

# International Journal of Knowledge Processing Studies (KPS)



Homepage: <http://kps.artahub.ir/>



## ORIGINAL RESEARCH ARTICLE

### Designing an Organizational Factors Model Affecting Tacit Knowledge Management: A Mixed Study (Iranian Social Security Organization)

Shahram Bakhshi hajikhajeloo<sup>1</sup>, Yousef Namvar<sup>2\*</sup>, Nasibeh Pourasghar<sup>3</sup>

<sup>1</sup> Ph. D student in Educational Management, Department of Educational Sciences, Ardabil Branch, Islamic Azad University, Ardabil, Iran. [sh\\_bakhshi57@yahoo.com](mailto:sh_bakhshi57@yahoo.com), 0000-0001-5180-6467

<sup>2</sup> Associate Professor, Department of Educational Sciences, Ardabil Branch, Islamic Azad University, Ardabil, Iran. (Corresponding author). [yosefy650@yahoo.com](mailto:yosefy650@yahoo.com), 0000-0002-4926-271X

<sup>3</sup> Assistant Professor, Department of Educational Sciences, Payame Noor University (PNU), Tehran, Iran. [npourasghar1@mail.com](mailto:npourasghar1@mail.com), 0000-0001-7050-0842

## ARTICLE INFO

### Article History:

Received: 2023-08-05

Revised: 2023-10-03

Accepted: 2023-11-23

Published Online: 2024-03-01

### Keywords:

Tacit Knowledge, Social Security Organization, Organizational Factors, Management, Grounded Theory

Number of Reference: 59

Number of Figures: 5

Number of Tables: 5

DOI: 10.22034/kps.2023.410131.1153



## ABSTRACT

The current research was conducted to design a model to identify the effective organizational factors for tacit knowledge management in Iran's Social Security Organization. The method and tools of data collection were obtained through field methods such as interviews and questionnaires. The statistical population in the qualitative phase included managers and experts from the general departments of the Deputy of Management Development and Human Resources of the Social Security Organization. The sampling method in the qualitative phase was purposive and snowball. Based on the principle of theoretical saturation, a sample size of 15 interviews was chosen for the semi-structured interviews. To validate qualitative findings, four criteria of validity, generalizability, reliability, and verifiability were used. To assess the validity of the findings, content validity was employed. The process of data analysis was conducted using the open, axial, and selective coding methods in the MAXQDA. The statistical population in the quantitative part of the research was 360 managers and expert experts in 7 specialized vice offices of the organization's headquarters, and according to the table of Karjesi and Morgan (1970), the number of quantitative study samples was 186 people selected by simple random method. In the inferential statistics section, quantitative content analysis of the structural equation modeling method was used. Finally, the model of effective organizational factors on tacit knowledge management in the social security organization was confirmed. It is necessary to pay attention to the institutionalization of effective factors in tacit knowledge management by considering the designed model.

### ©authors

► **Citation:** Bakhshi hajikhajeloo, S., Namvar, Y., & Pourasghar, N. (2024). Designing an Organizational Factors Model Affecting Tacit Knowledge Management: A Mixed Study (Iranian Social Security Organization). *International Journal of Knowledge Processing Studies (KPS)*, 4(2): 126-147. Doi: 10.22034/kps.2023.410131.1153

## 1. Introduction

Maturity levels of knowledge management can be categorized as follows: awareness, defined, managed, optimized, entrepreneur, and technologist (Momeni et al., 2022). The primary objective of knowledge management is to transform tacit knowledge into explicit knowledge (Sohrabi et al., 2019) and effectively manage an organization's intellectual assets (Ezzati et al., 2016). Organizations strive to gain a competitive advantage by developing internal intangible assets that are difficult for other organizations to imitate (Zahedi et al., 2018). Management is based on a knowledge-based economy, and intellectual capital is the result of the individual and collective knowledge of the organization (Ahmadiou et al., 2016). After labor, land, and capital, knowledge is an essential asset in the production area of an organization (Sher & Lee, 2016). Tacit knowledge management is the practice of effectively managing an organization's intangible knowledge (Ateshek & Mahzadeh, 2011). The world is experiencing an era in which knowledge and information play a vital role (Amalia & Nugroho, 2010). Tacit knowledge refers to subjective knowledge that is cognitive and experiential (Nonaka & Takeuchi, 1995) and is held by groups or individuals as a belief (Nazari et al., 2015). A competitive advantage lies in creating value and enhancing organizational performance (Tsaia & Li, 2007). Leading organizations are transitioning from the era of individual knowledge accumulation to knowledge for collective benefit and the public good (Makvandi et al., 2019). Organizations invest in knowledge management, learning organizations, and organizational learning (Mehr Alizadeh, 2009).

Regarding the statement of the research problem, it can be said that managers' attention has been drawn to knowledge management due to the increase in the volume of data and information in organizations and the need to use this information correctly and effectively. The focus of this study is on the gap between the current state and the desired state of

knowledge management in the social security organization. The establishment of an integrated knowledge management system is identified as a strategic priority for this large social insurance organization. As the primary purchaser of health services and the secondary custodian of medical services, this organization serves the largest population in the country. And he is responsible for training and improving the knowledge, skills, and attitudes of more than 68,000 human resources working in insurance, medical, and headquarters centers. This expansion of communication requires the organization to address the issue of knowledge management (Social Security Organization, 2020). The role of knowledge management in the social security organization is weak, and there is no suitable mechanism for its effective use. The research conducted is insufficient and does not respond to the needs of this organization (Mehdizadeh et al., 2019). Maturity levels of of the social security organization, the current level is considered to be initial awareness (Social Security Organization, 2020). The social security organization has a strong foundation in history and a wealth of experience in providing specialized services. One of its strengths lies in its expert, experienced, and efficient human capital. However, a weakness of the organization is the insufficient efficiency of its organizational structure and management of internal processes. The presence of suitable educational and research facilities in the country, along with the availability of skilled professionals, particularly in the areas of investment, social insurance, and healthcare, presents an opportunity for this organization. Environmental factors are external to the organization (Social Security Organization, 2020). Existing research in this field in Iran's Social Security Organization is limited, general, and theoretical, and there is a lack of understanding regarding tacit knowledge. According to the mentioned cases, designing an effective organizational model can contribute to the organizational maturity level of managing tacit knowledge within the organization. The innovation of this research

lies in the exploration of organizational factors that impact tacit knowledge management, involving experts and knowledge managers from the social security organization. Therefore, the main problem of this research is to answer the following question: "What is the model of effective organizational factors on the management of tacit knowledge in Iran's Social Security Organization"?

The practical beneficiaries of the findings from this research will include the social security organization, as well as other individuals and entities interested in tacit knowledge. The Social Security Organization is large. Therefore, for scalability, the headquarters of this organization were investigated in the present study.

## 2. Literature Review

Knowledge management encompasses data, information, knowledge, decision-making, and action (Chua, 2013). Data is a collection of facts and information about a phenomenon (Jamipour et al., 2015). By adding value to the data, it becomes meaningful and transforms into information (Jafari et al., 2018). Knowledge occupies a position that is higher than data and information, but lower than decision and action. Furthermore, knowledge is the only resource that is infinite and increases with more utilization (Chua, 2013).

### Tacit knowledge

Polanyi (1966) is credited with discovering the concept of tacit knowledge and categorizing knowledge into three types: objective knowledge (explicit), subjective knowledge (implicit), and tacit knowledge (hidden) (Sohrabi, 2019; Samari, 2014). Types of knowledge have been popularized by Nonaka (1994) and Nonaka and Takeuchi (1995) as two categories: tacit and objective. Tacit knowledge can be converted into explicit knowledge and vice versa, and the social interaction between them leads to the creation of knowledge (Rubenstein-Montano et al., 2001). Implicit knowledge refers to a type of hidden learning that manifests as the capacity to adeptly solve problems in

different situations (Huang et al., 2010). Tacit knowledge is revealed through use (Saif et al., 2014). Tacit knowledge is described as a form of knowledge that is based on intuition and personal experience, rather than being able to be proven or reasoned with using evidence and rules (Qolipour et al., 2014). Tacit knowledge refers to personal beliefs and individual characteristics (Qalicheli et al., 2014). Tacit knowledge is an intangible level of understanding that is often difficult to express in words. It lies within the individual and is rooted in experience and practice. Tacit knowledge is expressed through skillful performance and transmitted through apprenticeship, where learning occurs through observing and doing (Molavi & Yusefpour, 2015). The framework for transforming tacit knowledge into objective knowledge includes four organizational dimensions: planning, modeling tacit knowledge, and documenting objective knowledge (Nematullah et al., 2018).

### Organizational culture and tacit knowledge

By influencing the behavior of organizational members (Robbins, 2005), organizational culture provides a supportive environment for learning (Sorakraikitikul & Siengthai, 2014), sharing ideas, suggestions, and sharing hidden experiences among employees through knowledge sharing (Abbasi et al., 2012) and employees will be more involved in sharing knowledge and their hidden and overt experiences (Jo & Joo, 2011). In the Social Security Organization, the organizational culture influencing the behavior of the employees causes the exchange of knowledge, sharing of ideas, suggestions, and hidden experiences of the employees of the social security organization.

