ORIGINAL PAPER



DOI: 10.26794/2587-5671-2021-25-2-114-127
UDC 339.137.22(045)
JEL D21, M15, O33

# Digitalization of the Financial Activities of Platform Companies: Competitive Potential and Social Impact

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## ABSTRACT

The **aim** of the article is to define the characteristics of platform companies and their digital platforms as new mechanisms of competition and social transformation in the global economy. The **relevance** of the article is due to the demand for the experience of foreign platform companies as the main business models for the competitive development of the economy. The authors apply **methods** such as theoretical analysis of scientific publications (analysis, synthesis, generalization); deduction as a procedure for the transition from the general to the particular; analysis of the structure of the influence of platform companies on the strategies of competition, highlighting the differences between the platform and linear business models; determining the influence of platform companies on competition among offline partners; identification of competition between platform companies and within them; highlighting aspects of the social impact of the functioning of platforms and platform companies. The study **is based** on the works of domestic and foreign authors devoted to the analysis of the development of platform companies and the assessment of the social impact of these processes, as well as the interaction between the authors and developers of digital platforms. The **scientific novelty** of the article is provided by the analysis of a wide range of competition tools, which favorably distinguish the platform approach to modern business from the linear one. The results of the analysis make it possible to form a model of the competition ecosystem in the platform economy. The authors **conclude** that the basis of the competitive success of platform companies is their ability to expand the scale of activities (as a result of optimizing various types of assets), to minimize costs by involving external users in the process of creating added value, and cross-platform cooperation. The authors **recommend** that Russian business entities use the experience of foreign platform companies to gain competitive advantages not only in the Russian IT sector but also outside of it. Particularly important are: decentralization of quality control procedures, creation of new sales markets, collection, and processing of large amounts of data, development of strategies for entering markets as suppliers and contractors, diversification of activities at the stage of attracting investments, a social construction.
***Keywords:*** digital economy; digitalization; platform companies; digital platforms; competition; social impact

***For citation:*** **Bauer V.P., Eremin V.V., Ryzhkova M.V. Digitalization of the financial activities of platform companies: Competitive potential and social impact.** ***Finance: Theory and Practice.*** **2021;25(2):114-127. (In Russ.). DOI: 10.26794/2587-5671-2021-25-2-114-127**

## INTRODUCTION

In the modern economy, platform companies, which are usually based on digital platforms, demonstrate the greatest dynamics and success in the competition. Their "offensive" on the world economy is evidenced by the global ranking of the Top 100 public companies by market capitalization[1] as of June 2020, where Apple is in second place, third to eighth places are distributed as follows: Microsoft, Amazon, Alphabet, Facebook, Tencent, Alibaba. All of these companies have made digital platforms the backbone of their businesses. In the Forbes ranking of the most valuable brands in the world for 2020, platform companies occupy the top 5 positions.[2]

The recent rapid success of platform companies is due to the fact that they are using fairly new methods of competition, as well as actively transforming the traditional methods of competition that were used before the digital boom, thereby significantly influencing the development of society.

At the same time, a traditional linear company is a company that builds its internal and external relations on the basis of linear chains — from the processing of raw materials to production and distribution. In the economy of platform companies, linear communications are replaced by cooperation networks [1].

The competitive practices that underlie the success of platform companies deserve research because of their apparent effectiveness in allowing them to occupy and actively expand niche markets. The way platform companies compete and gain market share has a significant impact on society.

[1] Global ranking of the top 100 public companies by market capitalisation (June 2020 update). URL: https://www.pwc.com/gx/en/audit-services/publications/assets/global-top-100-companies-2019.pdf (accessed on 12.03.2021).

[2] Forbes' annual list of the World's Most Valuable Brands. 2020. URL: https://www.forbes.com/powerful-brands/list/#tab: rank (accessed on 12.03.2021).

