

## Enhancing Internet Banking - Solutions for Customer Relationship Management

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**Abstract:** Nowadays, when discussing banking, we can not neglect new technologies such as internet banking. The internet banking provides competitive advantage to banks. Internet banking became a need for customers and they demand this facility when they open an account. This paper explains the technology acceptance model and the customer behaviour regarding this innovation system called internet banking. Moreover, the role of this tool is highlighted by the authors. Based on case studies, the paper reveals the importance of this new trend in banking. Technology, finance and customer created this new technology that became a need for everyone of us. The internet banking, using a personal computer or any intelligent device brings the customer closer to the its financial provider. We can talk about customer relationship management by using this new tool and also gaining customer trust and loyalty. Future trends in Internet banking and growing the number of users are discussed in the below paper.

**Keywords:** Customer relationship management, internet banking, new technologies.

### INTRODUCTION

Internet banking refers to systems implemented by the bank to allowed customers to access their accounts for general information or to order all the bank products form their computer using a special devise (token), known as one click of a mouse for bank transaction [1]. Online banking, internet banking, home banking, web banking, virtual banking – are different names for the newest Internet technology applications used by banks. It was first introduced in United States at the beginning of the 1980s and almost simultaneously in United Kingdom and other European countries. In 1995, the virtual bank, which provides banking services completely online, commenced operation. However, in the succeeding dot-com boom years, more than 500 pure-play virtual banks were initiated and 50 virtual banks were in operation by the end of the year 2000. Concurrently, more than 1,200 brick and mortar banks incorporated various degrees of Internet banking capabilities. For example, on the German market, the importance of the direct banks has increased dramatically in the past years. New direct banks launch every year as the market demands it – from a total of 4 million customers in 2000, today there are to 18 million customers, making up for 23% of the population. Banks such as Sberbank Direkt, VTB Direktbank or AS Privatbank are examples of new direct banks that appeared ongoing since 2012 and contributed to an expansion of 2 million customers in only 3 years. This in times of contraction for credit institutions in Europe. With a general digital penetration

of 86.2% throughout all German consumers, Banking is one of the areas where customers expect the highest rates of digitisation [2].

Internet banking is a form of electronic banking that focuses on providing banking products and services through web-based on-line browsers and bank portals [3].

### Developing new technologies

The market in a continuous changing process. Banks must reflect the expectations of today's retail banking customers. The development of the new technologies in banking refers to: internet banking, mobile banking – called digital channels. Nowadays banking means transition from traditional banking methods to internet-based banking by packaging products and services for consumers and personalizing elements in order to satisfy consumer needs [4].

The globalization and competition forced banks to rapidly adapt to the changes of new technologies. Customer behavior to these new technologies has almost obliged banks today to offer service 24 hours around the globe [5]. To engage customers, banks have come up with regular innovations and enhancements, and targeted, personalized offers in order to remain competitive on the market. With Mobile Banking starting to replace other channels and gaining in popularity worldwide,

banks will have to respond to the innovative customer needs in order to stay competitive.

One of the most important advantages of the online banking is the low cost of a transaction. The cost of processing a transaction using online banking is about five times lower than ATM transaction and 25 times lower than in-branch transaction from the bank point of view.

At the same time digital banking transactions is supposed to use less personnel. This new facility creates two main issues for banks: difficulty in understanding the need of customers and the less personalized services. When the digital channel becomes the main part of the bank activity they faced with this non personal communication and distance operation. That is why the banks developed various applications for customers to become more attractive and to get unique advantages.

The new services and applications developed by the bank for the digital application could be divided in two categories: tools to better know and control the transactions (statistics, graphs, synthetic records of the transactions done by the customer, card management etc.) and new services as (deposits, exchange, recurrent bill payments and standing orders, direct debit, online assistance, etc.)

The future banking means going from traditional banking to Omni channel. Traditional banking means satisfying the bank demand by creating products that fit the customer needs, while Omni channel means satisfying customer demand by finding a solution in order to create business.

