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Presenting an Interpretative Structural Model for Promoting Intellectual Capital in the Database of Public Organizations

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ABSTRACT

Improving intellectual capital in databases involves enhancing the productivity of information and knowledge stored in these systems to boost organizational and competitive value. The intellectual capital development model encompasses processes such as collecting, organizing, analyzing, and utilizing data to create new and value-added knowledge. This article aims to present an interpretive structural model for enhancing intellectual capital within the databases of public organizations. The research was conducted using a mixed-method approach, including the metasynthesis method and interpretive structural modeling. To achieve this objective, the fundamental categories for promoting intellectual capital were identified and validated. By establishing the causal relationships among these elements, the final model was developed. It is an applied-developmental research in terms of purpose and a survey-cross-sectional research in terms of data collection method. The statistical population for this study comprised experienced human resource managers at Tehran Municipality. The snowball sampling method was utilized, and the sampling process continued until theoretical saturation was achieved, with 13 managers from Tehran Municipality ultimately participating in the study. The metasynthesis method was used to identify the underlying categories of intellectual capital. Additionally, a structural-interpretive model for intellectual capital promotion was presented. Data analysis was conducted using MaxQda and MicMac software. The results indicated that "organizational leadership, "organizational culture, and "organizational structure" influence the "expertise and skills of human resources, "media interactions" and "social customization. factors also affect "cooperation and participation, of "management of the relationship with the master of reference of "social excellence. ©authors.

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1. Introduction

Promoting intellectual capital in databases involves enhancing and generating the information and knowledge stored in these systems to boost organizational and competitive value. The model for promoting intellectual capital encompasses processes such as collecting, organizing, analyzing, and utilizing data to generate new and value-added knowledge (Iacuzzi et al., 2023). This model focuses on three main components of intellectual capital - human capital, structural capital, and communication capital - aiming to optimize knowledge management, enhance staff skills and knowledge, improve technological infrastructure, strengthen organizational relationships and networks, and boost performance and innovation within organizations. For instance, within an organizational database, utilizing data mining techniques and data analysis can reveal hidden patterns and valuable insights to aid in strategic decision-making (Abdallah et al., 2024). Furthermore, employees can efficiently share their knowledge and experiences by developing knowledge management systems and facilitating information sharing. These processes not only enhance the quality and speed of decision-making but also foster innovation and creativity within the organization (Martínez-Falcó et al., 2024). In essence, the model for promoting intellectual capital in databases assists organizations in maximizing their information and knowledge resources, thereby enhancing productivity and gaining a sustainable competitive advantage (Haji Malarabi & Rahimi, 2022). In the fifth-generation society, where public life and technology are deeply intertwined, the concept of intellectual capital holds paramount importance. Governments and the public sector should prioritize this issue (Konno & Schillaci, 2021).

Public organizations have realized the increasing importance of intellectual capital in the current decade more than ever before. There is a wealth of empirical evidence indicating that intellectual capital significantly influences public sector performance. The key to enhancing the

performance of public organizations is to focus on nurturing and advancing intellectual capital (Nicolò et al., 2021). Generally, companies and organizations that possess abundant intellectual capital can expand their operations with greater confidence. Such organizations encounter fewer information asymmetry problems and achieve maximum efficiency and effectiveness in their activities (Farooq et al., 2022).

In fact, with the transition from the age of industry to the information age, the importance of intellectual capital has greatly increased. In the information age, the effective utilization of intellectual capital determines the success or failure of a company (Shayeghan No et al., 2022). Many experts argue that intellectual capital is the most crucial factor in value addition and improved performance in companies. Particularly in today's knowledge-based societies, the return on intellectual capital is deemed more significant than the return on financial capital. Intellectual capital has become the primary advantage for companies in attaining performance management objectives within an organization (Dehghani et al., 2020). Successful organizations leverage intellectual capital through their employees, communication strategies, and investment processes to foster organizational innovation. Consequently, the correlation between the development, accumulation, and dissemination of knowledge and performance is realized under the influence of intellectual capital (Yusliza et al., 2020).

In the current knowledge-based economy and the era of knowledge sovereignty, intellectual capital is the key to success (Zoroastrian Shirin et al., 2019). This concept, which has been recognized as a valuable asset for countries and organizations in recent years, is rapidly becoming one of the indicators of developing countries (Rangreez et al., 2020). Intellectual capital holds great significance in the field of human resource management. Focusing on organizational capital, particularly intellectual capital, which is a highly beneficial asset for organizational growth,

and emphasizing organizational performance (Pinar et al., 2019). Leveraging the intellectual and mental capabilities of the organization's employees, referred to as hidden capital, necessitates structures that can enhance the job performance of the organization's employees to attain the organization's current and future objectives. The novel approaches to managing assets such as human capital, structural capital, and communication capital play a crucial role in business development (Ozgun et al., 2022).