## PLATFORM COMPANIES AND DIGITAL PLATFORMS: GENERAL AND PARTICULAR

The need to distinguish between the concepts of "platform companies" and "digital platforms" is explained by the fact that:

- platform company business model is based on the use of a digital platform; a platform company usually owns a digital platform, it can integrate other online services, as well as to conduct offline business related to the digital platform [2];
- digital platform — a software package implemented on the servers of a platform company or a group of companies; a digital platform is a single business process based on modern digital technologies to provide services to platform users.

The digital platform, as the main product of the platform company, forms a new type of organization of business processes and, as a result, new features of the social structure. New technologies do more than just improve productivity and wealth. They bring to life traits and characteristics that change the daily life of people, their usual consumer behavior, and business. Thus, the combination of smartphones and social media has impacted the daily lives of users, acquiring a new habit of learning about new events on social media. The social consequences of the development and competition of platform companies deserve careful study in connection with the need to stop their negative effects and stimulate positive ones.

According to D. Evans, digital platforms are mechanisms based on software code that that stimulate the development of many types of economic activity [3]. The concept of "digital platform" is given a fairly wide range of definitions. In its generalized form, it is a digital structure that allows two or more groups of users to interact [4], as well as a platform that supports a set of automated processes and the consumption of typical digital products (services) by a significant number of consumers [5]. In an economic sense, it is a digital platform that provides

mutually beneficial interactions between manufacturers and consumers. The activities of platform companies, their active use of digital platforms have led to the emergence of a new type of network market. It is a two-way market or socio-economic institution implemented on a digital platform and based on socio-economic activities for the transfer of value between parties registered on the digital platform. This transfer may or may not be carried out by money in various forms. In fact, a two-sided network market is a modern economic phenomenon introduced through the formation of a software product — a digital platform that is created and maintained by a platform company (a group of companies).

A platform company provides a digital platform as a digital infrastructure for the interaction participants and sets the rules for them. The main task of the digital platform is to create connections between users and facilitate the exchange of goods, money, and/or social currency (ratings), thereby contributing to the creation of new value by all participants in the interaction [6].

It should be noted that the market of the ancient Greek city, in its essence, was also a platform that brought together sellers and buyers. But due to the limited means of communication, this platform for many centuries was entrenched only in the distribution of goods and services [7]. With the emergence and development of capitalism in the economy, the model of linear production was established for a long time. The key to the success of this model is cost savings through increased production while incorporating manufacturing and control technologies (Ford assembly line). The model has evolved — Toyotism [8] replaced Fordism, which breaks down the production process into even smaller components with more careful control over each of them. Later, product platforms began to be introduced, but the essence of the production process remained linear.

The revolution marked by the emergence of platform companies took place in the early 2000s due to the reduction in the cost and growth of the availability of computing power, as well as a sharp increase in the amount of computer memory, reduction in the cost, and acceleration of the processes of transmission and storage of information, the development of the Internet [9]. In their composition, digital platforms form new sales markets, types of value of goods, works, services, and methods of competition [10], one of the models is presented in [11]. This model is described by a set of mathematical formulas that allow analyzing changes in financial flows, considering changes in the external financial and economic environment, which allows introducing new methods of competition into the activities of a platform company or improving existing methods of competition that increase its competitive potential.

The platform company, using the digital platform as its "digital weapon", eliminates intermediaries, while it becomes an intermediary itself, which is not considered as an impartial participant in the modern market. Platform companies pursue their business goals by customizing search engines and delivering search results to their needs through digital platforms, and this has an impact on society.

At the same time, with all the expansion of platform companies, line companies are not willing to give up their positions in the competitive struggle. They adapt by implementing business practices that have proven effective in a platform business model. Thus, large linear industries are actively digitizing their business processes, initially creating internal closed digital platforms based on "digital twins" to improve management efficiency, and then open these platforms for partners to create a collaborative network of suppliers and buyers on their basis (BMW, Boeing). By partially opening platforms for users of their products, line companies can collect feedback on their work, like platform companies, outsourcing some

of their quality control processes to external users. This approach allows line companies to move to the production of customized products — completing a mass product with additional elements at the request of a specific customer (Nike). Platform solutions are used by builders of smart cities, buildings, apartments. The advent of portable and low-cost 3D printing machines will drive platform solutions deeper and deeper into the linear business, transforming it from the inside out. The sphere of cooperation between line and platform companies is no less wide. For eBay sales, goods are needed, for travel through the Uber platform — taxi cars, for rental housing through Airbnb — the construction, repair, and maintenance of this housing. Traditional line companies are engaged in the production of goods, cars, construction, and repair of housing, for which the expansion of the platform business provides new opportunities for development.

