THE RISE OF MOBILE BANKING

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ABSTRACT: *To meet customer's expectations and needs, electronic banking services have allowed financial transactions to simplify and have increased their attractiveness. Over the past few year, in order to increase customer comfort and maintain profitability, banks around the world have adopted innovative banking technologies and modern e-banking services, such as internet and mobile banking. As a matter of fact, banking over mobile phones is the newest e-banking service with several benefits for both customers and banks. The paper aims to provide an overview of the latest electronic financial channel, underlining various aspects of mobile banking as it represents a key distribution channel for a growing number of customers.*

KEY WORDS: *banking, e-banking, mobile banking, m-banking.*

JEL CLASSIFICATIONS: *G21.*

1. INTRODUCTION

Nowadays, the very nature of banking is changing as consumers require more personalised banking products and services and have become less willing to visit traditional branches for routine transactions. In addition, they are demanding better service quality and are looking for simplicity in their day-to-day banking. Thus, traditional banking is more and more threatened as digital channels grow in popularity. Since customers have become more receptive to new electronic channels, the face-to-face sales and service interactions are declining.

Today, as new technologies emerged, customers have more options regarding when and where they can do their banking. Electronic banking, usually referred as e-banking, is the newest delivery channel for banking services and includes home banking, PC banking, internet banking, mobile banking. Electronic banking services have been around for quite some time in the form of telephone transactions or ATMs (Nsouli & Schaechter, 2002). In more recent years, modern e-banking services, such as internet and mobile banking, have revolutionized banking transactions, allowing

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customers to be connected anywhere, anytime (Drigă & Isac, 2014). The development of mobile banking has endowed the banking industry with new business models able to provide appropriate self-service banking alternatives to their customers.

2. CONCEPTUAL BACKGROUND

Electronic banking is seen as one of the most successful business-to-consumer applications in electronic commerce (Laukkanen, 2007). First, research focused on customers' behaviour toward ATMs, phone banking (home banking) and PC banking. Recent studies however have investigated the development of internet banking and the most recent literature has shown a growing interest in the world for mobile payment services.

Mobile banking or m-banking, the evolutionary step after online banking, has developed as a wireless service distribution channel that allows customers to conduct transactions with their banks, to obtain financial account information and to make payments through a mobile device. The newest distribution channel, mobile banking is based on wireless application protocol technologies since a mobile device requires a WAP browser installed in order to allow access to information. WAP (Barnes & Corbitt, 2003) is a universal standard for bringing internet-based content and advanced value-added services to wireless devices, such as phones and personal digital assistants.

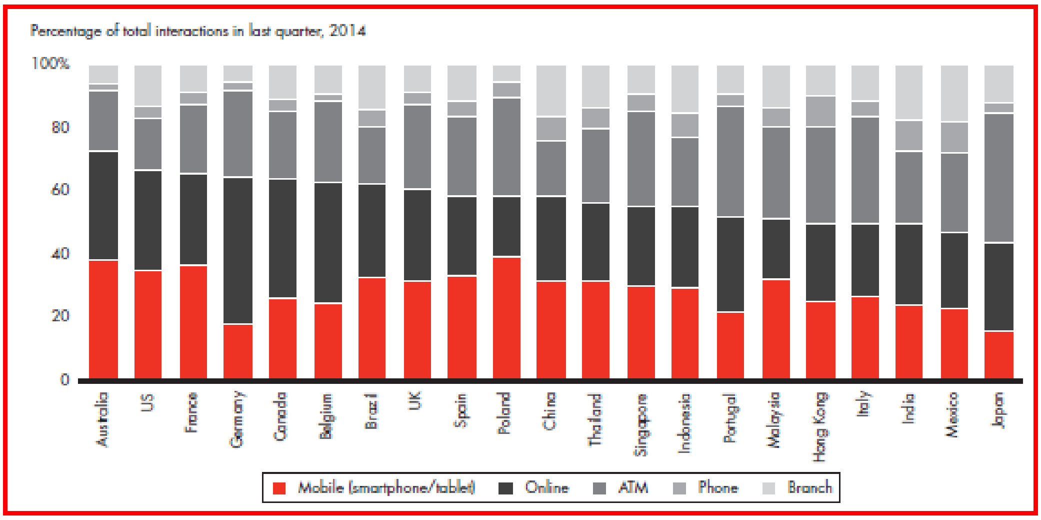
The term "mobile banking" has been defined in many ways by different researchers. Thus, Barnes & Corbitt (2003) define mobile banking as "a channel whereby the customer interacts with a bank via a mobile device, such as a mobile phone or personal digital assistant". According to Pousttchi & Schurig (2004) it is a way of running financial transactions through mobile communication technologies. Mobile banking is a subset of electronic banking, "the type of execution of financial services in the course of which - within an electronic procedure - the customer uses mobile communication techniques in conjunction with mobile devices" (Pousttchi & Schurig, 2004).

