Key Factors Affecting the Application of Information Technology in - Iran's Government Organizations Check

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ARTICLE INFO	ABSTRACT
	In this article, the results of the investigation of the key factors affecting the use of information technology in government organizations and the importance of these factors in various applications of this technology are presented. For this purpose, first information technology and then by presenting evidence of failure and failure in the application of this technology at the level of Iran and the world, the research problem is defined. In the following, the research method is explained and at the end, the findings of this research,which include 8 main key factors and 34 sub-indices , are presented

Introduction

The word information technology since the late 1970s. It was invented to refer to the use of computer technology to work with information [9]. The rapid and intense development of information technology, which started years ago and continues, has led to its widespread use in various aspects of society. [15, 16] Predictions show that this technology will grow rapidly and be used all-round. It will continue in various dimensions of human life in the coming years [18]. Today, the expansion of government activities, globalization and extensive technological changes in the environment of organizations have caused them to have the necessary flexibility in order to maintain their survival and competitive advantages.The flexibility of rapid changes is necessary, and rapid changes are not possible without having information, as a result of information which is considered as a very valuable resource along with other effective factors in any organization, especially the government organization. The existence of integrated information systems is one of the necessities of moving towards electronic business and competition and winning the war, and the use of information technology(IT) and information systems(IS) is an inevitable necessity for all organizations and companies [10]. Many organizations have become aware of the importance of information technology and its impact on the speed 'and accuracy of workflows, greater customer satisfaction or support systems, managers decision-making,and especially its efficiency, and this has made them quickly move towards its use. bring Every company or organization includes 3 main cores, i.e. decision-making process,information flow, and material flow, and information technology can affect all of the above-mentioned 3 cores. The use of information technology enables companies to gain important benefits such as the following:

_Saving money and improving information exchange

Avoiding human errors when tasks are repetitive or very complex

_Financial savings due to the reduction of errors and time to perform tasks

_Integration and coordination of several tasks in one task

_Improving organizational efficiency and effectiveness

problem statement

Due to the key role of information and communication technology in the country's development plan, it is necessary to pay attention to the digital divide and the continuous change in the global ranking, that the success factors of information technology are one of the basic requirements in defense organizations. Heidegger says that technology Writing is inevitable for humans The story of 5 Dutch hackers between April and May 1991 who hacked into the computers of 34 American military sites on the Internet, including sites that directly supported Operation

Shield/Desert Storm. Information related to the exact location of American forces - the type of their weapons, missile capability . The Patriots captured the movements of the American warships in the Persian Gulf region, after completing the work, they destroyed the signs of their activity to keep their activities secret. (Information and Security War - DA Denning)

Considering the importance of the application of information technology in different contexts and the increasing growth of government organizations, it was suggested that the efforts of the last decade in the field of information technology sub-structures in defense organizations should be removed if the organizations do not move in this direction in today's world in war ,will not win the wars of the third millennium, which include electronic war, network war virtual war, hacker war, cyber war, information war, security war, and command, control and communication) (C4I etc.. It is directly related to information technology. It is necessary for all commanders and senior and middle managers and lower levels to have comprehensive information about the applications of information technology in the field of organizational mission. This is an organizational requirement that is designed and implemented in order to deal with the new wars that are being designed and implemented by different countries, so it is necessary for all defense officials to change their view of the applications of information technology in the field of war and to identify the weaknesses and strengths and key components of the points Weaknesses are removed and strengths are strengthened so that they can easily and confidently face La in the event of a possible war

Subject literature

The effect of using information technology in the organization

In today's world, information technology has made possible the usefulness and efficiency of information. The use of information technology (information technology) has caused a wide transformation in administrative affairs and information systems, so that the possibility of electronic transmission of data, documents, documents and correspondence   through computers and telecommunications lines has been provided. Studies and researches show that there is a positive two-way relationship between investment in information technology and the efficiency of institutions and the productivity of human resources. Also, information technology increases the ability of organizations, and this is the result of increasing the variety of products and improving quality, customer satisfaction and winning the war . And also the reason Facilitating the administrative process and increasing the efficiency of human resources and management. One of the major results of information technology is decentralization at the same time as centralization. This means that a government operation can be carried out remotely without the need to have a continuous physical presence at the location, which emphasizes the shortening of time and space distances as a super highway.

 has taken over other management information systems such asCIS ,MIS ,DSS AI ,EIS , OA etc. Perform a concentrated operation. Therefore, it provides the possibility of , increasing the speed and quality of decision-making and management. Information technology is one of the most important tools to participate in the global market [15].

