**The Ministry of Education of Azerbaijan Republic**

**The impacts of e-banking to the development of Azerbaijan economy**

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I am one-step away from being a graduate of the SABAH Group of Departments who I once wanted to become a student. Once again, I have seen that I was not mistaken for my desires to correctly address them during these years. Because I have gained enough knowledge and experience over this years to write my diploma successfully. In acquisition of knowledge and experience and the successful writing of my diploma, I would like express my deepest gratitude and appreciation for aiding and supporting from sincere heart to my leading supervisor Dean, a Cand. of Econ., Assoc. Prof. Aida Aydin Guliyeva; Head of SABAH groups at Azerbaijan State University of Economics (UNEC).

During this time, I am huge thanks to my closer friends who are with me in patience, love and I am especially thankful to my best friends, Inji and Nail, and I express my special gratitude to my dear mother.

**Abstract**

The e-banking system, its development priorities and the ways to overcome the obstacles facing this development are one of the topical issues in today's world. Unlike other countries, due to the fact that electronic banking is a new field in our country, special attention is paid to the development of the industry by the state and banks. However, as well as the fact that most of the population is unable to fully grasp technological advances resulting from technological advancement and technological advancement, as well as security risks, is one of the major problematic issues in the concept of electronic banking. In this regard, the role of electronic banking in the Azerbaijani economy is important. Therefore, the study of the negative and positive effects of electronic banking by banks and analysing of the impact of these impacts on the socio-economic indicator on the economy of Azerbaijan is important and necessary. Practically, the analysis and resolve of the activity sphere of the services provided by the banks of the Republic of Azerbaijan in electronic banking were carried out, the results and proposals were put forward.

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# Introduction

## Background of Study

In the 21st century, technology is rapidly refreshing, so far ahead of the most daring predictions ever given. Innovations brought about by technological advancement are applied in all areas of our lives. One of the most beneficial of these innovations is the banks. In particular, the development of financial technologies over the past 20 years has led to the rapid development of electronic services in banks. Electronic banking services cover a large area ranging from electronic payments to smaller amounts, ranging from electronic payments to digital banks only. Failure to take into account financial technologies can lead to even death for banks, so we can say that the subject is very relevant for today.

Banks are the main component of the financial credit system of any country. They generate, collect, and present cash.

The Bank is one of the most demanded enterprises today. Banks provide various services to the population. And some of these will be presented in this research.

The focus of the research is on innovations in the banking system. This is the use of electronic means for banking operations and the provision of banking services from a far. To reach the level of service we use today, the banking system has gone through a long evolutionary path. Now the client can use various banking services at all hours of the day without going to bank.

## Purpose of the study

Purpose of the research is to reveal the essence of electronic banking services, to discover its features, to study the world experience in this field and to consider adaptation of this experience to the realities of Azerbaijan. Given the rapid expansion of financial technology, we can understand how quickly research and writing literature in this area has waned. Sometimes a scientific article written 2-3 years ago can not meet today's requirements. Taking these into consideration, we have tried to apply to the most advanced research in our research.

For the purpose of the research, the following tasks have been set:

- complex study of the role of E-banking in the transformation of banking and customer services in scientific and methodical literature;

- Theoretical and practical issues of e-banking formation;

- studying world experience in e-banking;

- Examining the legal basis of e-banking on the basis of local and foreign experience;

-Analysis of the current state of the banking and its evaluation;

- Investigating as an important area of e-banking banking services;

-E-banking services;

- Comprehensive promotion of e-banking types

- Identification of direction of improvement of quality of electronic banking services

- Investigation of development trends of electronic banking services

- study the directions of improving the structure of the e-banking services market;

- study and investigate competition in the e-banking services market;

- Improvement of payment and settlement transactions and submission of proposals and recommendations on the effectiveness of new financial services in commercial banks;

The object of the research is electronic banking services.

The subject of the research is the study of scientific and theoretical issues related to the features and analysis of the formation of electronic banking services in modern conditions.

## Research Questions

The study will answer the following questions:

What are the positive and negative effects of electronic banking?

What service type of electronic banking is widespread in the Republic of Azerbaijan?

What are the world practice of methods and tools for increasing the quality of E-Bank services?

## Significance of the Study

The practical significance of the study is that the compiled provisions, conclusions and recommendations are of importance in the development of legislative and regulatory acts governing the activities of credit institutions and commercial banks, as well as in the development of socio-economic programs for the development of national economy in the work of public administration bodies.

Also, theoretical provisions and practical materials of the research can be used in lectures and practical exercises on "Bank business" courses in the educational process.

Scientific novelty of the research:

- As a result of comparative analysis of modern concepts, the content of "e-banking services", "e-banking product" and "e-banking service quality" have been disclosed;

- New tendencies and legality in the application of new services in the e-banking sector have been investigated;

- modern methods of complex e-banking services assessment;

- evaluated the effectiveness of e-banking services by banks;

- e-learning of banking services has been investigated and recommendations have been made to improve payment and settlement transactions;

- The principles for successfully introducing a new product of the e-banking market are offered.

# Literature Review

**2.1 Theoretical and practical issues of e-banking formation**

Early 70s of the late 60s of the 20th century is considered as the starting point for the development of banking services theory. At that time, research papers of researchers from Michigan, Wales, and Geneva Universities have published. The second stage of the development of banking services may be described as the attempts to explore the functionality of financial and credit systems in different countries in the late 1980s and early 90s and the effects of globalization and centralization of bank capital on the banking services market. The third stage of the development of banking services theory began in 1991 and continues until now. The signing of the Maastricht Treaty on the Establishment of the European Financial Union in 1992 and the introduction of a single euro currency - euro from January 1999 laid the foundation for revising the concept of complex banking services to its customers. At that time, the idea of a "financial supermarket" began to become topical, services in the debt capital market, e-services, and the merger of banks were widespread.

In order to clarify the economic context of the Bank, the essence of the terms "banking" and "service" should be disclosed separately. There are many different points in the explanations of economists about its functional role and features, even though the Bank's financial market exists from antiquity as an institute conducting certain operations in its customer service. According to Professor E.M. Sadigov, the division of the banking market into segments is used to determine the client environment where it can offer certain services. According to R. Bashirov, the main aim of the bank's activity is to earn profits, and banks are constantly trying to expand the mediation operations and business services to increase it.

During the review of these concepts which define the essence and functions of banks, the complexity of the bank as a financial and economic system and its multi-purpose activity are once more confirmed. By summarizing the considered approaches, almost the bank is a financial intermediary providing services for cash payments from depositors to investors in return for the development of the economy.

In the scientific literature, there are different views on the content of the concept of "service". F. Kotler believes that the service is a measure or a measure that one side can offer to the other party, which is largely unseen and does not lead to something else .

Thus, it can be noted that the service is the result of which is the satisfaction of any person's needs or the achievement of any profit.

According to the position of some economists, banking service is a complex of banking operations performed by customers on the instructions of customers, and, according to others, any banking service should be viewed as a product of the banks' services market.

Banking transaction is practical manifestation of bank functions. It is carried out in monetary form, reflects the mass of money in various phases of recycling, directly implemented by banks. Banking service is operation of one or several bank operations that satisfy customers' needs and performing banking operations at a customer's discretion in exchange for a certain payment. Banking product is bank's interconnected service and transaction complex.

After analyzing all these approaches, it can be concluded that the concept of "banking product", "banking service" and "banking transaction" is similar.

There are numerous approaches to the classification of banking services in scientific literature. One of such approaches suggests that banking services are divided into 4 types:

1) Strategy - allows the bank's customer to develop and modify critical strategic changes in nature, lifestyle, scope and direction;

2) Current - allows the bank's client to optimally meet the goals set in the annual plan;

3) Operative - allows the client to prepare for unplanned problems and quickly resolve them;

4) Custom - Allows clients to receive professional assistance in unforeseen crisis situations.

Other classification includes banking services such as deposit, loan, investment, account services, foreign currency transactions, depository services, valuables, consulting, information, services which they are included in .

It is recommended that the classification of services for businesses should be allocated to banking and non-banking services . Bank services include deposits, loans, account transactions, remittances, invoices, payment and settlement documents, foreign exchange purchases, bank insurance, deposit inflows, and the placement of precious metals. The non-banking services include the placement, signing, purchase, sale, registration and storage of securities, the replacement of fee-based goods by third parties, the management of cash and other goods in the contract, leasing operations, consulting and information services. Depending on the characteristics of the Services Specification, the classification of services according to customer groups is different depending on the services and the complexity of the customer oriented services.

Depending on the payment, banking services are provided for free and paid services. However, this does not mean that any particular service is fully paid or free of charge. It is the business of the bank to determine which type of payment is being received from the customer. Based on certain considerations, separate transactions involving account, credit and deposit services can be made free of charge. From this point of time, the bank is distinguished by the services that do not bring in and out, the expensive and inexpensive services. Therefore, as a bank product, the banking services complex that the bank can offer its customers is a series of banking transactions that meet the needs of the customer. The Bank's work is a combination of logical and logical actions made by bank employees to serve customers and meet the bank's own needs. Therefore, the basic criterion of distinguishing one bank from another is the quality of its services.

