Iryna DANYLYUK¹, Liudmila HONCHAR², Liudmila DUMA³, Alena KARLASH⁴

ZARZĄDZANIE FINANSAMI OSOBISTYMI KLIENTÓW PRZY ZASTOSOWANIU ROZWIĄZAŃ BANKOWOŚCI PRYWATNEJ

Streszczenie: W artykule przedstawiono warunki wstępne dla zdefiniowania relacji pomiędzy bankami i ich klientami. Rozważono aspekty bankowości elektronicznej oraz określono kierunki rozwoju wewnątrzkrajowego rynku usług bankowych. Przeanalizowano tendencje tworzenia nowych usług bankowych mających na celu dalszy rozwój sektora bankowego na Ukrainie. W przedstawionych analizach przedstawiono porównawcze charakterystyki takich usług bankowych jak bankowość mobilna (internetowa). Rozważania przeprowadzono w oparciu o doświadczenia międzynarodowe.

Słowa kluczowe: innowacje bankowe, proces innowacji, bankowość prywatna, bankowość internetowa, zarządzanie finansami

ORGANIZATION OF PERSONAL FINANCE MANAGEMENT OF CLIENTS USING THE TECHNOLOGY OF PRIVATE – BANKING

Summary: The article investigates the theoretical preconditions for the formation of relations between banks and their clients; the features of electronic banking are considered; the directions of development of the domestic market of banking services are determined. The world tendencies of creation of new possibilities with the purpose of the further development of the market of banking services in Ukraine are studied. The study considers the comparative characteristics of such banking services as mobile banking, focused on international experience.

Keywords: banking innovations, innovation process, private banking, online banking, financial management

1. Introduction

At the present stage of the development of the banking system, there is a need for the introduction of innovative technologies, modern methods and models of management that are aimed at increasing competitiveness. The effective activity of domestic commercial banks are an important condition for further economic development of the country and determines the growth rate of the entire Ukrainian economy.

¹ Department of Computer Science, Ternopil National Economic University, Ukraine, Ternopil, 8 Chehova str., email: irynadanylyuk9@gmail.com

² Department of Computer Science, Ternopil National Economic University, Ukraine, Ternopil, 8 Chehova str., email: lyudmyla.honchar@gmail.com

³ Department of Computer Science, Ternopil National Economic University, Ukraine, Ternopil, 8 Chehova str., email: ludaduma7@gmail.com

⁴ Department of Computer Science, Ternopil National Economic University, Ukraine, Ternopil, 8 Chehova str., email: alenakarlash@gmail.com

2. Relevance of the topic and the formulation of a scientific problem

Problems that arise in society (economic, social), necessarily affect banking, as the payment market, today, occupies a leading position. The sphere of banking services is developing in the conditions of intensification of competition, presence of crisis phenomena in the world financial market and is characterized by such tendencies, as an increase of the role of innovative technologies; increase in the volume, variety of banking services; increasing the share of innovative technologies; formation of new segments of the customer service market. In this regard, the development and implementation of high-tech banking services, in particular, remote banking services, is important.

Analysis of recent publications

Issues of the development and functioning of electronic banking services in Ukraine are devoted to the work of domestic and foreign scholars: O.O. Gavrilova, O.D., Vovchaka, V.M. Kravets, O. Ovcharuk, I. Pasichnyk, O.O. Chuba J. Schumpeter, P.F. Drucker, J. Saltman, K. Levin, E. M. Rogers and others.

Paying tribute to the significant scientific work of these scientists, it should be emphasized that the complex of tasks with innovative technologies in the field of banking services remain insufficiently solved and predetermine further research. The purpose of the article is to search and research innovative perspectives of development of banking activity in Ukraine.

