvement of decision-making capabilities at the macro level.

►**Citation:** Sarmadi, A., Hassanzadeh, M., Babalahavaeji, F., & Hariri, N. (2025). Ranking of the Critical Success Factors of Knowledge Management in the Central Bank of the Islamic Republic of Iran. *International Journal of Knowledge Processing Studies (KPS)*, 5(1): 38-57. Doi: 10.22034/kps.2024.462748.1186

1. Introduction

In today's era, we are witnessing the rise of knowledge-based organizations. To acquire new knowledge resources, knowledge management has increasingly focused on innovative theories such as socio-oriented knowledge management, which aims to harness the vast knowledge resources of customers (Ode & Ayavoo, 2020). Knowledge management encompasses courses offered in business management, information systems, library science, and information science (Martínez-Martínez et al., 2023). Furthermore, many large companies, institutions, and non-profit organizations allocate resources to internal knowledge management initiatives, often integrating these efforts into their business strategies, IT departments, or human resource management (Koshelieva et al., 2023). Typically, knowledge management initiatives are directed toward achieving organizational goals such as performance enhancement, innovation, competitive advantage, the sharing of lessons learned, integration, and continuous improvement (Zhang et al., 2023). Consequently, knowledge management comprises a set of methods related to the creation, sharing, utilization, and management of an organization's knowledge and information (Abu-AlSondos, 2023). Additionally, Rajeb and Arisha (2013) define knowledge management as a deliberate strategy for organizations to ensure that the right knowledge reaches the right people at the right time, thereby enabling individuals to facilitate and apply information in ways that enhance organizational performance. Knowledge management is recognized as one of the most critical strategic resources for the success of any organization (Seifollahi, 2021). The Central Bank of the Islamic Republic of Iran, as the primary authority in monetary, banking, and foreign exchange matters, plays a crucial role in policy formulation, decision-making, and overseeing the implementation of monetary, banking, and foreign exchange laws. This organization must maintain its independence to effectively pursue its goals, mission, and organizational objectives without hindrance. The necessity for independence, along with the freedom to make decisions and formulate policies in these areas, is essential for acquiring the most current and vital information related to economic issues both domestically and globally. Economic conditions in any country are influenced by both internal and global economic factors. Moreover, as widely acknowledged, the challenge of the modern era lies not in obtaining information, but in effectively and efficiently utilizing the vast amounts of available information and optimally managing it (Dalkir, 2005).

The effective and efficient utilization of vast amounts of information brings to mind the concept of "knowledge management". To transform the central bank into a knowledge-based organization, it is essential to implement knowledge management strategies. In today's world, the focus of development and leadership is not merely on wealth or a large workforce, but rather on human knowledge and the ability to manage this knowledge effectively. Knowledge management is an ongoing process that begins with simple meetings and conversations, gradually influencing the thoughts, beliefs, and behaviors of employees, ultimately becoming a new way of life (Fazlali, 2012; Chen et al., 2004; Talebi et al., 2011).

Today, it serves as a tool to enhance productivity and gain competitive advantages. This can only be achieved when knowledge is managed effectively within the complex and competitive business environment of today. The primary reason for adopting knowledge management is to assist organizations in integrating new knowledge with existing knowledge, which can enhance the connection between knowledge acquired through education and business activities.

Despite the rapid evolution of knowledge management as a means to boost productivity and improve business processes, there remains no universally accepted definition of knowledge management (Houshmand & Afsar, 2013; Saraf et al., 2013).

Knowledge management is utilized in various countries across different sectors, including the banking industry. Each country adopts distinct approaches to knowledge

management within this sector. Due to the globalization of financial markets, most banks today are transitioning towards becoming knowledge-based institutions. Knowledge, as an intangible asset for banks, should be recognized and effectively managed (Leng & Nasaroudin, 2000) because it creates value and provides a competitive advantage for organizations. Banks are customer-oriented and must therefore collect and manage customer-related knowledge to offer services and products that meet customer needs (Ping & Kebao, 2010).

Knowledge management encompasses several elements, including organizational personnel, processes, and existing technologies. In the realm of knowledge management, information technology plays a crucial role. Although knowledge management is not synonymous with technology, the latter is vital for the success of knowledge management initiatives (Fathi Easa, 2019). In the banking sector, the element of personnel includes four distinct groups: investors, employees, customers, and management. Information and communication technologies are fundamental to the knowledge management aspirations of each of these groups (Leng & Naseruddin, 2000).

Drucker asserted in 1988 that organizations must evolve into knowledge organizations to compete and survive (cited in Ping and Kebao, 2010). Despite the World Bank's implementation of knowledge management in 1996, research conducted by the International Data Corporation revealed that only 20% of 600 European banks employ knowledge management processes. In 2000, European banks invested approximately $155.4 million in knowledge management, and by 2004, this figure had risen to $511.4 million (Rebiere & Chu, 2001).

Today, with the rapid expansion of the Internet and the proliferation of new technologies in the banking industry, the necessity for effective knowledge management has become increasingly apparent. Conversely, if employees possess adequate knowledge and expertise, and the organization has the appropriate infrastructure, but this knowledge is not managed effectively, the organization may decline and fail to achieve a competitive advantage. If knowledge is not captured in a timely manner, it will not be refined to adapt to changing needs; it may not be utilized effectively or appropriately; it may not be well internalized by the organization's personnel; and the creation of organizational memory may be hindered, ultimately depriving the organization of its benefits. Therefore, this study aims to identify the critical success factors of knowledge management, allowing us to rank these factors and provide useful recommendations for the Central Bank of the Islamic Republic of Iran. Consequently, the two primary questions addressed in this research are:

- What are the critical success factors of knowledge management in the Central Bank of Iran?
- What is the ranking of the critical success factors of knowledge management in the Central Bank of the Islamic Republic of Iran?

2. Literature Review

2.1. Knowledge Management

Knowledge management encompasses a set of processes that leverage knowledge as a critical factor for creating value. The primary components of knowledge management include the creation, acquisition, registration, transfer, and application of knowledge (Bazarkar and Haji Mohammadi, 2018).

Knowledge management practices consist of strategies, initiatives, and activities that foster sensitivity, facilitate transfer, disseminate, utilize, generalize, and store knowledge (Donat & Pablo, 2015; Ode & Ayavoo, 2020). While knowledge management can enhance innovation performance, not all actions are directly linked to innovation. Some findings indicate that knowledge protection practices do not have a direct effect on innovation (Inkinen, 2015).

Knowledge management is cultivated through learning processes and contributes to improved organizational performance, manifesting in both implicit and explicit forms. Tacit knowledge is deeply embedded in action, commitment, and participation, making it challenging to formalize and

communicate. In contrast, explicit knowledge is articulated in formal language, is systematic and transferable, and can be documented in libraries, archives, and databases. There exists a continuous interaction between tacit and explicit knowledge, occurring through individuals, groups, and organizations, ultimately returning to individuals (Schniederjans et al., 2020).

An examination of the dimensions of knowledge management across various fields reveals a lack of consensus on the subject. Some perspectives emphasize technical and technological factors, others focus on human and cultural factors, while a third category combines these elements as determinants of successful knowledge management (Naqshbandi et al., 2023).

2.2. Knowledge management in the banking industry

Knowledge management in banking means using appropriate methods, processes and technologies to capture, store, transfer and share knowledge in the banking industry. This process includes all the activities that are used to manage the knowledge and information needed to perform banking operations (Karyatun et al., 2023). In order to manage knowledge in the field of banking, the existing knowledge in the organization must be identified first. It includes technical, operational, strategic and managerial knowledge required to perform various tasks in banking. Then, processes and systems must be created to aquisition, store and share this knowledge (Al-Dmour et al., 2023). Therefore, the use of new technologies such as knowledge management systems, knowledge base, artificial intelligence systems and data analysis can help improve knowledge management in banking. Also, holding training courses and professional development for employees can also help to increase their knowledge and abilities (Mohammed et al., 2024). Therefore, the effective factors in knowledge management in the banking industry are: T-shaped skills, concentration, learning (Hasanpour et al., 2012).

2-3-Central Bank of I.R. of Iran: is the institution responsible for overseeing the financial and banking services in Iran. It was established and began operations in Tehran on August 18, 1960, with a capital of 3.6 billion rials. According to Article 10 of the Monetary and Banking Law of Iran, the bank is tasked with regulating and implementing credit and monetary policy in alignment with the country's overall economic strategy. Its responsibilities include maintaining the internal and external value of the national currency, issuing banknotes, minting common metal coins, regulating currency and Rial transactions, monitoring the export and import of foreign currency, and overseeing the country's monetary and credit system. Additionally, the central bank is responsible for supervising banks and credit institutions (Central Bank website, 2024).

