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# An investigation on Effective Factors of Acceptance of Cloud Computing in Iranian Public Services

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## Abstract

Cloud computing, as a kind of computational model, is based on the network environment and sharing of resources, including hardware or software. Government institutions around the world have been using cloud computing in recent decades, and more organizations are increasingly being drawn to cloud infrastructure and technology. The purpose of this study is to investigate the factors affecting the adoption of cloud computing in public service sector and acceptance of cloud computing ecosystems in Iranian government institutions. In this research, a questionnaire instrument was used for purpose of data collection. The statistical population of this study is 60 managers and experts of Information Technology sector of governmental organizations, including Banks, Credit Institutions, Municipalities, etc. (In three metropolises of Tehran, Isfahan, and Shiraz). The Data were analyzed using SPSS 24 software and logistic regression analysis. The result showed that human, organizational and technological factors are effective in adoption of cloud computing in Iranian public sector. Based on this finding, a conceptual model is proposed with research hypotheses for future empirical testing.

**Key Words:** Cloud Computing, Human Factors, Organizational Factors, Environmental Factors, Technological Factors, Public Services

## Introduction

Due to growing demands and join a new customers into the world of computing, computing systems need to change and be more powerful and flexible than before. Cloud computing runs beyond a system and is able to meet most requests and requirements, flexible cloud computing infrastructure, and virtualization technology provides new possibilities for business support. Virtualization is a technology that all providers use in cloud computing, and provides capabilities for resources through network infrastructure. Therefore, despite having only one system on a physical server, several systems with various operating systems (OS) can be run with this hardware. This is a particular advantage of using cloud computing, which allows hardware and software sharing to reduce costs, and customers pay only for what they use, and they do not have to use all other resources, such as hard disks , Memory, cooling system, etc (Tarmidia, 2014). According to research firm Gartner, is expected to invest in cloud computing by 2014 to 150 billion dollars by 2015 to \$ 220 billion range (Avram, 2014). Recently, government agencies have begun to architecture, platforms and cloud computing to deliver services and meet the needs of subset (Paquette, 2010). Cloud computing can change the way organizations access and use IT products and services. Organizations instead of owning and managing ICT products or services, or using a traditional outsourcing approach where hardware, software, and support services are tailor made for the organization, by employing cloud computing services, they can provide their clouding needs using a flexible, demand-driven, and scalable model by the cloud services provider .The feasibility of accepting cloud computing and its use in government and service sectors can be addressed through the following questions:

- ✓ How can effectively use cloud computing to support the provision of electronic services in the public sector benefit?
- ✓ What are the key factors that affect the acceptance of cloud computing for public and public sector?

## Review of literature

According to Charles de Gaulle how to run the country that has 246 kinds of cheese in it? In 2001, there were only 60 million transistors for every human, and in 2010, there were 1 million transistors for every human. A thousand billion mobile camera was sold in 2007 to the amount of 450 million more than in 2006. In 2011, two million people met the Internet and the Internet, and in 2014, one billion objects, such as cars, cameras, highways and ... were connected to the Internet. So the world around us is instantly getting smart. With the advancement of information technology, computing needs to be done everywhere and all the time. It also requires people to be able to do their heavy computing work without having expensive hardware and software. Cloud computing is the latest response to these needs technology (Mell, 2014).

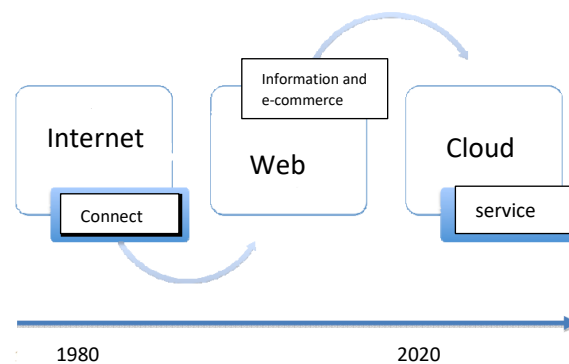


Figure (1): From the Internet to Cloud Computing (Wood, 2010)

The great motto of information technology is now cloud computing. Why all data and programs are on a computer when they can be stored on the cloud, so you can accessed them from any computer (Mathew, 2012). To date, there is little scientific effort and effort to accurately define the phenomenon of cloud computing, and various definitions of cloud computing have been proposed. The exact definition of cloud computing varies from one perspective to another (Geelan, 2008). Joseph and his colleagues were the first to try to provide a comprehensive understanding of

cloud computing and its related components. They consider cloud computing to be a collection of many new and old concepts in a variety of research areas such as service oriented architectures, networked and distributed computing, and virtualization. Cloud computing can be defined as a new computing paradigm that allows users to temporarily use the computing infrastructure over a network. Cloud computing is provided by cloud provider as serving on one or more abstract levels (Yusof, 2008). Cloud computing has not only changed the context of distributed systems, but has also essentially changed the way businesses operate in state and business organizations. Cloud computing has many benefits to information technology companies, including freeing them from high cost of investing in software and hardware, and they can focus on innovation and creation Job values, So with the advent of cloud computing, many organizations are outsourcing their computational needs to the cloud (Beloglazov, 2011; Younge, 2010; Buyya, 2010).