Krugel (2007) describes mobile banking as "an extension of the existing payment infrastructure of a bank to mobile phones, as a channel for the leveraging of the mobile network and its reach to deliver banking services to consumers". It is a more cost efficient channel for banks and allows customers to have instant access to information related to their bank accounts. Mobile banking, otherwise known as m-banking, m-payments, m-transfers and m-finance, refers to "a set of applications that enable consumers to use their mobile devices to access their bank accounts, store value in an account, transfer funds or even access credit or insurance products" (Donner & Tellez, 2008). M-banking can also be considered as the convergence of mobile technology and financial services (Chung & Kwon, 2009). Mobile banking is defined by Agwu, et al. (2014) as "the provision of banking and all forms of financial services through mobile telecommunication devices such as the smart phones, androids, etc."

This new banking channel, with huge potential, develops on the success of the other modern e-banking service (internet banking), being a natural evolution of computer based online banking and a better digital alternative to traditional bank channels, such as physical branches and automated teller machines (Püschel, et al., 2010). The simultaneous and growing expansion of WAP-enabled devices has made the conversion of banking applications to mobile devices a subsequent progress in e-banking (Al-Jabri & Sohail, 2012). However, despite its many advantages, the use of m-banking is still at an early stage, while internet banking maintains its leading position within the electronic banking channels. In terms of the difference between online banking and mobile banking, customers consider mobility as the most valued feature of mobile banking (Yu, 2012).

3. MOBILE BANKING PENETRATION GLOBALLY

The crisis has put pressure on banks and costs have become the main issue for bank managers. In this context, the development of alternative distribution channels has become a priority. E-banking over the internet and mobile devices involves lower costs compared to traditional branch banking. Even if the growing importance of mobile is undeniable, branch and internet banking still remain the most favoured delivery channels. However, digital channels are more and more preferred for most banking operations both in developed and developing countries. Besides, according to a 2014 Bain & Company Survey regarding customer loyalty in retail banking, mobile technology has overtaken online banking in several countries (see figure 1) (Drigă & Isac, 2014).

