

THE INNOVATIVE TRANSFORMATION IN THE RA BANKING SYSTEM

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Abstract: The analysis shows that the innovative transformation in the banking system of Armenia is a multi-level process that has a significant impact on the entire financial sector of the country. One of the key aspects of this transformation is the deep integration of modern technology into banking. This not only facilitates the interaction of customers and banks, but also increases the level of transparency and efficiency of financial transactions. The innovation of the RA banking system contributes to the expansion of access to financial services, enabling more people to use financial services, especially where they were previously limited. It was concluded that innovations and technological developments enable the banking system to provide faster, safer and more convenient services, reduce human errors and improve the efficiency of processes. New technologies improve the level of security. All of this is leading to greater competition in the banking industry, new ways of working and strategies, and overall improvements in customer service and financial operations (Egorova, A., A., (2015).

But they also present new challenges, such as data protection and security issues, as well as the need to use new technologies.

Keywords: Transformation, bank, innovation, technology, digitization, service, customer

JEL codes: G21, G24, O33

Research aims: to find out what innovative changes have taken place in the RA banking system in recent years and to what extent they have contributed to the development of the banking system.

Research novelty: Banking innovations are constantly evolving. The scientific novelty of the article is that RA commercial banks should include their customers in modern innovations, as well as invest in acquiring or developing new software solutions. All these innovations together can significantly change the way banking systems work, as well as improve customer experience and provide greater security.

Research methodology: The research method helps to form a full understanding of the scope and content of the study. The following methods were used for studying the work: method of studying scientific literature, method of analysis.

Research results

The banking system is one of the most dynamically developing and stable sectors of the RA economy, where significant changes have been observed in recent years. These shifts are manifested in the diversity of financial products and high competition between banks. That competition becomes more intense when Armenian banks try to keep up with the innovations developed in the international banking system. Around the world, banking

innovation is developing in different directions, which is transforming the way financial services are delivered and the capabilities (blockchain, AI, cryptocurrencies, chatbots, IB) (Inn Lee, Yongjae Shin (2018). A banking innovation needs to have several mandatory characteristics, including a certain degree of novelty, ability to meet market demand, and commercial feasibility (Korsunova, N.N. (2020). If we compare the technologies of Armenian banks with those of developed and developing countries, particularly Russia, we will notice that our banks lag behind the pace of development of modern innovations. See Figure 1.

According to the chart, in such developed countries as Germany and the USA, 67 and 70 percent of the population, respectively, own innovative banking products. In 2023, the highest index was shared by the USA, Russia's index is 52%. Among the neighboring countries, the indicator of Georgia in 2023 was 30%, the indicator of Azerbaijan was 35%, for comparison, let's note that the indicator of Armenia is 28%. In contrast to developed countries, in countries with developing economies, such as China, Kazakhstan and Turkmenistan, the level of ownership of innovative products is in the range of 38-50%.

Of course, there were cases when certain products entered Armenia earlier than Russia, for example, the ArCa online service, virtual card payments, but in general, technologically, we are lagging behind. Let's take, for example, mobile banking services, which Armenian banks have just started to introduce, while in many CIS countries they have been actively developing for several years.

