

“Multichannel Distribution in Banking: customers perspectives and theoretical frameworks to increase user acceptance of a multiplatform banking business”

AUTHORS

Anna Omarini

ARTICLE INFO

Anna Omarini (2013). Multichannel Distribution in Banking: customers perspectives and theoretical frameworks to increase user acceptance of a multiplatform banking business. *Banks and Bank Systems*, 8(1)

RELEASED ON

Tuesday, 30 April 2013

JOURNAL

"Banks and Bank Systems"

FOUNDER

LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

0



NUMBER OF FIGURES

0



NUMBER OF TABLES

0

© The author(s) 2025. This publication is an open access article.

Anna Omarini (Italy)

Multichannel distribution in banking: customers perspectives and theoretical frameworks to increase user acceptance of a multiplatform banking business

Abstract

Internet and all the web-based technologies are expansive by used and has changed radically the way people live and do things. In the economic area they have affected the way businesses interact with each other and the customers, the way of communicating and interacting, distribution channels and the way of managing relationships. Provision of bank services over electronic networks is referred to as e-service (Rust and Kannan, 2003). The aim of this paper is to describe the key factors affecting consumers' acceptance of technology, mainly Internet based banking. After having outlined the multi-channel distribution evolution in banking, the paper highlights some of the customer perspective on online banking adoption throughout an array of different theoretical contributions on the adoption process of Internet banking services. In conclusion it puts the attention on the opportunity for banks to leverage their Internet experience in moving on towards a multiplatform banking business technology driven. This means that at present banks need not only to be driven by technology in developing their integrated multichannel distribution platform but also they have to develop business models where it is visible the strategy behind. That is the one it needs to pursue a complementarity among channels and accesses to bank. The article also presents some recent data (year 2011) on the evolution of bank accesses (branches, Internet, contact center and the mobile banking) among Italian bank customers as to outline some of the customers' trend in doing banking.

Keywords: Internet banking, multichannel strategy, e-bank, e-branch, online banking, retail financial services industry, mobile banking, contact center.

JEL Classification: G20, G21, M30.

Introduction

Internet is an innovative product offered by technological improvements which is expansive used and has changing radically the way people live and do things. It has shown its impact in a plethora of fields including social and affective aspects. In the economic area it has affected the way businesses interact with each other and the customers, the way of communicating and interacting, distribution channels and the way of managing relationships. Therefore, it can be claimed that the emergence of the Internet has changed the business model of many industries. E-business has been continuously growing as a new industry during the last decade (Van Hoek, 2001). Rogers (1962) noticed that E-commerce adoption depends on the profile of the potential consumers because not all the consumers accept an innovation at the same time. Moreover, determinants of innovation adoption may include the perceived attributes of an innovation, the voluntary nature of the decision to adopt it, and the channels by which an innovation reaches the adopter (Rogers, 1995). The literature review shows that, among other factors, the degree of receptiveness to the innovation and perceived shopping risk are factors which determine how quickly an Internet user becomes an online shopper (Citrin et al., 2000; Vr-Chopoulos et al., 2001). The service sector is play-

ing an increasingly important role in the economy of many countries in the world. Service has been described as one of the most important attributes for online business to influence traffic and sales (Lohse and Spiller, 1998; Boyer and Frohlich, 2006). Provision of service over electronic networks is referred to as e-service (Rust and Kannan, 2003). Internet banking is defined as "the provision of retail and small value banking products and services through electronic channels. Such products and services can include deposit-taking, lending, account management, the provision of financial advice, electronic bill payment, and the provision of other electronic payment products and services such as electronic money" (Basel Committee Report on Banking Supervision, 1998, p. 3). Wong et al. (2008) view traditional and online banking as complementary methods of banking. The most important differences between these two types of service settings have been highlighted by Cox and Dale (2001), Gounaris and Dimitriadis (2003) and Long and McMellon (2004) as being:

- ◆ The lack of physical tangibles and human interaction in the Internet services case. Therefore the quality of the website becomes the 'moment of truth'.
- ◆ The customer's greater control over the service delivery process when the transaction is executed on the Internet, due to the absence of front-line personnel.
- ◆ The possibility of Internet services to be available 24 hours a day, seven days a week, without

© Anna Omarini, 2013.

The author would like to thank Alba Sadiku for her job in providing some references. The views expressed in the article are the authors' alone.

being geographically restricted. On the other hand, traditional services operate on specific hours and usually attract local customers.

- ◆ The lower switching costs for the customer of an Internet service, since competition is only a few keystrokes away.
- ◆ The need of the Internet service customer to have a level of computer literacy, which is not the case in the traditional services settings.

Research findings by Patricio et al. (2003) suggest that satisfaction with the bank's traditional service delivery may lend credence to new or alternative delivery channels. Recent developments in bank delivery channels highlight the importance of understanding how customers decide to favor a specific delivery channel (Branca, 2008).

Sarel and Marmorstein (2003) pointed out that many online consumers are inactive or use online banking sporadically, mainly for verification tasks rather than for complex ones. Financial services characteristics – intangibility, non-standardization and complexity – coupled with the uncertainty and perceived risk that characterize Internet make evident the importance of effective marketing activity to support consumers' decision about online banking services adoption. As Ramaswami et al. (2000) and Lassar et al. (2005) point out, the combination of the service (financial product) and the channel (Internet) make financial services purchased online unique. Understanding the key drivers that may be slowing adoption has become a relevant topic for the banking sector because meaningful cost savings can be possible only through a significant migration of consumers to Internet banking (Manzano et al., 2008). Research into customer acceptance of Internet banking has thus improved understanding of what beliefs lead customers to use the facility and demonstrate how the beliefs influence Internet bank customers behavior.

The aim of this paper is to describe the key factors affecting consumers' acceptance of Internet banking in the retail banking industry and also focus the attention on the adoption of Internet banking among Italian customers as to understand if there is any switching process among the different channels in doing banking. Even if as Burns (2000) indicates Internet should not replace other delivery channels, but it has to offer customers an increased flexibility and opportunity for improved service. As a final issue the next challenge for retail banks is that of keeping a possible cannibalization among different bank channels to a minimum.

For this reasons, the paper has been divided into section. Section 1 outlines the multichannel distribution evolution in banking. In sub-section.1.1 it is presented a set of different perspectives in present-

ing Internet banking. Section 2 highlights the customer perspective in online banking attitudes and adoptions, and in the sub-section 2.1 there is a special highlight on the main differences between developed and developing countries in terms of Internet banking adoption. Section 3 summarizes the main contributions of the literature on the adoption process of Internet banking services. Then in the sub-section 3.1 it is presented the framework of the relational studies and highlighted the most important elements of each ones. And in sub-section 3.2 there is a special highlight about the Italian market Internet banking adoption. In the conclusion the paper puts the attention on the opportunity for banks to leverage their Internet experience as to move on developing a multiplatform banking business; where technology not only drives the ways customers interact with their banks but also opens new business opportunities for them. And in the final section devoted to recommendations we outline the need to improve service to customers and be more effective in increasing their Internet banking usage.

1. The multichannel distribution evolution in banking

The banking sector is quite sensitive to the developments in the innovative technologies due to the nature of its operations and services. The primary goal for the introduction of new channels has always been to lower the marginal cost per transaction and answer to new competitors.

The electronic distribution of retail banking services originated with the introduction of automated teller machines (ATMs), a technology pioneered by Barclays Bank in 1967 (Batiz-Lazo and Wood, 2002; Batiz-Lazo and Wardley, 2007). The following phase in the history of multichannel distribution can be linked to the provision of telephone banking services by branchless retail intermediaries (Batiz-Lazo and Wood, 2002). Consumers could check balances, transfer money, acquire information about services and even pay bills by just making a phone call to a centralized phone number. Adoption of these services has not seen a rapid growth. It can be noticed that after banks increased the availability of live representatives, customers were more prone to use the services (Sarel and Marmorstein, 2003).

Afterwards, the 80s saw the rise in popularity of Personal Computers (PC) and the launch of a new electronic banking channel called PC-banking. It was first offered to clients by Citibank in 1984 (Shapiro, 1999). To make use of the service customers had to make an effort. PC-banking technology required its users to install proprietary software on their home computers and allowed communication with the bank's server in an offline mode (Flier et al., 2003;

Ibrahim et al., 2006). While early adopters of PC-banking liked the concept, adoption was limited to a very small group of consumers. Due to complexity of use and high costs, PC-banking was successful only in the corporate market segment (Giannakoudi, 1999; Daniel, 1999; Flier et al., 2003).

The next decade emerged a new distribution channel due to the popularization of the Internet. The 90s are known for a marked propagation of electronic banking as Internet was becoming the focus of the sector. Banks promptly realized the potential of the Internet medium and employed it to the benefit of consumers. Since Internet users operate standardized web browsers, no additional software or infrastructure was needed to conduct banking activities. E-banking uses the web browser for the user interface and the Internet for data transfer and download of software, and so has a potential for reducing maintenance costs (Mia et al., 2007). In the new systems, customers connect through the Internet to their bank's website anytime and anywhere. The first bank to allow online transactions was California-based Wells Fargo in 1995. The establishment of the first virtual branchless bank, Security First Network Bank, occurred during the same year (DeYoung et al., 2007). In the first years of the launch, Internet-only banks found it very difficult and/or unprofitable to attract new customers because the costs of marketing were higher than expected and most consumers were reluctant to abandon brick and mortar banks.

A decade later, practically all of the major USA and Western European banks offered Internet banking services (DeYoung et al., 2007; Hernando and Nieto, 2007). Recently, a new channel is growing rapidly, the mobile banking (m-banking), which was first introduced in 1999. It has been defined by marketers as a powerful new marketing and customer relationship management (CRM) tool for financial services companies (Sinisalo et al., 2007). This is true because there are more phones than PCs in the market and mobile phones make it simple to communicate with the target market and establish a stronger relationship as banks provide market compelling-needed services (The World Bank, 2009). It means that these services despite being used for satisfying needs have also a powerful and irresistible effect on the customers. Banks are among the institutions that offer services which capture an acute attention and respect from their clients. In this sense mobile banking is offering added value to CRM.

