Analyzing the Lived Experiences of University Managers in Iraq in the Context of Knowledge Management Implementation to Propose a Model

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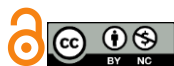*** Corresponding author email address**: farhad_shafiepoor@yahoo.com

A r t i c l e I n f o

A B S T R A C T

Objective: The aim of this research was to analyze the lived experiences of university managers in Iraq regarding the implementation of knowledge management to propose a model.

Methodology: The research methodology was qualitative-phenomenological. The research environment included all university managers in Iraq during the years 2023-2024. The sampling method was purposive and continued to the point of theoretical saturation until sufficient information was obtained, resulting in 21 university managers in Iraq. The research tools were in-depth and unstructured interviews. To determine the validity and reliability of the codes extracted from the interviews, the expert consensus method was used for confirmability. Data analysis was performed using open coding, axial coding, and selective coding.

Findings: The results showed that the model for analyzing the lived experiences of university managers in Iraq regarding knowledge management implementation comprises eight dimensions: organizational structure reconstruction, organizational welfare, organizational technology, promotion of organizational leadership culture, organizational excellence, organizational knowledge processing, overcoming limitations, and enhancing stakeholder service quality.

Conclusion: The findings of this study underscore the critical importance of various dimensions in the effective implementation of knowledge management in Iraqi universities. These dimensions include the reconstruction of organizational structure, enhancement of organizational welfare, utilization of organizational technology, promotion of organizational leadership culture, and processing of organizational knowledge. Additionally, addressing organizational constraints and improving stakeholder service quality are essential for fostering an environment conducive to knowledge management.

Keywords: *Knowledge management implementation, lived experiences, university managers, Iraq, phenomenology.*

1   Introduction

Although knowledge itself is not a new concept, the effective management of knowledge is a concern for all organizations, including universities. In Iraq, universities are concerned with scientific knowledge management to keep pace with scientific advancements and reduce the gap between Iraqi universities and those in developed countries. Knowledge is considered the main factor distinguishing organizational success and is regarded as the foundation of competitive advantage (Taheri et al., 2019). Despite the extensive literature on knowledge management processes in Western organizations, empirical studies related to Iraqi universities are very rare (Al-Salim & Mohamed, 2013). There have been scattered studies on knowledge management and its implementation in universities and higher education institutions (Qazi et al., 2024; Quarchioni et al., 2022; Rehman & Iqbal, 2020), and there is a heterogeneity in theoretical perspectives that have weak overlaps. Therefore, gaining a comprehensive understanding of knowledge management implementation in universities is necessary. According to the studies, efforts to gain a common understanding of knowledge management implementation strategies in universities facilitate this process (Mayahi et al., 2023; Quarchioni et al., 2022; Sadri, 2018; Safari et al., 2020; Sahibzada et al., 2022). The study by Massaro et al. (2016) suggests that identifying the factors affecting knowledge management development in higher education is effective (Massaro et al., 2016).

Professional teaching is related to employing creative teaching methods. Studies have shown that using knowledge management in psychological empowerment of individuals in educational organizations is effective in improving quality and achieving goals (Andam, 2017; Haghighi et al., 2014). In contrast, Al-Kouriouti's (2015) study showed that the use of knowledge management in educational systems is not significant and thus requires necessary infrastructure (Aldosari, 2023). The lack of knowledge management implementation has led to weak organizational knowledge among individuals, preventing them from advancing the educational system's goals with sufficient awareness and knowledge (Barão et al., 2017; Mayahi et al., 2023; Quarchioni et al., 2022; Rastorgueva & Zecca, 2017), resulting in a reduced capability of educational stakeholders. According to Sahibzada et al. (2022), the quality of performance in many universities is weak due to the lack of knowledge management implementation (Sahibzada et al., 2022). Despite the promotion of knowledge management in

higher education institutions, studies examining the interrelationship between knowledge management, stakeholder productivity, and organizational performance are lacking.

Implementing knowledge management among students in higher education facilitates the sharing of knowledge and experiences among faculty members, thereby enhancing their knowledge and improving the quality of their scientific and educational activities (Al-Husseini et al., 2021). The main issue of this research is identifying the strategies for implementing knowledge management in Iraqi universities and the model for it.

2   Methods and Materials

The research methodology was applied in terms of purpose and qualitative-phenomenological in terms of method. The research environment included all university managers in Iraq during the years 2023-2024, and the sampling method was purposive, continuing until theoretical saturation with sufficient information was achieved, resulting in 21 university managers in Iraq. The entry criteria for selecting participants included having over 15 years of experience, an executive position, a Ph.D. in management, and experience in knowledge management implementation, such as setting up an intranet, extranet, or a social network for the organization. The research tools were in-depth and unstructured interviews with subject matter experts. The interview questions were progressive and cumulative, with each interview lasting at least 45 minutes. The first interview question was: "What are the requirements for implementing knowledge management?" To determine the validity and reliability of the extracted codes from the interviews, the expert consensus method and four confirmability strategies, transferability, credibility, and validity were used. Data analysis involved categorizing data based on differences and similarities, leading to open coding, axial coding, and selective coding.