One of the basic features of today's era is information and its transformation into knowledge.Such a feature will have a great impact on the social, economic and

governmental institutions of the societies. Social institutions should be rebuilt and restructured based on it. It is said that information technology increases the ability of the organization, however, such developments often do not improve the financial performance of organizations. Special strategic plans and mechanisms are needed to achieve these basic .goals in the use of information technology (information technology) in the organization Dr. Romar, a professor at Berkeley University, states in his theory "New Economic Growth" that in today's era, the factors of economic growth are not capital,manpower and raw materials, but new knowledge and ideas cause economic prosperity, and the capital of countries is a function of science and ideas

The axes of using information technology in companies and offices

The three axes that are of interest in the use of information technology in organizations include: people, infrastructure and applications. Education, skill enhancement and cultural building is the primary basic axis that is considered as a people. Network, technical equipment, regulations and laws based on infrastructure, and finally, electronic education paperless system, remote conference, electronic government, electronic commerce, etc.are among the axes of information technology application

Implementation of information technology in organizations and departments

As mentioned, information technology (information technology) is considered as the axis and driving force for the development of societies and organizations. Studies in this field show that information technology (information technology) should be discussed in two areas of research and implementation in organizations. The research department is ,responsible for environmental simulation, virtual experience and low-cost assumptions along with planning, decision-making models and creation of creativity in employees. In the discussion of the implementation of information technology (information technology) in the organization, there are two basic and necessary points of view that the organization's management and information technology managers should pay attention to: the technical and engineering point of view - the managerial point of view

From a technical and engineering point of view, examining issues such as software (computer programs for receiving, processing and producing information) - hardware (hardware for processing, storing and retrieving information) - manpower training (training of the involved forces and consumers of technology products) - Information and ,raw data (data is the primary material of information technology, which must be reliable accurate and new.) - Communication systems (establishing communication between computers) -five factors There are those that should be taken into consideration [13] . In this section, the prioritization of the above components in terms of execution time and selection of items are the most important elements of use in the structure of information technology.

In the managerial point of view, the design and implementation of information systems such asMIS, DSS, OA, EIS, DBMS, etc. are mentioned, which have been implemented and implemented in various organizations today

Information technology system infrastructure

Information technology infrastructure can include very wide concepts. However, in this article, meaning and concept:

➢ The domain of hardware and software that are used in the use of information technology (information technology) in the organization.

➢ Accessible network security to protect the surrounding environment

➢ Improvement and recovery of future obstacles and risks

➢ Creating a fast and reliable communication and telecommunication network between different levels of the organization

➢ Anticipating future needs and expanding systems and improving communication speed

➢ Reliable and fast connection with the global Internet network to establish communication between clients, managers and employees with the organization

➢ Information technology infrastructure includes hardware and development environment, information banks, common information banks, common applications and skills and expertise of human resources [12].

Implementation and use of information technology(Information Technology)

The use and implementation of information technology (information technology) in organizations is not a general prescription and it is not possible to implement the information technology structure with a comprehensive information technology program for all organizations and companies. performed The most important factors that should be considered in the implementation of information technology (information technology) in any organization are:

1_ Cultivation : Cultivation is necessary in every organization for the successfu

2_ Belief and belief of the senior managers of the organization : The more the senior managers of the organization pay attention to information technology as an inseparable .category of their organization, the faster and more successful its use will be Information technology is more penetrating if it is in the throat of the manager of the organization like a surgical blade. In this way, managers' belief and confidence in the future is the most effective factor in the success of using information technology.

3_ Information **Pestology** : problems and obstacles of application and implementation technology in the organization should be carefully and scientifically reviewed and planned.

4_ Moving towards the process structure : The structure of organizations related to information technology should be moved from the task structure to the process structure.

5_ Involvement of all the people of the organization in information technology matters : all the members of the organization from the senior manager to the operational level employees should be recognized as information technology experts

6- **Improvement of productivity indicators** : productivity measurement indicators in the organization should grow towards improvement and information should be used to transform into knowledge.

7- ,**Downsizing** : Removing non-core activities from the organization's environment which is called downsizing, is considered a national necessity.

