

# E-Banking systems implementation and introduction with focus on Iranian Banking Transactions

Abolfazl Kalanaki  
Faculty of Management, University of Tehran  
Tehran , Iran  
Email: info@kalanaki.com

***Abstract** In this paper, e-banking system implementation with emphasize on Iranian banking system has been presented. The main target of this paper is introducing benefits and conditions of implementing e-banking systems for community development and some essential equipments for the best e-banking planning in Iranian banks. All of services that has been presented in this paper are in based on good e-banking services and need to services for people.*

*Key Words : e-banking ; banking model; financial management; Iranian Banking System; public network provider*

## 1) Introduction:

What is Electronic Banking?  
Electronic banking technology consists of advanced software-based software and information resources for financial exchange that can electronically eliminates the need for physical presence in the customer's bank branches.

These systems at three levels of service to customers :

### 1) Information:

The most basic level is the level of electronic banking internet bank information services through public networks provides.

### 2) Communication:

Possible to do this level exchanges between the banking system providing this level of risk in electronic banking more traditional levels.

### 3) transactions:

This kind of information communication system according to its highest level. this risk has a

customer interaction is able to operations such as billing, Czech export, transfer do the billing.

● Benefits of Electronic Banking  
It can be two aspects of the customer examined Customers can save costs pointed institutions can retain customers despite the shift banks mentioned prevent embezzlement Another important it is. The leading banks in electronic banking services, banking channels with different modulation systems are so integrated island management and management information with customers and improve customer satisfaction, savings in production costs for banks more will bring But before attempting to create All right electronic banking system it should be possible with the technical environment, economic, financial, human noted Developing access to the World Wide Web (Internet) revolution in the field of communication, "a one" and "a few" in all parts of the world has created. Can say firmly that the world never witnessed such a pace to use a scientific phenomenon has not. Number of people accessing the Internet and expanding global network of electronic communication between various individuals and organizations through the virtual world, a suitable ground for

establishing trade and economic exchanges and trade and has provided electronic banking can be considered consequences of the spread and influence. Considering the importance of electronic banking issue and the common trend in the world knew needed to have quick overview of basic concepts in this arena, including the ratio of e-commerce and electronic banking.

## 2) E-commerce position and definition :

E-commerce, the major achievement using information and communication technology (ICT) in economic fields. Using this technology led business development, economic factors facilitating communication, enabling activities for small and medium enterprises, improving productivity, reducing costs and saving time has been. Information and communication technology can increase the competitive ability of the firms prepared to create new jobs and led.

Expand on the technology, e-commerce volume in the world every day is growing. According to research published by the Institute was predicted during the years 2006-2002 the average volume of e-commerce more than 58 percent annually has grown from 2,293 billion in 2002 to over 12 837 billion will mature in 2006.

E-commerce definition as one of the great phenomenon of the 21st century, various explanations have been offered such as these can be pointed: direct business communications and transactions over computer networks through; buy and sell goods and services and transfer funds through digital communications; electronic instruments used to advertise, sell, distribute and support products.

But the Europe Union in 1997 it defined this way: e-commerce processing and electronic transmission of data including text, sound and image is based. Various e-commerce activities such as electronic exchange of goods and services, and immediate delivery of digital content and electronic transmission is on. E-commerce until recently a certain number of limited companies was entering a new era in which many consumers have in the network. In addition, the content of transaction data field order or order processing go beyond the major business activities such as advertising,

advertising, negotiations, contracts, and the pony is also derived. Set of definitions presented above can be concluded that e-commerce application areas much broader than the exchange of goods and services and funds, and in defining and determining the policies should be considered in addition to actual applications also noted its potential applications.

One of the tools necessary to realize and develop e-commerce, electronic banking system that is there along with the global monetary and financial systems of operation and related activities to facilitate e-commerce. In fact we can say that implementing e-commerce, electronic banking is the need to achieve. Use of electronic systems in the world financial institutions and credit was growing rapidly and the number of users of electronic banking services, day by day are increasing. According Research Institute Data Monitor (the analysis leading centers in Europe, banking information) statistics for users of electronic banking systems in eight countries, France, Germany, Italy, Netherlands, Spain, Sweden, Switzerland and England of 5 / 4 million In 1999 about 22 million people in 2004 has reached. In 2005 more than 75 percent of companies operating in developed countries at least one electronic banking services they use.