Computers and the internet are still new to date, even today, people over 40 are more distance against computer and internet, even though there is no major problem for the new generation today. There is a link between age-olds and e-banking services.

With the emergence of virtual banks, it has been realized that all banking transactions are as easy to turn the television on or off. Technology has not only shown positive effects on the market, but has also reduced operating costs in the banking sector. Briefly, E-banking is a virtual way of doing all the operations carried out by today's physical departments. Internet access is enough for the customer to use electronic banking services. Banking services are considered to be ours because we can carry out this process with mobile phones in our times. Each customer can benefit from the E-Banking service provided by the bank as a result of a contract with a bank that plans to work, within 7 days 24 hours from the framework set by the bank. With electronic banking services, we can carry out all individual and organizational operations except cash.

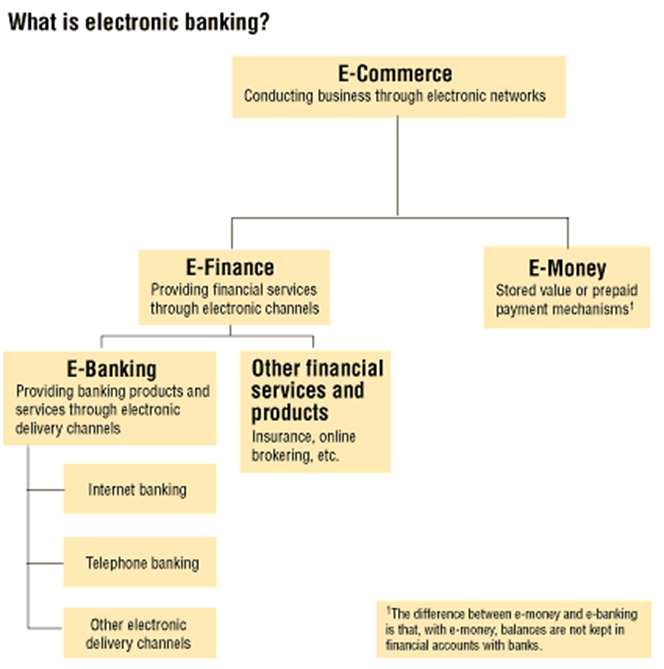
It is clear that e-banking began with the development of the Internet. In 1997, many banks began to carry out operations with computers, mobile phones or interactive monitors by developing electronic banking activities. Large geographical barriers have been eliminated in public places. Thus, the banks were closer to their customers. There are opportunities to reach 24-hour accounts in such places: Customers can make cash withdrawal at ATMs, as well as receive checks. Telephone banking requires the customer to call the bank. This is more convenient for a customer than going to a bank branch. Client can call his / her central telephone number, control his / her account, make money transfer, receive information about the services and pay debts using the phone. Banks use it alternatively or as a traditional distribution tool through branch networks. Here, the earnings of the banks are both the winning customer and the lower cost of the process. Client's earning is comfort. Customer can carry out banking services anywhere from 7 days a week and 24 hours a day. In short, this transaction will result in lower customer expense and lower cost of the bank. Private banking has made significant investments in the development of information technologies and has made significant decisions by providing alternative distribution channels. Most of the transactions were started with internet banking and telephone banking, rather than traditional branch banking. The pressure created by competition and the creation of alternatives have forced banks to reconsider existing channel strategies. An increasing competitive environment in financial services has increased the pressure on the development and use of alternative distribution channels.

The most recent alternative is the electronic banking services. Electronic Banking is used to provide banking information and services to customers through a computer or television set. E-banking mainly refers to Internet banking. Includes ATMs, credit and bank cards, telephone banking, electronic invoices, and network-based banking. With the development of other electronic services, the interest in electronic banking has increased, and many banks have recently started and developed internet banking. According to McMahon (1996), it is necessary to integrate these channels into existing distribution channels so that they can be available for the next 10 years. The most important feature of electronic banking is the fact that transactions such as electronic payments, money transfers, and e-banking are not made by physical contact or physical modification. In the short run, the most important activity in making online transactions, in addition to the use of electronic banking and transfer of funds, is a significant drop in operating expenses with electronic banking. According to the research, the cost of banking operations has also dropped significantly with electronic banking services. Technological advancements, increased competition, and customer satisfaction make it possible to accelerate, maximize and facilitate the services offered in electronic banking. Almost all transactions made in one bank branch today are also made with electronic banking.

The Bank's customers use the most common features of electronic banking:

Saving time, less expense and ease of use

Figure 1: Electronic banking



Source: www.ijsr.net/archive/v5i12/ART20163501.pdf

**2.2 World experience in e-banking**

The first Internet banking program was developed by Presidential Savings Bank in the United States and introduced to customers in 1995. Well-known banks, such as City Bank, Wells Fargo, also developed their own software and introduced them to their customers. With the development of the Internet, people's commitment to technology has increased and the number of people using Internet banking has gradually increased. According to Gartner Group's 2009 Internet Banking report, 47% of Americans use Internet banking, while 30% of UK customers use Internet banking. Technological advancement in the banking sector in the world has led to the development of electronic banking. For instance, Turkey's first private bank, “Türkiyə İş Bankası” introduced its customers to ATMs in 1987 and laid the foundation for electronic banking. Internet Banking was first introduced in Turkey in 1997 by “İş Bankası”. In the same year, “Garantı Bankası” provided its customers with electronic banking services.

Internet Banking has been seen as an alternative distribution channel by world trading banks since 1997 with the increase in computer trade, financial regulations, e-services of banking customers, reducing operating costs for banks and increasing customer comfort. However, Internet banking is increasingly restricted in some parts of the world, due to the fact that the customer is not accustomed to Internet banking. On the other hand, the difficult perception of technology by middle age and older people has been put into the flow of time. Banks have made their services more popular with electronic banking services. According to Forrester's analysis, in the European banking department, daily business was estimated at € 2 per transaction, 96 cents for telephone banking, 22 cents for ATMs and 14 cents for internet banking. In addition, as a result of the surveys conducted for the customers, it was determined that the consumers had easier access to their bank accounts, paid less service fees and gained more time as a result of electronic banking.

Not only is the use of internet in the whole of the world increasing in the Internet and increasing the level of computer knowledge, the use of internet banking is increasing. It is also believed to be the largest electronic banking client in the European Union, the United States and the UK, with the greatest impact being that the customer is e-banking in order to save time used to carry out banking services. The reason for these places is that the use of internet and computer information is closer to the number of people in these places. There is also a high level of telecommunications here.

The development of electronic banking has been explained in four stages worldwide. At the first stage, we are talking about the presence of commercially-guided web pages and the presentation of product information here. At this stage, the basic benefits of Internet banking are seen as informing customers. In the second stage, banking operations begin to come to their senses. At this stage account balance, money transfer and similar services are provided to customers. At the third stage, new services such as checks and investment transactions emerged, and at this stage, the banks turned into the main operating mechanism and allowed customers to close the bank completely. At the fourth stage, advanced level sales techniques, special and award-winning services have begun. At this stage, the Internet has also been used to reduce the costs of the bank, to create a new revenue point. Worldwide, electronic banking is widely used in northern countries such as North America, New Zealand, Norway, and Finland. Turkey has advanced technology in electronic banking compared to South Europe and America.

General E-bank quality control model - TQS (Total Quality Control) was proposed by Armand Vallin Feigenbaum at the beginning of the twentieth century. Armand Vallin Feigenbaum understands the overall quality control, which means a system that lets you solve the problem of the quality of the products and the cost of consumers, producers and distributors, depending on their profitability. He offered to consider quality not only as a final product of any production , but also at each stage of its creation. In accordance with this concept, the overall quality control model is described as follows:

Quality assurance → Keep quality → Improvement of quality

At the end of the 1970s, national standards for quality assurance in the UK and later in Switzerland and the Netherlands were developed. The British BS 5750, which was introduced in 1979, has played a prototype role in the development of ISO 9001 international standards. The first edition of these standards was published in 1987, and in 1994 the second version contained more than 20, all the documents were published. Since 2001, the ISO 9000 international standards are in its third edition. After this event, the managerial staff began to distinguish two approaches in quality management:

1) Establishing a quality system conforming to ISO 9000 standards. This approach aims and ensures achievement of limited goals without the need for continuous improvement in accordance with the requirements set out in the standards

2) Total Quality Management (TQM). At this time, all arsenals of methods and techniques are used, improvement of quality is ensured by the whole staff, and consumers' interests are placed first. This approach focuses on the continuous improvement of the quality improvement work that meets the changing needs of consumers.

Thus, development of methodological tools allowing to effectively evaluation of the quality of rendering services in credit institutions is one of the important elements of the bank's management system. Because these methodologies allow control the quality of the service, act as a basis for the analysis and decision-making of management decisions and provide the necessary feedback for the sustainable development of the banking system.