### Organizational strategies and tacit knowledge

Since organizational strategies are inseparable from tacit knowledge strategies, to choose the appropriate strategy, one must first be aware of the organization's situation, opportunities, threats, strengths, and weaknesses of that organization (Durrani &

Adiban, 2014). Organizational strategies specify the direction of movement toward the goals of the organization, the main goal of which is to actualize tacit knowledge management in the organization (Heidari et al., 2017). Tacit knowledge management is a platform for crystallization of organizational knowledge based on collective wisdom to create solutions for the most alive issues of the organization and an opportunity for conflict of opinions and effective discourse in order to explain and analyze the problems and issues of the organization. In the Social Security Organization, organizational strategy is the planned efforts of tacit knowledge management to influence the organizational results and achieve the goals of the social security organization.

#### **Teaching organization and implicit knowledge**

Templeton et al. (2002) consider organizational learning as an expression of intellectual capabilities and productivity, which results in continuous improvement throughout the organization. By using human capital in the form of a "learning organization", managers take over and manage all the intellectual power, knowledge, and experience of the organization to create changes and continuous improvement to determine tasks and roles, and development (Zhang et al., 2023). In the Social Security Organization, organizational learning improves the organization's ability to manage the tasks of employees and the goals of the organization.

#### **Organizational structure and implicit knowledge**

In order to activate knowledge-based organizations, especially tacit knowledge, the organizational structure must include more dimensions, which include trust-based relationships, extra-organizational interactive relationships, and comprehensive emotional relationships (Salameh and Zamil, 2020). The fundamental structure of tacit knowledge-based organizations is the prominent framework of extra-organizational interaction that is based on clear and objective structured agreements and does not rely on internal procedures, routines, and schedules (Gangoli et al., 2019). The

organizational structure of the social security organization enables the members of the organization to show the organizational values and capabilities in specified ways.

#### **IT and IT Governance**

Information technology in organizations brings together the required individuals and groups; Such as virtual teams, virtual communities, virtual trade, and shared trade. Information exchange, easy access to data, and remote communication enable employees to create their work unit in different geographical situations and time dimensions. Therefore, an organization can have a better chance of becoming a World Class because of being flexible and virtual (Sikombe & Phiri, 2019). Although implicit knowledge is not exclusively the product of information technology, information technology has been separately involved in the creation of knowledge management and the implicit knowledge management process. Today, implicit knowledge management is mainly responsible for information technology; because it plays a key role in collecting, converting, and transfer of data, information, and knowledge (Chong, 2018). Implicit knowledge management can reduce the devastating effects of the organization's human resources shortage (Rubenstein-Montano et al., 2001). Tacit knowledge management in the social security organization can reduce the destructive effects of the lack of human resources in the organization by technologically recording the expertise and knowledge of employees and re-employing them.

#### **3. Methodology**

The purpose of this study was to design a model that identifies the effective organizational factors for implicit knowledge management in the Iranian Social Security Organization. The research method was based on the mixed approach. From the point of view of the execution process (type of data) it is qualitative-quantitative. The theoretical framework of the research in the qualitative part is based on the grounded theory method of the foundation with the systematic comparison approach of Corbin and Strauss. The methods and tools of data collection include library research and

fieldwork (interviews, questionnaires). The study's statistical population of the qualitative part of the research included managers and experts in the field of management and human resources from the Central Staff of the Social Security Organization The year 2022. In the qualitative part the method of targeted sampling and snowball (chain referral) was based on the principle of theoretical saturation. The criteria for participating in a deep individual (semi-structured) interview include a minimum of 10 years of organizational experience and at least 5 years of management experience or expertise in the field of management and human resources development. This expertise should include knowledge of empowerment and professional qualification departments, education and research planning, knowledge management, promoting organizational culture, human resource management, artificial intelligence, knowledge management, competence, human resources, appointments, and transfers. Additionally, candidates should hold a master's or doctoral degree in one of the following fields: human resource management, organization management, educational planning, information technology, statistics and accounts, educational management, educational sciences, or psychology.

Interview questions were formulated based on research literature, research background, and grounded theory to fulfill the research objectives. The questions were as follows:

1. What are the important components to revive or advance the organization's tacit knowledge management (causal conditions)?
2. What is the status of tacit knowledge management in the social security organization (background conditions)?
3. What are the intervening conditions for tacit knowledge management in the social security organization (intervening conditions)?
4. Facilitators and barriers to the implementation of tacit knowledge management in the social security organization include what things (central phenomenon)?

5. What implementation mechanisms can be used to fill the gap between the current situation and the desired situation in the organization's tacit knowledge management (strategies)?

6. What will be the consequences of the correct implementation of tacit knowledge management in the social security organization (consequences)?

To collect data, the necessary permits were first obtained from the Higher Social Security Research Institute. First, six managers and experts in the field of management and human resources development were introduced for this study at the Central Social Security Organization. Then, after introducing the subject and research questions, they were asked to indicate their availability and preferred location for the interview. By conducting interviews and introducing new people by the interviewees, the number of targeted samples increased. The sampling continued until the data reached theoretical saturation. In the present study, a total of 18 semi-structured interviews were conducted. During the final three interviews, the same questions were repeated to ensure consistency in the data collected. After these interviews, the sampling process was concluded. Among the interviews, 15 desirable interviews were selected and analyzed for identifying and selecting key codes related to effective intra-organizational factors in implicit knowledge management. For each interview, it took between 30 and 45 minutes, and all interviews were conducted at the workplace of the experts in a quiet environment with the interviewer present. Interviews were recorded and transcribed. The data collection took 4 months. The ethical considerations of the research were explained to all participants. The formal content of the interview was approved by two faculty members from Islamic Azad University. To assess the reliability of the findings, the interview texts were reviewed by both the interviewers and the two coders.

The present study uses four criteria for validation: credibility, generalizability, reliability, and verifiability (Arabkhani et al.,

2022). The interviewees' feedback method was used to evaluate the validation. The research findings were made available to the participants, who confirmed the accuracy of the findings and interpretations. To assess the generalizability, the researchers outlined the research process from sampling to interpretation of the findings. They also provided an example of the interview transcripts to allow readers to evaluate the transferability of the data. To ensure the reliability of the results, the data collection and analysis were conducted under the supervision of multiple educators from the Islamic Azad University of Ardebil Branch. Finally, the research findings were evaluated by these lecturers and confirmed by them. Receipt. The inter-subject agreement has been used to measure the reliability of the interviews. For this purpose, a professor specializing in educational management was asked to participate as a research partner. The training and methods that needed to be encoded were transferred to the research colleague. In each of the interviews, the codes that were similar to each other were referred to as "agreement," while the codes that were not justified were referred to as "disagreement." The percentage of the two coders with 21 agreements in this study was 73.6%. Given that the reliability is more than 60%, it confirms the reliability of the coding.

The percentage of intrasubject agreement used as a reliability index was calculated as follows (Khastar, 2009):

$$\text{percentage of test-retest reliability} = \frac{2 * \text{total number of data} / \text{number of agreements}}{100}$$

The data analysis was based on the 3 -step coding pattern of the grounded theory method (open coding (primary and secondary), central coding, selective coding). Primary coding and other coding steps were performed using MAXQDA software -12 software. In this three-step coding, the data was constantly reviewed and monitored. In the first stage (open coding), the data that was around a concept was collected. In the second stage (central coding), the concepts that had a common meaning were organized in the form of a central code that was more abstract than other concepts. In the final step

(selective coding), in the form of selective code, concepts that had a common semantic and content load were placed in special classes. In the following, the research questionnaires was selected based on the central codes and include the organizational culture questionnaire of Ranai Kurdshuli and Garhamani Fard (2013), the organizational strategy questionnaire of Miles and Snow (1978), the learning organization questionnaire of Tausli (2011), the organizational structure questionnaire of Karimi (2015), The information technology governance questionnaire of Ronaghi and Mahmoudi (2014) and the researcher-made questionnaire of taicit knowledge management.

The statistical population in the quantitative part of the study consisted of 360 managers and experts in 7 departments of the headquarters of the Iran Social Security Organization based in 2022, of which 186 were selected by Karajsi and Morgan table and in a simple random method and the participation research were given. The validity of the questionnaire was confirmed by experts and the reliability of the questionnaire through Cronbach's alpha. The criterion of entry into the research included agreeing to participate in the research, the tenure of one of the management levels of the Social Security Organization while answering and completing the questionnaire, and employment in Tehran. The criterion of exit from the research in the quantitative section was an incomplete questionnaire. For this purpose, considering the distribution error of the questionnaire based on the custom of quantitative studies, 10 % was distributed more than the calculated number of questionnaires, after deleting the lost data and incomplete answered questionnaires, the number of correct questionnaires (186 questionnaires) Data analysis was obtained. The analysis and analysis of quantitative data were done with SPSS and Smart Pls3.3.

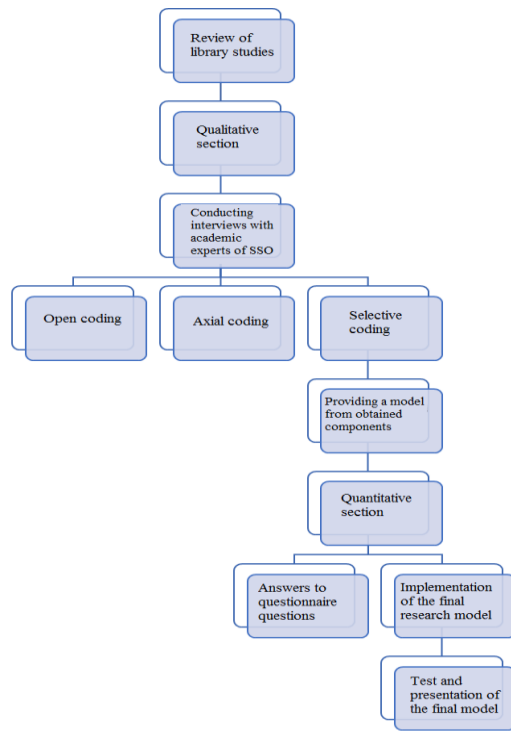


Figure 1. Research method

#### 4. Findings

In the present study, the demographic sample participating in qualitative research including gender, job history, education level, and age examined. 11 men (55 %) and 7 women (45 %) participated in the qualitative sector. 5 people (20 %) had between 10 and 15 years and 13 (80 %) over 15 years old. Education was 10 (55 %) Masters and 8 (45 %) PhD. 8 people (45 %) were 30 to 40 years, 7 (40 %) were 40 to 50 years and 3 (15 %) were over 50 years old.