3   Findings and Results

The findings of this study provide a comprehensive overview of the strategies for implementing knowledge management in Iraqi universities. The research identified several key areas essential for the effective establishment and enhancement of knowledge management systems. Each area was analyzed through selective codes, which were further broken down into axial and open codes to capture the

nuanced elements of knowledge management within the context of higher education in Iraq.

Table 1

Development of Knowledge Management Implementation in Iraqi Universities with an Organizational Structure Reconstruction Approach

Selective Codes	Axial Codes	Open Codes
Organizational Structure Reconstruction	Delegation of Authority	Decentralization based on stakeholders' knowledge (Code 5); designing training to review organizational procedures (Code 2), (Code 6), (Code 9); designing training for stakeholders to improve and change the organizational structure (Code 2); removing administrative obstacles (Code 7), (Code 9); deviating from administrative directives (Code 7), (Code 18); developing superior-subordinate relationships (Code 7)
	Revising Knowledge Acquisition Processes	Designing training for stakeholders to empower organizational revenue development (Code 1), (Code 17); designing training for professional organizational activities (Code 2), (Code 20); designing training to reduce organizational issues (Code 3), (Code 11); improving methods of organizational knowledge acquisition (Code 5); developing tools for organizational knowledge acquisition; developing organizational knowledge acquisition activities (Code 5); selecting strategies based on organizational knowledge (Code 20); providing mental models (Code 18); examining issues based on organizational knowledge (Code 20); studying solutions based on organizational knowledge (Code 20); presenting an organizational map based on knowledge (Code 20); strategic planning based on knowledge (Code 20); group learning (Code 20); creating shared insights (Code 20); innovating in creating organizational values (Code 20); innovating in knowledge crystallization (Code 20); innovating in knowledge application (Code 20); systematic thinking (Code 20); innovating in knowledge review (Code 20); innovating in service delivery (Code 20); presenting an organizational creativity model (Code 20); technological innovation (Code 20)

According to the findings in Table 1, the development of knowledge management implementation in Iraqi universities with an organizational structure reconstruction approach includes two axial codes: delegation of authority and revising knowledge acquisition processes.

Table 2

Development of Knowledge Management Implementation in Iraqi Universities based on Organizational Welfare

Selective Codes	Axial Codes	Open Codes
Organizational Welfare	Learning Welfare	Learning welfare with a space diversification approach (Code 6), (Code 8); learning welfare with a resource diversification approach (Code 6), (Code 17); learning welfare with an opportunity diversification approach (Code 6), (Code 7); learning welfare with a time diversification approach (Code 6), (Code 11); learning welfare with a session diversification approach (Code 6), (Code 13); learning welfare with a group diversification approach (Code 6), (Code 10)
	Technological Welfare	Learning welfare with a tool diversification approach (Code 6), (Code 9); learning welfare with a method diversification approach (Code 6), (Code 8), (Code 11); learning welfare with an activity diversification approach (Code 6), (Code 8); learning welfare with a communication diversification approach (Code 6); learning welfare with a mechanism diversification approach (Code 6)

According to the findings in Table 2, the development of knowledge management implementation in Iraqi universities with an organizational welfare approach includes two axial codes: learning welfare and technological welfare.

Table 3

Development of Knowledge Management Implementation in Iraqi Universities based on Organizational Technology

Selective Codes	Axial Codes	Open Codes
Organizational Technology	Technological Training	Designing training to develop adaptability with the expansion of technologies (Code 3), (Code 10); designing training for stakeholders to develop adaptability with the expansion of technologies (Code 2)
	Technological Management	Creating various administrative letters (Code 3), (Code 11); creating an automated template for numbering letters and documents (Code 4); ability to copy and transfer documents (Code 4), (Code 17); ability to create print templates (Code 4); managing access to documents (Code 4), (Code 13); ability to create folders and categorize documents (Code 4); determining approvers, signatories, and informed parties on documents (Code 4); linking and attaching documents to other documents and actions (Code 4); organizing and tracking electronically (Code 4), (Code 11); using document and file management (document module system) (Code 3), (Code 18); ability to record text documents in electronic formats (Code 3), (Code 6); organizing, monitoring, and managing activities within the organization (action module) (Code 4); evaluating information with tests, questionnaires, and plan tests (quality module) (Code 4); knowledge and information sharing (news module) (Code 4); customer and user communication (email module) (Code 4), (Code 9); customer and user communication (SMS module) (Code 4); creating and recording user guide information (wiki module) (Code 4)

According to the findings in Table 3, the development of knowledge management implementation in Iraqi universities with an organizational technology approach includes two axial codes: technological training and technological management.