Since the activities and competition of platform companies transform the activities of line companies, leading to a symbiosis of the platform and linear business models, the study of the competitive potential of platform companies seems to be even more necessary from the point of view of using the global experience of platform companies to increase the competitiveness of Russian line and platform companies.

## COMPETITIVE POTENTIAL OF PLATFORM COMPANIES

There are a large number of publications devoted to research in the field of the theory of perfect and other types of competition, in particular, on identifying the features of the concepts of "competition", "competitiveness", "competitive advantages", "competitive potential", and the relationship of these concepts with each other [12]. However, in our case, the most correct and sufficient is the definition of dynamic competition, proposed by Joseph Schumpeter, as "... the rivalry of the old with the new, with innovations" [13].

As mentioned above, platform companies are just new economic agents replacing traditional line companies. Therefore, at present, there are still no practical and theoretical provisions that allow to give a strict definition of the concept of "competitive potential of a platform company". In this regard, and from the point of view of systems theory, it is proposed to consider the functions and processes that determine their multi-level competitiveness as the competitive potential of platform companies [14]. These, in our opinion, include those substances that form a new model of the competitive ecosystem of the decentralized platform economy due to the following factors (*Fig.*):

- differences in methods of competition between linear and platform business models (Block K1);
- competition between offline partners (Block K2);
- competition between platform companies (Block K3);
- competition within the platform (Block K4);
- social consequences of the platform economy (Block K5).

We briefly consider the functional features of the K1-K5 blocks.

## DIFFERENCES IN COMPETITION METHODS BETWEEN LINEAR AND PLATFORM BUSINESS MODELS (BLOCK K1)

*Network effects used by platform companies.* The network effect occurs when an increase in the number of people using a product leads to an increase in its value [15]. The increase in the number of drivers registered with Uber leads to an increase in the availability of drivers, which increases the number of customers. Their growth in turn attracts new drivers, etc. As a result, the value and cost created by the platform grow with the number of users. The platform company creates a product that allows two or more groups of users to interact with each other, making an economic