● **Comprehensive information technology development program Information**

In order to realize the benefits of information technology, organizations must embed information technology in their organizational structure, culture and strategy, and clearly define the position of the information technology department in the organization. Since information technology affects all the activities of the organization. Generally, in advanced organizations, the tasks of information technology (information technology) are expanded in all departments and units of the organization under the management and supervision of the highest authority. However, in some domestic companies and organizations, due to the unknown nature of information technology issues, its widespread use within the organization creates resistance and acute problems that may Achieving the goals of information technology implementation cause the company to will face problems. In this case, the structure of information technology is defined and defined in an independent but effective manner in order to coordinate and implement information technology (information technology) and expand it within the company.

With the expansion of the use of information technology, the structure of organizations and large companies have changed from a vertical and hierarchical state to specialized cores and expertise. Therefore, the implementation of information technology in organizations should be done in such a way that it is compatible with the national and organizational culture.

▪ The issues that must **be examined and specified in the ITMASTER PLAN are :**
1_ Strategic planning of organizations

The strategic planning process of companies and organizations includes determining the philosophy, vision and mission of the organization, examining internal factors (strengths and weaknesses) and evaluating external factors (environmental opportunities and threats) (SWOT and compilation and selection It is strategy. Determining key points is of particular importance in strategy planning, organizations that do not have clear and codified strategic planning, the implementation and use of information technology is unreal and its discussion is pointless.

Strategic planning for the development of information technology is based on four basic principles

➢ Information technology is a vital thing.
➢ Information technology is a basic source for education, research and social cooperation.
➢ Technology is very basic and important for managing data and information
➢ Information technology shows the strategy of evaluating the performance of organizations
.
✓ Specific goals and strategies are defined for each of the above four principles. And in the next step, performance development is required to evaluate the functionality and allocate the

resources needed to achieve the goals. The strategic plan for the implementation of information technology (information technology) in organizations is part of the framework. The following figure shows the general framework for IT strategy, architecture and standards. Information technology standards support and provide more details for information technology architecture. Information technology architecture (information technology) supports the basic guidelines, goals and strategies determined in the strategic plan. And it supports the strategic plan, goals and objectives. The themes of the organization's vision for information technology depict the mission and mission of the entire organization. Every strategic plan for the implementation and use of information technology should include the following [11]

✓ The organization's mission and vision statements should be designed based on information technology.

✓ The basic guidelines for the use of information technology in the organization should be fully specified and defined, and the practical goals and strategies for each of these cases should be determined and compatible with all projects related to information technology.

✓ Basic success factors, keys to use, backgrounds and purposes of access, technologies used by other organizations are studied be placed

✓ The internal evaluation of the use of information technology should include examining the strengths and weaknesses as well as the opportunities and threats of the organization in relation to information technology in the organization

2_Understanding the current situation from the point of view of information technology
In reviewing the current situation of the organization, the following issues and matters should be taken into consideration:

❖ The organizational position of the company and its impact on the activities of the information technology sector
❖ Existing hardware equipment and related technologies in operation
❖ Software technologies used in existing computer systems
❖ Existing computer systems
❖ Manual and computer communication between systems
❖ The strengths and weaknesses of the company from the point of view of information technology

3_Determining and examining future needs

• The information technology system needed by the organization to reach from the current situation to the desired situation
• Communication between systems based on information technology in favorable conditions
• Opportunities and threats resulting from the development of information technology
• Defining and predicting additional projects according to the organization'sSWOT

4_Designing possible options and alternatives

✦ Prioritizing projects based on the organization's strategy

Obstacles to the use of information technology in offices and organizations

The technology limits of a nation are proportional to the average ability and knowledge of that nation. And this issue should not be forgotten that the goal in the development of technology is to improve the standard of living and education of the people of the society and to expand the strong and wide domestic market, and whatever we ignore, these consumers and adaptation to the existing environment of the country will be the real justification for the new technology. The lack of knowledge of managers in the field of information technology hinders the acceptance of this technology in organizations.

However, the main obstacles in the development of information technology in any organization can be stated as follows:

1_ Senior managers : Most senior managers do not understand the role of information technology sufficiently. These people do not initiate the integration approach and resist the proposed integration due to the fear of the subsequent inability to understand the process or control it. If they are literate about information technology, they may have a new mindset.However, their perspective of the organization or company is not in accordance with the information age.

2_ IT department employees : These people do not understand the information needs of managers and are only interested in technology. Information technology specialists are not ready to support or participate in information-based corrective approaches

3_ Other operational employees : the majority of employees have little strategic understanding of information, but they can be divided into two groups [14]

- A group that is not computer literate and feels threatened by information technology and related culture. This group of employees resists any kind of information age reforms due to their fear
- Those who are computer literate want to pursue their agenda regardless of thurgent need to coordinate IT activities. These people are not at all willing to elevate their efforts in the form of a more comprehensive reform program and thus undermine any kind of organizational effort with an integration approach to information age reforms.

