UDC 336.71

JEL CLASSIFICATION: G20, G21, G29

# GLOBAL PRACTICE OF ELECTRONIC BANKING AND ITS OBSERVATION WHILE IMPLEMENTING INTO THE UZBEKISTAN

#### **Sharifbek HASANOV**

Intern Researcher, Institute of Forecasting and Macroeconomic Research (IFMR) under the Cabinet of Ministers of the Republic of Uzbekistan E-mail: sh.hasanov@yahoo.com

Анотація. На сьогоднішній день онлайнбанкінг є одним із сучасних інструментів, що дозволяють банкам збільшувати свою прибутковість та сприяють збільшенню клієнтської бази. У даній статті розглядається світова практика використання онлайнбанкінгу, його переваги, потенційні ризики та недоліки, також проведено огляд поточного стану онлайн-банкінгу в Узбекистані. На основі проведеного аналізу наведено пропозиції щодо необхідності подальшого розвитку онлайнбанкінг в практиці Узбекистану. Аннотация. На сегодняшний день онлайн-банкинг является одним из современных инструментов, позволяющих банкам увеличивать свою прибыльность и способствующих увеличению клиентской базы. В данной статье рассматривается мировая практика использования онлайн-банкинга, его преимущества, потенциальные риски и недостатки, также проведен обзор текущего состояния онлайнбанкинга в Узбекистане. На основе проведенного анализа даны предложения о необходимости дальнейшего развития онлайн-банкинг в практике Узбекистана.

Summary. The present age's new upcoming technology trembles each and every action of corporate society and persuade them to cull strategy for having effective development. The online banking is one of the tools of digital universe that magnetises profit to the banks by gaining customer retention. This

article reviews the electronic banking features and its potential risks or drawbacks by analysing global practice which helped to observe its implementation in Uzbekistan. From the both side of coin the article scrutinised confronted challenges and the simplicity while implementation of online banking.

**Ключевые слова:** банковские системы, онлайн-банкинг, электронные банковские услуги (электронный банкинг), интернет-банкинг, устойчивость, рентабельность, новые технологии.

**Ключові слова:** банківські системи, онлайн-банкінг, електронні банківські послуги (електронний банкінг, інтернет-банкінг, стійкість, рентабельність, нові технології.

Key words: banking systems, online banking, e-banking (electronic banking), internet banking, stability, profitability, new technology.

#### 1. Introduction

Over the last few decades, the areas of information and technology have undergone such a huge change, that it has revolutionised the entire concept of communication. Whereas once it was practically impractical to communicate over such large distances in short time, now this has become a way of life. The most important aspect that heralded this change has undoubtedly been the internet. The internet not only has become the hub of all major social activity, with

the vastnumber of users that access its facilities daily, but also in a way has become the tool that allows various financial institutions, businesses and other concerned parties to gauge the level of economic activity that is taking place in a worldwide.

Likewise, banking sector is the leading industry in the development of e-business, since unlike most other industries that still involve traditional transportation of physical goods, where banks can deliver their service through the internet (Thomas & Steenburgh, 2012). Virtual bank is the bank with no branch offices so e-banking system help them to communicate and to provide banking service with their customers by using internet, wirelessly and via telecommunication networks.

E-banking is also called electronic banking which is the automated delivery of new and traditional banking services and products directly to customers through electronic, interactive communication channels. Furthermore, e-banking is systems that enable financial institution's customers to access their ac-

counts, transact businesses on financial product and services through a public or private network. It has access to the bank accounts 24 hours per day and 7 days per week.

In addition, e-banking includes e-financing which provides funds for the business or finances of the project. The financial institutions have loan management system that assists to find appropriate e-financing program for the corporate and private clients, even directing investment for the developing countries to improve their infrastructure.