Intellectual capital is an invaluable asset for organizations, encompassing individuals (human capital), relationships (communication capital), and physical assets (structural capital). Intellectual capital is not merely a static intangible asset; it is an ongoing process and a means to achieve objectives. Intellectual capital comprises three dimensions: human, structural, and communication (Mahmoudi et al., 2022). The primary dimension of organizational human capital (Dalwai et al., 2021). Structural capital refers to the company's assets that, supported by human capital, foster relationships, implying that the company possesses procedures, systems, appropriate programs, and strategies that can aid in achieving the company's ultimate goal of customer and stakeholder satisfaction (Ghasemi et al., 2020). The organization and its perception, as well as information exchange, are viewed in the context of agreements such as contracts and customer satisfaction and loyalty to clients.

Overall, governments and the public sector are attempting to utilize models to leverage intellectual capital in operational contexts (Perry, 2021). One of the public institutions that offers services to citizens is the municipality. Intellectual capital plays a crucial role in enhancing both financial and non-financial performance (Mahmoudi et al., 2021). Despite its significance in the municipality, there is currently no specialized framework for intellectual capital within this context. Therefore, it is anticipated that the implementation of an operational framework for intellectual capital within the municipality will lead to enhanced individual and organizational performance,

resulting in improved municipal services for citizens. Given that such a framework must be tailored to the unique characteristics of the municipality, distinct from other organizations, the development of a specialized intellectual capital framework is imperative. To achieve this, the fundamental categories of intellectual capital are identified, and a model for intellectual capital in the municipality of Tehran is proposed by establishing relevant relationships. This study addresses the central question of the dimensions and components of intellectual capital in the municipality of Tehran and explores the interplay among these factors.

2. Literature Review

Intellectual capital was first introduced by Fritz Moghlap, and then in 1969 John Kent Galbrit used the term (Dehghan et al., 2019). Stewart claimed that the concept of intellectual capital was initially raised in year 2 (Stewart, 2010). Some also attribute the introduction of the idea of Peter Drucker. Despite the increasing adoption of the concept of intellectual capital, many individuals are still unfamiliar with it. Overall, the term "intellectual capital" was first coined by Galbrit. He argued that intellectual capital extends beyond mere thinking and encompasses a level of intellectual action (Khalique et al., 2014). A review of research literature reveals that the first theoretical work on intangible assets was published in Japan in the early 1980s.

The first practical association in Switzerland was established in year 6, focusing on the knowledge of static assets such as inventions, ideas, computer programs, and rights (Cuozzo et al., 2017). The dimensions and components of intellectual capital were redefined through Bonnis' studies. According to Bonnis, intellectual capital comprises structural capital, relational capital, and human capital (Bontis, 2007).

An organization's intellectual capital encompasses knowledge, experience, inventions, innovations, market share, and relationships that can impact the organization. According to the Washington

DC Economic Institute's definition, a country's economic productivity relies more on employees' skills, knowledge, and problem-solving abilities than on the market value of commercial companies. Most experts concur that in the new millennium, intellectual capital will be the primary driver of economic growth. It serves as an intangible security infrastructure developed by companies over many years. Therefore, there is a need to prioritize sustainable development (Sardo et al, 2018). Intellectual capital refers to a collection of knowledge-based assets within an organization, leveraging its unique characteristics to enhance the organization's competitiveness by delivering value to key stakeholders (Wang, 2022).

The strategic database of an organization is not stored in the memory of its computers, but in the minds of its employees. This statement by Mintzberg indicates that organizations need to pay more attention to their assets and intellectual capital, and to work effectively (Huang et al, 2020). A set of knowledge assets creates added value for key stakeholders, enhancing the organization's competitive position. The intellectual capital questionnaire can be used to measure this. Management researchers have identified three dimensions of intellectual capital: human, structural, and relational. Human capital represents the accumulation of capabilities of responsible individuals to generate suitable solutions for the organization (Liu et al, 2020). The primary goal of human capital is to drive innovation in products and services, as well as to enhance business processes. Key indicators of human capital include the professional and specialized competencies of key employees, their education, experience, and the accurate allocation of responsibilities related to clients. Human capital is a crucial component in explaining economic growth as it boosts production through various channels, increasing labor productivity and demand, leading to enhanced production and organizational productivity (Bellucci et al, 2021). Structural capital encompasses knowledge-sharing mechanisms and processes. It refers to the knowledge

embedded in an organization's work procedures and is manifested through organizational analysis, processes, and innovation. The company's structural capital comprises systems, structure, strategy, and culture. Customer capital involves leveraging market information to attract and retain customers. The core of customer capital lies in understanding marketing channels and relationships with clients. Customer capital showcases the organization's potential due to its intangible external factors. While the term was initially coined by Hybert Sint, new definitions have evolved the concept into relationship capital (Bontis, 2001). This concept encompasses all relationships that the organization establishes with clients, competitors, suppliers, business associations, or government.