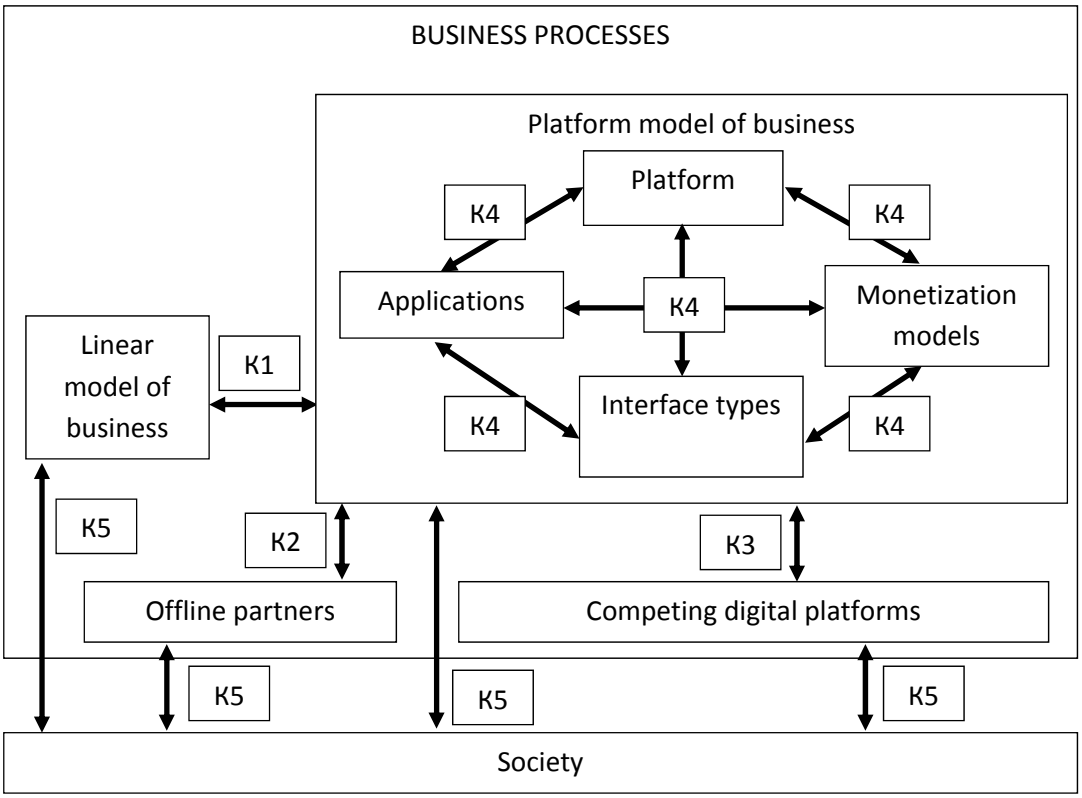


*Fig.* **Competition ecosystem model in the platform economy**

*Source:* complied by the authors.

exchange. By serving independent groups of consumers, the platform company creates a two-way (multilateral) market [16], creating two-way (multilateral) network effects.

As a result, in contrast to the linear production model, in which the cost of a product is determined by limited supply and no substitutes, in the platform model, an increase in supply will lead to an increase in the cost of the product [17].

*Expansion of existing and creation of new markets.* By entering existing markets, platform companies expand them significantly, which is rarely possible for line companies. Thus, Uber in the United States attracted more than 160 thousand drivers, some of whom had not previously been involved in the transportation of passengers for money and, most importantly, attracted millions of passengers, a significant part of whom had not previously used taxi services [18]. New sales markets are being created, for example, in the field of cloud technologies, data collection, and processing, providing developers with a platform for implementing applications for potential users, etc.

*Zero marginal cost.* The effect occurs because the cost of copying and distributing the original version of the platform application over the Internet is practically zero (as opposed to the marginal costs of line companies). These costs are not completely zero, as distributing the application requires the development of the original version of the product, development and technical support on the Internet, platform management, etc. Distributing the original version of the application by copying and skyrocketing consumer growth brings marginal costs to near zero. However, distribution requires manufacturing and infrastructure (Uber, Netflix), and sometimes the goods (eBay), resulting in a certain combination of linear and platform models.

*Extending zero marginal costs to suppliers.* Platform companies also cut costs by actively

engaging external developers and content creators (users), as opposed to line companies, by decentralizing production. As a platform company, their work is often free because, for example, users who post photos to Instagram are not paid to do so. In fact, many platform companies do not create their own product to entice users of their platforms to do so. The rapid development of such an approach in the field of production will occur in connection with the massive use of 3D printers, which will allow the transition to large-scale decentralization of production processes in various industries — from construction to engine building.

*Platform companies don't try to own property.* Competing line companies tried to expand production capacity, monopolize the sources of raw materials (Standard Oil refined 95% of oil produced in the United States by 1880), and platform companies competed, bringing users together. The ownership model is being replaced by a sharing economy business model, an example of which is the Uber business model. As a result of this approach, combined with network effects, platform companies tend to grow much faster than line companies. In such an economy, the centralized consumption of individual goods (personal car) also becomes decentralized (taxi, car-sharing).

*Data as new value.* Processed, structured datasets have value in their own right. In addition, their use provides a quick response to changes in user sentiment, which significantly improves the management efficiency of the platform company compared to the linear business, which usually receives information about the response of users to their product with a significant delay. The competitive advantage of platform companies over line companies is that they actively use information to create user feedback loops. In addition, data analysis allows making advertising more targeted, oriented at a specific consumer, to a certain extent — decentralized.