Table 4

Development of Knowledge Management Implementation in Iraqi Universities with an Organizational Leadership Culture Enhancement Strategy

Selective Codes	Axial Codes	Open Codes
Enhancing Organizational Leadership Culture	Developing Organizational Trust	Creating an environment of trust between stakeholders and managers (Code 5); developing a cultural compensation system (Code 5), (Code 9); job position trust (Code 17); organizational position trust (Code 17); organizational path trust (Code 17), (Code 19); organizational vision trust (Code 18); colleague perspective trust (Code 17); gaining stakeholders' trust in manager's ethics (Code 17), (Code 11); gaining stakeholders' trust in manager's knowledge (Code 17); gaining stakeholders' trust in manager's perspective (Code 17); colleague competence trust (Code 17); trust in organizational programs (Code 18), (Code 19); trust in organizational knowledge (Code 18), (Code 21); trust in organizational goals (Code 18), (Code 17); gaining stakeholders' trust in manager's experience (Code 17), (Code 14); gaining stakeholders' trust in manager's abilities (Code 17); gaining stakeholders' trust in manager's vision (Code 17), (Code 21)
	Developing Group Learning	Developing an organizational justice culture (Code 5), (Code 12); developing a service culture (Code 5), (Code 9); organizational flexibility (Code 5), (Code 17); creating a knowledge-sharing culture (Code 6); creating a knowledge transfer culture (Code 6); creating a knowledge retention culture (Code 6), (Code 11); creating a knowledge storage culture (Code 6); creating a knowledge development culture (Code 6), (Code 9); creating a group learning culture (Code 6), (Code 15); creating collective wisdom (Code 18); retaining collective knowledge (Code 18); promoting a positive perspective on collective knowledge (Code 18); improving knowledge cooperation (Code 18); expanding collective knowledge (Code 18)
	Organizing Knowledge at the Institutional-Social Level	Adapting organizational leadership to demographic changes (Code 2), (Code 14); using participatory leadership in organizational decision-making (Code 4), (Code 11); using transactional leadership (Code 4), (Code 9); leadership relying on stakeholders' cognitive empowerment (Code 5); leadership relying on stakeholders' psychological empowerment (Code 5), (Code 18); designing a knowledge management model with an organizational transformation approach (Code 6), (Code 9)
	Organizing Knowledge at the Administrative Level	Leadership relying on stakeholders' psychomotor empowerment (Code 5); leadership relying on information and communication technology (Code 5), (Code 14); designing an organizational knowledge management map (Code 5); prioritizing organizational knowledge (Code 5), (Code 15); designing and developing organizational knowledge dimensions (Code 5), (Code 18); organizing administrative-level organizational knowledge (Code 5), (Code 11); organizing knowledge acquisition at the institutional-social level (Code 7), (Code 19)
	Organizing Knowledge at the Technical-Operational Level	Organizing technical-operational level organizational knowledge (Code 5); integrating organizational knowledge resources (Code 5), (Code 10); designing a knowledge management model with a telecommuting approach (Code 5); designing a knowledge management model with a customer orientation approach (Code 5); designing a knowledge management model with an information technology approach (Code 5); designing a knowledge management model with a motivational activities approach (Code 5); designing a knowledge management model with a project-oriented approach (Code 6)

According to the findings in Table 4, the development of knowledge management implementation in Iraqi universities with an organizational leadership culture enhancement strategy includes five axial codes: developing organizational trust, developing group learning, organizing knowledge at the institutional-social level, organizing knowledge at the administrative level, and organizing knowledge at the technical-operational level.

Table 5

Development of Knowledge Management Implementation in Iraqi Universities with an Organizational Excellence Strategy

Selective Codes	Axial Codes	Open Codes
Organizational Excellence	Organizational Excellence	Educational planning to enhance organizational learning based on future needs (Code 1); (Code 8); educational planning to improve organizational capacities (Code 1), (Code 16), (Code 19); educational planning to improve competitive advantages (Code 1), (Code 5); decision-making based on organizational knowledge (Code 18), (Code 19); participatory decision-making (Code 18), (Code 11); systematizing organizational knowledge with an implementation approach (Code 18); systematizing organizational knowledge with a feedback approach (Code 18)
	Organizational Dynamics	Designing stakeholder training to achieve a dynamic organization (Code 1), (Code 14); designing stakeholder training to achieve a sustainable organization (Code 1), (Code 8); individual knowledge dynamization (Code 8); technical knowledge dynamization (Code 8), (Code 10); contextual knowledge dynamization (Code 8), (Code