3. Presenting main material

The term "private banking" refers to the process of servicing a private wealthy persons by a bank or the implementation of integrated management of the client's assets. This type of service is similar to the quality characteristics of the work of Swiss banks. Approximately, one third of the offshore wealth of wealthy people - VIP customers - is in Switzerland, in London - 15%, in the USA (NY - York, Miami) - 15%, including Hong Kong, Singapore, Luxembourg, Normandy and Cayman Islands. [6, 7] The main factors contributing to the success of Switzerland as one of the international

The main factors contributing to the success of Switzerland as one of the international financial centers and which has all the conditions for the development of private banks are:

- political and financial credit stability (Switzerland does not participate in wars, was never occupied, the government did not have to flee the country);
- strong currency the Swiss franc, put into circulation in 1848 and today is the official currency, which, regardless of temporary inflation, has maintained a fairly stable position vis-à-vis other currencies;
- neutrality (absence of blocking accounts for political reasons);
- secrecy of deposits (the policy of non-disclosure of financial secrets this is already a tradition of the country, the tradition of personal confidentiality, which arose even in the days of feudalism, and today Switzerland is unique in this regard, especially in the light of international law);
- geographical location in the center of Europe;
- the presence of multilingual managers (in Switzerland, three official languages: German, French, Italian);

- a simple and clear legislative system (for example, easier than in the US) (business features private banking legally defined the Swiss Banking Act of 1934, which clearly distinguishes the latter from other banking activities, in particular: private banking should not publish balance sheets; maintain a constant the relationship between capital, reserves and assets, the promotion of deposit-taking services, and later, in order to regulate the activity of private banking, several specialized institutions were created (the Swiss Private Association ankiv, private bankers of Geneva organization and so on. p.).

Taking into account all of the above-mentioned positive factors of the existence of Swiss banks, it is necessary to pay attention to their peculiarity. First of all, they are focused on the protection of personal property, preservation and transfer to his heirs, the development of an individual strategy for investing capital clients in reliable areas, while guaranteeing not high return on management of financial assets. Western millionaires "model of Swiss banking" consider the standard of quality service. Before becoming a customer of a Swiss bank, an investor must prove his financial strength by a letter of recommendation from the client of this bank or other financial institutions. This feature assists clients of banks to feel themselves elected by a certain closed elite financial society.

Trusting its capital to a Swiss bank, the Ukrainian investor is trying to emphasize the influential circle of people, their social and financial status. Ukrainian investors are mainly oriented towards maximizing returns on investments while maintaining the confidentiality of information. According to a survey conducted by EY with the participation of market leaders in this segment, the number of active and wealthy bank customers in 2015 increased by 18%. And the banks' income from the services rendered - by 38%. [5]

In an unstable economy and in the face of severe competition for the client, banks are trying to offer the maximum package of services. The latter conduct segmentation of the client base by the level of profitability (profit) from the implementation of banking operations and determine the cost of services for a particular group of customers (the cost of servicing customers should vary depending on current profits and future earnings).

So, in the West, in the category of Private Banking consider clients with capital more than 5 million c.u.. For Ukraine, a VIP can be a client who can provide at least a hundred thousand c.u. in the management of the bank. Clear criteria for VIP - persons are put forward by the OTR Bank: the confirmed monthly income is more than 15 thousand c.u., the possibility to place a deposit more than 100 thousand c.u., belonging to the top management or the founders of large companies. To become VIP - client of Privatbank, it is necessary to place on deposit 250 thousand c.u. or get a card Visa Platinum, Visa Infinite, MasterCard World Signia. [4]

In practice, the categories of Very HNWI and Ultra HNWI or MWF are the category of clients who have been cooperating with banks for many years and have friendly relations with the managers of the latter. (Table 1).

Other banks can attract a client of this category only if they hire a manager with many years of friendly and professional relationships with such a client. The "Mass affluent" category is, in fact, the most attractive to the bank, because this generation of young people who have already proven themselves have a stable average income and certain amount of cash for investing on favorable terms. Banks are tough competition for such customers, this category is the largest and most promising.