Seifollahi (2021) conducted a study titled "Investigating the Impact of Knowledge Management Dimensions on Organizational Productivity, that knowledge management dimensions significantly affect the dependent variable, namely organizational productivity. The study underscores the importance of knowledge management in enhancing organizational productivity. These findings align with the trend of organizations increasingly prioritizing knowledge management to boost productivity.

Mahmoudi (2014) assessed the status and prioritization of success factors in knowledge management within the libraries of Ferdowsi University and Shahid Chamran University of Ahvaz through applied survey research, utilizing the standard questionnaire developed by Heng et al. The results indicate that support from senior management and effective knowledge architecture are the most critical factors for advancing knowledge management programs in libraries, according to the librarians' perspectives. Motalaei (2017), in a study titled "Categorizing the Key Success Factors of Knowledge Management in Bank Parsian, from the viewpoints of managers and employees at Bank Parsian in Tehran, factors such as organizational culture, organizational structure, human resources, and information technology significantly influence the implementation of knowledge management within the bank.

Razavi and Tamadon (2018) conducted a study titled "Investigation of the Basic Success Factors in the Implementation of Knowledge Management in Public Libraries of Gilan Province. results indicated that the infrastructure of information systems is the most significant factor for success, while knowledge-oriented orientation was identified as the least influential factor in the successful implementation of knowledge management in public libraries of Gilan Province, according to the respondents. Tabatabaei et al. (2022) conducted a study titled "Designing a Model of Enabling Knowledge Management in Relief Organizations. the factor of specific strategies and goals in knowledge management capabilities, the support of senior managers is the most influential and critical factor in applying knowledge management. In fact, organizational managers serve as role models for all employees and should possess sufficient knowledge about knowledge management and its benefits within the organization. Shabanpour et al. (2023) conducted a study titled "Designing an Infrastructure Model for the Implementation of Knowledge Management in Public Companies in Gilan Province. Among the five identified factors, motivation, organizational maturity, structural, and technical factors significantly impact the implementation of knowledge management.

Ayatollahi & Zareem Kar (2020) conducted a study titled "Effective Factors in the Success of the Knowledge Management Process in Healthcare Organizations. The results indicated that organizational culture, information technology, organizational structure, and performance evaluation were among the most effective success factors in the implementation of knowledge management in healthcare organizations.

Loke et al. (2020) conducted a study titled "Knowledge Management Perspective in This Millennium: Are Knowledge Management Elements Still Important in Company Performance Today? The findings revealed that, among the three elements of knowledge management, only knowledge acquisition and knowledge use remain related to organizational performance in Malaysia, while knowledge sharing is considered less important.

Adileh et al. (2020) conducted a study titled "Evaluation of the Relationship Between Knowledge Management and Company Performance. The results demonstrated that the use of knowledge has the most explanatory power for performance in both medium and large companies, while knowledge acquisition was only effective for the performance of medium-sized companies and had no impact on large companies.

Al-Dmour et al. (2020) conducted a study titled "The Impact of Knowledge Management Performance on Digital Financial Innovation: The Role of Bank Managers. The empirical findings indicate that the performance of knowledge management functions has a positive and significant relationship with digital financial innovation.

El-Chaaran et al. (2020) conducted research titled "Knowledge Management and Job Performance: The Case of the Lebanese Banking Sector. This study demonstrates that knowledge acquisition, knowledge sharing, knowledge creation, and knowledge maintenance positively affect job performance in the Lebanese banking sector.

Easa (2021) noted that few studies have linked knowledge management in banks to various issues, including innovation, customer relationship management, and risk management.

Jabeen & Al Dari (2023) conducted research entitled "A Framework for Integrating the Benefits of Knowledge Management in United Arab Emirates Organizations. Their findings indicate that knowledge management capabilities, internal motivation, and organizational learning significantly enhance organizational performance. Additionally, organizational learning mediates the relationship between knowledge management capabilities, extrinsic motivation, intrinsic motivation, and human resource practices.

In their research, Dizaji et al. (2023) examined the integration model of social capital with innovative knowledge management to gain a competitive advantage and develop the banking sector in their

country. The results from the interpretive structural modeling method revealed that the tangible and cognitive dimensions, knowledge gathering, and knowledge dissemination exert the most influence, while the responsiveness component plays a crucial role in integrating these variables. Santos et al. (2023) conducted a study titled "Understanding Implementations and Limitations in Knowledge Management and Knowledge Sharing Using a Systematic Literature Review. Their findings suggest that knowledge sharing, along with the exchange, dissemination, and use of knowledge, as well as knowledge acquisition, represents best practices that organizations can implement to enhance knowledge management. Table 1 identifies the key success factors for implementing knowledge management based on previous studies. Reason: Improved clarity, readability, and technical accuracy while correcting grammatical and punctuation errors.

Table 1. *Key Success Factors for Knowledge Management Implementation*

Researcher/researchers	**Research history**	**Success factors of knowledge management**
Ashrafi	2009	Leadership, organizational culture, processes, apparent knowledge, hidden knowledge, knowledge centers.
Akhavan et al.	2011	Individual factors of employees, human group factors, infrastructures including technical, knowledge and financial infrastructures, organizational culture, strategic and managerial factors, knowledge management structures and processes including senior knowledge manager, organizational structure, organizational learning, performance evaluation and measurement
Ansari et al.	2012	Organizational culture, organizational structure, human resources, information technology, leadership.
Azadikhah Salimi & Hojjati	2012	Leadership, organizational culture, structure and process, information technology, human resource management.
Mahmoudzadeh et al.	2013	Organizational culture, organizational structure, strategy and leadership, information technology, human resources.
Hatami et al.	2014	Senior management support, human resource management, information technology infrastructure, knowledge sharing, knowledge management strategies and allocation of rewards for activities related to knowledge management.
Mahmoudi	2014	Organizational culture, senior management support, employee participation, training, teamwork, human resource empowerment, information systems infrastructure, knowledge-based performance measurement, modeling, knowledge architecture.
Naqvi et al.	2015	Management, organizational structure, knowledge architecture, culture, human resources, information technologies, knowledge processes, motivational rewards and knowledge content.
Smart & Afsar	2016	Organizational culture, human resources management, senior management support and information technology in order to create a knowledge-oriented culture
Motalaei	2017	Organizational structure, organizational culture, human resources, information technology and knowledge management measurement
Tabatabai et al.	2022	Strategy, goals, support of senior managers
Shabanpour et al.	2023	Motivation, organizational maturity, structure, technical infrastructure
Wong	2005	Support and leadership of senior management, culture, information technology, goal and strategy, measurement, organizational infrastructure, activities and processes, motivation, training resources and human resource management.
Cheng et al.	2009	Mission, mission, goals and values of the organization, senior management support and leadership style of the organization, management of knowledge in processes and workflow, organizational ontology drawing, information technology infrastructure.
Valmohammadi	2010	Senior management support, organizational culture, information technology, knowledge management strategy, performance evaluation, organizational infrastructures, processes and activities, reward system and motivation, the requirement to allocate resources, learning and training, human resource management, benchmarking or modeling
Danish et al.	2014	Leadership, organizational culture, information technology.
Karmi et al.	2015	Human resource management, organizational culture, goals and strategy, information technology, organizational factors.
Sayadi Turanlo et al.	2018	Lack of participation and desire to compete among employees, insufficient experience with information technology systems, differences in people's experience, time constraints, poor communication skills, and lack of management support for information sharing.
Al-Abdollat & Dababneh	2018	Organizational culture and job satisfaction of employees.
Kunthi et al.	2018	Organizational culture, organizational structure, information technology infrastructure, support of senior managers and human resources.
Nazir et al.	2018	Leadership, organizational culture, information technology.
Winadi et al.	2018	Organizational characteristics, information technology and communication infrastructures, organizational culture, strategy and leadership in support of knowledge management.

