



THE ROLE OF MOBILE BANKING IN SERBIA

Tijana Radojević¹,
Danica Rajin²,
Vladimir Džamić¹,
Dalibor Radovanović¹

²Singidunum University
32 Danijelova Street, Belgrade, Serbia

²Singidunum University
Faculty of Economics, Finance and
Administration - FEFA
Belgrade, Serbia

Abstract:

The aim of this paper is to provide the current situation of mobile banking implementation in Serbia. M-banking has changed the traditional business model which users are practiced in the use of banking services in the traditional manner. Mobile banking has allowed an increase in the number of existing distribution channels that banks used to offer their services. Following the tendencies of development of new services, banks in Serbia are increasingly opting to offer their banking services via mobile phones. Based on the analysis conducted herein, we find that 70% of banks that are operating in the banking system offers its clients m-banking services. Services are offered with much lower commission than traditional banking, thus leading to the dramatic increase in m-banking users in the last three years. Mobile banking plays the central role in the future of banking development.

Key words:

m-banking, banking services, mobile devices.

1. INTRODUCTION

Traditional banking is increasingly replaced by electronic banking, which is gaining in importance and a growing number of users. During the last decade, mobile banking was developed as a special form of electronic banking. Mobile banking offers great opportunities and has prospects for further development, especially if we know that the number of mobile phone users is constantly growing, and that phones are increasingly improved and can perform almost the same operations as computers. Contemporary information technologies have allowed banks to enable the production and delivery of financial services in cases where they are separated into different jobs. This means that banks can sell and manage services offered by other banks (often foreign) in order to increase their income.

2. DEVELOPMENT OF E-BANKING

Mobile banking is defined as carrying out banking operations with the help of mobile devices such as mobile phones or PDA - Personal digital Assistant (Rajnish and Buse, 2007). Mobile banking allows its clients to perform various transactions using portable computers, personal digital assistants (PDAs) and mobile phones.

Correspondence:

Tijana Radojević

e-mail:

tradojevic@singidunum.ac.rs



Every client in the bank has a need to have a concrete insight into the state of its account and wants to manage its funds. A few decades ago, such information was collected in the traditional way, by going to the bank counters or by telephoning the appropriate branch (Laukkanen and Pasanen, 2008). This mode of operation would require spending time and money. The solution which exceeded this traditional way was first found in e-banking, and then with the use of mobile phones, in m-banking (Sander, 2014). Mobile user is able to access the Internet through their bank or another financial institution that performs the necessary transaction (Guraău, 2002).

The first bank that began to offer services in the form of m-banking was MeritaNorthBanken in 1992. Seven years later, about 90% of banks in Europe had to offer some form of mobile banking (Rajnish and Buse, 2007).

3. TYPES OF MOBILE BANKING

The provision of banking services in mobile business is based on the two major software platforms:

1. SMS services
2. Applications that were developed as separate software programs installed on mobile phones.

SMS services

An organization that provides services (bank, partner - outsource) develops SMS portal that provides users with the ability to develop the use of this service. The desired information can be obtained on request, or at a certain time, so that this type of communication supports the push and pull models of business (Puschel *et al*, 2010). Pull technology is one in which the client initiates communications using their phone to call the gateway and thus requiring specific data, which are attracted to the application server to the mobile phone. In the latter, push technology, application server has more control over the mobile phone, and he makes the decision when to send data to the mobile phone. In this case, the previous request is not required. Any user who is interested in obtaining information about his/her account on this way, first should fill out the application in the bank in which report the bank about account number and number of mobile phone. The moment when the service is activated, the client is able to:

- ◆ to check the status of his account at the request, daily or after impact

- ◆ report on the execution of transactions related to payments
- ◆ see the exchange rate, *etc.*

Wireless Application Protocol (WAP)

WAP banking has appeared after the SMS banking with the development of WAP standard that enabled connection with the Internet via mobile phones. This means that the bank's clients can access to their bank account by using mobile phone via the Internet access. Some authors under the term of mobile banking refers exclusively WAP banking, while SMS banking classified as a special banking services. The connection with the bank is realized through mobile phone that has a built-in WAP device. The user must have a mobile phone that supports WAP in order that he could use WAP services of any bank. Thereby, the user pays only for the traffic generated to mobile network operator. Therefore, WAP banking involves access to banking services directly through mobile Internet or indirectly via specially installed applications in the mobile phone through which it connects to the mobile Internet.

After completing the registration, the user via SMS received confirmation of registration services, PIN and user manual. This mobile payment system is extremely easy to use and safe because the transaction is authorizes with personal PIN. The user via the mobile phone connects to the Internet and has an application that lets a user select a certain bank services (for example, reviewing account balances, making payments, a review of receipts and payments on all accounts, term deposits, insight into the exchange list, use the services of currency calculators, *etc.*).