Organizations are searching for ways to increase revenue growth, reduce costs, increase asset productivity, create barriers to entry, etc., and all of these increasingly dependent on information technology. These technologies play an increasingly important role in business success or failure. As the complexity and importance of having a functional IT system increase, pressure on executives to address technical issues that are involved in many surface-to-ground communications with nuclear activities has increased. Due to the fact that intra-network work has changed the shape of market, in which spatial and temporal geography has lost its meanings, access to market, customers and online suppliers takes place, and role of information technology systems from backbone to one of the key factors in success has become (Investopedia, 2014). Outsourcing of key business segments brings with it risks. To reduce these risks, companies such as IBM, HP and other companies provide virtualization and provision of specialized management software to maintain customer systems and create a private cloud for their customers (Dubey, 2007). Developing countries focus more on cloud infrastructure services as service and software as services than platform as a service. Because businesses that are involved in software development in less developed countries. Cloud replaces many of the basic software, such as the Microsoft Office as Office 365 from Microsoft, and Google Docs from Google (Mathew, 2012). Organizations buy and use cloud-based services, such as email, customer relationship management, payroll systems, online support, web hosting, and billing (Leavitt, 2009).

Cloud computing allows organizations to make the best use of resources and skills they have, reducing cost of recruiting new employees, because key personnel enable organization to focus more on production, profits, creativity And initiative to focus on work. Enables small organizations and companies to access information and communication technology services and resources that do not have access to cloud computing if they do not use it, thus bringing large and small organizations together in one Plays the level of playing field (Mahmood, 2011).

Cloud computing is not only changed the field of distributed systems, but has also essentially changed the way business businesses. Cloud computing has many benefits for information technology companies, including freeing them from high cost of investing in software and hardware, and they can focus on innovation and Create job values. So with advent of cloud computing, many organizations are outsourcing their computing needs to cloud (Beloglazov et al., 2011; Younge et al., 2010; Buyya et al., 2010). Due to simplicity and speed of use and application of this computing model, with least amount of time and effort additional resources can be achieved. Users can access their applications from anywhere in the world at any time they want. Users can also prevent this from installing and updating programs on device (Buyya et al., 2010). A cloud environment that is appropriately designed, it is possible that service quality is high for our users provide, as well as users in cloud environment can of tools and services customized to meet the needs of their own and an environment specialized for creating Bring back. In addition, use of cloud environment is cost effective, given that users use hardware as much as they need in each project (Buyya et al., 2010; Beloglazov et al., 2010). The cloud computing environment for storing information is provided by users in different organizations, which allows users to migrate their data and computing with least impact on system's performance to a remote location (Younge et al., 2010). Therefore, cloud computing has become a phenomenon that can provide everything as a service (Beloglazov et al., 2012; Buyya et al., 2010). Cloud computing is attractive to owners of organization due to following features (Wang et al., 2011):

Table (1): Cloud attraction for organizations

Factors	Description
	Cloud computing utilizes the paid-for-use pricing model for use, so cloud provider

No previous investment	does not need to invest in cloud computing, they simply rent clouds if needed, and in return They pay that fee.
Reduce operational costs	Resources in cloud environment can be quickly deployed on demand, allocated or released, so service provider, by releasing resources, aims to save huge operating costs.
scalable	Service Provider can easily expand its services to large scale, so that it can respond to the increased utility of the service.
easy access	Web services are generally hosted on cloud, so services are available through a variety of devices with Internet connectivity, such as desktop and mobile computers and mobile phones.
Reduce business risk and maintenance costs	By outsourcing cloud services, the service provider transfers its business risks to infrastructure providers. In addition, provider can reduce costs associated with hardware maintenance and staff training.

Users can access their applications from anywhere in the world at any time they want. Users can also prevent this from installing and updating programs on device (Buyya et al., 2010). the use of cloud environment is cost effective, given that users use hardware as much as they need in each project (Buyya et al., 2010; Beloglazov et al., 2010 and allows its users to use infrastructure such as data centers and processors, or provide a package for creating programs, or a fraction of programs as final product is offered to customers, therefore, cloud computing has become a phenomenon that can provide everything as a service (Beloglazov et al., 2012; Buyya et al., 2010). Cloud computing provides users with computational services based on their pay-per-consumption model. In this public clouds provide computing model, services like electricity and water facilities, and customers pay just as much money as they are using these services. The supplier of cloud offers a variety of services, including infrastructure as a service, software packages as services, and software as a service (Armbrust et al., 2010).

