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Features and economics of electronic crowdfunding in the face of global challenges

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Abstract: With the development of IT technologies in the investment environment, there are rapid changes in the field of new opportunities both for accumulating the necessary investment resources and for investors regarding investments in promising business areas. This is due to the rapid development of such a phenomenon as crowdfunding, which is especially attractive for startups, the development of small and medium-sized businesses, as well as for the implementation of various social projects, in particular, those that also concern local communities. The emergence of crowdfunding platforms helps to solve their problems with the formation of investment resources for financing good commercial (business ideas) and non-commercial ideas, which is especially relevant today for global developers of ideas/projects. The purpose of the research is to analyze the specific features of the formation and development of crowdfunding in the period of global changes. The main methods used in the work were: comparative, method of abstraction, deductive method, concretization. The results states that crowdfunding in today's conditions of economic instability can act as one of the powerful sources of attraction of investment resources, which determines the research of crowdfunding, the generalization of its typology and classification features The conclusion is oriented on the fact, that active development of the Internet space provokes an increase in investment income in the areas of the latest technologies and important social projects that are directly related to existence social networks and the virtual space of the network itself.

Keywords: crowdfunding, crowdsourcing, globalization, transformation, global changes, innovations, digital economy, electronic business, startup project, social projects, investment resources, virtual space of the network, development of the sharing economy, development.

Introduction

Research Problem

The modern direction of the post-industrial development of the economy feels the influence of the high pace of informatization of society as one of the main global megatrends. The development of information technologies determines the emergence and introduction of new economic and financial tools that are able to fundamentally change the usual processes of innovation and investment processes in the national economy and entrepreneurship. One of these tools became "crowdfunding" or a more general concept - "crowdsourcing". Today, such tool as "crowdfunding" is gaining more and more popularity in digital society. Statistical data presented in the report of the international organization Massolutin's indicate that the volume of crowdfunding investments is increasing rapidly every year, and can already be compared with the annual expenses of some countries. Such growth raises a number of questions about the features and advantages of crowdfunding over traditional types of investments (Silver et al., 2016).

Currently, crowdfunding has every prospect to become a full-fledged player in the financial market (Kim & Hall, 2020).

The active development of the Internet space provokes an increase in investment income in the fields of the latest technologies and important social projects, which is directly related to the existence of social networks and the virtual space of the network itself (Ziegler, Shneor, & Zhang, 2020).

That is why crowdfunding becomes a universal platform for the implementation of startup projects, due to the support of civil society and sometimes large investors. Crowdfunding in modern conditions of economic instability can be one of the powerful sources of attracting investment resources, which leads to the study of crowdfunding, generalization of its typology and classification features.

Research Focus

At the current stage of development of the global economy, more and more attention is focused on social capital as an important driver of inclusive economic growth. One of its tools is crowdfunding as a mechanism for rapid accumulation of funds from the community - investors for the purpose of implementing innovative projects. In the conditions of the formation of a network economy, the development of horizontal connections, as well as the increase in the price of bank loans and the growth

of requirements for lending to startups and small enterprises, the study of such a mechanism for attracting funds is especially relevant. Crowdfunding is not a new economic phenomenon. The first crowdfunding platforms appeared at the end of the 20th century, but special interest in them arose after the crisis of 2008-2009. The reason was the decrease in the amount of free international capital and the development of the sharing economy. According to Google Trends, a gradual increase in interest in crowdfunding began in late 2010. In 2019-2020, an increase in the number of user requests for crowdfunding and opportunities for its use was recorded. The peak of interest fell on July 2015. Most requests were made by residents of the Netherlands, Austria, Switzerland, Singapore, Spain, Belgium, France, Portugal, Germany, Italy, Japan, and Great Britain.