#### Based USB KEY online Bank Frame

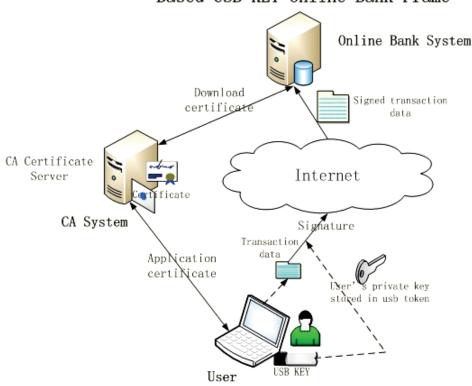


Exhibit 1: How E-Banking works

**Source:** http://www.strategyr.com/Biometrics\_for\_Banking\_and\_Financial\_Services\_Market\_Report.asp#RCC

The global customer base for Internet banking is projected to reach 657,2 million by the year 2015, driven primarily by the increasing adoption of Internet technology and the expanding Internet user base. Rising demand for online banking services from developing economies and the growing acceptance among younger, technologically aware individuals for daily banking needs is anticipated to boost Internet banking market (Jose, 2013).

Furthermore, globally, 423.5 million people accessed online banking sites during April 2012, reach-

ing 28,7 percent of the internet audience. The global reach of banking sites such as Bank of America grew by 2,9 percent over the past 2011. Over 45 percent of the internet audience in North America bank sites, an increase of 1,2 percentage points, making it the top region for these sites. The European Union ranked second by saturation (37,8 percent reach) with Latin America (25,1 percent) rounding up the top three. Asia Pacific saw the strongest growth rate of 5,1 percent to 22,0 percent of the internet audience accessing bank sites in April 2012.

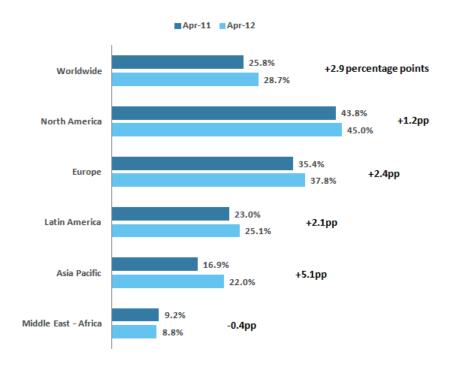


Figure 1: Reach of online banking sites growth by percentage

**Source:** ComScore MMX, April, 2012. 1 in 4 Internet Users Access Banking Sites Globally

## 2. The difference of e-banking and traditional banking

The Internet enhances competition in the banking sector as many non-banking institutions offer their services through Internet channels. Banks also face severe competition on the lending side from global markets.

The banking sector is an integral part of the economy that traditional banks are considered to be financial institutions which deal with financial activities in terms of collecting deposits and giving loans. An e-banking, on the other hand, is consists of several distribution channels that can supply several information about transaction. Similarly, e-banking is the delivery system of banks which provides information and services to customers via different delivery policy that can be used with a variety of digital devices such as via internet accessories, tablets, personal computers, and telephone.

Under the traditional bank payment transactions, clients assume every payment, which is done via a bank, or some other similar organisation concerning any kind of legal affairs (Anscombe, 2012). However, the Internet is a main delivery channel for e-banking and its value to customers and banks is continuously increasing its delivery systems. But, the payment transactions system does not include only cash payments, as an example, when a debtor gives money to a creditor.

Furthermore, formal banking systems differentiate from modern banking system that modernisation and globalisation brought the whole thing online. The both side customers and banks seek the convenience, time saving, cost saving way of operation and wants to build long term relationship. For those conditions, the online banking would be the best approach. However, analytics consider that formal way of banking increases customer's retention develops and maintains trust and commitment. Some experts consider, face-to-face interaction is important to deliver products and services and besides that elder generation has difficulties to adapt to the modern technology, which is beneficial for some banks operating without online platform.

However, people are becoming busier and hence are seeking to carry out transactions within seconds at a time of their convenience. Reduced waiting rime, customers prefer Internet banking instead of traditional banking.

