

THE EFFECT OF CLOUD COMPUTING ON EFFECTIVENESS OF CUSTOMER RELATION MANAGEMENT IN ELECTRONIC BANKING INDUSTRY: A CASE STUDY OF EGHTEHAD NOVIN BANK

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Abstract

In the past, customers expected of producers to deliver goods and services on time, with good quality and cheap price. The business was mostly relationship-based and the middlemen in distribution chain were powerful. Alongside the wide distribution of products, the main competition was for maintaining services and developing products and facilitating customers' purchase not for maintaining customers' relationship. But nowadays, organizations work in a complex and dynamic environment, the competition between organizations has increased, life cycle of products has decreased and organizations' lifetime reaches their decline phase more rapidly. In many cases, producers produce goods with similar quality and it is the customer who make buying decision. Accordingly, in present study we evaluate the effect of cloud computing on effectiveness of customer relation management in electronic banking industry regarding Eghtesad Novin Bank.

Keywords: quality, cloud computing, modern economy, Banks, buying decision

Statement of the problem

Cloud computing is not a new technology, but it's a new method for providing computing resources and a model for offering services through the Internet. In fact, cloud computing provide the ability of productivity, saving information technology resources and increased computing power. Therefore, processing power will change to a tool which is always available. Cloud computing distributes computing and processing duties among a network of resources that are composed of many computers. This function is in a way that user systems can access software and hardware services, processing power and storage space based on the demand. Offering cloud computing services by suppliers of these services for users is actually a pay-per-use service that will result in access to information technology resources shared through world wide networks such as the Internet and Intranet. These networks operate independently of the geographical place of providing services.

The model of offering services in cloud computing is classified into four categories: software as a service, platform as a service, infrastructure as a service, and services (Lin & Lin & Chen, 2012). Each of these four categories offer different suggestions for different customers. However, they share a common business model and they allow their customers to use their computing resources (including services, applications, infrastructures, and platforms) (Sultan & Sultan, 2012).

We can evaluate the roots of cloud computing emergence by observing the developments of several technologies in domains of hardware (virtualization, multi-core chips), technologies related to the Internet, distributed computing and automated management (W. Voorsluys, 2011). This means that we can consider cloud computing as a result of constant developments in these domains that has resulted in the development of previous computing models.

Customer relation management (CRM) includes instructions, methods, processes, and strategies that enables the organization to unify customer interactions and record all information related to him. In this regard, some technologies have been used to absorb new profitable customers and maintain and enhance the relationship with existing customers (Abeer Khan, 2012). Managerial value of CRM is in creating relationships with customers and their loyalty, although its basis is grounded on the technological dimensions. The concept of CRM means: adding value to customers by enhancing their satisfaction level in interactions with the organization (Chieko Minami, 2008).

In the past, customers expected of producers to deliver goods and services on time, with good quality and cheap price. The business was mostly relationship-based and the middlemen in distribution chain were powerful. Alongside the wide distribution of products, the main competition was for maintaining services and developing products and facilitating customers' purchase not for maintaining customers' relationship. But nowadays, organizations work in a complex and dynamic environment, the competition between organizations has increased, life cycle of products has decreased and organizations' lifetime reaches their decline phase more rapidly. In many cases, producers produce goods with similar quality and it is the customer who make buying decision (Cutler, 2002).

Customer relation management is a business strategy for creating a mutual value that identifies all aspects of customer's characteristics, creates customer knowledge, forms relationships with customer and causes their interpretation on the organization's goods and services. Therefore, the evaluation of such an important concept is essential in banks because the basis of their functions is grounded on customers. In national meeting of managers, the executive director of Eghtesad Novin Bank considered the presence of cloud computing very useful. In recent years, changes and evolutions in strategies of information and communication technology have gained a high velocity and new discussions have been introduced in this area and the issue of cloud computing has been very important in this domain. The executive director of Eghtesad Novin Bank has also pointed out that the issue of cloud computing is a paradigm that incorporates a wide domain of technology and since many developments are occurring in different domains of technology such as software, network and infrastructure, security and etc., participation in such events can lead to better and deeper understanding of new approaches in domain of technology. One of the areas that cloud computing can be applicable is banking industry and the problems such as the lack of employing cloud computing and the absence of CRM are in moving towards this area and the question is that when and how the bank should move towards this area. These problems depend on different parameters and require extensive studies in the section of research and development of the bank.