Tools and multiple information systems, defines e-government as a universal fact, since its initial introduction, e-government services is continually matured (Capgemini, 2009). The next generation of e-Government goals is a multi-stage strategic plan that addresses the challenges of economic, social and environmental challenges. Improving cooperation between citizens and government agencies is essential to success of these strategic plans and will ultimately lead to an increase in efficiency and effectiveness of public services. Meeting these goals will bring economics with economies of scale and knowledge for the statesmen. These goals and objectives were identified by EU09 in 2009 (Malmö, 2009). It is visible in the following figure:

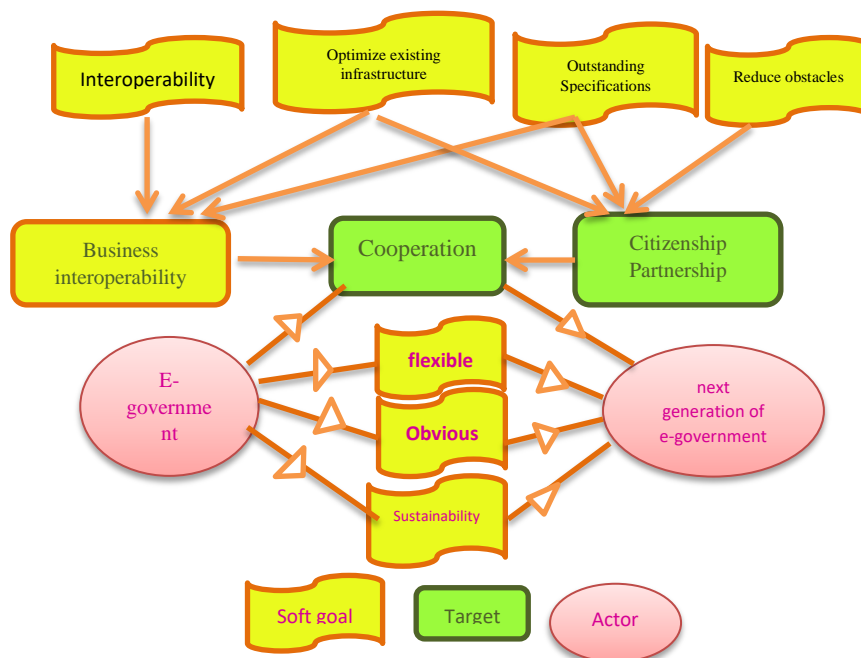


Figure 2: Maturity of e-government services (Malmo, 2009).

Through increased interoperability, business and citizen participation In e-government, it will lead to goals of openness, flexibility and sustainability. The e-government uses Internet and the worldwide web to provide citizens with information and public services (UN&amp, 2002). In addition to Internet and web portals, e-government may also include the use of information and communication technology tools such as databases, networks, support discussions, automation, etc. (Jaeger, 2003). A global solution that supports e-government in recent years. Cloud infrastructure, with their help, tools and computing resources are shared equitably between government agencies and citizens, which will ultimately lead to an increase in the participation of the state and the people. Cloud computing for e-government will include following benefits:

- Citizen Acceptance: (wikis, blogs, social networks and collaboration tools)
- Government Productivity: (emails, office automation ...)
- Government enterprise applications (business applications, mission applications, etc.)

To adjust the theoretical framework of this research and definition variables, based on TTF (fitness-of-function) model, FIIT model (fit between personality, technology and duty) of the HOT-fit model (the evaluation framework for the accuracy of human intelligence systems, organization and relevant technology ) and theory of diffusion of DOI initiatives have been used by key organizational, environmental, human and technological factors (Tornatzky & Fleischer , 1990, Goodhue, 2000; Ammenwerth, 2006, Yusof, 2008). The study identified factors for deploying cloud-based form (4) is:

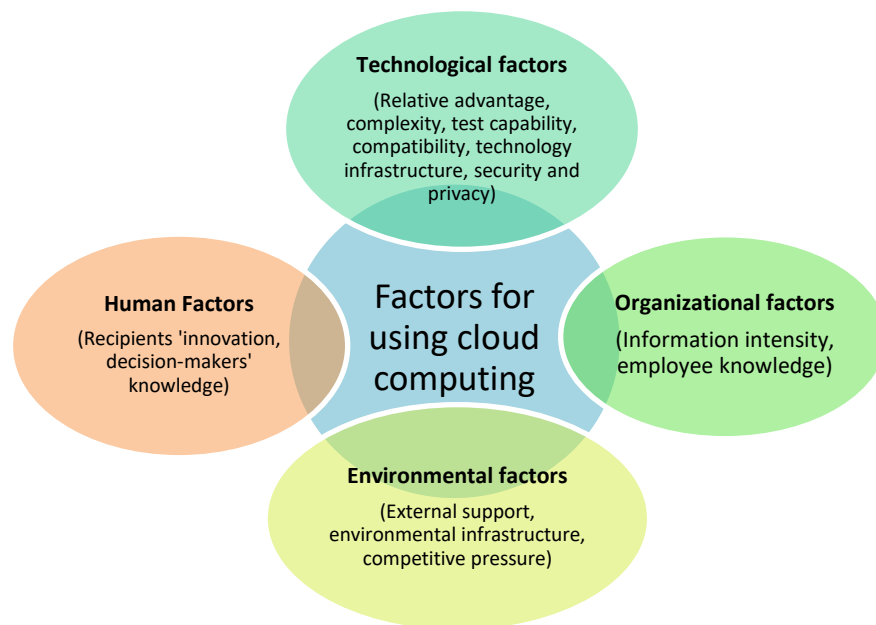


Figure 3: Conceptual model of research including factors for using cloud computing (Ramezani Tehrani, 2013)

- Environmental factors: Factors that are outside the process of adoption of new innovations such as cloud computing affect (Tornatzky & Fleischer, 1990, Lian et al., 2013, Thong and Yap, 1995, Chang et al., 2007).

- Human Factors: Factors such as perceptions and attitudes of individuals about information technology and their demographic characteristics are among the factors influencing the acceptance and use of this technology by people (Lian et al., 2013, Lin and Chen, 2012, AbuKhoua et al. 2012).
- Organizational factors: Based on theory of reasonable action and pattern of acceptance of technology, individual and organizational factors indirectly affect their behavior through their effect on people's beliefs about consequences of doing one's behavior (Yusof et al., 2008, Tornatzky & Fleischer, 1990). Therefore, people's beliefs about computer technology, ie, usefulness and ease of perceived use as a mediator, lead to association of these variables with the decision to use or accept that technology (Karahanna, 2002).
- Technological factors: The characteristics of each innovation are important parts of how and how much it is used. research on innovation features explains the relationship between characteristics or characteristics of each innovation with its implementation and implementation (Yusof et al., 2008, Lin and Chen, 2012).

## Method

The present research is an applied research method and is descriptive-survey based on type of data. In this study, this research seeks to identify and rank factors that affect acceptance of cloud computing in Iran's public services. A two-step process was carried out to achieve this goal. In the first step, using library studies, papers and research Effective factors have been identified. In the second stage, factors identified in section are ranked by questionnaire and with help of technique of the logistic analysis process.

Since the metropolis in order to implement new technologies in priority by government in public service was trying to Tuesday metropolis of Tehran, Isfahan and Shiraz were selected to be in the hands of managers and experts. The selected government departments include the following: Water, Regional Electricity, Gas, Telecommunications, Banks and Credit Institutions, Municipality, Civil Registration Office, General Directorate of Transportation and Terminals of the Province, Science and Technology Park, Organization Agriculture Jihad, Industry Organization, Mine & Trade, Provincial Power Distribution Company, General Department of Social Security, Department of Finance, Veterinary Department, General Directorate of City and Road Administration of the Province and General Office of Meteorology. The statistical population of the research is IT managers and experts in large and small industries of country. The reason for choosing these managers and experts as the statistical community is that they have an acceptable IT background and are partially capable of answering research questions. Due to the wide population census method used. A questionnaire was sent to 100 experts in service sector, of which 60 received questionnaires and were eventually used.

According to research appropriate standard questionnaire (Ramezani Tehrani, 2013) was used to collect data. Since factors such as monitoring the questionnaire's filler and preventing obfuscation caused by refusal to respond in this study are important, questionnaire has been used in person. The validity of questionnaire was confirmed by views of IT experts and university professors. The reliability of the questionnaire was calculated through Cronbach's alpha coefficient. The coefficient for questionnaire obtained 89/0.

