

ELECTRONIC BANKING – ADVANTAGES FOR FINANCIAL SERVICES DELIVERY

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E-banking is a fully automatic service for traditionally banking customer's products based on information technology platforms. E-banking services provide customer access to accounts, the ability to move their money between different accounts or making payments via e-channels.

The advantages generated by this services have determined an accelerate developing of this industry over the entire world. This paper examines some of the advantages of electronic banking products together with the characteristic management issues generated by the implementation of this new channel for financial services delivery.

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1. Introduction

Many specialized works define e-banking as a modern fully automatic service which delivers traditional banking products to customers with the help of information technology platforms and interactive communication channels.

2. Body of paper

Other works define e-banking as the automatic supply of new and traditional banking products and services directly to customers, using interactive channels of electronic communication. E-banking includes systems which allow customers, whether individuals or corporations, to access accounts, to close deals or obtain information about products and services through a public or private network, including Internet.

E-banking relies heavily on information and communication technology (ICT) to achieve its promise for 24 hours availability, low error rates and quicker delivery of financial services

Initially, e-banking was limited to phone banking operations and remote banking, but the range of services has increased thanks to the technological advances, the spread of online banking has coincided with the spread of high-speed broad and connections and the increasing maturation of the internet user population

One important factor in e-banking growth is that banks have discovered the benefits of e-banking and have become keener to offer it as an option to costumers.

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Today, customers can use Internet Banking or Mobile Banking services. Remote banking consists of electronic transactions between customers and their bank. These transactions are operated through a closed communication network using specific software provided by the bank. By these means, clients establish relations with their bank without being physically present in its premises. E-banking allows customers to access banking services through alternative distribution channels which focus on the customers' operational needs. These non-conventional channels use "electronic currency" and offer advantages which have made customers as well as banks use them increasingly:

- permanent technological innovation;
- fast and cheap communication with the existing clients;
- lower processing cost than conventional channels;
- serving a greater number of customers through the same physical infrastructure of bank branches;
- increased expectations from an ever increasing number of customers who are also better educated with respect to the use of these channels, in most cases;
- possible introduction of new commissionable services;
- identifying profitable clients and categories of clients;
- customized offers for an ever increasing number of clients selected from the data bases.

Technological advances lead to the development and implementation of new services [1] which complete the range of traditional ones. These new services are described below.

TELES Services allow customers to access the bank database and to do various operations through virtual bank branches. These services can be:

- Simple, allowing customers only to get information about their account status, or
- Complex, allowing customers to get information about their account status, to make payments or transfers between accounts, and to ask bank forms.

PHONE BANKING services use a rented telephone line (dedicated line), a connection convention signed by the customer, a password only known by the client and a personal code allowing access to the data.

HOME BANKING services allow access to the bank accounts through a software module which is installed on the customer's PC and accesses the server connected to the bank's database. Access is possible thanks to a customer code, a password only known by the customer and an electronic signature. There are several security levels (customers' access to the application, access to the server and access to payments). Customers can check their accounts, do bank transfers, and obtain financial and banking information (exchange rates, interest rates, etc.). Home banking is powerful software located in one or more computers at the customers' headquarters. As authorized users, customers access a Multicash server connected to the bank's databases. From the customers' point of view, the advantages of home banking are:

- comfort: access to the bank 24 hours a days, 7 days a week, without depending on the bank's schedule;
- flexibility: adaptability to the client's needs;
- accessibility: at present, customers can access bank servers by dial-up connection or through the web; bank statements are easy to access;
- safety: transactions are made in the best safety conditions;
- low costs: in order to reduce the number of clients who go to the bank desks, there are fee reductions (10-50% of the ordinary fees) for the electronic payments;
- time saving and reduced expenses (no more transportation to and from the bank building);
- free installation, training and technical assistance;
- interoperability: it is possible to import and export databases for a more efficient management of the customers' own accounting applications;

The disadvantages are:

- additional costs (subscription and connection to the server);
- dependence on the computer where the client software has been installed;
- offline connection with the bank; data can only be updated upon connection to the bank server; data are only updated once a day or every hour.
- an expert must go install and configure the client module;

INTERNET BANKING services allow customers to access their accounts online. Customers connect to a bank portal and thus can check their accounts and do bank transfers from any computer connected to the Internet. For authentication, a customer code and a password are provided.

Internet technology can make significant contribution to a company's value chain, provides a powerful platform for corporations to market and advertise their products and services.

It is important also to mention some of the problems of internet medium: overload, security & privacy problems, rapid technology change, high initially cost and uncertainly about information reliability.

Internet banking is a service which concerns individual and companies who are customers of a certain bank and have access to the Internet. This service allows them to access their bank accounts through a web browser connected to the site of the bank. As there is no need for special software, the only costs customers pay are the Internet connection and the fees.

In order to insure a high level of security, this service is developed on an infrastructure complying with the international information security standards. From the moment the authorized client is connected, any data exchange takes place under a secured protocol, SSL3, which uses a 128 bytes encryption key (the most powerful available for the time being) and a DES algorithm. Moreover, as this service can be provided and guaranteed by VeriSign, clients can easily recognize and check the authenticity of the site.

Currently, there are many Internet banking solutions on the market. They have been usually developed by specialized software companies or in house, due to the specificity for the data security. This service is provided to individuals, physical persons, and small and medium enterprises.