The decision to provide online services is currently perceived as vital for customer retention and maintaining competitive advantage in almost any industry (DeYoung and Duffy, 2002). The customer equity approach is based on a long-term strategy of acquiring, retaining and selling additional services to the

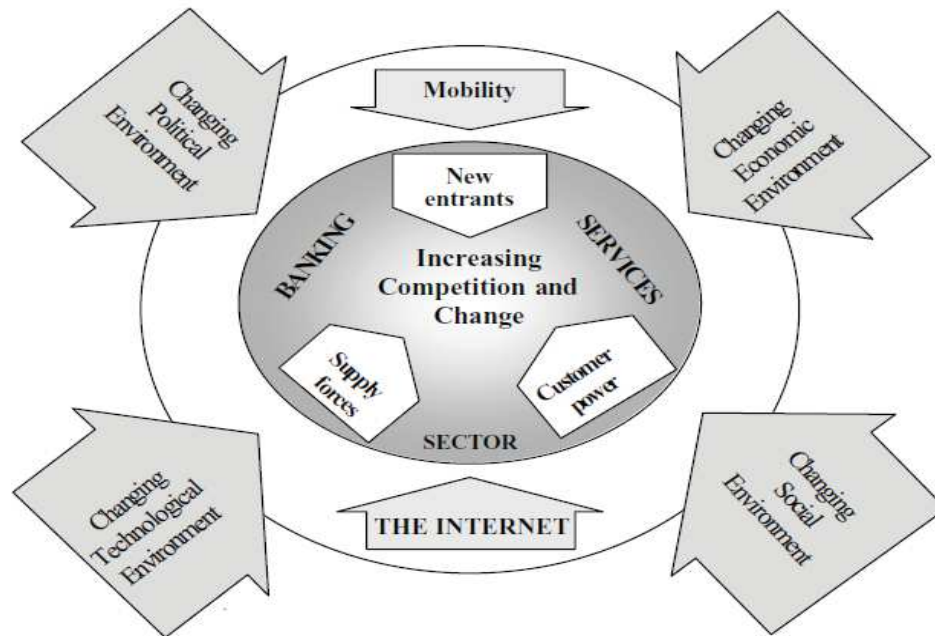
desired customer and online banking capabilities could help banks improve their efforts in all of these areas (Sarel and Marmorstein, 2003). In the beginning the primary goal of banks was to acquire clients. With the number of online banking consumers increasing, the focus is in retaining these clients and online capabilities are extremely helpful achieving this objective. By facilitating interaction and two-way communications, banks can learn about problems and opportunities before it becomes too late or too costly to recover (Sarel and Marmorstein, 2003). Being online enhances also the ability of the bank to identify and to evaluate emerging services trends that may affect many customers. The online world allows banks to move proactively into customer-based marketing efforts. By developing worthwhile databases, monitoring consumer needs and behavior, and experimenting with different tactics, new opportunities may emerge. The bank is closer to the client, the customer-bank relationship is strengthened, the possibility of add-on sales is increased and new streams of revenue may unfold (Sarel and Marmorstein, 2003).

The move toward Internet banking increases the need for a holistic approach to channel and process management, especially when integrating new delivery channels into existing frameworks. Burns (2000) indicates that the Internet will not replace other delivery channels, but it will offer increased flexibility and the opportunity for improved service. And also (Porter, 2001) said that "Many have argued that the Internet renders strategy obsolete. In reality, the opposite is true. Because the Internet tends to weaken industry profitability without providing proprietary operational advantages, it is more important than ever for companies to distinguish themselves through strategy. The winners will be those that view the Internet (and new other platforms, we also add) as a complement to, not a cannibal of, traditional ways of competing."

1.1. A focus on Internet banking: different perspectives of analysis. Internal and external forces have influences on electronic banking sector. The external forces consist of four forces changing: technological environment, changing political environment, changing economic environment, and changing social environment (Nellis, 1998; Jayawardhena and Foley, 2000). According to the study by Jayawardhena and Foley (2000), the external forces in the banking environment will have the greatest impact on the sector. Economic and political changes have increased power and rights of the customer, at the same time when legislation has increased competition in the financial services industry. Consumers are now facing a profusion of financial products and providers. The dynamic social environment includes the emergence of mature bank customer segments

which represent new challenges for banks. Social changes have also taken place in cultural values and beliefs and in attitudes toward technology and society. Changes in technology include the rapid growth of information technology and the impact of this on the banking world. New technologies create new markets and opportunities. Managing and satis-

fyng the customer with different delivery channels has become a key issue for the sector's players. As a result of the high cost of developing and introducing new technologies, many firms are becoming copy-cats by imitating competitors' products and making minor improvements in features and style (Karjaluo, 2002).



Source: Adapted from Jayawardhena and Foley (2000).

Fig. 1. The banking services sector and interaction with forces

According to the "E-Commerce beyond 2000", the banking and finance sector has been a rapid adopter of E-Commerce because its products could easily be virtualized and the product had priority over place (NOIE, 2000). Banks and financial institutions are always searching for new ways to maximize their profits at minimum costs. Pressured by rising costs, ever more demanding customers, and the need to preserve profitability while standing out from the competition, banks found themselves forced to invest in new customer service channels such as Internet banking (IB) (Hernandez and Mazzon, 2007). As Denny (2000) observes, awareness of competition has motivated banks to move aggressively in seeking alliances and establishing joint ventures to maintain their claim to this part of the E-commerce infrastructure. Banks started to provide their ATM, phone banking, Internet banking and mobile banking services respectively in line with the developments in technology, but not only. New technologies also mean sophisticated clients that want to integrate these new technologies in the way they satisfy their needs. Internet banking has become an attractive method for banks to be used in the field of obtaining market related information, delivering banking services to its customers in a quick way, and increasing its services to customers. Internet banking has made life much

easier and banking much faster and more pleasant, for customers and the bank itself declares the SAS Institute AB (2000).

The two prevailing Internet models in the banking industry are E-banks and E-branches. An E-bank is a banking institution that exists only on the Internet, with no bricks-and-mortar-branch access. This approach gives a bank the opportunity to exist without paper, without geographical limitations, and without ever closing the doors to customers (Nath, Schrick and Parzinger, 2001). The E-branch model is where a traditional bricks-and-mortar bank offers Internet banking to its customers. Putting it simple, it refers to the case when classic banks start to cross-sell bank products via a website in order to reach new clients and offer additional services to the existing ones.

E-banking has emerged as a significant and rapidly growing component of the world economic exchange. Through E-banking the world economic exchange has been reduced to a tiny global village in terms of its information capacity and the resources it holds which can be accessed by anybody from anywhere in the globe (Hwang et al., 2007). The first and the most important benefit for a bank is cost savings. There are two ways in which banks can reduce their

overall costs. The first one is by minimizing the cost of processing transactions. The second one refers to the number of branches that are required to service an equivalent number of customers. Reducing the number of branches leads to lower costs Orr (1999) states that electronic processing contributes to cost reduction by dramatically reducing the cost per transaction. Irvine (1999) noticed that electronic bill representation costs 40 per cent less than paper delivery. These cost savings can offer customers and banks concurrent reduced cost of banking and still provide efficient and diversified services. It provides convenience in terms of resources used such as the capital and labor time needed to make a transaction.

Internet banking can give banks the possibility to create loyal customers if there is a well-designed strategy behind it. The web site layout is very relevant in presenting the bank and its image. Websites that offer financial convergence for the customer will create a more involved customer who will deal more frequently with the banking site and is more likely use the services offered. The idea is that by creating a more loyal customer who depends on a bank for many financial services, more assembling can occur and higher revenue per customer can be generated. Also, it gives banks the possibility to provide very personalized relationship to their customers and to increase customer satisfaction and retention. Almogbil (2005) notes that a common reason for bank adoption of E-banking is to maintain the bank's competitive position and image. Furthermore, the capability to cater and expand the customer base is strengthened leading then to a vicious cycle.

Using the IT technology banks can offer to their customers a financial portal where different kinds of services may be provided. This financial portal concept gives banks a new role in the way they serve to their clients. By offering a wide array of products and services, banks can benefit from Internet integration because by just being present in Internet does not offer them a revenue stream (Wah, 1999). Banks can generate revenue through increased account access fees, and benefit from promotional opportunity to cross-sell products such as credit cards and loans (Yerkes, 1998). The Internet banks serve also as gateways offering identification and authorization services to a number of third party service providers such as the mobile phone companies, energy firms and tax board authorities (Mia et al., 2007). For example, in 2002 in USA, 81.867 private individuals submitted electronic tax declarations and 79.727 of them did it through Internet banks. There are user-friendly opportunities for conducting business over the Internet with telephone companies and other institutions. It has been shown that demand for those services influences also the usage rates of Internet banks.

2. The customer perspective on adoption a bank technology driven

Thornton and White (2001) compared several electronic distribution channels available for banks in the USA and concluded that customer orientation – towards convenience, service, technology, change, knowledge about computing and the Internet – affected the usage of different channels. Seitz and Stickel (1998) note that consumer behavior in banking has changed partly as a result of changes in the amount of spare time available to individuals. Mobility, independence of time and place, and flexibility has become key words in consumer banking. Howcroft et al. (2002) found that the most important factors encouraging consumers to use online banking are lower fees, less paperwork, and reduced human errors, which subsequently minimize disputes. Gerrard and Cunningham (2003) found a positive correlation between convenience and online banking and remarked that a primary benefit for the bank is cost saving and for the consumers a primary benefit is convenience.

Online banking is convenient because is accessible anytime and anyplace. It allows each customer to perform transactions, pay bills and check balances 24 hours a day, 7 days a week. The bank virtually never closes because it is as available as a PC or laptop computer, PDA, mobile or tablet. It is considered as “one-stop” shopping where the customer can find all he/she needs and leads to a high level of satisfaction.