The aim of this thesis is to fully describe the effect of cloud computing on customer relation management in electronic banking industry (case study: Eghtesad Novin Bank) and also provide necessary recommendations for applying cloud computing in customer relation management in electronic banking industry. With respect to aforementioned issues, the main question of the researcher is: do the components of cloud computing can influence on the effectiveness of CRM system?

The importance and necessity of carrying out the research including disagreement, existing research gaps, the extent of requiring this issue, its possible theoretical and practical benefits and also the possibly new materials, methods or research processes that are applied in this study:

Today, the service industry is changing in the world. New technologies have changed the method of offering customer services in many service organizations. Offering services by different banks has been influenced by information and communication technology and has undergone fundamental changes. According to the Davis's technology acceptance model, the effect of different levels of determinant factors on customers' willingness to use e-banking services was investigated in banking industry. Based on this model, perceived ease of use, perceived usefulness and an additional factor, i.e. perceived security were evaluated and the results showed that the effect of different levels of determinant factors on customers' willingness to use e-banking services is different (Gilaninia, 2011). Customer relation management is considered as a strategic necessity for all organizations, because the efficient implementation of CRM can result in increased customer's satisfaction, their loyalty and their attraction and therefore lead to getting more sales and increasing repeat purchases (Papasolomou, I & Doukakis, 2002). Some organizations have difficulty in implementing CRM because their attitude towards this issue is only technological, in that they consider the CRM strategies equal with CRM technology. However, CRM is not a technological issue but it's a business issue that the tool of information technology should be allocated and designed for it should be matched with business operations and strategies (Ngai, E.W.T, 2005). Customers are the best assets of an organizations and increasing number of organizations shows the importance of being customer-oriented in today's competitive world. Moreover, organizations should create knowledge about customers, goods and services both inside (different functions of the organization) and outside (customer contact points) of the organization. Therefore, the managers of the organization should move towards understanding the main factors of success in customer relation management (Greenberg. P, 2002).

Considering the services that cloud computing technology provides in domain of electronic services, we can analyze the importance and dimensions of offering services by cloud computing technology in banking industry:

- A. From banking and electronic services point of view and providing infrastructure as a service that includes:
 1. Content Delivery Network: it is generally important for webpages or network services that are provided in wide geographical districts.
 2. Virtual Desktop Infrastructure: it reduces the autonomy of existing computers in a system to a thin client with the minimum hardware facilities and put the major burden of storing and processing on central host.
 3. Computing: decreased costs of hardware purchase, decreased costs of repair and maintenance, and high flexibility of system.

- B. Electronic services and providing “platform as a service” (PaaS)¹. Applying PaaS in banking has a significant impact on the costs and loss of time in dispatching human forces and their training in distant branches.
- C. Banking and providing “software as a service” (SaaS)². In this model, the bank has no cost and concern about items such as hardware, software support, and the personnel of service maintenance and etc. because the central branch is responsible for all these items and their derivatives and it has the responsibility of cloud maintenance. The only things that each branch needs to access services are a web browser for employees, a username and a password (Iran Data-processing Company).

Applying ideas, technologies and approaches of public cloud computing in an organization is a considerable option for many institutions that are not able to provide public cloud computing. Choosing the time of cloud services presentation and application is the recent answer to make-or-buy question.

Basically, cloud computing has become a more tangible concept because the inherent challenges of technology management (due to complicated and expensive methods that were addressed in large domestic IT teams in the past) have become more dominant. The advantages of cloud computing in response to these challenges have developed more and more and is suitable and interesting for all kinds of institutions.