3. Methodology

From a philosophical perspective, the current study is an empirical investigation based on a deductive-independent approach. The aim of this study is to establish a model for enhancing intellectual capital in public organizations, thus adopting an applied-development approach. Since the data in this study was collected without bias or manipulation, it is considered a descriptive study conducted through a survey. Both commissioned and library studies were utilized to gather research data in the qualitative phase. Following the identification of categories through a mixed method, a questionnaire based on the structural-intelligence method was employed. The study population comprises theoretical experts (professors in human resource management) and practical experts (experienced managers from Tehran Municipality) who specialize in intellectual capital. The recommended sample size for such studies typically ranges between 5 and 25 individuals. Expert and purposive sampling methods are also advised. In this study, the perspectives of 13 individuals were considered using non-explicit and purposive sampling techniques. The reliability was calculated by assessing the agreement between two coders. Another researcher independently coded the same texts without knowledge of the initial

coding. If the codes assigned by the two researchers closely match, it indicates a high level of agreement. The Kappa coefficient was employed to determine the level of agreement between the two coders. A coefficient exceeding 0.6 indicates acceptable reliability (Gwet, 2014). In the present study, the Kappa coefficient was 0.611, meeting the acceptable threshold. Additionally, the Kappa index was less than 0.05, rejecting the assumption of code independence and confirming code dependence. Therefore, it can be asserted that the tool codes used for extracting data are reliable. Initially, the component method was used to identify the main and sub-categories for designing the model of intellectual capital enhancement in public organizations. Subsequently, the final model

was developed through structural-structural modeling. The software Maxqda was employed for conducting the structural-composite modeling in conjunction with MICMAC software.

4. Findings

In the first step, the intellectual capital promotion model was identified using a combined method.

Generally, the metasynthesis method is a kind of qualitative study that uses other studies on the subject of the relevant subject. In the component method, the researcher combines the secondary data from other studies to respond to the results of his or her study and get new results. For the sake of the formation of the method, the text was made from the Sandelowski and Barroso (2006).

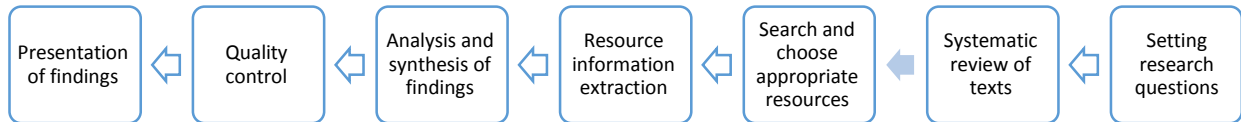


Figure 1. The seven-step metasynthesis model

Step One: Setting Research Questions

The first step in the component method is to arrange research questions. These questions are generally based on four parameters, who, when, and how;

Adjustable. In the grouping and analysis of the dimensions of intellectual capital promotion, it was questioned.

Table 1. Research questions

Parameter	Research question
(What)	What are the basic categories of designing the intellectual capital promotion model in Iran's public organizations?
(Who)	Who are the people involved in the design of the intellectual capital improvement model in Iran's public organizations?
(When)	What are the indicators for measuring the design categories of the intellectual capital promotion model in Iran's public organizations?
(How)	What are the design categories of the intellectual capital promotion model in Iran's public organizations related to each other?

Step Two: The systematic review of the texts

For the formation of data from the databases, it has been made to the name of the data. This is the entire research of research in the field of intellectual capital promotion. With the study of the research and the other and the other sites, the sites and sites of the universities Rights of Conferences, Entrepreneurship, Iran Doc and Trends with Model Capital Model in Employees' Model Government agencies were found in a number of 49.

Step Three: Search and select appropriate texts

In the search process, various parameters such as title, abstract, content and details of the article were deleted and articles that were not commensurate with the research question and purpose were eliminated. Frequently, and in this case, it is given in Figure 2.

Finally, after four refining stages, 49 articles were lifted. 39 were selected for analysis.

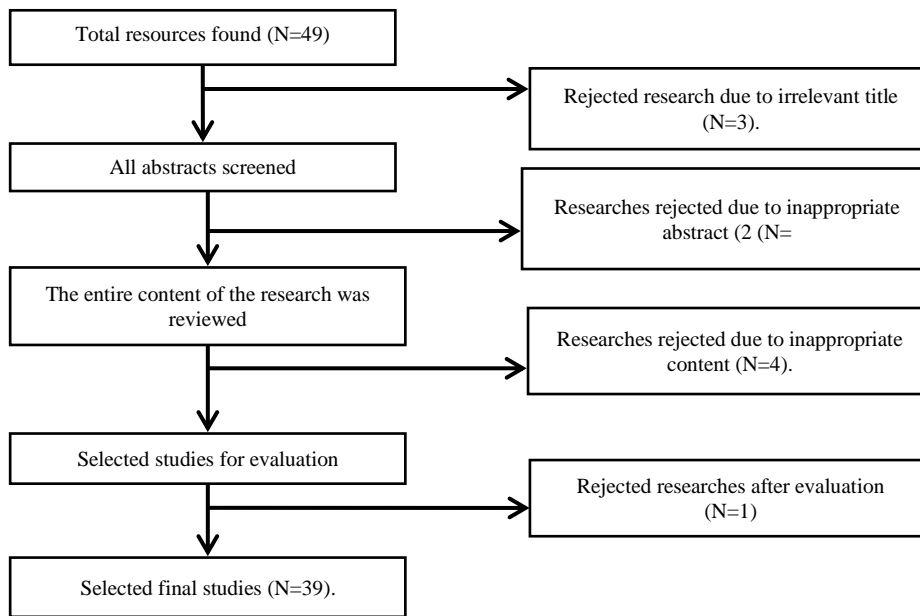


Figure 2. Review and selection process

Fourth Step: Research information extraction

In this research, the information of the researches was classified in a table. This table includes the following information: ID information of the research: title, name and family name of the authors and the year of publication.