### Electronic Banking Definition

To understand every phenomenon is necessary to first define the phenomenon and certain variables and factors related to the offering. For electronic banking, offered various explanations, including that it can be pointed to the following definitions:

- Providing access to customers using banking services through safe and without physical presence
- Customers using the Internet to organize, and test or change in their bank accounts or investment banks to provide banking operations and services.
- Offering direct banking services and new and traditional channels to customers via electronic interaction.

In general we can say electronic banking include the ability for employees to increase their speed and efficiency of banking services at branches and processes between and among bank branches around the world and provide hardware and software software to customers who can use

them without physical presence in the bank at any time of day (24 hours) through the communication channels and ensure safe operation to do your own bank. In other words, the use of electronic banking software and advanced technology-based hardware and telecommunications networks for the exchange of resources and financial information in electronic form that can eliminate the need for physical presence in branch banks to be customer.

### 3) E-Banking types with benefits and implementing

Electronic banking branches Based on electronic banking facilities and market needs in the following categories and offers various types that include:

- 1-Internet Banking
- 2 - based mobile banking and its related technologies
- 3- Telephone Banking
- 4- Fax based banking
- 5 - ATM-based banking
- 6 - Banking terminals based on sales
- 7 - E-Branch-based Banking

Electronic Banking Channels For electronic banking services There are several channels, some of them include: personal computers, personal assistance processors, Kiosk, network management, increasing fixed and mobile phones and ATM machines.

Network management method, increasing the banks to communicate with their customers networks that use previously created. Internet in the way personal computers, banks through the creation of a website and introducing it to customers, communicate with them and provide interaction serves. Telephone banking methods, telephone (both fixed line and mobile) communication device with its customers and banks of banking services offered through. Using the ATM machines of banks can a variety

of services such as cash withdrawal, deposit, transfer funds, pay bills and others to offer their customers.

Benefits of Electronic Banking Electronic banking can benefit both customers and financial aspects noted. Customers can see the savings in costs, saving time and access to multiple channels for banking named. From the perspective of financial institutions can create features such as banks and increase the reputation of offering innovative, retain customers despite the shift of banks, creating the opportunity for seeking new customers in target markets, expand geographic scope of activities and establish the full name of competitive conditions range. According to Data Monitor Research Institute of the most important benefits of electronic banking are: focus on new distribution channels, improved customer services and the use of e-commerce strategies. However, the benefits of electronic banking from the perspective of short-term, medium term and the long term can be investigated. Same competition, maintain and attract customers, including electronic banking benefits in the short term (less than a year) are. In the medium term (less than 18 months) benefits of electronic banking are: integration of different channels, data management, extensive range of clients, customers directed toward the appropriate channels with the desired features and cost reduction. Reduce the cost of processing transactions, providing customer service as well as target market and create income, including electronic banking are long-term benefits. Electronic Banking; blade opportunities and threats.

Deployment of electronic banking is one of the important issues of today's modern banking industry needs is considered. Extend the process for banks is also a threat and an opportunity. Universal banks that offer such services fails to be at risk of losing many of their customers and banks that will speed and improve the services offered online (Online) are the opportunities it will that they attract more customers, larger geographic areas they cover and their credibility with customers to increase. The leading banks in electronic banking services, banking channels with different modulation systems will be integrated island. So, information management and customer relationship management and improved customer satisfaction, cost savings and generate more revenue for the banks would bring. But

before attempting to create and implement electronic banking system should be on the feasibility of establishing a bank in the network be evaluated, ie we ensure that the project environment, technical, economic, financial and human resources can be up to . Technical feasibility in relation to availability of hardware, software and knowledge of how to develop electronic banking system requires users to answer. Implementation of electronic banking in countries like our country requires the presence of all cultural backgrounds and economic, political, technological and even as education is a prerequisite. While essentially all the services should also fits the legal structure of traditional and modern society are created to capitalize on these opportunities must justify and increase the chances of success. Prerequisites to review the feasibility of creating electronic banking in terms of technical, economic and human resources with the help of specialists in the areas of IT along with economic and banking economists is essential. On the other hand there is no doubt that one needs to enter global markets and membership in organizations such as WTO, an efficient banking system that can accurately, quickly and with the same level as technology advanced world banks enter these markets and efficient trade for domestic producers and consumers in developed countries to provide world negotiations between buyer and seller, purchase orders, preparation of insurance policy, electronic money transfers to and transportation of goods is based on electronic application. In this context, supplying needed technical infrastructure of electronic banking and the major organs is necessary to accomplish this. For electronic banking, there are many definitions; in an overall sum Perhaps it was defined: the ability of employees to increase performance and provide banking services at branches and between branches and between processes at banks around the world and provide hardware Interesting point is that doing this was expected from reduced congestion within the bank branches and banking affairs easily be done while the recent days we see clearly the crowd to the ATM or terminal the sale has been moved! And software that customers can use them without the need for physical presence in the bank at any time of day (24 hours) through the communication channel banking safely and confidently do your own. In fact, the use of