### - Study Descriptive Variables

Table (2): A survey of descriptive index variables

Standard deviation	Average	Variable		Standard deviation	Average	Variable	
1,390	2,97	Employee use of cloud computing for different titles (employee knowledge 1)	Employee knowledge	1.054	3.20	Technical support for cloud providers (external support 1)	External support
1,110	2,57	Basic knowledge of staff in the cloud (employee knowledge 2)		1.138	3.60	Train these providers to the organization (external support 2)	
1,081	2,48	The presence of qualified people in the field of cloud computing in the organization (employee knowledge 3)		0.705	4.33	Doing things faster in organization (relative advantage 1)	

1,186	2,66	Employee Perceptions of Cloud Computing (Staff Knowledge 4)		0.504	4.50	Improvement of work quality (relative advantage 2)	Com para tive advan tage
1,299	3,20	Understanding cloud differences with other computing subjects (decision maker knowledge1)	Decisio n maker knowle dge	0.520	4.37	Easier things (relative advantage 3)	
1,119	2,63	Information about different types of cloud (decision maker knowledge 2)		0.486	4.63	Improve the effectiveness of operating systems (relative advantage 4)	
1,285	3,10	Information about various cloud models (decision maker knowledge 3)		0.490	4.38	Improve the efficiency of the working system (relative advantage 5)	
1,166	3,28	The identification of employees are one of the main advantages of the cloud's payment model when (decision-makers knowledge 4)		0.497	4.42	Improve efficiency in the organization (relative advantages 6)	
1,160	3,90	The organization's dependence on the existence of information (information 1)		0.504	4.48	Improve operational efficiency (relative advantage 7)	
1,037	3,90	Information Access Speed (Information Severity 2)	Intensi ty of inform ation	0.666	4.38	Raising Data Storage Capacity (Relative Advantage 8)	com petit ive pres sure
1,126	4,05	Existence of accurate and reliable information (information intensity 3)		0.723	4.45	Cloud computing technology is up to date (relative advantage 9)	
1,342	3,28	The difficulty of understanding the flow of work done by cloud computing (complexity 1)		0.520	3.97	Pay-Per-Time Model (Relative Advantage 10)	
1,420	3,48	The long process of learning cloud computing (complexity 2)	Compl exity	1,402	3,40	Customer orientation to other organizations and companies (competitive pressure 1)	com petit ive pres sure
1,142	2,98	Time-consuming work with cloud computing by employees (complex 3)		0,840	3,85	Strong competition among different organizations (competitive pressure 2)	
1,483	3,07	Provide Secure Services by Cloud Computing (R1)		0,895	3,75	Different products and services with similar performance in a particular industry (competitive pressure 3)	Com patib ility
1,097	2,98	Secure servers and data centers of cloud providers (Security 2)		1,148	3,07	Compilation of cloud computing with organizational style (Compatibility 1)	
1,438	3,00	Confidentiality of data by cloud providers (Security 3)		1,332	3,23	Cloud computing compliance with organization performance (Compatibility 2)	
1,362	3,10	No worries of the organization's employees about the security and privacy of cloud computing services (Security 4)		1,420	3,53	Organization Proportionality with the norms and culture of the organization (Compatibility 3)	
0,928	2,45	The opportunity to test different types of cloud computing for employees (Security 5)	Capabi lity Assura nce	1,134	3,37	cloud computing Fitness with IT infrastructure of organization (adjustment 4)	cost
1,157	2,53	Ability to test various applications by cloud computing (Security 6)		1,281	3,05	cloud computing fitness with other existing systems working in the organization (Compatibility 5)	
1,152	2,17	Test capability for people before making a decision about choosing a type of service (Security 7)		1,00	3,82	Reduce the cost of initial capital (cost 1)	
1,359	2,52	Long-Term Use License for Cloud Computing for Employees (Security 8)		0,986	3,67	Reduce investment in new infrastructure (cost 2)	
1,169	2,58	Legal Status of New Technologies in Iran (Infrastructure 1)	Infrastr ucture	0,848	3,40	Reduce Software Licensing Costs (Cost 3)	
1,180	3,12	The staff's trust in modern technologies, including cloud computing (infrastructure 2)		1,065	3,87	Reduce system upgrade costs (Cost 4)	
1,169	2,92	Access to Integrated Information System (Infrastructure 3)		1,066	4,02	Reduce maintenance costs (cost 5)	



1,532	2,60	Access to networked software and speed and processing security (infrastructure 4)		0,802	4,03	Reduce operational costs (Cost 6)	
1,094	2,70	Providing ability to transmit and transmit routers (Infrastructure 5)		0,872	3,95	Reduce IT costs (Cost 7)	
1,481	2,67	Existence of appropriate bandwidth in organization (Infrastructure 6)		0,841	3,93	Excess training costs in organization (Cost 8)	
				0,996	3,92	Preferring the cost of using cloud computing rather than installing and improving technology (Cost 9)	
				1,020	3,67	Creativity in Designing New Ideas (Innovation 1)	inov
				0,840	3,85	Create new options instead of improving previous options (Innovation 2)	ation
				0,910	3,45	Risks of doing things (innovation 3)	

As shown in Table (2), performance factors of public service sector tend to be innovative in relevant organizations, and field of employee knowledge in service sector is highest in medium. In this regard, important foreign support has been considered by organizations. Experts from different organizations have found existence of cloud computing in their respective organizations to have a high comparative advantage of this technology. The decision makers' knowledge is their knowledge in the field of cognitive differences with other cloud computing, that decision maker knowledge and competitive pressure in the service sector above the average. The severity of information in public sector was moderately evaluated and majority of respondents in public sector considered access to relevant and relevant information relevant and important in organization, and in all organizations the severity of information has been high.