Key methodological information: research method and goal. Main findings information: research results and findings.

Fifth Step: analysis of qualitative findings

During the breakdown and analysis, the researcher looks for issues that have appeared among the existing studies in the meta-synthesis. This case is known as (thematic investigation). As soon as the topics are identified and defined, the examiner forms a classification and places similar and related classifications in a topic that best describes it. Topics provide the basis for creating explanations, models and theories or hypotheses. In this research, at first, all the factors extracted from the studies were considered as identifiers, and then by considering the meaning of each of them, the identifiers were defined in a similar concept; Then, similar concepts were classified in the explanatory categories so that the explanatory axes of the intellectual capital improvement indicators can be identified in

the form of the main and sub-components of the research.

Sixth Step: control the quality of the analysis

In qualitative research, credibility means concepts such as defensibility, believability, verifiability and reflectivity of research results. One of the indicators of validity (reliability) of qualitative research is the evaluation of two or more documents in terms of reference to a specific index (Sandelowski & Barroso, 2006). MaxQda software has such a capability and the nature of zero and one codes allows the use of Kappa index. To evaluate the reliability of metasynthesis, a selected document was provided to one of the experts. After evaluation, Kappa coefficient was calculated as 0.611. A kappa coefficient above 0.6 is desirable (Landis et al., 1977), so this value means the reliability of the research results. Also, in this research, the following methods were taken into account to maintain the quality of the study:

- Throughout the research, an effort was made to provide clear explanations for the research options.
- Both electronic and manual search methods were used to search for researches.

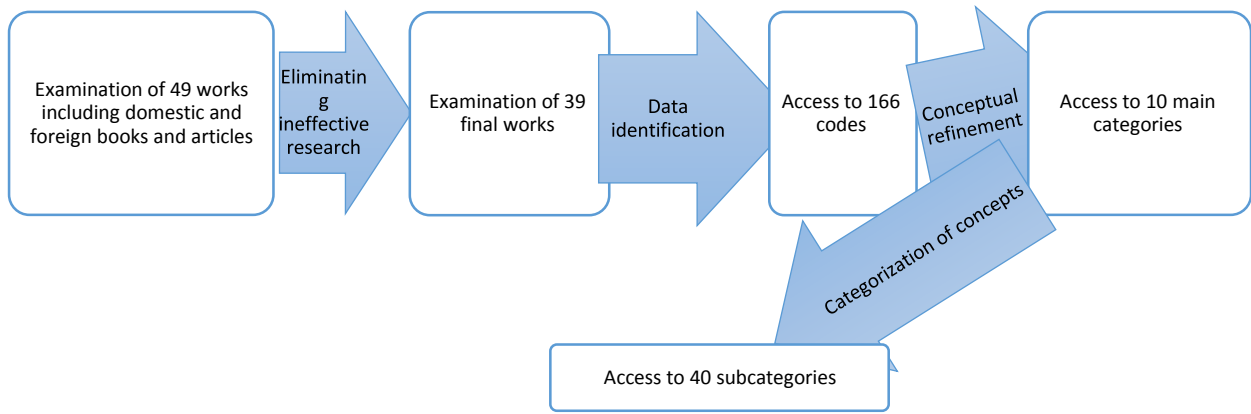


Figure 3. Output Algorithm of Quality Control of Research Indicators

Seventh Step: Presenting the research report and findings

In this stage of the metasynthesis method, the findings of the previous stages are presented. In the following, the research indicators will be identified. From the indicators extracted from the texts of related articles, by removing synonymous and frequent indicators and finally by

categorizing and categorizing the final indicators, 4 comprehensive categories, 10 organizing categories and 40 basic themes were obtained. In this stage of coding, the main and subcategories of the research were determined. The results of this categorization are presented in Table 2.