Table 1. Client Base Segmentation [1,3]

Client segment of business investment	Portrait of the client	Amount
Mass	Men (70%), women (30%), 28 to 60	The volume of
Retail	years old;	
Keiaii		investments - up to 50-60
	Income - up to 2 thousand n	thousand c.u.;
	United States to a family member;	Cash is deposited on the
	The inhabitants of the big city; Investment limit - 3 months	deposit account; Amount of agreement up
	investment mint - 3 months	to 10 - 20 thousand c.u;
M	Men (70%), women (30%), 30 to 45	The volume of
Mass affluent		
Private wealth	years old;	investments - up to 500
management	Income - up to 10 thousand n United States to a family member;	thousand c.u.; Possible investment in
		several institutions :
	The inhabitants of the big city; Investment limit - 9 - 14months	The volume of the
	investment innit - 9 - 14montins	
		transaction up to 100-200 thousand c.u.;
High net worth	Men (95%) years old; Age - more	The volume of
individual	than 30 years;	investments - up to 5000
Private banking	Business owner or one of the major	thousand c.u;
1 Tivate banking	managers of a major company;	Is a client of Pryvate
	Capital is formed through the	Banking in Russia or
	implementation of successful deals	Eastern Europe;
	or when receiving large premiums;	The volume of the
	Investment limit - 3 years	transaction up to 1000
	investment innit 3 years	thousand c.u.;
Very HNWI	Men (98%) years old; Age - more	The volume of
Private banking	than 40 years;	investments - up to 20,000
	Owner of several businesses;	thousand c.u.;
	Capital is formed by the purchase	Is a client of one or more
	(sale) of several businesses;	Pryvate Banking in
	Investment limit - 5-7 years	Russia, Western or Eastern
	_	Europe;
		Amount of agreement up
		to 5000 thousand c.u;
Ultra HNWI	Very wealthy families;	The volume of
MWF	Age - over 45 years. Oligarchs and	investments - up to 50,000
Multifamily office	their families, owners of TNCs;	thousand c.u.;
	Capital was formed by several	Is a client of Multifamily
	generations and is approaching the	office;
	management circles;	Amount of agreement up
	Investment limit - 10 years or more	to 5000 thousand c.u

Trying to offer the client the western level of service and attract the capital of wealthy individuals, as well as enable advanced investors to diversify their investments, some banks have embarked on the path of borrowing foreign products. Structured products (note) have become an innovative way of investing in Ukraine. These are complex investment instruments that, due to the inclusion in their structure of dynamic investment assets, can yield maximum returns despite the volatility of the financial

market with the simultaneous guarantee of returning to the investor the amount of fixed capital.

Such banks are few, and those with such a product do not try to distribute it, since it is oriented mainly on VIP-clients.

The specificity of this tool is that it is not profitable to work with small sums. Nevertheless, investing large amounts cannot be expected on large profits - 20 - 30% per annum is considered a good indicator. It is possible that there will be no profit at all because its value depends on the market situation. But, you can be sure 100% that nothing will be lost. This offer is suitable for clients, for whom the absence of risk is more important than profit. [2, p. 495]

Banks, as a rule, offer structured products in the form of one asset, in particular: there may be an index, securities, raw materials (oil, gold), commodity and currency futures. Structured products have become more and more popular in the international market in recent years, and for private investors, the most attractive are those that provide a guarantee for the conservation of their investments. Structured notes can be of interest only to advanced investors who understand that asset quotes can be influenced by various factors and world events.

As diversification of deposits, many clients invest their cash flows into jewelry. During the crisis, demand for ready-made jewelry grew significantly, as in the conditions of instability in the financial and money market, many believed that investment should be invested in precious materials. This opinion has a significant drawback, since the price of the product has a pile of components, in particular: the cost of precious metal, the work of the wizard, the compliance of design with fashion requirements, the brand of the jewelry salon, when buying - VAT, etc. Over time, the cost of such product can be significantly reduced, resulting in losses. Therefore, it is desirable to buy jewelry from famous craftsmen and rare ones. However, in this situation it is necessary to be familiar with the jewelry market or to use the knowledge of experts in this field. This kind of income is a long-term investment (perhaps more than 10 years). Jewelry purchasing and valuation services are part of the Life Style management program, but, in times of crisis, they prefer to invest directly in gold. In Ukraine, gold prices are free, information is available. Famous world foreign analysts predict that the next 5 to 10 years, demand for gold will outstrip the offer, which means world prices will continue to grow. Accordingly, gold mining projects will remain attractive for investment as well.

The department dealing with private investment, orienting clients towards the gold market, recommends a profitable time for entry (exit) from it, determines the percentage of gold in the total investment portfolio. Focusing on information, the client freely distributes his assets.