**2.3 Legal basis of e-banking**

The development of electronic banking began in the 1980s. The development of electronic banking in the banking services system coincides with the development of technology. In addition to the development of modern technology, the other place in the development of electronic banking is competing. At the end of the 20th century, Azerbaijan gained its independence. This independence also meant the development of the banking services system. Thus, many private banks began to emerge. As private banks and technology develop, e-banking services are also developing in our country. Electronic banking services are commonly known as the type of young technology. Compared to other countries, this service area is younger in our country. By means of e-banking services, customers perform their financial transactions both fast and safer, without going to bank branches.

Azerbaijan E-bank is the application of a mobile bank integrated with the “Asan imza”. With this application, the customer can use mobile telephones as digital personality and electronic signature. Another advantage of this technology is the lack of smart card readers. “Azər-Türk” bank, the first private bank in Azerbaijan, has introduced e-banking services to its customers by means of “Asan imza” .In the e-banking account created by “Asan imza” does not need the rules of use required in other classic accounts. That is, the customer can log in without having to write a name, surname and username. With this service, customers can manage their bank accounts anywhere in the world. In addition, this type of service allows the employee to spend less time in the bank branch and thus effectively use the working time.

After the independence, on February 11, 1992, the President issued a decree on the establishment of the Central Bank of the Republic of Azerbaijan. Thus, the National Bank of Azerbaijan was established in 1992. On August 7, 2007, the Law on the Central Bank of the Republic of Azerbaijan was established.

In recent years, increasing the liberalization tendencies in investment movements and the elimination of restrictions by making the necessary legal adjustments that make it easier to reach financial markets in this context make the markets more harmonious with the impact of information technology developments.

Technological development and competition will create the possibility of ending state monopoly on money supply by private sector entities providing e-money. In the past, this was the reason why private agencies were dismissed. However, private monetary concepts that do not have technological progress and nationality in the present day make it even more difficult for them to regulate the legal arrangements that hinder development. Because, by nature, those who supply e-money do not have to have a physical space, each country has its own financial structure and legal arrangements. How much money will be released in the new monetary system, where the e-money is tight, is not the state, but consumers and companies will decide. Although there is no new idea of ​​the concept of e-money, and there is no reason to think about how effective it is now, there is only one thing that is clear, which will soon attract the attention of the state.

The new rule that will be created in the face of e-money advances should be created in a very careful way to protect the purchasing power of money and bring transparency to the e-banking system. Regardless of the fact that organizations responsible for legal adjustments can eliminate systemic problems and create a stable environment, adjustments that are not made in the right way will hinder the development of technological developments that have the capacity to improve the market and welfare. In the same way, restriction of experience in this field and making the e-money advances too costly will also adversely affect the development of e-money. The management of electronic payment systems will also determine what will happen in the future. If developments in this area are not limited, important steps will be taken in a very fast way. It is also believed that in the event of a severe form of legal regulation, the developments will continue, but its speed will be naturally slower.

The European Central Bank director, Duisenberg (2001), states that legal adjustments regarding e-money have been made while the e-money is still under development, but that creative improvements can not be eliminated. While the European Central Bank welcomed the progress of e-money advancements due to its enhancing features, for some reason, it believes that it should be restricted to credit institutions in the field. For this reason, e-money in all European countries, except Denmark and Finland, is limited to credit institutions. However, the differences between the electronic banking bill containing prepaid monetary values ​​and the difference between the value of money outside of the e-currency is still unclear. According to Article 19.1 of the European Central Bank (ECB) System Law, the ECB sees only the legality of credit institutions.

One of the characteristic features of the e-banking service is the e-money concept as well as e-banking services. State control over e-services and security measures are essential to ensure customer safety. The rules to be applied in electronic banking are:

It is accessible to Internet banking services, which will enable the Client to perform financial, personal, or personal data, and to perform transactions that give rise to financial responsibility.

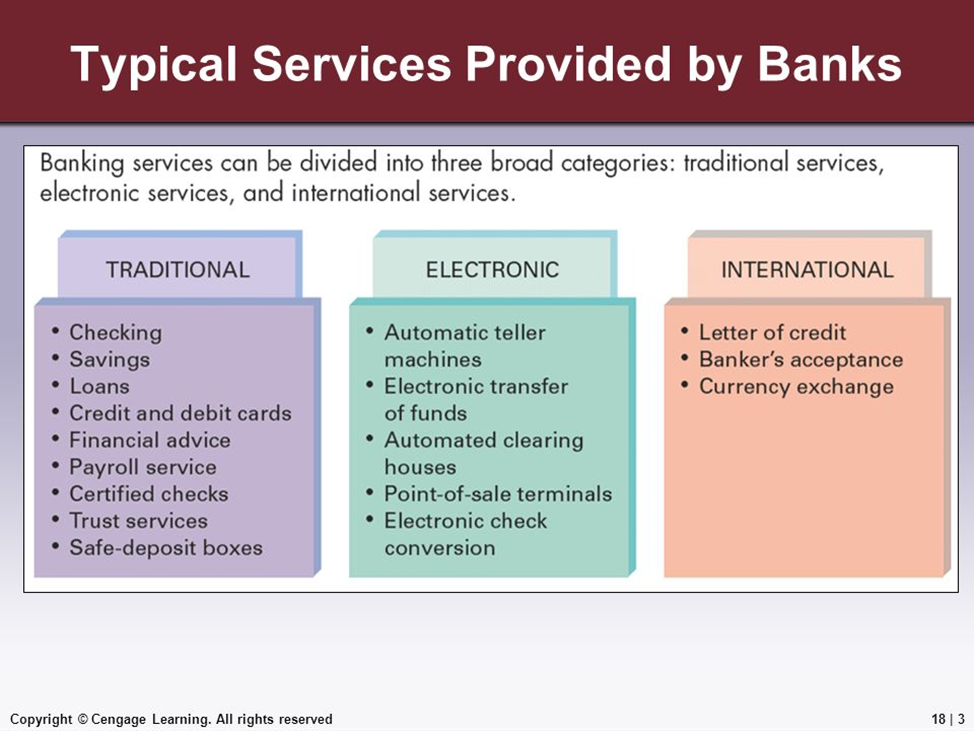
Any type of electronic banking software is regarded as part of the bank's information systems. It is also evident that banking services provided under the scope of electronic banking activities will be exposed to some additional risks on issues such as failure to meet the security of the Internet, improper identification, misinterpretation and non-disclosure of responsibilities, is established.

**2.4 E-banking as important part of banking services**

The growth of the standard banking services is driven by the growth of both the volume and the expansion of the composition of many factors in the market (not just competition, development of a new technology, the invention of a new bank product, etc.). This is particularly evident in the work of commercial banks. A few years ago, local banks did not have certificates, currency and credit cards, professionalism, factoring, leasing, contractor, option; ATM, etc. have not been used in concepts like this. It can be understood that banks have worked under conditions of a centralized distribution system when there is no need for a number of services. The market offered new requirements for this sector: the banks were forced to start new transactions that their client was interested in. Unfortunately, banks can not handle all these services immediately. Within a short period of time, banks have not accumulated enough experience. Because of the inadequate communication facilities and strong inflation, there is a need for some operations to develop. At the same time, banks should prepare staff to provide their staff with equipment, given that their end-of-service services are not adequate.

Although new technologies, new operations are the property of banks, gradually banks, along with traditional banking operations, start to offer a broader range of services. In general, almost universal economy of the banking sector, tendency of banking services universalization has been observed. For this purpose, banks should solve a number of problems mentioned above. It is important for banks to properly determine their location in the market, evaluate their financial, human resources and production capacities. Sometimes it is not necessary to apply all service forms. On the contrary, it is more important for a particular bank to concentrate rationally on certain transactions. The Bank's specialization on transactions it conducts may be a more effective development of its operations, reducing transaction costs and ultimately raising its revenue. Improving banking services for the population and developing electronic banking is one of the key priorities for banks. With the rapid expansion of the Internet, electronic banking has become a powerful alternative source of banking products and services. This completely changed the strategies of banks to compete with each other. The path to success in presenting modern banking services is now through electronic banking. This advancement in technology also creates new products and services for banks to identify and meet their changing needs and needs. The main component of the Bank's product is its services. These can be classified as follows:

Figure 2: Typical Services Provided by Banks



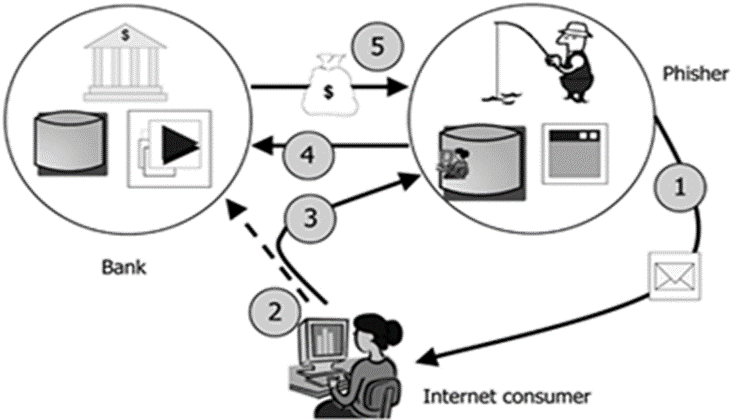
Source: slideplayer.com/slide/9699473/

Electronic banking services have come to the form that can be used by many financial institutions in a form that is physically available to most of the financial institutions, without interfering with the customer, reducing service costs, shortening the transaction time, increasing the operational speed, increasing mobility of business relationships and generally serving better.