Literature review and relevant history (brief expression of research backgrounds at home and abroad regarding the subject of the study and their results and the review of literature and theoretical framework of the study):

- In a research with the title of “evaluation of the relationship between the quality of electronic services and the insured people satisfaction in insurance companies of Guilan province”, the researchers concluded that the results of testing hypotheses indicate that the quality of electronic services has an influence on the insured people satisfaction of using electronic insurance and all the hypotheses of the research were validated. In evaluating the quality of electronic services from the insured people point of view, personal privacy and accountability have the most importance followed by reliability, supplying orders, contacts, compensation and efficiency (Gilaninia, 2014).
- In a research with the title of “cloud structure modeling in banking”, the researchers analyzed cloud adoption decision in banking area and concluded that cloud computing is the latest solution of companies for designing their Internet and can solve many problems in the areas such as security, operation flexibility, movability of business profiles and implementation of Internet applications (internal network). Furthermore, hardware problems that are due to activities such as enhancement of transfer, repair and maintenance are no longer a barrier for management and planning and do not impose

¹ The model of “platform as a service” provides a software infrastructure for software developers and includes all systems and environments that contain full cycle of development, application test, and a host of complicated web application as a service which is delivered by the cloud basis.

² Software as a service is a multi-user software infrastructure that uses shared resources and the same sample of an application code and database in order to be able to provide services for several user at the same time.

any cost on the company. Cloud computing both in public and private forms, is the best solution for distributed companies all around the world in order to organize their computerized operations. Cloud computing covers almost all operations from public sector to private sector, and from financial affairs and banking to nonfinancial affairs. Making limitation is through the devices that are used for final users. Cloud computing is a reliable solution for modernizing the operations of the company and can be equal with the zero Internet or customer structures with low usage time (Anca Apostu et al., 2012).

- In a research with the title of “cloud security tracing, log maintenance and notification systems for net banking cloud applications”, the security issues related to cloud computing and the challenges of different types of cloud computing and different kinds of offering services were evaluated to provide a system that represent pursuing operations, logging and maintenance of events and notifying users about potential threats. The results of this research will be used for tracing cloud security and notification system from centralized database of multi-tenant cloud, and for storing information related to network banking. This type of storing information is faced by many security barriers such as password for the user and manager. The aim of user notification is to establish security. The main objective of our application is to provide more security for Internet banking by using cloud computing in this regard. (Bhagyashree A. Dhamande et al., 2014).
- In a research with the title of “an integrated model based on single sign-on (SSO) for providing Internet banking services via cloud computing”, the researchers evaluated an integrated secure model based on SSO and central banking system in order to provide Internet banking services via cloud computing and facilitate transactions by centralizing online payment rules. Moreover, by using cloud computing in this model, we can save money in IT costs. Our recommended system has released users from memorizing different user names and passwords and numbers and letters related to different banks and payment gateways, because this system only uses a unique identity. Furthermore, this system has made management and audit easier. It is worthy of notice that as a result of using the individual’s unique identity and accessing all systems by this identity, the importance of abovementioned system will increase and therefore propensity for stealing this system will raise. Therefore, it is necessary to make more effort for its security (Abdollahi et al., 2014).
- In a research with the title of “research of e-commerce based on cloud computing”, Chunling Sun evaluated using applications in current e-commerce and referred to relevant important issues. The application of cloud computing in e-commerce has been explained through defining its concept and characteristics and the important aspects of e-commerce development via cloud computing have been analyzed.

The results include:

1. All your tools are simultaneously available at all times.
2. You can access your stored information whenever you want.
3. You can organize extracted data online.
4. You can immediately share data, regardless of any type and size they are. Probably, you may wonder that you have so far used cloud computing but you were unaware. For example, have you ever used Gmail? If your answer is “yes”, therefore you probably know how to share files through Google docs. By using Google docs you

can share information both in the form of written documents and in the form of spreadsheet files. Anyone who is allowed to view and edit files can do it. This is an old concept of cloud computing. We may expect this tool to know our request and what we want to do without giving any command. Such a thing may seem odd currently, but it may occur in the near future (D. Jin and S. Lin, 2012).

- In another research, the researchers evaluated the role of security and trust, and technological, legal and behavioral recommendations in order to compare cloud computing and banking. The results indicate that the security of applications and cloud-based data require planning and resources. The providers of cloud-based services will enjoy its security benefits because they can spread security costs among their multiple customers and therefore earn more money for investment in different security procedures. For example, they can employ a team consisted of skilled people in the area of protection in order to reduce vulnerability period. They can also use trained people in the area of system. Since the organizations guide their IT solutions towards cloud computing, the managers of IT should not ignore the responsibility of data and performance management.