#### Interview Examples

"An organizational culture requires that their knowledge managers are recorded and transformed into managerial knowledge". It is the source of cultural activities ". Organizational culture is one of the most important components of knowledge management, for example, organizational culture in which creativity and innovation become a value of knowledge management. The source of knowledge can be strengthened by individuals, instructions, methods of work, information technology and more. The implicit knowledge is the establishment of a strong organizational culture is one of the factors affecting knowledge management. " " The

organizational structure is important because knowledge management must have a specific organizational structure. It is one of those who are managed to achieve collective goals. " "Information Technology or Knowledge Management Software helps to discuss knowledge documentation". "The existence of knowledge systems, technical and skill development of employees in the areas of technology-construction, specific rules, and regulations, organizational intellectuals, staff presentation sessions of knowledge management facilitates. In the present world of technology and information in our organization, our organization must take into account the three strategies of 1- different, 2- better and 3- to make it smaller. Implicit knowledge is the soft aspect of science. It is a sign of being a widespread perspective. The organization has also made an effort, such as the organizational consciousness of managers or managers 'meetings, reports of managers' experiences, video conferencing and webinars, and content production and journals and journals. This is a kind of knowledge management, but besides these, the tricks of some managers or operational staff are very effective, the best way to convey the implicit knowledge of the show, narrative, observe and learn from each other. Information technology governance as a process that makes the organization effective and efficient in the use of information technology is an effective component ". Senior managers can be very effective. Facilitation can be like day-to-day information technology, identifying the concepts of knowledge management, the collective culture of knowledge, and obstacles such as culture, time, and lack of awareness, complexity, and resistance of managers. Documents, Model Design, Motivational Tools, Information Technology, Specialized Software, Internet use Facilitator for the Management of Home Management of the Organization ". Believe that their knowledge and information must share and support their knowledge and success in the organization. It is implicit for the revival of knowledge management. The strategic and macro goals of the organization are the subject of knowledge management,

knowledge management, and the learning organization. Employees of the Strategic Finance Organization have a bag of experience, skills, and technical knowledge. If these technical skills and technical knowledge are not documented, this technical knowledge will be eliminated by cutting off their cooperation with the organization". "The organizational strategy is important. Strategic coordination between ethical decision-making strategies and human resource strategies as functional strategies can enhance organizational performance. The categorization of implicit knowledge is the establishment of knowledge-based thinking rooms, evaluating and controlling the output of the processes". It is very important to have strategic plans for the organization, including the strategic planning of the organization and operational planning.

"Important components for restoring or advancing knowledge management of the organization are things such as learning and teaching culture, learning and training processes, formulating a Code and Knowledge Management Map, Identification of Experts and creating knowledge circles, creating knowledge systems for implicit knowledge extraction". Inadequacy of knowledge is one of the major weaknesses of dynamic and agile organizations. Implementation of implicit knowledge management in the social security organization is to strengthen the systematic attitude at the organization's levels, the importance of intellectual capital and knowledge and experience of employees (in fact human value to knowledge and reason. He), the importance of the workforce of knowledge is to strengthen the participatory culture in the organization. "Cooperation and synergy with knowledge-based companies are among the priorities of this organization for learning organizations." Carriers and managers with their background and responsibility, responsibility and commitment of employees are among the factors affecting knowledge management. The most important thing is to respect and value the experience in any job. There is knowledge of the organization in the brain of

the organization's staff. There is no teaching anywhere. The unwritten graduate of this organization should be flourished with implicit knowledge management. "

In the process of analyzing the interview data in the Max-QDA environment, 130 open codes were first obtained at the level of initial responses without literary concepts. Then, according to the rule of secondary coding. Due to the large number of codes produced, to summarize them, the initial codes became secondary codes, which was the basis of which was the concept and meaning of the primary codes. By deleting 73 duplicate codes, 57 open (secondary) codes remained for the present study. Finally, in the secondary coding section, it is attempted to become a few concepts into one category. The central coding of the second stage is the analysis of the theory of data theory. The purpose of this stage is to establish a relationship between the production classes. The relationship between other classes with the central class will be realized in five titles of the Strauss and Corbin Systemic Approach Foundation, including causal conditions, central phenomena, strategies, and action, the prevailing context, and consequences. 5 Central Codes including Organizational Culture, Organizational Strategy, Learning Organization, Organizational Structure, and IT Governance were identified. In the selective coding stage, with the integration and refinement of open and central codes, 18 selected codes (6 variables) were identified, including causal components including knowledge sharing, exterior and innovation, context including formality and complexity, intervention conditions including acquisition, Planning, supervision and support, the phenomenon included concentration and decentralization, strategies, including futurism, analytical and reactive, and the consequences included personal abilities, mental patterns, vision and aspirations, team learners and system thinking (Table 1).



*Table 1. Open, axial and selective codes*

Open coding	Grounded theory model	Selected coding	Axial coding
Determine the reporting relationships and the flow of authority	Casual factors	Sharing knowledge	Organizational Culture
Their latest changes to the needs of the day		The outer environment	
The experiences of the world's successful and top companies			
Top and expert people			
International standards and frameworks			
Adaptation to internal and external requirements under control			
Cultural activities		Innovation	
Cultural and educational approach			
Widespread interactions			
Culture			
Fulfilling customer's needs and expectations in a relatively short period of time	Contextual Factors	Formality	Organizational Structure
Combining Organizational Processes and People with Advanced Technology			
Utilization of potential opportunities		Complexity	
Adaptation to changes			
Structural mechanisms			
Compatibility and fit with a particular direction			
Efficient and effective flow in the work	Intervening factors	Acquired	Information technology governance
Transfer of information between different levels of hierarchy in an organization			
Investigating how individual activities are together		Planning	
Official communication channels			
Technology Strategies			
The realization of the effective and efficient use of information technology		Supervision	
More governing information on information technology			
Quantity and quality of work			
Social security groups and institutions		Support	
Interactions in various areas of insurance			
Social partners			
Today's societies			
Expansion			
The sovereignty of culture over the managers			
Coordination	Phenomenon	Focus and decentralization	Organizational strategies
Organizational elements			
Success of the organization (increased profit and income)			
modern world			
Double sensitivity to organizational health			
Participatory Management Follow –up			
Strategic integrity			
Achieve the goals of the organization			
Relating to the components of the organization			
Improving processes and productivity			
Organization Strategy in Human Resource Management, Culture Ethics	Strategies	Futurization	
Organization Strategy		Analytical	
Operational strategies			
Functional strategies			
Human Resources Strategies		Reactive	
Decision -making strategies			
Strategic coordination			
Long -standing moral values			
Business ethics			
Moral Values			
Learning from topics related to organizational changes	Concequences	Personal abilities	learned organization
Perform different tasks		Mental pattern and models	
The roles and responsibilities provided		Shared vision and aspirations	
Achieving collective goals of management		Team learner	
All -encompassing patterns		Systematic thinking	
Natural patterns			
Intellectual patterns			