The idea of ​​e-banking was first introduced in 1980 by phone banking. Concepts and programs have been made about the concept of home banking, with the use of fax and telephones, as previously unused computers and internet usage. In the US, Net Bank has introduced electronic banking for the first time. Then, in 2001, the diversified banks began to offer this service to their customers. In order to reduce costs in modern global economic conditions, banks are encouraging their customers to use alternative distribution channels, such as electronic banking, mobile banking, TV banking, telephone banking and telephony, and thus, less time and can be realized with cost. By utilizing high technology capabilities, banks utilize digital resources to closely analyze customer needs and changes and respond to those needs. Especially in the 1990s, along with the development of private banks, increased competition in the banking sector, after which banks realized the importance of technological factor in the competitive advantage. The desire of the Bank's customers to use electronic banking has changed over the Internet, the bank, the bank's electronic banking system and the security of websites, the demographic factors, the use of the Internet and various advantages. Looking at references, it has been suggested that have the security level, the duration of the internet usage and the demographic variability that affect the use of electronic banking. E-banking is a financial system all over the world; globalization, international capital movements, financial freedom and technological advancement. These changes have made significant progress in continuing to monitor international developments in the financial field, changes in compliance, and partnerships with foreign institutions and international organizations responsible for the regulation of the banking system. The freedom of control has been of particular importance in ensuring that all parties are fair, open and transparent, in the field of banking, where competition is both national and international. The feeling of confidence in a structure responsible for the regulation and supervision of banks was one of the key conditions for increasing the confidence in the banking system, the economy and the national currency.

It is advisable to speak of the risks facing electronic banking in the modern era of electronic banking. Increased cybercrime, the risk of electronic banking has also risen. Some nuances should be considered and measures should be taken when using electronic banking services.

Figure 3: Risks in e-banking



Source: resources.infosecinstitute.com/modern-online-banking-cyber-crime/

In addition to the benefits provided by electronic banking, there are some risks that are brought together. For example, special attention must be paid to information security against fraudulent activities that may arise in electronic banking operations that have an operation. On this border; the following points should be considered for security in terms of users' awareness:

1. Be careful about the e-mails you want to have your identity card and personal finance information.

2. All letters that require personal information should not be filled.

3. Customer numbers and data provided by banks should not be shared by a third party.

4. E-mails from banks and trading entities that provide information and requiring information such as password, username, customer number, credit card number, ID card should not be answered.

5. Banks should in no circumstances be required to request personal information from customers.

6. Banks should not require any form of ciphers by e-mail.

7. E-mails should not be accessed via e-mails with existing links.

8. Pay attention to the use of a credit card or a safe computer to which personal information is entered.

9. To be furious against phishing websites frauds, the Internet-friendly application must be downloaded.

10. Electronic banking accounts should be regularly checked.

11. You must define a different password for each of your e-bank accounts.

12. To be sure of the safety of electronic banking services, you should not log on to the computer where you do not know security.

For this purpose, it is not advisable to use general computer services such as internet cafes.

Evaluation of electronic banking services in the modern time, the conditions that are opposed to their rival banks and the level at which these terms are presented. The Bank must trust its customers and try to perform its operations safely. In any case, customer satisfaction is an important situation. Customer satisfaction depends on the expectations of the customer and the connection between the service provider. Therefore, customer satisfaction can be enhanced by providing a link between customer service providers. Branch banking is used by older people, those who can not use the computer and care for personal relationships. These clients choose face-to-face contact with bank employees. Those who can not use a personal computer or use information technology also choose branch banking. Despite the large number of them, it is observed that this number is gradually decreasing. The quality and ease of use of web sites used in transactions while evaluating electronic banking are also important. Some bank customers do not use this distribution channel because they have difficulty understanding the bank's website. Banking customers in Switzerland examined the reasons for the transfer of money using electronic banking.

Banks using electronic web sites have difficulty understanding the information on the bank's website, and they have not made any money transfers through electronic banking due to the lack of time to explain how bank employees work for each customer. The most effective change in the use of electronic banking customers is thought to be the trust of electronic banking services. At the second level, the factor influencing the use of electronic banking is the ratio of information about electronic banking services, and the third - the impact of electronic data on electronic banking.

Basically, banks are the entities involved in deposit-taking, promoting, managing, maintaining, accepting, accepting, accepting, and applying monetary and credit policies, supporting intermediary industries, participating in the affiliates. The Bank is an organization that works with financial instruments and other securities that replace money. Banks' depositors and lenders can be reimbursed by the difference between the deposited and the interest paid on loans.

Banks' activities generally consist of 4 parts:

- methods of payment methods,

- Portfolio method,

-Fund transfer and risk allocation determination,

- Processing of receivables is considered to be a better way of getting information and reducing operating costs.

Basically, banking is divided into two types of investment banking and commercial banking. Saving and current accounts hold commercial banks such as lending, investing, and providing services that streamline financial transactions between individuals and entities. Investing banks consult and mediate investment in movable property and changes in capital structure of firms. Banks intermediate cash flows and payments between individuals. This service is provided either through direct transfer or termination. Banks also serve to keep property prices, securities and mines in cash. The central bank mediates the regulation and implementation of monetary and credit policies that carry out international financial transactions.

Also, during the financial crisis, commercial banks also use the space they will use most recently to borrow. Central banks, along with these key activities, play a significant psychological role as a financial system security. Inhibiting commercial banks from lending to high-risk lenders, these banks monitor their methods and accounts, and lend to commercial banks that suffer from cash shortages. Limited banking activities, which are closely related to a relatively small part of former societies, play an active and significant role today in both international and national economic and trade.

Through the twentieth-century communication technology, transitory power transfers can be made between countries and continents in very short terms. In such an environment, the activities of the banks, the grouping and working order and the level of economic development affect each other. Developments in information technology have created a new dimension for the banking industry. The banks kept their customer data in advance. The transfer of data from these cards to the computer is the first step in the use of technology. After that, other operations were launched. Online access has been established and telephone banking has been established. By developing telephone banking over time, banking operations become a channel. Electronic banking has been developed with more advanced and active forms of electronic banking. Electronic banking has attracted tremendous targets for banks to reach market data, deliver banking services to customers and increase customer relationships.

However, there is a strong need for this system to be used. For this purpose, banks increase their investments in technology and software. Banks have different reasons for electronic banking activity. In particular, the desire of customers not to leave their competitors and not to stay out of competition in the competitive environment is one of the main targets for banks.

Particularly, finding young customers and thinking about their costs is among the other goals. In particular, banks approaching the Internet with ad-supported websites, then give their clients a code and password. At the same time, they provide banking services over the Internet. Thus, the customer can go to the bank via his code and code online.In general, electronic banking has four main stages.

Stage I: Use of the Internet for information and sales purposes. At this stage, complaints from customers are recorded in the system and stored in memory.

Stage II: The launch of simple interactive services for customer profits. At this stage, it is important to evaluate previously collected data to gain new customers.

Stage III; Almost all banking services are provided through the Internet and the duration of the bank's website linking system. Almost all transactions are provided to customers.

Stage IV; creation and development of customer database, and making revenue revisions. In this form, the classification of the market and identifying the target audience become easier.

Another stage, followed by these four phases, also covers electronic money withdrawal services. According to this stage, electronic banking is a great step, which will ensure physical elimination of money. It is noted that the outcome of further development of the electronic money supply with simpler meanings in our time will not necessarily need branches. Banks understand how important the internet is for their latest products. The most important nuance here is to provide the contribution of electronic banking to the services by distinguishing itself from other channels. In our time, electronic banking is known as a separate channel. Access to electronic banking, along with customer's password and code, is also required. This ensures that customers achieve secure banking services. Also, it is possible to reduce the fears of customers by developing unique single-use passphrases by means of technology developed. Coordination between mobile banking and electronic banking services is ensured. And as a result of the use of any service activity, mobile phone information is provided.

One of the most important reasons for the development of electronic banking is the desire to respond to the rapidly changing demands of consumers. One of the most important channels for responding to these needs and reaching customers is the electronic banking channel.

Even if we are unable to accept a lifetime lifestyle today, this situation will be of the same importance for electronic banking in the near future. Consumers do not want to be a client of a non-electronic bank. Unaware of electronic banking, consumers will not like it very much.

Bank's competitiveness and business efficiency are largely dependent on the availability of new banking services and products.

Bank service is a technology-related bank transaction and is provided to the customer on a contractual basis by the bank and is aimed at providing customer service with banking services.

Bank product - is a combination of banking operations and services aimed at meeting customer needs in various banking activities.

At present, various services of distance banking services, called "electronic banking" (e-banking), are widely used for banking services provided by credit institutions.

The growth of personal computers and network devices, which are not too expensive for the development of electronic banking services, and the increase in the number of Internet users are also affected. The presentation of electronic banking services is more attractive for banks wishing to increase their revenues by attracting new customers.