Online banking is fast, efficient and effective. Through the Internet, transactions are typically performed and executed at a faster rate than ATMs. In addition, online banks give the customer the ability to handle several bank accounts from one site. It offers flexibility and customers no longer need to travel to the bank or queue for the services.

The cost aspect is relevant not only for the bank but for the customer too. The Internet banking cost structure allows consumers to receive cost savings and/or financial benefits for banking online. Interest rates on Internet current accounts can be higher because Internet-based operations have cheaper running costs. However, this is not always the case. Internet banking offers also a faster circulation of assets leading to time savings. It allows companies to make new business contacts from different global business alliances, test new products and services, and make market research and other enquiries all at a minimal cost both financial and otherwise (Shin, 2008).

Systems that allow customers to initiate transactions online, beside the traditional ones, such as transferring money between accounts or making payments, provide additional advantages to the customer (Ravi et al., 2001). These enhanced web sites offer a large umbrella of service from one trusted banking institu-

tion providing benefits to both banks and the customers. Banks will be able to acquire a greater share of a customer's financial business. Customers will benefit by having a wider selection of services available from one trusted institution (Hickman, 1999). Using the Internet, financial information from a bank can be linked to account information stored in a program such as Quicken, QuickBooks, or Microsoft Money on a home computer (Fysh, 1999). These features improve "stickiness" of customer with his/her bank. Sheshunoff (2000) argues that once a customer moves to full-service Internet banking, the likelihood of that customer moving to another financial institution is significantly diminished.

On the other hand, security has been and remains one of the causes for e-banking diffusion. Customers are certainly concerned of giving their bank account information online or paying an invoice through Internet. Privacy issues are also correlated to these concerns. E-banking industry and the e-business in general is facing another challenge, the quality of delivery service – including both delivery speed (i.e., short advance time required in ordering) and delivery reliability (i.e., delivery of items/services on time) (Furst et al., 2000). Many studies in different countries indicate that user adoption of e-banking is strongly affected by perceived security. Even with the best the Internet has to offer in banking services, consumers still need to visit an ATM or a bank branch to withdraw cash. Even though the use of cards has seen an increase over the years, cash is still the main medium of exchange. Furthermore, online banking is subject to the dependability of other computers or web servers. In case of any problem regarding safety or usage, a customer cannot have access to his/her account. Also if the service connection is not performing or customers have problems they should go to the branch to find the solutions of their problems.

While doing transactions online there is no individual to receive and check the money or correct some wrong information that the customer might have written on a certain form. For people comfortable dealing with real people who provide personalized services and using paper and money, Internet banking is not ideal. The face-to-face communication is an issue for both the customers and banks. CIA Triad states that there are set of people e.g. older

ones who don't want to follow the technological trend and continue traditional conventional branch banking, thus ignore to learn the new technologies due to lack of confidence and personal capability.

Familiarity reflects the direct and indirect knowledge about a certain product or object available to the individual. Several researchers emphasize that consumers' level of experience or familiarity with the Internet should be considered as a key situational variable in determining both beliefs about this medium and online consumer behavior (Martinez-Lopez et al., 2005). For a first time user, navigating through a website of an Internet bank may be hard and may take some time to get used to it. Opening an account could also take time as some sites ask for numerous personal details including a photo identification which can inconvenience the potential customer. Because of this complexity, they may be discouraged to use the Internet banking service. This is especially true for elderly people that have problem adopting to new technologies in general. These customers believe that they are left at a disadvantageous position and become very reluctant in doing business online (Yang et al., 2007).

Even though Internet banking is regarded as one of the most powerful delivery channels that allows banks to expand their customer contact through increased geographical area and lower cost delivery channels, there is no point for banks to invest in IBS if the services are neither wanted nor accepted by their customers. As it happens with almost everything, the E-banking diffusion is not the same across countries in the world. There are different reasons that may explain these differences and that has been subject of various studies. The main ones are related to economic factors, infrastructure development, cultural and social differences and Internet regulations. For example, there are 476 million Internet users in Europe, 272 million Internet users in North America and 21 million in Oceania, for a total of 769 million users. This figure is lower than the 1 billion of Internet users in Africa, Asia and Middle East. As it is shown in the following table Africa, Middle East and Latin America have the highest growth rates in the last 10 years. However, the E-banking is more accepted among users in developed countries.

Table 1. World Internet usage and population statistics (June 30, 2012)

World regions	Population (2012 est.)	Internet users (Dec. 31, 2000)	Internet users (latest data)	Penetration (% Population)	Growth 2000-2012	Users % of table (May 2011)	Users % of table (June 2012)
Africa	1,073,380,9258	4,514,400	167,335,676	15.6%	3,606.7%	5.7%	7 %
Asia	3,922,066,987	114,304,000	1,076,681,059	27.5%	841.9%	44%	44.8 %
Europe	820,918,446	105,096,093	518,512,109	63.2%	393.4%	22.7%	21.5 %
Middle East	223,608,203	3,284,800	90,000,455	40.2%	2,639.9%	3.3%	3.7 %
North America	348,280,154	108,096,800	273,785,413	78.6%	153.3%	13%	11.4 %

Table 1 (cont.). World Internet usage and population statistics (June 30, 2012)

World regions	Population (2012 est.)	Internet users (Dec. 31, 2000)	Internet users (latest data)	Penetration (% Population)	Growth 2000-2012	Users % of table (May 2011)	Users % of table (June 2012)
Latin America / Caribbean	593,688,638	18,068,919	254,915,745	42.9%	1,310.8%	10.3%	10.6 %
Oceania / Australia	35,903,569	7,620,480	24,287,919	67.6%	218.7%	1.0%	1.0 %
World total	7,017,846,922	360,985,492	2,405,518,376	34.3%	566.4%	100.0%	100.0 %

Source: Internet World Stats.

Banking penetration is usually associated to the development of the country and its financial industry. That is why USA or France have more households with deposit accounts than China or Brazil. Cultural differences have to be taken into account when analyzing the adoption of IBS. In their recent study Yuen, Yeow, Lim and Saylani (2010) have demonstrated that cultural factors are very important in the adoption of Internet banking services. It has been observed that the implementation of IBS in Asian countries is taking place in a different way from the Western countries. For instance, Asian cultures place more value on strong relationships in business than Western cultures, and it has its impact on e-banking too. Key account managers in banks in Hong Kong view a whole set of social relationships as quite important in facilitating the information exchange for building and maintaining customer relationships (So and Speece, 2000). This strong human orientation can make the Internet self-service model unattractive for consumers and evidences have shown this. For example, Srijumpa et al. (2000) showed that the lack of human interaction was a strong barrier and a source of dissatisfaction for Thai consumers of stockbrokerage firms.

2.1. Developed countries versus developing countries. The majority of banks with Internet presence are from the USA, while in Europe the largest number of banking websites are in the UK, Germany, Spain, Italy and France. There are 22 million E-bankers in the UK, accounting to more than 50% of the country's online population, and there are approximately 10.5 million E-bankers in Australia. In the UK, there were 45.1 million bank accounts registered to use E-banking in 2010, up from 28.2 million in 2006. 79% of French Internet users manage their banking accounts online.

Several studies compared Internet Banking Services (IBS) in different countries. For example, a comparison of IBS adoption among users in 15 European Union countries shows that IBS is more commonly used in Nordic and Middle-European countries than Southern-European countries. Results show that socio-demographic variables such as age and profession have a significant impact on the use of IBS. A recent study found that for the developed countries (the US and Australia), attitude towards use, performance

expectancy, and perceived credibility are important factors. The main difference between the developed and developing countries is perceived credibility (PC) (Yuen et al., 2010). PC is a predictor of intention to use IBS for the developed countries but not for the developing country. This can be explained by the cultural differences between the countries. The researchers concluded that consumers in the developed countries are concerned over PC issues in IBS, such as being a victim of phishing and having their IBS account information exposed to unauthorized people. In addition, they noted that having lower level of power distance and higher level of individualism, consumers in the developed countries are less likely to easily trust Internet banking specialist to protect them from fraud, loss of money and privacy intrusion. According to "International Banking" report published by The Economist in May 2011, only 60% of Italian Internet users consider online banking important, or very important. Similarly, only 50 per cent of French Internet users feel that online banking is important or very important. Despite the fact that IBS penetration is higher in the developed countries (Australian Bankers Association, 2008), the consumers in the developed countries have significantly lower behavioral intention to use IBS compared with their counterparts in the developing country. In other words, many consumers in the developed countries have IB account but may not choose to use it as frequently or extensively in the future as their counterpart in the developing country. Such a situation can probably be explained by the cultural difference in terms of perceived credibility (Yuen et al., 2010).

Legislation and regulation is another aspect to be considered when talking of IB services. It is interesting to note that the IBS users in the developed countries have more security and privacy measures and legislation to protect IBS users. In the US, government agencies such as the Office of the Controller of the Currency regularly inform users of the latest security and privacy threats regarding to IBS transactions. In Australia, the Australian Bankers' Association serves the same purpose. In contrast, such agencies in developing countries are not present yet and the body of laws governing the E-commerce is not completed.

Banks in developing countries have started to implement the Internet strategy and somehow to educate the consumers about it. While the E-banking application has advanced significantly during recent years, especially in the developed nations and most emerging new economic power nations (like China, South Korea, etc.), but in comparison, the development of E-banking application is way behind in many relatively poor and underdeveloped nations (like many nations in South Asia and Africa) (Gao and Owolabi, 2008). Many researchers have been studying the main factors that influence the adoption of E-banking in these countries. All studies agree in the fact that performance expectancy, meaning the functional value, is the first important factor influencing adoption in all developing countries. In other words, the benefits deriving from using the IB are the most important drivers that lead its usage.