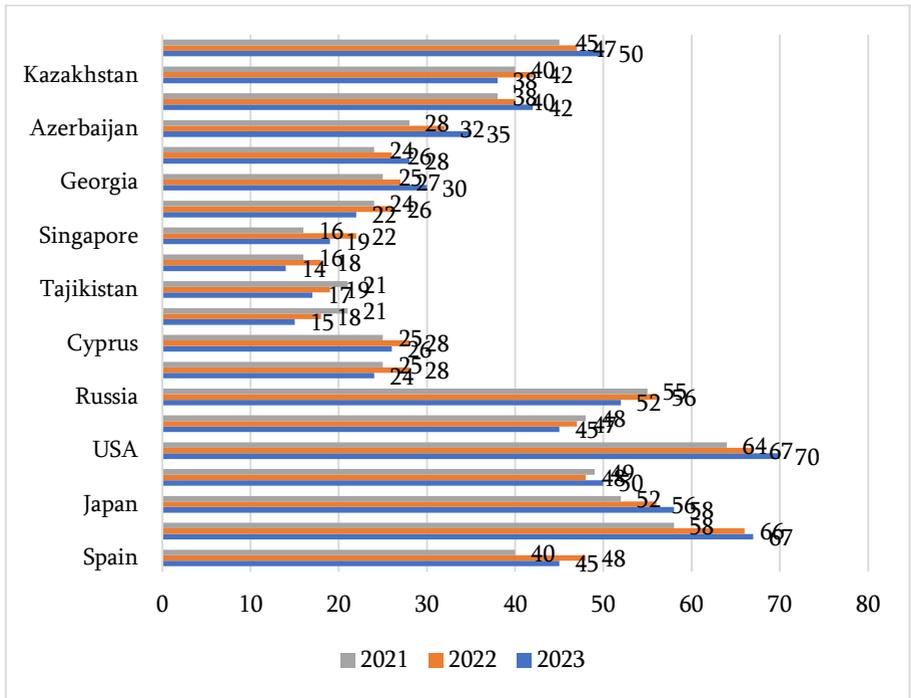


Figure 1. The level of ownership of innovative banking products in the population of a number of countries, 2021-2023, (%) [5]
Source: Our research results

The graphs show the volume of transactions made with ArCa cards in Armenia. In 2023, the volume of transactions carried out with Arka payment cards was 23.4%, which decreased by 0.2% compared to the previous year, 46.3% was carried out with VISA cards, it decreased by 1.2% compared to the previous year, it was carried out with Master Cards is 23.6% of transactions, other cards made 1.2%.

The study shows that Armenian banks lag behind international banks technologically. The problem is the existing infrastructure. In particular, the reason many of our banks are technologically underdeveloped is their dependence on certain banking solution providers.

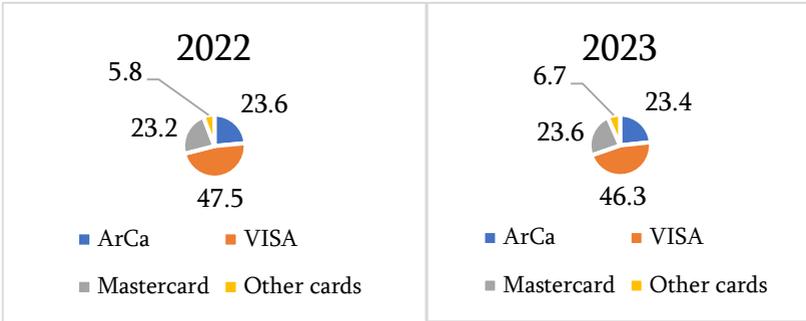


Figure 2. Volume of transactions made with payment cards in RA, 2022-2023, (%) [6]

Source: Our research results

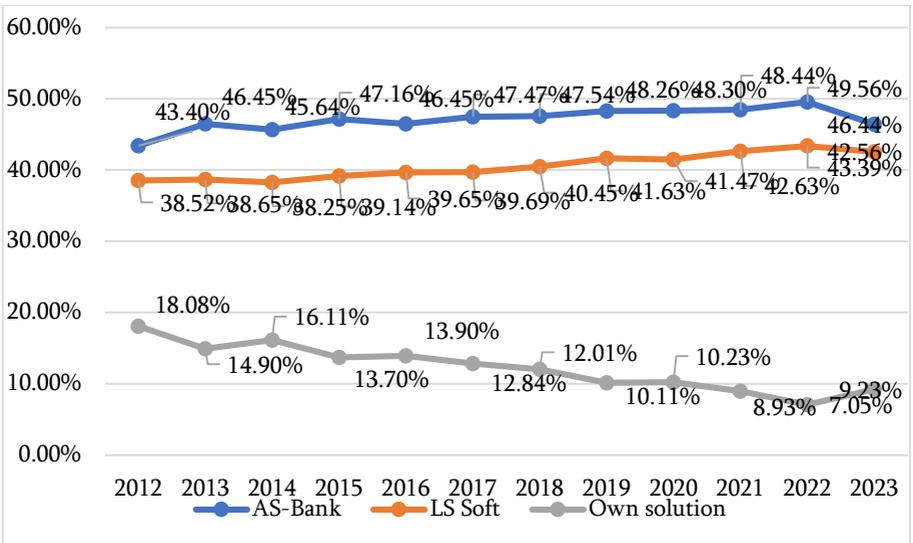


Figure 3. Dynamics of bank assets according to information systems, 2012-2023, (%)

Source: Our research results

The information on the systems mentioned in the diagram was provided by the "Armenian Programs" company. The chart shows that the most widely used system in banks is the AS-bank system, followed by the LSoft system, there are relatively few banks that prefer to use their own software system, although they have increased in recent years. Thus, about half of Armenian banks use "Armenian programs" as their main operational system. Some banks, including large ones, use another local solution, Elsoft, and some use software developed by their own or parent company.