Electronic banking services cover the whole range of banking services, from banking services to banking, to banking sector services, by software providers. Diversified banking services mean that banking services can be used remotely, ,without visiting a customer's bank, computer or telephone network is expected to be submitted. Electronic banking services are the exchange of information between the bank and its client, subject to confidentiality and security conditions. The Bank manages and develops good bank banking services, increases the level of sales of bank products, attracts new customers, and provides them with more favorable terms of service.

Electronic banking means that the client is only allowed to use all the possible operations on the Bank's office using the Internet. It turns out that electronic banking has the following capabilities:

- all utility payments (gas, telephone, electricity, flat fee, etc.)

- payment of contact accounts

- transfer of payments of different types of goods and services

- withdraw or add money from your plastic card account

- open different account types and transfer money

Electronic banking services are widely used in the practice of their substitutes without the use of cash and payment instruments and tools created on the basis of the advanced experience of advanced industrialized countries. Here are three levels of electronic banking services:

a. Retail electronic banking services:

Services related to the use of plastic cards, ATMs and other self-service facilities in the home or office; settlement systems at trading points; services related to the protection of monetary documents.

b. Wholesale electronic banking services:

Money transfer, transaction management and supervision services

c. Automated settlement chambers:

It is a special organization that helps commercial banks conduct transactions between customers by using electronic means. As banking business is divided into wholesale and retail outlets, electronic banking services are also divided into wholesale and retail services. At the same time, retail electronic banking services are understood to mean the operation and maintenance of commercial bank cards, banking plastic cards, ATMs and electronic payment systems.

**2.4.1 Types of E-Banking**

The Electronic Banking methodological management covers the following types of services:

1. PC banking services: With the installation of a dedicated PC, electronic means are provided with communication channels.

2. Banking through the Internet: Unlike the first type of communication, without the use of a dedicated software.

3. Mobile Banking: An electronic banking service, both for computer banking and for the installation and maintenance of a banking service provided by the Internet.

Electronic banking services are implemented through:

Credit Cards - a ghost in 1887, appeared in the novel of Edward Bellamy's "Looking Backward or Life in The Year 2000" and then in 1950 with "dinner club". The credit card, which became popular among US bank clients in 1956, entered our country in the late 20th century. In March 2008, 38,534,106 credit cards were issued.

Virtual credit cards are a credit card that is not physically used and is used only during internet shopping. The virtual card is a card used only for purchases made on the Internet only by determining the limit on the user's bank account with the security code, which is not a magnetic field, and which determines the limit for each customer's transaction. With this feature, the risks that may arise from the use of unauthorized persons are minimized.

Smart cards are the name given to plastic bank cards carrying micro tip instead of magnetic tape. The reason why these plastic cards are called a smart card is that they are capable of storing and storing up to 100 times more than a standard magnetic card. Intelligent cards are very reliable because they have a very special encryption capability. A consumer who wishes to use a smart card while shopping at any virtual store may use a smart card with a smart card reader.

A feature of the smart card is its ability to operate micro cards with the same purpose as credit cards by downloading data in different fields. The use of intelligent cards, which are available in two different ways, is particularly relevant to organizations and companies or as a membership card. These cards are used on fixed payments over the amount charged by the prepayment method in the system.

Intelligent lock-electronic banking provides users with two-step safety. To access your electronic banking with an intelligent lock, your password is entered with an 8-digit password created by an intelligent lock. The clever lock creates a different password when you enter each electronic bank. These codes are "disposable use". You or someone else can not be used for the second time.

- Smart lock creates two-step safety;

- Makes extra money and helps you pay off your money;

- However, you will not have to remember an additional password;

- Whenever you enter into electronic banking, you will have a new and single use password;

- Easy to use;

- It is possible to carry the appliance everywhere;

- The operating system works separately.

Electronic banking services are divided into 2 groups according to service subjects (customer base):

1. Systems serving the corporate sector (legal entities and individual entrepreneurs)

2. Systems used by individuals

Electronic banking services are divided into the following groups depending on the chosen contact channel of the bank customer.

a) PC-banking or "Customer-Bank" system, which implies that the client software can be installed on a personal computer.

b) Internet banking, which provides banking services using a Web browser built into the client's computer.

c) Telephone Banking (Phone Banking) where tonal number dialing and taxi are used for account management

d) Mobile banking (mobile banking), which envisages the exchange of information between a bank and a customer through a mobile device (phone, tablet) or mobile internet (SMS-banking, Wad-banking, GPRS-banking).

e) banking services provided by ATMs - ATMs and self-service terminals.

   In this research, we will focus on internet banking and mobile banking more broadly.

Mobile banking

  Mobile banking - involves using mobile phones and tablets to manage and receive information on your bank account.

  The world's first mobile banking system was launched in 1999. European banks have offered their customers to use this service with the help of SMS messages. Earlier, with the help of the call center specialists of the bank, there was a type of banking that allowed them to manage payments from their bank accounts.

  SMS banking and Java applications, which are the first tools for mobile banking, have not gained public popularity. First of all, there were not many people who were ready to carry out many technological operations to manage their accounts. Only then, when the work was relatively comfortable, the fans of mobile banking grew.

  The number of mobile banking participants is less than the internet-banking. As internet banking has a lot of functionality, it has been created earlier and is closer to the bank's customers.

  With regard to the most commonly used banking service among online clients, nearly 50% of these services are services for mobile communication, internet access, and utility bills. In addition, transfers of accounts, currency exchange, and transfer of electronic money to the system are among the customer's accounts.

**Types of mobile banking**

   SMS is a bank account management account with sms sent to a bank's special number. Notwithstanding its simplicity, this service allows not only the availability of modern handsets, but also the use of banking services in mobile broadband access, for example in remote areas, as well as where mobile internet is expensive, for example, in foreign roaming.

    Java application is a more advanced mobile banking business and works in most modern telephones.

More "advanced" and user-friendly applications were created for modern mobile phones. These are Windows Mobile / Windows Phone, Android, Symbian, as well as ios, which is for i Phone and i Pad. These applications allow you to perform all the functions offered by the phones and are most comfortable.

   Banks that do not have a separate mobile banking system, which allow smartphones to use "lightweight" site versions in internet banking, they do not belong to mobile banking.

   One of the most important problems that arose during the use of mobile banking is the increase in fraud. Mobile banking systems could be provided with highly reliable means of protection. However, it is important to take into consideration the "average" user convenience to use these services. After all, not everyone has to read long instructions, pass through numerous identification procedures, and prefer to go to the nearest bank branch. Therefore, banks are using reasonable protection systems.

  IT professionals, as the main threat, include the loss of unencumbered access to information and the loss of physical damage to the device with the help of virus programs.

  Those who download antivirus programs to their smartphone are just rare lovers, because spreading viruses to mobile platforms is not as much as for desktop PCs. In addition, mobile operating systems themselves are not protected from the start.

  Bankers are advised to download an antivirus program, to be careful when downloading software from suspicious sources, and password protectively, when they follow very simple procedures that banks are reporting on their websites.

  It is also incorrect to open e-mails and SMS from non-familiar sources.

  The phones with the built-in bank can not be handed over to children. When repaired, you need to wipe the bank application or block it through the call center of the bank.

  Obviously, it does not need to close all bank accounts to the mobile banking system, especially when large balances remain, and it is more logical to separate a separate account that does not have much to do for a net fee.

  The modern phone, which is at the hands of the user, allows you to access your bank accounts anywhere and at any time. Another type of electronic banking services can not boast of such efficiency. It is no coincidence that British researches showed that mobile bank users check their bank accounts three times more than internet-banking users.

  True, today many experts say that mobile banking is just a complement to internet banking and will never be able to compete with it. However, there are those who think that since year after year mobile phones will not only compress home computers and laptops.

**Internet Banking**

One of the perspective directions of banking activity is Internet Banking. Its main objective is to mitigate the money laundering procedures and reduce the cost of customers.

Internet banking provides for real-time web-based payments through this software. The Bank uses Internet banking to offer its customers a wide range of services, which are of a different nature. These services mainly have the following functions:

• Balance study;

• Money transfers from one account to another;

• Granting applications for a loan;

• Electronic payment of accounts, etc.

Some banks offer brokerage services and insurance services.

In addition, the bank's ability to carry out its activities via the Internet allows businesses to make money transfers, apply for credit, monitor and manage cash transactions online.

Internet banking has the following advantages:

• The Bank's access to all potential customers;

• The client's geographical commitment to the bank;

• considerable savings as a result of the client's absence of personally visiting;

• Ability to control customers' accounts at 24 hours a day and reactivate the financial markets in accordance with the changing situation ( loan repayment, purchase and sale of currency, repayment of bank deposits);

• Increasing the customer's control over their operations;

• It is not necessary to place special software on customer side;

• The new service is accessible to all internet customers because the changes are reflected on the bank's service page.

Internet banking, which is still in use by users, is more used than mobile banking. This is expected to change in the near future due to the increased mobile phone capabilities.