Research Aim and Research Questions

Active implementation of automation processes in the modern economy based on information and communication technologies and the Internet brought communications to a new level and led to acceleration of globalization processes. In this regard, it can be argued that the main development trend of the global economy is digitalization, which is the process of spreading digital technologies in all aspects business. Digitization is a recognized mechanism for economic growth due to the ability of technology to positively impact influence the efficiency, effectiveness, cost and quality of economic, social and personal activities. According to estimates of the World Economic Forum in Davos, digitalization carries enormous potential for business and society in general over the next decade and could bring in an additional over \$30 trillion US revenues for the world economy during the next 10 years (until 2025). Ukraine is also active is involved in the processes of globalization of the digital economic space and transforms the economy of Ukraine from analog to digital in accordance with the Concept of Development of Digital Economy and Society of Ukraine for 2018-2020. In the conditions of the digital transformation of the economy, mechanisms and forms are being transformed business financing, new ones are emerging that use digital technologies and social networks. Digital technologies make it possible to create new business financing tools, significantly reducing transactional ones costs. One of the tools for attracting financial resources of private investors for business financing the purpose of implementing digital economy projects, as evidenced by world practice, is crowdfunding.

Research Methodology

The theoretical and methodological basis of the study of features and economics of crowdfunding, the digital transformation, the increasing role of technologies, the development of modern theories and new competencies that society can realize. In the research process, general scientific research methods were used, namely: system analysis, synthesis, deduction and induction, typology, historical-logical, institutional analysis, structural-functional analysis.

Research Results

The rapid development of information technologies and the Internet, which at the end of the 20th century became available to millions, brought communication to a new level and led to the acceleration of globalization processes. This was manifested in the formation of an open labor market, the emergence of a new type of production (peer-to-peer production), based on the use of mass-collaboration and collective intelligence, in the discovery of new opportunities joint co-sharing ownership of material goods (co-sharing) and national ownership intellectual property (licenses Creative Commons, CC), public license for free software General Public License (GPL) (Mayorova & Petrenko, 2018).

The economy began to acquire special features of a new type: on-demand economy, sharing economy, cooperation economy, Wikinomica, high-tech donation economy (The Hi-Tech Gift Economy), which would seem to contradict classical economic teachings and the science of effective management of companies in market conditions. Practice proved the reverse and demonstrated the irreversibility of the processes of formation of the electronic economy in new economic realities and benefits for businessmen. A special place in this series was occupied by phenomena that changed the perception of scientists on the involvement of people in financing processes projects, production, promotion,

distribution and consumption of products and services on a voluntary basis. It is about crowdsourcing and crowdfunding and their role as innovative marketing tools for promoting projects, production and services (Chandna, 2022).

The phenomenon of crowdsourcing is inextricably linked with the rapid development and spread of information technologies and the Internet. Today, global trends towards globalization and informatization of the economic space have a colossal impact on all spheres of society. In particular, the rapid development of the Internet virtual space caused the emergence of not only new non-standard forms of conducting business, but also provoked the emergence of innovative forms of electronic fundraising. In addition, it became an impetus for the creation of social networks and their use as an important marketing tool. New financial instruments and forms of fundraising have appeared, which are not based on traditional authorized capital or state guarantees, but on public support (Tanklevska et al., 2021).

Crowdsourcing can be considered as a specific technology of socio-economic management development of the region and here it is possible to highlight the priority areas of its use: attraction of investments in regional development; development of socio-economic strategies for the development of the region; support and development small business of the region; creation of new high-tech jobs.

Crowdfunding is a type of crowdsourcing. The term crowdfunding was first introduced by Jeff Howe (Jeff Howe) together with the term crowdsourcing in 2006. For example, US President B. Obama called crowdfunding is a "game changer" and in April 2012 signed JOBS (Jumpstart our business startups) - a law according to which startup companies can attract up to 1 million dollars for assistance crowdfunding without preparation of a special package of documents and registration of shares. The law contains requirements for baker, as well as to the person who placed the offer.

The term "crowdfunding" is formed from two English words "crowd" and "funding", which in translation means "funding by the crowd" or "public financing". Modern economic science considers crowdfunding as a new technology, the basis of which is the pooling of funds of a large number of investors (donors), on a voluntary basis, in order to support and implement important or interesting projects for them.

