THE PART OF THE TECHNOLOGY IN THE BANKING SECTOR: INTERNET BANKING

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Abstract

The banking sector is a sector in which service updates need to be done fast and adaptation to technology in this sense becomes a necessity. In order to comply with the requirements of the age and to meet human needs with maximum satisfaction, it has expanded its product network which is open to innovations. One of them, internet banking, has become a banking product that has been renewed and diversified with the increase of internet usage in the world. The fact that many transactions in branches can be done without considering the time and place increases the usage rate of internet banking every day. This method, which is more cost effective and more profitable for both banks and users, remains popular. As a result of the change of technology day by day, renewed and diversified internet banking is a platform where banks offer their products and services. Therefore, in this study, firstly internet banking was introduced and then the products and services offered to the user via internet banking were mentioned.

Keywords: Internet Banking, Banking, Banking Sector, Customer

1. Introduction

With the discovery of the internet, manual transactions have been started by means of machines and systems. As we experience developments that make our lives easier, its usage has become widespread and it has started to be accepted all over the world. The internet, which brought with many positive factors, found its application area in all sectors and also broke new ground in the banking sector. Unity of continuous development of the internet and the search for difference in the banking sector has emerged “Internet Banking” product.
The journey of internet banking in our country first started with İş Bank in 1997 and continued with Garanti Bank’s practices. In the following years, Ottoman Bank, Pamukbank, Esbank, Akbank, and Yapı Kredi Bank started to introduce their internet banking services to their customers (Pala and Kartal, 2010). Now when we look at the banking sector or the banking industry in the world today Turkey, it shows how widely the Internet banking is used (Yıldırım, 2011). Although the geography in which internet banking emerged is known as the United States (USA), it can be said that it progresses and develops more rapidly in European geography (Korkmaz and Gövdeli).

The customer, who is at the top of the value hierarchy of banks, wants to make use of the technology they use in their daily life while doing banking transactions. Many reasons such as job intensity, distance of the bank branch or waiting in the line have felt that the ongoing banking system needs to be differentiated. Considering that the demands and expectations change day by day, the necessity of making innovations in the banking sector is understood. For these reasons, banks strengthen their technological infrastructure to increase their service quality day by day (http://www.fortuneturkey.com). In addition, in terms of international competitiveness, which includes banking sector significantly, it has been accepted, the necessity to implement systems and information in a more effective and coordinated way with technology (Aytar, Yeğen and Erdemir, 2012). Consumers' interest in technology and their desire to renew the systems of the banks, followed by the expansion policy has enabled them to compete (Yurttadur and Süzen, 2016). Considering the concept of customer satisfaction is now a tool for competing, important developments are taking place in the service sector and internet banking is a digital option in order to attract the mass of consumers who are not indifferent to the innovations.

2. Literature Review

2.1. What is Internet Banking?

The Internet is a platform that is made up of at least two communication networks, which contains many information, allows the registration of information in network systems, enables the transfer of information mutually (Savaş, 2011), which has been implemented in almost every area of life, and is also accepted in the banking sector. With the introduction of the Internet in our lives, institutions have started to change their culture and way of doing business and have started to make their products and services through the internet (İleri and İleri, 2011).
Thus, the banking system, which has been brought into a whole with the help of internet, has made great contributions with internet banking service.

Internet banking is a technological option that has an important place among today's banking services and products which are considered among the alternative distribution channels of the banking system where almost all of the services provided in the bank branches can be made. Internet banking provides a number of benefits to both customers and banks, and therefore, the efficient use of this technology is harmonized with the technological infrastructure of the current era (Yıldırım, 2011). Internet banking also has emerged as a result of the continuous development of the electronic banking system and it is an alternative distribution channel service offered by the banks that can be used in any network where the internet is free and that not only individuals but also corporate customers can receive services (Pala and Kartal, 2010).

All these technological developments and the remaining banks have created a system in which they can get almost any kind of service from any computer or mobile phone without coming to the branches. At the same time, change and development in internet systems also supports the development of this service and are being tried by more people. Thus, internet banking has become a platform where almost all branch transactions can be traded (Çakmak, Güneşer and Terzi, 2011). In the developing and changing world, as the banking sector has become insensitive to developments, infrastructure investments have become more important for the development of internet systems, and internet banking has taken a large part in investment clause. By the economies aiming to increase profits and productivity by lowering costs and directing people to spread the use of internet banking as an alternative distribution channel (Eroğlu and Yücel, 2012).