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16); strategic knowledge dynamization (Code 8), (Code 13); procedural knowledge dynamization (Code 8); explicit knowledge dynamization (Code 8); tacit knowledge dynamization (Code 8), (Code 17); collective knowledge dynamization (Code 9), (Code 14)

Selective Codes	Axial Codes	Open Codes
	Organizational Agility	Designing stakeholder training to achieve an agile organization (Code 1), (Code 6)
	Service Development	Educational planning to develop stakeholders' understanding of organizational goals (Code 1), (Code 13); designing stakeholder training to empower organizational revenue development (Code 1), (Code 7); designing stakeholder training to achieve social justice (Code 1), (Code 6); designing training to improve stakeholder satisfaction (Code 1), (Code 12), (Code 16); designing training to review and improve organizational services (Code 1), (Code 18)
	Digitization	Designing stakeholder training to develop electronic services (Code 1), (Code 19), (Code 21); designing stakeholder training to achieve an excellent organization (Code 1), (Code 11); designing training to create equal opportunities for all stakeholders (Code 1), (Code 4); designing training to expand service domains for stakeholders (Code 1), (Code 9)

According to the findings in Table 5, the development of knowledge management implementation in Iraqi universities with an organizational excellence strategy includes five axial codes: organizational excellence, organizational dynamics, organizational agility, service development, and digitization.

Table 6

Development of Knowledge Management Implementation in Iraqi Universities with an Organizational Knowledge Processing Strategy

Selective Codes	Axial Codes	Open Codes
Organizational Knowledge Processing	Understanding Organizational Learning Cycles	Discovering knowledge to improve the identification of organizational learning cycles (Code 16), (Code 18); discovering knowledge to understand organizational policies (Code 16), (Code 19); discovering knowledge to develop organizational involvement (Code 16); discovering knowledge to identify organizational problems (Code 16), (Code 11); discovering knowledge to solve organizational challenges (Code 14); discovering knowledge to develop organizational understanding (Code 17); discovering knowledge to improve organizational level analysis (Code 17); discovering knowledge to improve organizational adaptability (Code 17), (Code 19); discovering knowledge to improve organizational processes (Code 16), (Code 10); discovering knowledge to identify organizational wastes (Code 16), (Code 19); discovering knowledge to understand organizational decision-making (Code 17); discovering knowledge to improve organizational trust (Code 17), (Code 14); systematizing organizational knowledge with a program design approach (Code 18), (Code 20); developing organizational knowledge classification (Code 18), (Code 15), (Code 13); creating organizational memory (Code 18), (Code 21); developing organizational thinking (Code 20)
	Organizational Knowledge Sharing	Sharing knowledge on organization methods (Code 11); sharing knowledge on supervision methods (Code 10); sharing knowledge on planning methods (Code 10), (Code 17); sharing knowledge with a response experience approach (Code 10); sharing knowledge with an administrative experience approach (Code 10); sharing knowledge with a teamwork experience approach (Code 10); sharing knowledge with an organizational problem-solving experience approach (Code 10); sharing knowledge with an outsourcing report approach (Code 10), (Code 18); sharing knowledge with an agile approach; sharing knowledge on performance evaluation methods (Code 10); organizational knowledge sharing (Code 17)
	Understanding Organizational Knowledge	Explaining organizational procedures to stakeholders (Code 13); explaining organizational regulations to stakeholders; explaining organizational relationships to stakeholders (Code 13); explaining organizational accountability to stakeholders (Code 14), (Code 19); explaining organizational evaluations to stakeholders (Code 14); explaining organizational concerns to stakeholders (Code 14), (Code 17); explaining organizational values to stakeholders (Code 13), (Code 18); explaining organizational mechanisms to stakeholders (Code 13); promoting organizational knowledge (Code 17), (Code 20); understanding organizational knowledge levels (Code 17); valuing organizational knowledge (Code 17); providing a platform for individual knowledge growth (Code 18); developing individual thinking (Code 18); promoting a positive attitude towards individual knowledge improvement (Code 18), (Code 20); using technological knowledge (Code 20)
	Organizational Knowledge Production	Preparing procedural knowledge packages (Code 11); preparing interactive knowledge packages (Code 11); preparing contract registration knowledge packages (Code 11), (Code 16); preparing experiential knowledge packages (Code 11), (Code 19); preparing performance knowledge packages (Code 11), (Code 21); preparing coaching knowledge packages (Code 11); preparing structural knowledge packages (Code 11); using organizational learning to respond to customers (Code 9); using organizational learning to design programs (Code 9); using organizational learning to implement programs (Code 9), (Code 10); using organizational learning to evaluate programs (Code 9), (Code 12); organizational learning for efficiency improvement (Code 10); using organizational learning for development (Code 10); using organizational learning to prevent job turnover (Code 9), (Code 13); using organizational learning for ideation (Code 10); using organizational learning for synergy (Code 9); using organizational learning to educate customers (Code 9); using organizational learning to redesign programs (Code 9), (Code 18); organizational learning for empowerment (Code 10), (Code 16); designing training to reduce organizational errors (Code 2), (Code 11); designing shared experiences to create a common vision in the organization (Code 2); designing training to increase engagement (Code 2), (Code 17); designing training to develop job mindset (Code 2), (Code 8); designing training to develop ideation (Code 2); designing training to develop organizational

