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# Investigating the Impact of Knowledge Management on Organizational Customers' Results (Guilan Regional Distribution Study)

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# Abstract

KM is a comprehensive approach to identifying, capturing, retrieving, sharing, and evaluating an organization's information assets and affecting the organization's various dimensions. The purpose of this study was to examine the efficacy between knowledge management components and organizational customer outcomes. The target community of the present study is the regional water customers in Guilan province. All organizational customers were counted in 31 cases and information was collected through a standard questionnaire in the second half of the year of 1397. This research is applied in terms of the purpose and the correlation method has been used to test the hypotheses. The results showed that among the components of knowledge management, knowledge acquisition component with a correlation coefficient of 62.6%, knowledge transfer component with a correlation coefficient of 51.8, knowledge creation component with correlation coefficient of 49.6 and knowledge retaining component of 45.6%, and the component of knowledge application with correlation coefficient 51.5 has a positive and significant relationship with organizational customer outcomes. Also, from the viewpoint of Guilan Provincial Regional Water Users, all aspects of knowledge management in this organization have a relatively favorable situation. The average value obtained for variables is: acquisition of knowledge equal to 2.339; knowledge preservation equal to 2.414; knowledge transfer 2.446; knowledge creation 2.496; knowledge application 2.322; and finally, the results of organizational clients were 2.374.

**Keywords:** knowledge management, organizational customers, knowledge creation, knowledge transfer, knowledge acquisition, knowledge preservation, knowledge application.

## Introduction

Nowadays, with the complexity of competition, innovation is considered as one of the main advantages of the company's life. All organizations need fresh and fresh ideas to survive. New and fresh ideas like soul are blown up in

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the body of the organization, and they save it from being inanimate. The advent of knowledge innovation not only enables organizations to gain competitive advantage over competitors, but also provides a useful tool for improving the organization's performance. Knowledge as a major source of innovation and organizational excellence is of paramount importance. The main purpose of knowledge management is to create and organize an environment in which people develop their knowledge, exchange knowledge, combine knowledge with others, and eventually apply it. The use of knowledge in turn will lead to innovation in the organization. Therefore, knowledge management is often recognized as the main source of innovation and is one of the basic requirements of the innovation process in the organization (Dehghan Najm, 2009). The emergence of the "information technology" revolution, the formation of the information and networking society, as well as the rapid development of high technology, especially in the field of communication, computer and engineering, has changed the pattern of global economic growth since the 1990s.

As a result of these developments, knowledge as the most important capital has been replaced by financial and physical assets in the global economy. Recent studies have shown that, unlike lowering the returns of traditional resources (such as money, land, machinery, etc.), source knowledge Increased business performance. What matters is that the market has also recognized the value of knowledge and other intangible factors in the process of creating value. In fact, the knowledge-based business environment in many countries in the world requires a new model and designation that includes intangible agents of the organization. In this situation, the emerging field of "intellectual capital" has attracted increasing attention.

From a strategic perspective, intellectual capital can be used to create and apply knowledge to increase the value of an organization. Today, the emerging field of intellectual capital has been an exciting issue for both researchers and business practitioners. In today's world, the main economic resources, capital, natural resources, labor, and so on. . . But the main economic resources will be knowledge. After the twentieth century, which was the century of industrial economics, the 21st century is a century of information and knowledge economy. In the industrial economy, the factors of the production of economic wealth were a series of physical and visible assets such as land, labor, money, and ... and the combination of these economic factors was generated by wealth. In this economy, the use of knowledge as a factor of production has played a small role, but in the knowledge economy, knowledge or intellectual capital is preferred as a source of wealth in comparison with other tangible and physical assets.

In the knowledge economy, unlike the industrial economy, intellectual property and especially human capital are among the most important assets of the organization, and the potential success of organizations is rooted in their intellectual ability. Therefore, the way intellectual capital management in organizations and the role of competitive advantage can play a significant role in advancing organizational goals (Bhatheaei, 2006).

Meanwhile, our country's organizations need to manage their knowledge and use the intellectual capital of their organization to align with other organizations and increase their competitive ability in the domestic and global arenas. Especially since our country's membership in the World Trade Organization in 2005 and increasing competition in the domestic economy, as well as the country's desire to join this international organization, the need for organizations to think in the management of knowledge and intellectual capital is felt more than ever. Organizational performance is a general construct that refers to how organizational operations are conducted. Organizational performance is

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interpreted as the ability of the organization to use resources efficiently and to generate sustained outputs, taking into account the objectives of the stakeholders. In general, organizational performance refers to how the mission and the tasks and organizational activities are performed, and the results obtained from doing so.