**3**. **Methodology**

Qualitative analysis is outlined as a marketing research technique that focuses on getting knowledge through open-ended and informal communication. This technique is not solely, concerning “what” individuals suppose however additionally “why” they suppose therefore. In this research, the case study research and record keeping will be used which they are the types of quality research methodology. Record keeping method makes use of the already existing reliable documents and similar sources of information as the data source. This data can be used in a new research. This is similar to going to a library. There one will check books and different reference material to gather relevant knowledge that may probably be utilized in the analysis. The case study technique has evolved over the past few years and developed as into a valuable qualitative analysis technique. As the name suggests it is used for explaining a company or Associate in Nursing entity. This type of analysis technique is employed at intervals variety of areas like education, social sciences and similar. This technique could look troublesome to control, however, it is one amongst the only ways in which of conducting analysis because it involves a deep dive and thorough understanding of the data collection methods and inferring the data.

**4. Analysis and Discussion**

The formation of a networked economy covers network structures covering all hierarchical conventions in traditional economics, including commercial banks. Because the organization's networking forms are relatively easy to manage with the hierarchy of the organization, it is possible to compare the composition of network organizations with their existing structural changes, including the need for the necessary redesign through price signals. This problem is crucial in the application of banking services.

However, there are certain difficulties that need to be considered in this area. Thus, for example, starting from a certain level of development of information technology, the information model may be removed from the agent in some informational environments, being represented in the form of a certain information object. With the active participation of all facilities in the actualization of this facility, it can be seen as a general information model for certain community members to co-ordinate joint activities to achieve the most rational, mutually acceptable option. As a result, evolutionary development of non-market regulatory mechanisms can take place on the basis of organizational structures of the network, resulting in a new network based on horizontal relationships, non-industrial economy. This evolutionary process of forming the self-organizing information mechanisms of the economic system has already manifested itself in the development of Internet technologies.

Transition to the information (network) economy in the banking sector, the key organizational mechanisms to ensure the social and economic development of the society varies considerably, as it is competitive in the context of information (network) economy, first of all, on the basis of new information technology and network management.

This problem is very important in the application and implementation of banking services. For example, the World Bank has established 239 banks in 15 countries in Europe and North America in order to develop a formulated method to create an international data network using financial information exchange and standardized information. All SWIFT systems are represented by the following categories and messages:

Client transfers and receipt of receipt;

financial transactions (remittances and options, credit and savings operations, credit and deposit transactions, interest payments, etc.); collection and instructions for cash payment;

Securities;

precious metals;

documentary letters of credit and guarantees;

travel checks;

mixed messages and so on.

As you can see, the SWIFT system carries out a number of international banking services. Currently, an upgraded SWIFT-2 system is used. For a message on the SWIFT-2, a single bank terminal (CBT) is used:

personal computer;

messages are processed on a dedicated cryptographic equipment and are transmitted to the communication line via communication equipment.

Information on contact lines reaches the access point in SWIFT (SAP);

The SWIFT community is fully responsible for the integrity and security of the message

New services have emerged on modern SWIFT systems, specifically for large volumes of data transmission - inter-bank transfer files have been developed. This information can be obtained from the bank's head offices and departments' purchasing information, credit management information and so on. can exclude administrative and current reporting information.

Banking technology is based on a number of key principles as a tool to support and develop banking activity:

- a unified approach covering the broader banking sector with full integration;

- module construction principle;

- Openness of technologies that can be linked to different external systems;

- flexibility in building a banking system and adapting them to needs;

- the ability of more than one user to access the uniform information space;

- Modeling the Bank and its business processes;

- Continuous development and improvement of the system based on business processes reinforcement.

Establishment of automated banking systems (ABS) is related to the planning of all the IT infrastructure of the commercial bank, which relates to the content of the components, processes and components of the process of banking technology and service optimization . Here, special attention should be paid to services covered by plastic cards and their types. Popular and widely used cards today are as follows:

The following installment cards are offered on the Azerbaijan market:

“Bolkart” (Bank of Baku)

“Albalı Plus” ( Unibank)

“World Card” (Yapıkredi Bank)

“Paykart” (Bank Respublika)

“Birkart” (Kapital Bank)

“Smile Card” (Express Bank)

“Maxi Card” (NBC Bank)

**Bolkart (Bank of Baku)**

Advantages: We can think of the "elder" of Bolkart, the first installment card in Azerbaijan. The main advantage of Bolkart, which has the largest customer base ever, is a broad network of partners and customer segments. Everyone has their own Bolkart, as it is said in the bank's advertising charts: currently the card is offered in 4 types (Young, Family, Gold and Diamond) and offers different advantages over each segment. Another advantage of the card is the loyalty program Bolkart Ball to win.

Disadvantages: The disadvantages are:

Providing cards on a paid (annual service fee) basis.

Cashback opportunities are lower than their competitors. Thus, only 25% of the reserved card limit can be used in cash.

**“Albalı Plus” ( Unibank)**

Advantages: There are 2 types of Unibank's Albalı Plus brand, one of the country's leading retail banks. Albalı Plus Standard and Albalı Plus Gold.

Advantage of the Albalı Plus Standard card is that the card is free and accessible to customers, so it is enough to have a total profit of $ 100 for the card. Gold card is designed for customers with a relatively high segment (salary requirement of 500 AZN).

Advantages of the Albalı Plus Gold card are the fact that the card has a grace period of both cash and non-cash transactions. In particular, we would like to emphasize that the Albalı Plus Gold card is the only card that offers a grace period for all transactions between installments. There is unlimited possibility of cashing on both types of cards, you can use cash on hand all ATMs cash.

Disadvantages:

The main disadvantage of the Albalı Plus Standard card is the failure to apply a grace period for non-cash transactions. That is, the interest rate will be calculated from the next day. The main disadvantages of the Albalı Plus Gold card are the fact that the card is a paid (one-time fee of 1% (min 20 AZN)) and high (2%) ATM's cashing commission.

**“World Card” (Yapıkredi Bank)**

Advantages: Worldcard on card-based campaigns can be considered as a leader in the market. Examples of these campaigns include "shopping abroad 3 months without interest", "online shopping for 3 months without interest rates" and so on. we can show an example. WorldCard Honey System can also be considered the best among loyalty programs for card users. Worldcard Classic cards are offered free of charge to customers.

Disadvantages: As with Bolkart, World Card's cashing opportunities are low. 50% of the limit can be cashed on the "Worldcard Classic" type, where the majority of clients are concentrated.

**“Paykart” (Bank Respublika)**

Advantages: Paykart's installment capabilities can be considered satisfactory, even though the number of users is behind any of the above 3 cards. Thus, all "installment" transactions with Paykart card are carried out in interest-free manner (interest rates on other cards are also applied).

Disadvantages: The disadvantages of the card are:

Low cash withdrawal (30% of the limit).

If you do not have a grace period in non-cash transactions, if you pay once per Paykart, your interest will be accrued on the next day.

**“Birkart” (Kapital Bank)**

Advantages: The new product offered by the bank, which has the largest service network in Azerbaijan, has surpassed other cards in the recent competitive terms. Particularly difficult to find an opponent of the card "Birkart Cash-back". The advantages are as follows:

The card's partner network has extensive installment options (interest-free installments up to 18 months) and is applied only to interest-free, as it is in Paykart.

The card implements an interest-free grace period of up to 40 days for non-cash transactions. 1.5% of the amount used for lump-sum purchases in non-partisan stores is back to the card account in the form of "cash-back". Partner stores are up to 20% depending on the cash-back partner. 100% of card limit is available for cash. There is a kind of "Birkart Miles" for the premium segment of the card, which can be purchased for free tickets via this card.

Disadvantages: The only disadvantage of the card for us is the annual service fee. Birkart - 15 AZN per year, Birkart Cash-Back - 35 AZN per annum;

**Smile Card (Express Bank)**

Advantages: Not only in the bank's partner network but also at any store, it also allows you to pay for a 6 or 12 month installment (interest-free installment). Smile Card also automatically joins the Express Club program and earns up to 20% of the partner's partner stores and 0.3% cash-back in non-affiliate stores. The card is completely free to customers.

Disadvantages: No interest-free installment.

**What is a Birkart?**

A credit card product with a "BirKart" installment function. It is possible to carry out both cash, cashless and installment transactions through the card.Installment - is a function that allows the Bank to pay for goods and services at the trading points where it is partnered with interest-free and non-commissionable up to 18 months. The number of trade points that BirKart cooperates with on the installment project is considerable. Paying particular attention to this feature of the card, the Bank also carries out installment campaigns on special occasions. For example, on the eve of the New Year holiday + 3 installments were donated to the Bank by all installments. According to the taxpayer features and the number of partners, "BirKart" is one step ahead of its competitors on the market. Cashless payments - You can also make online purchases online and abroad. At this time, the amount you use will apply for a period of up to 40 days (up to 10 next month). No additional interest or commission is received from the customer if the debt is fully seized during this period. However, if the entire amount you use during the month is not refunded to the next month, the grace period will not apply, and the interest rate will be added to the debt at 11:00 on the relevant date (25% per annum). We would like to especially emphasize one thing that if the client does not want to pay interest and commission on non-cash payments, he should fully repay the debts arising during the month. Cash transactions - One Card is not profitable at all. 1.5% (min.2 AZN) commission is applied to ATMs for cash withdrawals. Also, the cash flow transaction period is not applied. In other words, cash is accrued at the rate of 25% per annum starting from the next day.