Society is gradually coming to the opinion that the most effective way of attracting funds to projects is not the traditional search for investors, lobbying interests, attracting additional credit resources, but self-financing, based on the principles of democracy and public access to data. This study analyzed an innovative tool for attracting financial resources to start-up projects, namely crowdfunding. Global trends in the financial markets testify to the unprecedented growth of this type of activity, its flexibility and efficiency compared to traditional types of activity. Crowdfunding is an integral part of the concept of crowdsourcing, which means the use of not only monetary resources, but also the creative, creative and other potential of a wide range of people. Incidentally, we note that both concepts were introduced by the Englishman Jeff Howe in 2006 (Abakumenko, 2016).

Crowdfunding allows for the development of areas of social investment, i.e., in which the subjects of investment activity are persons who are not institutional investors, such as the state, investment funds, business, venture capital, etc. In this case, fundraising can be carried out in a wide variety of directions: financing of startups, support of small business facilities, charitable activities, financing of cultural events, political and public organizations, etc. (Medina-Molina, et. al., 2019).

That is, this tool allows you to implement any idea, regardless of its essence or the financial condition of the authors of the project, provided the necessary amount of donor funds is provided. To date, the largest crowdfunding platforms in the world are Kickstarter, IndieGoGo, Boomerang, RocketHub, ArtistShare and others.

It is also worth noting that the above-mentioned Internet portals are not the only means of exchange and transmission of information between objects and subjects of crowdfunding. Social networks have also become an important element of a successful crowdfunding campaign, because it is through the communication of people online that content is published, distributed, discussed, and the process of transforming social capital into monetary capital is accelerated. Crowdfunding has a number of features that distinguish it from traditional types of financing of various types of projects:

-microfinancing – a wide range of people invest small sums in certain projects, that is, the process of social investment takes place. This technology has a lot in common with the idea of "social business" proposed by the Nobel laureate in economics M. Yunus, which allows to activate the processes of production of new goods and services, introduction of new technologies, creation of a product that will meet the needs of society;

- financing of projects in real time in the global virtual space - the fundamental difference of crowdfunding from traditional forms of financing is the absence of any barriers between donors and objects of financing, which can be manifested in the national regulation of the financial sphere, the structure of the national and international financial market, features of the financial infrastructure; since this segment is already an integral part of the global financial system;

-massiveness – the crowdfunding process involves a large number of both social investment objects that offer certain projects and donor entities that finance these projects;

-absence of intermediaries - provision of direct communication between potential investors and those who need investment, i.e. manifestations of the general process of disintermediation (loss of financial influence by banks, as intermediaries);

-low risks - since the amounts involved are usually small - the risks are minimal.

Crowdfunding platforms are a convenient means of fraud; minimization of transaction costs, thanks to the basic principles of crowdfunding; the special role of social networks - is manifested in the establishment of a specific network system of financing, when a potential investor and the project author are in contact through a social network. A study by University of Pennsylvania professor Ethan Mollyk, who examined 46,902 projects on the crowdfunding platform Kickstarter.com, shows that if the author of a certain project has less than 10 friends on social networks, his chance of success is about 9%, 100 friends - 20%, 1000 increased probability up to 40%. Offline social connections are no less important, because if the author lives in a big city, the chance of success is higher.

Table 1

Modern kinds of crowdfunding

The name of crowdfunding	Description of crowdfunding
Cultural	Aimed at supporting and financing creative projects, cultural events, activities of musical groups, etc. An example of this type is one of the oldest crowdsourcing platforms - ArtistShare, which helps young artists find funding for recording new music albums.
Social	Solving important social issues, which require considerable attention of society. The concept of social crowdfunding is not the same as charity, as investors can receive certain benefits from attracting funds to these projects, as well as in case of insufficient amount of funds to implement the project, the funds are usually are returning.
Crowdfunding of the ideas	Aims to implement innovative ideas, development of new technologies or products; takes place in scientific, social, cultural and any other spheres.
Business crowdfunding	The main goal is to make a profit, thanks to the introduction of innovative technologies.
Political	Connected with the activities of political parties and public organizations, social control and monitoring effectiveness of measures taken by the government

Source: created by authors

Three agents participate in the crowdfunding process: developers, investors, and Internet platforms. For developers, the advantages of using this type of financing are the low cost of capital, access to a large amount of information. For individual investors, there are several factors that may encourage them to invest funds through crowdfunding: more open and accessible to understand and use compared to other traditional funding options; the opportunity to invest small amounts in absolutely any project, therefore, insignificant risks; access to a new product even before its official market entry; participation in the "community", the opportunity to exchange thoughts, ideas, as well as be part of innovative projects; support of creative ideas and projects.