Table 2. The main and sub-themes of the research

Basic themes	Organizing categories	Comprehensive components
Risk taking and uncertainty tolerance	Organizational leadership	Organizational capital
Flexible and responsible		
Planning, controlling and organizing		
Ethical orientation and serving the leader		
Providing facilities for coordination between different departments of the organization	Organizational Structure	
Revision of the organizational chart		
Specialization in the organization		
Clarify organizational strategies and procedures	Organizational Culture	
Maintaining the cultural values of the organization		
Creating a culture of dialogue between managers and employees		
Creating a warm and friendly atmosphere in the organization		
Implementation of ethical and behavioral regulations in the organization	Expertise and skill of human resources	Human Capital
Use of technological and up-to-date equipment		
Training needs assessment of employees		
Developing creative and innovative thinking skills		
Giving material and spiritual rewards	Cooperation and participation	
Job commitment		
Appropriate job design with people's capabilities		
Delegation of authority in organization decisions		
Increasing communication and interaction with employees	Managing the relationship with the clients	Communication capital
Get feedback from the feedback master		
Providing quality services to the client		
Getting the satisfaction of the master		
Prompt handling of complaints	Media interactions	
Creating a database specific to clients		
Providing appropriate advertising at the macro level		
Organizing the center of multimedia public spaces in the organization		
Increasing presence in social networks	citizen orientation	
Media coverage of the organization's activities		
Creating and developing communication channels with citizens		
Knowing the needs and desires of citizens		
Continuous monitoring of customer satisfaction	Social excellence	Social capital
Communication, dependence and loyalty of citizens		
Developing the process of creativity and innovation in society		
Collaborative learning among all people		
Building social trust	Social customization	
Socialization of education and learning		
Identifying and meeting hidden social needs		
Commitment to providing social services		
Social mobility and new attitudes of people in society		

Interpretive structural modeling method has been used to determine the pattern of intellectual capital improvement in Tehran Municipality. Designing an Interpretive Structural Model (ISM) is a method to investigate the effect of each variable on other variables; This design is a comprehensive approach to measuring communication and this design is used to develop the framework of the model to enable the general objectives of the research. Interpretive structural modeling method was

used to design the primary model of strategic marketing in the furniture industry.

For this purpose, the structural self-interaction matrix (SSIM) was first formed. The relationships of comprehensive structures are characterized by four symbols V (variable i affects j), A (variable j affects i), X (two-way relationship), and O (absence of relationship) (Azer et al., 2017). The structural autocorrelation matrix is presented in Table 3.

Table 3. SSIM structural self-interaction matrix of intellectual capital promotion in Tehran municipality

D10	D09	D08	D07	D06	D05	D04	D03	D02	D01	SSIM
V	A	A	V	A	V	V	V	V		Human resources expertise and skills (D01)
V	A	A	O	A	V	V	X			Media interactions (D02)
O	A	A	O	A	V	V				Social customization (D03)
A	A	A	V	A	A					Managing the relationship with the owner (D04)
A	A	A	O	A						Cooperation and partnership (D05)
V	A	X	V							Organizational Leadership (D06)
A	A	A								Social Excellence (D07)
V	X									Organizational culture (D08)
V										Organizational structure (D09)
										Citizenship (D10)

By transforming the structural self-interaction matrix into a two-valued matrix of zero and one, the received matrix (RM) is obtained. In the received matrix, the dimensions of the main diameter are equal to one. Also, secondary relationships should be checked to be sure. That is, if A leads to B and B leads to C, then A must lead to C.

That is, if direct effects should be included based on secondary relationships, but this did not happen in practice, the table should be corrected and the secondary relationship should also be considered (Azer & Khosravani, 2018, p. 260). The final accessibility matrix is presented in Table 4.

Table 4. Matrix of final achievement of intellectual capital improvement in Tehran municipality

D10	D09	D08	D07	D06	D05	D04	D03	D02	D01	TM
1	0	0	1	0	1	1	1	1	1	Expertise and skill of human resources (D01)
1	0	0	1*	0	1	1	1	1	0	Media interactions (D02)
1*	0	0	1*	0	1	1	1	1	0	Social customization (D03)
0	0	0	1	0	0	1	0	0	0	Managing the relationship with the owner (D04)
1*	0	0	1*	0	1	1	0	0	0	Cooperation and partnership (D05)
1	1*	1	1	1	1	1	1	1	1	Organizational leadership (D06)
0	0	0	1	0	0	0	0	0	0	Social Excellence (D07)
1	1	1	1	1	1	1	1	1	1	Organizational culture (D08)
1	1	1	1	1	1	1	1	1	1	Organizational structure (D09)
1	0	0	1	0	1	1	0	0	0	Citizenship (D10)

After forming the achievement matrix to determine the relationship and stratification of strategic marketing in the furniture industry, "achievement set" and "prerequisite set" should be identified. For the variable, the access set (output or effects) includes the

variables that can be reached through the variable. The prerequisite set (input or effects) consists of the variables through which the variable can be reached. The set of inputs and outputs to determine the level is presented in Table 5.