electronic banking software and advanced technology-based hardware and telecommunications networks for the exchange of resources and financial information in electronic form that can eliminate the need for physical presence in branch banks to be customer.

#### 4) E-Banking history in Iran

History of Electronic Banking in Iran History of electronic banking activities in Iran dates back to 1971. Tehran Stock at the time with possession of between seven to 10 devices to the first chapter experience automatic payment of money only installed on the same branch, were responsible. Late 1981 the country's banks with regard to use of personal computer and feel the need to computerized banking automation banking operations began. Comprehensive banking automation project after studying the various suggestions in the form of comprehensive planning for development activities Informatics bank banking network was presented to officials of the General Assembly approved 72 banks in the form of comprehensive design automation system, officially became a bank . In the same year the central bank, Informatics Services Co. as executive master plan Informatics Organization established banking system. 72 and 73 years to create sparks national switch to electronic banking. In Persian date 2002 regulations governing the collection of information exchange network between the banking center, called accelerated adopted. Thus the Central Bank office in momentum established with the aim of 04/01/2002 providing electronic banking infrastructure was launched. Supreme Council office, according to the proposed Management and Planning Organization in order to achieve e-government a 21-point resolution passed the most important goals of such a bill can be outlined:

- A) access to accurate information and when various parts of the economic, social, and cultural activities through automation
- B) implementing expedite matters and improve the quality of service delivery to people
- C) increase the quality of decisions at various levels
- D) distance services

E) reduce costs, increase efficiency and effectiveness of various sector

And) create a fast and accurate flow of data between devices Executive

### 5) E-Banking comparison in Iran and today world

Electronic banking in the world today, Iran One hundred and eighth Iranian nation of the world is ready for e-government. According to recent business and social circles show the UN that Iran has been ranked 108th with 10 stairs up to the previous report in the fall of 2005, even lower than countries such as Armenia, Kyrgyzstan, Guatemala and Montenegro to be exposed. Although the report points to the Iranian general reports in 2005 in preparation for e-government has had little growth, but within two years of the accelerated realization of e-government in Iran considerably been reduced. Interestingly the vast majority of countries in the time that Iran accelerated towards e-government countries have left the place so unfamiliar and not out of reach.

Considering that usually when some little distance bills are sent to customers and as a result of the payment deadline time is almost close together.

Iran's reasons for the fall can be a very brief three new branches in 2008 Vote investigation during which the system will search Vote Tuesday subsidiaries include the world of web presence, power, infrastructure and population is divided into specialized manpower. Currently the lowest score to the field of e-government of Iran is infrastructure.

One of the striking things is that the percentage of e-government services during 2004 to 2005 nearly doubled, from 15 to 28 servers; while since so far only four previous service was added services.

Obstacles and problems Iran's banking system still relies on pen and paper and computer, or ATM cash machine (ATM cards that customers can bank with certain daily quantities to withdraw money from your account), electronic banking are the highest manifestations.

Most Iranians are not yet capable of electronic

banking through substantial amounts of money to transfer, but other than these cards, efforts by some companies to issue credit cards taken, but so far none has been successful. Credit cards are cards that the cardholder can balance the bank account without using credit, buy goods and services.

### 6) Conclusion

Methodologies in e-banking system implementation and its applications showed in this paper. Comparison between e-banking management systems in Iran and whole world has been shown that for reach to international standards for e-banking implementation in Iran and all of the world, infrastructure planning and management is essential. Providing equipments in this part of banking systems in Iran is now with distance from its global standards and therefore, customer satisfaction in banking transactions models is up to the best preparing of structures which are the most important matter in designing and planning of an e-banking system.

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