- Factor Analysis

The main purpose of factor analysis method is to study order and structure of multivariate data. In present study, a confirmatory factor analysis has been used to evaluate model that results of each statistical society have been investigated separately. Table 2 shows the result of KMO test in public service sector:

Table (3): Factor Analysis Results

Error Level (Sig)	Bartlett Test	Test KMO
0,000	990	0,508

As shown in Table (3), the KMO test result is 0.508, which indicates possibility of reducing data to number of underlying factors. Also, the result of Bartlett test is 990 at a significant level of less than 0.01, which indicates the correlation matrix between items is not unit and same matrix that is, on the one hand, there is a high correlation between the terms within each factor, that is, on one hand, there is a high correlation between items within each factor, and on other hand there is no correlation between items of an agent with other factors. In order to identify correlation matrix between items and factors and categorize each item in each factor after removing items that have value less than 0.55 (compatibility 4, compatibility 5, cost 5, cost 6, cost 7, cost 8, infrastructure 5, information intensity 3, Competitive pressure 1) and remove external dependence variable and complexity which did not have the ability to distinguish between different factors. And reduced the number of research variables to 9 factors; which variables of information intensity and compatibility and cost are highly correlated. Due to importance of cost, two other variables will be remove from conceptual model of research.

- Final results of factor analysis

Table (4): Final Results of Factor Analysis

Residual variables after factor analysis					
✓	Decision maker knowledge	✗	External support	✓	Innovation
✗	Competitive pressure	✓	Comparative advantage	✓	Employee knowledge
✗	Compatibility	✗	Complexity	✓	Intensity of information
✓	cost	✓	Quiz Ability	✓	Security
				✓	Infrastructure

Displays remaining variables for logging regression logic.

- Logistic regression test

A two-dimensional nominal logistic regression analysis is used when dependent variable is two-dimensional in nominal level and for purpose of examining existence or non-existence of a relationship, predicts a set of independent variables. Therefore, in present study, logistic regression test is used to investigate factors affecting adoption of cloud computing. One of the presumptions of logistic regression method is normal distribution of independent variables, in which case model has a good fit.

Table 5: Descriptive statistics, Skewness, Kolmogorov-Smirnov test after factor analysis

Variable	Kolmogorov-Smirnov test		Skewness	Descriptive Statistics	
	Sig	Statistic	Statistic	Standard deviation	Average
Innovation	0,002	1,476	0,496	0,633	3,40
Employee knowledge	0,010	1,616	0,261	1,148	2,86
Comparative advantage	0,001	1,214	-1,956	0,493	4,37
Decision maker knowledge	0,000	1,076	-0,241	1,025	3,05
Intensity of information	0,000	1,319	-1,816	0,671	4,41
Security	0,001	1,561	-0,224	1,234	3,03
Quiz Ability	0,003	1,120	0,791	0,990	2,41
Cost	0,000	1,592	-1,807	0,620	3,72
Infrastructure	0,007	1,673	0,222	0,956	2,95

The results of Table 5 show that, the tolerance of variability average, in populations studied is high, which indicates that the level of co-variation among variables is low. Also, the results of another indicator, inflation factor variance in societies studied, are smaller than number 2 in other words, the data in implementation of regression are at a high level of confidence.

- Necessary fitness test

In order not to fit the model, fitting of model is based on exponential statistics and pseudo determination coefficient is used. This test is used to examine the role of independent variables in explaining variance of dependent variable and its values vary from 0 to 1, closer the value of this test to the number 1 indicates that role of the independent variable is significant in explaining variance of dependent variable and vice versa Close-to-zero values indicate a weak role for variables in this regard. The values of nondestructive test fit for each statistical population are shown in Table (6).

Table (6): The results of non-test fit of model

service	test
27,999	<b>-2Log likelihood</b>
0,594	<b>Cox &amp; Snell R Square</b>
0,796	<b>Nagelkerke R Square</b>

As shown in table above, Nagelkerke R Square values are close to 1, which indicates that role of independent variables is high in explaining the variance of dependent variable.

- Model Assessment

In order to evaluate whole model, Homser-Lamsh test is used. This test states that error level is smaller than 0.01 of research model and has necessary fit, that is, independent variable can predict dependent variable variations. The results of model evaluation in present study are presented in Table (6).