The concept of the term "performance" is important since it can be evaluated or managed by defining the function. The evaluation of measurement performance is data that indicates progress towards the desired results. This research investigates the results of organizational customers in the Gilan Regional Water Authority and can provide new and new results in terms of organizational and regional water services from customers' point of view, with the knowledge management, the managers of this organization will be able to enhance and increase the efficiency and thereby increase customer satisfaction.

## II. Research literature

Knowledge includes facts and beliefs, concepts and thoughts, judgments and expectations, methodology (methodology), or science of principles and techniques (Techniques, 2007). The knowledge of our ideas, understandings and lessons learned over time. Lessons and ideas that have been supplemented by information from different sources and over time (Emami and Kayhani, 2007). Adding comprehension and memory to information leads to natural development after information. Summarizing as much as possible (accumulation) of basic information leads to knowledge. In this way, knowledge can be defined by insights from information and data that can be divided into different methods and in different conditions (Norouzian, 2008).

#### 2.1. Knowledge Management Concepts

## 2.1.1 Knowledge management

From Rabitz's point of view, knowledge management includes all of the ways in which the organization manages its own knowledge assets, including how to collect, store, transfer, use, update, and create knowledge. Beginner and knowledge management the explicit and systematic management of critical knowledge and processes for the creation, organization, dissemination, use and discovery of knowledge has been defined (Vahid Alipour, p. 2-3). Pears believes that knowledge management is the gathering of knowledge, rational capabilities and experiences of individuals an organization and the ability to retrieve them as an organizational capital. Niemann believed that KM management a set of phenomena that comprise the creation, dissemination, and application of subjective and objective knowledge in an organization. (Mansourdehghan Najm, 2009, pp. 48-49).

The KM process consists of four steps that are carried out in the organization in the following process:

In the first step, the existing knowledge at the organization level and its resources (including explicit and implicit knowledge of individuals, databases, documentation, etc.) must be identified and then collected and stored properly. Then, To make knowledge valuable and to bring about synergy and rehabilitation, knowledge needs to be shared among people. After this step, the knowledge gained for the purposes of the organization should be used.

Finally, by entering new information into the system of knowledge creation takes place (Meysam Norouzian, 2005, p. 26)

#### 2.2 Knowledge Management Elements

#### 2.2.1. Knowledge creation

The first step in the broad process of knowledge management is knowledge creation in a company in two distinct personal and group cycles. Personal knowledge, when used in organizational context, creates a new knowledge that can be called organizational knowledge. The collective knowledge cycle of the application of personal knowledge is created in the context of the organization, which can also be called organizational knowledge. Organizational knowledge includes a variety of knowledgeable knowledge, competitive knowledge, technical knowledge, and so on.

#### 2.2.2. Preservation of knowledge

In contrast, the refinement process is the process of preserving the permission of any knowledge to the organization. The organization must prevent unnecessary knowledge using logical mechanisms and only allow useful and applicable knowledge to enter the organization. To achieve this goal, the management team can provide a framework for knowledge assessment using the organization's insights, missions and goals.

#### 2.2.3. Knowledge transfer

Knowledge transfer refers to attempts by using methods such as flexible structure - trust culture - the strategy of learning and information technology is intended to develop knowledge transfer and personalization, and studying this transfer in order to achieve innovative capabilities in an organization such as Product service is the process of design and technique. In this context, there are at least three main reasons for the transfer of knowledge:

## 2.2.4. Acquiring Knowledge - Reuse - Creating Knowledge

Regarding the importance of culture in organizational knowledge and dissemination, it can be said that culture leads to the creation of harmonious environments. If the organization values and cultures to encourage learning and knowledge, all functions of the organization will change.