In Asian countries where the level of individualism is low, banks do not face the issue to justify the IBS security measures to gain the trust of consumers. Also these consumers recognize the expertise of the banks and leave it to the experts to protect them. However, this is not true for all countries and each of them has its own cultural peculiarities. Studies in other countries suggest that banks must first convince their customers that Internet banking and transactions are secure before customers show willingness to use Internet banking. In Saudi Arabia, Internet banking is still in its early stages and it is not utilized as a considerable savings tool in operating costs for banks and in improving customer relationships (Al-Somali, Gholami and Clegg, 2009). In Asian region, Hong Kong and Singapore are regarded as the leaders in the adoption of Internet banking (Shih and Fang, 2004).

Malhotra and Singh (2010) conducted an exploratory study in India and the results reveal that the private and foreign Internet banks have performed well in offering a wide range and advanced services of Internet banking. They also highlighted the determinants affecting the extent of Internet banking services such as the size of the bank, experience of the bank in offering Internet banking, financing pattern and ownership of the bank. Chinese online and mobile banking users were predominantly males, not necessarily young and highly educated, in contrast with the electronic bank users in the West. The issue of security was found to be the most important factor that motivated Chinese consumer adoption of online banking (Laforet and Li, 2005). In Brazil, the IB growth rate over the past years has exceeded that of the internet itself. According to Febraban (2004), the number of IB registered current accounts has jumped from 8.3 million in 2002 to 18.1 million in 2004, of which 16.2 million belong to individual account holders.

3. A theoretical framework for the comprehension of the adoption process of Internet banking services

As the new technologies started to have their influence on the banking system by simplifying the access to clients, literature on banking technology has developed particularly as of the late 1980s and the early 1990s. There has been wide discussion in the literature, on the one hand, about the adoption process of Internet banking services, and on the other hand, about consumers' reactions to this new delivery channel. Studies on IB adoption can be divided in two categories: descriptive and relational.

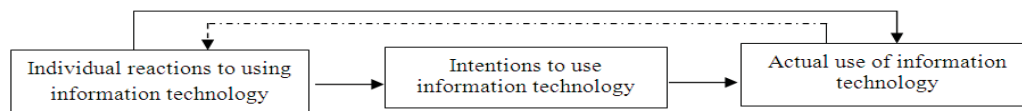
Descriptive studies focus on identifying the characteristics of IB adopters, their reactions, attitudes, and the barriers to adoption they face, or the attributes that make IB more attractive to prospective adopters (for example, Lee et al., 2005; Akinci et al., 2004). Patsiots, Hughes and Webber examined Internet banking adoption and resistance in Greece in order to develop profiles of segments of adopters and non-adopters of the services. They identified three segments with different characteristics such as "the advanced users" who present the greatest knowledge of the benefits of using the service and the awareness of the aspects of interactivity in their communication through computer-based interfaces. They are those that are the least concerned with regard to the different risks involved in using the service, given their high level of knowledge. They are less influenced by emotional factors, they are more likely to prefer the computer-based interface compared to the human interaction, and the lack of trial is not important for them. The second segment was called "the concerned majority" which placed greater importance on the aspects of human interaction and is more concerned with the different risks involved and the lack of trial before adoption. They prefer interaction with people from the bank compared to interaction with the computer-based interface. While they may have the knowledge to understand the benefits of using the service, their desire for the presence of human interaction, their risk concerns, and their lack of trial seem to explain their resistance behavior. The third group was "the unconcerned majority" and these individuals placed the greatest importance on the emotional aspects and the negative elements associated with the service. However, they are not concerned with any of the rest of the influencing factors. Laukkanen, Sinkkonen and Laukkanen (2008) in their study tried to identify postponers, opponents and rejectors of the E-banking in Finland. They concluded that the resistance of the rejectors is much more intense and diverse than that of the opponents, while the postponers show only slight resistance. The results also indicate that psychological barriers are even higher

determinants of resistance than usage and value, which are constructs of ease of use and usefulness of the technology acceptance model. Sarel (2003) also identified three groups of users which he labeled “active users”, “light users” and “non- users”.

Relational studies are focused at detecting the variables influencing adoption of IB, in general using one of the new technology adoption models mentioned below (IDT, TRA, TAM, TAM2, TPB, UTAUT and DTPB). Since the aim of this study is to identify the elements that influence the customers in using E-banking and their behaviors towards it, these models will be elaborated in detail.

Significant progress has been made over the last decade in explaining and predicting user acceptance of information technology. Online banking is an issue that is researched using different models in various countries of the world. Information System (IS) research has long studied how and why individuals

adopt new information technologies. Within this broad area of inquiry, there have been several streams of research. One stream of research focuses on individual acceptance of technology by using intention or usage as a dependent variable (e.g., Compeau and Higgins, 1995b; Davis et al., 1989). Other streams have focused on implementation success at the organizational level (Leonard-Barton and Deschamps, 1988) and task-technology fit (Goodhue, 1995; Goodhue and Thompson, 1995). To date, Information System acceptance research has been mostly influenced by intention-based models embedded in cognitive psychology, including the theory of reasoned action (TRA) by Fishbein and Ajzen (1975), the technology acceptance model (TAM) by Davis (1989) and its extensions, and the theory of planned behaviour (TPB) by Ajzen (1991). TAM is an extension of the theory of reasoned action, developed by Fishbein and Ajzen (1975) to describe the psychological determinants of behavior.



Source: Venkatesh et al. (2003).

Fig. 2. Basic concept underlying user acceptance models

Figure 2 presents the basic conceptual framework underlying the mentioned models explaining individual acceptance of information technology that forms the basis of this paper.

3.1. A focus on the relational studies on the adoption process of Internet banking services. A first important theory among the relational studies is the one called theory of reasoned action (Fishbein and Ajzen, 1975). It was originally introduced in the field of Social Psychology, but it has been widely used to explain individuals behavior. The TRA hypothesizes that behavior is predicted by an individual’s intention to engage in a given behavior. Intention, in turn, is predicted by two factors, the individual’s attitude towards the outcome of the behavior and by the opinions of the person’s social environment, which is called the subjective norm. The attitude toward behavior reflects an individual’s evaluation or general feeling toward the target behavior. It indicates an individual’s positive or negative evaluation about performing the behaviour. The attitude toward behavior is a product of beliefs about the behavior and the individual’s evaluation of the outcome resulting from that behavior. The theory postulates that the intention to perform a behavior will be higher when the individual has positive evaluation of performing the behavior (Ajzen, 1991).

Subjective norm (SN) refers to an individual’s perceived social pressure to perform or not to perform target behavior. The subjective norm is a composite

of normative beliefs about a certain behavior and the individual’s motivation to comply with relevant others (Fishbein and Ajzen, 1975). Normative beliefs indicate one’s perception of the influence of opinion among reference groups while motivation to comply indicates the extent the individual wants to comply with the wishes of the referent other (Mathieson, 1991). The rationale for a direct effect of subjective norm on intention is that people may choose to perform a behavior, even if they are not themselves favorable toward the behavior or its consequences, if they believe one or more important referents think they should, and they are sufficiently motivated to comply with the referents. The referents may be superiors (e.g., parents or teachers) or peers (e.g., friends or classmates) (Taylor and Todd, 1995). The theory suggests that people often act based on their perception of what others think they should do, and their intention to adopt a behavior is potentially influenced by people close to them. Though the effect of subjective norms (SN) on intention is inconclusive, from prior research there is a significant body of theoretical and empirical evidence regarding the importance of the role of subjective norm on technology use, directly or indirectly (e.g., Taylor and Todd, 1995; Venkatesh and Davis, 2000; Hsu and Lu, 2004). The relative influence of subjective norm on intentions is expected to be stronger for potential users with no prior experience since they are more likely to rely on the reactions of others in forming their intentions (Hartwick and Barki, 1994).

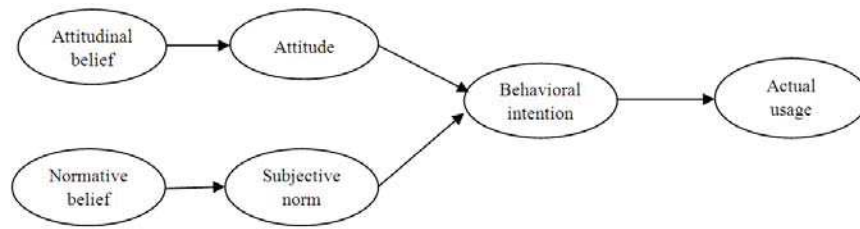


Fig. 3. The pure form of TRA

A second relational study is the one called technology acceptance model (TAM); it was proposed by Davis (1989) to predict the acceptance and use of new information technology (software and information systems) within organizations. TAM suggests that user adoption of new information systems is determined by user's intention to use the system, which in turn is determined by user's beliefs about the system. It theorizes that an individual's behavioral intention to use a system is determined by two beliefs: perceived usefulness (PU), defined as the extent to which a person believes that using the system will enhance his or her job performance, and perceived ease of use (PEOU), defined as the extent to which a person believes that using the system will be free of effort. Perceived usefulness is also influenced by perceived ease of use because, other things being equal, the easier the system is to use the more useful it can be. Numer-

ous empirical studies have found that TAM consistently explains a substantial proportion of the variance (typically about 40%) in usage intentions and behavior. By hypothesis, the greater the perceived usefulness and the perceived ease of use, the better are people's reactions towards the innovation and the higher their intention to adopt it. Later, based on TRA, Venkatesh and Davis (2000) added to TAM the subjective norm construct, and this new model became known as TAM2.

TAM2 proposes that subjective norm can influence the cognitive belief of perceived usefulness. Lewis (2003) sought to explain for perceived usefulness from social aspects and found the expected relationship. Subjective norm may also help to shape an ease of use before any direct experience cannot be exempted from social influence.