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		health (Code 3), (Code 6); designing training to develop organizational decision-making participation (Code 3), (Code 8); developing organizational knowledge acquisition activities (Code 5), (Code 13); designing training to develop organizational knowledge (Code 3), (Code 16), (Code 21); training for organizational development (Code 2), (Code 18); training for developing operational plans (Code 2)
	Organizational Knowledge Storage	Storing individual knowledge (Code 11), (Code 18); storing group knowledge (Code 11); storing knowledge on organizational complexities (Code 11); storing knowledge on organizational solutions (Code 11); storing knowledge on budgeting (Code 11), (Code 15); storing general organizational knowledge (Code 11); storing specialized organizational knowledge (Code 12), (Code 14); storing outsourcing knowledge (Code 13), (Code 19); storing internalization knowledge (Code 13); storing stakeholders' tacit knowledge (Code 12), (Code 18); storing stakeholders' explicit knowledge (Code 12)

According to the findings in Table 6, the development of knowledge management implementation in Iraqi universities with an organizational knowledge processing strategy includes five axial codes: understanding organizational learning cycles, understanding organizational knowledge, organizational knowledge sharing, organizational knowledge production, and organizational knowledge storage.

Table 7

Development of Knowledge Management Implementation in Iraqi Universities with a Constraint Removal Strategy

Selective Codes	Axial Codes	Open Codes
Constraint Removal	Organizational Review Requirements	Existing top-down structure (Code 7), (Code 15); predefined structure (Code 7); rigid and formal structure (Code 7), (Code 13); lack of structural diversity (Code 7), (Code 20); formal communication between colleagues (Code 7); formal communication between stakeholders and manager (Code 7); inflexible structure (Code 7), (Code 12); stakeholders' time occupied with administrative bureaucracy (Code 7); managing interpersonal knowledge conflicts (Code 18); managing individual-organizational knowledge conflicts (Code 18); lack of organizational task preferences based on organizational needs (Code 7); unclear organizational requirements (Code 7); complexity of work processes (Code 7), (Code 13); vague expectations (Code 7); multiple stakeholder roles in the organization (Code 7), (Code 9); weak organizational literacy (Code 8), (Code 9); weak expert literacy (Code 8), (Code 16); inactive stakeholders; mismatch between educational degree and job position (Code 8), (Code 21); designing training to review and improve organizational goals (Code 1); designing training to review the use of organizational resources (Code 1); designing training to review and improve organizational processes (Code 1), (Code 13); designing organizational strategies with a knowledge approach (Code 18); reviewing organizational policies based on knowledge (Code 18), (Code 21)
	Budgetary Requirements	Lack of financial resources for organizational learning diversification (Code 7); lack of financial resources to invite expert instructors (Code 7); lack of budget for specialists' remuneration (Code 7); centralized budgeting (Code 7), (Code 15); lack of financial resources for organizational learning (Code 7); lack of financial resources for creating organizational learning cycles (Code 7), (Code 20); lack of financial resources for flexible organizational learning (Code 7); no budget manipulation authority (Code 7), (Code 11); financial support for attending associations (Code 6), (Code 10); financial support for attending conferences (Code 6); financial support for attending scientific forums (Code 7), (Code 9); financial support for research projects (Code 7), (Code 10)
	Motivation Requirements	Low job motivation among stakeholders (Code 8), (Code 10); discouraged employees (Code 8), (Code 15); lack of job attachment (Code 8); organizational indifference (Code 8); stakeholders' financial concerns (Code 8), (Code 10); lack of fair stakeholder ranking (Code 8), (Code 11); lack of organizational justice (Code 8); inactive stakeholders (Code 8), (Code 19); future concerns (Code 8), (Code 13)
	Opportunity Creation Requirements	Stakeholders' time occupied with non-essential organizational growth activities (Code 8), (Code 15); stakeholders' time occupied without considering organizational requirements (Code 8); no specific time defined for learning to overcome organizational obstacles (Code 8); no time prioritization for organizational activities (Code 8); lack of organizational task preferences based on customer needs (Code 8); no mentoring in the organization (Code 7), (Code 14); weak organizational coaching system (Code 8), (Code 17); stakeholders' weak experiences (Code 7), (Code 18); stakeholders' time occupied with administrative bureaucracy (Code 8); administrative support for stakeholders' knowledge acquisition (Code 7), (Code 21)

According to the findings in Table 7, the development of knowledge management implementation in Iraqi universities with a constraint removal strategy includes four axial codes: organizational review requirements, budgetary requirements, motivation requirements, and opportunity creation requirements.