Table 5. A set of inputs and outputs to determine the level

Common	Input: Effectiveness	Output: effect	Structures
D01	D01,D06,D08,D09	D01,D02,D03,D04,D05,D07,D10	D01
D02,D03	D01,D02,D03,D06,D08,D09	D02,D03,D04,D05,D07,D10	D02
D02,D03	D01,D02,D03,D06,D08,D09	D02,D03,D04,D05,D07,D10	D03
D04	D01,D02,D03,D04,D05,D06,D08,D09,D10	D04,D07	D04
D05,D10	D01,D02,D03,D05,D06,D08,D09,D10	D04,D05,D07,D10	D05
D06,D08,D09	D06,D08,D09	D01,D02,D03,D04,D05,D06,D07,D08,D09,D10	D06
D07	D01,D02,D03,D04,D05,D06,D07,D08,D09,D10	D07	D07
D06,D08,D09	D06,D08,D09	D01,D02,D03,D04,D05,D06,D07,D08,D09,D10	D08
D06,D08,D09	D06,D08,D09	D01,D02,D03,D04,D05,D06,D07,D08,D09,D10	D09
D05,D10	D01,D02,D03,D05,D06,D08,D09,D10	D04,D05,D07,D10	D10

Therefore, social excellence (D07) is on the first level. The variables of cooperation and participation (D05) and citizen orientation (D10) are in the third level. The variables of media interactions (D02) and social customizability (D03) are at the fourth level. The variable of expertise and skill of human resources (D01) is at level five. The variables of organizational leadership (D06),

organizational culture (D08) and organizational structure (D09) are at the sixth level. Also, the outputs and inputs of each variable show the power of influence and dependence of that variable, respectively. The influence-dependence power of the studied variables is presented in Table 6.

Table 6. Influence power-dependency of intellectual capital improvement variables in Tehran Municipality

Research variables	level	Penetration power	The degree of dependence
Expertise and skill of human resources (D01)	5	7	4
Media interactions (D02)	4	6	6
Social customization (D03)	4	6	6
Managing the relationship with the owner (D04)	2	2	9
Cooperation and partnership (D05)	3	4	8
Organizational leadership (D06)	6	10	3
Social Excellence (D07)	1	1	10
Organizational culture (D08)	6	10	3
Organizational structure (D09)	6	10	3
Citizenship (D10)	3	4	8

Based on the influence-dependence diagram, the variables of organizational leadership (D06), organizational culture (D08) and organizational structure (D09) have high influence power and have little influence and are placed in the area of independent variables. The variables of social excellence (D07), cooperation and participation (D05) and citizenship orientation (D10) also have high dependence but little influence, so they are considered dependent variables. The variables of expertise and skill of human resources

(D01), media interactions (D02) and social orderability (D03) have similar influence and degree of dependence, so they are linked variables. It should be noted that no variable has been placed in the first quadrant, i.e. the autonomous region. The final pattern of the levels of the identified variables is shown in Figure 4. In this diagram, only the meaningful relationships of the elements of each level on the elements of the lower level, as well as the meaningful internal relationships of the elements of each row, are considered.