4_ Lack of financial facilities and lack of prioritization in capital allocation : the use of information technology requires investment and allocation of necessary funds from the profits of companies and organizations. The need for major investment in the field of information technology is among the issues that prevent the spread of new information . and communication technologies in organizations

5_ Lack of cooperation between research and development units.

6_ Inadequate education and infrastructure

● Recommendations for implementing information technology in organizations

According to the investigations carried out on the works and the way information technologies are used in organizations, it is necessary to adopt the following policies in

order to implement this system:- In replacing traditional methods with new methods based on information technology, priority is given to systems that have a greater impact employees and role in improving service delivery to.

- ✓ - In replacing traditional methods with new methods based on information technology, modification and improvement of manual methods and systems has priority over mechanization of operations
- ✓ Modification and improvement of the methods and systems used must be specified and followed in the form of a plan in the organization.
- ✓ Movements should be towards small, flexible, efficient and management focused organizations using information technology and its capabilities
- ✓ Application and development of applied mechanization and management information systems(MIS) along with planning and control and moving towards paperless offices and organizations will be among the priorities of using information technology.
- ✓ Training and increasing the ability of human resources to design, implement and develop application systems based on information technology is one of the main policies that every organization should put at the top of its program

Research background

to this group, the presence of such factors causes success and their absence causes the failure of the use of information technology. These factors are From

1. The support and support of the senior management of the organization: The support and support of the senior management of the organization for the use of information technology is one of the factors whose presence is for the success and lack of it for the failure of the use of technology in any organization has always been emphasized [30] which in the government organizations of Iran that The amount of authority of senior managers and commanders of the government is very high, according to experts, it is of great importance
2. Suitability and congruence of the use of information technology with the needs of the organization:
   This means that such applications should be defined as a part of wider changes in the organization and not as independent applications. Such a perspective makes the application of information technology fit and match the real needs of the organization, and the existence of such factors affects the success of technology in organizations. State, non-state, and state have always been emphasized [20]
3. Allocation of resources: Although this factor has not been mentioned in previous studies in the public sector, it was the success factor in government organizations, and its absence has caused the project to fail [32]
4. User training: In all public and private sectors, it has been mentioned as a key factor in past research[20]
5. Organizational level and position: The job position of the person responsible for the application of information technology in government organizations is very important, and this factor is not very important in government organizations according to the surveys conducted in this field

6   Ability to manage change in the government organization: Since information technology is known as an agent for change, its successful application also depends on the ability to [.manage change in the organization

7   The stability of the senior management of the organization: This code is based on the fact that the managers of government organizations with many powers can have a key impact on the application of information technology . Despite this, the life of managers in management positions is not so long to cover the life cycle of an information technology application project from the beginning to the end, for this reason, with the change of senior management of organizations, the continuation of projects is half-finished or risky [25]

8   The stability of the implementation team of information technology application in the organization: this factor includes the turnover of project team members, the loss of project team members and the loss of project managers, which, according to evidence, occurs more in government organizations

9   Planning for the application of information technology in the organization: the comprehensive program of information technology refers to a program for this technology that supports the goals, missions, and government strategies of the organization. This planning is based on the role of information technology as a tool. Strategic is of great importance for obtaining competitive advantages of the government. After all, the rate of technical changes in this field is so high that it creates the ability to quickly respond to them in this way [33]

10   The awareness and correct understanding of the organization's senior management of the applications of information technology: this factor has been proposed as an effective component in all public, private and public sectors [21]

Success factors

According to experts, the presence of such factors is a cause of success, while their absence does not cause the failure of the use of this technology, **or its effect on the failure is not key.**

1_ The direct involvement of the organization's senior management in the use of information technology: The expert members have presented the direct involvement of the organization's senior management in the use of information technology as one of its success factors. The direct involvement of the senior management in the opinion of the group members includes direct communication between the management and the implementers of the application. information technology in the organization and participation in the process of using this technology from the stage of needs assessment to implementation

2_ The existence of a person responsible for the use of information technology in the organization : the existence of a person responsible for the use of information technology in the organization who follows each project or all projects in the organization from the beginning to the end and ensures the achievement of the project goals. It is one of the factors that the members of the group consider to be the key to the success of using this technology

