**EpSBS** 



ISSN: 2357-1330

http://dx.doi.org/10.15405/epsbs.2017.01.02.24

### 5<sup>th</sup> icCSBs 2017

# The Annual International Conference on Cognitive-Social, and Behavioural Sciences

## THE BEHAVIOR OF CUSTOMERS REGARDING E-BANKING AND ITS IMPACT ON THE BANKING SECTOR

Simona Rus (a), Marian Mocan (b), Larisa Ivascu (c)\*, Nicoleta Trandafir (d)
\*Corresponding author

- (a) Politehnica University of Timisoara, Faculty of Management in Production and Transportation, Romania, simona rus@yahoo.com
- (b) Politehnica University of Timisoara, Faculty of Management in Production and Transportation, Romania, marianmocan@upt.ro
- (c) Politehnica University of Timisoara, Faculty of Management in Production and Transportation, Romania, larisa.ivascu@upt.ro
- (d) Politehnica University of Timisoara, Faculty of Management in Production and Transportation, Romania, nicoletatrandafir@upt.ro

#### Abstract

Thanks to technological advances and customer desires, the banking sector has developed a number of effective tools to satisfy the customer. In this respect, this refers to the customers' use of quick service and especially the online ones. Online services help customers perform a variety of banking transactions using the Internet while being remote. However, a number of customers have reservations when using these services. They are not willing to use the Internet to access and perform a number of banking transactions. They prefer to use standard banking services, not involving Internet use and exposure to a number of risks in this respect. So the goal of this research is to identify and examine the factors that influence customer satisfaction to Internet banking using market research through investigation. Among the most important factors influencing satisfaction with Internet banking are security, speed, quality of service and privacy.

© 2017 Published by Future Academy www.FutureAcademy.org.UK

Keywords: Customer satisfaction, e-service quality, technology.



#### 1. Introduction

The banking industry in very well represented in Romanian business environment. Banking performance depends on the speed of access to Internet, information technology and customer characteristics (Nupur, 2010; Ahanger, 2011; Ling et al., 2016). On the other hand the performance of ebanking functions is influenced by the bank's ability to adapt to technological developments and by the skills of employees (Ling et al., 2016). Employee skills contribute to the success of the organization's activity (Chianchana, & Dvorjaková, 2016). The paper focuses on the e-banking services of the banks and the research of customer behaviour towards such services. The main categories of e-banking services are described below. The characteristics and definitions of e-banking services are:

- Online Banking Services (hereinafter "OBS") is the service provided to customers by a bank through the Internet Banking and / or Mobile Banking to facilitate carrying out approved bank operations, check different situations, and view balances using Internet service as a means of communication
- Internet Banking Services (hereinafter "IBS") is an OBS tool type. Clients use several applications with availability 24 hours / 7 days a week by visiting an address in the cloud, using a personal computer through which they perform a series of remote banking operations that are supported by the Bank.
- Mobile Banking Services (hereinafter referred to as "MBS") is an OBS tool type. Clients use several applications with availability 24 hours / 7 days a week by visiting an address in the cloud using a smartphone / tablet through which they perform a series of remote banking operations that are supported by the Bank.

E-banking services have gained many customers lately, similar to financial intermediation, by using the Internet (Ahanger, 2011). Technological advances and innovation in the banking sector contributed to the development of innovative products and the raising of service quality for customer satisfaction (Ahmad, et.al, 2011; Munusamy et al., 2010).

The paper presents the main products and services of e-banking in Romania and highlights existing customer behaviour characteristics towards e-banking. To present the main products, e-banking sites have been used and each bank products in this direction were identified. Customer characteristics were identified through questionnaires to customers who use banking services.

#### 2. Problem Statement

The technological developments contribute to the emergence of many products involving technology. The complexity in using the services is different from one service to another. A number of customers have difficulty in using or having the required devices. Therefore the customer behaviour is based on factors that influence the buyer (Nawi et al, 2013; Ozatac et al., 2016).

The purpose of this paper is to present the e-banking services incurred as a result of technological

advances and to investigate the impact of e-Banking on customer behaviour. The technological advance

has contributed to the development of innovative products adapted to technological advances that address

different customer segments based on the bank's strategy.