Although WAP banking has so far not yielded the expected results on the global level, it is expected that with the development and simplification of applications that are directed to the end user and adapted to its real needs, there should be a greater number of users who use this type of banking services (Yang, 2009).

4. ADJUSTING THE BASIC REQUIREMENTS OF TARGET GROUPS

Nowadays, banks are more and more faced with technologically literate customers. Today's customers want to organize banking transactions while they are in the motion, regardless of the working hours (Yu, 2012). Banks have been able to react to these changes by introducing mobile services.



The key target group of mobile banking can be divided into three categories:

- 1) Young: segment aged 14-18 years has gained an important role in the growth of mobile telecommunications and related services. This group is recognized as the one that prevails technological achievements and is ready to experiment with innovative products and services. Young people are often on the move and require a service that is ubiquitous at any time. Although they are young, as a group and they could hardly be relevant for banks from a financial perspective, they represent a potential client and should be nurtured as clients in the long-term marketing strategy of banks.
- 2) Adults: this segment refers to a group of young people, adults and students and trainees, as a segment which is usually marked as “onliners”. Also, it is believed that this segment dominates technological innovation. Although this group is not financially very strong, many of its members are already involved in stock market activity and many have now started professional career, therefore, it is necessary that this consumer segment be cultivated.
- 3) Business people: This group of users, which mainly covers the age group of 25-36 years, is considered the most important for mobile banking. Members of this group are generally well-educated and economically well-off customers. They need to be frequently on the move for professional reasons. Therefore, they carry mobile devices with them in order to provide them access to the provision of m-business services. For this reason, they are ideal candidates for using the services that can be offered via mobile devices.

In order to recruit new groups of client's banks tend to show mobile banking as an option that promises (Riquelme and Rios, 2010). However, these services represent additional features for the target user or group, also have their usefulness for banks.

5. MOBILE BANKING AND SERBIA

In Serbia, about 80% of population uses mobile phones of new generation, from whom about 30% are using smart phones that allow the use of mobile banking. In recent years, banks in Serbia are increasingly determined to offer their banking services through mobile devices.

According to the data of the National Bank of Serbia (NBS, 2016), the number of mobile banking users is increasing constantly. In Serbia, in 2013 the total number of mobile banking users was 97 150, while in 2015 that number increased to 464 167.

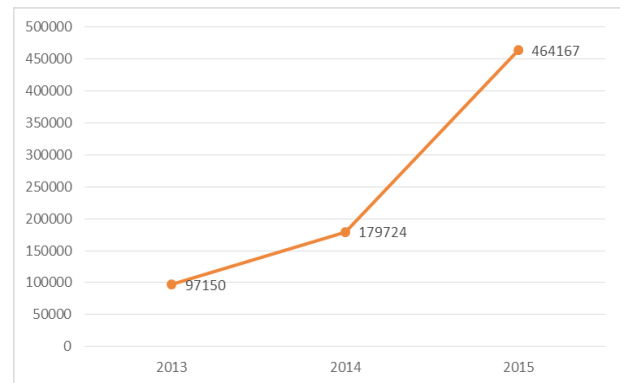


Figure 1. The number of mobile banking users in Serbia.

In Serbia, out of 30 banks operating in the financial system in 2016, 21 provide mobile banking services.

The first bank to introduce mobile banking in Serbia was Banca Intesa through Intesa Mobi application. This application allows customers that via their mobile phone quickly, easily and safely complete a payment whenever and wherever the customer wants, and without commissions. In 2014, there was a growth of 114% in the number of active users of Intesa Mobi application compared to the year 2013.

Commercial Bank offers its clients mBank service that allows performing all types of non-cash transactions without commission, internal transfers of funds from one account to another, repayment of the payment cards, as well as exchange operations, purchase and sale of foreign currency. The novelty of this service is that it is completely independent of the mobile operator and the network that the client uses.

Credit Agricole bank applications mBank is available for users of mobile phones with Android OS, while new m-banking services of UniCredit Bank provides full control over finances via mobile phone. Customers can pay on the move, quickly and safely, without limitation, access to the account 24 hours, 7 days a week.

ProCredit Bank has developed mBankar application that allows clients to perform various services via



mobile phone. Societe Generale Bank has developed m-banking application that is part of the Premium version of e-banking. It is currently available for Android, iOS and Windows operating systems, and in the future it will be versions for Symbian and BlackBerry.

Hypo Alpe Adria bank allows the use of mobile banking via Hypo M-banking applications, which is a convenient and fast way of doing banking transactions using mobile phones including all Android and iOS devices.

Raiffeisen Bank offers a new mobile banking application which meets the highest safety standards in electronic banking provided the use of tokens.

Erste Bank has gone a step further and offers their customers the Erste mBanking application "Take and pay". This option allows their clients to pay bills with just a few simple clicks without rewriting data from slips.