The main role in crowdfunding is played by specialized Internet platforms. A crowd platform is a specially developed technological service that allows collection, processing, storage and transfer of large volumes of data, financial funds received from investors using the Internet. A typical crowdfunding platform is an intermediary in concluding agreements between investors and the project author. The activity of these platforms in different countries has its own characteristics, according to the legislation of each state. Some platforms carry out a preliminary analysis of projects and screen out dubious projects, others only bring companies and investors together, others, on the contrary, act as the sole owner of the investors' share in the financed enterprise. Some platforms have requirements for their members. Such requirements are made by a certain citizenship or legal status.

Among the advantages of crowdfunding platforms, scientists single out the following: reducing the distance between the author of the project and the audience for which the project was developed; placement of projects of various orientations, from technological to charitable; ensuring familiarization of a wide audience not only with a specific project, but also with its developer; performs the role of marketing research, tests potential demand, price and demand for the product; formation of the client base; assistance in promoting the project through mass media.

It can be argued that in the new economy, collaborative filtering allows the individual to facilitate the solution of the age-old problem of choice, and the computerization of these actions significantly reduces the time and money spent on searching for the necessary information. Under such conditions, the mechanism of collaborative filtering allows to reduce transaction costs, primarily information costs. The main asset of information and communication technologies is the cheapening of communications, since opportunities have appeared for direct, unmediated exchange from mouth to mouth, as well as for open exchange in a team, when private statements are not transmitted along a chain, but are immediately available to all members of society.

In addition to the famous "invisible hand" of Adam Smith, as a result of collaborative filtering, a parallel mechanism can be included - a second invisible hand, which is based on observing not prices, but who buys which goods, for what purposes and with what effect. Applying this idea to the concept of crowdfunding, it can be recognized that the "second invisible hand" mechanism allows choosing those projects that have the greatest value for all members of society by satisfying the interests of a larger number of participants of various clubs. The more "donations" collected for the project, the higher its value.

In this way, the project selection process becomes more effective: individuals receive benefits from the satisfaction of their interests in the form of compensation that they have chosen - moral, material or financial compensation; the initiators of crowdfunding projects receive financing in the necessary volumes quickly and without financial intermediaries for the implementation of their creative projects of various orientations - social, environmental, charitable, commercial, etc.; organizers of crowdfunding platforms - commissions and the opportunity to earn on charity and own ideas; the economy receives an increase in the volume of sales of existing or innovative products, an increase in the aggregate national product, new jobs, a reduction in costs, etc. in the case of financing investment projects, society - an increase in public goods, the possibility of implementing social projects, an increase in the level of trust, transparency and unity.

Another advantage of crowdfunding in the context of collaborative filtering is the possibility to restore parity in the awareness of the consumer and the producer about the quality of goods, blocking the tendency of selection to deteriorate, which arises in conditions of information asymmetry. The reduction of information asymmetry and transaction costs at the ex ante and ex post stages is achieved

thanks to the combination of technical and organizational capabilities, in particular requirements for the presentation of projects, ensuring the transparency of fundraising and the progress of project implementation, the ability to monitor the entire process online in real time, feedback in tongue. As market participants note, for the project to become successful and be implemented, it is necessary for it to clearly provide answers to the questions: where exactly will each amount go and what will investors receive. In addition, it is important to immediately determine an adequate amount that can be realistically collected during the time given for collecting money. Another success factor is advertising the project on all possible communication channels so that as many people as possible learn about it. Adherence to these recommendations significantly increases the chances of a crowdfunding project to succeed.