3_ The priority of using information technology in the organization : The priority of using information technology in the organization in comparison with other needs of the organization is .one of the factors that the members of the group have put forward for the success of this technology to be assigned, this priority must be real from the members' point of view

4_ Dividing large information technology application projects into stages for which each stage can be delivered and deployed separately: group members as one of the key success factors by dividing large information technology application projects into stages that can be delivered and deployed separately They have agreed that there is any stage for it, on this basis, such projects should be modular, in other words, they should be done in a growth-oriented manner

5_ Existence of an incentive system to support the use of information technology : One of the measures provided by the members to stabilize the use of information technology is the existence of an incentive system to support the use of information technology, since this technology is known as a factor for change. Change models guarantee success. Its application is used. [34]

6_ Existence of qualified consultants for the organization in the field of information technology : In recent decades, provision of resources from outside the organization in the field of information technology has grown a lot and it is expected that this growth will continue. Providing resources from outside the organization in the field of information technology that requires work is done with external suppliers.[35]

7_ Observability of the results of the use of information technology at the organization level Observability is one of the dimensions of the (diffusion of innovations) model that Rogers: presented . According to this model, the mentioned factor refers to the level of observability of the results of an innovation for others. The results of some ideas are easily visible to others and can be expressed for them, while other results can be shown to others with difficulty. The basis of this model is that the perception of the members of a social system about the observability of a technology has a positive effect on its diffusion rate [36]

8_ The presence of a positive attitude in the organization towards the use of information technology : The presence of a positive attitude in the organization towards the use of information technology is one of the factors that is considered important and key according to the members of the group. It is about the merits of using this technology and the feeling of agreeing with it. The effect of this attitude on the intention to use this technology has been proven in several projects [37]

9_ Learning from the experiences of successful organizations in the use of information technology : Government organizations are organizations that have a cooperative and cooperative structure. This cooperation is a process in which organizations pursue their goals and maintain their independence. They direct their activities towards a specific topic and result. One of these issues is the creation of knowledge, which takes place in a fluid and evolving context, therefore, the formal organization in a traditional way with its dryness and flexibility is considered an inappropriate tool for learning, from this past in complex and developed fields and somewhere that expertise is widely distributed, innovation can be found more in a network of learning organizations than in individual organizations, therefore, one of the factors that make organizations cooperate is learning that the members are also in the fields of information technology are considered to be one of the areas where organizations can achieve success by learning from each other and using experiences.[38]

10_ Suitability of the use of information technology with the goals of the organization
Suitability of the use of information technology with the goals of the organization is one of the key factors.[39]

11_ : Suitability of information technology application with organization strategies
Suitability of information technology application with organization strategies is one of the key factors.[25]

12_ Control of information technology application projects during their development and deployment : in a scientific and technical approach to the control of information technology application projects and the use of project control software in this field to control these projects during their development and deployment, including The factors that the members of the group have identified in the successful use of this key technology are project control, which can guarantee the achievement of project completion goals, the allocation of resources, recognition and reporting of problems.[31]

13_ Ability to use information technology for users : testability is one of the dimensions of the innovation diffusion model that Rogers has presented. Based on this model, this model refers to the degree of testability and the ability to use and experience an innovation. An innovation and finding out how it works in specific conditions related to each person actually gives them meaning. Based on the Rogers model, the perception of the members of a social system about the testability and the ability to use a technology and the extent of its diffusion has a positive effect. This factor has already been proven in the use of information technology in the government sector.[36]

14_ Existence of appropriate laws and regulations : appropriate laws and regulations for the use of information technology are among the factors that the members of the group have determined as the key success factors. The appropriate laws and regulations are those that do not create restrictions for the use of this technology and are financially And the deals are suitable with the nature of the related projects

Failure factors

The members of the group have identified 3 factors as having a negative effect on the use of information technology in Iran's government organizations. According to these members, the presence of such factors causes the failure of the use of information technology, while their absence does not cause the success of this technology and with its effect. There is no key to success and they are

1_ Use of incompetent managers for information technology application projects : Information technology application projects without qualified managers face the possibility of failure. Group members also consider the use of incompetent managers for information technology application projects as a key factor for their failure. have raised, in their opinion, if the managers of information technology application projects lack project control abilities, coordinate with the general managers of the organization and get the support of senior managers, these projects will face the possibility of failure

2_ Uncertainty of the organization's processes : Information technology applications include the ,automation of awareness and transformation in a hierarchical form that are done with automation the automation of the organization's processes, whether with the aim of automating the existing ,processes or with the aim of Their re-engineering, from the point of view of the group members the lack of clear working processes of the organization causes failure in the application of information technology.[40]