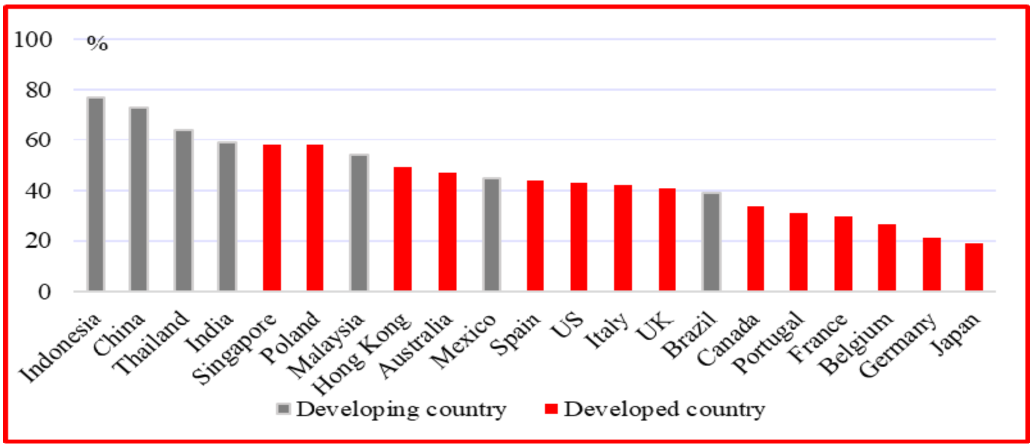


Source: Bain & Company, Customer Loyalty in Retail Banking, Global Edition, 2014

Figure 1. Percentage of channel preference in different countries in 2014

Prior to mobile banking, internet banking services had an obvious impact on customers but lately they have increasingly begun to use smartphones in interacting with their banks in the detriment of other channels. Although it is the newest distribution channel with a short existence, mobile banking evolved and expanded very rapidly. The adoption of mobile banking services by users is much faster than the adoption of internet banking since banks have invested heavily in the development of mobile technologies, security and smart phone applications (Drigă & Isac, 2014).

Despite several advantages and benefits, such as ability to offer services anytime and anyplace, high rate of penetration and potential to grow even among the less educated, ability to provide mass marketing and serve as alternative to branch banking, capacity to reduce customer reliance on branch infrastructure or access to the internet, the use of mobile banking services is lower than expected (see figure 2) in both developed and developing economies (Agwu, et al., 2014).



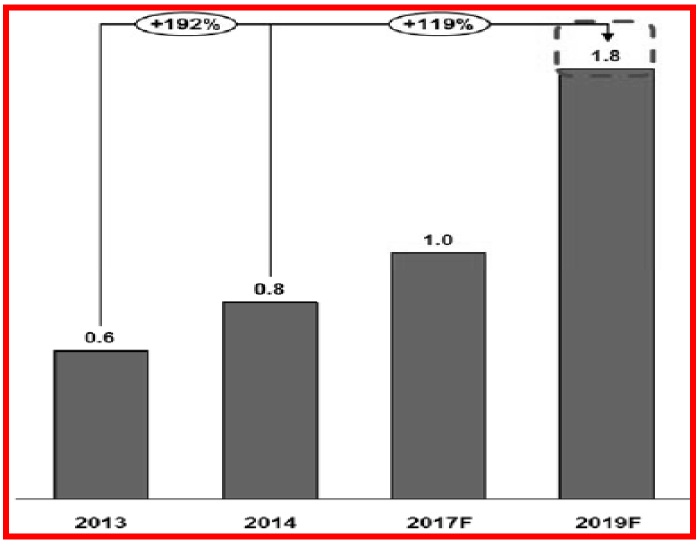
Source: www.statista.com

Figure 2. Mobile banking usage worldwide in 2014

In coming years, the use of mobile banking services is expected to increase. After a period of limited functionality, banks have extended their offer, most banks providing at least one mobile banking offering. According to the Global Mobile Banking Report, published in July 2015 by KPMG, this past growth to 0.8 billion mobile banking users worldwide in 2014 is just the beginning (KPMG, 2015b). The number of mobile banking users globally is predicted to double in the next 5 years or so (exceeding 1.6 billion m-banking users, which means over 20% of the world's population). Worldwide mobile banking is expected to be over 119% between 2014 and 2019 (see figure 3).