Table 8

Development of Knowledge Management Implementation in Iraqi Universities with a Stakeholder Service Quality Enhancement Strategy

Selective Codes	Axial Codes	Open Codes
Stakeholder Service Quality Enhancement	Service Desirability	Service diversification (Code 7); service appeal (Code 7); improving service desirability (Code 8); improving service effects, service sustainability (Code 19), (Code 8); valuable services (Code 18); flawless services (Code 18), (Code 7); clear accountability (Code 21); accountability (Code 21); facilitating foresight (Code 21);

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	organizational transformation (Code 9); resolving customer issues (Code 15); providing clear responses to stakeholders (Code 12); creating an organizational information database (Code 17)
Customer Satisfaction	Positive perception of the organization, customer satisfaction (Code 21); service adaptability to customer preferences (Code 21); meeting stakeholders' expectations; accelerating service delivery to stakeholders (Code 21); customer satisfaction (Code 21); attracting customers (Code 21); developing customer relationships with the organization (Code 21); customer service preference (Code 21); positive customer service evaluation (Code 21)
Service Domain Improvement	Specifying service time domains (Code 12), (Code 6); determining service geographic domains; specifying service thematic domains (Code 12), (Code 18); determining access to organizational knowledge (Code 11); human interactions for knowledge acquisition, externalization (Code 16)
Productivity	Improving organizational performance (Code 20); enhancing service features; enriching services; resource savings (Code 21); improving productivity (Code 21); noticeable organizational changes; improving organizational flaws and defects; removing organizational redundancies (Code 21); organizational reputation (Code 21); organizational transformation (Code 21); risk and opportunity assessment; reducing organizational problems (Code 21); correctly executing work processes (Code 21); outperforming competitors (Code 21); creating competition in learning among stakeholders (Code 21); specifying organizational knowledge locations (Code 8); preventing individual knowledge loss (Code 18), (Code 21); understanding organizational conditions (Code 21); designing training to utilize stakeholder talents (Code 1), (Code 15); designing training to develop organizational capital (Code 1), (Code 7); designing training to overcome resource limitations (Code 1), (Code 5); designing training to improve organizational capabilities (Code 1), (Code 11); designing training to develop intellectual human resources (Code 2); designing training to develop motivational human resources (Code 2); designing training to develop organizational financial resources (Code 2), (Code 13); designing training to develop behavioral human resources (Code 2); designing training to develop job-related human resources (Code 2); designing stakeholder training to develop promotion-related human resources (Code 2); designing training to develop organizational innovations (Code 2), (Code 18); designing training to develop strategic programs (Code 2)

According to the findings in Table 8, the development of knowledge management implementation in Iraqi universities with a stakeholder service quality enhancement strategy includes four axial codes: service desirability, customer satisfaction, service domain improvement, and productivity.

Table 9

The Summary of Qualitative Analysis Results

Selective Codes	Axial Codes
Organizational Structure Reconstruction	Delegation of Authority, Revising Knowledge Acquisition Processes
Organizational Welfare	Learning Welfare, Technological Welfare
Organizational Technology	Technological Training, Technological Management
Enhancing Organizational Leadership Culture	Developing Organizational Trust, Developing Group Learning, Organizing Knowledge at the Institutional-Social Level, Organizing Knowledge at the Administrative Level, Organizing Knowledge at the Technical-Operational Level
Organizational Excellence	Organizational Excellence, Organizational Dynamics, Organizational Agility, Service Development, Digitization
Organizational Knowledge Processing	Understanding Organizational Learning Cycles, Understanding Organizational Knowledge, Organizational Knowledge Sharing, Organizational Knowledge Production, Organizational Knowledge Storage
Constraint Removal	Organizational Review Requirements, Budgetary Requirements, Motivation Requirements, Opportunity Creation Requirements
Stakeholder Service Quality Enhancement	Service Desirability, Customer Satisfaction, Service Domain Improvement, Productivity

4   Discussion and Conclusion

The implementation of knowledge management in universities enhances organizational and service activities. Therefore, establishing and implementing knowledge management in Iraqi universities is of great importance, prompting this research. According to the findings, one of the dimensions of developing knowledge management implementation in Iraqi universities is the reconstruction of organizational structure. The research results align with the prior studies (Al-Salim & Mohamed, 2013; Sahibzada et al., 2022; Zamaani Tabaghdehi & Momenimahmouei, 2023). These studies indicate that the implementation of knowledge management depends on reconstructing the organizational structure of universities, which requires effective management strategies for structural flexibility achieved through transformational and transactional leadership. Implementing knowledge management in an organization means enhancing the knowledge and experience of employees, creating a suitable environment for systematic knowledge transfer, and improving organizational performance (Al-Salim & Mohamed, 2013; Sahibzada et al., 2022; Zamaani Tabaghdehi & Momenimahmouei, 2023).