The new technologies called digital channels increase customer loyalty and advocacy. Taking into consideration the mobile application for banking services, the benefits for customers are:

- '2nd generation' digital banking for exceptional customer experience
- Extensive usability research to improve customer experience online
- Keep up with market trends and customer demands and add new differentiated products
- Personalisation of messages/ads online enables bank to avoid 'spamming' customers
- Helps the bank to strengthen its brand and reputation as a leader and innovator
- The low cost to serve mobile channels means that banks can reduce or eliminate fees for certain transactions

The banks are not the only ones that saw this opportunity to use new technologies, social media did it, google did it and also phone companies did it: so they followed the trend and that's how Facebook received authorization by Ireland's central bank to

become an "e-money" institution, Vodafone has acquired an e-money license for the phone company to offer financial services in Europe, and has purchased a vehicle thematic software firm. Google has held a banking license from the Netherlands since 2007. Brand new customer-centric value propositions can be launched on all digital channels, including mobile and social networks, in less than 12 to 18 months.

In their study Douda and Lee [6] using conjoint analysis and stated preferences methods with discrete choice model wanted to identify the future online banking for Nigeria. The study shows that the banks need to promote e-banking, digital wallet, video banking, smart phones application for banking and other digital services to increase the competitiveness and the efficiency.

The Technology Acceptance Model (TAM) [7] showed that between variables as security risk, financial risk, privacy risk, resistance to change, efficiency, awareness is a strong correlation with the intention to use internet banking. The model offers at least information of the customer acceptance of the internet banking in Egypt example that could be used in developed and developing countries.

#### **Internet banking users in Romania**

Romanians use Internet banking to verify their account balance and the self-service zone, but also the bank branch to make cash payments, deposits and withdrawals. Self-banking can be used at the branch bank, but without a personal banker, just using the cash machines, ATMs, multifunctional machines and exchange machines, etc.

Although the number of online-banking users has raised in the past years from 4% of the population in 2013 to 6% in 2016, Romania is still second to last in Europe when talking about banking, just before Serbia. For comparison, the first positions are occupied by Czech Republic with 62% of the population using internet banking and Austria with a significant rate of 55%.

Romanians do not use the internet-banking, even though the operations through this channel are cheaper and faster. According to EuroStat, just 6% of the population aged between 16 and 74 use online banking services. Although more than 66% of the Romanians use internet daily, banks just can't convince them to give up on traditional banking services offered in the bank branches and move to the virtual space. Banks could spare some money if clients would move to the virtual space and clients would spare some money also by digitalization of the banking services.

According to banks, even the Romanians that use internet banking, half of them verify daily the account balances, but do not make any other operations.

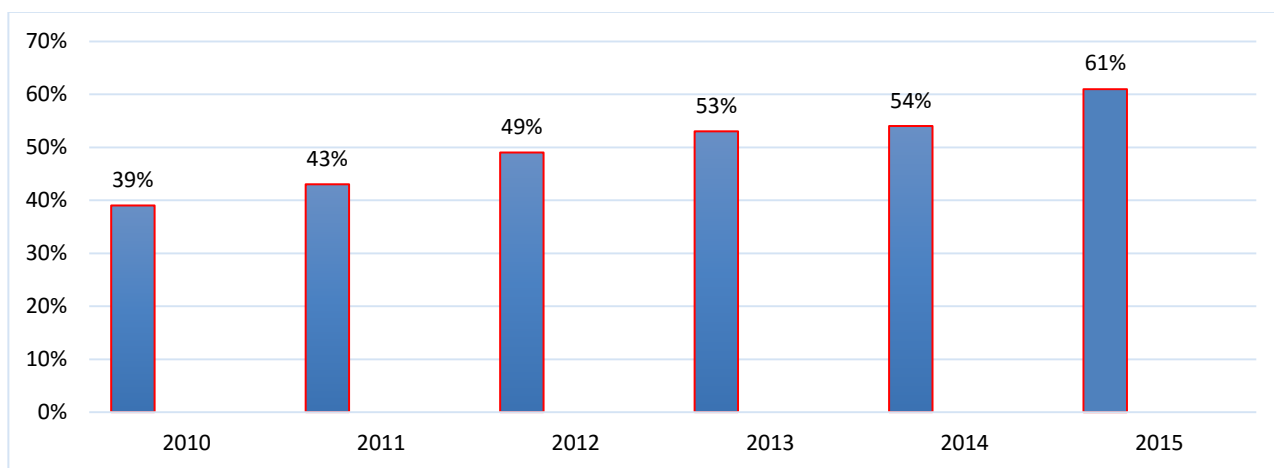
The number of online users of internet banking is not that high mainly because of security issues that scare most of the people away from changing traditional banking with digital banking. Nevertheless, interaction with people make the client feel safer than talking with a robot or doing the payments and banking operations by themselves in the online environment. Studies show that online banking users in Romania are mostly young people with higher education and higher annual incomes than average.