Researcher/researchers	Research history	Success factors of knowledge management
Ayatollah & Zeraatkar	2019	Organizational culture, organizational structure, information technology, performance measurement and evaluation, organization leadership.
Jamipour and colleagues	2019	Governance of knowledge management, support of senior management, communication of knowledge management and business, competitive and environmental factors, basic knowledge culture, technological capabilities, strategic view of knowledge management, skills
Yip and N.J	2019	Leadership and support of senior management, organizational culture, employee training and learning, employee participation, improvement through teamwork.
Ayatollahi and farmer	2020	Organizational culture, information technology, organizational structure and performance evaluation
Santos et al	2023	Knowledge sharing as well as exchange, dissemination and use of knowledge and knowledge acquisition

3. Method

This study employs a mixed-methods approach, integrating both qualitative and quantitative research, and is practical in terms of its objectives. Given the qualitative nature of the current research, a purposeful mixed sampling method was utilized to select the statistical sample and determine the sample size (number of participants). The purposeful combined sampling method involves the integration of two or more purposeful sampling techniques. Homogeneous sampling entails a detailed and in-depth examination of individuals with shared characteristics. After identifying the types of participants, the snowball sampling method was employed to ascertain the number of participants and to facilitate access to the necessary data for the research. In this approach, experts in the relevant field are asked to recommend other qualified experts and experienced professionals. Prior to inviting candidates to participate, a form was designed and reviewed by two subject matter experts for feedback and revisions. Additionally, these experts were requested to suggest other individuals who met the specified criteria for participation in this research. From the recommended individuals, 30 were deemed eligible. The selection of participants for the fuzzy hierarchical process in this study was based on the requisite experiences and expertise related to the subject matter. The next step involved recruiting candidates to participate in the research, which was conducted through in-person invitations, phone calls, and emails. Participants received an invitation along with a questionnaire detailing the research process and seeking their consent to participate.

Ultimately, a total of 20 individuals expressed their willingness and consent to join the Delphi working group. Consequently, this research utilized 20 experts, and the questionnaire was distributed to them. At this stage, the research community comprised 20 members from the academic fields of knowledge management, information science, epistemology, and banking management, all selected through the snowball method.

4. Findings

In this study, the metasynthesis method based on the seven steps outlined by Sandelowski and Barroso (2007) was employed to identify the components.

First Step: Designing a Research Question

In this study, the following questions were investigated: - Identifying the components of the critical success factors of knowledge management in the banking industry from 2001 to 2023 based on internal sources. - Identifying the components of the critical success factors of knowledge management in the banking industry from 2000 to 2023 based on external sources.

The Second Stage: A systematic and comprehensive review of the literature.

This research utilized foreign databases such as Science Direct, Emerald, and ProQuest, as well as Iranian databases including SID, Mogiran, the Comprehensive Portal of Humanities, and Silvica. A total of 102 studies were identified for initial review. As previously mentioned, no research has been found that comprehensively investigates these critical factors using metasynthesis and provides a suitable model for the critical success factors of knowledge management in

the banking industry. The keywords used in this research are presented in Table 2.

Table 2. *Key Words Used in the Present Research*

Key Words
Success in knowledge management
success in Knowledge management in the banking industry
Customer Knowledge Management
Customer relationship knowledge management

Third Step: Careful Evaluation of the Research and Selection of Appropriate Texts

In order to select the appropriate sources for this research, the keyword was initially searched in the databases. However, since this term was too general, many unrelated topics were retrieved. Consequently, the search terms were refined word by word until the complementary keyword management success and its English equivalent were used. Additionally, specific criteria were established to select relevant articles, which are briefly outlined in Table 3.

Table 3. *Inclusion and Exclusion Criteria for the Study*

Criterion	Input	Result
Population	All studies	-
The desired phenomenon	Knowledge management, knowledge management success	Articles not related to knowledge management, knowledge management success
Context	No restrictions	No restrictions
Publication date	From 2000 to 2023, English articles;	Articles before 2000 English articles;
Language	Persian articles from 1380 to 1402.	Articles before 1380 Persian articles.
Type of study	English and Farsi	Languages except English and Farsi
Availability	Scientific research and promotional scientific articles	Scientific articles, conferences, books and notes

In this step, the articles undergo multiple reviews, and at each stage, those that are unsuitable or do not align with the topic are eliminated from the process.

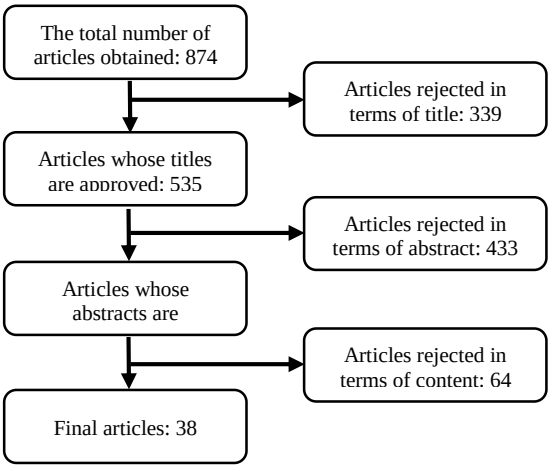

Figure 1. *Summary of the article screening process (research findings)*

The review of articles at this stage involves assessing various parameters, such as the title, abstract, content, and overall text. First, the titles of the articles are examined, and any that do not correspond to the research's purpose and questions are discarded. Next, the abstracts of the remaining articles from the previous stage are evaluated, leading to the removal of additional unrelated articles. Finally, the remaining articles are scrutinized based on their content or full text, and the final selection is made by excluding those that do not fit the topic. These selected articles will proceed to the next step of synthesis, where their methodological quality will be assessed. Figure 1 provides a summary of the article screening process.

Fourth Step: Extracting Information from Texts

In the current research, the information of the articles is categorized; The reference of each article is recorded (author's last name, year of publication of the article, title and effective components in the success of knowledge management in the banking industry) and key methodological information such as: research objective, method, procedures and measurement tools are noted and in The following table is compiled. Since the main goal of this research is to identify the critical success factors of knowledge management through a systematic review of research literature.

Fifth Step: Analysis and Synthesis of Qualitative Findings

In the present research, first all the factors extracted from the articles were considered as codes (components) and then by considering

the concept of each of these codes, they were classified in a similar concept (dimensions) to this The order of research concepts should be formed. Leadership and support of senior management, organizational culture, organizational structure, human resources management, training, information technology, and monitoring and evaluation of knowledge management are among the most important success factors of knowledge management, which are divided into three general categories: structural-organizational factors, individual-human factors, and technological factors. are classified Formulating a knowledge strategy and informing employees in this field, providing financial resources and creating motivation for employees in the category of leadership, culture of knowledge sharing and innovation in the category of organizational culture, team structure and collaborative management in the category of organizational structure, techniques for attracting and retaining human resources. Knowledge with the help of promotion and motivation tools in the category of human resources management, informing employees about the plan and its importance and progress in the category of education, providing appropriate and user-friendly software and hardware infrastructure platforms and using monitoring and measurement tools and mechanisms in The most important factors affecting the success of knowledge management are Also, the findings of previous studies show that the successful implementation of knowledge management has a significant impact on the performance of today's organizations. Customer knowledge management and the use of comprehensive human resource management and customer relationship management systems have a great impact on the success of knowledge management and gaining competitive advantages for the organization. These dimensions are given in table (4).

Table 4. *Critical success factors of knowledge management success in Central Bank*

Categories, concepts and items related to the life factors of knowledge management success from the point of view of different researchers				
Reference researchers	Indicator	Component	Dimension	No.
Akhavan et al. (2010), Ansari et al. (2013), Azadikhah Salimi & Hojjati (2013), Mahmoudzadeh et al. (2014), Hatami et al. (2015), Adli & Sohrabi (2015), Mahmoudi (2015), Mokhtarifar et al. (2014), Naqvi and co-workers (2015), Houshmand & Afsar (2016), Razavi & Tamadon (2018), Ronaghi et al. (2018), Tabatabai et al. (2001), Wong (2005), Cheng et al. (2009), Valmohammadi (2010), Siddiqui & Zand (2012), Talebi et al. (2012), Huang & Layi (2012), Oghorlou & Qazldaq (2013), Danish et al. (2014), Farzin et al. (2014). , Karami et al. (2015), Margilage & Blue (2015), Asrarulhaq & Anwar (2016), Cham et al. (2016), Mohammad Zaki & Suleiman (2017), Indra Senso et al. (2018), Sayadi Turanlu et al. 2018), Kanti et al. (2018), Nazir et al. (2018), Winadi et al. (2018), Ayatollah et al. 2020), Al-Dmore et al. (2020),	Elaboration of knowledge perspective	Strategy and vision of the organization	Leadership	1
	Compilation of written scientific strategies			
	Elaboration of knowledge management strategies			
	Development of organizational learning strategies			
	Alignment of organizational interests with personnel interests through knowledge management	Leadership support and participation		
	Support and participation of senior managers in knowledge-based plans and projects			
	Being a role model for leaders and senior managers in the field of knowledge sharing			
	The existence of personal and emotional relationships between managers and employees			
	Dealing with knowledge as a strategic resource			
	Allocation of necessary and sufficient budget and resources			
	Applying programs and procedures to create a culture of knowledge exchange, knowledge dissemination, knowledge creation and storage, documenting experiences and research results, and transferring individual knowledge to the organizational knowledge treasure.			
	Giving importance to benchmarking (getting inspiration from the existing experiences of other companies)			
	Paying attention to meeting the needs of knowledge-seeking employees	Establishment of motivational factors		
	Existence of financial and non-financial motivational factors for sharing knowledge (having a system of rewards and benefits)			
	Establishment of incentive policies based on knowledge sharing and knowledge meritocracy			
	Employee participation in decisions			
	Giving importance to group and team work			
	Allocating freedom of action to employees			
Akhavan et al. (2010), Ansari et al. (2013), Azadikhah Salimi & Hojjati (2013), Mahmoudzadeh et al. (2014), Adli & Sohrabi (2015), Mahmoudi (2015), Mokhtarifar & (2015), Naqvi et	Giving importance to growth, development and learning by employees and the organization	Employee values	Organizational culture	2
	The existence of common organizational values among employees			
	There is mutual trust between employees and managers			
	Flexibility and acceptance of new ideas			