Therefore, an important advantage of crowdfunding, which ensures the reduction of information asymmetry, is the improvement of the project management process and the improvement of its efficiency with the help of feedback, the communication capabilities of which have significantly increased due to the use of Internet technologies. Under such conditions, a significant part of the project implementation monitoring functions is transferred to investors. Continuing the argument in favor of the possibilities of crowdfunding to reduce manifestations of information asymmetry, it should be noted that crowdfunding also reduces the risk of fraud and dishonesty (Andrianova, 2020).

Once deceived, you can already lose people's trust for a long time, and electronic identification of movement in the network (using IP) will not allow manipulation using different postal services or fictitious data. At the same time, small amounts of investment, the need to disclose information about oneself, as well as the use of social networks (Facebook, Twitter, LinkedIn, VKontakte) and groups (by geographic or other characteristics) within the platform do not allow fraud to become a very profitable business.

Although crowdfunding can reduce transaction costs and information asymmetry, it does not completely overcome it. The implementation of crowdfunding projects is associated with uncertainty, since most projects are quite new and therefore risky. Therefore, providers of funds, primarily investors, must take into account the risks of project implementation. In order to further reveal crowdfunding as a financial innovation of post-industrial society, we consider it necessary to focus separately on such a feature as the phenomenon of voluntary collective cooperation of community members for the purpose of implementing a socially important project (quite often, but not necessarily) or one that has value in the eyes of the fund provider. At the core of the ideology of crowdfunding is the concept of social responsibility, the cornerstone of which is trust between participants.

As for the Ukrainian crowdfunding market, it is at the initial stage of development, so the features of its development have some differences from those of the world. For Ukraine, crowdfunding is a new phenomenon, insufficiently developed both in terms of the number of platforms and the scale of implemented projects. Its resources are sufficient only to meet the small needs of small businesses and the population. It is almost impossible to raise funds for the implementation of an ambitious high-tech project, a startup with a product that will be aimed at the Western or Asian market on Ukrainian platforms. Such projects have to use the services of European and American crowdfunding companies. In particular, in 2018, Ukrainian startups financed and "promoted" using the Kickstarter crowdfunding platform were Feel VR (game steering wheel and pedals using Direct Drive technology, \$500,000), Ugears (3D wooden puzzles, \$460,000), Verum 1 (headphones of Kharkiv engineer Roman Landyk, \$185,000), Pix (created a backpack, the front side of which can be changed to your liking - display pictures and animations that look like pixel graphics, \$150,000), Stealtho (wheels for Caster Wheels office chairs, \$138,000), SignumGame - Legends of Signum: Battle for Vallor board game, \$109,000 (Vasilchuk, 2019).

In general, the Ukrainian crowdfunding market is very poorly developed. Its resources are sufficient only to meet the small needs of small businesses and the population. It is almost impossible to raise funds for the implementation of an ambitious high-tech project, a startup with a product that will be aimed at the Western or Asian market on Ukrainian platforms. Such projects have to use the services of European and American crowdfunding companies. But at the same time, domestic entrepreneurs face a number of difficulties, which can be conditionally divided into territorial, organizational and cultural.

Among the first, for example, we can include the fact that most crowdfunding companies work only with entrepreneurs from Western Europe, North America and Australia. Others require opening an account in certain American or European banks. Of the world-famous companies, only "Kickstarter" and "Indiegogo" work with users from almost all countries of the world. This in a certain way limits the possibilities of the Ukrainian user in choosing a platform and region of the world for fundraising.

Discussion

Research shows that crowdfunding has been actively developing in recent years all over the world. At the current stage in global practice, small and medium-sized enterprises attract a significant share of financial resources on the crowdfunding market. The global volume of financing using crowdfunding grew from \$2.7 billion in 2018 to \$34.4 billion in 2020, that is, crowdfunding showed an almost 13-fold increase in four years. Annual growth in this type of financing was more than 200%. According to Global Crowdfunding Market 2016-2020 report, the crowdfunding market is expected to grow at a CAGR of 26.87% during the period 2016-2020. According to the latest market research report published by Technavio, it is expected that the growth rate of the global crowdfunding market CAGR will be almost 17% until 2021. As for the analysis of the topics of crowdfunding projects, global practice shows that the most popular are business and entrepreneurship - 41.3%, social projects 19% and cinematography 12.2% (Shvets, 2019).