Internet banking defined as a platform for the consumers can reach 7/24 by entering a number of passwords after the identification number or customer number by the help of a computer with internet connection, which is started with the ‘www’ (Vurucu and Arı, 2015). Thus, with the help of websites, banks offer many banking products and services to their customers. In addition, when internet banking is the first application area as it is today, banks have been used as an intermediary in their websites for marketing and selling many products and services (Tan and Teo, 2000).
Technological or intellectual innovations occurring in the countries of the world caused the countries to be indifferent to the changes due to their communication with each other. The banking sector, which has an important place in the world as a whole, has been structured within itself. With the results, consumers can face a new banking product or service every new day. In this context, the internet banking, acclaimed consumer demand for a product that also live mold showing an increase, this can be confirmed in Table 1 of the Banks Association of Turkey (TBB) report.

Table 1: Number of Internet Banking Customers 2010-2018

<table>
<thead>
<tr>
<th>Period</th>
<th>Individual</th>
<th></th>
<th>Corporate</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of customers registered in the system, logged in at least once</td>
<td>Number of active customers</td>
<td>Number of customers registered in the system, logged in at least once</td>
<td>Number of active customers</td>
<td>Number of customers registered in the system at least once in the last 1 year</td>
<td>Number of active customers</td>
</tr>
<tr>
<td>December</td>
<td>2018</td>
<td>61.118.837</td>
<td>11.258.092</td>
<td>3.629.378</td>
<td>1.286.010</td>
<td>64.748.215</td>
</tr>
</tbody>
</table>

Source: The Bank Association of Turkey, www.tbb.org.tr

The total number of active users in Table 1 was 6.693.832 in December 2010 and 12.544.102 in December 2018. It is seen that the number of active users increased by almost 100%. In December 2010, the number of customers registered at least once in the system was 17,222,919, while the number of customers registered at least once reached 64,748,215 in December 2018.

In addition to the importance of the development of technology and the development of systemic infrastructures, the marketing strategies of banks should not be forgotten. It is considered that facilitating diversification and use of products and services is also likely to have an impact on the increase in the rates of active use.
2.2. Benefits of Internet Banking Products and Services

It can be useful to know customers use Internet banking more for which product or service. Knowing this density in terms of both customers and banks can contribute positively. From the customer's point of view, it may be advantageous to develop the requested product or service, make it easier to use, or respond to requests for time, space and such like requirements. At the same time, it is also of great importance that the system of a bank for customers gives enough confidence.

In terms of banks, knowing more about which product or service is concentrated on can help for profitability and cost arrangements while providing competitive advantage.

Technology of our era offers the following products and services through internet banking, which can perform almost all branch operations (Eroğlu and Yücel, 2012):

- Account balance learning,
- Opening or closing of time and demand accounts,
- Virman, remittances and money transfers like EFT,
- Instantaneous and retrospective viewing of account movements,
- Investment portfolio monitoring,
- To give orders about investment transactions,
- Invoices, credits and similar payments,
- Check, prominence and portfolio summary
- Credit card debt viewing and payment,
- Credit calculation and credit withdrawal,
- To be aware of current campaigns,

For an active internet banking customer, the transactions that he can make without going to the branch are highly developed other than cash withdrawals.

Competitive price, customer opportunities, population-related unknown reasons and similar reasons are the most important reasons for banks to adapt to the technology and internet banking (Bhandari, 2017). The information, which cannot be achieved by classical methods and which may take time to obtain, will increase the profitability and productivity of banks with
the integration of technology and internet banking, and at the same time reduce their costs. For these reasons, it can be seen that the services and products included in the Internet banking application vary from time to time.

Many processes can be done at the computer, by saving time and space. At the same time, the current exchange rate and interest rates can be viewed in detail as well as the current information can be easily updated from the current bank campaigns. The increasing product and service diversity increases the demand for internet banking at the same rate. Internet banking offers products and services not only for individual customers but also for commercial and corporate customers. These are (Eroğlu and Yücel, 2012):

- Summaries of accounts belonging to the firm,
- Available balance query,
- Instantaneous and retrospective viewing of account movements,
- Account information,
- If they are paying salary,
- Display of check and deed collections,
- Daily clearing check inquiry,
- Other bank checks, forward checks, notes, return checks,
- The Central Bank's instantaneous exchange rates and foreign exchange transactions,
- Calculation of deposit interest and inquiry

As a result, registered internet banking users are now able to perform common banking transactions such as checks, bills, fund transfers, account printing and asking questions about account balances (Tan and Teo, 2000). As mentioned above, many transactions can be done instantly and information can be queried.