Consider transactions with precious metals carried out by banks for the purpose of investing the customer's funds: the purchase of physical metal in ingots or coins and investment in non-cash form (opening a special "metal" account in a bank). "Metal" accounts can be two types: the account of responsible storage (RVZ) and impersonal "metal" account (ZMR). An impersonal metal account is current and deposit. The metal account of responsible storage is the transfer to the bank of its own personal metals. In this case, the client leases the box, and the bank becomes responsible for storage. This kind of operation has the name - to give their metal for storage. This is not a deposit, which means that interest is not charged on it. An impersonal metal account involves purchasing from a financial institution a certain number of grams of

precious metal, and the bank does not actually provide the customer with ingots, and the transaction is executed only on paper. Current accounts do not provide any level of interest. The deposit account has an interest rate, which in the average market varies from 2 to 5% per annum. Input account is a deposit, opened to save and accumulate. You can use it only after the expiration of the agreement. The current account has such features - at a convenient time it can be removed, transferred or refilled.

Metal accounts have many advantages over cash deposits. But at the legislative level there is a significant drawback. In case of financial problems in the bank, on metal accounts, the client will not receive compensation from the Deposit Guarantee Fund. In addition, when a client opens an account in gold bullion, he carries indirect costs that consume a significant portion of the profit. When buying (selling) a gold bullion an investor loses from 3 to 40% on a spread.

In many banks, the conditions for the redemption of bullion are deliberately unprofitable. Moreover, if depositor buys a bullion in another bank, then the deposit (as a rule) opens with reduced interest rate. And some banks generally refuse to accept deposits from ingots purchased from other banks. This is due to the fact that the financial institution suffers additional losses for the examination of such ingots. If deposit is bought by a depositor on-site and when the deposit is closed, it sells it to the same bank, then the financial institution does not need to withdraw the ingot from the repository. And since the bank saves on this transaction, such deposits, as a rule, are set lowered.

Another disadvantage is that by buying (selling) a bull in Ukraine, the customer cannot be sure that the gold is sold to him at "fair" value (which has developed on the world market). The London Precious Metals Market is the main trading center for gold, which has London fixing system where the five largest fixed-line operators (Barclays Capital, Deutsche Bank, HSBC, Scotia Mocatta, Societe Generale), twice a day (morning and evening) determine the price at which the supply and demand are aligned. Applications for purchase and applications for sale are considered, and when the equilibrium is reached, the price is announced. All other banks when buying "for the London fixing" use the services of these five operators. At the same time, the prices of gold in Ukrainian banks may differ significantly from world market prices. Consequently, experts argue that buying gold and keeping it on deposit makes sense only in the case of contributions for a term of three years or more. Short-term investments in such an asset are mainly loss-making.

With regard to commemorative coins, they are not very interested in businessmen who want to invest money in precious metals: first of all, it's a high cost, which is determined by coins (and not the amount of precious metal in the coin), and the payment of VAT when purchasing.

An alternative to banking investment instruments within the framework of partnership programs is to offer financial company that facilitates access to international stock exchanges. An effective way of investing in gold can be considered to be the purchase of shares, which are rotated on the stock exchange ETFs, provided with gold. They give investors the right to participate directly in a trade without having to buy it physically. Each stock of funds is provided with 0.1 troy ounces (3.11 grams). Metal is on a special deposit bank - guardian. ETFs shares move in line with gold prices. In general, shares of nine funds are rotated on different exchanges. The largest is street TRACKS Gold Shares, which is listed on the New York Stock Exchange by the GLD Stockserver. The aggregate volume of gold, which provides the shares of all 9 ETFs,

is more than 800 tons. Another way to participate in the growth of prices for precious metals - the purchase of shares of companies - manufacturers. In this case, the return on investment can be remarkably large. So, with an increase in the price of gold at 50%, the indices that combine shares of gold futures, such as the PHLX Gold & Silver Index, their Gold Index or Gold Bugs Index, increased by hundreds of percentages. Investment gold funds are one of the most convenient types of paper investment in gold and make it possible to reduce the risk inherent in purchasing shares of particular company. "Gold Funds" invest their investors in shares of gold mining and affiliated companies. There are no problems in storing ingots, there is no difference between the prices for the purchase (sale), the revaluation of the property of the fund occurs every day after closing the stock exchange in London and New York.