The first step in implementing knowledge management is to identify the existing information and knowledge in the organization, followed by establishing appropriate processes for collecting, storing, and sharing this knowledge. Organizational structure reconstruction involves changing and improving the organizational structure to enhance flexibility, efficiency, and productivity. These changes may include altering the organizational hierarchy, defining responsibilities and tasks, creating specialized work teams, and increasing collaboration opportunities to adapt to market trends. With knowledge management implementation and organizational structure reconstruction, the organization can better respond to environmental needs and changes, utilize employees' knowledge and experience, and ensure improved performance and productivity.

One of the dimensions of developing knowledge management implementation in Iraqi universities is organizational welfare. The research results align with the prior finding (Rastorgueva & Zecca, 2017). According to their study, knowledge management implementation is related to organizational welfare, promoting welfare through strategies aimed at organizational transformation and improvement. Knowledge management and organizational welfare are both crucial topics for organizations. Knowledge management, by enhancing employees' knowledge and experience, creating a suitable environment for systematic knowledge transfer, and increasing organizational performance, can positively impact organizational welfare (Barão et al., 2017). Employees' knowledge and experience play a significant role in improving the work environment and increasing their satisfaction and welfare. For instance, creating a space for sharing knowledge and experience among employees can leverage positive interactions to boost morale and work motivation. Additionally, enhancing employees' knowledge and skills can improve the quality of services provided by the organization, thereby ensuring improved organizational welfare. Therefore, organizations should not only focus on knowledge management but also consider the needs of organizational welfare, managing both simultaneously to achieve overall organizational performance and welfare improvement.

One of the dimensions of developing knowledge management implementation in Iraqi universities is the utilization of organizational technology. The research results align with the previous studies (Mayahi et al., 2023; Safari et al., 2020; Taheri et al., 2019; Zamaani Tabaghdehi & Momenimahmouei, 2023). According to these studies, knowledge management implementation is related to

organizational technology. Knowledge management and organizational technology are two fundamental elements that interact and can improve organizational performance and development. Knowledge management involves enhancing employees' knowledge and experience and systematically sharing it, which can foster innovation and the development of new technologies within the organization (Zamaani Tabaghdehi & Momenimahmouei, 2023). Moreover, aligning organizational technologies with employees' current and future knowledge can enhance organizational performance and efficiency. For example, using appropriate software and tools for collecting, storing, and sharing knowledge, artificial intelligence capabilities, and e-commerce can improve organizational technology. By combining knowledge management and organizational technology, the organization can focus on innovation, performance, and productivity, enhancing its competitiveness (Adenan et al., 2013). Therefore, paying attention to both elements and their proper management can lead to sustainable development and progress for the organization.

According to the findings, one of the dimensions of developing knowledge management implementation in Iraqi universities is organizational leadership culture enhancement. The research results align with the prior studies (Quarchioni et al., 2022; Sadri, 2018). According to these studies, knowledge management implementation is related to organizational restructuring. Knowledge management and organizational restructuring are two key topics that interact and can improve organizational performance and development. Knowledge management involves creating a space for sharing employees' knowledge and experience, systematically collecting and storing information, and increasing innovation within the organization. Organizational restructuring aims to change and improve the organizational structure to enhance flexibility, efficiency, and productivity (Quarchioni et al., 2022; Sadri, 2018). These changes may include alterations in organizational hierarchy, defining responsibilities and tasks, utilizing specialized work teams, and creating more collaboration opportunities to adapt to market trends. By implementing knowledge management and organizational restructuring, the organization can better respond to environmental needs and changes, leverage employees' knowledge and experience, and ensure improved performance and productivity. Overall, combining these two elements can help improve overall organizational performance and welfare.

According to the findings, one of the dimensions of developing knowledge management implementation in Iraqi universities is organizational knowledge processing. The research results align with the prior studies (Antunes & Pinheiro, 2020; Barão et al., 2017; Zamaani Tabaghdehi & Momenimahmouei, 2023). According to these studies, knowledge management implementation is related to organizational knowledge. Knowledge management leads to the development and improvement of knowledge. Knowledge management and improving organizational knowledge are two fundamental topics that interact and can help organizational development and progress (Antunes & Pinheiro, 2020; Barão et al., 2017; Zamaani Tabaghdehi & Momenimahmouei, 2023). Knowledge management involves creating a space for collecting, storing, and sharing employees' knowledge and experience, which can lead to increased organizational performance and innovation. On the other hand, improving organizational knowledge involves efforts to enhance employees' knowledge and experience, create appropriate educational opportunities, and create a space for sharing information and knowledge among organization members. These efforts can lead to improved performance, welfare, and organizational productivity. Knowledge management and improving organizational knowledge are complementary elements, and full cooperation between the two can help sustainable development and improvement of the organization. Therefore, attention to these two topics and creating appropriate strategies for managing and improving organizational knowledge can lead to overall organizational performance and welfare improvement.