## 2.2.5. Knowledge application

From the perspective of most researchers, including Fiber and Sutton, the most important process. They argue that the competitive advantage of organizations that do not have the best knowledge assets, but belongs to organizations that best utilize their knowledge in practice. If it does not become operational, and organizational activities are not based on the knowledge of the organization, all knowledge management activities and processes are ineffective. The application of knowledge makes the gaps between knowing by acting and the important loop of feedback, learning with doing and applying. Also, the application of knowledge enables the creation of a learning scenario to provide a basis for the application of knowledge, in spite of the fact that learning is very difficult in this way, but in knowledge creation is very important, because it involves the meta-analysis and evaluation of processes and, therefore, often it is forgotten in organizations. He says that if the productivity of knowledge does not increase, the economy will become stagnant. In the brain, the role of individuals as sources of knowledge in creating wealth

and wealth is so much that it needs to be looked at strategically. The third millennium of the century is the pace of change and change, with the beginning of which the creation of knowledge is collaboratively provided, the necessary platforms for promoting value creation for R & D units are provided. The scientific and financial participation of the developed and developing countries in creating knowledge and cultures is evident at a global scale.

#### 2.2.6. Earn knowledge

The process of harvesting or acquiring knowledge is necessary to meet the current and foreseeable needs of the future and to realize the effectiveness of the objectives. Knowledge can be gained through various mechanisms. In order to identify the mechanism for acquiring knowledge, it can be classified into two categories: the source within the organization and the source outside the organization. The internal source of knowledge acquisition, the minds of employees (implicit knowledge and data) or the database of the organization that is codified in the form of information. Knowledge management, the use of intellectual capital for the superiority of the organization in competing with peer organizations, as well as innovative responses to challenges A new and leverage for action and a mediator (Bobby, 1391).

## 2.3 Principles of Knowledge Management

Knowledge management itself does not exist in organizations and requires specific backgrounds and skills. Some organizations may delegate the task of implementing knowledge management to their employees or managers. Of course, this interaction and the use of forces in this matter can increase effectiveness. Below are some of the principles of KM:

- Investment: Knowledge is an asset, and its effectiveness must be invested in other sectors. For example, investing in training staff training.
- Relationship between man and technology: Information and data are transmitted through humans to a computer and the computer processes it immediately. Now these data are in the human mind that is transmitted to the computer. Because knowledge is based on information and information, these two can be effective.
  - Knowledge Managers: Value managers can attract latent knowledge by valuing individuals' knowledge.
- Achieving knowledge: Knowledge should be applied and incorporated into organizational processes, which will lead to improved organizational performance.

The four factors mentioned above are among the most important principles in knowledge management, while other factors such as training, managing time control, profitability, and the process of looking at the knowledge management, not the instrumental look, are also important. Regarding all of these, it can be said that KM is a long-term commitment from senior executives, committed and trained employees, and ultimately, the proper use of information technology (Fatehi, 2011)

# 2.3.1. Reasons for using knowledge management

One of the most important reasons why organizations tend to point to knowledge management is that knowledge management:

- Increases productivity and profitability.

➤ Strengthens cooperation.

➤ Creates and develops creativity.

➤ Encourages and innovates.

> To facilitate and accelerate the flow of knowledge transfer from producer to recipient.

➤ facilitates the sharing of information between employees.

➤ Reduces work.

➤ Increases the ability of the organization to deal with the phenomenon of inflation.

> Collects and stores employees' knowledge of the organization before leaving the organization.

➤ improves the quality of customer service.

By helping the organization increase its awareness of the solutions, products, and performance of competing organizations, it helps the organization not to compete. Whig conducted a comprehensive study on knowledge management in government agencies and outlined four roles for knowledge management in government agencies:

1. Promoting public service decisions

2. Helping the public participate in the decision-making process

3. Creating the Capacity Competitive Capacity

4. The Development of Knowledge Workers (Sharif al-Din et al., 2004, p. 97)

McAdam and Reid noted the improvement of quality and organizational efficiency as well as cost reduction as the benefits of knowledge management in government agencies. (EO, 2005, p. 42). The retirement of long-term employees in government agencies and experiences have gained a lot of them as a misfortune for the managers of the organizations. The cost and time spent on these employees to gain enough knowledge and experience about their businesses brings the importance of knowledge management in government agencies. That is why the knowledge of these people needs to be available to other staff before leaving the organization. This will reduce the cost of training It can be said that knowledge management reduces knowledge sharing in the organization and creates employee collaboration from rework, which will increase the organization's reach and ultimately provide better and faster service to the client.

Problems in implementing knowledge management in government agencies:

In spite of the strong reasons for the strategic use of KM to improve organizational performance, there are various barriers to the implementation of KM in public administrations (IE, 2005, p. 42-43). These barriers can be summarized below:

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1- Managers Knowledge Management:

2. The secretive nature of government agencies

3. No culture of participation in the organization:

4. Employees look at knowledge as a source of power.

Solutions to Overcoming Problems in Knowledge Management Implementation:

In the following, there are 4 ways to deploy knowledge management and to overcome the obstacles facing it.