Table (7): Hausmer test results

service	Hausmer test
22,561	<b>Chi-square</b>
0,004	<b>Sig</b>

The results of Homser and Lamsh test in research communities were less than 0.01, indicating that research model was appropriate and necessary for its development.

- Model Predictability Examination

In order to evaluation the separation of powers model Drtbqat dependent variable in logistic regression analysis of classification used in this table can be used to help assess predictability of the model. Table 8 shows the results of predictability of model.

Table (8): Model Predictability Examination

observations		Predict correctness of model		
		cloud computing		Percentage of health
		yes	No	
cloud computing	yes	24	2	92,3
	no	2	22	94,1
Final percentage				93,3

The results of above table in service sector indicate that in service organizations that accepted cloud computing, with 92.3 percent confidence, the independent variables of model have been able to determine the dependent variable, as well as model in 94.1 percent of time managed organizations Which would not accept computer, and in total in service sector, the independent variables of model will be able to accurately predict acceptance of cloud computing with a confidence of 93.3%.

- Reviews significant degree of influence of each independent variable on dependent variable in the model

To evaluate the significance and effect of each independent variable on dependent variable in logistic regression statistics wald and Exp (B) is used. The Wald statistic is most important statistic for testing significance of presence of any independent variable in model at an error level of less than 0.05. If the error level is less than 0.05, indicate that variable will be useful in the model and its effect will be meaningful, and vice versa, and to find out of each of these variables on dependent variable using Exp (B) statistics. Accordingly, tables (9) show that values of these statistics in each statistical society:

Table (9): Logistic test results

Variables	B	S.E.	Wald	df	Sig.	Exp(B)
Innovation	2,489	1,103	5,095	1	0,024	0,083
Employee knowledge	2,237	0,654	9,864	1	0,001	8,872
Decision maker knowledge	1,934	0,447	8,121	1	0,005	6,735
Intensity of information	2,11	0,554	9,221	1	0,001	7,567
Comparative advantage	0,255	1,333	0,037	1	0,848	0,775
Compatibility	0,532	1,025	0,269	1	0,604	0,588
Security	1,532	0,771	5,35	1	0,03	5,954
Quiz Ability	1,736	0,556	6,947	1	0,01	6,734
Cost	1,231	0,654	4,239	1	0,036	4,237
Infrastructure	1,234	0,436	4,871	1	0,03	5,376

The results of logistics test in service sector indicate that relative and comparative advantage variables with respect to significance level of error greater than 0.05 are not useful and meaningful in studied population. Other variables of employee knowledge, severity of information, decision-maker knowledge, test capability, security, infrastructure, cost, innovation, according to Exp (B) statistic, have the most impact on the acceptance of cloud computing in the service sector, respectively.

Table (10): Final result of logistic test of variables

Exp(B)	Sig	Variable	Exp(B)	Sig	Variable
6,735	0,005	Decision maker knowledge	8,872	0,001	Employee knowledge
7,567	0,001	Intensity of information	0,083	0,024	Decision makers' innovation
–	–	Competitive pressure	–	–	External support
–	–	Complexity	0,775	0,848	Comparative advantage
6,734	0,01	Quiz Ability	0,588	0,604	Compatibility
4,237	0,036	Cost	5,954	0,03	Security
			5,376	0,03	Infrastructure

The final results of logistic test show role of variables in statistical societies. Given above table, key variables in cloud computing model are identified in Public Services.

## Results

The purpose of this study was to identify the effective factors in accepting cloud computing in Iranian government agencies. Given the fact that these organizations differ in terms of human, organizational, technological and environmental factors, large organizations of community services, including municipalities, banks, public service organizations (water, electricity, gas, telephone) Answered the questionnaires in this research. According to above ecosystem and different human factors, organizational, and technological environment in each of the groups, the factors influencing adoption of cloud computing application model for public service will be as follows:

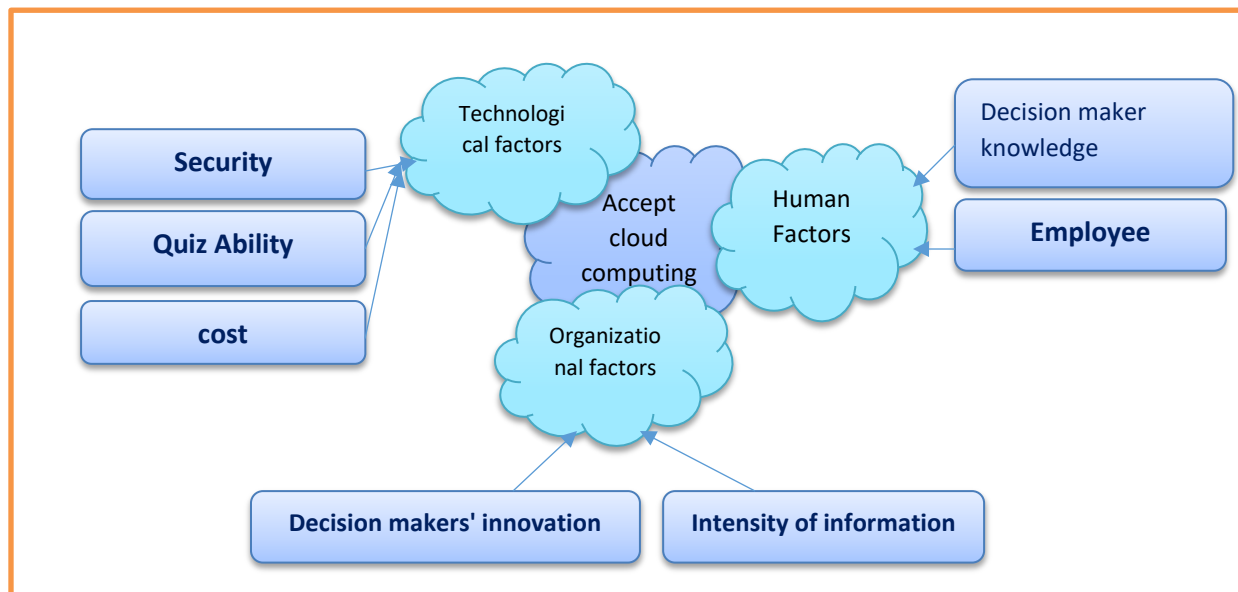


Figure (5). The cloud computing acceptance model in the public service sector

Traditionally, access to public services is more difficult because it requires several formal and formal procedures. Hence, governments around the world have turned their services through the Internet. This approach is known as e-government. The e-government uses information and communication technology to exchange information and serve citizens and business organizations. With e-government, governments can communicate with their citizens more easily and quickly. The deployment of e-government should be cost-effective and reliable, while maintaining ease of use. Unfortunately, current technologies are not enough to meet the needs of e-government. Cloud computing is a new way to accept and serve on Internet. This technology provides a platform for the efficient use of e-government systems. This approach will save you money. Because cloud computing provides hardware, software, and network processing power as a service, it offers better solutions in terms of technology. The three dimensions of information technology implementation in public service sector include facilitating IT processes in government data centers, automating government workflows and implementing e-government projects. In assessing cloud computing power in services sector in field of water and energy and the energy sector (oil and gas), understanding the distinction between its internal and external applications is considered to be important. The benefits of internal cloud computing include improvements in internal interactions, greater flexibility and cost savings through virtualization. In contrast, the use of cloud computing outside the organization brings far more benefits to industry, including challenge of changing business models.using cloud computing, oil companies around world will seamlessly provide global access to information and new tools such as social networking and video conferencing will cost the world a step further. Such improvement will increase the ability of these companies to interact at different levels. In addition to all the benefits, cloud computing helps companies reduce energy consumption and reduce their energy consumption.

In future banking, banking business definitions will be redefined by placing a customer in center of all banking activities. Tomorrow's customer customer has a lot of difference with the bank customer yesterday and today. He is equipped with knowledge of vast function of technology in his everyday life, and that's why his needs and requests from future bank are beyond the conditions we are witnessing now. Cloud computing as one of the key elements in world that determines future of technology in many industries is an opportunity for a modern attitude toward more efficient use of ICT capacities in banking system of the country in order to provide wider, more diverse, more balanced services, More environmentally friendly and more cost-effective, all banking system stakeholders are particularly interested in distributed and heterogeneous distributed information and communication technologies.

The best area of employment generation is the discussion of government services; in fact, with introduction of technology into two domains, productivity increases, but workforce will not change much. The best area that can generate employment is the service sector that can be improved with use of technology, including cloud computing. The result will be a change in increase in productivity and human labor.

Support the technology development is one of most important tasks and concerns of governments. Considering that cloud computing facilities, especially in infrastructure sector, serve as a key to development of an independent and integrated e-government and serve as a way of filling the digital divide in society; Therefore, the proposed model and architecture for development and application of cloud computing in business has a special place in this route. By examining the issues of macroeconomic and technical infrastructure government, through the expansion of commercial computerization in public service and public services, will be able to findings and ideas in this area as a model for improving the business environment. Work for the industry.

Given the seriousness of this approach at international level, if proper functioning of main actors of public and private sector is possible, it will be possible to surpass other countries in area of cloud computing in regional and international arena. It is possible to create necessary infrastructures and infrastructure for presence of technical and non-technical agents from requirements that all those involved in this field should pay attention to.

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