According to the findings, one of the dimensions of developing knowledge management implementation in Iraqi universities is constraint removal. The research results align with the prior studies (Haghighi et al., 2014; Massaro et al., 2016; Mayahi et al., 2023; Quarchioni et al., 2022; Rastorgueva & Zecca, 2017). According to these studies, knowledge management implementation is related to organizational constraints. Existing constraints in the organization hinder the development and implementation of knowledge management, while removing organizational constraints and barriers leads to the expansion of knowledge management. Empowering employees is an important strategy for removing constraints, which can improve organizational performance. Knowledge management and organizational constraints are two significant issues that, if misaligned, can lead to inflexibility and reduced organizational performance. Knowledge management

involves enhancing employees' knowledge and experience, creating a suitable environment for systematic knowledge sharing, and increasing innovation. However, when organizational constraints exist, they can prevent the creation of a suitable environment for knowledge management. Organizational constraints may include limited budgets, detailed organizational hierarchies, and strict organizational regulations, leading to comprehensive organizational settings and limited resources for knowledge management. These constraints can limit the availability for developing and sharing organizational knowledge among employees (Haghighi et al., 2014; Massaro et al., 2016; Mayahi et al., 2023; Quarchioni et al., 2022; Rastorgueva & Zecca, 2017). To advance knowledge management despite organizational constraints, appropriate strategies must be adopted to remove and overcome these constraints. This includes creating a flexible and open environment for knowledge sharing, researching and developing new approaches to knowledge management, and creating more opportunities for employee education and development. Thus, organizational constraints can become an opportunity for improving and developing knowledge management.

According to the findings, one of the dimensions of developing knowledge management implementation in Iraqi universities is enhancing stakeholder service quality. The research results align with the previous studies (Al-Husseini et al., 2021; Mayahi et al., 2023; Safari et al., 2020). According to these studies, knowledge management implementation is related to stakeholder services. According to their studies, efforts to establish knowledge management are necessary for providing services to stakeholders. Knowledge management and student services are two important topics that can improve students' performance and welfare and enhance the organization's educational and research quality (Al-Husseini et al., 2021; Mayahi et al., 2023; Safari et al., 2020). Knowledge management involves enhancing the knowledge and experience of organization members, creating a space for systematic knowledge sharing, and increasing innovation. For students, knowledge management can improve learning processes and their ability to solve problems and generate knowledge. On the other hand, student services include providing educational, research, counseling, and cultural and social support services to students. These services can increase student satisfaction, support their research and academic activities, and improve educational opportunities and personal development. By combining knowledge management and providing appropriate services to students, the organization can best

utilize students' knowledge and experience, and through improving service quality and learning processes, contribute to the continuous growth and improvement of students and the organization. Overall, combining knowledge management and student services can help improve the organization's overall educational performance and welfare.

To develop knowledge management implementation in Iraqi universities, organizational restructuring should include delegation of authority and revising knowledge acquisition processes.

Based on the results, it is recommended:

To develop knowledge management implementation in Iraqi universities, organizational welfare should be provided through learning welfare and technological welfare.

To develop knowledge management implementation in Iraqi universities, organizational technology should be expanded, including digitizing educational documents, digitizing executive-technical documents, digitizing user documents, and digitizing administrative documents.

To develop knowledge management implementation in Iraqi universities, organizational leadership culture should be expanded. Thus, organizational trust, group learning, organizing knowledge at the institutional-social level, and organizing knowledge at the administrative level should be developed.

To develop knowledge management implementation in Iraqi universities, organizational structure should be reconstructed through organizational excellence, organizational dynamics, organizational agility, service development, and digitizing executive-technical documents, and digitizing user documents.

To develop knowledge management implementation in Iraqi universities, emphasis should be placed on organizational knowledge processing, including organizational knowledge production and organizational knowledge storage.

To develop knowledge management implementation in Iraqi universities, constraints such as budgetary requirements, structural requirements, and motivation requirements should be addressed, and authority should be delegated to specialists.

To develop knowledge management implementation in Iraqi universities, enhancing stakeholder service quality should be the central focus of university activities, emphasizing customer satisfaction, service value, service domain improvement, and productivity.

Authors' Contributions

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