3_ Absence of a suitable mechanism for implementing information technology plans
Information technology plans as a type of innovation are subject to failure, therefore the members
of the group felt the lack of a suitable mechanism for implementing these plans in the organization.
Among the factors of the failure of the use of information technology in Iran's government
organizations, this mechanism includes a clear process for following information technology plans
and how to make a decision about the use or stopping of information technology plans.[41]

shows the key factors affecting the use of information technology in Iran's government
organizations in 8 categories: human factors, structural factors, environmental factors, the role of
senior management, planning capacity, and the capacity to change and implement theTAM model.

Summary of the research done in the field of factors affecting the career of information
technology

Source	Main findings	territory	Tool method	Approach	The subject of research
18	Important factors of success and failure	All types of departments in England	interview	Qualitative	Non-technical factors in the application of information technology
23	The validity of the technology acceptance model in the western world	All kinds of organizations in the western world	Survey/Questionnaire	a little	The application of the technology acceptance model in the field of information technology in the western world
19	The effect of geographical territory on the effective factors of 7 types of factors	Developing / countries health sector	Theoretical/research case/ meta-analysis	a little	Success and failure factors of information systems
24	Key failure factors	Canadian public and private organizations	Survey/Questionnaire	a little	Failure factors of information technology projects
17	Areas of influence of success factors	British government agencies	study	a little	Success factors of large information technology projects
25	The importance of meaning in success	Swedish social service organization	Research/explanatory/interview/archival case	Qualitative	The role of ambiguity in the application of information technology
22	The main obstacles	Nigerian organizations	Survey/Questionnaire	a little	Barriers to the use of

					information technology
26	Success factors and barriers	Types of organizations in England	Survey/Questionnaire	a little	Success factors of information systems
27	Organizational factors are more important than technical factors Classification of agents	Types of organizations in England	Survey/Questionnaire	a little	The effect of organizational factors on the success of information systems
28	The role of senior 'managers understanding of information technology in success	Types of organizations in Australia	Survey/Questionnaire	a little	The role in the lack of application of information technology
29	The effect of five characteristics of innovation 'Rogers) (model	All kinds of organizations in Aristan	Survey/Questionnaire	a little	Factors affecting the acceptance of information technology
16	factors 75 with positive impact and factors 16 with negative impact	Management information systems in Iranian organizations	Survey/Questionnaire	a little	Human factors of establishing management information systems

Initial suggested factors for the effective use of information technology inIran'sgovernment organizations

Based on the studies conducted in different models , the initial form of effective factors for the use of information technology in government organizations is proposed according to the table below

Structural factors	human factors
Stability of senior management -1 Organizational position of information -2 technology The stability of the executive team -3 Existence of the responsible person -4 Business processes not being clear -5	Awareness of the senior management of -1 the organization Having a positive attitude -2 Observability -3 change management -4 Social norms -5
The role of senior management	**Environmental factors**
Support -1 Direct conflict -2	Inter-organizational learning -1 Appropriate laws and regulations -2 Qualified consultants -3
Capacity to change	**Planning capacity**
Ability to manage change -1 User training -2	Comprehensive information technology-1 program

Project control -3 Support motivational system -4 Unitization of projects -5 Poor quality project managers -6 Absence of a mechanism for applying -7 plans	Allocation of financial resources -2 Suitability to needs -3 Compatibility with the goals-4 Compatibility with strategies-5 Priority-6
Greetings from the technical team	**modelTAM**
Information technology infrastructure -1 Atla Ata's literacy -2	Ease of using technology -1 The usefulness of technology -2

4_Research method

factor analysis

The method of factor analysis of the main components proposed by Kaiser is based on the calculation of the correlation matrix of the variables. Then, this matrix is converted into a matrix of factors through calculations. The factor loadings of each variable on the factors ,should be interpreted to introduce the main structure of the variables. Usually, in research we face a large amount of variables for various reasons. In order to analyze the data more ,accurately and reach more scientific and at the same time more operational results researchers seek to reduce the volume of variables and form a new structure for them, and for this purpose they use the factor analysis method. Factor analysis tries to identify the basic variables or factors in order to explain the pattern of correlation between the observed variables. Factor analysis plays a very important role in identifying latent (hidden) or the same factors through observed variables [1][1] variables