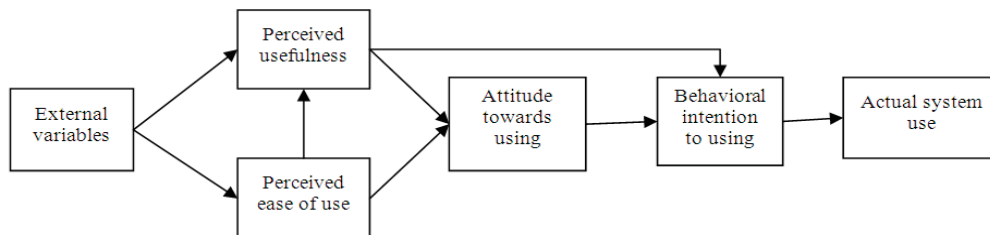


Fig. 4. TAM model extended with external variables

A third approach is called theory of planned behavior. Based on TRA, TAM assumes that two personal beliefs about the ease of use (PEOU) and usefulness (PU) of the computer system influence attitude which in turn lead to behavioral intentions and then generate behavior to use the system (Davis et al., 1992; Venkatesh and Davis, 1996). Some evidence exists that the original TAM constructs explain less than 45 percent of intention and usage variance in an e-commerce related context, including IB (Chen et al., 2002; Suh and Han, 2002). It is, therefore, recommended to incorporate the other underlying behavioral constructs and external variables reflecting the user's task environment into TAM to remedy the problem (Dishaw and Strong, 1999; McFarland and Hamilton, 2004).

The first addition to TAM was the perceived behavioral control (PBC) construct, taken from the Theory of Planned Behavior (TPB). TPB was proposed by Ajzen (1985) as an extension of TRA (Fish-

bein and Ajzen, 1975) for situations where people do not have complete control over their behavior. PBC account for personal perceptions of the availability of knowledge, resources, facilitating conditions and opportunities to perform the behavior (Ajzen, 1991; Ajzen and Driver, 1991). In essence, TPB differs from TRA in its addition of the component of perceived behavioral control (Taylor and Todd, 1995). The inclusion of perceived behavioral control in TPB considerably enhanced its explanatory power (Thorbjørnsen et al., 2007). In TPB, behavior itself is a function of both the behavioral intention and the perceived behavioral control. Behavioral intention, in turn, is influenced by the attitude towards behavior, the subjective norm and the perceived behavioral control. The determinants of intention (attitude, subjective norm, and perceived behavioral control) are established by the structure of the underlying (attitudinal, normative and control) beliefs. In accordance with Ajzen (1991) and Battacherjee (2000), Venkatesh (2000) divides the

concept of control into perceptions of internal control (computer self-efficacy) and perceptions of external control (facilitating conditions). Internal control relates to knowledge/self-efficacy, while external control relates to the support environment. Both internal and external control factors play an important role in shaping people's intention and behavior, as they are expected to be incorporated in people's

assessment as to how easy or difficult it will be to use a new technology (Venkatesh, 2000), thus affecting the acceptance of that technology (Davis, 1989). Nysveen et al. (2005b) suggest there is a significant link between behavioural control and intention to use, especially when it comes to goal-directed services (text messaging and payment) rather than experiential services (contact and gaming).

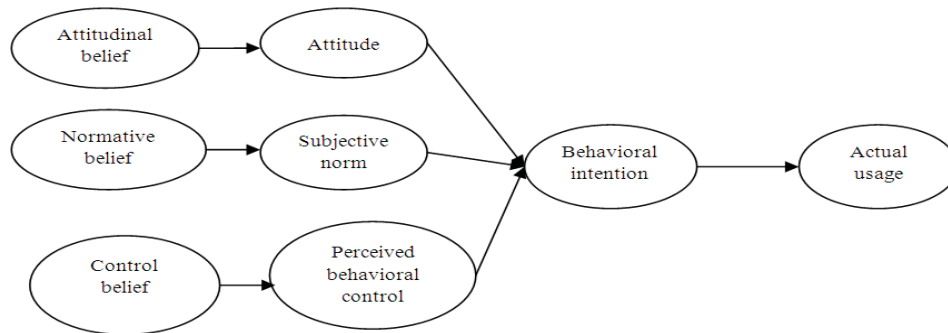


Fig. 5. The pure form of TPB

In the consumer behavior literature, it has been well documented that consumers tend to consider all the uncertainties and possible adverse outcomes when they make their product/service purchase decisions (Mitchell, 1999). In other words, perceived risk (PR) significantly influences consumers' purchase decisions, in which is involved the probability of unpredictable, unpleasant and costly consequences connected with those decisions. Evidence exists that PR is an important determinant of online purchasing behavior because the Internet is an inherently risky environment due to the absence of personal contact, physical product (service) evaluation, warranties or contracts, solid transaction security and privacy protection (Featherman and Pavlou, 2002; Hoffman et al., 1999; Jarvenpaa et al., 2000; Montoya-Weiss et al., 2003; Suh and Han, 2002). Therefore, with the proliferation of e-commerce and IB, TAM has recently been extended by adding the PR construct to remedy its lack of task environment focus. PR could be defined as the perceived possibility of exposure to adverse consequences in the persuasion of desired outcomes which, in turn, result in psychological, social, time, privacy, financial and performance losses by using IB (Cunningham et al., 2005). In the online environment criminal acts can be performed with extremely high speed, and without any physical contact (Cheung and Lee, 2006). If an unauthorized individual gets access to the online banking account, a considerable amount of financial information may be endangered and there might be considerable financial losses. Hence, the most important categories of perceived risk associated with Internet banking are likely to be financial risk and privacy. Social risk refers to the possibility that using online banking may result in disapproval of one's friends/family/work group. It is possible that one's

social standing may be enhanced or diminished depending on how online banking is viewed. While time risk intends the loss of the time and inconvenience incurred due to the delays of receiving the payment or the difficulty of navigation (finding appropriate services and hyperlinks). Two leading causes of dissatisfying online experiences that may be thought of as a time/convenience risk include a disorganized or confusing web site and pages that are too slow to download (Forsythe and Shi, 2003). Performance risk refers to losses incurred by deficiencies or malfunctions of online banking web-sites. Customers are often apprehensive that a breakdown of system servers or disconnection from the Internet will occur while conducting online transactions because these situations may result in unexpected losses (Kuisma et al., 2007).

Venkatesh et al. (2003) proposed a more complete model for the understanding of the acceptance and the adoption of IT namely the Unified Theory of Acceptance and Use of Technology (UTAUT) which integrates eight previously established models on individual acceptance of IT. They state that four elements play a significant role as direct factors of user acceptance and usage behavior, namely performance expectancy, effort expectancy, social influence and facilitating conditions. It redresses the limitations of existing user acceptance models by including barriers that would prevent an individual from using IBS into the study. The eight models reviewed are the theory of reasoned action (TRA), the technology acceptance model (TAM), the motivational model, the theory of planned behavior (TPB), a model combining the technology acceptance model and the theory of planned behavior, the model of PC utilization, the innovation diffusion theory (IDT), and the social cognitive theory. It is

considered a complete model because other factors that were not present in the eight previous models were added. These include: perceived credibility, self-efficacy, attitude toward using technology, and anxiety. Their role is to measure issues such as security and privacy, user confidence, enjoyment, and fear that arise during user interaction with IBS respectively (Venkatesh et al., 2003).

Among these studies there is also a second line of research that has considered adoption of new information technologies from the perspective of the Innovation Diffusion Theory (IDT) (Rogers, 1983; Tornatzky and Klein, 1982). This line also uses behavioral intention or behavior itself as dependent variables but the determinants are usually established according to the characteristics of the new technology. According to the IDT, the different dimensions of attitudinal belief toward an innovation could be measured using the five perceived attributes: relative advantage, compatibility, complexity, trialability and observability of the innovation (Rogers, 1983). Rogers (1995) regards an innovation as an idea, practice or object that is perceived as new by an individual or other unit of adoption. Adoption is defined as the process by which an innovation is communicated through certain channels over time among the members of a social system (Rogers, 1995). As Internet banking services allow customers to access their banking accounts from any location and at any time of the day, it gives advantage to customers to be able to manage their finances properly and in a more convenient way. The IB services offer relative advantages when compared to branch banking and other alternative methods in terms of price, convenience and performance. Complexity is considered as the exact opposite of ease of use, which has been found to directly impact the adoption of the Internet banking (Lederer, Maupin, Sena and Zhuang, 2000). Cooper and Zmud (1990) point out that a system that requires less technical skills and operational efforts will be more likely to be adopted and in turn generate better performance. On the importance of trialability, Rogers (1983) and Agarwal and Prasad (1998) stated that potential adopters of new technology, who are allowed to experiment with it, would feel comfortable with it and thus be more likely to adopt it. Compatibility is another important dimension of the innovation diffusion theory. In Tornatzky and Klein's (1982) meta-analysis of innovation, they found that an innovation was more likely to be adopted when it was compatible with the individual's job responsi-

bilities and value system. Observability is defined as the extent to which the benefits or attributes of the innovation can be observed, pictured or described to prospective adopters. Moore and Benbasat (1991) broke down the observability construct into two other: result demonstrability and visibility. The first, result demonstrability, refers particularly to the extent to which an innovation can be observed before it is adopted. The second construct, visibility, focuses on the extent to which the benefits of an innovation are visible to prospective adopters. The relationship between each of these characteristics and the intention to adopt an innovation is positive, with the exception of the complexity construct, which bears a negative relationship to the intention to adopt.

Taylor and Todd (1995) proposed a model known as the Decomposed Theory of Planned Behavior (DTPB), bringing together concepts from two distinct lines of research, that of innovation diffusion theory and theory of planned behavior. Taylor and Todd (1995) state that DTPB offers a number of advantages compared to other models:

- ◆ it renders more transparent and easier to grasp the relations among beliefs, attitudes and intentions;
- ◆ it enables application of the model to a variety of situations; and in managerial terms it is more relevant because it helps to determine specific factors that lead to adoption and use of new technology.