Assessing the clients experience is essential for providing financial services. The result of many researches shows that traditional bank users are not completely satisfied in comparison with online banking system. Traditional bank did not provide sufficient facilities to their clients that they obtained from online bank organisers. Traditional banks may simply be left with payment and settlement business even this could be cast into doubt and customers un-

happiness. Whereas, e-bank consumers are getting several benefits such as ATM, internet banking, credit card and a range of buying or selling option. These factors have a strong and positive effect on customers to accept online banking system. As a result, most of the customers are moving to e-banking system.

### 3. Advantages and Disadvantages of e-banking 3.1. Benefits

The Internet increases banks efficiency by helping them reduce the cost of producing and delivering financial services. Internet banking is a benefit both for the bank and the user. The main benefits of internet banking to the bank is that it is cost savings, it allow the bank to reach new customers, it raises the reputation of the bank and provide better service and satisfaction to customer. People who always rushing between office and the bank everyday and always worried that you are unable to check your company's or own financial status while travelling, internet banking will help you tackle all of this problems.

### 3.1.1. Enhanced Image and Attract New Customers

E-banking is considered as a new marketplace to attract potential customers. E-banking can help to enhance their image of the organisation as a customer focused innovative organisation. Innovation builds up a reputation for the banks that customers learn to trust and comment positively to other people. An attractive banking website with a large portfolio of innovative products will enhance a bank's image.

As consumer is the most important asset of an organisation financial institution provide personalised banking service to cater their needs. It is said that once a consumer moved to electronic banking the risk that the consumer changed it financial institution reduced literally. The research show that 61 % of the respondent claimed that if the bank provides the service that they want, they would prefer to utilise the bank service (Anscombe, 2012). This is usually because switching from bank to another requires much time and effort by individual consumer. Internet banking is attractive because consumers are more satisfied with all the facilities it offer and it is also said to create positive word of mouth. E-banking can take advantages of cross-selling effects to offer personalised services and an additional channel to existing customers and reach new customers.

#### 3.1.2. Cost saving

An online transaction costs the bank much less than a face-to-face interaction with a bank's teller. According to study by "Mobile Banking Research Paper, 2013 the cost per bank transaction for the customer varies from \$ 4 for full service branch trans-

actions, to \$ 3,75 for call center transactions, \$ 0,17 for transaction via the Internet and \$ 0,08 for transaction via mobile. The cost can go down further with the increased use of these facilities. E-banking is the cheapest transaction channel so banks can get cost savings, reduce their branch networks and downsize workforce.

#### 3.1.3. Convenience

Consumers can execute various banking transactions such as bill paying, check ordering, account managing, money transferring and shopping in any location with an internet connection, at any time, without leaving home.

#### 3.1.4. Accessibility

E-banking has the potential to provide customers with accessible financial services 24 hours a day, 7 days a week and 365 days a year because it does not requires a "bricks and mortar" infrastructure that is operated by the staff where consumers can access various banking services electronically.

#### 3.1.5. Reliability

Reliability is one of the significant service quality dimensions of e-banking service quality. E-banking has developed enormously over the past several years and will persist to develop as financial institutions continue to strive to permit customers to pay bills, complete money transfers and access critical information online. An essential concern of financial institutions is verifying customers logging onto their online banking service.

#### 3.1.6. Customer Satisfaction & Retention

In the e-banking environment, banks can use collaborative and interactive way to offer recommendations based on past transaction profile and customise the services to meet all their needs. Thus, customer can have full access to relevant financial information, do more self-service for themselves and no need to rely on the staff at the branch office. Consequently, e-banking increases customer's loyalty and satisfaction. Also, it helps bank reduce the cost and increase customer convenience. The young usage about the online banking service will be good affect for the trend of e-banking development in the future.

#### 3.2. Drawbacks

In comparison, e-banking also has some drawbacks that may be referred as luck of trust, bank servers may go down, and other technical problems.

Several barriers exist towards adoption of Internet based banking services. The first barrier would be access to the Internet to be able to use the service. Beyond that, this delivery channel also has an implied learning curve for consumers. The persistent complaint from non-users of not being able to connect without a face to face interaction, such as in a branch poses a hurdle. Furthermore, security issues plague the consumer's mind which is even highlighted in the national and international media.