To satisfy the needs and desires of customers more e-banking products have been developed

(Szopiński, 2016). These products have contributed to the emergence of various products that facilitate a

range of activities that customers can do at home or at work.

3. Research Questions

What is the behaviour of the customers in front of e-banking and what are their wishes and what is

the impact from banking performance prospects of e-banking services? This is one of the questions which

help to strengthen the present paper.

From the electronic perspective the categories of products and services are: ATMs, payment and

transactions robots, Internet banking and Mobile banking. Internet banking and mobile banking are

subordinate products to online banking (Hoehe et al, 2012; Santouridis, & Kyritsi, 2014). All these

services are more widely used by customers globally. Technological advance is felt in Romania, a range

of products tailored to customer needs is being developed. Both needs, wishes and customer behaviour

are concepts in marketing and research leading to factors which influence customer. These factors

contribute to the development of future products and help maintain the performance of the banking sector

and banks in times of financial instability

4. Purpose of the Study

Technological evolution has determined a more intense development of banking services. This

development aims to satisfy customer needs and wishes, who are using various tools for accessing

banking facilities. The paper evaluates the behaviour of customers towards e-banking. The factors that are

influencing the customers help develop future services.

5. Research Methods

The questionnaire survey method was used to obtain data for this research. The questionnaires

were applied to customers of commercial banks in Romania. The data obtained in Romania were

compared with the existing website data. Finally the factors that influence the behaviour of users of e-

banking are presented.

To identify the factors influencing customer behaviour in the face of e-banking market research

survey was used. The questionnaire was used as a tool and it was divided into several parts. This

questionnaire was applied in Romania on online bank customers using free platforms and also face to

face.

234

To identify the products and services of e-banking in Romania an analysis of websites of commercial banks in Romania was used. The online banking services in each commercial bank were noted after a careful analysis.

#### 5.1. The analysis of e-banking products

To systematize and analyse data relating to products and services of e-banking public websites of commercial banks have been used. The services held by each were analysed and evaluated and systematized as a table in the results section.

#### 5.2. The questionnaire structure

In structuring the questionnaire, the factors influencing the customer were considered (internal factors, external factors and marketing). The questionnaire was divided into three main sections:

- The quality and performance of services: questions relate to technological advances, how the services had responded to customer needs, speed, capacity of adaptability to the environment and ease of use.
- Security and Safety: refer to safety when using the services provided for the customer, and accounts and transactions security refers to the impossibility of compromising customer data.
- Personal factors: depend on client and contributes to the attitude that the customer has towards e-banking. This includes personal factors, environmental factors and factors developed by marketing activities.

A number of studies have been conducted in the field of e-banking services. These studies were conducted in different countries and also differences between culture and technological development have been investigated. In Romania, the studies are reduced, addressing issues related to personal customer factors that influence e-banking services.

The following section presents some results of other research and then the current research results is presented in a structured and balanced way..

#### 6. Findings

The study pointed out that the adoption of e-banking has had a positive effect on customers, especially from the perspectives of: accessibility, comfort, content, speed, taxes, design and time. A number of national and global studies show the e-banking results in this direction. In 2010, Yoon stresses that speed, design, structuring of information, security and call centre service had a significant effect on a low or high customer satisfaction. Hu and Liao in 2011, studied five national banks and found the most important factors for evaluating the quality of the electronic internet banking: these factors include security and speed of service. In 2014, Hanafizadeh et al. showed that efficiency, reliability, performance, security, site aesthetics, responsiveness and ease of use of electronic services are defining factors for banking services in Iran.

In Romania, the results follow the same direction and factors such as those listed above. There are differences and different factors or unidentified in previous studies. The level of development of the country contributes to the factors influencing the customer faced with e-banking services.

#### 6.1. Presentation of e-banking services in Romania

The situation of e-banking products in commercial banks in Romania is presented in the table below Table 1. It is noted that each bank holds Internet Banking services, except the ones that offer products especially for housing. The results presented in Table 01 are public data collected and analysed according to the information displayed on each banks site.