Three types of beliefs are the roots of this model. Attitudinal beliefs are broken down into three constructs such as perceived usefulness (relative advantage), ease of use (complexity), and compatibility. Normative beliefs are related to disagreement among the opinions of key reference groups in an organizational environment (peers, superiors, and subordinates). Control beliefs also break down into two groups: self-efficacy and facilitating conditions. Self-efficacy is related to the perceived ability of using a new technology and facilitating conditions refers to the available physical (time and money) and technological resources for adoption. The hypothesis is that the intention to adopt the innovation is stronger as the perceptions of self-efficacy in the use of a new technology and the existence of facilitating conditions become clearer. Taylor and Todd (1995) showed that the decomposed model of the TPB has better explanatory power than the pure TPB and TRA models.

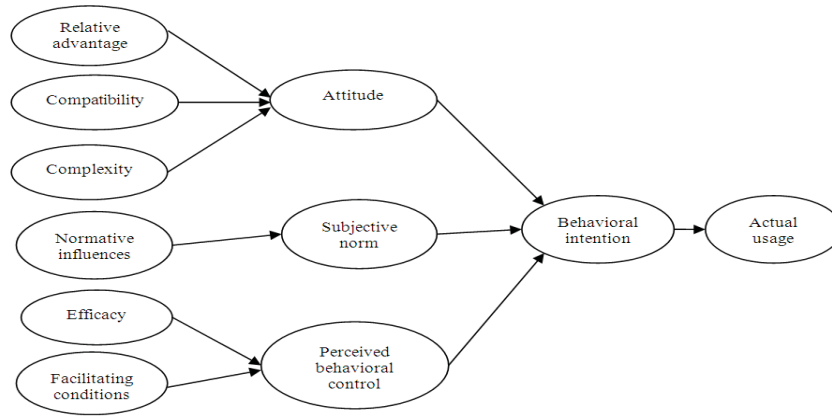


Fig. 6. Theory of planned behavior with belief decomposition

The following table makes a summary of the models mentioned and the constructs or variables that they have used. The definition of the new variable

that is added to each model is given in order to see what the models have in common with each other and what is their contribution in the literature.

Table 2. A summary of the principal theoretical frameworks on internet usage

Model	Constructs	Definition
Theory of reasoned action (1975)	Attitude toward behavior Subjective norm	"Attitude toward the behavior reflects an individual's evaluation or general feeling toward the target behavior". "The subjective norm is a composite of normative beliefs about a certain behavior and the individual's motivation to comply with relevant others".
Innovation diffusion theory (1983)	Relative advantage (Usefulness) Compatibility Complexity (Ease of use) Triability Observability	"Relative advantage is defined as the degree to which an innovation is better than its precursor." "Compatibility refers to the degree to which an innovation is perceived as being consistent with the existing values, needs and past experiences of potential adopters". "Complexity is the degree to which a system is perceived as relatively difficult to understand and use". "Triability is defined as the extent to which an individual is allowed to experiment with a system before adopting it". "Observability is defined as the extent to which the benefits or attributes of the innovation can be observed, pictured or described to prospective adopters".
Theory of planned behavior (1985)	Attitude toward behavior Subjective norm Perceived behavioral control	"Perceived behavioral control is defined as the perceived ease or difficulty of performing the behavior".
Technology acceptance model (1989)	Perceived usefulness Perceived ease of use	"Perceived usefulness is defined as the extent to which a person believes that using the system will enhance his or her job performance". "Perceived ease of use is defined as the extent to which a person believes that using the system will be free of effort."
The decomposed theory of planned behavior (1995)	Relative advantage (usefulness) Compatibility Complexity (ease of use) Normative influences Efficacy Facilitating conditions	"Self-efficacy is related to the perceived ability of using a new technology". "Facilitating conditions refers to the available physical (time and money) and technological resources for adoption of a system".
Technology acceptance model (2000)	Perceived usefulness Perceived ease of use Subjective Norm	
Unified theory of acceptance and use of Technology (2003)	Performance expectancy Effort expectancy Social influence Facilitating conditions	"Performance expectancy is defined as the degree to which an individual believes that using the system will help him or her to attain gains in job performance". "Effort expectancy is defined as the degree of ease associated with the use of the system". "Social influence is defined as the degree to which an individual perceives that important others believe he or she should use the new system". "Facilitating conditions are defined as the degree to which an individual believes that an organizational and technical infrastructure exists to support the system".

3.2. A focus on Internet banking adoption in the Italian market. According to a recent research developed by ABILab (the Italian Banking Association Laboratory Lab on Technology) it is resulted

that in 2011, 88 per cent of the banking population used physical channels and 83 percent of them declared to use also distance channels (See Table 3 below).

Table 3. The adoption of multichannel in Italy (2011)

Multichannel customers in 2005	60%
Multichannel customers in 2011	73%

Table 3 (cont.). The adoption of multichannel in Italy (2011)

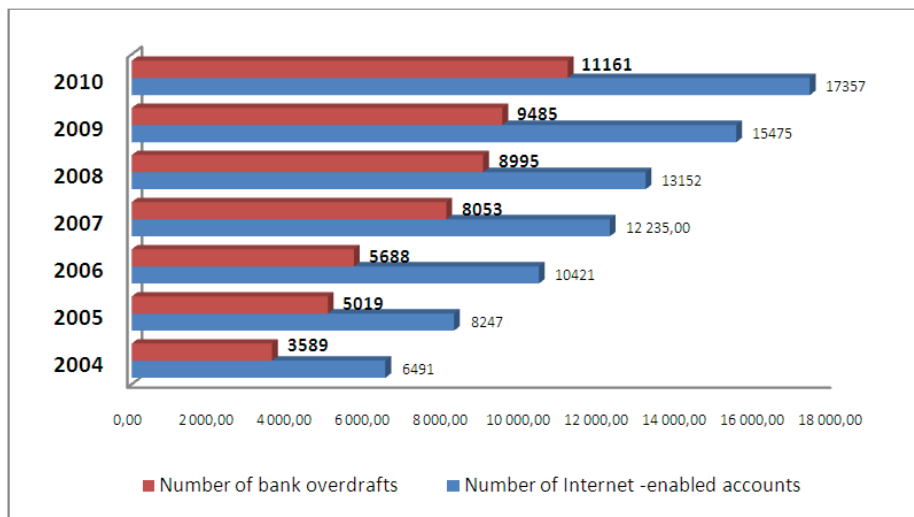
Physical channels	(73% + 15) = 88%	Branches 86% Financial advisor 5%
Distance channels	(73% + 10%) = 83%	Contact center 7% Internet banking 34% Automated teller machine 79%

Source: ABILab (2012, p. 29).

It is interesting to see that in 6 years Italian multi-channel bank customers had been increased from 60 percent of the banking population to a 73 per cent of it, as a consequence of a double effect. From one hand we can see that individuals have been increasing their attitudes and behaviors towards distance channels. And on the other hand banks have been developing the interoperability among the different channels. They have also increased the customer user experience by increasing their offer. Even though in the Italian market still remains a peculiarity that is the much higher number of branches per 100.000 inhabitants. As the average of the European countries (15 members excluded Italy in this case) have 41 branches per 100.000 inhabitants; in Italy there are 55 branches for the same population.

Spain has an even bigger number of branches that is 94 and Portugal 61. Instead Finland, Sweden, Ireland, Holland and the UK have a number of branches well below 30 per 100.000 inhabitants.

To explain this number we can also outline that although in Western countries Internet banking had its boom in the 90s, in Italy it became well known one decade later. In fact it is from the year 2004 that the trend of the diffusion and adoption of Internet banking services has been increasing sharply. A significant growth has occurred between the 2009 and 2010, when online current accounts rose by 12.2 per cent. This meant that there were more than 17 million Internet-enabled accounts in 2010. And among them the percentage of the bank overdrafts were well over 64 per cent (see Figure 7).



Source: ABILab (2012, p. 29).

Fig. 7. Number of Internet-enabled bank current accounts (values in thousands)

At present all Italian banks are offering Internet banking to their customers. Even though the product portfolio is not the same across the banks with some offering fewer services than the others but the trend is increasing and enlarging the services offered is already marked. There are banks offering account checking, recording of all the historical transactions, domestic

and international payments, debit and credit cards, loans payment and application, bill payments, and information related with T-bills and exchange rate and much more. In the process for Internet banking adoption, banks play the major role in developing the services (see Table 4) but also educating their customers about the new product offered to them.

Table 4. Percentage of banks from the sample offering informational and disposable services

Informational services		Payments services	
Current account balance	100%	Bank transfer	100%
Recording the historical transactions	100%	Bill payments	97%
Loans payment and application	81%	Mobile charging	73%
Alerting service	75%	Pre-paid credit cards charging	71%

Table 4 (cont). Percentage of banks from the sample offering informational and disposable services

Informational services		Payments services	
Financial simulation	62%	Utilities payments	53%
Cards balances	44%	TV license payment	50%

Source: Consorzio Bancomat (2011).

As shown in Table 4 we can infer a stronger relationship between the perceived usefulness of the array of services offered – both informational and disposable – and their use by Italian customers. There is also another aspects that is concerned with the functions Internet banking provides them and the easiness of benefiting from those functions. This is explained by the fact that technology, and in particular the use of the Internet, has a growing importance in Italian families. The data issued by ISTAT Report (Citizens and New Technologies – 2001) showed an increase in the proportion of households in 2011 who owns a PC (by 57.6 per cent to 58.8 per cent) and that has Internet access (from 52.4 per cent to 54.5 per cent).

This trend is also reflected on access to online banking services: according to Censis, the use of the Internet banking is one of the well more activities carried out on the web on a daily basis (22.5 percent) and, from 2011, ISTAT Report showed that 27.5 per cent of women and 36.5 per cent of men interviewed had access to online banking services in the last quarter of 2011. From another source it is confirmed the spread of the Internet banking with a trend that since 2004 is always growing as to reach the over 17 million Internet-enabled bank accounts, as showed before.