Thanks to the implementation of the banking "LSoft" system under modern technological conditions, banks can increase and retain loyal customers, increase the level of satisfaction of the "AS-bank" and "LSoft" systems, see all stages of work with the client, their requests, which in turn allows calculate the cost of work with the client, the efficiency of that work, the profit received and the costs incurred.

As for the mode of service, there is a segment that wants to be served easily and quickly, to solve all banking problems on the spot, at any time of the day, whether at the office or at the resort (Nazarova, K., V. (2017). Technologies are now developing in just that direction. Self-service systems such as internet banking, mobile banking, contact centers, ATMs equipped with new technologies and payment terminals are widely spread in Armenia today.

Consider the growth of ATMs in the RA banking system in the chart below.

Based on the data in the chart, it can be stated that the number of ATMs has registered significant dynamics during the mentioned period, and in 2022, compared to the previous year, the increase is 3.2%, but in 2023, their number decreased by 17 due to technical problems. with.

As can be seen in Figure 5, the indicators of the number of terminals are different. Compared to the previous year, the number of terminals increased by 4,336 in 2022, and by 11,668 in 2023 compared to the previous year.

Unlike us, in other countries these technologies have been used for a long time and have a large number of users. This is new for the Armenian market, forecasts show that in 2-3 years remote banking systems will become one of the main methods of customer service. Today, payment instruments, e-commerce and online payment systems are developing quite quickly, our banks actively offer these services. The main competition is in the field of online payments. Today, one of the rapidly developing directions is payment instruments.

The most important competitive advantage will be the bank that provides serious and advanced IT solutions. There is an opinion that banks are turning into IT companies. That is why Armenia is trying to find all the alternative solutions of our information and technological infrastructure that will ensure flexibility, allow us to respond to customer demands in time and increase the scale of business. And so those banks that pay a lot of attention to investments in IT and innovation today will have an advantage in the long run.

It is very important that innovations in the banking system are not seen only in the context of customer service. When we say innovative transformation, we mean that it also refers to the technological development of the bank's internal systems, management methods and business processes, which in turn determine the degree of efficiency of the bank.

And if we take into account that the threshold of the minimum regulatory capital has been raised to 30 billion AMD, the opportunities of small banks to invest in infrastructure are even more limited.

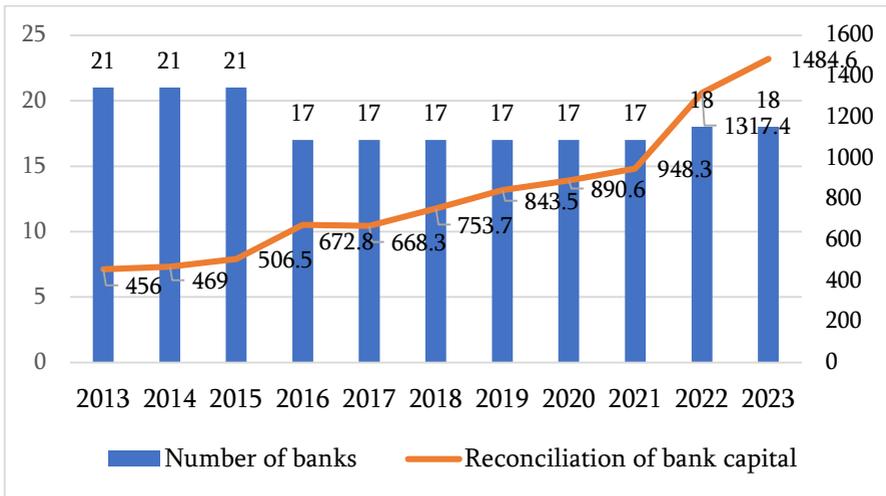


Figure 4. Comparison of the number of banks and bank capital, 2013-2023, (in AMD)

Source: Our research results

The regulator should support the development process of high-tech banks. Since 2015 since January, the Central Bank of Armenia

is gradually tightening the regulatory capital requirements (according to Basel III). From 2018, all intangible assets, including IT investments, will be deducted from regulatory capital.

As much as this new requirement corresponds to the international experience of banking regulation, it will not contribute to the growth of investments in the field of technology in our market. I think the regulatory body can still find some methods and forms of incentives. The question is not only the local market, but the ability of banks to participate in the global competition unfolding for the sake of the customer, because banking has long been global in nature. And for that, you need to have appropriate technological solutions. Of course, regulation is not the most important aspect of technological development, but it can both restrain the growth of investment and facilitate its inflow.

