Creating a competitive strategy for a digital financial institution

Margarita Agafonova1,*, Lyudmila Shevchenko1, Oleg Shalnev1, and Andrey Chugunov

1Voronezh State Technical University, Moscovskiy prospect, 14, Voronezh, 394026, Russia

Abstract. The paper reveals the essence of digital changes and digital transformation. It was possible to determine the essence of strategic approaches to business transformation in the turbulent conditions of digital transformations and outline ways to build strategies for digital transformations. The paper analyzed the factors influencing the implementation of digital transformation strategies of the financial sector. Based on the capabilities of the external environment, a brief analysis of new opportunities for digital transformation in the field of financial services was carried out. An attempt was made to develop approaches to creating strategic digital transformations of financial companies, as well as develop a competitive strategy for the consistent development of a specific financial organization based on strategic digital changes in the digital transformation environment of the industry.

1 Introduction

Since the invention in the middle of the last century, information systems have gone through a rapid evolutionary path, annually doubling their capacity after the invention of the integrated circuit (the so-called empirical Moore's law, which will be valid, according to many researchers, until 2025). And today, thanks to this development of information computer systems and networks, it became possible to transform the economic structure in a new paradigm – digital one.

The digital economy based on a new information infrastructure enables new types of e-business to emerge. At the same time, it becomes possible to obtain the maximum coverage of the population with goods and services, to automate or robotize any work, including eliminating the human factor in many critical areas. In the digital economy, marginal costs are also significantly reduced, even down to zero in some sectors of the economy, and, thus, digitalization solves many problems.

The transition to the digital economy is impossible without the information transformation of the state's financial services system. Moreover, this area is one of those areas of human activity where the use of information technology can have a significant positive effect (for example, cost reduction by 25-90% [7]).

Historically, finance is the first commercial environment in which computing machines began to massively appear. Already from the beginning of the 50s, financial companies

*Corresponding author: agaf-econ@yandex.ru

© The Authors, published by EDP Sciences. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (http://creativecommons.org/licenses/by/4.0/).
began to massively use computer technology. And since the 80s, banks began to use electronic plastic cards as a means of payment, pattern recognition - for processing documents, and international electronic networks - for money transfers. But, despite the historical primacy and potential positive effect, many researchers believe that banks are still not sufficiently aware of the impact of digitalization on their activities and are not actively introducing digital methods into their activities, lagging behind in digital transformations from such once archaic areas as trade and publishing.

2 Materials and Methods

In the Russian Federation, banks with state participation are the main driver of digitalization. Thus, the relevance of information transformation of banking as an element of the new digital economy of the Russian Federation is emphasized in the Strategy of Sberbank of the Russian Federation [13]. According to this strategy, Sberbank plans to transform from a traditional bank into a digital information channel and an intelligent product development company. Other leading banks in the country are developing similar plans. For example, VTB Bank recently commissioned the development of an information transformation strategy focusing on new Agile flexible management technologies from the world's leading consulting company “McKinsey” for a significant amount of 300 million rubles.

Problems, scientific terminology and methodological practice of digital transformations of economic sectors and individual enterprises, including in the field of financial services, are currently undergoing a period of formation. A rigorous scientific academic understanding of the processes taking place now is still to come in the future.

The most important areas and conclusions of this study were formed based on the results of the analysis of theoretical, methodological and practical developments of domestic and foreign authors.

The methodological basis of the research includes the study of the current legislation in the payment and banking sector of the Russian Federation and the European Union, with selected examples from the practice of Belarus, Switzerland and India, the results of research by American, European and Russian scientists in the field of digital transformations, statistical reports, analytical and empirical models and other materials.

The work used the methods of system and structural analysis, expert assessments, methods of processing statistical information. It also used fundamental and applied research on the selected topic, as well as the best practices of domestic and foreign organizations.

3 Results

Analyzing successful digital banking models, IBM proposed a classifier of four transformation models

Model A. Digital bank as a brand. The rationale for the model is as follows: many traditional banks have found it difficult to find common ground with the millennial generation, and, conversely, traditional customers are against digital innovation. To resolve this contradiction, so as not to dilute its branding for traditional customers, the bank creates a new brand, with a unique proposal aimed strictly at the target group. This offer is branded as a «new» bank based on the infrastructure of a traditional bank.

Model B. Digital bank as a distribution channel. Many entrepreneurs and progressive bankers are seeing a gap between the service that customers want and the offering of traditional banks. It is this gap that can offer new business opportunities. Unlike digital banks of Model A, organizations of Model B are based on the belief that new customer
service experiences require more engagement than simple branding, so they develop and offer a mobile online application focused on specific customer needs.