The attention and the consequent dedicated investments by banks in the provision of services on the Internet banking channel are also confirmed in the high level of satisfaction (ABI-GfK Eurisko, 2011). In particular, it was pointed out that satisfaction with the service provided via web leads to a greater satisfaction to the bank as a whole, especially by users of overdrafts account.

In fact, if the total of bank clients the 60 per cent declared satisfaction of the service, to active customers on the Internet banking the percentage rises to 63 per cent. Considering specifically the data relating to Internet banking customer satisfaction for the online channel, the percentage increases to 84 per cent.

It is also important to notice that the more banks develop services the more customers perceived their usefulness and consequently they increase their usage. In terms of new features, Italian banks plan to further expand the range of services and initiatives to their customers. And this can take place any time soon. In particular it will be increased the FAQ area for clients and live chat – both services being

used through a password. It is also foreseen that banks will expand these services to a greater extent. Among other functions that do not require password to use them, 82 per cent of the banks interviewed already provides localization services to a branch or ATM. It is interesting to notice also the relevance that is gradually assuming the scope of Social Media; as for detail about 36 per cent of Italian banking groups expected for the next two years an increase of these instruments in support of customers, while about 60 per cent will initiate social networking applications for extension of the target, customer loyalty and branding. Another important issue for the Internet banking adoption is the security risk. It appears to be the most important inhibitor to the adoption of online banking and it is for this reason that Italian banks' awareness and focus towards providing security and protection have been risen over the time.

Conclusions

Technological developments in the retail financial services industry have significant implications for banks' marketing efforts, and especially their distribution and communications policy since they impact on the interface with the customer. Understanding the factors that influence the diffusion of technological innovations is also important in identifying new market opportunities (Rogers, 1995).

There is no point for banks to invest in IBS if the services are neither wanted nor accepted by their customers. Therefore, it is crucial for banks to understand the importance of the factors that lead to the adoption of IBS, as a critical step for developing a more effective multichannel banking. This would help banks to maximize their returns on investments and maintain a competitive advantage (Dauda et al., 2007). As mentioned before the technology acceptance model (TAM) by Davis et al. (1989) found a stronger relationship in the USA between perceived usefulness and use than between ease of use and use. But there is also a fundamental fact that there is the conscientious about benefits and usefulness that the technology can offer. There is also the security factor that can be a most important inhibitor to the adoption of online banking. Perceived security and trust is one of the constructs that explain better the attitude towards IB. Another element that affects security is website trustworthiness. This underscores the fact that concerns about fraud and an identity theft are foremost in the minds of Internet users. Thus, provid-

ing encryption and strong authentication to prevent fraud and identity theft should be a priority in this field. These findings are consistent with many other studies (Gerrard et al., 2003; Rexha et. al., 2003) especially in developing countries, where security and trust are of paramount importance in adopting IBS. Banks that offer online banking need to search for risk-reducing strategies that might assist in inspiring high confidence in potential customers.

Also perceived behavioral control is an important constructs that together with PST explain the attitude. Usefulness is a vital element in encouraging customers to switch from traditional services to Internet banking services. Furthermore, customers with self-control have enhanced flexibility when they are empowered with the abilities to serve themselves. Awareness of Internet banking services is essential in the early adoption stages.

A significant positive relationship between attitude and behavioral intention suggests that positive attitude about Internet banking could influence individuals to use Internet banking.

Financial products are relatively complex products that require elaborate decision making. Information plays a major role in decisions concerning financial products (Perry and Morris, 2005; Lee and Cho, 2005) and therefore the external search for information is widespread and considered to be important (Heaney and Goldsmith, 1999).

The opportunity to increase the comprehension of customers attitudes is a key issue to increase the adoption of Internet banking services. And this knowledge is also extremely important because it can be leveraged for the next phase of the evolution of multichannel strategies in banking.

Web-based technologies are developing not only channels to contact customers but also more consistency schemes of distribution where partnerships and co-brandings can be further developed. They are more similar to platforms where the value delivered can vary among customer by developing different markets and business opportunities for banks. This is true because many have argued that the Internet renders strategy obsolete. In reality, the opposite is true. Because the Internet tends to weaken industry profitability – as it is considered to be cost less in respect to other channels – without providing proprietary operational advantages, it is more important than ever for companies to distinguish themselves through strategy. The winners will be those that view the Internet and the new other web-based platforms as complements to, not a cannibal of, traditional ways of competing. But in order to reach this goal it is necessary first of all to be focused on customer needs and their profiles. This is

important because the way you get knowledge on customers is relevant on the activity of segmenting customers considering their sensitivity to different factors, and to what extent they are a part of a given bank's actual customer portfolio. In this situation, what is certain is the strategic role played by bank-distribution schemes to create and deliver value to customers and develop new values for bank-customer relationships.

In conclusion, we think that banks have to leverage on the potential adoption of the Internet as to create different banking experiences, as not to miss the opportunity afforded by the new mediums to rethink the entire value proposition of a retail bank. Some non-bank entrants, on the other hand, are already exploiting the unique capabilities of electronic networks and they are trying to leverage their own resources through web-based strategies. From the virtual environment new entrants could pose a threat to retail banks. They can succeed because they pursue a business model different from that of traditional retail banks. Banks must react at this kind of threat. The real challenge in electronic banking is that banks must not be technology-driven but customer-driven, technology in fact it is only a tool not an end.

Recommendations

Technological developments in the retail financial services industry have significant implications for banks' marketing efforts, and especially their distribution and communications policy since they impact on the interface with the customer. Understanding the factors that influence the diffusion of technological innovations is important in identifying market opportunities.

From the one hand, banks should first target "sign-up" customers, those that have not tried it yet, and persuade them to utilize Internet banking services through tutorials or incentive programs. And from the other hand banks should also design a friendly and fool-proof interface for their Internet banking services. If customers can access and utilize Internet banking services such as transactions and information enquiry without effort, they can build up their self-esteem and self-efficacy and further appreciate the usefulness of new technology.

Banks can create a positive attitude amongst their customers towards Internet banking by promoting its security and trust, behavioral control and then usefulness and ease of use. To increase interest in Internet banking service attitude towards use, the first step is to ensure that the users are familiar with the service. Marketing professionals of banks could consider providing free demonstrations and trials to the public, accompanied with persuasions of the convenience and

enjoyment of using Internet banking services. This would provide opportunities for new adopters/users to experiment with various Internet banking products or services before deciding whether they like to use Internet banking. The marketing campaigns can be focused on giving the idea of independence and self-control it offers, and then to the efficiency, convenience and effectiveness are the main benefits of Internet banking. Advertising and personal promotion of Internet banking should emphasize the trustworthiness of the web site in its message. It should highlight the security features of the web site that will allow customers to use it with confidence. A significant positive relationship between attitude and behavioral intention suggests that positive attitude about Internet banking could influence individuals to use it.

In this case banks shouldn't sell Internet banking for free as it is a valuable service for customers and this

can be found in the high levels of their customer satisfaction. On the other hand, banks addressing a clientele already acquired should enlarge, as the Italian example shows, the range of services offered – both on the traditional and innovative sides – as to increase its interest and utility. However in this case banks should also consider that as some financial products are relatively complex products they can require elaborate decision making. It is in this respect that information plays a major role in decision-making and a personal support is also needed. Therefore, in these situations banks should take into account not to exceed in the remote bank and customer self-sufficiency because these aspects would lead the bank but also the customer to suboptimize the outputs of their relationship. In this situation it is essential that banks tune a strategy in which the channels are increasingly becoming complementary inside them if they want to follow customers' needs and instances.

References

1. ABI-GFL Eurisko (2011). Osservatorio di customer satisfaction, Roma.
2. ABILab (2012). Scenario e trend del mercato ICT per il settore bancario, Roma.
3. Alda's-Manzano, J., Lassala-Navarre, C., Ruiz-Mafe, C. and Sanz-Blas, S. (2009). "The role of consumer innovativeness and perceived risk in online banking usage", *International Journal of Bank Marketing*, Vol. 27, No. 1, pp. 53-75.
4. Al-Somali, S.A., Gholami, R. and Clegg, B. (2009). "An investigation into the acceptance of online banking in Saudi Arabia", Operations and Information Management Group, Aston Business School, Birmingham B47ET, UK, *Technovation*, 29, pp. 130-141.
5. Al-Somali, S.A., Gholami, R. and Clegg, B. (2009). Internet Banking Acceptance in the Context of Developing Countries: An Extension of the Technology Acceptance Model", *Working paper*, Operations and Information Management Group, Aston Business School, Birmingham B47ET, UK.
6. Ba, S. and Johansson, W.C. (2008). "An Exploratory Study of the Impact of e-Service Process on Online Customer Satisfaction", *Production and Operations Management*, Vol. 17, pp. 107-119.
7. Batiz-Lazo, B. and Wardley, P. (2007). "Banking on change: information systems in technologies in UK high street banking 1919-1969", *Financial History Review*, Vol. 14, No. 2, pp. 177-205.
8. Batiz-Lazo, B. and Wood, D. (2002). "Historical appraisal of information technology and commercial banking", *Electronic Markets*, Vol. 12, No. 3, pp. 1-12.
9. Basel Committee Report on Banking Supervision (1998). Risk Management for Electronic Banking and Electronic Money Activities, Switzerland: Bank of International Settlements.
10. Bhatti, T. (2007). "Exploring Factors Influencing the Adoption of Mobile Commerce", *Journal of Internet Banking and Commerce*, Vol. 12, No. 3.
11. Boyer, K. and Frohlich, M.T. (2006). "Analysis of Effects of Operational Execution on Repeat Purchasing for Heterogeneous Customer Segments", *Production & Operations Management*, Vol. 15, Issue 2, pp. 229-242.
12. Branca, A. (2008). "Demographic influences on Behavior. An update to the adoption of bank delivery channels", *International Journal of Bank Marketing*, Vol. 26, No. 4, pp. 237-259.
13. Censis (2011). I media personali nell'era digitale, Roma.
14. Chen, Sh-C. Li, Sh-H. (2010). "Consumer adoption of e-service: Integrating technology readiness with the theory of planned behavior", *African Journal of Business Management*, Vol. 4, n No. 16, pp. 3556-3563.
15. Citrin, A.V., Sprott, D.E., Silverman, S.N. and Stem, D.E. (2000). Adoption of Internet shopping: the role of consumer innovativeness, *Industrial Management & Data Systems*, Vol. 100, Issue 7, pp. 294-300.
16. Consorzio Bancomat (2011). La multicanalità delle banche, Roma.
17. Davis, F. (1989). "Perceived usefulness, perceived ease of use, and user acceptance of information technology", *MIS Quarterly*, Vol. 13, No. 3, pp. 319-340.
18. Dauda, Y., and Santhapparaj, A.S. (2007). "The impact of e-commerce security, and national environment on consumer adoption of Internet banking in Malaysia and Singapore", *Journal of Internet Banking and Commerce*, Vol. 12, No. 2.
19. DeYoung, R. and Duffy, D. (2002). "The challenges facing community banks: straight from the horses' mouths Federal reserve bank of Chicago", *Economic Perspectives*, Vol. 26, No. 4, pp. 2-17.
20. Fishbein, M. and Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, reading, MA: Addison-Wesley.