Categories, concepts and items related to the life factors of knowledge management success from the point of view of different researchers				
Reference researchers	Indicator	Component	Dimension	No.
al. (2015), Houshmand & Afsar (2016), Matlaei (2017), Razavi & Tamadon (2018), Ronaghi et al. (2018), Shabanpour et al. Seddiqi & Zand (2012), Talebi et al. (2012), Hwang and Layi (2012), Ughorlou & Qazaldaq (2013), Danish et al. (2014), Farzin et al. (2014), Karmi et al. (2015), Margilage & Blue (2015), Asrarul Haq & Anwar (2016), Cham et al. (2016), Mohammad Zaki & Suleiman (2017), Indra Senso et al. (2018), Sayadi Turanlou et al. (2018), Al-Abdlat and Dababaneh (2018). , Kanti et al. (2018), Nazir et al. (2018), Vinadi et al. (2018), Ayatollah et al. (2019), Jamipour et al. (2019), Yip et al. , Joben and El Dury (2023), Santos et al. (2023)	Encouraging group and team activities and informal structure and accepting the principle of cooperation as an organizational necessity	Innovation culture		
	There is an atmosphere of openness in the organization			
	Transparency in the organization and an open culture for collaboration, communication and ideas			
	Welcoming change and sharing new ideas in meetings			
	To discuss and debate the strategies of the organization			
	Encouraging people to plan, control and evaluate things	Collaborative management		
	Creating motivation in the field of acquiring, applying and documenting experience and knowledge			
Akhwan et al. (2010), Ansari et al. (2013), Azadikhah Salimi and Hojjati (2013), Mahmoudzadeh et al. (2014), Adli & Sohrabi (2015), Mahmoudi (2015), Mokhtarifar et al. (2015) , Naqvi et al. (2015), Houshmand and Afsar (2016), Motalaei (2017), Ronaghi et al. (2018), Shabanpour et al., Talebi et al. (2012), Huang & Lai (2012), Atapatu & Jayakudi (2014), Farzin et al. (2014), Karmi et al. (2015), Margilage & Blue (2015), Asrarul Haq & Anwar (2016), Sayadi Turanlu et al. (2018), Kanti et al. (2018), Ayatollah et al. (2019), Jamipour et al. (2019), Adegbembo et al.	The existence of an informal and decentralized structure in the organization (non-hierarchical and flexible structure)	Internal structure	Organizational structure	3
	Making it possible to establish good and warm relations between the people of the organization			
	The existence of diverse and many working relationships among employees			
	Removing restrictions on access to information needed by senior managers within the organization			
	Ease of sharing information and facilitating relationships between different organizational units			
	Giving people the authority to make decisions about all aspects of work			
	Holding meetings without structure and instructions to discuss and review important issues of the organization			
	Flexibility in rules and ways of doing work			
	The existence of a formal structure to manage activities related to knowledge management			
	The presence of a senior knowledge manager			
	Facilitating communication with the environment outside the organization	External communications		
	Removing the restrictions on access to the required extra-organizational information			
Akhavan et al. (2010), Ansari et al. (2013), Azadikhah Salimi and Hojjati (2013), Mahmoudzadeh et al. (2014), Hatami et al. (2015), Adli & Sohrabi (20115), Mahmoudi (2015), Mokhtari Far et al. (2014), Naqvi et al. (2015), Houshmand & Afsar (2016), Motlai (2017), Razavi & Tamadon (2018), Ronoghi et al. (2018), Shabanpour et al. (2002), Wong (2005), Cheng et al. (2009), Valmohammadi (2010), Siddiqui & Zand (2012), Talebi et al. (2012), Huang & Lai (2012), Atapatu & Jayakudi (2014), Farzin & colleagues (2014), Karmi & colleagues (2015), Margilage an&d Bello (2015), Asrarul Haq & Anwar (2016), Mohammad Zaki & Suleiman (2017), Indra Senso et al. (2018), Sayadi Turanello and colleagues (2018), Al-Abdlat and Dababaneh (2018). , Kanti et al. (2018), Nazir et al. (2018), Jamipour et al. (2019), Yip and Ng (2019), Adegbembo et al. (2020), Niin & Sue and Chen	Applying people's knowledge documentation mechanisms (storing, valuing, coding and classifying knowledge and experience to improve and excel the organization's performance)	Attract and retain	Human resources	4
	Job security (employees not feeling the risk of losing their job by implementing a knowledge management system or sharing individual knowledge with others			
	Recruiting people based on knowledge qualifications			
	Systematic maintenance of scholars			
	Change management (contextualization for the implementation of knowledge management)	Training and development		
	Informing employees about knowledge strategies			
	Awareness and understanding of employees (familiarity and mastery of employees towards the knowledge management system			
	Programs for the development of academic human resources			
	knowledge sharing	Creativity and innovation		
	Knowledge generation (knowledge created by combining existing knowledge or converting data and information into knowledge as a task in addition to performing daily tasks)			
	Creating informal working groups to do things outside of official definitions and organizational hierarchies			
	The mechanism of reflecting the scientific and technical opinions of people			
	Using the capacity and power of all people			
	Design and deployment of the suggestion system			

Categories, concepts and items related to the life factors of knowledge management success from the point of view of different researchers				
Reference researchers	Indicator	Component	Dimension	No.
Aye (2020), Joben et al. Dori (2023), Santos et al. (2023)	Creating loyalty in employees by providing material and spiritual support	motivation		
	Promotion based on academic competence			
	Emphasis on the role of academics			
	Payment and reward based on knowledge			
	Job enrichment			
	job satisfaction			
	Valuing the knowledge creation of people in the organization			
	Basing reward systems and employee performance evaluation on their participation in knowledge production and sharing			
	Valuing knowledge and its owners			
Akhavan et al. (2010), Ansari et al. (2013), Azadikhah Salimi & Hojjati (2013), Adli & Sohrabi (2015), Mahmoudi (2015), MokhtariFar et al. (2015), Ronaghi et al. (2019), Wong (2005), Valmohammadi (2010), Siddiqui & Zand (2012), Kanti et al. (2018), Jamipour et al. (2019), Yip & Ng (2019), Adegbembo et al. (2020), Joben & El Dori. (2023), Santos et al. (2023)	Focus on employee training and learning as a core activity	coaching	Education	5
	Participation of people in education			
	Priority to the education of scientists			
	Priority to learning for learning and acceptance of single-loop and double-loop learning			
	Emphasis on network structure to promote knowledge			
	Transferring knowledge using the teacher-apprenticeship system			
	Experimental implementation of knowledge management system			
	Facilitating structure of knowledge discovery			
	Providing new opportunities for learning	In-service training		
	Providing problem solving and creativity training			
	Apply change management tools			
	Teaching methods of knowledge transfer to people			
	Educational methods based on the development of group learning			
	Existence of processes for modeling			
	Comparing the work processes of the organization with other similar organizations			
	The existence of guidelines for modeling			
	Existence of knowledge promotion standards			
	Formation of people by following the best experiences of others			
	Applying educational methods based on systemic thinking			
Akhavan et al. (2010), Ansari et al. (2012), Adli & Sohrabi (2014), Mahmoudi (2014), Motlai (2017), Razavi and Tamadon (2008), Wong (2005), Cheng et al. (2009), Valmohammadi (2010), Siddiqui & Zand (2012), Talebi et al. (2012), Ughorlou & Qazldaq (2013), Margilage & Bello (2015), Ayatollah & Zaremkar (2019)	Measuring the performance of employees and managers in the implementation of knowledge management processes	Evaluation items	Monitoring, evaluation and measurement of knowledge	6
	Measuring procedural knowledge or know-how and descriptive know-what knowledge created in the organization			
	Evaluation of communication networks for distribution of information and knowledge			
	Evaluation of the organizational structure in order to facilitate the distribution of information and knowledge			
	Evaluation of platforms and knowledge portals of the organization			
	Auditing and drawing a knowledge map and organizational ontology			
	Determining quantitative and qualitative criteria for measuring performance and knowledge	Evaluation criteria and mechanisms		
	Designing appropriate knowledge and performance evaluation mechanisms			
	Identify appropriate processes to facilitate knowledge exchange			
Akhwan et al. (1389), Ansari et al. (1392), Azadikhah Salimi and Hojjati (1392), Mahmoudzadeh et al. (1393), Hatami et al. (1394), Adli and Sohrabi (1394), Mahmoudi (1394), Mokhtari Far et al. (2014), Naqvi et al. (2015), Houshmand and Afsar (2016), Motlai (2017), Razavi & Tamadon (2018), Ronoghi et al.	Employee access to the Internet and intranet	Software infrastructure and relevant professionals	IT infrastructure	7
	Having the management of documents and files electronically			
	The existence of databases to store information			
	The existence of a complete infrastructure for documenting knowledge			
	Having a complete technology infrastructure for knowledge sharing			
	Virtual group discussion mechanisms			
	User-friendly electronic systems			
	Expert and decision support systems			