Social responsibility is a manifestation of a higher level of social consciousness, which became possible thanks to many factors, among which one should highlight, first of all, the growth of the level of freedom and consciousness of the individual in the new society. In turn, the increase in the level of trust between the participants of the crowdfunding project, as already mentioned, is supported by the technical capabilities of Internet technologies, which allow you to control all stages of the process of collecting funds and implementing the project. The concept of sustainable development, which is based on the ideology of social responsibility of society and business, thanks to crowdfunding received another source of funding for social and environmental projects - funds from the general public (households). In the field of business and entrepreneurship, projects are financed mainly by the public investment scheme, while social projects and cinema are financed by the scheme without remuneration. In the structure of the global market of crowdfunding, 70% falls on the American and European markets, despite the spread of this tool in other countries. So, in 2015, according to the amount of crowdfunding, the countries of the world were distributed as follows: North America - 17.25 billion dollars, Asia - 10.54 billion dollars, Europe - 6.48 billion dollars (Shvets, 2019).

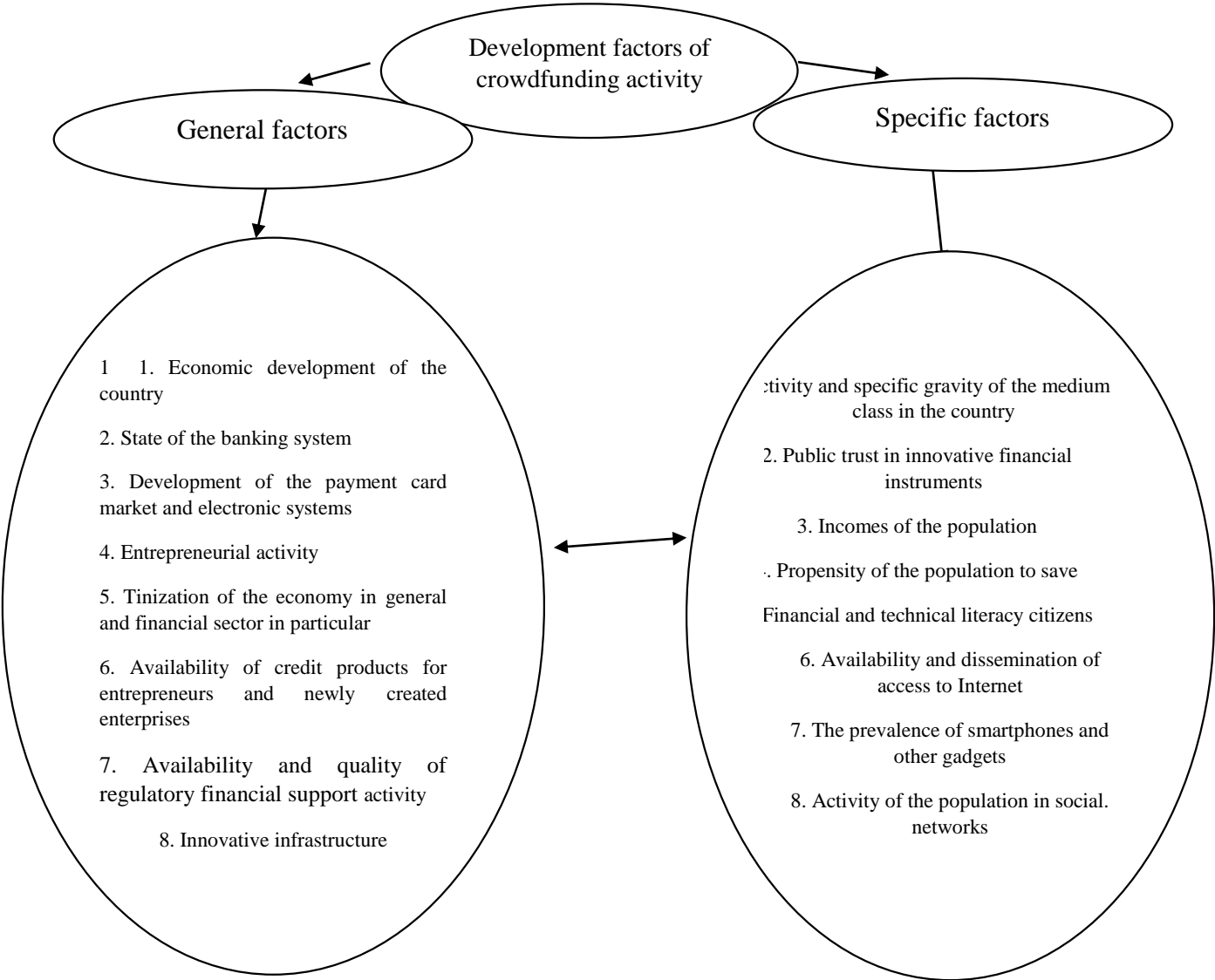
There is a specially developed technological service that allows collection, processing, storage and transfer large volumes of data, financial funds received from investors using the Internet. Typical the crowdfunding platform is an intermediary in concluding agreements between investors and the author of the project. Activity of these platforms in different countries has its own characteristics, according to the legislation of each state. Some platforms carry out a preliminary analysis of projects and screen out dubious projects, others only build companies and investors, third parties, on the contrary, act as the sole owner of the investors' share in the financed enterprise. Some platforms have requirements for their members (Sheina et.al., 2020).