*Outsourcing of the control mechanism.* It is another successful area of decentralization of business processes of platform companies. If product quality control is an internal mechanism of the line company, then the platform company often assigns it to the competence of external users, using the mechanisms of supplier/developer reputation and moderation of posted content on the digital platform. Specifically, the mechanisms include customer reviews (ratings) about service providers (Airbnb, Uber), goods (eBay), quality of the content (YouTube), control of moderators and other users for compliance with the terms of use of the platform.

This approach significantly reduces the quality control costs of platform companies while strengthening quality control, which gives these companies a significant competitive advantage over the linear business model. Recently, line companies have been actively moving to a system of online reviews of their products and services, evolutionarily drifting towards the application of platform experience.

*A new marketing approach.* In a linear business model, marketing is separate from production. The attractiveness of the created product is positioned in the minds of consumers through advertising. The platform model should initially be attractive enough to naturally attract users. Advertising can handle this. However, in a linear model, the disappointment of buyers with a product does not necessarily lead to its return, while platform users can massively leave it. This is evidenced by the history of social networks such as Friendster and MySpace. Thus, Friendster lost in terms of increasing the number of MySpace users, which, in turn, did not respond in time to reputation losses due to poor content moderation.

Network effects enhance this process. Thus, marketing is an integral part of the product offered by the platform company. Selling a product in the platform economy is not a one-

time promotion, but serving customers who need to be retained [19].

### COMPETITION BETWEEN OFFLINE PARTNERS (BLOCK K2)

*Freelance and e-commerce as cost-cutting methods*. Above this situation has already been described from the point of view of free labor of users. But the influence of platform companies on the processes of competition among paid partners is no less great. In fact, this is the entry of platform companies into the international labor market, primarily through the use of specialized freelance resources (platforms). By decentralizing the state by attracting remote developers from poorer regions of the world, the platform company, on the one hand, reduces its costs, but, on the other hand, by increasing competition, reduces the income of developers. As a result, developers need to constantly learn and improve their reputations.

***Marketing is an integral part of the product offered by the platform company. Selling a product in the platform economy is not a one-time promotion, but serving customers who need to be retained.***

Using online auctions to find equipment and supplies also reduces their prices, allowing millions of competing suppliers to bargain. The exception is specialized suppliers who provide unique services or products that are difficult to replace. But global online competition is also dropping their numbers. This approach blurs the boundaries of country resource markets, leading to a fusion of ideas at the international level that fosters innovation.

*Competition for developers*. This situation is the opposite of the previous one. Platform companies are vigorously competing for the best application, software, and peripheral developers. Platform game developers compete to host their game on the latest console. Different platform companies can make proposals to the developer of a promising application about placing the finished product on their platform in the hope that it will significantly increase its attractiveness to users. A striking example of such competition is the purchase by Facebook in 2016 of the Belarusian application MSQRD, which allows applying filters to user photos.

*Increased competition between machine and man*. The British Encyclopedia used the services of special people who distributed it to subscribers. In the conditions of the electronic publication of encyclopedias, these people are not needed, since anyone can visit the Wikipedia page on the Internet. At the same time, the competition "machine-man" can spread further and lead to competition "machine-machine", for example, among analytical programs processing large data arrays.

*Hypercompetition*. It is typical not only for partners but also for platform companies. Digital platforms accelerate the competitive processes in the economy. With their use, companies develop quite quickly, capitalizing, capturing the market, and going broke over the course of several years. The situation with partners is similar. A developer who has created a successful version of an application can quickly gain worldwide fame, appropriate funding, and profits. For example, the Finnish company Rovio Entertainment (developer of Angry Birds), founded in 2003 by three students, received US$ 42 million in funding in March 2011. Two years earlier, the game it developed had cumulatively over a billion downloads, making it the top-selling game on the App Store.[3] But at this time, Rovio is unable to repeat its success. This indicates

[3] Fried I. Rovio Passes a Billion Angry Birds Downloads, Still Mulling IPO. AllthingsD: Tech Portal, 2012. URL: http://allthingsd.com/20120509/rovio-ceo-when-to-go-public-is-up-to-dad-other-owners/ (accessed on 09.09.2020).

that in the modern market, the current sustainable advantage of any company is an illusion since both companies and their partners do not have reliable competitive advantages.