Some customers do not want to use e-banking services as they find it difficult to know how to use a computer. A wrong click causing monetary losses makes them afraid of using e-banking rather than traditional banking. Getting familiar with the bank's website requires much time to read the instruction.

#### 3.2.1. E-banking risk

The central use of new technology to provide e-banking services has important implications on banks operational risk. This new technology may require changes in procedures supervisors use to ensure that banks properly manage their online banking risks in the areas of security, data confidentiality, data and system integrity, system availability and outsourcing (Shah, 2012). Although there is risk in using any of these remote access devices (such as personal computers, Kiosks, mobile phones etc.) for financial services, those that involve internet access typically pose the greatest risk. This is because the internet is such a widely accessible and public network.

#### 3.2.2. Challenges and transactional risk

A major challenge for Internet banking is its growing popularity and easy accessibility, which attracts fraudsters and enhances risk of online theft. Also, there are various elements that contribute to operational and transactional risks namely, management processes, architecture, integrity, security, availability.

Management processes includes management oversight, inadequate audit checks. Architecture includes poor development standards, wrong configuration of hardware/software. Integrity refers to mistakes made by bank officers and errors of judgment. Security issues include inadequate password administration, breach of policy and viruses, malware, phishing. Availability refers to the failure to backup.

#### 3.2.3 Legal risk

Legal risk is arises when the customer, the bank and the transaction are in more than one country. It may lead to loss reputation and reduce business opportunities. Bank need to carefully understand existing laws as they apply to internet banking. The need to keep customer private data and look for customer's permission before sharing the data, to avoid compliance risk. Most of the customers, they are very concerned about the privacy of their data and banks need to be seen as reliable guardians of such data.

#### 3.2.4. Credit risk

Credit risk is the risk to earning arising from a

borrower's failure to meet the terms of credit contract with the bank that bank could not identify the client over the internet.

#### 3.2.5. Strategic risk

Strategic risk is recent and future risk to the bank earnings and capital arising from poor business decision or improper business decision. If the managers make a poor e-baking planning and investment decisions it will affect and increase a financial institutions strategic risk (Guardian, 2012).

#### 3.2.6. Reputational risk

Poor service or poor internet banking services can damage banks reputation. Reputation risk arises from negative public opinion. Customers are less forgiving of any problems like bad service and poor response (FSA, 2012).

Consequently, the need for advanced and effective security measures assumes significance for smooth conduct of Internet banking operations. Despite the potential drawbacks in the form of high cost and security concerns, banks are using Internet services to benefit from the digital revolution.

# 4. Worldwide Implementation of Online banking

The dominant banks experienced the expediency and transparency of providing online services that made other financial institutions to turn into e-banking.

According Gonzales & Guerrero, (2004) internet banking has encountered a rise in demand of cross-border payment transactions including small amounts. UK banks keep on developing and introducing new internet banking service to satisfy their consumers. By June 1999 the UK and eight of the European countries namely France, Portugal, Germany, Spain, Switzerland, Luxembourg, Holland and Scandinavia has become the leading nation in providing internet banking.

Where, Bank of China has given the green light to introduce internet banking in 1996 and in 1997 China Merchant Bank was the first to start internet banking and telephone banking services. By the end of 2002, 3,5 million Renminbi (RMB) customers has opened internet banking account with the major commercial bank in China with a transaction exceeding 5 trillion RMB. In 2004 the number of consumer using internet banking was about 10 million. Internet banking developed quickly to such extent in 2007 it represent about 245,5 trillion RMB of the transaction in China.

In USA bank hesitated to adopt internet banking in the beginning but slowly turned to use it. Bank of America and Citibank were among the first bank to implement electronic banking in USA. In this way banks were able to provide service to their consumer via their personal computers. By introduction of online banking many banks were formed focusing only on internet banking and to increase effectiveness of online banking some public banks provided free internet connections and telephone services.