Top-down suggestions have a higher degree of importance that organizations need to review and implement in order.

1 - The main issue that leads to the lack of attention to knowledge management in government agencies is the

lack of knowledge of managers with knowledge management, its benefits and the implementation process in the

organization. The manager should be able to determine the knowledge of the organization. Review the applications.

Slow down and create the ones that make the most value. Then we need to create computer networks and databases

so that information is readily available to those who need it (Farzad Omidvaran, 2006, p. 247).

2. Modeling and reviewing the experiences of private organizations can help government agencies implement

the KM process. By reviewing private organizations and their successes and failures in implementing the KM process,

they will take templates and have an effective management of their organizational knowledge.

3. Create a culture that shares knowledge in the organization, rewards it and rewards it. Creating such a

knowledge culture requires strong organizational leadership that changes the attitudes and behavior of individuals.

4. Conducting training courses as necessary infrastructure for knowledge management in the organization is

also necessary

2.4 Knowledge strategies

Knowledge strategies are strategies that determine the direction of knowledge goals in the organization.

Organizations that want to run knowledge management, in addition to the usual organizational goals, must also define

their knowledge goals and then define the goals by defining knowledge strategies. Given that knowledge goals and,

consequently, knowledge strategies are not compatible with hierarchical and traditional structures, attention to

processes in knowledge-based organizations is very important. Hierarchical structures are less consistent with this

attitude and cover most tasks rather than cover the processes (Akhavan, 2010: 116).

Some scholars have differentiated between knowledge strategy and knowledge management strategy. From

Zac's point of view, the strategy of knowledge specifically refers to the organization's business strategy, which also

considers the resources and capabilities of the organization's knowledge. This strategy involves identifying

shortcomings and surpluses of knowledge and then managing it through the implementation of a KM strategy to

enhance the organization's performance (i.e., 166).

2.5 KM goals

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Knowledge management involves the process of optimizing the combination of knowledge and information in the organization and creating an appropriate environment for the production, sharing and application of knowledge and innovation of creative and innovative human forces. The goal of KM is to create a learning organization and partnership by creating the flow of information between the information tanks created by individuals in different parts of the company (financial, performance, competitive intelligence, etc.), and their association with each other. In other words, the ultimate goal of knowledge management is to upgrade Value added knowledge in the organization to develop and improve creativity, productivity, and competitive advantage for the organization (Verna, 2001).

## 2.6 Summary of research background

Table 1: Summary of internal and external studies

Results	Researcher-year	subject	Row
The necessity of attention to knowledge management for the advancement of the organization's resources and success in the field of competition is concluded	Azad University of Naraq-93	Factors Affecting the Implementation of Knowledge Management at the Applied Scientific University of Qom	1
The role of KM on problem-solving activities is emphasized by dynamic knowledge and critical decision making.	Azad University of Naraq -92-93	The Effect of Knowledge Management on Organizational Performance of Tehran Metro Co.	2
It has come to the conclusion that in the information age, continuous and sustained presence of organizations in the world of business and competition must be rooted in the field of science and knowledge.	Ebrahimi -1392	Knowledge management in governmental and non-governmental organizations	3
Spearman's correlation coefficient showed that there were significant relationships between knowledge creation, knowledge preservation, and knowledge transfer and knowledge application with organizational innovation.	Taleghani and colleagues -1390	The relationship between knowledge management and organizational innovation in an insurance company	4

Research findings show that there is a positive relationship between knowledge management and its hard and soft dimensions and organizational innovation. Knowledge management has a positive relationship with the three dimensions of organizational innovation.	Vedadi and Abdulalian-1390	Investigating the relationship between knowledge management and organizational innovation in the human resources of the National Oil Refinery	5
The results of the research have shown that various components of knowledge management such as knowledge-based activities, types of knowledge, knowledge transfer and technology have a positive and significant effect on innovation through the transformation of knowledge into the assets of the organization.	Akram and colleagues 2011	The Role of KM in Innovation Integrated Approach	6
The results of this research show that organizational learning is the intermediate variable between knowledge management and organizational innovation.  Hence, in a system, knowledge management is a key input variable, organizational learning of the key process, and organizational innovation as a key output variable.	Leo Woo -2010	Knowledge Management Perspectives, Organizational Learning, and Enterprise Innovation	7
The results of the research reveal the importance of the centralized knowledge management structure for creating synergies between different aspects of KM. The research has revealed the importance of leadership, communication and collaboration in promoting knowledge management.	Scrodero Paulin- 2007	Knowledge Management Governance and Knowledge Influence	8