In terms of a corporate customer, not wasting any time on banking transactions, which means to spend more time on production activities is a pleasing situation. Due to all these developments, with the assumption that the technological developments have a great effect in the last 20 years, every title of the alternative distribution channels has been detailed in itself and efforts have been made to provide a better service (Eroğlu and Yücel, 2012). Thus, although the products and services are diversified, it has created the need for continuous innovation and changes in the presentation forms.
The banking products and services also have benefits (MEB, 2011):

- It enables direct communication with customers. By e-mail or by linking the pages with individual and corporate customers, it is easier to communicate and get rid of postal costs.

- It is felt that it is special to the customer and that it offers special services. The special service offered to the client will constitute a long-lasting, binding quality to the bank.

- Internet banking shows developments outside of existing banking products and services. Due to the increase in internet users and widespread use of electronic shopping platforms, it is thought that the usage in our country will increase.

- Individuals and institutions prefer to use internet banking because of lower usage of banking products and services. In particular, the increasing interest in retail banking in recent years signals the diversification of products and services on the individual side of the banking sector and the increase in the portfolio size. As the number of customers and circulation is very high in retail banking, it is seen as a serious profit item.

- Today's advanced customer relationship systems are easy to obtain customer data. The potential customers may not be registered in the system or the detailed information of existing customers may not be received in the branches due to work intensity, system slowness and similar reasons. However, with CRM called Customer Relationship Management, all information can be recorded in detail and the lists can be accessed.

- By adapting to technological changes, the position of the bank in the eyes of the customer changes in a positive way. At the same time, customers can easily access the transactions they want to do by going to the branches or access to the information and services they hope to find easily, enabling the internet banking to become more widespread and diversify.

- The lagging systems used in the branches were replaced with modern and detailed systems, and banking operations gained speed.
In addition, internet banking can reach many sectors and support the economic growth and development of that country (Gkoutzinis, 2006).

At the same time, it is also of great importance that the system of a bank gives enough trust for their customers.

Trust is an important element in the choice of products and services that the buyer will consume to provide benefits. When trust is ensured, the number of consumers will be increased and the existing customers will be protected. Internet banking is an alternative to be used in the assessment for the consumers, products or services without buying yet (Aksoy, 2006). As information becomes more easily available through the development of technology, the banks that provide internet banking are trying to take necessary systemic measures in order to prevent any material and moral damage for the consumers. The satisfaction level of the customers who perform the internet banking transactions of the banks which cannot satisfy their expectations may cause future problems for the image of that bank. Customer losses may also occur. Since the aim is to be able to work with the customers in the long term, it is very important to provide the element of trust. Because trust is an emotion that people want to feel when buying banking products as they do with every purchase. In particular, the confidence in the customer in the banking sector will make the institution one step ahead when it is evaluated in terms of competition.

2.3. Past Studies on Internet Banking

There are many studies on internet banking in the literature. In these studies, the definition, history, internet banking products and services, their benefits or losses, customer expectations, compliance with technology and similar issues are discussed. But in this study, the connection and benefits of internet banking with technology have been mentioned.

In a study that examined the transactions that can be done with internet banking, it was analyzed by the least squares method by using the data of 26 banks which are members of TBB and it is determined that internet banking usage rates in our country are less than the developed countries but they are in an increasing tendency (Yıldırım, 2011). Based on the statistics published on the website of TBB, time series analysis methods were used in a study conducted with 26 bank information between 2007-2016. It has been determined that the changes in the internet banking, active customer ratios and the transaction sizes are processed as plus to the bank vault (Uzun and Berberoğlu, 2018).
Another study, on the other hand, pointed out that banks' interest rates after 2002 and the interest commissions outside the interest rates affected the bank revenues and found that banks gained more revenue from non-interest commissions between 2006 and 2012 (Erol, Çınar and Duramaz, 2015). In addition, it has been advocated that the use of internet banking has been increased by conducting a study on bank customers' perspectives on internet banking and creating sub-markets from these perspectives. Three different clusters were formed in a survey conducted on 232 people in some districts of Istanbul and over 18 years of age in the bank. These; customers who use internet banking are customers away from internet banking and customers who are close to internet banking. It is thought that it would be beneficial for banks to shape their sub-market structures according to this aggregate (Okumuş, Bozbay and Dağlı, 2010).