They should reach an agreement with service provider and control the main operation of the system in order to ensure that the services will be offered effectively. Moreover, organizations should have some policies, methods and controls in order to ensure strategic alignment and integrity and safety of cloud-based solutions. Modern virtualization technologies help many businesses to use stored information, offer services, use resources' efficiency and utilize atmosphere in the best way. By providing a virtual environment for companies through integrated applications and tools that support their needs, the cloud computing allow companies to trace users and allow users to use the organization's information. It is necessary to verify the history, location and application of an item through recorded documents in order to ensure the company's compliance with internal and external requirements (Ranjit Bose et al., 2013).

- In a research with the title of "the introduction of a new architectural model in cloud computing for banking systems", the researchers examined e-banking transfer to cloud computing and different criteria were evaluated. One of the major problems in this transfer is the consumption level of data centers of cloud computing that entail high costs for banks. Different algorithm have been offered in this regard. A selection algorithm of virtual machines immigration was suggested for this purpose. It greatly reduces the energy consumption in these data centers and results in reduction of the costs related to using these centers. In following sections we simulate this algorithm by using CloudSim toolkit and analyze its results (Zahedi, MA thesis, Tabriz University, 2014).

Considering a number of research backgrounds, a suitable model or theory that be able to answer the primary question is as following:

Considering the structure of the model and the opinions of the supervisor and some experts, a modified model was introduced. In this model, the components of cloud computing include: 1) cloud computing security; 2) computing power; 3) the lack of dependency on device and location; 4) decreased dependency on hardware. These components are the independent variables of the model and CRM effectiveness is the dependent variable. This model will be analyzed as the base model. Figure 1 shows our modified model (Gilaninia, 2009).

Innovative aspect of this research

For the first time in the country, the modified model presented in Figure 1 (conceptual model of the research) has been applied and tested in CRM systems of the banks and has been implemented as an innovation.

Research objectives

- A. Determining the effect of cloud computing on customer relation management in e-banking industry.
- B. Determining the effect of cloud computing on customer relation management in e-banking industry (case study: Eghtesad Novin Bank)

Research questions

1. Does cloud computing security influence on customer relation management in banking industry?
2. Does computing power of cloud computing influence on customer relation management in banking industry?
3. Does the lack of dependency on device and location in using cloud computing influence on customer relation management in banking industry?
4. Does the decreased dependency on hardware in using cloud computing influence on customer relation management in banking industry?
5. Does cloud computing influence on electronic services and customer relation management in banking industry?

Research hypotheses

1. Cloud computing security influences on customer relation management in banking industry.
2. Computing power of cloud computing influences on customer relation management in banking industry.
3. The lack of dependency on device and location in using cloud computing influences on customer relation management in banking industry.
4. The decreased dependency on hardware in using cloud computing influences on customer relation management in banking industry.
5. Cloud computing influences on electronic services and customer relation management in banking industry.

Definition of technical words and terms

1. Conceptual definitions

Cloud computing security: the security increases as a result of centralized data and the existence of more complicated security resources but the concerns about the loss of control over sensitive data still remain.

Computing power: decreased costs of hardware purchase, decreased costs of repair and maintenance, and high flexibility of system.

The lack of dependency on device and location: users can access systems in every location and with every device (e.g. computer or mobile) that has a web browser and is connected to the Internet.

The decreased dependency on hardware: the users are no longer have to be limited to a specific network or computer. It is enough for users to change their computers to see that your applications and documents are still available for users on the cloud.

2. Operational definitions of variables

Cloud computing: the term “cloud computing” is consisted of two words, i.e. “cloud” and “computing”. Here, “cloud” refers to a network or a range of wide networks such as the Internet and a normal user is not precisely aware of behind the scenes and what happen consequently (such as inside the cloud). In some texts, the terms “cloud computation” or “cloud processing” have been used instead of the word “computing” (Merriam-Webster, 2011).