Some banks, in addition to gold, offer customers to open accounts in metals such as silver, platinum, palladium. Silver is considered a metal - a "satellite" of gold, since its prices actually duplicate the price fluctuations of the yellow metal, although sometimes independent price jumps are possible, therefore, experts offer some of the money, in the form of large "metal" investment portfolios, placed in silver. Platinum and palladium are exclusively technical metals, their prices are dependent on demand and supply, so the bank never creates reserves from the latter. [4]

However, it should be noted that investment in gold is predominantly used during the crisis. This is the price of uncertainty in tomorrow, so it's not worthwhile to rely on large profits. Nevertheless, with professional investment strategy, this asset can bring an investor over 40% per annum.

Trust management of financial assets is a civil-law relationship that arises between a trustee (investor) and a trustee in connection with the implementation of its operations in trust management of a financial asset (by capital: funds in national and foreign currency, securities, debt obligations bond, right of claim of a debt) of an investor in the stock market on its own behalf, but at the expense and in the interests of the investor. Trust management can take the form of trust management through an agreement and through mutual funds, which has become the most widespread in Ukraine.

Consequently, including in the presentation line of trust management services, it is possible to sell units to any trusted company that manages and contracts an agreement with, or to sell its own financial assets at their disposal.

The Bank may also offer an independent customer such services as brokerage (independent brokerage business). For example, Alfa-Bank offers its clients Alpha-Direct program, which includes:

- providing stock quotes, analytics, financial news and other information necessary for making investment decisions;
- execution of orders for the purchase (sale) of shares, bonds, futures and other financial assets on all exchange and over-the-counter markets;
- provision of margin loans for the purchase of securities and loans for the purpose of selling securities "without coverage";
- provision of loans secured by securities;
- submission of securities to issuers for the purpose of carrying out procedures of repayment, payment of coupons or dividends and directing the received income to the owner of securities;
- possibility of operations with the help of a smartphone.

In an unstable economy, brokerage services are quite popular not only among wealthy clients but also among the general public.

In order to expand banking services, innovative products such as: work with precious metals, brokerage, structured products, banks must take into account:

- work with precious metals is associated with obtaining a license for the relevant activity (high financial costs);
- to work with financial assets, it is necessary to develop a separate direction in the bank and to buy special software;
- the provision of brokerage services and the receipt of funds for structured notes also relates to certain software, financial costs and the purchase of new equipment.

4. Conclusion

So, developing private banking service at the bank, it must be remembered that this will necessarily be linked to the introduction of innovative technologies in the field of computer software and systemic innovation technologies that affect the management structure of both the service staff and the client. Private banking technology should evolve not only thanks to a friendly partner relationship between the manager and the client, but also with the help of convenient, understandable, accessible services, tools that meet the requirements of the modern information society. Of course, the result is serious financial costs, but the returns from operations with clients of the category "mass affluent" substantially cover the costs of creating and maintaining an extended base of banking services.

REFERENCE

- 1. TISHCHENKO O.I.: Review of current trends in the online banking market [Text] /O.I. Tishchenko // Economics and Society, 13(2017), 1237 1243.
- 2. TRUDOVA M.E.: Innovative prospects for development in the banking system of Ukraine / M.E. Trudova// Economy and Society, 3(2016), 485 490.
- 3. Electronic resource: Analysis of Ukrainian banks: reviews, graphs, facts. *Access mode: http://bankografo.com/*
- 4. Electronic resource: VIP-banking or banking services for business owners. *Access mode:*
 - http://www.bankchart.com.ua/depoziti_biznesu/statti/vip_banking_abo_bankivski_poslugi_dlya_vlasnikiv_biznesu
- 5. Electronic resource: Privat Banking Development trends in Ukraine. *Access mode:https://www.asterslaw.com/press_center/publications/private_banking_de velopment_trends_in_ukraine/*
- 6. Electronic resource: The Banker Top 1000 World Banks 2017 Rankings. *Access mode: http://www.thebanker.com/Top-1000-World-Banks*
- 7. Electronic resource: World Retail Banking Report from Cappemini and Efma, *Access mode: https://www.worldretailbankingreport.com/*