Table 01. E-banking services for the banking sector of Romania

| No. | Bank  | Internet Banking            | Mobile banking          |
|-----|---|-----------------------------|-------------------------|
| 1   | ABN AMRO Bank Romania                                 | ABN AMRO NetBanking,        | Office Net              |
|     |   | Access Online-Romania       |                         |
| 2   | Alpha Bank Romania                                    | Alpha Click                 | Mobile Banking          |
| 3   | Romanian Credit and Investment Bank                   | e-xim banking/BRCI iBanking | mbanking                |
| 4   | Commercial Bank Carpatica                             | BCC e-SMART                 |                         |
| 5   | Railway Commercial Bank                               | Internet Banking            | BCF Mobile              |
| 6   | Commercial Intesa Sanpaolo Bank Romania               | I- B@nk                     | -                       |
| 7   | Romanian Commercial Bank (RCB, in Romanian            | MultiCash BCR               | 24 Banking              |
|     | BCR)  | 24 Banking                  |                         |
| 8   | BCR Bank for Housing                                  | -                           | -                       |
| 9   | Export-Import Eximbank Romania                        | Online banking              | -                       |
| 10  | Romanian Bank - Member of the National Bank of Greece | e-bancamea                  | e-bancamea              |
| 11  | Transilvania Bank                                     | BT24                        | BT24 mobile             |
| 12  | Bancpost  | Fastbanking                 | Fastmobile              |
| 13  | Bank Leumi Romania                                    | Leumi Online                | Leumi Mobile            |
| 14  | BRD - Groupe Société Générale                         | MyBRD                       | Mobile Banking          |
| 15  | CEC Bank  | Cec Online                  | Mobile Banking          |
| 16  | Crédit Agricole Bank Romania                          | I-Conect                    | Mobile Banking          |
| 17  | Credit Europe Bank (România)                          | Credit Europe Net           | -                       |
| 18  | Garanti Bank  | Garanti Online              | Mobile Banking          |
| 19  | Idea Bank   | IBank                       | -                       |
| 20  | Libra Internet Bank                                   | Internet Banking            | Libra Mobile<br>Banking |
| 21  | Marfin Bank   | Ebanking                    | -                       |
| 22  | OTP Bank Romania                                      | Internet Banking            | Mobile Banking          |
| 23  | Patria Bank   | Patria Online               | Mobile Banking          |
| 24  | Piraeus Bank Romania                                  | Winbank                     | Winbank                 |
| 25  | Porsche Bank România                                  | Internet Banking            | -                       |
|     |   |                             |                         |

eISSN: 2357-1330

| 26 | ProCredit Bank              | ProB@nking        | mBanker                    |
|----|-----------------------------|-------------------|----------------------------|
| 27 | Raiffeisen Bank             | Raiffeisen Online | Raiffeisen Smart<br>Mobile |
| 28 | Raiffeisen Bank for Housing | -                 | -                          |
| 29 | UniCredit Bank              | OnlineBanking     | Mobile Banking             |

#### 6.2. Analyses of data from the market research

Following the evaluation and analysis of data by applying questionnaire survey on 400 respondents a number of factors that influence customer behaviour have been outlined. For each cross section of the questionnaire key factors influencing the client are presented. All these questionnaires were applied in Romania, on customers that use banking services.

In terms of *quality and performance* the following results were obtained on each analysed key factor:

- The efficiency and reliability of services: 83% of respondents consider efficiency as an important factor in the use of e-banking. Efficiency leads to improved results also within the banks.
- Speed: over 95% of respondents consider this factor as one of the most motivating and one that helps reducing costs for the customer (hours off work, traveling by vehicle, et).
- Ease of use; only 43% believe that these e-banking services are easy to use. The majority of respondents believes that these e-banking services are continually evolving, and in Romania they are still in the launch period or maximum growth.
- Quality of service: 65% of respondents are satisfied with the results obtained from the use of e-banking. Quality of service is the result of comparison between the expectations of customers before using the service and their experience of actual use.
- Web interface: the interface that each service of mobile banking or Internet banking holds influences the customer's decision to use these services or not. As this involves banking transactions, money supply, this leads to the development of a sensitivity to customers. Therefore, 97% of respondents considered the interface a key service in use. If a bank has a less friendly and difficult interface to use, customers refuse to use the service.