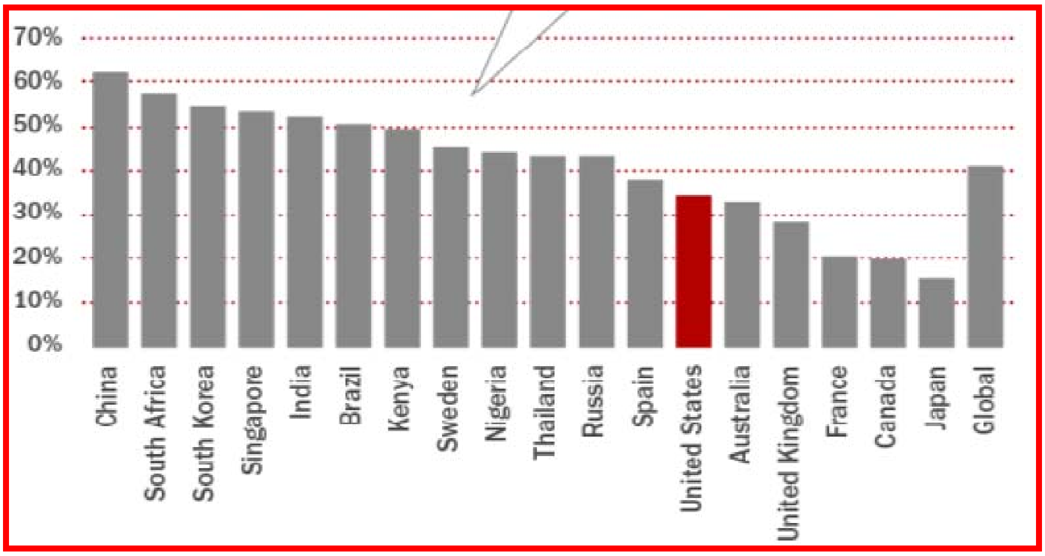
The same report also highlights that mobile banking is one of the most preferred banking channel worldwide, especially within developed countries, being the most accustomed channel for the majority of banks by volume of transactions, in some developing countries reaching more than 50-60% (India and China, see figure 4). Actually, the Global Mobile Banking Report 2015 claims that adoption of mobile technologies for banking has reached higher values in China and India than in the United States and Europe (KPMG, 2015b).

According to research data, there is a powerful connection between efficient mobile banking services and higher percentage of consumer satisfaction and support (see table 1), but the correlation with the probability of mobile customers staying with the present bank is negative, at least in some developed countries, since the first users of mobile banking services are generally more economically active and more technologically clever and, thus, more demanding of their banking services providers (Marous, 2015).



Source: KPMG, Mobile Banking 2015, Global Trends and their Impact on Banks, July 2015

Figure 3. The number of mobile banking users worldwide



Source: Marous, J., Mobile Banking Usage to Double, The Financial Brand, August 10, 2015

Figure 4. Mobile banking penetration by country

Table 1. Satisfaction caused by mobile banking engagement by country

Country	Mobile customer "recommended to a friend" score	Non-mobile customer "recommended to a friend" score	"Recommended to a friend" difference	Mobile net promoter score	Non-mobile net promoter score	Net promoter score difference
Japan	5.2	4.5	0.7	-70	-82	11.8
China	7.0	6.3	0.7	-9	-35	26.3
Thailand	6.9	6.2	0.6	-17	-33	16.2
UK	7.5	6.8	0.6	6	-10	16.0
South Korea	6.2	5.6	0.6	-45	-60	15.4
India	8.0	7.4	0.6	30	11	19.5
Spain	6.2	5.6	0.6	-35	-47	12.1
South Africa	7.7	7.2	0.5	22	3	19.0
Kenya	7.7	7.2	0.5	18	7	11.3
Nigeria	8.2	7.7	0.4	36	23	13.0
Russia	7.4	7.0	0.4	5	-7	12.0
Singapore	6.8	6.4	0.3	-21	-33	12.5
Brazil	7.4	7.2	0.2	10	4	5.4
Canada	7.3	7.1	0.2	3	4	-1.0
Australia	7.1	7.0	0.1	-8	-6	-1.5
United States	7.8	7.7	0.1	19	20	-1.5
Sweden	6.7	6.6	0.0	-14	-11	-2.4
France	6.6	6.5	0.0	-26	-23	-3.1
Global	**7.1**	**6.6**	**0.5**	**-3**	**-17**	**14.1**