**Types of "BirKart"**

"BirKart" is available in 3 types of customers. BirKart(usual), One Card Cashback and BirKart Miles. The duration of each 3 cards is 3 years and the maximum limit is 10,000 AZN.

BirKart (ordinary) - annual service fee is 15 AZN. Client is exempted from service fee of the first year if the transaction is made at least 10 AZN for 3 times within 90 days of receipt of the card. Service fees for the 2nd and 3rd years must be paid.

BirKart Cashback - An annual service fee is 35 AZN. The customer is exempt from service fees for the first year (cash exception) if the transaction is made at least 5 times minimum within 20 days from the date of receipt of the card. Service fees for the 2nd and 3rd years must be paid. The main advantage of this type of card is that it has a "cash-back" function as seen in the name. In the venture's partner banks, a maximum of 30% of a single cashless payment is returned to the card (depending on the partner). In non-joint ventures, the cash-back percentage is 1.5%. In other words, these card holders will receive 1.5% of their cashless payments at the worst case, so there is no second card available on the market. There is no cash - back in installments, online and cash transactions.

BirKart Miles - annual fee is 35 AZN. This card can also be obtained in AZN / USD / EUR currencies with debit function, and the card's 3-year price will be AZN 80. The main advantage and purpose of the card is the user's earnings during single cashless payments. For every 1 AZN, shopping costs 1 MIL for domestic transactions and 1.5 MIL in country transactions. It can be used for the purchase of airline tickets from the collected VATs. The cost of shuttles is calculated as 65 MIL = 1 AZN. If we make a simple calculation, we will need to pay AZN 13,000 for domestic transfers and AZN 8667 for a modified ticket to AZN 200. As with the BirKart Cashback card, this card does not calculate the TRL in installments, online and cash transactions (the utility payments made through the Mobile Banking application are counted on the counters).

**How are "BirKart" monthly payments calculated?**

As mentioned above, it is possible to carry out three types of operations through BirKart: installment, cashless and cash. The payment interval is in the range of 1-10 months of each month. Monthly payment amount is calculated as follows:

Installment - partial monthly payment of relevant purchase. For example, if you have a 12 month installment of a product worth X 300 at the Bank's X partner, then your monthly payment for this transaction will be 25 AZN (300/12). Cash - 5% of the cash used during the month and accrued interest. For example, you have made a cashback transaction at the amount of AZN 500 from the ATM on the 5th. At this time your debt will be 507.5 AZN, with the cash commission (1.5%). Interest is accrued on a daily basis, with an interest rate of 25% per annum until the date you pay. If you pay 10 (35 days) after the next month, then the minimum payment is set as follows.

Main debt - 507.5 \* 5% = 25.4 AZN

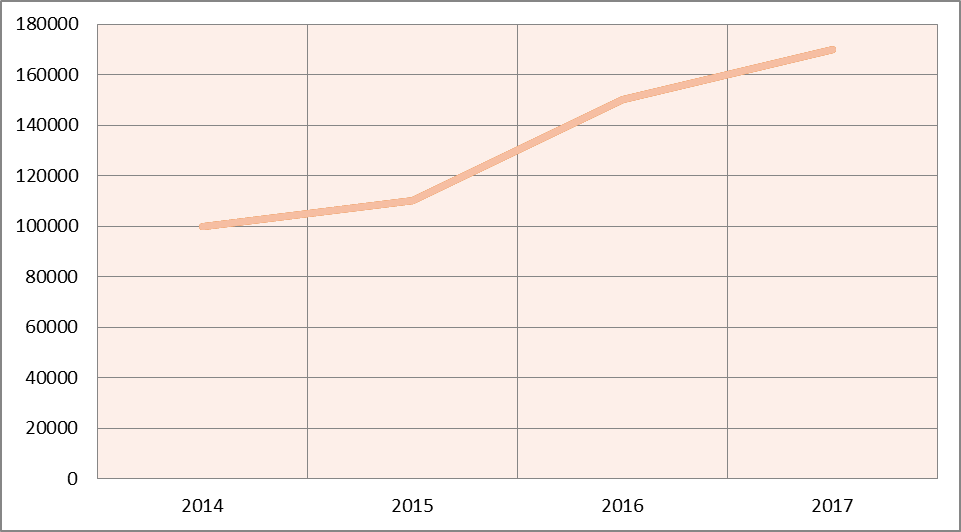
Interest debt - (507.5 \* 25%) / 360 days \* 35 days = 12.40 AZN

Total payment - 25.4 AZN + 12.4 AZN = 37.8 AZN

Cashless - No interest and commission is calculated if the amount used on non-cash transactions is fully repaid by 10th of next month. However, if there is no full payment, after 11:00 the calculations are carried out just as in cash transactions, 5% of the accrued interest and principal debt.

How can I get a "Card"?

Individuals with a place of employment may apply for a single card, a document confirming their income and a personal identification card. The age requirement for the client is 18-67, and the demand for a job at the last workplace is 6 months. BirKart can be acquired by employees of Kapital bank salary / scholarship card holders, as well as fellow employees from other Bank.

**Figure 4-Dynamics of plastic cards sales in the Kapital Bank for the years 2014-2017**

Source: Statistical Analysis of Central Bank Baku, 2017 s.28

The research showed that Birkart offered by Kapital Bank today is on the agenda and is selected with the convenience of the population.

The information function is a purposeful specialized management, created by the information system and characterized by the uniformity of actions of all kinds of information. Information network - users of information resources and computer and software components combined with unified information channel for the efficient development and transmission of information flows. Information System (IT) - an ordered set of documented information and information technologies. All types of information systems and networks, their technology and security mechanisms constitute a special area of ​​economic activity defined by state scientific, technical and industrial policies of information development. As the main classification features of Automated Information Systems (IIS), it is expedient to consider the features of automated professional activity - the process of accessing information - to obtain the necessary access information, which automatically identifies the EIT as an official or a group official involved in managing an organizational system .

In accordance with the proposed classification feature, the following AIS can be distinguished:

• Automated Control Systems (ANS);

• Decision Support Systems (QDS);

• Automated information and computing systems (ECHR);

• Automated Training Systems (ATS);

• Automated Information Reference Systems (AISA).

The automated management system is an automated system designed to automate all or some of the managerial tasks that the collective management body (ministry, management, board, service, management team, etc.) solves. Depending on the object of control, it differs from ANS (ANS) and QDS Technical Assistance (AIA). Decision support systems are interactive computers using different decision models and specialized databases that support decision makers. Such software software allows users to set up several "whatever" questions, and get interactive options for the situation.

Artificial Intelligence (AI) is information technology, its main purpose is to create a computer that can think, see, listen and feel as a human being. The EU's largest organizational impact is in the field of expert systems. The Expert System (EC) tries to transfer the process of thinking in the decision-making process to professionals and managers. ES is developed by encoding data from a specialist in the rules of writing a computer program that simulates a particular strategy for solving problems. ES has many similarities with decision-support systems. In fact, both provide a high level of support to busy users who handle employment problems. However, ESs are generally used to solve unique, complex problems by decision-making systems to deal with recurring problems in the narrower areas of the activity and to give recommendations.

The management internal information system (VIS) is a series of information flows that provide information needs for different centers to provide management decisions. It consists of 3 basic elements:

- technical means for data processing (computers);

- internal and external data transmission channels (communication channels);

- Actual information recorded on the relevant media.

The establishment of WSI is based on the following key principles:

- Combining and reusing data, reducing duplication and limiting the number of used indicators, reducing information flow and increasing data usage;

- compatibility of personal elements and sub-systems of VIS (technical, software, organizational), enhances reliability of its activity and reduces the cost of creating and upgrading;

- Very variable calculations in the process of preparation and adoption of management decisions and their optimization. Design, creation and utilization of the organization of the internal information system is to achieve the following essential objectives:

- automation of administrative and management work based on the use of information technologies;

- Reduce the risk level as a result of enhancing the effectiveness and reliability of decisions and improving the quality of the information used;

- acquisition, retention, updating and creation of a system of information in centralized and centralized regimes;

- Continuous development and improvement of information technologies.

The main functions of VIS are:

- Identify the needs of each head, in a particular nature, content and volume;

- software development, creation and use of data banks;

- Determine the level of costs for the acquisition and operation of technical means;

- coordination of all information services;

- Automated processing and delivery of documents and text data.

Contemporary information technology further covers management and production processes, enabling the creation of integrated computer systems that combine research, development, production, marketing, finance and other economic activities and the functions of a commercial organization into a single information process.

Information systems, such as finance, production, marketing, supply, warehousing, transport, service and design, are integrated as integrated systems supporting all aspects of the enterprise. The information system allows you to track critical parameters when evaluating an enterprise's activity.

The information system is based on modern software and modern computer facilities. Fourth generation programming languages ​​were created using operating systems such as UNIX and Windows. The ideology of building management information systems delivers maximum flexibility in enhancing functionality, changes to existing interfaces and databases.