According to INSSE statistics, 2015, Population's access to technology, 61% of Romanian households have internet at home, 73% in the urban area and 47% in the rural area. How digital are Romanians? The numbers say: 3 out of 10 people aged 17-74 have never accessed internet. Banks should consider the new digital channels as a tool in growing

their profits and remain competitive on the market. For sure Romanian economy is growing slower than others, but the need for technology became a lifestyle nowadays. In our opinion, banks should follow the European models and go digital, because the world is in a continuous change and technology became cheaper.

As Ndubisi and Sinti [8] claim: "individuals have already established personal banking norms, lifestyle, finance management systems, and account monitoring mechanisms prior to the advent of Internet Banking, their acceptance or rejection of this new mode will rely greatly on the extent this new mode accommodates or rejects all or some of the past values".

But the INSSE [9] statistics agree that the number of "digital Romanians" will definitely grow in the next few years as we can see from fig.1



**Fig-1: Evolution of households that have access to the internet**  
 Source: INSSE statistics, 2015, Population's access to technology

How digital is the banked population?

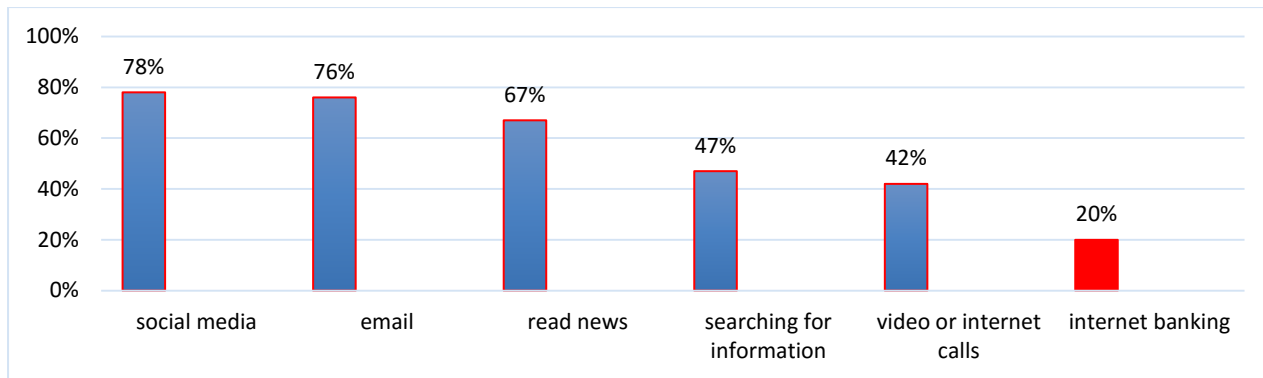
73% banked population have access to internet via PC at least once per week, 43% several times per day, while 22% never access.

62% banked population have access to internet via mobile at least once per week, 35% several times per day, while 37% never access.

According to INMS/ IMAS, Banking Market Monitor 2016, less than 20% of Internet logs in the last 3 months were for using Internet Banking (fig. 2)[9].

The conclusions of a study on Romanian online banking [10] states that: "Market developments

proves that banking transactions through remote channels have become important to users as they allow customers to spend more time doing things that are meaningful to them and less time banking. In the same time, electronic banking services over the Internet are simple and convenient to access and involve lower costs compared to traditional branch banking. However, the percentage of online users is not as high globally and their interest in internet banking is sometimes weak mainly because of security issues that scare many people away from banking online." This conclusion reconfirms the fear of the customer for the unsecured line and the potential exposure on the bank accounts and savings.