Recently, cloud computing technology has been introduced as one the most important debates related to the domain of information systems development (Lian et al, 2013), in a way that Avram (2014) considers cloud computing as a new paradigm for hosting and providing services in the Internet. Cloud computing has been recognized as an important domain in information technology innovation and it is a domain that extensive investments have been made in it (Armbrust et al, 2010). Some of the advantages of cloud computing include: costs reduction (Jadeja & Modi, 2012), ease of scalability (Marston et al., 2011), and easy management (Jadeja & Modi, 2012). The potential advantages of cloud computing application can be evaluated from two perspectives: financial saving and resources management (Lin & Chen, 2012).

Different models of cloud computing implementation

Cloud computing is presented in 4 forms, i.e. private cloud, group cloud, public cloud and hybrid cloud; the type of cloud computing implementation depends on the type of user’s need. This method of classification refers to the nature of access, control and the manner of providing physical and virtual resources (Hongan, M et al. 2011).

Customer relation management (CRM)

The term “customer relation management” (CRM) in its current concept emerged in 1990s and was developed as a business strategy to adopt and manage the most valuable relations with customers. CRM requires a customer-oriented philosophy and the culture of supporting effective processes of marketing, sales, and after-sales services in the organization. Customer-oriented culture is based on a simple concept that suggests there should be a one-to-one relationship between customers and sellers. This attitude considers each customer as a person with his own demands, purchases and needs. By employing CRM we can analyze customers’ relationship with the company and their needs. In fact, CRM is a process for collecting and integrating information for the purpose of effective and meaningful utilization of them. These information can be about customers, sales, effective marketing, and the sensitivity and requirements of marketplace (Elahi & Heidari, 2005).

Electronic banking

Electronic banking is the latest channel for distributing banking services (Folorunso, 2010). Electronic banking has been defined somewhat differently in various researchers, because e-banking includes several services through which the bank’s customers are able to request for information and receive micro banking services via computer, television, and mobile (Folorunso, 2010). The fundamental changes in internal systems of the banks such as CRM systems, business management technologies, central processing technologies and different technologies of

protection and integration have had positive effect on performance and profitability that in models of electronic business they fall into the categories of customer relations and infrastructure management respectively (Taft, 2007).

Since the aim of this research is to evaluate the effect of cloud computing on customer relation management in e-banking industry, the present research is a causal survey. In causal method we try to find the relationship between cause and effect. In this study we have used questionnaires for collecting information.

Studied variables in the form of a conceptual model and the manner of measuring variables:

In order to carry out a scientific and systematic research, we need a scientific and theoretical framework. With respect to the fact that considering all effective factors in the area of cloud computing and customer relation management is a difficult affair, we use a conceptual model. With respect to review of different researches in this domain and modeling reliable researches in the area of e-banking, technology acceptance model, planned behavior theory, and trust factor as an effective factor (Suh and Han, 2002), this model will be used for identifying the effect of cloud computing on customer relation management in e-banking industry. In this study the conceptual model is as following:

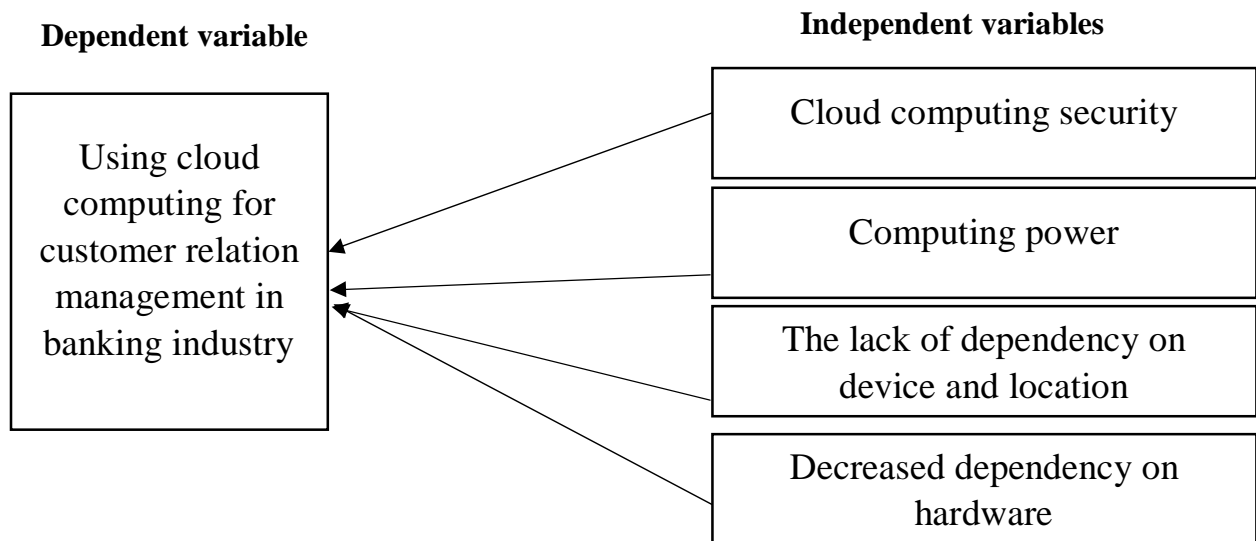


Figure 1- the modified conceptual model of the research (Suh and Han, 2002; Gilaninia, 2015)

In order to carry out a scientific and systematic research, we need a scientific and theoretical framework. We have used field survey for collecting information. This method has been used for verification or rejection of the research hypotheses. We have also used questionnaires for collecting information.

Conclusion

Since the aim of this research is to evaluate the effect of cloud computing on customer relation management in e-banking industry, the present research is a causal survey. In causal method we try to find the relationship between cause and effect. In this study we have used questionnaires for collecting information. In order to carry out a scientific and systematic research, we need a scientific and theoretical framework. We have used field survey for collecting information. This method has been used for verification or rejection of the research hypotheses. We have also used questionnaires for collecting information. The statistical population of this research include “the customers of Eghtesad Novin Bank in Lahijan Branch” and the sampling will be done randomly. Random sampling will be done among the bank customers. In this study we have used non-probability sampling method which was accessible and the relevant questionnaires are designed for the customers of Eghtesad Novin Bank. The sample size will be calculated as following (Gilaninia, 2009). Moreover, sampling is based on those e- banking services of this bank that the customers use them. In order to determine the sample size, we have used Krejcie and Morgan table (Krejcie and Morgan, 1970). The results showed that using cloud computing method will be useful for the banks’ success.

References

- Frozandeh, B (2002). *Marketing principles* (Trans), 4, Atropat Publication, 2002.
- Elahi, Sh.; Heidari, B. (2005). *Customer relation management*, Business Publication Company, Tehran, 2005.
- Moghaddasi, A. (2010). Different methods of payments in e-banking, *Information technology era quarterly*, 58.
- Talebi Mazraehshahi, H. *virtual ray quarterly*, modern services head office, 53.
- Abeer Khan ,Dr .Nadeem Ehsan ,Ebtisam Mirza ,Sheikh Zahoor Sarwar(2012) Integration between Customer Relationship Management(CRM)and Data Warehousing .*Procedia Technology*, 1, 239–249.
- Ali Abdollahi *et al.*, *International Journal of Advances in Computer Science and Technology*, 3(1), January 2014, 34 – 38
- Anca Apostu *et al.* / *Procedia Economics and Finance* 3 (2012) 543 – 548.
- Avram,G. 2014. Advantages and challenges of adopting cloud computing from an enterprise perspective, *Procedia Technology* 12: 529 – 534
- Armbrust, M., A. Fox, R. Griffith, A. D. Joseph, R. Katz, A. Konwinski, G. Lee, D. Patterson, A. Rabkin, I. Stoica, and M. Zaharia. 2010. A view of cloud computing. *Communications of the ACM* (53): 50-8.
- Bhagyashree A. Dhamande *et al.*, *International Journal of Computer Science and Mobile Computing*, Vol.3 Issue.3, March- 2014, pp. 993-998.
- Chieko Minami ,John Dawson (2008). The CRM process in retail and service sector firms in Japan: Loyalty development and financial return. *Journal of Retailing and Consumer Services*, 15, pp. 375–385.
- D. .Jin and S. Lin (Eds.): *Advances in CSIE*, Vol. 2, AISC 169, pp. 15–20. springerlink.com © Springer-Verlag Berlin Heidelberg 2012

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(www.ejise.com)

Ellinger, A .E;Daugherty,p.jPlair, Q.J,(2000)," customer satisfaction and loyalty in supply Chain: the Rule of Communication", *Pergamon Journal*, Transportation Research part E. vol 35.