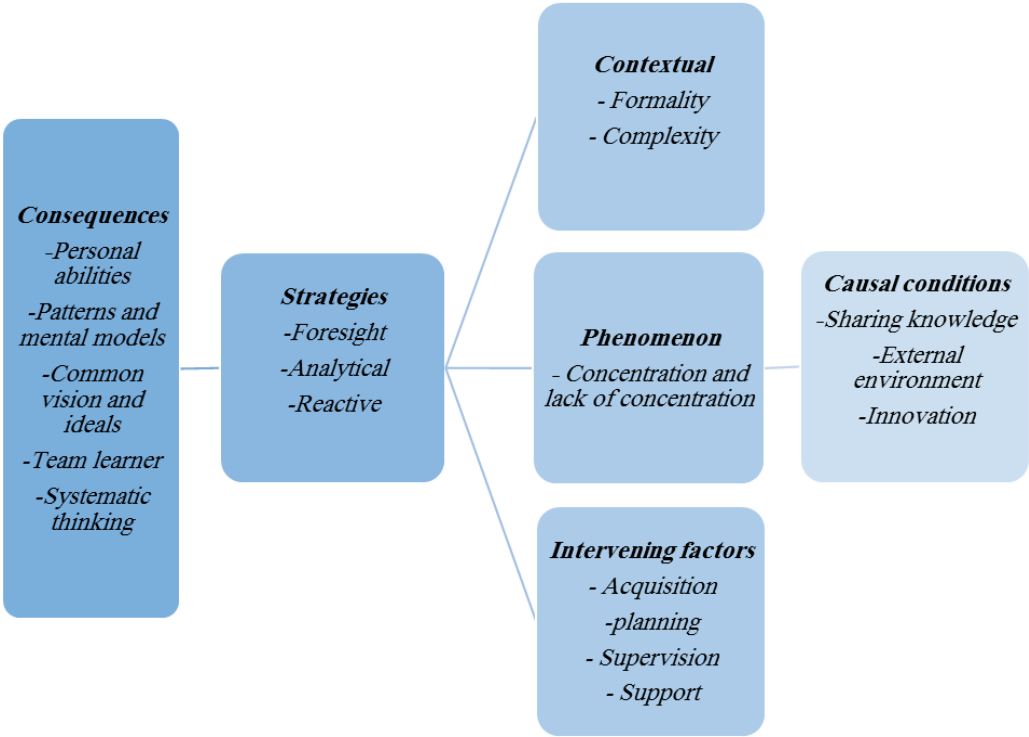


Figure 2. Conceptual pattern of axial coding based on the foundation data model

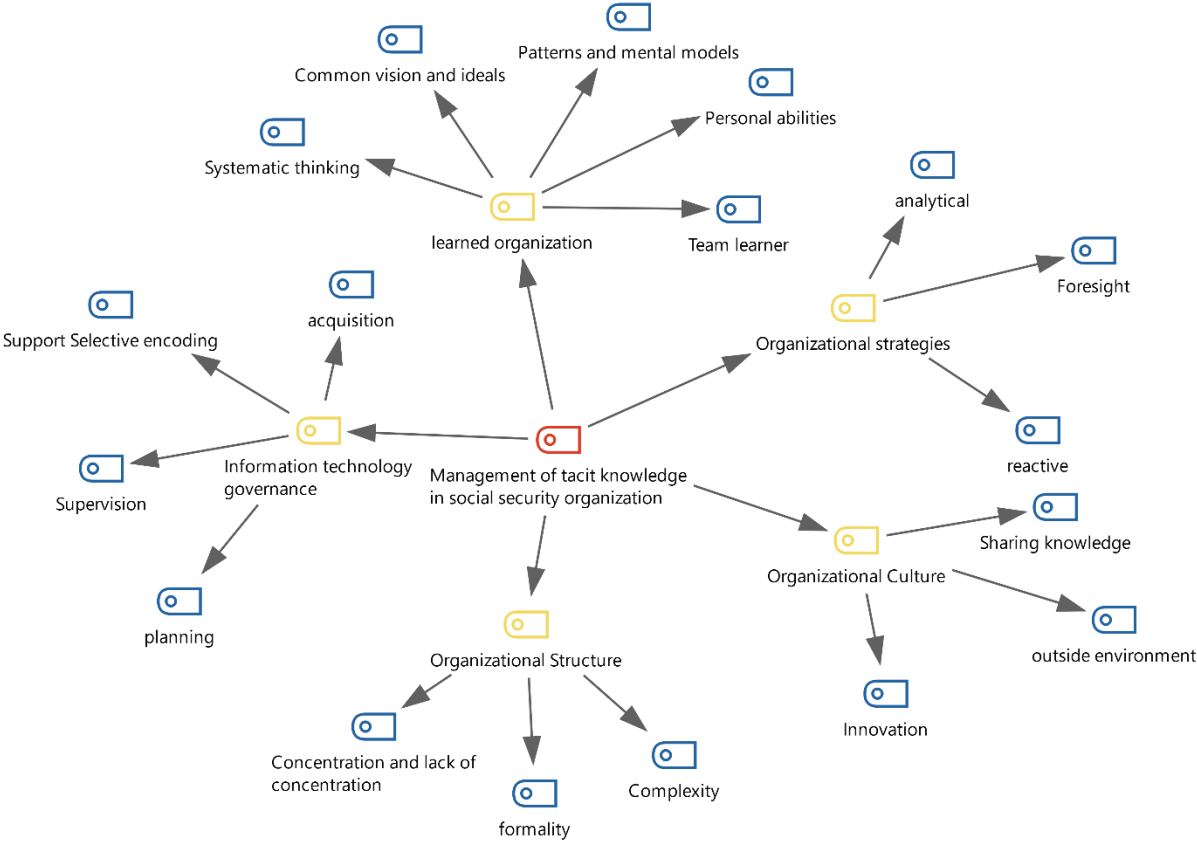


Figure 3. Extracted research cluster model output of MAXQDA software

Model fit and test of relationships in the research model:  
To analyze the model in the method of structural equation modeling with the partial

least squares approach, model measurement fit, model structural fit, and overall model fit were performed, and then the relationships in the research model were tested. To check the

fit of the index reliability measurement model (internal consistency reliability or Cronbach's alpha, composite reliability, and factor loading coefficients), convergent

validity and divergent validity were performed.

**Table 2.** Reliability and convergent validity of the variables

Cronbach's alpha	average variance Extracted (AVE)	Composite reliability (CR)	component
0/93	0/818	0/947	Foresight
0/82	0/721	0/948	Patterns and mental models
0/78	0/789	0/963	Acquisition and implementation
0/73	0/619	0/942	Planning and organizing
0/83	0/844	0/956	analytical
0/92	0/514	0/919	Delivery and support
0/77	0/862	0/949	Sharing knowledge
0/73	0/743	0/945	Systematic thinking
0/83	0/783	0/915	Concentration and lack of concentration
0/93	0/583	0/870	Organizational formality
0/88	0/579	0/906	Personal capabilities and abilities
0/89	0/816	0/930	outside environment
0/76	0/790	0/949	Monitoring and Evaluation
0/78	0/775	0/954	Innovation
0/73	0/868	0/952	reactive
0/83	0/578	0/870	Organizational complexity
0/92	0/571	0/832	Common vision and ideals
0/87	0/557	0/897	Team learner

The results of the combined reliability test indicate the appropriate reliability of the variables. The convergent validity of the variables was tested with the extracted average variance. If the average extracted variance of a variable is greater than or equal to 0.5, that variable has convergent validity. The meaning of divergent validity is that the items or indicators related to a variable only measure the same variable. In PLS analysis based on Fornell and Larcker (1981), the

square root of the AVE of a variable should be greater than the correlation of that variable with other research variables. In this step, the square root of the AVE values is first calculated and then the obtained values are replaced on the diagonal of the correlation matrix of the current variable. The calculated Cronbach's alpha coefficient shows the good reliability of the items.

**Table 3.** Divergent validity of latent variables using the Fornell-Locker method

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Foresight	0/904																		
Patterns and mental models	0/936	0/849																	
Acquisition and implementation	0/816	0/950	0/888																
Planning and organizing	0/861	0/928	0/907	0/787															
analytical	0/884	0/950	0/900	0/894	0/919														
Delivery and support	0/887	0/897	0/812	0/904	0/872	0/717													

Sharing knowledge	0/343	0/386	0/391	0/450	0/347	0/617	0/928											
Systematic thinking	0/955	0/935	0/842	0/884	0/919	0/927	0/376	0/862										
Concentration and lack of ...	0/940	0/920	0/808	0/862	0/900	0/914	0/336	0/958	0/885									
Organizational formality	0/753	0/776	0/729	0/776	0/781	0/909	0/566	0/857	0/815	0/764								
Personal capabilities and abilities	0/661	0/697	0/666	0/733	0/700	0/908	0/784	0/757	0/712	0/927	0/761							
outside environment	0/382	0/405	0/398	0/497	0/374	0/674	0/906	0/423	0/370	0/621	0/841	0/903						
Monitoring and Evaluation	0/817	0/953	0/993	0/899	0/905	0/812	0/400	0/843	0/802	0/740	0/674	0/402	0/937	0/889				
Innovation	0/803	0/832	0/777	0/802	0/848	0/880	0/394	0/923	0/872	0/955	0/822	0/427	0/850	0/788	0/880			
reactive	0/784	0/907	0/944	0/867	0/797	0/787	0/370	0/791	0/778	0/660	0/619	0/393	0/854	0/934	0/689	0/931		
Organizational complexity	0/756	0/862	0/908	0/925	0/808	0/876	0/618	0/795	0/773	0/754	0/790	0/639	0/838	0/882	0/731	0/883	0/760	
Common vision and ideals	0/728	0/875	0/944	0/865	0/847	0/826	0/601	0/775	0/734	0/753	0/769	0/578	0/865	0/943	0/743	0/888	0/922	0/756
Team learner	0/713	0/744	0/707	0/766	0/744	0/916	0/712	0/812	0/766	0/978	0/975	0/753	0/752	0/718	0/899	0/643	0/792	0/774

As can be seen, the diagonal elements of Table 2 are the values of the square root of the extracted average variance, and the elements of the lower triangle of the matrix are the correlation values between the variables. In the Fornell-Locker method, even if the square root of a variable is greater than its correlations with other variables, divergent validity is established. As Table 3

shows, none of the correlations between the variables is greater than the elements of the matrix diameter. As a result, the divergent validity of the underlying variables is supported.

Next, the type of relationship and the effect of variables on tacit knowledge management were determined according to the value of the standard path coefficient and t-statistics.