**Fig-2: Users of digital media**  
 Source: INMS/ IMAS, Banking Market Monitor 2016

The percentage of 20 customers [9] using internet banking shows that Romanians are not easily accepting it, they are very resistant to the change and very strong connected with cash transactions and on office activity. Potential reasons of this phenomena could be low income, fear of additional costs, labor and products black market.

**Benefits of online banking**

Using principles of information and knowledge management banks are growing their efficiency and effectiveness, but also allowed the customer to do so with their bank issues. The new technologies let the bank to offer less costly services, personalized and customized [11].

As the shown in figure 3, the benefits of online banking are sustained by the following:

- Growing sales pipeline with improved lead generation capabilities
- Customers can set savings goals, allowing the bank to then market products directly related to those goals
- Personal Financial Management allows customers to input personal data which can be used by the bank to create leads
- Online Sales helps banks to refine their sales processes and offer an effective (potentially superior) alternative to face-to-face sales-people

- More targeted sales offers & generate more cross-sell opportunities
- Better sales campaigns
- Smart advertisement tools to boost product awareness
- Online triggers at the right time to optimise uptake e.g. overdraft protection with low balance alert or payment services
- Enable customers to buy products with the minimum amount of effort to improve sales figures

**Internet banking - meeting customer demand for personal financial management (PFM)**

Customers can access online PFM services and increase financial awareness Gives bank’s customers the ability to access features which will enable them to:

- Understand their current financial position
- Analyse their expenses and incomes
- Forecast incomes & control expenses
- Set up budgets / alerts on each spending category
- Spending Analysis
- Budgeting
- Savings Goals
- Net Worth



**Fig-3: Online banking benefits**  
 Source: author creation

**Online banking – disadvantages**

The main disadvantage of digital channels and online banking are the security problems. Even though the technology solved the security issues, clients still fill unsafe when going online.

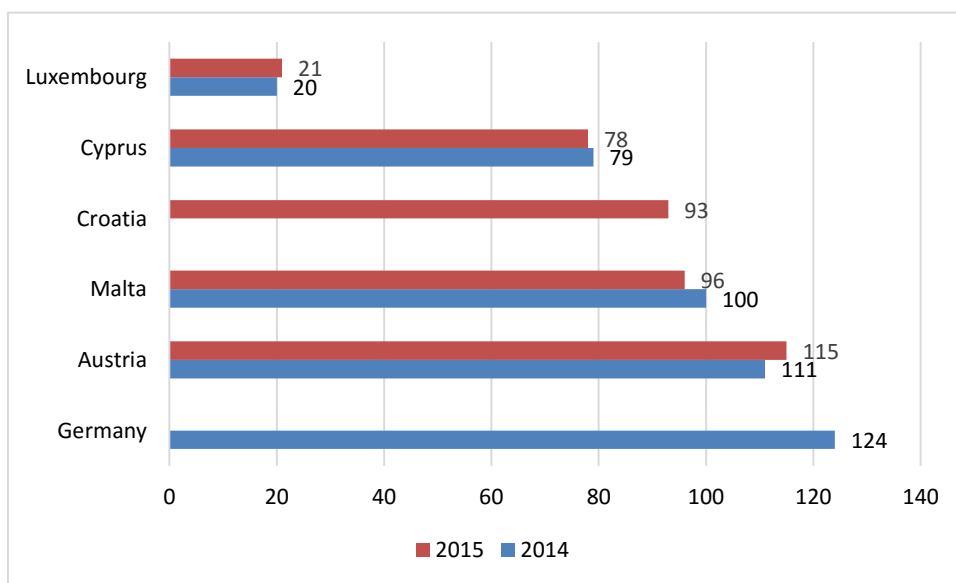
A repercussion of the usage of digital banking is that staff employed in the banking sector continued to shrink. Looking at the average number of inhabitants per bank staff in the EU member states, the number of citizens for every banker ranges from 20.5 in Luxembourg to more than 354 in Lithuania, a difference of more than 17 times [12].