Model C. Digital bank as a subdivision. Many banking innovators are trying to create not only a unique customer experience, but an end-to-end digital business model. Typically, in the first planning phase, they find that the existing organization is incapable of creative rethinking and incapable of change. Large banks also often find that their existing banking systems are too rigid to meet the needs of a digital bank. Therefore, it is necessary to create a separate organization for a separate, already completely digital bank.

Model D. Only this model is a true digital bank. The model is aimed at creating a real digital bank, where the main competitive advantage is the digital core. Such a bank does not necessarily operate without branches. The customers of such a bank primarily expect interaction with their bank through digital channels. Some banks operating on this model really do not have branches at all, others combine digital channels with face-to-face communication in financial centers, cafes, or even via video chats. Examples: Fidor Bank131 and N26132 in Germany. In Russia, with a certain assumption, Tinkoff Bank operates within this model.

For all its merits, the IBM approach does not take into account the following factors - models A and C are models for transforming the existing banking business, and models B and D are models for creating a new business. In addition, analyzing the entire world experience, the issue of concentration of certain models of digital financial business by country remained behind the scenes. By the way, the issue of the distribution of models by country requires its own research, but a quick look at the fintech landscape allows concluding that, for example, type C models are concentrated in countries where there is no regulation of financial intermediaries, and venture capital is readily available. Conversely, D models emerge in highly regulated markets.

The combination of strong regulation with difficult access makes the choice of creating a real digital bank according to Model D simply predetermined.

The Digital Market Strategy contains the following main elements:

• new spectra for mobile communications - 700MHz;
• a single standard for digital broadcasts;
• ban on blocking services for geographical reasons - in the process of implementation, apparently, it will lead to the closure of small national trading enterprises in favor of Amazon, Naspers and other large players;
• unified legal system of digital contracts;
• distribution of VAT to e-commerce (at the point of consumption, not purchase) - introduced for digital content and a significant reduction in the legal digital content market;
• strengthening the protection of intellectual property - led to the adoption of the infamous “Meme Ban Act”, which prohibits any use of content without the express permission of the copyright holder, including the fair use, which is likely to lead to such consequences as the blocking of Youtube in the EU;
• introduction of new generation WiFi networks (WiFi4EU);
• privacy protection. The GDPR law, which generally prohibits the storage of data of EU citizens outside the EU without special agreements and gives “the right to be forgotten”;
• antitrust investigation against e-commerce leaders;
• promoting the use of European online platforms;
• increase in the share of the digital economy in GDP to 4.5 percent, to fight against national regulations;
• create a European digital ecosystem (through partnerships with business leaders, the EU will provide legal and infrastructure support);
• create a framework for digital competencies;
• support digital start-ups in the areas of 5G, cloud technologies, Internet of things, cybersecurity, blockchain and fintech (through programs of frequent government partnerships, such as Startup Europe);
• new initiatives in the digital government program;
• stimulation of investments in digitalization programs;
• program of transition to 5G.

Alas, as we see in practice, restrictive directives worked out in the program much better than stimulating ones. And in general, the program is aimed at the benefit of IT giants rather than stimulating SMEs. On the other hand, it is quite obvious that only such an approach can achieve the set goals in a timely manner.

In general, unfortunately, most Russian banks do not have a holistic digital transformation strategy. There are rare exceptions, such as Tinkoff Bank, which in 2018 presented to foreign investors a shaping strategy [7] for the Lifestyle financial services ecosystem in the Russian Federation. Most banks are introducing new technologies through IT development strategies, which, however, within the current environment of the Russian Federation and thanks to the promotion of Russian state strategic initiatives, gives a generally positive result. Also, it is probably important that some of the large banks, such as Otkritie, PSB, are going through a period of general structural reforms associated with their recent crises.

The majority of consumers of financial services believe that the tasks of digitalization should be accumulated within a single platform, which can also unite disparate solutions. As for new digital solutions, banks are interested, first of all, in high availability and flexibility of services, fullness of functions, and ease of use. For the overwhelming majority, security is also a priority.

4 Discussions

The current practice of the Central Bank of the Russian Federation suggests that perhaps now is not the best time to enter the Russian market with fintech products, given that the Russian Federation, as we found out above, is one of the digital banking champion countries dominated by large, mainly state-owned banks. Nevertheless, the practice, for example, of such a 100% digital bank as Rocketbank, which remains successful after the change of the third partner bank, tells us that there are segments of users whose requirements are not met by the current offers of leading players.

The main characteristic of the Russian market is that it is a market dominated by payment cards as a payment instrument and consumer credit as the main financial instrument for the development of the financial technology market in the Russian Federation in recent years. According to this analytics, in the coming years (until 2035), there will be an increase in fintech services, primarily due to small and medium-sized businesses, where the penetration of financial institutions is now only 54%. At the same time, in the field of insurance, digitalization is possible only to reduce the cost due to high competition, and the low profitability of deposits will increase the population's interest in passive investments by 47%. Growth potential in areas - non-bank money transfers - 7%, mobile payments - 30%, neobanks - 26%, car insurance based on telematics - 31%, online budgeting and financial planning - 25%.