*Accelerate business processes and reaction times for competitive success*. The nature of business processes is changing towards their intensification. Thus, the development of a new version of a platform application usually begins before the development of the previous version is complete. Customer support is carried out twenty-four seven, minimizing the response time to a request to several hours (in some cases, minutes). The concept of "non-working hours" is disappearing, since the processes of purchases and sales, customer support, etc. carried out without interruptions, on holidays and weekends — 24 hours a day.

All of the above changes the nature of the buying and selling process. The desired product, for example on Avito, can be bought in seconds. As a result, the slightest confusion can leave a potential buyer without a product.

## COMPETITION BETWEEN PLATFORM COMPANIES (BLOCK K3)

*User reputation as the basis of their loyalty to the platform*. It is used quite often by platform companies, but initially, they did not see it as a way to retain customers. The importance of reputation has occurred to some extent automatically. Essentially, a good reputation score (or rating) earned by a user on a certain platform (which leads to certain preferences and gain of customers) slows down the transition of this user to another platform, as he will need to earn his reputation again. Profile markets are emerging where highly reputable profiles become tradable.

*Interfaces and functions competition*. Platform companies compete with each other for the usability of their platforms and the usefulness of the functions they offer. But the oversaturation of the platform with various useful functions may not give it an advantage, but, on the contrary, by making it too complex, neutralize the network effect, leading to a churn of users (the story of the first social network for students Club Nexus) [20]. The way to combat oversaturation is a multi-level interface that is simple for ordinary users but allows experienced users to connect new functions, use new settings, up to programming on the platform.

*Preventing apps from being hosted across platforms*. Platform companies use rules, techniques, and protocols to prevent applications running on their platforms from being hosted on competing platform sites. This placement promotes a switch between platforms of user attention and, therefore, can lead to their churn. For example, Apple discourages the use of the Adobe Flash Player application for viewing audio and video content, forcing developers to use tools developed directly by Apple.

*Mergers and acquisitions of platform companies*. Through these mechanisms, platform owners are trying to acquire companies that create value for users, which in many ways intersects with the value created on their platforms. For example, platform owners acquire companies that develop applications that allow them to more efficiently search for information on their platforms. Likewise, social media owners can acquire companies that successfully develop browser games. Because of this, platforms try to bind network data and users to themselves, amplifying the effect of network effects.

*Shared resource consumption by platform companies*. It should be noted that in order to increase competitiveness, some platform companies may partner with others to provide resources. For example, many platform companies rely on Amazon Web Services for cost savings, cloud database rentals, middleware, virtual servers, serverless computing, storage, and development tools. For the same purpose, Uber uses Google maps.

*Competition as cooperation*. It is a symbiosis of platform companies and venture capital investments in a favorable business

environment. A striking example of the fact that competition in the system of platform companies presupposes active cooperation is the business climate in Silicon Valley, based on the exchange of knowledge, experience, and financial support. Founders of successful startups, venture capitalists invest part of their profits in the development of many other startups, realizing the competition from their side. IT companies understand that their top employees can leave the company, and using the experience gained, they found their startups, some of which have a bright future. Stanford University provides students with resources for scientific development. As a result, competition and cooperation, exchange of ideas and experience become an integral part of each other. Thus, YouTube links on Facebook increase popularity and increase YouTube audience, while Facebook and Google (the owner of YouTube) are competitors for the audience. In turn, YouTube publishes links to its contributors' Facebook and Instagram profiles. As a result, by competing, companies complement each other, thereby forming a type of network effect in which it is their interaction (despite the competition) that increases the value of each of these platforms (and, therefore, platform companies) for users.