**Table 4.** The results of measuring the assumptions of direct relationships in the research model

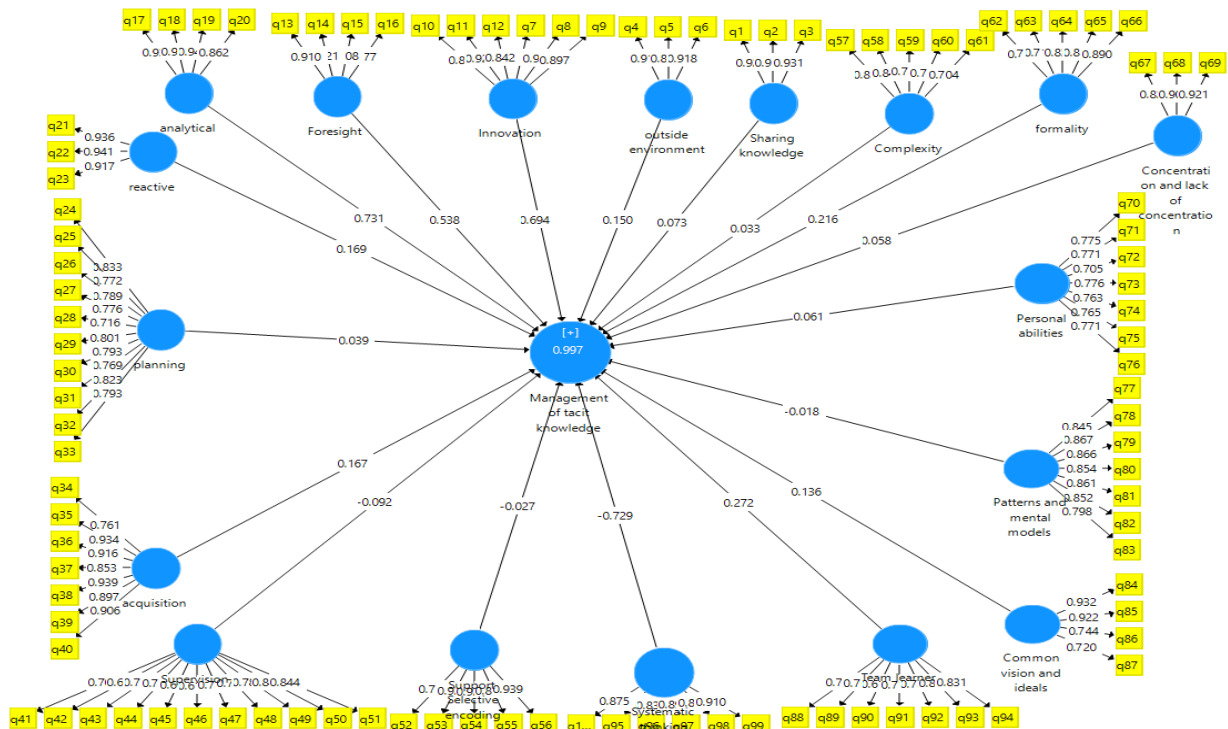
Test result	Standard path coefficient	T	Research hypothesis		
Confirmation the hypothesis	0.073	3.008	Tacit knowledge Management	←	Sharing knowledge
Confirmation the hypothesis	0.150	4.926	Tacit knowledge Management	←	outside environment
Confirmation the hypothesis	0.694	3.644	Tacit knowledge Management	←	Innovation
Confirmation the hypothesis	0.538	13.520	Tacit knowledge Management	←	Foresight
Confirmation the hypothesis	0.731	19.175	Tacit knowledge Management	←	analytical
Confirmation the hypothesis	0.169	4.528	Tacit knowledge Management	←	reactive
Confirmation the hypothesis	0.039	2.215	Tacit knowledge Management	←	Organize planning
Reject the hypothesis	0.167	0.933	Tacit knowledge Management	←	Acquisition and implementation
Reject the hypothesis	0/092	0.630	Tacit knowledge Management	←	Transformation and support
Reject the hypothesis	0/027	0.372	Tacit knowledge Management	←	Monitoring and Evaluation
Reject the hypothesis	-0.729	0.436	Tacit knowledge Management	←	Complexity
Confirmation the hypothesis	0.272	2.740	Tacit knowledge Management	←	formality
Confirmation the hypothesis	0.136	3.203	Tacit knowledge Management	←	Concentration and lack of concentration
Reject the hypothesis	-.018	0.809	Tacit knowledge Management	←	Personal capabilities and abilities
Reject the hypothesis	0.061	0.134	Tacit knowledge Management	←	Model and mental models
Confirmation the hypothesis	0.058	3.133	Tacit knowledge Management	←	Common vision and ideals
Confirmation the hypothesis	0.216	2.759	Tacit knowledge Management	←	Team learner
Confirmation the hypothesis	0.033	11.417	Tacit knowledge Management	←	Systematic thinking

The result of measuring the direct relationship of the variables with tacit

knowledge management in the social security organization will be described in

Table No. (3) out of the 18 variables examined, 12 variables are the amount of knowledge sharing, external environment, innovation, foresight, analytical, reactive, organizational planning, Formality, concentration or lack of concentration, and team learning and system thinking have a direct relationship with tacit knowledge management in the organization. To confirm the role of the mediator, four conditions must be met: there is a relationship between the

independent variable and the dependent variable; there is a relationship between the independent variable and the mediating variable; there is a relationship between the mediating variable and the dependent variable; and the number of changes in the dependent variable, which is explained by the independent variable, should be reduced to a lower level if the intermediate variable is controlled (Hajizadeh & Sardari, 2017).



**Figure 4.** Measurement model for tacit knowledge management in standard path coefficient mode

The coefficient of determination  $R^2$  is a criterion used to connect the measurement part and the structural part of structural equation modeling. The values of 0.19, 0.33, and 0.67 are expressed as weak, medium, and strong values of  $R^2$ , respectively. In the measurement model of tacit knowledge management in the mode of standard path coefficient, the value of  $R^2$  report equal to 0.997 was obtained (Figure 2) and it showed

the average explanation of the independent variables on the dependent variable of the research. The GOF goodness of fit criteria is related to the overall fit of the structural equation model. In the present study, the overall fit value of the model was 0.82. According to the obtained fit value, it can be concluded that the fit of the research model is at a favorable level.

**Table 5.** The results of examining the role of the learning organization in the relationships between effective organizational factors and tacit knowledge management

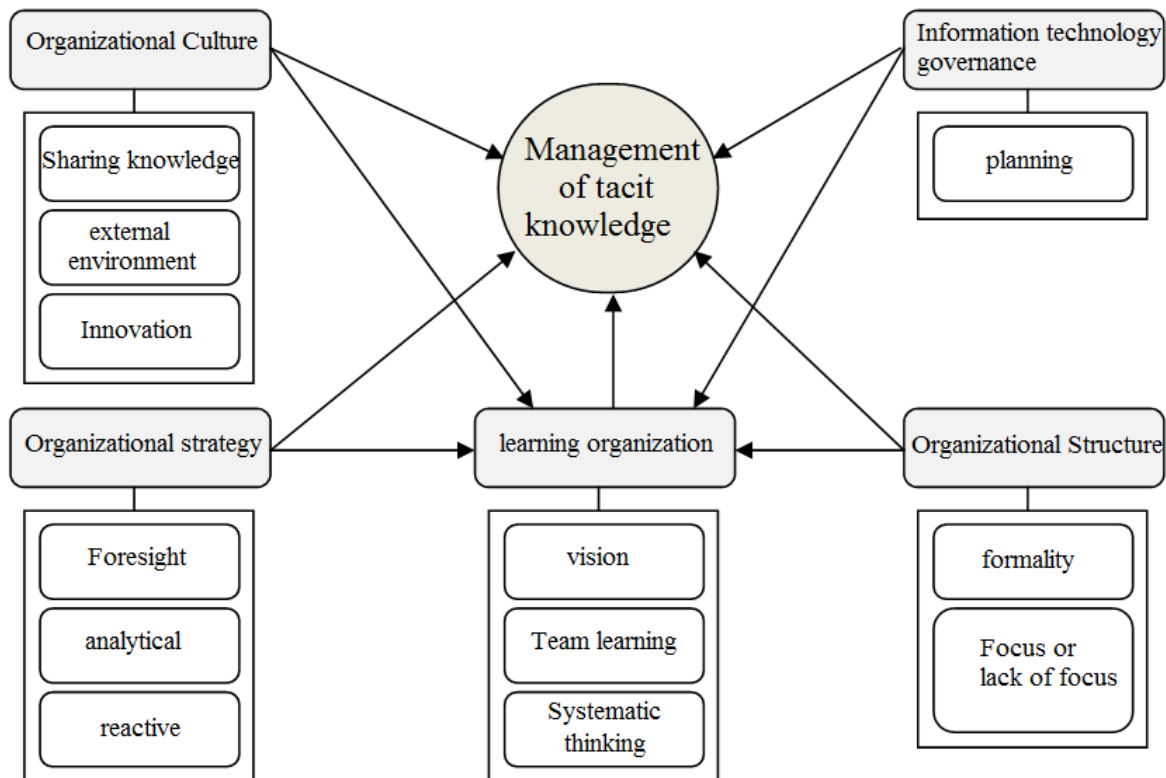
hypothesis		$\beta$	t	Sig
Direct path	organizational culture- learning organization	0.138	26.176	.001
	organizational culture- tacit knowledge management	0.090	5.820	.001
	learning organization- tacit knowledge management	0.325	6.045	.001
	organizational strategy- learning organization	0.087	18.577	.001
	organizational strategy- tacit knowledge management	0.896	17.057	.001
	organizational structure- tacit knowledge management	0.182	4.966	.001
	information technology governance- learned organization	0.852	9.096	.001

	information technology governance- tacit knowledge management	0.093	5.419	.001
Indirect path	organizational culture- tacit knowledge management	0.463	5.890	.001
	organizational strategy- tacit knowledge management	0.078	5.749	.001
	organizational structure- tacit knowledge management	-0.018	4.797	.001
	information technology governance- tacit knowledge management	0.277	5.035	.001

Table 5 shows the learning organization effect of organizational culture ( $\beta=0.463$ ,  $P=0.001$ ), organizational strategy ( $\beta=0.078$ ,  $P=0.001$ ), organizational structure ( $\beta=0.018$ ,  $P=0.001$ ) and information technology ( $\beta=0.277$ ,  $P=0.001$ ) mediate tacit knowledge management.