Categories, concepts and items related to the life factors of knowledge management success from the point of view of different researchers				
Reference researchers	Indicator	Component	Dimension	No.
(2018), Shabanpour et al. (2002), Wong (2005), Cheng et al. (2009), Valmohammadi (2010), Siddiqui & Zand (2012), Talebi et al. (2012), Huang and Lai (2012), Ughorlou and Qazldaq (2013), Daniesh et al. (2014), Karmi et al. (2015), Margilage & Bello (2015), Asrarul Haq & Anwar (2016), Cham et al. (2016), Mohammad Zaki & Suleiman (2017), Indra Senso et al. (2018), Sayadi Turanello et al. (2018) , Kanti et al. (2018), Nazir et al. (2018), Nazir et al. (2018), Ayatollah et al.	The existence of communication platforms and networks necessary for the interaction of knowledge and information between citizens, organizations and within the organization			
	Having a corporate website			
	Having information storage and retrieval systems			
	Having databases to search for information without time and place limitations			
	Creating electronic networks of people			
	Providing e-learning and people			
	Integrating information search in different systems and databases			
	A central presence in the organization as the focal point of all knowledge flows			
	A central presence in the organization as all knowledge metadata or data warehouse			
	Having a system for collecting storage and representing organizational memory			
	User-friendliness and lack of space and time limitations regarding the organization's information storage and retrieval systems			
	Existence of a system to record opinions, experiences and suggestions of people and employees of the organization			
	Coordination to acquire knowledge and information outside the organization in order to minimize redundancies			
	Having a team responsible for identifying and representing and maintaining critical knowledge in the organization			
	The existence of a complete and sufficient infrastructure of information technology hardware	Hardware infrastructure		

Sixth Step: Quality Control of the Findings

In this research, the Kappa index was calculated as 0.82, which indicates a high agreement between the two evaluators. Finally, it was found that all 102 extracted studies have the necessary quality to enter the next stage for analysis.

Seventh Step: Results

As it appears from the findings of the final part of meta-composite analysis, the critical components or success factors of knowledge management in the banking industry include leadership, organizational culture, organizational structure, human resources, training, evaluation and measurement.

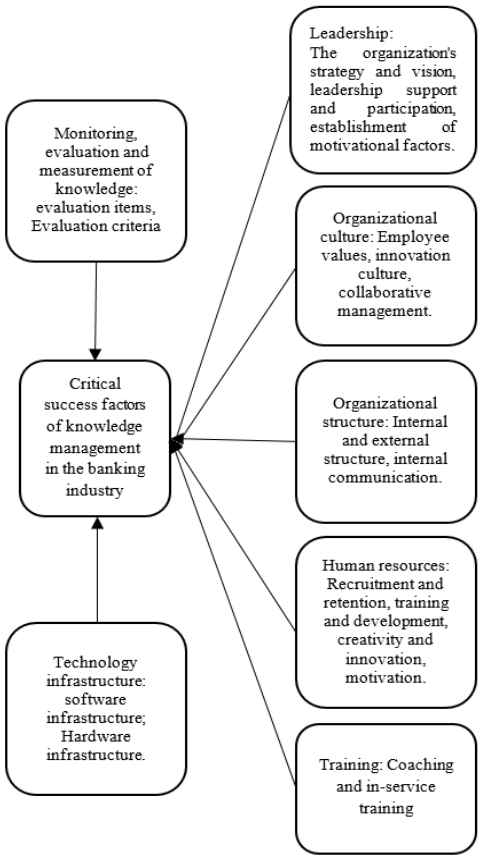

Figure 2. *Model of critical success factors of knowledge management in the banking industry*

Forming paired comparisons

In this section, pairwise comparisons of criteria are given. These pairwise comparisons were made based on the spectrum of 1 to 9 phases approved by experts, and then they were integrated by the geometric mean method, which is given in Table 5.

Table 5. *Pairwise comparisons of criteria (inconsistency rate: 0.05)*

Leadership	Human resources	Education	Organizational structure	Technology infrastructure	Evaluation and measurement of knowledge	Organizational culture	
(1.076, 0.777, 0.541)	(0.888, 0.648, 0.474)	(0.565, 0.408, 0.32)	(1.496, 1.031, 0.71)	(0.699, 0.449, 0.332)	(1.071, 0.68, 0.448)	(1,1,1)	Organizational culture
(0.838, 0.542, 0.362)	(1.167, 0.817, 0.561)	(0.989, 0.847, 0.711)	(0.555, 0.423, 0.338)	(0.699, 0.555, 0.443)	(1,1,1)	(2.234, 1.47, 0.933)	Evaluation and measurement of knowledge
(0.962, 0.68, 0.515)	(0.887, 0.655, 0.464)	(1.27, 0.847, 0.553)	(0.809, 0.579, 0.446)	(1,1,1)	(2.256, 1.803, 1.431)	(3.016, 2.228, 1.431)	Technology infrastructure
(0.678, 0.519, 0.414)	(0.53, 0.369, 0.289)	(0.967, 0.655, 0.43)	(1,1,1)	(2.242, 1.726, 1.236)	(2.959, 2.363, 1.803)	(1.409, 0.97, 0.668)	Organizational structure
(0.776, 0.549, 0.388)	(1.192, 0.892, 0.651)	(1,1,1)	(2.326, 1.528, 1.035)	(1.808, 1.18, 0.787)	(1.406, 1.18, 1.011)	(3.121, 2.451, 1.769)	Education
(0.795, 0.568, 0.428)	(1,1,1)	(1.536, 1.121, 0.839)	(3.465, 2.709, 1.888)	(2.154, 1.528, 1.127)	(1.783, 1.224, 0.857)	(2.109, 1.544, 1.126)	Human resources
(1,1,1)	(2.335, 1.76, 1.258)	(2.577, 1.822, 1.289)	(2.417, 1.927, 1.475)	(1.94, 1.47, 1.039)	(2.762, 1.844, 1.194)	(1.849, 1.288, 0.929)	leadership

Calculation of fuzzy and normal weights

In this step, based on relation 1 and 2, we first calculate the geometric mean of the fuzzy numbers of each row of the table, and then we divide each resulting geometric mean by the sum of the geometric means to obtain the fuzzy weight, then each fuzzy weight is We use the relation $\frac{l+2m+u}{4}$ and to normalize each non-phase weight, it is enough to divide that weight by the sum of the non-phase weights. For example, for criterion C1, the calculations are as follows:

First, we calculate the geometric mean of the rows, which is as follows.

$$\text{The geometric mean of the first line} = [(1.1.1) \times (0.448.0.68.1.071) \times \ldots \times (0.541.0.777.1.076))]^{\frac{1}{7}} = (0.507.0.676.0.931)$$

In a similar way, these calculations are done for other lines, and the results are given in the second column for all lines, then we get the sum of all these geometric means, which is equal to (5.492, 7.261, 9.57). Then the fuzzy weight of each criterion is equal to the geometric mean of the line of that criterion divided by the sum of the geometric means. For example, for criterion C1, the fuzzy weight is calculated as follows:

$$C1 \text{ Fuzzy weight} = \frac{(0.507.0.676.0.931)}{(5.492.7.261.9.57)} = (0.053.0.093.0.169)$$

The same operation is done for all the criteria, and the fuzzy weights are given in the third column. Then, each fuzzy weight was de-fuzzified as follows.

$$C1 \text{ Fuzzy weight} = (0.053.0.093.0.169) == > C1 \text{ Fuzzy weight} = \frac{0.053 + 2 \times 0.093 + 0.169}{4} = 0.102$$

This process was done for all the criteria, the results are given in the fourth column, then the normalization of each non-phase weight was done as follows.

$$C1 \text{ Non} - \text{fuzzy weight} = 0.102 ==> C1 \text{ Normal weight} = \frac{0.102}{0.102 + 0.111 + 0.146 + 0.134 + 0.170 + 0.0187 + 0.23}$$

The results of the aforementioned activities are shown in Table 6. According to table (6), leadership with a weight of 0.213 has won the first place. Human resources ranked second with a weight of 0.173 and education ranked third with a weight of 0.157.