The readiness to use electronic banking is linked to socioeconomic and demographic characteristics (such as income and age) and perceptions of specific technologies. Online banking most likely be used by wealthy households, college degree holders, and suburb dwellers (Wendell, 2004). The statistics illustrates that 80 % of small businesses and groceries start us-

ing electronic banking from 2004, where this tendency rocketed and now businesses in the UK could not visualise functioning without online banking. Therefore dominant banks in to the UK start providing competitive online services to the customers. For example, Lloyds TSB is one of the six largest banks in the UK and holds 23 % domestic market share in SME (small & medium sized enterprise) banking and 7 % more shares in current account. The Research shows that the using of online banking depends on services provided whether it is wide or small range. The pie chart below displays the list of e-banking services offered in to the developed countries.

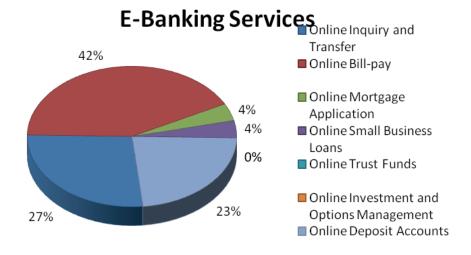


Figure 2: List of Online banking services currently provided

**Source**: Authors outcome by surveymonkey.com

The result of chart produces that most shares of e-banking services, possessed by bill-payment, small business loans and online bank transfers where other services are frost thus it is clear that even industrialised countries could not effort to provide full

e-banking services which confronted by overcoming challenges.

Both developed and developing countries face some obstacles to provide the full online banking services that are formed in to the following table.

Technological considerations in e-banking	Yes (%)	No (%)	Total (%)
Deficiency of IT Professionals Difficulty in Recruiting Qualified Professionals Government Support Technological Constraints	78	22	100
	57	43	100
	50	50	100
	28	72	100

**Source:** Outcome by research results prepared by surveymonkey.com

#### 5. Implementation of e-banking into Uzbekistan

Nowadays, Uzbekistan is a multi sector economy and technology development based on the presence of many technological inventions. Many banks in Uzbekistan are also offering wide range of online services. It includes checking the current accounts, online bill payment, remittances and others.

The use of modern technologies to expand the financial services and develop the retail-banking sector by applying modern way of delivery plays greater role for Uzbekistan to progress further in a competitive economic environment. Primarily electronic banking service introduced only for corporate clients in Uzbekistan in 2007 where presently some commercial banks are already delivering online services for individuals. Moreover, the high number of internet usage in Uzbekistan motivates banks to contemplate seriously about providing their banking services distantly. According to "UZACI" in the beginning of 2011 amount of internet users reached to 7.4mln

people where this result rocketed and turn into 9,815 mln users in 2012. As encouraging the Uzbekistan President's decree № PP-1438 dated in 26.11.2010, further reforming in banking sector and improving stability of the financial system of Uzbekistan to be able to attain high international tendency levels by switching full and constant electronic banking service to both corporate and private customers until the end of 2015.

To satisfy customers' needs and follow the decree of the President, most of the banks established mobile banking service that allows customers to access information about current account balance and report about money flow in to their account. As a result between 2011 and 2013 mobile banking developed actively that its users encompassed 65 percent of whole e-banking clients and volume of customers continue to grow. For the evidence, the comparison and dynamic of e-banking customers' amount is accurately drawn below.

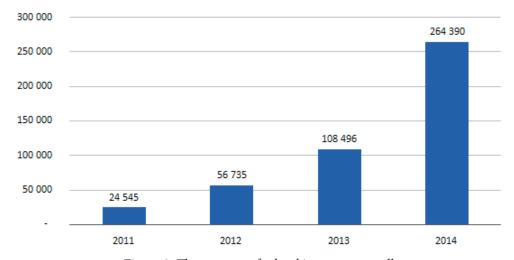


Figure 3: The amount of e-banking users overall

**Source:** http://www.cbu.uz/eng/section/payment\_system/remote\_banking.

The graph represents that in 2011 the distance users of bank were 24 545 whereas the figure is doubled in 2012 by indicating 56 735 and continue increasing significantly for following years. In 2013 the tendency rocketed comparing to the previous years where it

is expecting to be above 300 000 at the end of 2014. As a result, it precisely indicates the growth and popularity of e-banking service among customers and that dynamic progress would be proof of substantial evaluation of e-banking in Uzbekistan for the future.