In the final model, the components of the model of effective organizational factors on the management of implicit knowledge in the social security organization include organizational culture (knowledge sharing,

external environment, innovation), organizational strategy (foreseeing, analytical, reactive), learning organization (perspective, team learning, systemic thinking), organizational structure (formality, centralization or lack of centralization) and IT governance (planning) were confirmed. The results of structural equation modeling showed that the learning organization plays a mediating role in the relationship between internal organizational factors and tacit knowledge management.



**Figure 5.** Model of effective organizational factors on tacit knowledge management in Iran's Social Security Organization

## 5. Discussion

The main goal of the research was to design a model of organizational factors that are effective in tacit knowledge management within the social security organization. The findings of the research were identified within the theoretical framework of six selected data codes from the foundation, which include

1. Causal factors include the determination of reporting and the flow authority, as well as the authority, latest based on the needs of the day. It also takes into account the day, experiences of successful and top companies in the world, insights from the world, experts, people, international standards and frameworks,

compliance with internal and external requirements under control, cultural activities, cultural and educational approach, extensive interactions, and culture building.

2. Contextual factors include meeting the needs and expectations of the customer in a relatively short period of by integrating organizational the organization and people with advanced leveraging of potential opportunities, adapting changes, implementing changes, and mechanisms aligning with a specific direction.

3. Intervening conditions include efficient and effective workflow, information transfer between different levels of hierarchy in an organization, examination of how individuals collaborate, formal communication channels, technology strategies, effective and efficient use of information technology, increased governance regarding information technology, quantity and quality of work, groups and institutions related to social security affairs, interactions in various fields of insurance, social partnerships, the development and expansion of today's societies, and the management of culture by managers.

4. Phenomenon (coordination, organizational elements, organizational success (increasing profits and income), modern world, dual sensitivity to organizational health, pursuit of collaborative management based on collective wisdom, strategic integration, achievement of organizational goals, and connection of organizational component.

5. Strategies include improving processes and productivity, Organizational Strategy in the fields of Human Resource Management, Ethics and Culture, Operational Strategies, Functional Strategies, Human Resources Strategies, Decision-Making Strategies, Strategic Coordination, Long-Standing Moral Values, Business Ethics, and Moral Values.

6. Consequences include learning from issues related to organizational changes and transformations, performing various roles, roles responsibilities, presented, and achieving the collective goals of

management, comprehensive patterns, patterns, patterns, and rational patterns.

Among the results of the current research is the identification of the causal conditions that affect tacit knowledge management, including "organizational culture." The findings showed that organizational culture has a direct and significant effect on the management of tacit knowledge within the social security organization. Additionally, the variable of a learning organization can play a mediating role between them. Findings in this field are aligned with the results of Biranvand et al.'s research (2021), Rahimi et al. (2011), and Robbins (2005). In explaining this research finding, it can be said that knowledge management is a dynamic process that requires careful consideration of various factors, including people, processes, and the cultural infrastructure of the organization. Management of tacit knowledge is a collective and collaborative activity because tacit knowledge resides within individuals' hearts and minds. Therefore, all individuals at every level of the organization need to be actively engaged in this process. Establishing knowledge management is one of the tasks of a learning organization. Everyone needs to be aware of their respective roles and responsibilities. Group coordination and the establishment of a flexible organizational culture are effective in achieving the goals of knowledge management within an organization. The institutionalization of organizational culture is an important factor in effectively implementing a tacit knowledge management system. The organization will be successful because of the skills and experiences of its human resources. Due to the emphasis on competition in both private and public non-governmental organizations, tacit knowledge management is considered a significant competitive advantage.

Among the results of the current research is the identification of phenomena and strategies in tacit knowledge management, including "organizational strategy". The findings showed that the organizational strategy has a direct and significant effect on tacit knowledge management. Additionally,

the variable of a learning organization can play a mediating role between them. Findings in this field, based on the research results of Duan et al. (2022), Kucharska (2022), Hasirchi et al. (2019), Heydari et al. (2017), Baghbani Arani et al. (2017), Dilmaghani and Namur (2016), Durrani & Adiban (2014), Akhwan & Saleh Olya (2012), and Hatch (1997), are consistent. In explaining this aspect of the current research findings, it can be stated that both external resistance to change and internal transformation are significant factors contributing to the failure of tacit knowledge management within an organization. While planning the organizational strategy for implementing the tacit knowledge management program, one should be aware of certain factors that can disrupt the program and hinder its successful implementation. Knowledge management should have an organizational strategy and a trustee. Knowledge management is the beating heart of the organization. Knowledge is like water; it must be constantly flowing. The implementers of organizational strategies should be sensitive to the challenges of knowledge management programs and understand their impact. They should take appropriate measures to address these challenges, as failure to do so will jeopardize the successful implementation of any organization. Among the results of the present research is the identification of the underlying conditions affecting tacit knowledge management, including "organizational structure." The findings showed that the organizational structure has a direct and significant effect on tacit knowledge management. Additionally, the variable of a learning organization can play a mediating role between them. The findings of this section are similar to the research results of Hwang (2022), Oliveira et al. (2022), Salameh & Zamil (2020), Ganguly et al. (2019), Farnese et al. (2019), and Hatch (1997).

In explaining this part of the findings, it can be said that the organizational structure of social security specifies how tasks should be assigned, therefore tacit knowledge management requires an organizational

structure that creates efficient allocation of resources, accountability for performance, and coordination between units. This importance can be implemented through the creation of multiple sets of independent departments, each of which is responsible for a special production line. To make the decisions of the organization more efficient by using the experiences, and tacit knowledge of existing expert capacities. Among the results of the current research is the identification of intervening conditions affecting tacit knowledge management, including "information technology dominance". The findings showed that the governance of information technology is effective in meeting the expected benefits of implementing tacit knowledge management, the findings in this field are in line with the research results of Al-Den et al. (2019), Sikombe and Phiri (2019), Chouk (2018), Rubenstein Montano et al. (2001) and Hatch (1997) are consistent. In explaining this part of the findings, it can be said that information technology governance is a paradigm that helps the architecture and structure of tacit knowledge management in the organization and encourages tacit knowledge management in the organization based on information technology and its application in the organization. To organize existing tacit knowledge and succeed in tacit knowledge management in the organization, to transfer experience, create motivational contexts and even maintain organizational tacit knowledge, the existence of a suitable and efficient platform of information technology is inevitable. It is possible to make the decisions of the organization more efficient by taking advantage of the future developments in the field of information technology in the country and the development of infrastructure and the development of management systems and the provision of services within the framework of the organization along with the use of experiences, the tacit knowledge of existing expert capacities.

Among the results of the current research, the identification of consequences in tacit knowledge management includes the concept of a "learning organization," which involves



performing various tasks, roles, and responsibilities. The sub-components of a learning organization, such as team-level conversation skills, can enhance the management of tacit knowledge. Additionally, organizational-level mental models can influence the implementation of tacit knowledge management. Furthermore, individual-level learning can be transferred to team-level and organizational-level learning. If there is no learning, the organization will bear the heavy costs of not knowing, reworking, inefficiency, and wasting resources and skills. Additionally, the organization will witness the loss of implicit knowledge management. The findings in this field are consistent with the research results of Hwang (2022), Asher & Popper (2019), Tolai (2019), Niaz Azari (2007), and Demirchi et al. (2019). In the explanation of this part of the findings, it can be said that tacit knowledge management is unique to the organization itself. It acts as an invisible pillar or organizational beacon. In the absence of proper learning, the organization will suffer significant costs due to ignorance, rework, inefficiency, and the wastage of resources and skills. Suffered and witnessed the loss of effective knowledge management in the organization. The transformative nature of an organization's human capital necessitates the enhancement of scientific and experiential knowledge of its human resources. To preserve the indigenous and tacit knowledge of employees and transfer it to the human resources department, it is essential to document, narrate, record, and provide training for this knowledge. To the young and inexperienced members, it is important to prioritize the re-creation of the organization. With the assistance of the implicit knowledge possessed by experienced individuals and by enhancing the organization's collaborations with other educational institutions, it is feasible to enhance the efficiency of the organization's decision-making process, enabling it to effectively address the needs of social partners and governing institutions.

## 6. Conclusion

In general, the results of this research showed that the organizational factors that influence tacit knowledge management in the social security organization include organizational culture (knowledge sharing, external environment, innovation), organizational strategy (foresight, analysis, reactivity), and learning organization (perspective, team learning, systemic thinking). The variables of organizational structure (formality, centralization or lack of centralization) and information technology governance (planning) can play a mediating role between them and the learning organization. Tacit knowledge management is a platform for crystallizing organizational knowledge based on collective wisdom. It aims to create solutions for the most pressing issues within the organization. It also provides an opportunity for conflicting opinions and effective discourse to explain and analyze organizational problems and issues. It is suggested that top managers of learning organizations consider the proposed model and establish a suitable platform for integrated knowledge management within the organization. It is suggested that future researchers explore methods of institutionalizing the model of factors affecting tacit knowledge management in a mixed exploratory manner. One limitation of the current research was its narrow scope, which focused solely on managers and employees of the specialized assistants at the central headquarters of the Social Security Organization. This research alone cannot explain all the effective organizational factors that affect tacit knowledge management. Considering that this research was conducted at the headquarters of the Social Security Organization, the theoretical and practical results of this study can be of interest to both the Social Security Organization and other learning organizations.