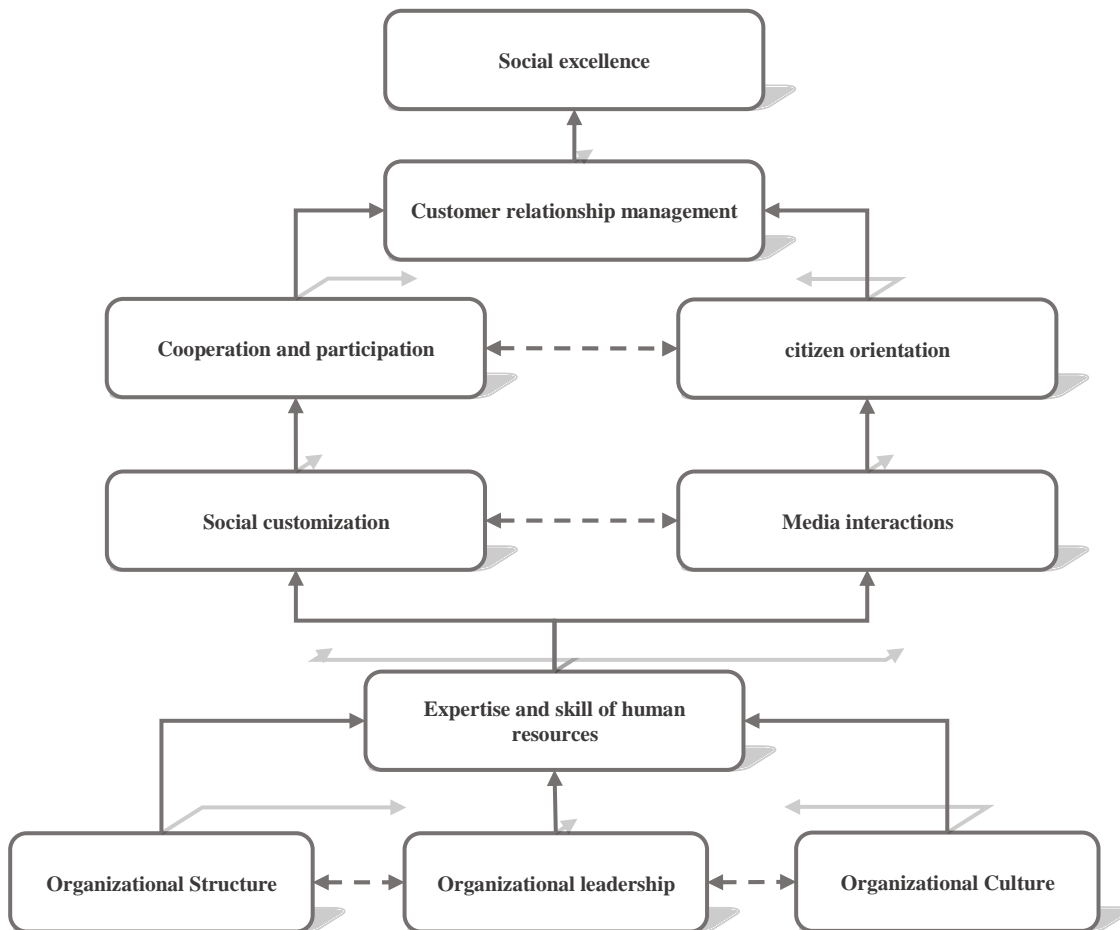


Figure 4. *The model of promoting intellectual capital in Tehran Municipality*

Based on structural-computing calculations, it has been found that elements of the six, namely "organizational leadership", "organizational culture" and "organizational structure" have the most impact. These elements affect "human resource expertise and skill". Human expertise and skill also affect "media interactions" and "social ordering". Likewise, these factors affect "citizenship" and "cooperation and partnership". Ultimately, the improvement of "communication management with the client" leads to "social excellence".

5. Conclusion

The results of this study show that social excellence is crucial in promoting intellectual capital in the municipality.

Expertise and skill of human resources play a pivotal role in promoting intellectual capital within public organizations' databases. Skilled employees contribute to the development, storage, and dissemination of knowledge, which enhances the organization's intellectual capital. Their

expertise enables the effective management of data, ensuring accuracy, relevance, and accessibility. This, in turn, supports decision-making processes, innovation, and the overall efficiency of the organization. By fostering a culture of continuous learning and skill development, public organizations can maximize the intellectual capital embedded in their human resources, leading to better public service delivery and organizational performance.

Media interactions significantly contribute to promoting intellectual capital within public organizations' databases by facilitating the flow of information and knowledge both internally and externally. Through strategic media engagements, organizations can share insights, updates, and innovations with the public, stakeholders, and employees, thereby enhancing transparency and trust. Media platforms also serve as channels for gathering feedback, which can be integrated into the database to refine and expand the organization's knowledge base. By leveraging media interactions effectively,

public organizations can enrich their intellectual capital, improve knowledge dissemination, and foster a culture of continuous learning and adaptation.

Social customization involves tailoring intellectual capital initiatives to the specific social and organizational context of public organizations, enhancing the relevance and impact of their knowledge management efforts. By customizing strategies to align with the unique needs, cultures, and preferences of different social groups within and outside the organization, public entities can better engage stakeholders, address specific challenges, and leverage diverse perspectives. This approach ensures that the intellectual capital stored in databases is not only accurate and comprehensive but also contextually relevant, promoting more effective knowledge sharing, collaboration, and innovation. Social customization helps in creating a more dynamic and responsive knowledge environment that adapts to evolving social needs and organizational goals.

Managing the relationship is crucial in promoting intellectual capital within the database of public organizations. Effective relationship management ensures that the owner's strategic vision and goals are aligned with the organization's knowledge management practices. By maintaining open communication, addressing the owner's expectations, and incorporating their insights into the development and utilization of the database, public organizations can enhance their intellectual capital. Pinar et al (2019) showed that This alignment fosters a supportive environment for knowledge sharing and innovation, ensuring that the database not only reflects the owner's objectives but also contributes to achieving them. Consequently, it strengthens the organization's ability to leverage its intellectual resources for improved performance and public service outcomes.

Organizational leadership is vital for promoting intellectual capital in the database of public organizations. Effective leadership ensures that the owner's strategic vision is integrated into the organization's knowledge management framework. Leaders play a key

role in setting priorities, allocating resources, and driving initiatives that enhance the database's ability to capture, store, and utilize intellectual capital. By aligning leadership actions with the owner's goals, fostering a culture of knowledge sharing, and actively supporting intellectual capital development, leaders can create an environment that maximizes the value of the database. This collaboration not only strengthens the organization's strategic capabilities but also promotes a more efficient and impactful use of its intellectual resources.

Social excellence is crucial for promoting intellectual capital in the database of public organizations. It involves cultivating a high level of engagement and collaboration between the organization and the owner, ensuring that social interactions and relationships are leveraged to enhance the database's value. By prioritizing effective communication, transparency, and mutual respect, organizations can align their intellectual capital strategies with the owner's expectations and social objectives. This approach facilitates the integration of diverse perspectives and expertise into the database, enriches the quality of knowledge captured, and fosters a culture of continuous improvement. Ultimately, social excellence helps in building a strong partnership with the owner that drives innovation and maximizes the impact of intellectual capital on organizational performance.