*Competition of digital ecosystems*. As part of the competition for sales markets, platform companies expand their markets of presence, forming spheres of influence through a network of platforms and services that complement each other and compete with each other within the same platform company. An example of such an ecosystem is the Yandex system, which includes Internet search with many additional services, ordering food, car sharing, smart speaker, taxi service (including the current development of self-driving cars), etc.

*Monopolization*. The drive for monopolization is embedded in the key mechanisms that ensure the competitiveness of platform companies (network effect, zero marginal costs). The more users visit the platform, the higher its value for each of them. The more data is collected and processed by the platform, the more accurate forecasts are formed based on them. Different ways of attracting and retaining users on the platform are an integral competition mechanism between the platform companies. Monopolization is intensified by user actions, the creation of a unique profile on the platform, and the formation of a reputation. As a result, for a user, the abandonment of a specific platform is a waste of time spent on developing a profile, accumulated within the framework of the social communications platform, which strengthens users' binding to a specific platform.

*Cross-subsidization*. This happens as follows: one division of a platform company reduces the cost of services provided by its platform to users (possibly to zero in the case of a freemium pricing model), preventing them from switching to other platforms, another division of the same company increases prices for services of other platforms, thereby compensating for the losses incurred. Often, using such a mechanism, costs are passed on to users who have less elastic demand for platform services. For example, Google, like other postal services, offers free postal services to them, given that the number of its users is variable, but at the same time raises the price of advertising. This considers the fact that with an increase in the number of users, advertisers are more interested in their presence on Google [21].

*Freemium*. Some platform companies (for example, developing game platforms) compete with each other, providing users with a version of the product (application) with limited functionality, but at the same time offering a fully functional paid version. Having appreciated the convenience of the free version, creating and developing their profile, some users are ready to switch to a paid subscription.

## COMPETITION WITHIN THE PLATFORM (BLOCK K4)

*Competition between the platform and applications developed on its basis*. This type of competition tends from intra-platform to cross-platform. Various applications of the same type compete on the same platform for the attention of users, in turn, to a certain extent repeating the evolutionary process of platform development as a whole and, thereby, directly influencing the development path of a particular platform. This competition was singled out in a separate form due to the fact that the owners of the most successful applications can take control of the platform (and, therefore, the platform company) from its direct owners.

*Competition of monetization models*. Within a single platform developed by a platform company, several monetization models can compete, replacing each other or working simultaneously. Typically, a model that generates stable, dynamic cash flow wins when the following principles are met:

- no reduction in access to the value that users are accustomed to receiving;
- moving from free to paid must be accompanied by the creation of additional value to justify the fees.

*Competition between platform interface types*. This field for the competition is quite wide: from competition between different sets of functions to competition between different concepts for the further development of the platform on the part of its owners and developers, which is reflected in the concept of interface development. In this case, the opinion of users becomes crucially important, so that platform companies often experiment. For example, randomly placing key buttons on the interface of their platforms (Buy, Add as Friend, etc.), and then tracking user behavior changes for better or worse after each such placement of buttons.

Various directions in which platform companies are transforming the methods of competition, strengthening their competitive potential, raises the question of the need to further study competition both between platform companies and between the platform and line companies [22].

## THE SOCIAL IMPLICATIONS OF PLATFORMS IN THE MODERN ECONOMY (BLOCK K5)

The stratification of society is associated with different levels of integration of the population and business into the digital economy. Along with the first-level digital divide, which implies different access for different segments of the population to digital infrastructure, there is a second-level digital divide, which means a difference in the ability to master digital technologies and the speed of information processing by enterprises. As part of the acceleration of competition processes, people who are prone to the rapid adoption of innovations, learning, accelerated adaptation, generation, and implementation of ideas quickly and fairly early get rich, at the same time becoming role models. Mark Zuckerberg, founder of Facebook, became a billionaire at 23, Evan Spiegel (Snapchat) at 23, Larry Page (Google) at 30, etc. On the one hand, this increases the wealth stratification of society, but on the other hand, platform companies can become quite effective social elevators, which, in turn, attracts new staff to the IT industry.