What customers decide on to use internet banking will be a guiding factor for banks (Durkin, 2004). In the study conducted in the Indian banking sector, a number of differences have been drawn between banks that provide internet banking service and those that do not provide this service. It is stated that the banks providing internet banking services are more profitable and more voluminous than the others and that the operation part of these banks is better managed (Malhotra and Singh, 2009). In a study describing internet banking as a remote distribution channel, internet banking was examined under two headings. The first one is the establishment of a website with a bank of existing branches, as well as offering internet banking as well as the alternative distribution channels that it currently uses. The other option is creating a new structure under the name of "virtual", "branchless" or "only internet bank" (Furst, Lang and Nolle, 2000).

Since internet banking is also a type of service marketing, this service is also needs to be transparent and reliable. Therefore, the concept of trust is one of the preferences of customers to use or not to use internet banking. For example, with a survey conducted on 535 bank customers, it was tried to determine which factors are effective in the decisions of consumers in using and not using internet banking and whether there is a gender difference in this decision. At the same time, it has been tried to determine what kind of problems the users of internet banking face during their usage and with the findings, it is stated that the banks should focus more on the security side and the internet pages should be more intelligible (Durer, Özsözgün Çalışkan, Akbaş and Gündoğdu, 2009). In this sense, it has been argued that it would be beneficial for banks to direct their customers and it would be beneficial to try to explain the anxiety and unwillingness in classical ways (Oruç and Tatar, 2017). Reis, Gülseçen and
Bayrakdar (2010) emphasized the importance of having internet banking users aware of the threats they face and stated that the implementation of the Secure Internet Banking Education System GIBES will contribute positively.

In a study carried out at Atatürk University, because of the suspicions about the security of the people again, technological investment advice was made to the banks. Also, it is aimed to determine the usage rates of internet banking, the reasons for using or not using, which products they focus on and what operations they do more. As the education and income level increased, the usage of internet banking increased, 78.6 % of the surveyed personnel used internet banking, and these periods were 7 years and above, a significant portion of which was used for internet banking payments, and time and space savings were an important criterion. It was determined that 2.5 % of the cases had problems due to use (Özkan and İpekten, 2017).

In addition to the security measures to be taken by the banks, consumers should be more careful. While the Bank is spending on its system to gain the trust of its customers, consumers should not perform internet banking transactions in such a way as to allow strangers, such as the security of their computers, personal information and password confidentiality (Reis, Güleşen and Bayrakdar, 2010). The more reliable and understandable the website of a bank, the more it will increase its customer and the more positive it will be advertised.

3. Conclusion

Competition in the banking sector has emerged from classical methods and has become the race for technology and creativity. In the study of Ceylan, Genç and Erem (2013), the banking sector, which has been transformed into a serious competition with the advancement of technology, has been competing for itself in order to serve more customers and it is a product that saves time and space such as internet banking in order to be ahead in this race. It is stated that it has gained importance.

With the Internet banking invention, products and services derived from or inspired by this product may also be encountered. Due to the new ideas brought by the internet banking product, it is thought that the product variety will increase in the sector in the future. In this study, while the benefits of internet banking are emphasized, it is thought that different products and services will be offered in the future.
Banks, which are also engaged in advertising campaigns through the internet banking product, acquire potential customers. At the same time, it allows the existing customers to do, almost all of their products through internet banking without the need for another bank. Thus, each bank serves its economic system by expanding its portfolio size.

It is observed that the positive effect of internet banking is not only for the suppliers but also for the demanders. The fact that it is a service that the consumer benefits and meet his needs can be considered among the reasons for being preferred. At the same time, the internet enters every home, together with the widespread networks, facilitates the use of the product. A bank's investment in the internet system for product and service provision will also contribute to a sense of trust and therefore it can be one of the reasons why the bank is preferred. In other words, many factors can be listed in the purchasing decisions of customers. As internet banking is a service that facilitates mutual business in the banking sector, it is seen as a system accepted by both customers and banks. In this respect, it can be said that internet banking is a service that creates positive effects for banks, consumers and the economy.

Internet banking has become one of the most important services of the banking sector in the light of technological developments. Then, the supply of innovative products such as mobile banking, fingerprint applications and square code applications continues. As a result, as Hamid, Amin and Ahmad (2007) point out, internet banking will create new opportunities in the banking system in practice, provide better services and offer different opportunities for us. It will also continue to be used as an information store.

REFERENCES