Figure 4: Types of system that used by distant banking users

**Source:** http://www.cbu.uz/eng/section/payment\_system/remote\_banking.

In comparison, types offered both services specifically online banking and SMS banking grew considerably. At the beginning of 2014, mobile banking or SMS banking sketch incredibly high figure as 207 851 clients whereas internet banking and ATM users were about four times lower and formed only 56 539 clients. It is also important to note that the further development of banking business, upgrading of product complexity and continuously altering of customers' needs brings customers to face with e-banking. Besides, prospect of E-banking depends on customers, therefore, specific understanding on customers' perceived requirements and meeting their demands and expectations is becoming an intricate challenge. To understand customers' needs it is important providing requested information promptly and to build customer relationship management (CRM) system which is designed to increase profitability and to reduce cost by setting customer advocacy, satisfaction and loyalty. All of this pours additional resources in to financial sector and increases the level of financial intermediation of the country and in the end a stable long-term growth.

#### 6. Conclusion

The eminence quality and wide range services that offered by domestic banks conduct to espouse the level of world standards. Therefore domestic banks in Uzbekistan have begun to pay attention to individuals by managing relationship with customers and to develop online banking further, which

benefits both the public and the banks. Besides the speed and first-class service, bank's operations management is critical to the success of the online banking. As mentioned above socio-economic and demographic factors play an important role in determining adoption of Internet as a channel therefore awareness of the existence of the issues is extremely useful for banks to reform in e-banking further and to gain more power in competitive financial sector.

#### 7. Recommendations

Improvements of the system infrastructure linked to:

- advance the system for credit cards and other forms of electronic transaction;
  - build-up transaction reporting services;
  - improve payment system;
  - improve telecommunications infrastructure

Once the infrastructure is placed properly, then banks can push customers to use new delivery channels by giving guarantee on security where to tackle above mentioned issues and to ease the challenges, bank should

- Make more online tutorial to avoid fraud and present what kind of security measures are applied to store personal data, as well as customers should help to the bank by managing their accounts.
- React to customer complains in effective and efficient way.
- Sent to customers annual review of online transactions.

- Indicate security issues and privacy statement clearly on its website.
- Explain to the customers what private data collects for doing online banking and how it utilises.

Do some researches to gain customers trust and tell them if their information shared with third parties.

#### Reference:

- 1. 1. Anscombe N. (2012). E-reader revolution in the UK. Engineering & Technology, 7 (2), 68-71.
- 2. 2. Decree of the President of the Republic of Uzbekistan dated 26.11.2010, № PP-1438 "On priorities for further reform and improve the stability of the financial and banking system in 2011-2015 and to achieve high international rating indicators".
- 3. E banking: risks and responses. 2012. E banking: risks and responses. [ONLINE] Available at: http://www.fsa.gov.uk/library/communication/speeches/2000/sp46.shtml. [Accessed 14 march 2013].
- 4. Gonzales, M. and Guerrero, M (2004), "New competitors in banking services", Journal of Financial Services Marketing, Vol. 9, No. 2, pp. 126-137.
- 5. Jose S. 2013, Internet Banking: A Global Strategic Business Report GIA.

- 6. Mahmood Shah, 2012. E-Banking Management: Issues, Solutions, and Strategies. 1 Edition. Information Science Reference.
- 7. The disadvantages of Internet banking | Money | guardian.co.uk.2012. The disadvantages of Internet banking | Money | guardian.co.uk. [ONLINE] Available at: http://www.guardian.co.uk/money/2000/dec/06/consumernews.internetphonesbroadband1. [Accessed 14 march 2013].
- 8. Thomas & Steenburgh. Introduction to E-commerce 2012. Journal of Marketing 76396-111.
- 9. Wendel, C. (2004) "How to move customers out of branches", American Banker, Vol. 169, No. 70, pp. 15.