Internet banking is used for the following operations:

- checking bank statements (remainder, history, transactions for all the accounts);
- issuing payment authorizations in any foreign currency (between banks or within the same bank);
- remainder transfers from the current account to the card accounts of the same individual;
- creating and annulling deposits;
- daily information about currency exchanges and interest rates;
- currency exchange and currency exchange negotiations
- securing transaction by an encryption key;
- modularity: use of various customer profiles and limitation of the operation in compliance with the bank policy;
- possibility to pay local taxes and duties (at banks which have implemented the e-Tax service)

Customers have the following advantages:

- comfort – access to the bank 24 hours a days, 7 days a week, without depending on the bank's schedule;
- low costs – in order to reduce the number of clients who go to the bank desks, there are fee reductions (10-50% of the ordinary fees) for the electronic payments;
- time saving and reduced expenses (no more transportation to and from the bank)

building);

- safety – transactions take place in the best security conditions as customers use a user name, a password, and an encrypted channel;
- accessibility – online connection with the bank from any Internet connected computer; simple and ergonomic menu leading the client directly to the operation he/she wants to perform;

One disadvantage concerns the additional costs of subscription and Internet connection.

MOBILE BANKING services can be described as the newest services in electronic banking. They are performed using mobile phones or other mobile devices. Mobile banking services are provided through a convention of connection to these services. Access to the database is made through a password and a customer code. Customers can check their balance and make adjustments between accounts.

The potential for providing mobile banking services may be far greater than services through typical desktop access, as there are several times more mobile phone users than online PC users.

There are two main types of technology available for use in mobile banking: WAP (Wireless Application Protocol) and WIG (Wireless Internet Gateway).

The first one is an application environment and set of communication protocols for wireless devices built to enable manufacturer, vendor and platform independent access to the internet and advanced telephony services.

The other one (WIG) is a SMS-based service in which a menu of banking services options is downloaded from the bank to the phone. This enables the user to browse to all bank services options and through their accounts and to conduct specific tasks.

The main problems in developing mobile banking are:

- internet connectivity costs;
- difficult user interface;;
- lack of awareness amongst customers;
- limitation in functionality of mobile devices;
- accessibility issues;
- security concerns;
- organizational changes;
- small number of choices;
- technology overload;

Mobile-banking can be defined also as an account management tool which can be accessed through the mobile phone. This modern service appeared on the market as an alternative to electronic banking and internet banking services and it facilitates access to accounts and banking operations through the mobile phone. This service can be easily used whether in the home country or abroad. If a client is abroad and wants to access his/her bank account, that can be done through the mobile phone operator. The bank is accessed by Internet (through the WAP service which allows reading Internet pages directly on the mobile phone display) or by SMS through the local operators.

Mobile banking is a fast, secure and efficient service. It offers up-to-date information on the status of the clients' bank accounts, whatever the location of clients or the schedule of the bank.

From the customers' perspective, mobile banking presents the following advantages and disadvantages:

- access to the bank 24 hours a day, 7 days a week, through the mobile phone;
- smaller fees for electronic payments than for traditional payments;
- reduced transportation costs and time saving;
- offline link to the bank;
- Additional costs for the subscription and the connection to a GSM provider.

CALL CENTER services are provided by a team which performs a homogeneous set of interactions with customers according to procedures under control. Customers can benefit from technical assistance by experts and can check and make transfer between accounts.

A rapid development of e-banking requires the increase of the customers' base by attracting new categories of clients with a new behavior and which are very open to the latest technological advances. At present, there is an increased competition in the banking system because of many banks

with small territorial network entering the market and offering new products competing with traditional ones.

For the future it is expected to have a decrease in the banks' operational costs by reducing the volume of "traditional" operations, customers' transactions costs (in 2003, in the US, a transaction operated at the bank's desk would cost almost 1\$, while the same transaction operated online would cost 0,1 \$), and the number of operations requiring the customers' presence in the bank's buildings.

The Call-Center is an assistance tool for the bank accounts management through the phone. In the broad sense, a call-center is a functional entity that exists within a company and is able to communicate by phone and electronically in real time.

E-banking management problematic issues

The implementation of e-banking services is far from being well known and is encountering a numerous difficulties and barriers

The Internet as the unique channel for services delivery is totally different from the classic branches network or telephone banking. That's way it brings up its own challenges that require unique and innovative solutions.

The most common problematic issues in e-banking implementation and management include:

- Traditional structures that are unable to respond to the agility required for the e-banking;
- Resistance from the employees;
- Legacy systems;
- Security issues;
- Regulatory issues which are more complex than traditional ones;
- Project management problems

Further more it is necessary to identify the technology related problems like:

- IT and Telecommunication issues;
- Capacity (or scalability) problems;
- Availability and System Integration;
- Operational Functionality of Web Site Design;

together with management problems like:

- Regulatory issues;
- Information Management;
- Outsourcing problems ;
- Security;
- Loss of Personal Relationship;
- Organizational structure and resistance;
- Trust issues;
- Acceptance issues;
- Clash with other service delivery channels;
- Change Management issues;
- Ethical issues.

3. Conclusion

Organizations that have successfully adopted e-banking demonstrate that a combination of a strong customer focus, performance measures and strategic planning process can be easily incorporated. All these organizations are able to measure the quality of their services and products and become flexible enough to quickly respond to their customer request and market changes

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