When it comes to e-banking services, a sensitive issue is the *security and safety*. From the questionnaire the following results are yielded:

- Safety concerns certainty that a customer has when using a banking product. All responders considers safety as a very important decision maker in this activity.
- Security for accounts and transactions refers to the impossibility of compromise customer data. This is seen as a form of protection to ensure the safety of customers and prevent hackers from invading customer privacy. All responders, 100% believe that security is the most important problem in the use of online banking. Confidentiality is another important element that always develops the hope that banks can protect customers' personal and financial information when they make transactions through Internet banking.

Each client is influenced by a number of factors in the *purchase or use*. For the e-banking services, personal factors are complex. The factors are divided into 3 main categories:

- Customer Dependency: 23% of respondents consider the temperament, attitude and personality as factors influencing the use of e-banking. About 35% consider family and friends to have an impact on their decision to use. Over 75% believe that the level of training and competencies as important factors in the use of e-banking.
- Environmental factors: Over 34% believe political and legal environments as factors influencing them in using online services.
- Marketing activities factors: even if the promotion us intense, it does not have a positive impact on customers. Over 61% consider advertising and social networking as unattractive and without impact on them.

#### 7. Conclusion

Technology contributes to attracting new clients in the banking system. Aligning banking system to the requirements of the environment, and also to clients' needs and wishes, is helping keeping banks on the market during this period of economic instability. Technological advances led to the emergence of some utilization barriers mainly due to data security.

#### References

- Ahanger, R. G. (2011). An Investigation into the Determinants of Customers' Preferences and Satisfaction of Internet Banking (Empirical Study of Iranian Banking Industry). *Journal of Applies Sciences*, Vol. 11(3), 426-437.
- Ahmad, A. E., & Al-Zu' bi, H. A. (2011). E-banking Functionality and Outcomes of Customer Satisfaction: An Empirical Investigation. *International Journal of Marketing Studies*, Vol. 3(1), 51-59.
- Hanafizadeh, P., Keating, BW., Khedmatgozar, HR., 2014. A systematic review of Internet banking adoption. *Telematics and Informatics*, Vol. 3, 492-510.
- Hoehle, H., Scornavacca, E., Huff, S., 2012. Three decades of research on consumer adoption and utilization of electronic banking channels: A literature analysis. *Decision Support Systems*, Vol. 54, 122–132.
- Hu, Y., Liao, P., 2011. Finding critical criteria of evaluating electronic service quality of Internet banking using fuzzy multiple-criteria decision making. *Applied Soft Computing*, Vol. 11, 3764–3770.
- Ling, M.G., Fern, Y.S., Boon, L.K., & Huat, T.S. (2016). Understanding Customer Satisfaction of Internet Banking: A Case Study In Malacca. *Procedia Economics and Finance*, Vol. 37, 80 85.
- Munusamy, J., Chelliah, S., & Hor, W. M. (2010). Service Quality Delivery and Its Impact on Customer Satisfaction in the Banking Sector in Malaysia. *International Journal of Innovation, Management and Technology*, Vol. 1(4), 398-404.
- Nawi, F. A. M., Yazid, A. S., & Mohammed, M. O. (2013). A Critical Literature Review of Islamic Banks Selection Criteria in Malaysia. *International Business Research*, Vol. 6(6), 143-151.
- Nupur, J. M. (2010). E-Banking and Customers' Satisfaction in Bangladesh: An Analysis. International Review of Business Research Paper, 6(4), 145-156.
- Ozatac, N., Saner, T., Sen, Z.S. (2016). Customer Satisfaction in the Banking Sector: The Case of North Cyprus, 3rd Global Conference on Business, Economics, Management and Tourism. *Procedia Economics and Finance*, Vol. 39, 870 878.

- Santouridis, I., Kyritsi, M., 2014. Investigating the Determinants of Internet Banking Adoption in Greece. *Procedia Economics and Finance*, Vol. 9, 501 510.
- Szopiński, T.S. (2016). Factors affecting the adoption of online banking in Poland. *Journal of Business Research*, Vol. 69, 4763–4768.
- Yoon, CH., 2010. Antecedents of customer satisfaction with online banking in China: The effects of experience. *Computers in Human Behavior*, Vol. 26, 1296–1304.