Table 6. *Fuzzy and non-fuzzy weights of the main criteria*

Criterion name	geometric mean) $\left(\prod_{j=1}^{n} \tilde{P}_{ij}\right)^{1/n}$(	fuzzy weight) $\widetilde{W}$(	Non-fuzzy weight	Normal weight
Organizational culture	(0.931, 0.676, 0.507)	(0.169, 0.093, 0.053)	0.102	0.095
Evaluation and measurement of knowledge	(0.975, 0.747, 0.573)	(0.178, 0.103, 0.06)	0.111	0.103
Technology infrastructure	(1.291, 0.982, 0.739)	(0.235, 0.135, 0.077)	0.146	0.124
Organizational structure	(1.183, 0.905, 0.693)	(0.215, 0.125, 0.072)	0.134	0.135
Education	(1.5, 1.143, 0.867)	(0.273, 0.157, 0.091)	0.170	0.157
Human resources	(1.657, 1.258, 0.958)	(0.302, 0.173, 0.1)	0.187	0.173
leadership	(2.034, 1.551, 1.156)	(0.37, 0.214, 0.121)	0.230	0.213
$\sum\left(\prod_{j=1}^{n} \tilde{P}_{ij}\right)^{1/n}$	(9.57, 7.261, 5.492)			

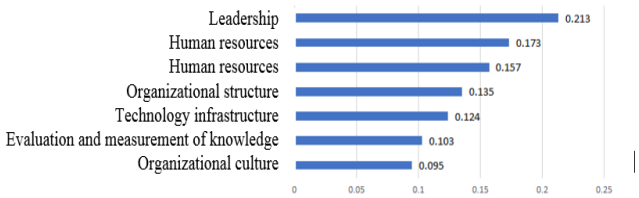

Figure 3. *Weight and final priority of criteria*

5. Discussion

The research findings indicate that leadership, with a weight of 0.213, secured the top position. Human resources, with a weight of 0.173, ranked second, followed by education at 0.157 in third place.

Organizational structure ranked fourth with a weight of 0.135, while technological infrastructure came in fifth with a weight of 0.124. Knowledge evaluation and measurement ranked sixth at 0.103, and organizational culture, with a weight of 0.095, placed seventh.

Although these results align with the studies conducted by Akhwan et al. (2013), Ansari et al. (2014), Adli and Sohrabi (2014), Mahmoudi (2014), Tabatabai et al. (2014), Shabanpour et al. (2010), Seddiqi and Zand (2012), Talebi et al. (2012), Oghurlou and Qazldaq (2013), Margilage and Bello (2015), Ayatollah and Zaremkar (2020), and Santos et al. (2023) regarding critical success factors, there are significant discrepancies in the ranking of these factors compared to previous studies. In most prior research, organizational culture was ranked highly; however, in this study, it was assigned the lowest rank.

A similar divergence is observed with human resources, where the findings differ from those of other studies. Another notable difference between this research and previous studies is that many earlier investigations did not emphasize a structured presentation of the factors, resulting in a wide dispersion of materials.

In contrast, this research organized the findings into seven dimensions, comprising 18 components and 114 indicators, which were then categorized and ranked.

To effectively rank the critical success factors of knowledge management in the Central Bank of the Islamic Republic of Iran, it is essential to accurately identify factors such as organizational culture, information technology, support structures, and employee training and development. These elements serve as the foundation for establishing a successful knowledge management system. Evaluating these factors through scientific methods, such as interpretative structural modeling and statistical analysis, can aid in determining their priorities. The outcomes of this ranking can inform strategic decisions aimed at enhancing infrastructure and fostering a culture of knowledge sharing at the organizational level.

Given the complexities of the central bank and its crucial role in regulating and monitoring the country's financial system, attention to these critical success factors in knowledge management will not only boost internal productivity but also directly influence the development of financial policies and enhance decision-making capabilities at the macro level.

Based on the ranking findings, the continuous improvement of these factors can

cultivate a dynamic environment for innovation and bolster organizational productivity, ultimately contributing to the competitiveness and stability of the central bank in the face of emerging challenges.

6. Conclusion

The success of knowledge management at the Central Bank of the Islamic Republic of Iran, a vital institution in the country's economy, plays a crucial role in enhancing organizational efficiency and effectiveness. Knowledge management involves the collection, storage, sharing, and utilization of knowledge to improve decision-making processes and overall organizational performance. In the central bank, whose primary mission is to regulate and monitor the country's monetary and financial policies, the effective use of organizational knowledge can significantly enhance the quality of macroeconomic decisions. Therefore, identifying and ranking the critical success factors of knowledge management within this organization is a strategic initiative aimed at ensuring the optimal utilization of organizational knowledge resources. One of the most important success factors in knowledge management is organizational culture. A supportive organizational culture encourages employees to share knowledge, fosters interdepartmental collaboration, and promotes continuous learning. If the culture within the central bank nurtures innovation, learning, and collaboration, employees will be more inclined to share their knowledge and experiences. Consequently, this can lead to improved quality in macroeconomic decisions and strengthened supervisory and regulatory capacities of the central bank. Another critical factor is IT infrastructure. The implementation of advanced knowledge management systems and the creation of digital platforms for storing and accessing knowledge are essential for the success of knowledge management. Given the rapid technological advancements and the necessity for data-driven decision-making at the central bank, the adoption of new technologies such as artificial intelligence and machine learning can enhance data analysis and economic information, leading to more accurate and efficient decision-making. Therefore, it is imperative to establish and develop a robust technological infrastructure to support knowledge management processes. Additionally, the training and development of employees are vital components of successful knowledge management. Central bank employees should receive continuous training to keep their skills and knowledge current. Regular training programs and opportunities for organizational learning can enhance employees' knowledge levels and their ability to engage in knowledge management processes. This, in turn, fosters innovation within the organization and enhances both individual and collective capabilities among employees.

Support structures play a crucial role in the success of knowledge management. These structures encompass policies, procedures, and strategies that facilitate knowledge management within an organization. The central bank should develop appropriate policies to promote knowledge management and equip employees with the necessary tools and procedures for collecting and sharing knowledge. Additionally, senior management must actively foster a culture of knowledge management and provide employees with the motivation to engage in these processes. The success of knowledge management at the Central Bank of the Islamic Republic of Iran relies on the integration of several factors, including a supportive organizational culture, an advanced information technology infrastructure, comprehensive training programs, and robust support structures. By focusing on these elements and evaluating their effectiveness, the central bank can enhance its organizational efficiency and effectiveness, thereby playing a significant role in improving the country's financial system. Furthermore, establishing a strong and stable knowledge management system will enable the central bank to make informed and effective decisions in response to future economic and financial challenges, contributing to the nation's economic stability. The application of knowledge management in the banking industry varies widely and includes areas such as customer relationship management, performance

evaluation, decision support systems, data warehousing, and data mining. However, many banks worldwide do not utilize all of these tools. As the primary institution overseeing monetary, banking, and foreign exchange matters, the Central Bank of the Islamic Republic of Iran plays a vital role in policy formulation, decision-making, and supervising the implementation of monetary, banking, and foreign exchange laws. This organization must maintain its independence to pursue its goals and mission effectively. Independence and freedom in decision-making and policy formulation are essential for acquiring the latest and most critical information related to economic issues both domestically and globally, as the economic conditions of any country are influenced by both internal and external factors. Moreover, it is widely acknowledged that the challenge of the modern age lies not in obtaining information, but in effectively and efficiently utilizing the vast amounts of available data and managing it optimally. The effective use of this extensive information underscores the importance of "knowledge management. transform the central bank into a knowledge-based organization, it is imperative to implement knowledge management practices. Identifying the critical success factors and assessing the significance of each factor is the most crucial step for the successful execution of the knowledge management plan and is a fundamental requirement that will determine the plan's ultimate outcome.

Therefore, based on the results of this research, it is suggested that the critical success factors of knowledge management are extracted as a measure for the readiness of the Central Bank of Iran to implement the knowledge management plan, and it is implemented operationally.