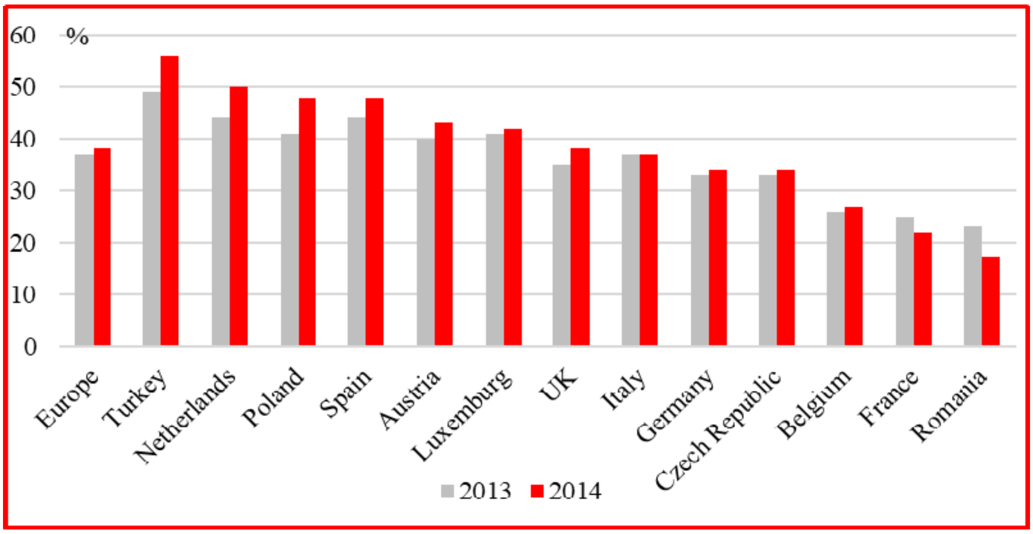
Source: Marous, J., Mobile Banking Usage to Double, The Financial Brand, August 10, 2015

4. EUROPEAN TRENDS IN M-BANKING

Mobile technology is revolutionizing the banking industry also in European, allowing banks to offer additional opportunities and facilities to their customers. Although mobile banking penetration is high in some European countries, this digital alternative is relatively new in many markets and its usage is still low in most countries across Europe.

Statistical data (see figure 5) shows that mobile banking penetration in European countries is relatively low with an average modest growth year on year (37% in 2013, 38% in 2014). There are some notable differences between specific European economies, Turkish consumers showing the highest demand for m-banking across Europe (penetration rate 56% in 2014) (ING, 2015). Mobile banking services are also popular in the Netherlands, Poland and Spain where usage rates reached in 2014 figures near 50% (50%, 48% and 48% respectively). If Turkey is the only European country where more than half of the population uses mobile banking services to interact with their banks, at the opposite side we can find economies like Romania, France and Belgium recording penetration rates under 30% (17%, 22% and 27% respectively). Even countries like the Czech Republic, Germany, Italy and the UK record a low number of mobile banking services consumers, penetration rates do not even reach 40%.

Moreover, according to statistics, Europe has a higher average age of mobile banking users (39 years) in comparison with Asian and American users where the average age is 37 years and 35 years respectively, with India having the youngest population of mobile banking users across the world (average 30 years).



Source: www.statista.com

Figure 5. Mobile banking penetration in several European countries, 2013-2014

5. CONCLUSIONS

Due to the convenience of digital channels, customers use online and mobile technology for their banking needs more often. Mobile banking, the newest delivery channel that provides immediately and interactively banking services via mobile devices, is growing fast while the attractiveness of branch banking diminishes accordingly. Yet, internet and mobile delivery alternatives do not completely replace other channels, branch banking being still favoured by customers when it comes to getting banking advice. However, there is no doubt that in the near future electronic banking will undeniably overcome traditional banking as digital channels become lately the dominant means for consumers to interact with their banks. With the increasing cell phone usage and evidence from growing user adoption statistics across all regions, further development of mobile banking globally is just a matter of time and depends on the ability of banks to convert smart phone users into banking users. While the future of banking is mobile, keeping mobile banking users and attracting new ones may not be an easy task for banks.

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