Despite the fairly distributed landscape of fintech companies in Russia, we note the lack of visionary approaches in the development of Russian financial technologies. There are no fintech companies in the IoT segment either. Leading consulting company Erns&Young publishes analytics and forecast and draws attention to the fact that there is no synergy between Russian fintech projects and the opportunities provided by Russian development programs.
Let’s find the points where a company of the LatCard level could make efforts to develop on the Russian market. The most realistic option is a classic strategy, similar to the strategy in the EU, but based on the national card system MIR, which is clearly underestimated by the market. The locality of any card system gives bonuses in the form of simpler regulation, easier introduction of new products and a conversation with the regulator in the same language. This will require certification. The high Russian rate on deposits and the absence of restrictions on interchange makes it possible to pay cashback. In the Russian Federation, there is no such interesting product sold by the company as a gift card of a shopping center (card with limited circulation) based on a payment system card. This product could also be created based on the MIR card. A more visionary option is IoT payments through smart speakers, which have already been implemented in the Russian market (and, for example, are not available in the Baltic market) [8-9].

5 Conclusion

The inexorable progress of humanity is leading to a new economic order - the digital economy. The importance of the digital economy is recognized both at the microeconomic and macroeconomic levels. Having emerged more than 20 years ago, the concept of the digital economy has become the mainstream of management thought.

The digital revolution is based on big data technologies, artificial intelligence, 3D printing and the Internet of Things, which are based on cloud technologies, mobile Internet and social media. Digital transformation projects are based on the application of revolutionary digital technologies in various fields of human activity, including all economic sectors where the processes of replacing humans with artificial intelligence are taking place: robotization and changes in the process of human interaction with the environment, mobilization, digitalization.

Combining the approaches and concepts of digital transformation with the concepts of strategic development is not a trivial task. The market successes of fully digital companies without a classic strategy, based on vision, constant adaptation and rethinking things from basic principles, have led to the destruction of the classic concepts of competitive strategies and competitive advantage. The general research consensus is that it is no longer possible to build a strategy based on sustainable competitive advantage; one should be flexible and often change strategic approaches in various aspects of one's activities. There are different approaches to digital transformation at different levels, starting from the basic level of digitalization - infrastructure. At the same time, digital strategies of enterprises go back to strategic initiatives of states.

The theoretical significance of the work lies in the fact that a model of a navigator of strategic approaches has been built, prerequisites to clarify the model of the palette of strategies have been made, a new meta-model of digital transformations of a financial organization has been created, a new framework for building IT strategies as a basis for a digital financial organization has been created, the opportunities, limitations and obstacles to the implementation of competitive strategies of financial organizations in the context of digital transformations of the state economy are identified.

The practical significance of the work lies in the fact that the results obtained in it can be used in practice, both in the activities of domestic and foreign enterprises. Thus, the materials of the work can be used in the process of preparing strategies for digital transformation of financial organizations or in the process of creating new start-up enterprises in the financial sector. The results can also be used in educational, tutorial and consulting activities.
References

1. M. Mitchell, Waldrop The chips are down for Moore’s law, Nature. 09 Feb (2016)
2. S. Kumar, Fundamental Limits to Moore's Law, arXiv.org (Last accessed 18 Nov 2015)
3. J. Rifkin, The Zero Marginal Cost Society. The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism (USA, St. Martin's Press, 2014)
4. Laurent Fournier Merchant Sharing Towards a Zero Marginal Cost Economy arXiv.org (Last accessed 7 May 2014)
5. Cherp, J. Jewell, V. Vinichenko, N. Bauer, E. Cian, Climatic Change, 136, 83–94 (2016)
6. Designing a sustainable digital bank. Whitepaper, IBM Corporation (2015)
7. L. Chernysheva, STRATEGY DAY 2018, Tinkoff Investor Relations tinkoff.ru (Last accessed June 2018)
8. I. V. Ilin, A. V. Izotov, S. V. Shirokova, O. V. Rostova, A. I. Levina, Method of decision making support for it market analysis Proceedings of 2017 20th IEEE International Conference on Soft Computing and Measurements, SCM 2017, 7970732, 812-814 (2017)
9. T. V. Alesinskaya, D. V. Arutyunova, V. G. Orlova, I. V. Ilin, S. V. Shirokova, Conception BSC for investment support of port and industrial complexes Academy of Strategic Management Journal, 16(1), 10-20 (2017)
10. S. A. Chunikhin, E. A. Kuzmin, L. V. Pushkareva, Entrepreneurship and Sustainability Issues 6(4), 1663–1679 (2019) doi:10.9770/jesi.2019.6.4(8)