At the same time, national security threats emerging as digital headhunting becomes global, social elevators go beyond the national level without requiring physical border crossings. The distribution of added value is getting out of the control of the state, moving to a supranational level controlled by global corporations [23].

*Increased stratification of economic opportunities*. Active platform users with the necessary experience are able to attract orders from all over the world, acquire competencies of the international standards, successfully implementing (monetizing)

their skills. Platform communications give users access to information, allowing them to track consumer sentiment in order to timely adjust products and services to their changes, thereby staying in the market trend. Users' lack of desire and experience to use digital platforms in this way limits their contacts with customers and suppliers, thereby leading to a reduction in their economic opportunities and, as a result, income.

*Competition for access to personal data.* Analysis of personal data allows companies to build marketing strategies, predict changes in the behavior of consumers, competitors, and suppliers. This allows the company that owns the data to design a more effective strategy for its development. As a result, one of the activities of the platform companies is the collection and processing of personal data of users. At the same time, the formation of digital profiles of citizens, the use of big data analysis based on the information of these profiles should reduce the risks of unauthorized access to personal data. Besides in the future, when digital profiles of residents of regions and countries will be formed, the analysis of big data will allow tracking trends and, without risk, building strategies for the development of these large territorial entities.

## CONCLUSIONS

The present study aims to identify the characteristics of platform companies and their digital platforms as new mechanisms of competition in the modern world economy, introducing new features into the traditionally established socio-economic processes of organizing economic life. The authors identified the specifics of the functioning of platform companies and digital platforms, developed a model for the ecosystem of the digital economy, and identified the types of competitive potential of a platform company.

The results of the study show that the variability of the advantages of platform companies does not allow them to build long-term market strategies, since this leads to a combination of monopolization and competition in which the platform company "survives" competition, offering users unique products of the digital platform, forms its competitive potential.

In our opinion, within the framework of the Russian economy, it is most important to consider the genesis of the development of platform companies prone to decentralization. First of all, this is decentralization at the stage of formation of platform companies, which finds practical expression in venture capital investment and the creation of a certain, not even economic, but social environment that facilitates mass contacts between idea generators, developers, scientists, and other investors with the simultaneous widespread use of outsourcing (for example, Silicon Valley). Decentralization also occurs at the stage of developing additions and updates to a digital product, new applications to it with the involvement of third-party developers, the result of whose work is often not paid, but their product can be placed on digital platforms as a product for users to buy. Thus, by caring for their own well-being, these developers increase the competitiveness of the platform company. Equally important is decentralization at the stage of quality control of developed and operating IT products, which allows platform companies to reduce the costs of this process.

The development of digital platforms is based on finding the best IT solution for a new product, offered not only by employees of platform companies but also by independent developers and users, as well as investors who invest in many new projects, considering the fact that the profit from successful investments can cover previous losses.

Decentralization is important for the effective development of today's ultra-fast economy when there is no adequate solution about the development strategies of companies due to the fact that consumers do not always understand what product or service they need. Therefore, the search for a new solution by many company founders, product developers, and customers is extremely important — this leads to market success: consumers themselves receive the planned product in the market, which makes the platform company competitive. This scheme is not only changing the global economy, but it can and should be used in the Russian economy as a response to the modern challenges of digitalization.

The experience of developing platform companies may not only be used in IT (recreating Silicon Valley). It should be used when creating conditions for breakthrough development in the field of biology, medicine when creating new materials and production technologies. This experience can also be applied in the design of new socio-economic institutions, which is beyond the scope of the article but seems to be the direction of foresight analysis of the development of the identified trends.

The findings of the study can be useful for many Russian companies both line companies (for the development and implementation of measures in response to the growing competition from platform companies) and new platform companies being formed in the Russian context (for choosing a policy development and development of methods for promoting services of their digital platforms).

## ACKNOWLEDGEMENTS

The article is based on the results of budgetary-supported research according to the state task carried out by the Financial University, Moscow, Russia.

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*The article was submitted on 11.09.2020; revised on 28.09.2020 and accepted for publication on 28.01.2021.*
*The authors read and approved the final version of the manuscript.*