Developers of information systems do not allow users to lose the direct application at the same time by using "preemptive multitasking" methods to integrate integrated data using manipulations of network operating systems, combining work with individual computers.

Traditionally, commercial banks use the following types of settlements to organize payments and repayments: payment requirements; payment order; payment requests; checks; using letters of credit; mutual offsetting; transit operations and so on. However, in modern conditions, the payment procedure is subject to significant changes and advanced payment technologies are applied. At present, the most modern payment technologies are applied in the largest banks of the republic: Visa Money Transfer, Master Card P2P Money Transfer, Mobile Banking, Internet Banking, SMS Notification, e-Commerce (3-d secure), Multicurrency card, Caching Currency exchange, Info Kiosk and others. World and local experience shows that repayment transactions are the first service of banks to their clients. Currently, they relate to basic banking operations. Banks provide payment services to clients who have a bank account, a deposit and a document for transfer. Then banks play a mediator role. The main types of commercial banks' operations in the field of settlement operations include:

- Acceptance of accounting documents;

- Checking the accuracy of their compilation and registration;

- Oversight of legitimacy and capabilities of monetary transactions;

- Determining the amount of funds on the accounts of customers.

- Informing all participants of the transactions about their conduct

To improve the quality of banking services, it is important to predict cash flows, which characterize the movement of money and reflect the movement of money from turnover to cash offices of banks and cash withdrawal.

**5. Conclusions and Proposals**

The characteristic features of the present time for commercial banks in Azerbaijan are diversification of activities. It is very dangerous to concentrate on a narrow service within the framework of economic policy. For this reason, banks offer broader banking products and services to their clients. The problems of the formation and development of commercial banks in Azerbaijan, their ability to quickly and efficiently solve all new market tasks are solely based on modern management, strict adherence to all principles, and creative use of marketing potential. As we examine the world experience, we have come to the conclusion that banks have certain specific services. In my opinion, services are the settlement and cash services of the most important and widespread e-banks in the Republic of Azerbaijan, and these methods and tools to improve the quality of services should be constantly increased using the world experience. In the market economy, the commercial bank exists because of the need for its products (services). Depending on the demand, the bank prepares a specific policy and is committed to it in its activities. The main direction of the development strategy of banks is to consider development of (or upgrading) new banking products as its most important tool in ensuring its functioning, economic growth and competitive stability. Without it, it is simply impossible to endure competition in the modern market. New products are more important to increase market share (or protection) as well as increase profits. It takes a long time to control certain market segments so that the bank changes and updates. In order to do so, the bank should always provide a high level of supply of new products, that is, new products that should always be included in the consistent work of the banking system. If the bank does not keep up with the new situation, it can not be a leader in the market; the key ever-creative banks will be more profitable and will be in a competitive position. Investigating various approaches to the content of the E-Banking service allows the Bank to determine its customers' existing needs during banking operations. Client position refers to a service copy as a basic quality criterion, the frequency of transactions, the accuracy of the documentation, the lack of mistakes, the quality of consultations, the day-to-day operation, reputation and location of the bank. The Bank's prism includes qualitative indicators: copy of technological processes, operating costs, and expenses for correcting mistakes, labor efficiency, credit and other risks in comparison with the level of spending in the production of bank products. Banks aimed at the development of new products should take into account their interests in their interests, as well as their interests in order to fully take account of the impact of the external environment. Switching to any of the digital banking models is a bigger process than porting mobile banking or online platforms. This requires maximum personalization of digital relations with the customer and the addition of digital conformity to base transactions. Because Neo banks belong to financial technology companies, their future looks very promising in Europe and the United States. The e-banking sector is so popular that global financial centers such as London and New York compete to get the name of global financial technology center and attract startups by offering affordable methods for registration, taxation. Thus, it should be noted that within the framework of this dissertation, e-banking means the complex of banking services that the bank can show to its customers and the banking service, which is a set of banking operations that satisfy the customer's needs. The Bank's operation is a combination of logically and logically completed actions by bank employees to serve customers and to meet the bank's own needs. The quality of services rendered by a commercial bank has a direct impact on its image and competitiveness. In my opinion, the development and use of quality standards in the bank is one of the decisive factors of the bank's success. This, in turn, leads to the development of the bank, the efficiency of its employees' work, the proper functioning of business processes and the implementation of strategic goals. The services listed in the dissertation are only part of the bank's operations and e-services for customers. Modern banks seek to expand their number and increase the quality of their performance to attract more customers and increase their revenue base. Currently, the timely resolution of services between buyers and suppliers, as well as credit and other plastic cards, reports, checks, etc. Services related to the introduction of new payment systems are particularly appreciated. We believe that the growth of banks' professionalism at the present stage of development may allow customers to improve their complex payment and cash services, conduct transactions with securities, and prepare cash, insurance, audit and leasing services. Implementation of measures to computerize a satisfactory reserve of banking operations. A special value for the Bank is the correct cost of e-banking services. An optimal criterion for determining bank commissions should be the price of advanced banking transactions and pricing in the market for this type of service. At the moment, based on the subscription principle, the amount of payment may be set for a portion of the services provided in a particular contract. The profitability of credit business is diminishing. Therefore, the banks are transitioning to transit business. But this alone is a little profit. You need to add any additional value to win the transaction business. Neo bank services also compete in this area. In addition, the new generation is more dependent not only on new technologies, but also very prone to managing its own finances that can make the neo-bands very well. At present electronic banking services are the fastest growing part of the banking system. The modern banking system requires new solutions aimed at low-paying mass-serving technologies. These technologies are selected by ease of circulation, high demand for systems, high level of system and processes. Today's most effective method of making similar business decisions is using electronic capabilities. Credit organizations using electronic banking services can offer their customers not only traditional banking services, but also completely new products and services that meet their customers' financial, social and other needs. Due to the differentiation of financial information transmission ways, the bank has been able to develop different technical solutions to use different communication channels. The purpose here is to increase the level and quality of banking services to customers, as well as to minimize the loss of time and money. One of the main opportunities provided by e-banking services is retail business strategy, based on the concept of distant banking self-service. This concept is that the customer comes to the bank branch and signs a contract. After that, the bank will be able to use its services and the client will be able to access new banking products without coming to the bank office. This process allows banks not only to use their products, but also to access a large number of clients, regardless of the business regime and location of the bank branches.

**6. References**

1. Law of the Republic of Azerbaijan// On the Central Bank of the Republic of Azerbaijan // December 10, 2004 //

2. // January 16, 2004 - "// Law of the Republic of Azerbaijan about Banks

3. Baku, 2003. Abbasov AM // Z. F.Mammadov // Banking and e-banking

4. Bakı, 2010 -Sadıqov E.M. Bank əməliyyatları.

5. Bakı, 2007 - Əsgərova R. Pul, Kredit, Banklar.

6. Bakı, 2016 - Bəşirov R.A. Bank işi.

7. Bakı , 2012- Bəşirov R.A. Pul və banklar

8. Bakı-2014.- Aslanov A.M. Maliyyə və bank statistikası

9. Control Engineering Practice, 1995//Statistical process//T.Perers and R.Waterman// Control of Multivariate Processes

10. Financial intermediation and the theory of the firm// // Southern Economic //C.Rebbit və P.Berqxin //An analysis of savings and association behavior

11. J. Financial Economics.//1987. Dec.//F.Kotler Some evidence of bank credit unions

12. J. Finance, 1976, May.// A.Parasuraman, L.Berri və V.Saytaml// A transaction cost approach to the theory of financial intermediation //

13. Rules 29 December 2001 - Transactions with banks related parties

14 The law. - 2009. - № 10. Development tendency of Azerbaijan National Payment System: law and economic aspects analysis

15. Məmmədov Z.F. // The law. - 2007. - № 8. Corporate governance system in Azerbaijan and its application in banks

16. Pul, kredit və banklar //Bakı, 2009 - İbrahimov Z.

17. Rev. Economics and Statistics, 1961. Aug // E.Van Duzer The deposit relationship and commercial bank investment behavior //

18. resources.infosecinstitute.com/modern-online-banking-cyber-crime/

19. Statistical Analysis of Central Bank Baku, 2017 s.28

20. slideplayer.com/slide/9699473/

21. Service Recovery Begins With Customer. - EFQM, 2004. T.Xilioma

22. Umea, 2001.// Multi- and Megavariate Data Analysis, Umetrics AB//. D.B.Predein, E., Kettaneh-Wold, N., Wold, S

23. Z.F. Məmmədov // The law. - 2009. - № 10. Development tendency of Azerbaijan National Payment System: law and economic aspects analysis

24. Z.F. Məmmədov // The law. - 2007. - № 8. Corporate governance system in Azerbaijan and its application in banks

25. Z.F. Məmmədov //Baku: May 25-26, 2006. In the context of world practice, the system of deposit insurance / / AZMEA RH. materials of the scientific-practical seminar.

26. [www.ijsr.net/archive/v5i12/ART20163501.pdf](http://www.ijsr.net/archive/v5i12/ART20163501.pdf)

27. 18noyabr 2008- Banklarda kreditlərin verilməsinin daxili Prosedurları və uçotu haqqında Qaydalar