Folorunso, O. (2010). An exploratory study of the critical factors affecting the acceptability of automated teller machine (ATM) in Nigeria, *Anale Seria Informatica*, 15(7), 23-45.

Gray Paul & Jung book byun (2001),"customer relationship management", university of California, available at : <www.crito.uci.edu> , [07, 08, 2004] .

Greenberg, P. (2002), *CRM at the speed of light: capturing and keeping customer in Internet Real time*, McGraw – Hill Osborne

Hongan, M., Liu, F., sokol, A., Tong, J., NIST Cloud Computing, Standards Roadmap, Version 1.0, Special Publication 500-291, Information Technology Laboratory of National Institute of Standards and Technology, p15,2011.

Jadeja, Y., and K. Modi. *Cloud computing- concepts, architecture and challenges in Computing, Electronics and Electrical Technologies (ICCEET)*, 2012 International Conference on, 2012, pp. 877-880.

Krejcie, R. V., and D. W. Morgan. 1970. Determining sample size for research activities. *Educational & Psychological Measurement* 30: 607-610.

Lin, A., and N.-C. Chen. 2012. Cloud computing as an innovation: Perception, attitude, and adoption. *International Journal of Information Management* 32 (2012): 533–540.

Lian, J., D. Yen, and Y. Wang. 2013. An exploratory study to understand the critical factors affecting the decision to adopt cloud computing in Taiwan hospital. *International Journal of Information Management*, <http://dx.doi.org/10.1016/j.ijinfomgt.2013.09.004>

Lee, Y., Kim, J., Lee, I., & Kim, H. (2002). A Cross-Cultural Study on the Value Structure of Mobile Internet Usage: Comparison Between Korea and Japan. *J. Electron. Commerce Res.*, 3(4), 227-239.

Merriam-Webster .<http://www.merriam-webster.com/dictionary/computing>, 2011.

Marston S.; Zhi Li; Bandyopadhyay S.; Ghalsasi A. 2011. Cloud computing— The business perspective. *Decision Support Systems* (51): 176-189.

Ngai, E.W.T, (2005), Customer relationship management research (1992-2002) an academic literature review and Classification, *Marketing Intelligence & Planning*, 23(6), 582-605.

Papasolomou, I & Doukakis, (2002),The role of employee development in customer relations: the case of UK retail banks, *An International Journal* ,V.7,N.1, 62-76.

Ranjit Bose et al. / *Procedia - Social and Behavioral Sciences* 73 (2013) 30 – 34.

Taft, J. (2007). *An examination of the antecedents of electronic banking technology acceptance and use*. A dissertation presented to the faculty of the college of business administration of Touro university, requirements for the degree of doctor of philosophy.

Sultan, N., & Z. Sultan. The application of utility ICT in healthcare management and life science research: A new market for a disruptive innovation? In *The European Academy of Management conference EURAM* , Rotterdam, The Netherlands, 2012.

The articles that have been used in this research include:

1. Gilaninia, Sh. (2014). Evaluation of the relationship between electronic services' quality and the insured people satisfaction, *the first international conference of economy, management, accountancy and social science*.
2. Gilaninia, Sh. (2011). Evaluation of effective factors in customers' willingness towards using e-banking services, *the ninth international conference of management*.
3. Gilaninia, Sh. (2009). Identification of effective factors in customers' willingness towards using e-banking services, *Management and productivity quarterly*.
4. Gilaninia, SH,(2015),**PRODUCTION ENGINEERING ,PUBLISHED BY Islamic Azad University, Rasht branch, Rasht, Iran, SECACOND EDITION.**

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