## 2.7 Part Two: Customer Orientation

# 2.7.1 Customer - Ordinary customer and customer types

According to the definition of the customer, it is a kind of organizational culture that creates the necessary behaviors to value the customers in the best possible way. Also, according to another definition, customer orientation refers to the customer's perception of their expectations and expectations. In the sources also mentioned: customer

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orientation or customer focus is a method that first addresses customer's needs, and then seeks to meet these needs. They come in such a way that the final result is the customer's satisfaction and expectations.

In Japan, they read the customer as God. They are of the opinion that, as God is offering, the customer gives you something, so they should be respected. In India, they call the client a boss. Because the highest positions of organizations in India are headed, and the people who run the chair are honored with great respect, they say that our client is our customer. In Iran, the term customer the mold is called referrals, and this is because in the past of Iran, we have talk of master and martyrs, and everyone who lived as a master of interior in Iran has a great respect and a very high status. Then we see that in Different countries have different views on the customer-orientation, all of which end up being the customer of a very important person in our organization.

Customer divisions are as follows in terms of how they are present in the purchasing process:

- True Customer: Participate in people with their personal and real nature. The real customer is said to be the same as many of the daily purchases that real people make. (Golshan, 1390: 31).
- Legal Client: Companies, organizations, institutions and enterprises that participate in the legal process within the procurement process are legal clients, such as purchases by ministries, institutions and companies. (Kami, 1383: 16).
- Customer Organizations: The customer is divided into internal and external outsourcing from the point of view of the manufacturer or service provider. Thus, in the service and production chains, the customers are those who are the result of the work directed towards them. For example, the car production line is the manufacturer's unit assembly unit. These customers are called in-house customers. In the same organization, the consumer car is an outsourcing client. (Golshan, 1390: 33).
- Geographic Client: Another categorization proposed for the customer is related to the geographic range, so that the client is in a geographic location. In this way, the customer in the geographical area (neighborhood, region, city, country) is the customer of the internal and external geographical area of the "foreign customer". (Kamisy, 1383: 17).

## 2.7.2 Define enterprise customers

The customer has been divided into both internal and external entities from the point of view of the manufacturer or service provider. Thus, in the service and production chains, the customers are those who are the result of the work directed towards them. For example, the car production line is the manufacturer's unit assembly unit. These customers are called in-house customers. In the same organization, the consumer car is an outsourcing client. (Golshan, 2011: 33). Organizational customers include all customers who use goods or services for use in the production of other products and services. These customers are wholesalers and types of organizations such as hospitals, universities and institutions. Government agencies. (Corporate Marketing 32: 1392)

#### 2.7.3 The difference between organizational and non-organizational customers

The same products that one company produces can be bought both on the corporate market and on the consumer market. But corporate goods usually differ greatly from consumer goods markets. What distinguishes a market from another market? The buyer wants And the intended use by the buyer of the product. The differences between the product type and the nature of the customer, which leads to different problems and marketing approaches that occur in two areas.

The main differences between organizational and non-organizational customers are as follows:

- 1. The volume of customer purchase is more organizational
- 2. The number of customer transactions is more organizational
- 3-The seller is associated with fewer customers
- 4. Business buyers are bigger
- 5. Organizational buyers are geographically focused
- 6. There is a closer relationship between the corporate client and the seller
- 7. Distribution channels are more direct for enterprise customers
- 8. Organizational customers have a more formal approach to buying
- 9. More people have an influence on the decision making of corporate clients
- 10-More complex negotiations are taking place in the purchase of organizational customers
- 11 Professional sales are more than sales promotion to corporate customers (Corporate Marketing 37: 1392)

## 2.8 Effect of performance on results

Today, the effectiveness and effectiveness of the organization's processes is day-to-day. With scientific studies, one has to answer the question of how to improve the effectiveness of the organization's processes. Experts believe that one of the ways to increase the effectiveness of the organization, improve the quality of services and its purpose, and meet the needs and expectations of customers. Therefore, one of the indicators of the effectiveness of the organization can be considered customer satisfaction.