According to the findings of the current research, leadership ranks first among the critical factors for the success of knowledge management, therefore, the commitment of senior managers of the central bank to the implementation and application of knowledge management, formulating a knowledge-based vision based on knowledge strategies, explaining short-term and medium-term goals And long-term knowledge, creating a suitable structure for the implementation of knowledge management, creating motivation in employees and providing other identified components under the leadership factor, can have a tremendous impact on the implementation of the knowledge management plan. Based on the findings of this study, it is suggested to evaluate the level of preparedness of the central bank regarding the implementation of the knowledge management plan by measuring the indicators under the 7 identified dimensions. According to the second rank of the "human resources" factor, among the critical success factors of knowledge management, it is suggested that the T-shaped skills of Central Bank employees, managers and specialists are measured and evaluated through competency assessment centers, then appropriate strategies to develop educational programs to acquire these skills, designed and implemented. A suitable organizational structure should be created to create and facilitate effective communication between the main body of the bank and external communication, so that it is possible to extract and collect existing knowledge of the organization and create organizational memory. Software and hardware platforms needed to create all kinds of knowledge bases including organizational memory and organizational wiki should be provided. Sufficient budget should be provided to provide the resources needed by the organization and implement knowledge management, and the opportunity for knowledge activities should be provided for the employees. Appropriate criteria for monitoring and measuring the organization's performance based on knowledge strategies, determination and evaluation mechanisms should be clearly stated. Periodic continuous performance evaluation should be done, lessons learned should be recorded, feedback should be received, and then the necessary revision of goals, performance and how to carry out activities should be done.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper

References

Abu-Al Sondos, I. (2023). An empirical study of critical success factors in implementing knowledge management systems (KMS): The moderating role of culture. *Uncertain Supply Chain Management*, 11(4), 1527-1538. https://doi.org/10.5267/j.uscm.2023.7.016

Adaileh, M.J., Alrawashdeh, M., Elrehail, H., & Aladayleh, K.J. (2020). Assessing the nexus between knowledge management and firm performance: A data article. *Data in brief*, 32, https://doi.org/10.1016/j.dib.2020.106283

Akhan, P., Amiran, H. & Rahimi, A. (2012). Presenting the motivational model of employee knowledge sharing in manufacturing companies using Structural Equation Modeling (SEM), *Sanandaj industrial management*. 8(23), pp. 86-67. [in Persian]

Al-Dmour, A., Zaidan, H., & Al Natour, A. R. (2023). The impact knowledge management processes on business performance via the role of accounting information quality as a mediating factor. *VINE Journal of Information and Knowledge Management Systems*, 53(3), 523-543. https:// doi.org/10.1108/vjikms-12-2020-0219

Amiri Ekhtaari, R., & Timurpour, B. (2013), Designing a structural model of bank customer knowledge management using an interpretive structural model. *Human Resource Management Research Quarterly*, 4(3), pp. 1-22. https://doi.ir/20.1001.1.22286977.1393.4.3.5.3

Ayatollahi, H., & Zeraatkar, K. (2020). Factors influencing the success of knowledge management process in health care organizations: a literature review. *Health Information & Libraries Journal*, 37(2), 98-117. https:// doi.org/10.1111/hir.12285

Azadikhah Salimi, M., & Hojjati, S. (2012). *Identifying and investigating the key factors affecting the establishment of knowledge management in the supply chain and prioritizing them using the fuzzy synthesis method*. The 6th Knowledge Management Conference, Tehran. [in Persian]. https://doi.org/10.30481/ijlis.2019.183033.1553

Bazerkar, A., & Haji Mohammadi, M. (2018). Investigating the impact of knowledge management on the organization's financial performance with regard to the mediating role of innovation and organizational intelligence. *New Research Approaches in Management and Accounting*, 26 (5), pp. 66-86. [in Persian]. https://doi.org:10.14807/ijmp. v12i1.1267

Chang, M.Y., Hung, Y.C., Yen, D.C., & Tseng, P.T. (2009). The research on the critical success factors of knowledge management and classification framework project in the Executive Yuan of Taiwan Government. *Expert Systems with Applications*, 36(3), 5376-5386. https://doi.org/10.1016/j.eswa.2008.06.060

Chen, J., Zhu, Z., & Xie, H.Y. (2004). Measuring Intellectual Capital: A New Model & Empirical Study. *Journal of Intellectual Capital*, 5 (1): 195-212. https://doi.org/10.1108/14691930410513003

Dalkir, K. (2005). *knowledge management in theory & practice*, McGraw Hill.

Danish, R., Q., Asghar, A., Asghar, S. (2014). Factors of KM in Banking Sector of Pakistan. *Journal of Business & Economics*, 2 (2): 61-70. https://www.researchgate.net/publication/264442216

Divandari, Al., Mohammadian, M., Shami Zanjani, M., & Abedi, E. (2014). Compilation and explanation of customer knowledge management deployment framework in Iran's private commercial banks, *Business Management*, 6 (1), pp. 66-41. [in Persian]. https://doi.org/10.22059/jibm.2021.313655.3990

Dizaji, M. R., Matin, Y. A., & Azar, S. F. (2023). Designing a Model for Integrating Social Capital with Innovative Knowledge Management in Gaining Competitive Advantage and Development of the Country's Banks (Case Study: Sepah Bank Branches in Tabriz). *International Journal of Innovation Management and Organizational Behavior (IJIMOB)*, 3(5), 53-59. https://doi.org/10.61838/kman.ijimob.3.5.7

Donate, M.J., & de Pablo, J.D.S. (2015). The role of knowledge-oriented leadership in

knowledge management practices and innovation. *Journal of business research*, 68(2), 360-370. https://doi.org/10.1016/j.jbusres.2014.06.022

Easa, N. F. (2021). Knowledge management at banking industry: A review of the literature and further guidelines. *International Journal of Customer Relationship Marketing and Management (IJCRMM)*, 10(2), 21-34. https://doi.org/10.4018/IJCRMM.2019040102

Easa, N.F. (2019). Knowledge management at banking industry: a review of the literature and further guidelines. *International Journal of Customer Relationship Marketing and Management (IJCRMM)*, 10(2), 21-34. https://doi.org/10.4018/IJCRMM.2019040102

El-Chaarani, H., & El-Abiad, Z. (2020). Knowledge management and job performance: The case of lebanese banking sector. *International Review of Management and Marketing*, 10(1), 91.

https://www.econjournals.com/index.php/irmm/article/view/9225

Farzaneh, A., Rahimi, R., & Farzaneh, A. (2016). Duties and powers of the central bank. *National Conference of New Researches in Management, Law, Economics and Humanities*, Iran, Kazeroon. [in Persian].

Fathi Easa, N. (2019).KM at Banking Industry: a Review of the Literature & Further Guidelines. *International Journal of Customer Relationship Marketing & Management*.10 (2). https://ideas.repec.org/a/igg/jcrmm0/v10y2019i2p21-34.html

Fazal Ali, A. (2012). Presenting the model of the key success factors of knowledge management in order to empower the organization in National Bank of Iran. Master's thesis, Azad Islamic University, Central Tehran Branch, Faculty of Management

Ghasemi, R., and Karimi, M. (2013). Identifying and prioritizing the important success factors of knowledge management in the organization of libraries, museums and Astan Quds Razavi Center. *Library and Information*, 17 (1), pp. 5-21. [in Persian].

https://www.researchgate.net/publication/228426857

Hadizadeh Moghadam, A., Mohebi, P., & Qalich Lee, B. (2012). Investigating the relationship between knowledge sharing and innovation in financial service organizations: Bank Refah Kargaran, Management Research in Iran, *Management Research in Iran*, 17 (1), pp. 220-201. [in Persian].

https:// doi.org/10.22059/jitm.2017.234557.2061

Haji Esmaili, M., & Haji Malamirzaei, H. (2019). Presenting the model of knowledge management in the value system of Islam and comparing it with other common models, *strategic management of organizational knowledge*, 3 (11), pp. 71-100. [in Persian]. https://jkm.ihu.ac.ir/article_205986.html

Hassanzadeh, M. (2012). Competencies of information science and epistemology specialists in knowledge management. The Book of the Month of Generalities, 2018. [in Persian]

Houshmand, H., and Afsar, A. (2012). Key factors of infrastructural success in the implementation of knowledge management in Bank Mellat. *Information Technology Management Studies Quarterly.* 2 (5), pp. 133-157. [in Persian].

https://ims.atu.ac.ir/article_1174_31ccf06cf1f6be031aaac41f756a6e6d.pdf

Houshmand, H., Mirafazl, S., and Rezaei-Noor, J. (2013). Presenting a model for evaluating the knowledge management of knowledge-based organizations in the case of Qom University, Growth and Technology, *specialized quarterly of parks and growth centers*, 10th year, number 38, pp. 65-77. [in Persian]

Inyiama, H.C. (2014). Modelling a KM system for Banking Industry. *International J. of Engineering Research & Technology*, 3 (6): 2092-2100. https://www.researchgate.net/publication/340503300

