

Executive summary

Over the past 10 years, the landscape of financial services industry has drastically changed. In the first decade of the 21st century every financial service ever imagined was provided either by an investment or commercial bank or some other traditional intermediaries. However, the second decade could be characterized as the startup boom — at the moment there are more than 12 thousand startups in the global financial services market, some services are offered by non-bank or non-credit organizations, and the largest companies in other industries are gradually entering the industry and start competing with traditional financial institutions.

One of the main reasons for such large-scale industry transformation is the strengthening of the role of digital technologies both in the financial services industry and in other aspects of one's life, the state processes and the operations of the companies. Financial services are one of the key consumer services, as well as any country's fundamental industries. That is why both niche (e.g. financial technologies) and fundamental innovations (e.g. blockchain, identification systems) emerged from the development of financial products. However, a number of technologies (e.g., quantum technology or robotics) entered the landscape of financial services industry from the outside and still change it significantly. Such fast technological progress led to the digital transformation of traditional providers' usual business with changes not only in specific processes but in value chains and business models as well.

Due to the differences in institutional environment, different models of digital transformation in financial services have emerged. United States and China experience increasing role of technology companies, so called BigTechs; in Russia traditional financial intermediaries, in particular universal banks, are ones of the most influential companies in the economy; and in Europe, where regulatory innovation has led to the emergence of open banking and the development of startups, financial services have become a more closed ecosystem.

Differences between countries and their specifics in terms of financial innovations development motivated Center for Research in Financial Technologies and Digital Economy SKOLKOVO-NES to study how industry borders reshape due to the development of financial services ecosystems and outline the main effects of their digital transformation both locally and globally. Based on the analysis of academic and business literature, as well as real cases of digital offerings implementation by various companies, we have derived 3 models of digital transformation of financial services, as well as key choices that market participants can make to form their own strategies.

The results of this research will be useful to everyone interested in the development of global and local financial innovation ecosystems and financial services in general. In particular, banks and other traditional intermediaries can determine effects that their choices have on the overall market landscape and explore solutions offered by competitors. New entrants to the industry that want to either enter or strengthen their positions can identify existing niches and challenges as well as the opportunities created by the digital transformation processes. Finally, other market participants can use the results to formulate their own strategies.





Main results

1. DIGITAL TRANSFORMATION OF FINANCIAL SERVICES IMPLIES EXPANSION INTO BUSINESS OPERATIONS THAT ARE NOT RELATED DIRECTLY TO THE CORE BUSINESS.

Digitization is a transition from paper-based information storage to the digital storage formats. Digitalization is a transition from providing goods and services in offline physical world to online digital world. Digital transformation is a transition from traditional financial services business models and operations to the ecosystems that include products and services from non-financial industries.

2. DEVELOPMENT OF FAVORABLE MARKET AND REGULATORY ENVIRONMENT IN ORDER TO INCREASE COMPETITION IN FINANCIAL SERVICES INDUSTRY IS ONE OF THE MAIN GLOBAL TRENDS.

Due to the emergence of fintech startups the industry becomes more competitive provoking traditional financial institutions to transform digitally. New market participants are gradually moving away from the "monoliner" business model to product line expansion and start providing services previously offered only by traditional intermediaries (e.g., salary projects, services for SMEs). This becomes possible due to rapidly developing and favorable regulatory conditions that allow startups to get banking licenses and operate in different countries. This, in turn, provokes rigid traditional intermediaries to optimize internal processes and search for new solutions in order to retain their leadership positions in the market.

3. There are 3 models of digital transformation in financial services: US-Chinese, russian and european.

MODEL TYPE	MAIN ASSUMPTIONS	Model summary	CASES
US-CHINESE	Increasing consumer trust in technologies and increasing role of technologies in different areas of personal, business and state operations	Financial services – secondary ecosystem element Consolidation of clients' data in the hands of BigTechs	FAMGA (FACEBOOK, AMAZON, MICROSOFT, GOOGLE, APPLE)
	Decreasing entry barriers in every market due to innovations and remote access to services Customer satisfaction (e.g., increasing financial services access, digitalization of traditions, bonuses and better customer experience)	Clients that receive at least one product/service from a BigTech's ecosystem can seamlessly transition inside it from one segment to others Potential partnership with traditional financial institutions for more efficient solutions	BAT (BAIDU, ANT FINANCIAL, TENCENT)
RUSSIAN	Inactive consumer Proactive financial services providers State protectionism leading to resources consolidation in the hands of several traditional financial institutions (TFIs) High profitability of financial services providers Relatively high clients' trust level in TFIs	Bank acts as a main provider of financial services offering its clients solutions for almost every part of their life Universalization of financial institutions and increasing returns to scale Regulatory support for TFIs Banks develop financial innovations inside their R&D departments or by acquiring companies and projects looking for fundamental technological breakthroughs and applications	SBERBANK TINKOFF BANK



MODEL TYPE	MAIN ASSUMPTIONS	Model summary	CASES
EUROPEAN	Regulatory changes in the financial services market	Financial services become niche	REVOLUT
		Client involvement in the value	Monzo
	Increasing clients' role	chain	N26
	Smart and mindful consumption tendencies	Financial services industry works at the intersection of three players' actions:	STARLING BANK
	Stagnation of banking systems and obsolescence of the financial services industry classical architecture (breakdown of legacy systems)		DANK
		Traditional intermediaries – banking infrastructure (common services available before digital transformation);	
		Fintech startups – interface as an add-on to banking products provided in a more user-friendly way (sometimes bypassing TFIs);	
		Client – selection of the appropriate interface and a set of necessary products, as if from a supermarket of financial services	
		Financial market participants target only their segment while developing and implementing innovations only within their industry	

4. In practice none of the models exists in isolation even in the considered countries.

More often there is a mixture of pure models. For example, there are fintech startups in the Russian market, while US banks are not eager to let go of their leadership and start competing with BigTechs (e.g., Morgan Stanley case).

5. DIGITAL TRANSFORMATION STRATEGIES FOR MARKET PARTICIPANTS ARE FORMED WITHIN TWO KEY DECISIONS: TO BE EITHER UNIVERSAL OR NICHE PROVIDER AND TO BUILD OWN ECOSYSTEM OR BE A PART OF A LARGER ONE.

There are 4 strategies that might help guide market participants actions:



Universal provider

NEXT BIG THING	WILLING PARTNER
 Company becomes one of the largest companies in the country Financial services is one of its segments Maximum diversification 	 Company is one of the essential elements in the system Financial services is its competitive advantage Focused business direction
own ecosystem 5-TH ELEMENT • Company builds its solution in which it locks a client • Business focus • Innovations only within industry	part of a larger ecosystem PART OF THE SHIP - PART OF THE CREW Company is one of the elements of a larger ecosystem (could be easily replaced) Monoliner business models and microservices approach
,	

Niche provider