The most important effects of customer satisfaction on organizational processes

- Continuous reduction of costs and shorter working cycle times due to the effective use of resources;
- Improved operational results and consistent and predictable results (Improvement recommendations);
- Enabling centralized and prioritized opportunities for improved operations;
- Increasing the ability to create value for both sides;

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- Transferring the importance of customer requirements as well as regulatory and regulatory requirements to

the organization;

- Establishing a Quality Policy (Magnus, 1382, p. 260)

In terms of the institution, customer satisfaction comes from a three-part system that includes:

1-Institute functions (processes);

2. The staff of the institution that provides the product or service;

3. Customer expectations.

The effectiveness of this three-part system depends on the proper integration of these parts with each other

Factors Affecting Organizational Results

The factors affecting organizational communication are divided into three broad categories:

1. Human factor:

The human factor encompasses human aspects and affects the relationships of individuals. In fact, the human factor, its component and its variables, effectively affects organizational communication and has a positive effect on it. This factor consists of three components:

A. Individual characteristics of individuals

B) Social Features:

C) Communication skills:

2. Organizational factor:

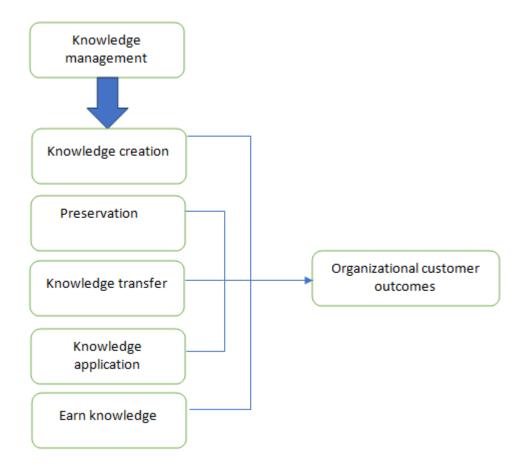
The organizational factor encompasses the structure and content of the organization and affects the connections of the organization. In fact, the organizational factor and its components and variables make organizational communication effective and has a positive effect on it. This factor is divided into two categories:

A. Organizational structure:

B. Organizational culture:

3. Goods and services

The factors that have a greater impact on customer satisfaction include quality, price, value added to the buyer, after-sales service, and the speed with which goods or services are delivered.



Graph 1: Conceptual model of research Sedra and gable, 2010

## III. Research Methodology

The method is to follow or determine the steps to be taken in order to achieve a goal. The research methodology is a set of valid, systematic rules, tools, and methods to investigate the facts, discover the unknowns and achieve them. Is a solution to problems? The research method used in this research is descriptive survey type and it is a cross-sectional time interval. The present research is a combination of library and field research (exploratory and field research method) (library collection tools and questionnaires). First, using the library resources (books, Persian and Latin papers), theoretical foundations of the research were developed and further According to research literature, the questionnaire was distributed. Finally, by collecting a questionnaire, data related to it were analyzed using statistical software and the relationship between variables was investigated.

## 3.1 Collecting data

The statistical population of this research is all organizational customers of guilan Regional Water Authority. Due to the limited number of companies in the survey, due to the definition of the customer type (corporate client), a census was conducted. In this research, data collection and data collection, Use of field and library methods.

#### 3.1.1 Validity and reliability of the questionnaire

To determine the credibility of the questionnaire there are several methods that one of these methods is content validity. Content validity is a kind of credit used to examine the components of a measuring instrument. The content validity of a measurement tool depends on its constituent questions. The content validity of a test is usually determined by people specializing in the subject matter. The content validity of the questionnaire is confirmed by a respected supervisor and expert and advisor to the researcher and is valid. There are several tools for measuring the reliability of a questionnaire, one of which is the "alpha-cronbach coefficient". This coefficient was developed by Cronbach and is one of the most common methods for measuring the reliability or reliability of questionnaires. Obviously, the closer the Cronbach Alpha index is to one, the more internal consistency between the more questions and the resulting questions will become more homogeneous. Cronbach has a low reliability coefficient of 45%, an average of 70%, a 95% high coefficient. Obviously, if the alpha value is low, it should be checked that by eliminating which questions it can be increased.

The Cronbach's alpha coefficient of the questionnaire is 0.970 and the reliability of the questionnaire is confirmed by this method.