Conclusion

The analysis of the level of mastery of banking innovations in developing and developed countries showed that the banking system of Armenia lags far behind modern innovative trends. The problem is not the low prevalence of the given banking product (for example, mobile banking), but the lack of mastery of it by the population. Therefore, it is necessary for banks to regularly include different layers of the population in educational processes to master banking innovations. Today, very few Armenian banks have mobile banking applications, which proves that we are currently in the role of the rearguard, that is, we are trying to catch up with the leaders, rather than keeping up with the times. On the other hand, the figures show that the potential users of online and mobile banking

services in Armenia today are relatively few. Of course, banks may argue that the market is not yet ready for mass implementation of remote banking services, but on the other hand, there was no quality offer. If mobile banking had been introduced earlier, it is possible that today the number of users would be several times larger.

The analysis showed that only three software systems are used in the RA banking system. Our processing companies share the blame for this technological underdevelopment. Although all the mentioned companies try to develop their solutions within the framework of their own agenda, in any case, certain conditions are created, due to which we are not able to respond to changes and introduce new technologies in time. Historically, such a model has been formed where the freedom of activity in the IT sector depends on the pace of development of the suppliers available in the market. And the transition to large international suppliers requires large investments, for which banks do not have a large enough business.

As a result, we find ourselves in a dead end: you will not buy the expensive one, because such costs are not justified, and the local one does not always meet the latest technological requirements. Thus, it is the technologies available in our banks that limit the entry of innovative products into the market. That is why the size of the business must be such that the bank can afford to innovate, and the market must be large enough to make these investments profitable. This is where we face the problem of expanding banks and searching for new markets. unless there are market opportunities, there will be no serious investment in innovation.

It is hoped that in the near future personal payments will develop, that is, money transfers from one individual to another individual using a mobile phone number or other means of identification. But in that business, the bank has to decide its role when, on the one hand, it just issues cards, and on the other hand, it acts as an infrastructure that acts as a gateway for online and mobile payments in the market. That is why the payment business will be widespread, and this will be the main form of transformation that will take place in the RA banking system.

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ՆՈՐԱՐԱՐ ՓՈԽԱԿԵՐՊՈՒՄԸ ՀՀ ԲԱՆԿԱՅԻՆ ՀԱՄԱԿԱՐԳՈՒՄ

Ինեսա Նուշիկյան

Հայաստանի պետական տնտեսագիտական համալսարան,
բանկային գործ և ապահովագրության ամբիոն, հայցորդ

Բանալի բառեր - փոխակերպում, բանկ, նորարարություն,
տեխնոլոգիա, թվայնացում, ծառայություն, հաճախորդ

Հայաստանի բանկային համակարգում նորարարական տրանսֆորմացիան բազմաստիճան գործընթաց է ապրում, որը էական ազդեցություն ունի երկրի ողջ ֆինանսական հատվածի վրա: Այս վերափոխման առանցքային կողմերից մեկը ժամանակակից տեխնոլոգիաների խորը ինտեգրումն է բանկային գործունեության մեջ: Այն ոչ միայն հեշտացնում է հաճախորդների և բանկերի փոխգործակցությունը, այլև բարձրացնում է ֆինանսական գործարքների թափանցիկության և արդյունավետության մակարդակը: ՀՀ բանկային համակարգի նորարարությունը նպաստում է ֆինանսական ծառայությունների հասանելիության ընդլայնմանը՝ հնարավորություն տալով ավելի շատ մարդկանց օգտվել ֆինանսական ծառայություններից, հատկապես այնտեղ, որտեղ դրանք նախկինում սահմանափակ էին:

Կատարվել է եզրահանգում, որ, նորարարություններն ու տեխնոլոգիական զարգացումները բանկային համակարգին հնարավորություն են տալիս ավելի արագ, անվտանգ և հարմարավետ ծառայություններ մատուցել, նվազեցնել

մարդկային գործոնի սխալները և բարելավել գործընթացների արդյունավետությունը:

Նոր տեխնոլոգիաները բարելավում են անվտանգության մակարդակը: Այս ամենը հանգեցնում է բանկային ծառայությունների ոլորտում ավելի մեծ մրցակցություն, նոր աշխատելաոճերի և ռազմավարությունների ձևավորմանը, ինչպես նաև հաճախորդների սպասարկման և ֆինանսական գործառնությունների ոլորտում ընդհանուր բարելավումների: Սակայն դրանք նաև ներկայացնում են նոր մարտահրավերներ, ինչպիսիք են տվյալների պաշտպանության և անվտանգության խնդիրները, ինչպես նաև նոր տեխնոլոգիաների օգտագործման անհրաժեշտությունը:

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