21. Flier, B., Van den Bosch, A.J. and Volberda, H.W. (2003). "Co-evolution in strategic renewal behaviour of British, Dutch and French financial incumbents: interaction of environmental selection, institutional effects and managerial intentionality", *Journal of Management Studies*, Vol. 40, No. 8, pp. 2163-2187.
22. Floh, A. and Treiblmaier, H. (2006). "What Keeps the E-Banking Customer loyal? A multigroup analysis of the moderating role of consumer characteristics on e-loyalty in the financial service industry", *Journal of Electronic Commerce Research*, Vol. 7, No. 2, pp. 97-110.
23. Gounaris, S., Dimitriadis, S. (2003). "Assessing service quality on the Web: evidence from business-to-consumer portals", *Journal of Services Marketing*, Vol. 17, Issue 5, pp. 529-549.
24. Grabner-Krauter, S. and Faullant, R. (2008). "Consumer acceptance of internet banking: the influence of internet trust", *International Journal of Bank Marketing*, Vol. 26, No. 7, pp. 483-504.
25. Hernandez, J.M.C. and Mazzon, J.A. (2007). "Adoption of internet banking: proposition and implementation of an integrated methodology approach", *International Journal of Bank Marketing*, Vol. 25, No. 2, pp. 72-88.
26. Ho, Sh.H. and Ko, Y.Y. (2008). "Effects of self-service technology on customer value and customer readiness: The case of Internet banking", *Internet Research*, Vol. 18, No. 4, pp. 427-446.
27. Howcroft, B., Hamilton R., and Hewer, P. (2002). "Consumer attitude and the usage and adoption of home-based banking in the United Kingdom", *The International Journal of Bank Marketing*, Vol. 20 (3), pp. 111-121.
28. Hsu, Ch.L. and Lu, H.P. (2003). "Why do people play on-line games? An extended TAM with social influences and flow experience", *Information and Management*, Vol. 41, pp. 853-868.
29. Hughes, T. (2003). "Marketine Challenges in E-Banking: Standalone or Integrated?", *Working Paper*, Bristol Business School.
30. ISTAT (2011). *Cittadini e nuove tecnologie*, Roma.
31. Jaruwachirathanakul, B. and Fink, D. (2005). "Internet banking adoption strategies for a developing country: the case of Thailand", *Internet Research*, Vol. 15, No. 3, pp. 295-311.
32. Jayawardhena, Ch. and Foley, P. (2000). Changes in the banking sector – the case of Internet banking in the UK, *Internet Research*, Vol. 10, Issue 1, pp. 19-31.
33. Karjaluoto, H. (2002). "Selection criteria for a mode of bill payment: empirical investigation among Finnish bank customers", *International Journal of Retail & Distribution Management*, Vol. 30, No. 6, pp. 331-339.
34. Karjaluoto, H. (2002). *Electronic banking in Finland: Consumer Beliefs, Attitudes, Intentions, and Behaviors*, Publishing Unit, University Library of Jyväskylä.
35. Lassar, W.M., Manolis, Ch. and Lassar, Sh.S. (2005) The relationship between consumer innovativeness, personal characteristics, and online banking adoption, *International Journal of Bank Marketing*, Vol. 23, Issue 2, pp. 176-199.
36. Laukkanen, P., Sinkkonen, S. and Laukkanen, T. (2008). "Consumer resistance to internet banking: postponers, opponents and rejectors", *International Journal of Bank Marketing*, Vol. 26, No. 6, pp. 440-455.
37. Lee, M.-C. (2008). "Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit", *Electronic Commerce Research and Applications*.
38. Liao, Z. and Cheung, M.T. (2008). "Measuring consumer satisfaction in Internet banking: A core framework. What service-quality attributes must Internet banks offer to induce consumers to switch to online transactions and keep using them", *Communications of the ACM*, Vol. 51, No. 4, pp. 47-51.
39. Lohse, G.L. and Spiller, P. (1998). "Electronic Shopping", *Communications of the ACM*, Vol. 41, No. 7, pp. 81-88.
40. Long, M. McMellon, Ch. (2004). "Exploring the determinants of retail service quality on the Internet", *Journal of Services Marketing*, Vol. 18, Issue 1, pp. 78-90.
41. Mia, H.M., Rahman M.A. and Uddin, M (2007). "E-Banking: evolution, status and prospects", *The Cost and Management*, Vol. 35, No. 1, pp. 36-48.
42. Nath, R., Schrick, P. and Parzinger, M. (2001). "Bankers' perspectives on Internet banking", *e-Service Journal*, Vol. 1, No. 1, pp. 21-36.
43. Omar, A.B. and Sultan, N., Zaman, K. and Bibi, N. (2011). "Customer perception towards online banking services: empirical evidence from Pakistan", *Journal of Internet Banking and Commerce*, Vol. 16, No. 2.
44. Patsiotis, A., Hughes, V., Webber, D.J. (2008). Adopters and non-adopters of Internet banking: A segmentation study, *Research Pape*, Emerald Group Publishing.
45. Porter M. (2001). Strategy and the Internet, *Harvard Business Review*, March.
46. Rexha, N., Kingshot, R.P.J and Aw, A.S.S. (2003). "The impact of the relational plan on adoption of electronic banking", *Journal of Service Marketing*, Vol. 17, No. 1, pp. 53-76.
47. Riquelme, H.E. and Rios, R.E. (2010). "The moderating effect of gender in the adoption of mobile banking", *International Journal of Bank Marketing*, Vol. 28, No. 5, pp. 328-341.
48. Rogers, E.M. (1962). "Diffusion of Innovations", The Free Press of Glencoe, New York.
49. Rust, R.T. and Kannan, P.K. (2003). "E-Service: a new paradigm for business in the electronic environment", *Communications of the ACM*, Vol. 46, Issue 6, pp. 36-42.
50. Sarel, D. and Marmorstein, H. (2003). "Marketing online banking services: the voice of the customer", *Journal of Financial Services Marketing*, Vol. 8, No. 2, pp. 106-118.
51. Shapiro, J. (1999). "Innovation in financial services case study: home banking", MIT IPC Working Paper 99-004, Massachusetts Institute of Technology, Boston, MA, March.
52. Shih, Y.-Y., Fang, K. (2004). "The use of a decomposed theory of planned behavior to study Internet banking in Taiwan", *Internet Research*, Vol. 14, No. 3, pp. 213-223.

53. Taylor, Sh. and Todd, P. (1995). "Decomposition and crossover effects in the theory of planned behavior: A study of consumer adoption behaviours", *International Journal of Research in Marketing*, Vol. 12, Issue 2, pp. 137-155.
54. Van Hoek, R (2001). E-supply chains – virtually non-existing, *Supply Chain Management: An International Journal*, Vol. 6, Issue 1, pp. 21-28.
55. Vankatesh, Sh., Rangaswamy, A. and Pusateri, M. (1999). "The online medium and customer price sensitivity", *eBusiness Research Center Working Paper 04*.
56. Vankatesh, V. and Davis, F.D. (2000). "A theoretical extension of the technology acceptance model: four longitudinal field studies", *Management Science*, Vol. 46, No. 2, pp. 186-204.
57. Vankatesh, V., Morris, M., Davis, G. and Davis, F. (2003). "User acceptance of information technology: toward a unified view", *MIS Quarterly*, Vol. 27, No. 3, pp. 425-478.
58. Verkasalo, V., López-Nicolás, C., Molina-Castillo, F.J. and Bouwman, H. (2010). "Analysis of users and non-users of smartphone applications", *Telematics and Informatics*, 27, pp. 242-255.
59. Wong, D.H., Rexha, N. and Phau, I. (2008). "Re-examining traditional service quality in an e-banking era", *International Journal of Bank Marketing*, Vol. 26, No. 7, pp. 526-545.
60. Yang, J. and Ahmed, K.H. (2009). "Recent trends and developments in E-banking in an underdeveloped nation – an empirical study", *International Journal of Electronic Finance*, Vol. 3, No. 2, pp. 115-132.
61. Yap, K.B., Wong, D.H., Loh, C. and Bak, R. (2010). "Offline and online banking – where to draw the line when building trust in E-banking?" *International Journal of Bank Marketing*, Vol. 28, No. 1, pp. 27-46.
62. Yuen, Y.Y., Yeow, P.H.P., Lim, N. and Saylani, N. (2010). "Internet banking adoption: comparing developed and developing countries", *Journal of Computer Information Systems*, pp. 52-61.
63. Zenga, F., Hub, Z., Chenb, R. and Yangc, Zh. (2009). "Determinants of online service satisfaction and their impacts on behavioural intentions", *Total Quality Management*, Vol. 20, No. 9, pp. 953-969.