## IV. Research findings

Table 2: Describing demographic variables

		Frequency	Percent	Valid
				Percent
Sex	Male	27	87.1	87.1
	Female	4	12.9	12.9
	Total	31	100.0	100.0
age	20-30 Year	1	3.2	3.2
	30-40 year	17	54.8	54.8
	40-50 year	12	38.7	38.7
	50-60 year	1	3.2	3.2

	Total	31	100.0	100.0
degree of education	Diploma	3	9.7	9.7
	license	14	45.2	45.2
	Masters	11	35.5	35.5
	P.H.D	3	9.7	9.7
	Total	31	100.0	100.0
work experience	Less than 5 years	3	9.7	9.7
	10-5 year	6	19.4	19.4
	10-15 year	10	32.3	32.3
	More than 15 years	12	38.7	38.7
	Total	31	100.0	100.0
Ownership	Private	14	45.2	46.7
	Governmental	16	51.6	53.3
	Total	30	96.8	100.0
Missing	System	1	3.2	
Total		31	100.0	
History of regional	Less than 5 years	7	22.6	28.0
cooperation	5-10 year	10	32.3	40.0
	10-15 year	4	12.9	16.0
	More than 15 years	4	12.9	16.0

	Total	25	80.6	100.0
Missing	System	6	19.4	
Total		31	100.0	
Annual consumption	54900.00	1	3.2	33.3
	100000.00	1	3.2	33.3
	118000000.00	1	3.2	33.3
	Total	3	9.7	100.0
Missing	System	28	90.3	
Total		31	100.0	

Of the 31 samples, 12.9% were female and 87.1% were male. It also has a mean age of 3.2% between 20 and 30 years, 54.8% between 30 and 40 years, 38.7% between 40 and 50 years, and 3.2% between 50 and 60 years. 9.7% were less than 5 years old, 19.4% were between 5 and 10 years old, 32.3% were between 10 and 15 years old, and 38.7% more than 15 years old. As regards the level of education, 9.7% had a diploma, 45.2% had undergraduate degrees, 35.5% had master degrees and 9.7% had doctoral degrees. Regarding the history of regional cooperation, 22.6% less than 5 years, 32.3% between 5-10 years, 12.9% between 10 and 15 years, 12.9% more than 15 years old, according to the number of respondents 35.5% have less than 50 Personnel; 6.5 percent; between 100 and 150 personnel; and 45.2 percent more than 150 personnel; among valid data, 45.2 percent were private and 51.6 percent state owned.

Describe the main variables of the questionnaire:

**Table 3:** Describe the main variables of the questionnaire

Variance	Standard deviation	Average	Maximum	At least	Number	
0.126	0.3365	2.3395	5	1	31	earn knowledge

0.0711	0.3133	2.4140	4	1	31	Preservation of knowledge
0.154	0.3774	2.4966	5	1	31	knowledge creation
0.1	0.3199	2.4462	4	1	31	knowledge transfer
0.149	0.3665	2.3266	4	1	31	Knowledge application
0.153	0.3295	2.3742	4	1	31	Organizational customer outcomes

A review of the normal distribution of the main variables:

Table 4. Results of the Kolmogorov-Smirnov test

Result	The significance level	The statistics	Variable
normal	0.111	2.339	earn knowledge
normal	0.149	2.414	Preservation of knowledge
normal	0.222	2.446	knowledge transfer
normal	0.247	2.497	knowledge creation
normal	0.151	2.323	Knowledge application
normal	0.125	2.374	Organizational customer outcomes

Each case that is both normal variables is Pearson correlation coefficient and so on (non-parametric test of Spearman correlation coefficient is used to study relationships whose at least one of its variables is abnormal distribution with a significant level less than 0.5). As you can see, all variables follow normal.

# 4.1. Test of research hypotheses

-Hypotheses

Knowledge gains influences organizational customer results

Storage of knowledge affects the results of organizational clients

Creation of knowledge affects organizational customer results

Knowledge sharing affects organizational customer results

Use of Knowledge affects the results of organizational customers

Using the appropriate statistical tests, including Pearson and Spearman correlation, the main purpose of the research was to test the research hypotheses and to achieve the objectives of the research based on the obtained data. It should be noted that the statistical society of this research is the organizational customers of Gilan Regional Water Company. The results of correlation tests show that all independent variables have a positive and significant relationship with the results of organizational clients in the organization. The severity of the correlation and the significance level are as follows:

Table5. The severity of the correlation and the significance level

Result	The significance level	Coefficient of correlation	Number	Variables
Confirm hypothesis	0.00	<b>%</b> 62.2	31	Earn knowledge and organizational customer results
Confirm hypothesis	0.05	<b>%</b> 49.6	31	Creating Knowledge and Results of Organizational Customers
Confirm hypothesis	0.01	<b>%</b> 45.6	31	Maintaining Knowledge and Results of Organizational Customers
Confirm hypothesis	0.03	<b>%</b> 51.8	31	Knowledge transfer and organizational customer results
Confirm hypothesis	0.03	<b>%</b> 51.5	31	Application of Knowledge and Results of Organizational Customers

## 4.2. Conclusion and Results of Investigation Assumptions

Hypothesis 1: Knowledge gains affects the organizational customer results

The value of the significant level (Sig) is less than 0.01. Therefore, with a confidence of 99%, it can be said that the research hypothesis is confirmed and this relationship is significant. Also, according to this table, the intensity of correlation between the two variables of knowledge acquisition and the results of organizational customers is 62.2%, which indicates the direct effect of this variable.

#### Hypothesis 2: Storage of knowledge affects the results of organizational clients

The value of the significant level (Sig) is less than 0.01. Therefore, with a confidence of 99%, it can be said that the research hypothesis is confirmed and this relationship is significant. Also, according to this table, the intensity of correlation between two variables of knowledge and results of organizational customers is 45.6%, which indicates the direct effect of this variable.

## Hypothesis 3: Knowledge sharing affects organizational customer results

The value of the significant level (Sig) is less than 0.01. Therefore, with a confidence of 99%, it can be said that the research hypothesis is confirmed and this relationship is significant. Also, according to this table, the correlation between two variables of knowledge transfer and organizational customer outcomes is 51.8%, which indicates the direct effect of this variable.

### Hypothesis 4: Creation of knowledge affects organizational customer results

The value of the significant level (Sig) is less than 0.01. Therefore, with a confidence of 99%, it can be said that the research hypothesis is confirmed and this relationship is significant. Also, according to this table, the intensity of correlation between knowledge creation and organizational customer outcomes is 49.6%, which indicates the direct effect of this variable.

## Hypothesis 5: Use of Knowledge affects the results of organizational customers

The value of the significant level (Sig) is less than 0.01. Therefore, with a confidence of 99%, it can be said that the research hypothesis is confirmed and this relationship is significant. Also, according to this table, the intensity of correlation between two variables is the use of knowledge and the results of organizational customers is 51.5%, which indicates the direct effect of this variable.

According to the results of the hypothesis test, it was revealed that among the components of knowledge management, knowledge acquisition component with a correlation coefficient of 62.2%; knowledge storage and maintenance component with a correlation coefficient of 45.6%; component of knowledge sharing and transfer with a correlation coefficient of 51.8; knowledge creation component The correlation coefficient of 49.6 and the component of knowledge utilization with correlation coefficient of 51.5 have a positive and significant effect on the results of organizational customers. Also, from the perspective of guilan regional water customers, all of the knowledge management components in this organization have a relatively favorable situation. The average value obtained for variables is: acquisition of knowledge equal to 2.339; knowledge storage and maintenance 2.414; knowledge sharing and transfer 2.446; creation of knowledge 2.496; knowledge utilization 2.322; and finally, the results of organizational clients equaled 2.374.

#### V. Research Limitations

- Due to the low awareness of organizations about the importance of their role in providing services, it was hard to get involved in answering the questionnaire.

➤ Each research has its own limitations and during the research there are problems that the researcher does not foresee and is not available to the researcher. These limitations can be a barrier to research, or even affect research findings. Therefore, all researchers are trying to minimize these constraints. However, there are a number of limitations in this research to be considered in other studies.

➤ Since the present study has been conducted specifically for a number of clients, the generalization of its results to other statistical societies should be made more cautiously.

All collected data is based on the respondent's own opinion as the representative of the organization, so helping out the person's memory or limiting the information of the respondent does not allow them to respond.

➤ In this research, the resources and research activities carried out were very little available

# VI. Suggestions for future research

➤ Considering the limitations of the questionnaire tool, it is recommended to use the interviewing tool to achieve more reliable results.

➤It is recommended to analyze and prioritize factors related to the implementation of the KM system based on mathematical models and research techniques in the operations, including multi-factor decisions and multi-objective decisions with rational or fuzzy approaches.

➤ It is suggested that this assessment be made for the wider range of clients to find out more about the research findings of the customer's domain, for example, from the surface water customers of the regional water company.

➤ It is suggested that this research be compared in structural terms and results in all provincial and national administrations, such as municipal water and wastewater, and municipalities.

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