## 7. Acknowledgement and Sponsoring Information

This article is taken from the Ph.D degree thesis of Shahram Bakhshi hajikhajeloo, a doctoral student in educational management in the Islamic Azad University, Ardabil

branch, with the approved code 1623991562 on 12/23/2019. The research was carried out with the material and spiritual support of the Higher Institute of Social Security Research, contract 2000-2090, dated 02/19/1400. In turn, I would like to thank the institution for its contribution to the development of knowledge and research in the country. The online version of the ethical code of this research is available at the following address and is open to the public. IR.IAU.ARDABIL.REC.1400.042

## 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

- Abbasi, A., Kabuli, N., Farhadian, H. (2012). Investigating organizational learning culture in environmental protection organization: application of the learning organization model. *Economic Research and Agricultural Development of Iran*, 44(2), 328-317. [In Persian] [https://ijaedr.ut.ac.ir/article\\_36728.html?lang=en](https://ijaedr.ut.ac.ir/article_36728.html?lang=en)
- Ahmadi, M., Hatamizadeh, N., & Hosseini, M. A. (2016). Identify and classify concepts and components of intellectual capital in the organizations. *Journal of Health Promotion Management*, 5(3), 15-27. <http://jhpm.ir/article-1-626-en.html>
- Amalia, M., & Nugroho, Y. (2010). An innovation perspective of knowledge management in a multinational subsidiary. *Journal of Knowledge Management*, 15(1), 71-87. <https://research.manchester.ac.uk/en/publications/an-innovation-perspective-of-knowledge-management-in-a-multinatio>
- Arabkhani, A., Dargahi, H., Ghorbani, R., Roshdi, I. (2022). The model of health system development in Iran with Grounded Theory Approach: A qualitative study. *Journal of Health Promotion Management*, 11(5), 80-97. <https://jhpm.ir/article-1-1506-en.html>
- Ateshk, M., Mahzadeh, P. (2011). Process methodology of knowledge management deployment models in order to provide an integrated method. In *Proceedings of the National Conference on Knowledge Management and Information Sciences: Links and Interactions*, 419-447. [In Persian]
- Baghbani Arani, A., Maghsoudiganjeh, Y., Aryapour, Z., Sotoudeh Arani, H. and Mehtri Arani, M. (2017). Factors affecting tacit knowledge exchange and its role in the marketing performance of agricultural cooperative companies in Isfahan province. *Cooperation and agriculture*. 7 (26), 1-27. [In Persian] [https://ajcoop.mcls.gov.ir/article\\_69426.html?lang=en](https://ajcoop.mcls.gov.ir/article_69426.html?lang=en)
- Chua, A. Y., & Banerjee, S. (2013). Customer knowledge management via social media: the case of Starbucks. *Journal of Knowledge Management*. <https://pure.york.ac.uk/portal/en/publications/customer-knowledge-management-via-social-media-the-case-of-starbu>
- Daneshfar, T., & Khadivi, A. (2016). Survey of the Impact of knowledge Management in the Personnel Creativity of Gas Company in Uremia City. *Biannual Journal of Value Chain Management*, 1(2), 32-48. [https://journals.iau.ir/article\\_650411.html](https://journals.iau.ir/article_650411.html)
- Davari, A., & Rezazadeh, A. (2017). *Structural equation modeling with PLS software*. Tehran: University Jihad Publications, third edition. [https://www.researchgate.net/profile/Aras\\_h\\_Rezazadeh/publication/264519454\\_Structural\\_Equation\\_Modeling\\_with\\_PLS/links/53e236d80cf2d79877aa19f1/Structural-Equation-Modeling-with-PLS.pdf](https://www.researchgate.net/profile/Aras_h_Rezazadeh/publication/264519454_Structural_Equation_Modeling_with_PLS/links/53e236d80cf2d79877aa19f1/Structural-Equation-Modeling-with-PLS.pdf)
- Duan, Y., Yang, M., Huang, L., Chin, T., Fiano, F., de Nuccio, E., & Zhou, L. (2022). Unveiling the impacts of explicit vs. tacit knowledge hiding on innovation quality: The moderating role of knowledge flow within a firm. *Journal of Business Research*, 139, 1489-1500. <https://doi.org/10.1016/j.jbusres.2021.10.068> <https://www.sciencedirect.com/science/article/abs/pii/S0148296321007955>
- Durrani, K., & Adiban, H. (2014). Investigating the relationship between knowledge management processes and the job performance of employees in higher education (Tehran University case study).

- Knowledge Retrieval and Semantic Systems Quarterly*, 2(4), 1-25.  
[https://jks.atu.ac.ir/article\\_2362.html?lang=en](https://jks.atu.ac.ir/article_2362.html?lang=en)
- El-Den, J., & Sriratanaviriyakul, N. (2019). The role of opinions and ideas as types of tacit knowledge. *Procedia Computer Science*, 161, 23-31.  
<https://researchers.cdu.edu.au/en/publications/the-role-of-opinions-and-ideas-as-types-of-tacit-knowledge>
- Ezzati, M., Mirkamali, S. M., & Sadeqi, L. (2016). The optimal model of knowledge management at the university in accordance with the vision of the Islamic Republic of Iran in 2025. *Quarterly Journal of the Macro and Strategic Policies*, 4(13), 1-24.  
[https://www.jmsp.ir/article\\_11610.html?lang=en](https://www.jmsp.ir/article_11610.html?lang=en)
- Farnese, M. L., Barbieri, B., Chirumbolo, A., & Patriotta, G. (2019). Managing knowledge in organizations: A Nonaka's SECI model operationalization. *Frontiers in Psychology*, 10, 2730.  
<https://www.frontiersin.org/articles/10.3389/fpsyg.2019.02730/full>
- Ganguly, A., Talukdar, A., & Chatterjee, D. (2019). Evaluating the role of social capital, tacit knowledge sharing, knowledge quality and reciprocity in determining innovation capability of an organization. *Journal of knowledge management*.  
<https://www.ingentaconnect.com/content/mcb/230/2019/00000023/00000006/art00004>
- Hajizadeh, P., Sardari, A. (2017). The effect of knowledge management on improving the innovative performance of the organization with an emphasis on the mediating role of organizational learning (case study: Quaid Basir Petrochemical Production Holding). *Organizational Knowledge Management Quarterly*, 1(2), 63-693. [In Persian]  
[https://jkm.ihu.ac.ir/article\\_203696\\_805179c89e739429fe9ee459482b696f.pdf](https://jkm.ihu.ac.ir/article_203696_805179c89e739429fe9ee459482b696f.pdf)
- Hasirchi, Amir., Tolai, Ruhollah., Matini Motahar, Massoud. (2019). Designing a native model for extracting expert knowledge and organizational experiences at a strategic level. *Organizational Knowledge Management Quarterly*, 3(4), 101-136. [In Persian]  
[https://jkm.ihu.ac.ir/article\\_206017.html](https://jkm.ihu.ac.ir/article_206017.html)
- Heidari, H., Heydari, H., & Khodayari, Kh. (2017). The effect of knowledge management strategy and processes on organizational excellence. *Business Management*, 10(40), 17-45. [In Persian]  
[https://bmj.ctb.iau.ir/article\\_663906\\_3d0079b25abd95313a1b4a767a3c8944.pdf](https://bmj.ctb.iau.ir/article_663906_3d0079b25abd95313a1b4a767a3c8944.pdf)
- Huang, T. T. A., Chen, L., & Stewart, R. A. (2010). The moderating effect of knowledge sharing on the relationship between manufacturing activities and business performance. *Knowledge Management Research & Practice*, 8(4), 285-306.  
<https://www.tandfonline.com/doi/abs/10.1057/kmrp.2010.21>
- Iranian Social Security Organization. (2020). *Deputy for Management Development and Human Resources*. The most comprehensive educational reference of the Social Security Organization: educational resources of the specialized section of treatment. Tehran. Iran; 2020.
- Jafari, A., Mohammadpour, F., Alam Tabriz, A. and Khadevi, R. (2018). Effective solutions in empowering experts in the health department of Kurd University of Medical Sciences. *Journal of Kurd University of Medical Sciences*, 10 (2), 1-10. [In Persian]
- Jamipour, M., Yazdani, H., Sadeghi, F. (2015). Presentation of the road map for strategic alignment of knowledge management in Iranian government organizations. *case study: Tehran Regional Electricity Company*, 8(2), 231-252. [In Persian]  
[https://journals.ut.ac.ir/article\\_55716\\_0.html](https://journals.ut.ac.ir/article_55716_0.html)
- Jo, S. J., & Joo, B. K. (2011). Knowledge Sharing: The Influences of Learning Organization Culture, Organizational Commitment, and Organizational Citizenship Behaviors. *Journal of Leadership & Organizational Studies*, 18(3), 353-364.  
<https://doi.org/10.1177/1548051811405208>  
[https://www.researchgate.net/publication/259862895\\_Knowledge\\_Sharing\\_The\\_Influences\\_of\\_Learning\\_Organization\\_Culture\\_Organizational\\_Commitment\\_and\\_Organizational\\_Citizenship\\_Behaviors](https://www.researchgate.net/publication/259862895_Knowledge_Sharing_The_Influences_of_Learning_Organization_Culture_Organizational_Commitment_and_Organizational_Citizenship_Behaviors)
- Karimi, M. (2015). *The effect of organizational structure on job satisfaction of employees (Case study: Islamic Azad University, Ilam Branch)*. Master Thesis in Business