MobiBank PŠ is a service of the Postal Savings Bank which allows customers to regulate their obligations, regular monthly bills for different services for a fee up to four times less than at the counters. To start MobiBankPŠ services PIN is required.

The application for mobile banking of AIK Bank allows a quick, easy and safe way in which customers can monitor changes in the accounts, as well as to perform various transactions using mobile phones. Alpha Bank also provides services Alpha Mobile Banking through financial transactions via mobile devices at any time and from any location. Eurobank Serbia has developed m-Banking application that allows their clients the first 10 transactions to perform without commission each month. Jubmes mBank is an application of Jubmes bank that offers its customers a 50% lower commission than clients will pay at the bank counter.

NLB mKlik is an application of NLB bank that provides bill payment without limitation to minimum commission. OTP bank enables the use of m-banking application through an activation code which can be obtained at any branch of OTP Bank, then choose a unique PIN code, which is used for future application. Piraeus Bank has developed Winbank mobile application for Android phones. Winbank m-banking is a unique service Piraeus Bank Belgrade, which allows its users to quickly and easily perform all types of banking transactions through mobile phones. Sberbank has placed its m-banking application that lets payments at a lower fee than at bank counters. Application supports all mobile devices with Android or iOS operating system. Serbian bank has included in its offer highly innovative and advanced payment service via mobile

phone - mBank. The service allows users to pay bills with a significantly lower fee than at the bank counter. Vojvodjanska bank has developed an application mBank for their clients. Access to all the financial data and functionality of the application is available through m-pin known only to the user.

Great expansion in the spread of mobile banking in Serbia we have since 2013 when Telenor acquired 100 percent of the KBC Bank shares with a view to offer the citizens of Serbia Telenor bank - modern and innovative mobile financial services. Telenor bank is the first bank in the region, in which the banking is completely different - completely mobile. According to the mobile application Telenor Bank (Android and iOS), the whole bank is stored in the mobile phone.

Nowadays, experts predict even stronger expansion of mobile banking in the coming years due to fact that the number of mobile phone users greatly exceeds the number of Internet users.

6. CONCLUSION

Mobile banking is an opportunity for banks to retain their existing customer base which are based on smart technology, offering added value by providing innovative services. Mobile banking can actually help to attract new customers who were unable to obtain the services offered to its current product portfolio of banks. Undoubtedly, mobile banking is an opportunity to create additional income for the bank. His main contribution, however, can be expected in the strategic field. Mobile banking has the chance to become the instrument of differentiation.

Mobile banking in Serbia is developing along with modern technologies and trends in the world and allows its customers access to new ways of using banking services. Based on the conducted comparative analysis that we have done in this paper, we can conclude that the offer in the field of m-banking has a lot of progress. In a very short period of time, offer of mobile banking services has expanded dramatically and the number of clients has increased considerably. Clients via their mobile phones can perform almost all services that can be performed in the bank branch. Customer support by banks in using this application significantly increases customer satisfaction and confidence in the bank that offers mobile banking service.

Mobile banking has the potential, which could become one of the widespread and accepted applications in the field of mobile commerce.



REFERENCES

- Guraău, C. (2002) Online banking in transition economies: the implementation and development of online banking systems in Romania. *International Journal of Bank Marketing*, 20(6), 285-296
- Laukkanen, T., & Pasanen, M. (2008) Mobile banking innovators and early adopters: How they differ from other online users? *Journal of Financial Services Marketing*, 13(2), 86-94
- National Bank of Serbia (2016) The number of clients by type of individual payment service. Retrieved March 01, 2016, from <http://www.nbs.rs/>
- Puschel, J., Mazzon, J. A., & Hernandez, J. M. C. (2010) Mobile banking: Proposition of an integrated adoption intention framework, *International Journal of Bank Marketing*, 28 (5), 389-409
- Rajnish, T., & Buse, S. (2007). The mobile Commerce prospects, A Strategic Analysis of Opportunities in the Banking Sector, Hamburg University Press. Retrieved from https://www.postbank.de/postbank/docs/HamburgUP_Tiwari_Commerce.pdf
- Riquelme, H. & Rios, R. E. (2010). The moderating effect of gender in the adoption of mobile banking, *International Journal of Bank Marketing*, 28(5), 328-341
- Sander, D. (2014). Mobile banking: New trend in the contemporary banking sector, *Banking*, 43(5), 86-109
- Yang, A. S. (2009) Exploring adoption difficulties in mobile banking services, *Canadian Journal of Administrative Sciences*, 26(2), 136-149
- Yu, Chian-Son. (2012). Factors affecting individuals to adopt mobile banking: empirical evidence from the UTAUT model, *Journal of Electronic Commerce Research*, 13(2), 104-121.