Iranzadeh, S. and Fakhimi-Azer, S. and Jadhari Sefigari, A. (2014). Investigating the effect of knowledge management components on human resource productivity using factor analysis method in financial and credit institutions of Tabriz city. *Productivity Management*, ninth year, number 33, pp. 45-27. [in Persian].

https://doi.org/10.1177/22785337221148567

Jabeen, F., & Al Dari, T. (2023). A framework for integrating knowledge management benefits in the UAE organisations. *Knowledge Management Research & Practice*, 21(2), 277-291.

http://doi.org/10.1080/14778238.2020.1780966

Karami, M., Alvani, M., Zare, H., Kheirandish, M. (2015) Determination of Critical Success Factors for KM Implementation using qualitative & quantitative Tools. *Iranian J. of Management Studies*, 8 (2): 181-201. https://doi.org/10.22059/ijms.2015.52588

Karyatun, S., Yuliantini, T., Saratian, E., Paijan, P., Soelton, M., & Riadi, E. (2023). Towards The Best Model Good Corporate Governance and Knowledge Management to Improve Performance Through Job Satisfaction. *Journal Riset Bisnis Dan Manajemen*, 16(2), 236-245. https://www.researchgate.net/publication/373894195

Khadivar, Amina; Dartaj, Fatemeh (2015). Providing a framework for success in implementing knowledge management systems based on cloud computing, *Management Research in Iran*, 20 (2), pp. 118-93. [in Persian].

https://www.researchgate.net/publication/363432726

Koshelieva, O., Tsyselska, O., Kravchuk, O., Baida, I., Mironov, V., & Miatenko, N. (2023). Knowledge management as a new strategy of innovative development. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, *8*(5), 46.

https://doi.org/10.26668/businessreview/2023.v8i5.1592

Loke, W., Fakhrorazi, A., Doktoralina, C., & Lim, F. (2020).The zeitgeist of knowledge management in this millennium: Does KM elements still matter in nowadays firm performance. *Management Science Letters*, 10(13), 3127-3134.

https:// doi.org/10.5267/j.msl.2020.5.010

Mahmoudzadeh, M., Zargham Borojni, H., and Sedaghat, M. (2013). The relationship between knowledge management enablers and knowledge management processes, *Management Studies (Improvement and Transformation)*, 22 (73), pp. 145-173. [in Persian].

https: doi.org/10.1108/02635570910926618

Martínez-Martínez, A., Cegarra-Navarro, J. G., & Garcia-Perez, A. (2023). Sustainability knowledge management and organisational learning in tourism: Current approaches and areas for future development. *Journal of Sustainable Tourism*, 31(4), 895-907. https://doi.org/10.1080/09669582.2022.2086560

Melabi, A., Alipour, A., and Nasri, F. (2012). Identifying factors affecting the implementation of knowledge management in higher education institutions and ranking them using fuzzy TOPSIS method. *Educational Management Research Quarterly*, 5(1), pp. 133-153. https://www.researchgate.net/publication/340260645

Mesbahi Jahormi, N., and Adibzadeh, M. (2014). The effect of knowledge management system on organizational innovation, *scientific studies*, 2 (5), pp. 25-43. [in Persian]. https://doi.org/10.22054/jks.2016.2696

Moghimi, M., and Ramezani, M. (2012). Knowledge Management and Information Technology, Tehran, Industrial Management Organization, pp. 60-63. [in Persian]

Mohammed, A. B., Al-Okaily, M., Qasim, D., & Al-Majali, M. K. (2024). Towards an understanding of business intelligence and analytics usage: Evidence from the banking industry. *International Journal of Information Management Data Insights*, 4(1), 100215. https://doi.org/10.1016/j.jjimei.2024.100215

Naqshbandi, M. M., Meeran, S., & Wilkinson, A. (2023). On the soft side of open innovation: the role of human resource practices, organizational learning culture and knowledge sharing. *R&D Management*, 53(2), 279-297. https://doi.org/10.1111/radm.12566

Naqvi, A., Mirghfouri, H., Maruti Sharifabadi, A. (2015). Identifying and prioritizing key success factors in implementing knowledge management in sports organizations. *Sports Management Studies*, 8 (36), pp. 112-93. [in Persian]

Nazir, T., Umer, M., Nawab, S. (2018). What are success factors of KM & their Impact on the performance of officers of banks in Pakistan. *The business & Management review*, 9 (3): 464-473. https://www.researchgate.net/publication/326632551

Ode, E., & Ayavoo, R. (2020). The mediating role of knowledge application in the relationship between knowledge management practices and firm innovation. *Journal of Innovation & Knowledge*, 5(3), 210-218.

https://doi.org/10.1016/j.jik.2019.08.002

Parhizgar, M., Walkbari, M. (2013). Strategic assessment of organizational knowledge management based on the systematic strategy translation method with a fuzzy approach. *Development Management Process*, 27(4): pp. 165-197. [in Persian]

Ping, L.& Kebao, W.(2010).KM in Banks. I*nternational Conference on E-Business & E-governance (ICEE)*, Guangzhou, China, May 7-9. https://researchr.org/publication/icee-2010

Razavi, A., & Tamadon, A. (2018). Investigating the basic success factors in the implementation of knowledge management in public libraries of Gilan province, *Science Quarterly*, 11 (1), pp. 184-149. [in Persian]

Ribiere, V., Choa, C. (2001). KM in the Banking Industry. *European Conference on KM (ECKM)*, Bled, Slovenia. https://kmeducationhub.de/european-conference-on-knowledge-management-eckm

Saida Ardakani, S., and Kejkav Monfared, A. (2016). Factors affecting the success of establishing knowledge management in higher education institutions. *Business Management Explorations*, 3 (5), pp. 158-136. [in Persian]. https://bar.yazd.ac.ir/article_191_b7f548396d68cfb3b573e5149e3d7940.pdf

Santhose, S. S., & Lawrence, L. N. (2023). Understanding the implementations and limitations in knowledge management and knowledge sharing using a systematic literature review. Current Psychology, 1-16. https://doi.org/10.1007/s12144-022-04115-6

Schniederjans, D.G., Curado, C., & Khalajhedayati, M. (2020). Supply chain digitisation trends: An integration of knowledge management. *International Journal of Production Economics*, 220, 107439. https://doi.org/10.1016/j.ijpe.2019.07.012

Shabani, Ahmed; Mohammadi Estani, Morteza; Farozuh, Hamed (1391). Identification, review and ranking of factors affecting the implementation of knowledge management using TOPSIS technique. *Health Information Management*, 9 (3), pp. 318-326. [in Persian]. https://him.mui.ac.ir/article_11162_a38c6d875fac14a2d9e99eb5fc309a27.pdf

Shabanpour, A., Taleghani, M., and Badri, P. (1402). Designing the infrastructural model of knowledge management implementation in public companies of Gilan province, *human capital empowerment*, 6 (3), pp. 136-121. https://srb.sanad.iau.ir/en/Article/1038793?FullText=FullText

Tabatabaei M., Daneshfard, K., and Timuranjad, K. (1401). Designing a knowledge management enablement model in relief organizations. *Islamic lifestyle centered on health*, 6 (3), pp. 174-189. [in Persian]

Talebi, B., Pakdel Bonab, M., Zemestani, G., & Moradi, S. (2011). Presenting a Perceptional Model of Effective Factors in the Success of Knowledge Management in Governmental & non-Governmental Higher Education Centers & Universities in Iran, *American J. of Scientific Research*, (32): 69-81. https://www.academia.edu/8942391

Valmohammadi, C.(2010).Identification & Prioritization of Critical Success Factors of Knowledge Management in Iranian SMEs: an Expert's view. *African J. of Business Management*, 4 (6): 915-924.

https://www.researchgate.net/publication/228426857

Wang, C.H., Chang, C.and Shen, G.C. (2015), "The effect of inbound open innovation on firm performance: evidence from high-tech industry", *Technological Forecasting & Social Change*, Vol.99 No.11, pp.222-230. https://doi.org/10.1108/IJIS-03-2021-0059

Wong, K.Y. (2005). Critical success factors for implementing knowledge management in small and medium enterprises. *Industrial management & Data systems*.

https://doi.org/10.1108/02635570510590101

Zand Hosami, Hossam and Ashtianipour, Zainab and Pourkhalil, Nessa (2013). Investigating the impact of knowledge management dimensions in enhancing the competitiveness of small and medium organizations. Industrial Management Quarterly of Faculty of Human Sciences, ninth year: pp. 27-42. [in Persian]

Zhang, X., Chu, Z., Ren, L., & Xing, J. (2023). Open innovation and sustainable competitive advantage: The role of organizational learning. Technological Forecasting and Social Change, 186 (5). https://doi.org/10.1016/j.techfore.2022.122114