As shown in fig. 4a and 4b, Germany is one of the fastest within the developed countries to optimize

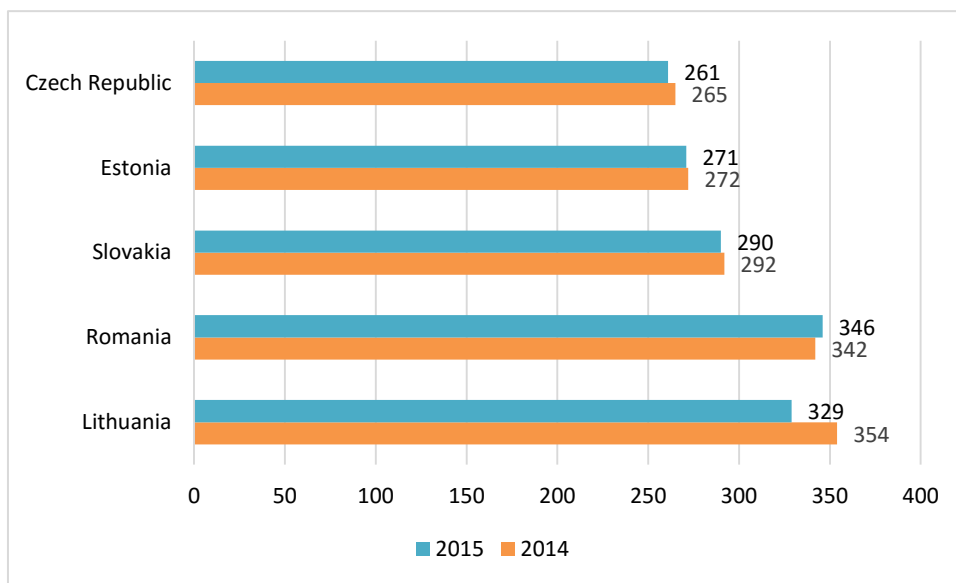
online vs offline presence. Even so Germany fall down from the first 5 lowest rate in 2014 being overtaken by Croatia.

Conclusive for Romanians that still use traditional banking is the before last in 2014 and last position in 2015 with the highest rate of customers per bank employee.

Dandapani *et al.* [13] are presenting in their paper the fact that is determined growth of internet banking and the dimensions of the business model. They explore the impetus and constraints of the development of internet banking and the future of this tools and techniques used by banks to strength the connection with their customers and to respond to the new technologies challenges.



**Fig-4a: EU countries with the lowest number of inhabitants per bank employee**  
 Source: EBF facts & figures 2014 and 2015



**Fig-4b: EU countries with the highest number of inhabitants per bank employee**  
 Source: EBF facts & figures 2014 and 2015

The field of online banking being pending on the new technologies is not a plain area easy to be approached by the banks. There a lot of opportunities along with lot of treats and risks [14].

## CONCLUSIONS

As a first conclusion we can appreciate that on line banking is easier accepted and implemented in developed countries than in south east European countries, Croatia is an exception. The main reason is the customer resistance to change and the fear of security, similar phenomena could be seen for e-commerce, e-governance etc.

Banks are interested in introducing less costly technology and faster flexible operation systems. Internet banking is offering a friendly solution to substantially cut the operation and administration costs, minimize the office structure and cut the front desk employee. Internet banking gives the possibility of a better operation recording bringing to surface all the commercial transactions.

The customers benefits are the 7 of 7, 24 of 24 access to their accounts, fast services, easier and cost less. After PC, the mobile will become the second most important channel for banks to communicate with their customers and understand their needs. It could be appreciated that in “digital age” customers need banking but not banks. This treats makes banks to fight for their position on the market and to stay in contact with the customer. Doing more with digital is the main challenge for the banks to reach their goals and to remain one of the players on the market and at the same time is the competitive advantage they can have.

The paper is briefly presenting the main advantageous and disadvantages of internet banking, major accelerators, inhibitors and the behavior of early adopters of virtual banking to highlight the usefulness and the facilities from the bank and customer point of view.

To sum up, banks should invest in innovation, educating staff and customers, offering excellence and convenience to customers in an Omni channel environment. The new technologies can also create digital banks with an innovative design and technology driven solutions: cash less branches, intelligent ATMs, interactive tables, video counseling.

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