The validity of the questionnaire

In this research, the main focus was on the questionnaire, therefore Cronbach's alpha method was used to determine the reliability of the questionnaire. Questionnaire reliability means obtaining the same results from the questionnaire in different conditions. Reliability is calculated by Cronbach's alpha. The larger alpha value is 7/. It shows high reliability [3],[1]

,Reliability was calculated after removing the indicators that had a lower absolute load and for all components, its value was between 752 /. to 963. Therefore , the final indicators have good reliability

Gathering information through questionnaires

A questionnaire is a set of written questions, often based on specific options, on which the respondent enters his answers Questionnaire is an efficient tool for collecting information . [1]

In this research, according to the existing models and studies, the effective factors on the use of information technology in government organizations were extracted and a questionnaire was prepared and sent to the government experts in order to answer, a 5-

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Latent [1]

point Likert scale (from completely agree to completely disagree). It is considered that the respondents and the status of each index are determined according to that

The validity of the questionnaire

Without knowing the validity of the measurement tool, one cannot be sure of the accuracy of the information obtained from it. To increase the validity of the questionnaire, usually before distribution, the designed questionnaire is presented to several experts and the experts comment on it [1]

In this research, a discussion was held regarding the questionnaire with several professors related to the research method course and experts and the questionnaire was sent to them and its validity was confirmed

Society and statistical sample

The statistical population is a quantity of desirable elements that have at least one characteristic. According to the definition, statistical samples are a limited number of community statistics that express the main characteristics of the community [1], [6]

The required information regarding the factors affecting the use of information technology in government organizations, which can be obtained through asking the opinions of experts and technical experts, was collected through a questionnaire. For this purpose, a sample of about 180 was considered. Experts and experts are technical people and university professors and information technology managers in government organizations

Out of 180 distributed questionnaires, 139 questionnaires were returned, 4 of them were distorted and 6 of them were incorrectly completed. Therefore, in this research, 129 questionnaires were examined and analyzed

Indicators test-4-6

In order to extract the principal components PCA with varimax rotation andEigenvalue values higher than 1 were considered and the following items were calculated for each of the axes

KMO and Bartlett's test[2] index

It is an indicator of sampling adequacy that examines the smallness of partial correlation between variables and in this way determines whether the variance of the research variables is under the influence of the common variance of some hidden and fundamental factors or not. . This index is in the range of zero to one. If the value of the index is close to one, the desired data are suitable for factor analysis, and otherwise (usually less than 6.) the results of factor analysis are not suitable for the desired data [2], [1] , [6]

In this researchthe KMO index as an example for the capacity of has been calculated And the rest of the factors are calculated . / 753 according to table 1 below, which is writing which indicates the adequacy of in Table 4, all of which are from the number 6. is more

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Kaise-Meyer-Olkin Measure of Sampling Adequacy [2]

sampling.And all the mentioned components of Bartlett's test are smaller than0.5 which .
shows that the matrix is not unitary and factor analysis can be used to identify the structure

- **Table 1**KMO index top management awareness and change management indicators for

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.813
Bartlett's Test of Sphericity	Approx. Chi-Square	369.813
	df	78
	Sig.	.000

- **Checking the reliability of indicators**

The value of Cronbach's alpha for the final indicators is927 .which indicates the reliability of the coating

Reliability Statistics

Cronbach's Alpha	N of Items
.927	129

Table 2: Checking the reliability of indicators of senior managers' awareness and change management

- **Scree plot diagram**

    This chart is used to extract the number of principal components. Here, the values for Eigenvalue greater than 1 are considered in the calculations. Ifthe Eigenvalue equal to 1 is drawn on the vertical axis parallel to the horizon, the number of components placed above the line indicates the number of extracted components [2]

    In this research, the indicators of senior managers' support and employee change management were proposed for the human resource factor, and after analysis, according to Figure 7 and the scree plot diagram, anew indicator called employee attitude was added to these indicators
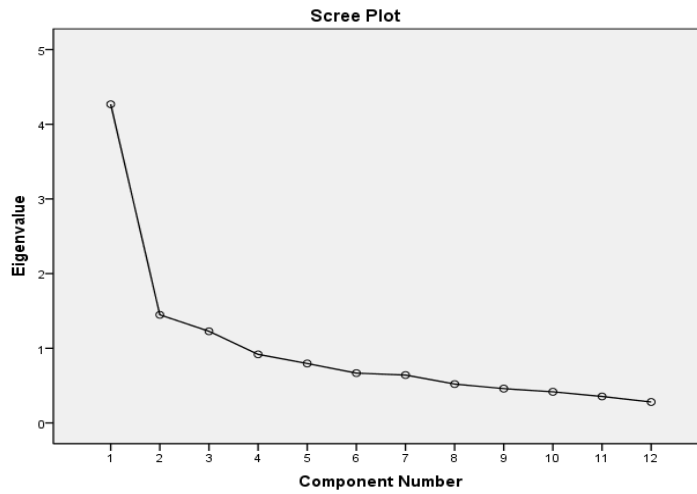
-Figure 7scree plot for indicators of awareness of senior managers and change management