Organizational culture plays a pivotal role in promoting intellectual capital within the database of public organizations by shaping attitudes, behaviors, and practices related to knowledge management. Wang (2022) showed culture that values and supports continuous learning, collaboration, and knowledge sharing encourages employees to actively contribute to and utilize the database. When the organizational culture prioritizes intellectual capital, it fosters an environment where employees are motivated to innovate, share insights, and enhance the quality of information captured. This cultural commitment ensures that the database becomes a dynamic repository of valuable knowledge, ultimately driving organizational

performance and enabling more effective public service delivery.

Organizational structure significantly impacts the promotion of intellectual capital within the database of public organizations by defining how knowledge flows and is managed across the organization. A well-designed structure facilitates efficient communication and collaboration among departments, ensuring that valuable insights and expertise are effectively captured and integrated into the database. Clear roles and responsibilities, along with streamlined processes for knowledge sharing and retrieval, support the effective management of intellectual capital. Abdallah et al (2024) showed a structure that supports cross-functional teams and encourages innovation helps in continuously updating and enhancing the database, thereby maximizing its utility and contributing to improved organizational performance and decision-making.

Citizenship in promoting intellectual capital within the database of public organizations involves actively engaging and empowering citizens to contribute to and benefit from the organization's knowledge resources. By fostering a sense of ownership and responsibility among citizens, organizations can enhance the breadth and depth of information captured in the database. Encouraging citizen participation in knowledge-sharing initiatives, feedback mechanisms, and collaborative projects ensures that diverse perspectives and local expertise are integrated into the intellectual capital. This approach not only enriches the database with relevant and practical insights but also strengthens public trust and engagement, leading to more effective and responsive public services.

6. Discussion

This index depends on the ability of municipal managers and influences their role. Through proper planning, coaching managers can enhance their role and strengthen municipal knowledge management. These two indicators also impact intellectual capital. By maintaining this balance, performance evaluation, analysis, and review will improve.

Ultimately, organizational culture plays a moderating role in the relationship between municipal intellectual capital and evaluation and performance analysis.

Based on the analysis results, Tehran municipal managers are advised to enhance intellectual creativity and innovation among employees, and to prioritize confidentiality regarding citizens' and municipal clients' information. Employees should strive to enhance indicators by ensuring accurate performance and authenticating citizens correctly.

They should improve Tehran municipality's performance by executing tasks based on existing policies, accepting their responsibilities, and managing their affairs.

Facilitating the exchange of professional insights and knowledge among individuals, fostering a culture of mutual respect among employees, will enhance cooperation, coordination, and overall municipal performance.

Furthermore, Tehran municipality managers should prioritize hiring employees with relevant expertise and education, and assess individuals' calculated skills as a top priority.

In order to enhance the desirability of managers' roles and their ability to manage municipal performance, training programs should be provided to improve managers' capabilities and expertise.

Additionally, by educating employees on financial and municipal laws and offering necessary training, they can enhance this criterion and boost the municipality's performance. Tehran municipality managers should elevate their performance and uphold this standard by enhancing problem-solving skills and evaluating their employees.

Furthermore, it is recommended that Tehran municipality managers enhance cooperation and coordination with other employees by fostering an intimate and friendly work environment. If implemented, they will be able to increase municipal credit and staff performance. Tehran municipality staff should take full responsibility for their tasks and not neglect them. Moreover, maintaining the professional credibility of the municipality is the responsibility of

employees. Employees must adhere to municipal organizational directives. It is also suggested that accessing citizens' property and confidential information should only serve municipal goals and be handled by authorized personnel.

This study has encountered limitations. The lack of sufficient scientific support and indigenous knowledge of the municipality's intellectual capital has constrained the conceptualization of enhancing intellectual capital in state organizations. The traditional perspective on intellectual capital, focusing on performance evaluation and financial metrics, is another significant limitation.

Given these limitations, future researchers are advised to conduct studies to conceptualize municipal intellectual capital discussions from both theoretical and operational perspectives, exploring methods to implement intellectual capital patterns.

Recommendations can also be made at the company and macro levels. To leverage the benefits of enhancing government agencies' intellectual capital at the company level, emphasis should be placed on increasing marketing and the influence of the Tehran municipality market. Enhancing the value and credibility of the Tehran municipality can be achieved through recruiting and retaining knowledgeable staff, accessing advanced technical knowledge, and adopting new technologies. At the macro level, it is also suggested to allocate more resources to research and development to enhance government agencies' intellectual capital.

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Cooperation and partnership with the owner are essential for effectively promoting intellectual capital in the database of public organizations. By fostering a collaborative relationship with the owner, organizations can ensure that their knowledge management strategies are aligned with the owner's vision and priorities. This partnership facilitates the sharing of expertise, resources, and insights, enriching the organization's intellectual capital. Joint efforts in developing and utilizing the database can lead to more innovative solutions, improved data quality, and enhanced strategic decision-making.

Moreover, a strong cooperative relationship helps in securing support and resources needed for the successful implementation and continuous improvement of intellectual capital initiatives.

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