- Management, Islamic Azad University, Rasht Branch.
- Khastar, H. (2009). A method for calculating coding reliability in qualitative research interviews. *Methodology of Social Sciences and Humanities*, 15(58), 161-74. [http://method.rihu.ac.ir/article\\_418.html?lang=en](http://method.rihu.ac.ir/article_418.html?lang=en)
- Kucharska, W. (2022). Transformational leadership for researcher's innovativeness in the context of tacit knowledge and change adaptability. *International Journal of Leadership in Education, Theory and Practice, Latest Articles*. <https://doi.org/10.1080/13603124.2022.2068189> <https://www.tandfonline.com/doi/full/10.1080/13603124.2022.2068189>
- Makvandi, M., Mehralizah, Y., & Hosseinpour, M. (2019). The study of methods and how to document technical knowledge of the personnel and managers of the companies in the area of Arvand Free Zone. *Journal of Development & Evolution Mngement*, 1398(39), 11-22. [https://jdem.gazvin.iau.ir/article\\_670239.html?lang=en](https://jdem.gazvin.iau.ir/article_670239.html?lang=en)
- Mehr Alizadeh, Y. (2009). New theories of management (theoretical and experimental foundations) with an emphasis on the experience of Iranian organizations. *Ahvaz: Shahid Chamran University*. [In Persian]
- Miles, R. E., Snow, C. C., Meyer, A. D., & Coleman Jr, H. J. (1978). Organizational strategy, structure, and process. *Academy of management review*, 3(3), 546-562. <https://www.jstor.org/stable/257544>
- Molvi, M., Yusefpour, H. (2015). The role of organizational culture in increasing tacit knowledge sharing. International Conference on Management and Resistance Economy, Malaysia, *Center for Development of Modern Education of Iran (METANA)*. [In Persian]
- Momeni, B., Ahmadi, G., Pardachi, M. (2022). Designing the maturity model of knowledge management in healthcare organizations. *Bimonthly Scientific-Research Education Strategies in Medical Sciences*, 15(1), 46-57. [In Persian] <https://edcbmj.ir/article-1-2510-en.html>
- Natek, S., & Zwilling, M. (2016). Knowledge management systems support SECI model of knowledge-creating process. In Joint International Conference (pp. 1123-1131). <https://ideas.repec.org/h/tkp/mk1p16/1123-1131.html>
- Nazari, N., Riahi, L., & Biglarian, A. (2015). Correlation between organizational silence and knowledge management in Firoozgar Hospital Tehran. *Journal of Health Promotion Management*, 4(3), 43-50. <http://jhpm.ir/article-1-477-en.html>
- Nematullah, M., Zamahni, M., Chaina, M., Amirkhani, A. (2018). A framework for transforming tacit knowledge into explicit knowledge in the studied industries of Pars automotive industry. 17(55), 99-65. [In Persian] <https://sciexplore.ir/Documents/Details/084-025-694-843>
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization science*, 5(1), 14-37. <https://www.jstor.org/stable/2635068>
- Nonanka, I., & Takeuchi, H. (1995). The knowledge creating company. *How Japanese Companies Create the Dynamics of Innovation*. Frankfurt a. M.: Campus. <https://www.jstor.org/stable/2635068>
- Oliveira, M., Pinheiro, P., Lopes, J. M., & Oliveira, J. (2022). How to overcome barriers to sharing tacit knowledge in non-profit organizations? *Journal of the Knowledge Economy*, 13(3), 1843-1874. [https://iconline.ipleiria.pt/bitstream/10400.8/5754/1/Oliveira2021\\_Article\\_HowToOvercomeBarriersToSharing\\_published.pdf](https://iconline.ipleiria.pt/bitstream/10400.8/5754/1/Oliveira2021_Article_HowToOvercomeBarriersToSharing_published.pdf)
- Pangil, F., & Nasurdin, A. M. (2019). Assessing the Relationship between Organizational Commitment and Knowledge Sharing Behavior. *Malaysian Management Journal*, 13, 35-50. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3357196](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3357196)
- Polanyi, M. (1966). *The Tacit Dimension*, Routledge & Kegan Paul, London. <https://www.worldcat.org/title/tacit-dimension/oclc/60901005>
- Qalicheli, B., Asadi Qarabaghi, M. (2014). The effect of knowledge sharing intentions and competences on the job performance of librarians in project-oriented organizations) Case study: Petrochemical Industries Development Management Company. *Management Research in Iran*, 19(4), 161-184. [In Persian] [https://mri.modares.ac.ir/article\\_381.html?lang=en](https://mri.modares.ac.ir/article_381.html?lang=en)
- Qolipour, R., Samadi Miyarklai, H., Samadi Miyarklai, H. (2014). Promotion of psychological empowerment in the light of knowledge sharing. *Managing Organizational Culture*, 13(3), 879-905.

- [In Persian]  
[https://jomc.ut.ac.ir/article\\_54743.html?lang=en](https://jomc.ut.ac.ir/article_54743.html?lang=en)
- Ranaei Kordshooli, H. A., & Ghahramanifard, M. (2013). Scale Development and Validation for Measuring Organizational Readiness in order to Implement Social Intranet (A Study in Fars Regional Electric Company). *Journal of Information Technology Management*, 5(1), 37-60. [https://jitm.ut.ac.ir/article\\_30050.html](https://jitm.ut.ac.ir/article_30050.html)
- Raunghi, M., Mahmoudi, J. (2014). The relationship between information technology governance and corporate governance among government organizations in the field of information technology. *Information Technology Management*, 7(3), 634-615. [In Persian] [https://jitm.ut.ac.ir/article\\_54329.html](https://jitm.ut.ac.ir/article_54329.html)
- Robbins, S. P. (2005). *Management*. eighth edition, entice Hall of India. <https://www.biblio.com/9780131439948>
- Saif, M., Thabet Maharloi, A., Rastgar, A., Talebi, S. (2014). Factors affecting the willingness to share knowledge among academic staff members of Shiraz University of Medical Sciences. *Iranian Journal of Education in Medical Sciences*, 15(5), 5-41. [In Persian] [https://ijme.mui.ac.ir/browse.php?a\\_code=A-10-2605-3&slc\\_lang=en&sid=1](https://ijme.mui.ac.ir/browse.php?a_code=A-10-2605-3&slc_lang=en&sid=1)
- Salameh, A., & Zamil, Z. (2020). The effects of reward systems and organizational structure on tacit knowledge sharing. *Management Science Letters*, 10(10), 2229-2236. <http://growingscience.com/beta/msl/3789-the-effects-of-reward-systems-and-organizational-structure-on-tacit-knowledge-sharing.html>
- Samadi Sankhasti, S. (2017). *The role of tacit knowledge in the sustainable development of villages (with an emphasis on the tacit knowledge of Sankhasat village residents)*. 9th National Conference on Sustainable Agriculture and Natural Resources, Tehran. [In Persian]
- Samari, Isa. (2014). *Theoretical foundations of the development of higher education and the university system (concepts, theories, and models)*. Tehran: Afaq Kalam Publications. [In Persian]
- Sher, P. J., & Lee, V. C. (2016). Information technology as a facilitator for enhancing dynamic capabilities through knowledge management. *Information & management*, 41(8), 933-945
- <https://www.sciencedirect.com/science/article/abs/pii/S0378720603001472>
- Sikombe, S., & Phiri, M. A. (2019). Exploring tacit knowledge transfer and innovation capabilities within the buyer-supplier collaboration: A literature review. *Cogent Business & Management*, 6(1), 1683130. <https://www.tandfonline.com/doi/full/10.1080/23311975.2019.1683130>
- Sohrabi, R., Asghari Sarem, A., Ezzati Arasteh, F. (2019). Presenting the codification model of the tacit knowledge of human resources and identifying the obstacles to its implementation in the General Department of Economic Affairs and Finance of Hamedan. *Strategic Management of Organizational Knowledge*, 3(9), 137-166. [In Persian] <https://civilica.com/doc/1128656/>
- Sorakraikitikul, M., & Siengthai, S. (2014). Organizational learning culture and workplace spirituality, Is knowledge-sharing behaviour a missing link? *The Learning Organization*, 21, 175-192. <https://doi.org/10.1108/TLO-08-2011-0046>
- Tavasoli, J. (2011). *Investigating the relationship between organizational structural dimensions and knowledge management in education organizations*. Master thesis. [In Persian]
- Templeton, G. F., Lewis, B. R., & Snyder, C. A. (2002). Development of a Measure for the Organizational Learning Construct. *Journal of Management Information Systems*, 19(2), 175-218. <https://www.jstor.org/stable/40398581>
- Tsai, M. T., & Li, Y. H. (2007). Knowledge creation process in new venture strategy and performance. *Journal of Business Research*, 60(4), 371-381. <https://www.sciencedirect.com/science/article/abs/pii/S0148296306001573>
- Wetzels, M., Odekerken-Schröder, G., & Van Oppen, C. (2009). Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS quarterly*, 177-195. <https://www.jstor.org/stable/20650284>
- Wiewiora, A., Trigunarsyah, B., Murphy, G., & Coffey, V. (2013). Organizational culture and willingness to share knowledge: A competing values perspective in Australian context. *International Journal of Project Management*, 31(8), 1163-1174.

<https://www.sciencedirect.com/science/article/abs/pii/S0263786313000057>

Zahedi, M., Karimi, M. and Dehghani, M. (2018). Examining, identifying and prioritizing dimensions and components of intellectual capital in technology-oriented organizations. *Quarterly Journal of Innovation Management in Defense Organizations*, 2(3), 61-88. [In Persian] [https://www.qjimdo.ir/article\\_88895.html?lang=en](https://www.qjimdo.ir/article_88895.html?lang=en)

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, 122114. <https://doi.org/https://doi.org/10.1016/j.techfore.2022.122114>