- **Rotational component matrix**

    In order to check which of the indicators have a high absolute load on the extracted components, the rotational component matrix is calculated [2], [1]

    - In order to strengthen the results, the minimum value of 6. Is considered. According to Table No. 3, it can be seen that each of the proposed axes and indexes have a suitable absolute load after5 rotations, so variables with an absolute factor load value greater than 6. In 3 categories, the main indicators are in the form of subsystems Obviously), AF1 MT7 factors, AF5 .(are deleted

        Table 3- Rotating component matrix for indicators of senior managers' awareness and change management

Rotated Component Matrix [a]

	Component		
	1	2	3
MT1	.713	.203	.112
MT2	.740	.003	.096
MT3	.720	-.006	.088
MT4	.761	.045	.268
MT5	.701	.421	.073
MT6	.428	.603	.089
MT7	-.124	-.707	-.073
AF1	.175	.267	.304
AF2	.369	.302	.655
AF3	-.094	-.157	.802
AF4	.384	.292	.678
AF5	.139	-.809	-.071

a. Rotation converged in 5 iterations.

research findings

the use of information technology in Iran's government **Table 4-** Summary of the results of the analysis of factors affecting organizations

Indicator KMO	The number of rotations of the matrix	The minimum and maximum value of the index is maintained	'Cronbachs alpha for final indicators	Number of component) sSCREE PLOT chart (	Number of indexes removed	The number of sub-axes	Agents
. 674 . 813	3 8	895. 668-. .627-.891	792. 877.	2 4	0 1	5	Human Factors
. 754	3	892. .616-	771.	2	3	2	Structural factors
. 71	5	. 675- 904	821.	4	3	3	
. 8	3	.629-.898	.828	2	0	2	Environmental factors
796.	6	.611-.901	.820	3	3	3	
. 755	3	.706-.912	.855	2	1	2	The role of senior management

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. 811	3	.860-.922	.858	2	0	3	**Planning capacity**
848.	0	.601-.854	.889	1	0	3	
. 825	3	.825-.911	.827	5	1	7	**Capacity to change**
. 85	5	.865-.884	.912	2	0	2	**Tam model**
. 785	2	.830-.924	.854	2	0	2	**Technical qualification**

5_summary and Conclusion

In order for information technology to be used strategically at the organizational level,careful planning is needed. This planning includes a deep study of the organization's culture, the organization's ability, making changes, the organization's external environment, the level of management support, the organization's information needs and ways Fulfilling them.Also,the existing skills in the organization in the field of information technology should be checked to ensure that there is a suitable and sufficient manpower to maintain the systems both in terms of hardware and software. The lack of knowledge of managers in the field of information technology hinders the adoption of this technology in organizations.As a result, before information technology can be effectively used at the organization level,managers must be trained in various fields of this technology. But unfortunately,managers are so involved in other technical aspects and a lot of work that it is not possible to pay attention to other dimensions of organization management.

The strategy of using information technology(su information technology, strategic-uses of information technology) helps information technology managers to take advantage of the opportunities available during the implementation of information technology. In order to avoid repeated and parallel expenses and delays in project implementation The big issues of information technology development in organizations should first be formulated and approved by mentioning the details, timing, means of achievement and existing ways. The programs should change from manager-oriented strategies to new technology-oriented programs. In the regulation of technology-related activities The information should define ,and specify the current situation, direction of movement, coordination of efforts investment framework, budget allocation, belief and confidence of managers and activities that should be carried out during a future period

Suggestions for future research

The perspective of the research is general and general, and a specific and case-by-case analysis for government organizations such as the Basij, the Revolutionary Guards, the police force, the army (other bodies) due to their cultural differences, was not presented on a case-by-case basis or an integrated plan between them, so to complete the work In this regard, the following suggestions have been made

- Information technology implementation solutions in the armed forces

- Providing a native model for the implementation of information technology in the armed forces
- .Providing a comprehensive utility system for the country by all forces

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