Certain citizenships make such demands or legal status. Among the advantages of crowdfunding platforms, scientists single out the following: reducing the distance between the author of the project and the audience for which the project was developed; placing projects of various orientations, from technological to charitable; providing familiarity with the broad audience not only with a specific project, but also with its developer; performs the role of marketing research, tests the potential demand, price and demand of the product; formation of the client base; assistance in promoting the project through mass media.

According to the results of research on the theory and practice of Internet platforms, the following types will be distinguished crowdfunding depending on the features of the reward. The first type of crowdfunding is crowdfunding without remuneration to the investor. There are usually donations voluntary acts done on the basis of altruism and without any obligation to the recipient. With therefore,

the altruism of investors has its limits, which restrains the possibilities of this option and narrows the range of projects that can be financed in this way.

Figure 1
Development factors of crowdfunding activity in the global challenges



Source: created by authors

Most often, this model is used in social, political, environmental and medical projects. It is worth noting that until 2012 this direction was dominant in the framework of all crowdfunding. As examples of crowdfunding platforms, where this type is used, it is possible lead Betterplace in Germany, "Godfundme" in the USA and Respekt in Austria. More active crowdfunding platforms in Ukraine belong to this type (Schetinina, 2020).

The second, which is actively developing at the current stage and is the most common type - crowdfunding with certain non-financial reward to the investor. It is believed that this type of crowdfunding is the most effective a fundraising tool for any projects, from creative to complex technological products. A special case of the "non-financial reward" scheme is the previous model order. An analysis of the activities of crowdfunding platforms shows that the material reward is usually represented by goods or services for sponsors (investors), such as various media from audio and video

recording, photos, music tracks; the ability to receive information from cloud storage files; technical devices, etc. Most often, investors perceive crowdfunding platforms as quality of a regular online store, helping to finance technological products, but with a delay delivery of goods.

The most successful platform that works on the principle of non-financial reward and, in particular, offers a pre-order model, there is a Kickstarter platform that raised \$1.5 billion in 2015 alone, and in In 2019, it surpassed the mark of 4.2 billion dollars. The third type of crowdfunding is investment (stock) with a reward to the investor, which is called crowdinvesting. At the current stage, crowdinvesting functions in the following models: royalties, crowdlending and equity crowdfunding.

Conclusions and Implications

There are many large foreign crowdfunding platforms, of which the American "Kickstarter" and "Indiegogo" are considered the largest in the world in terms of the number of implemented projects and attendance. They allow you to finance projects on any topic, but there is one "but" - in most cases, citizens from other countries can use them only when they have a bank account in that country or find agents in these countries to interact with the platform. Similar platforms are also appearing in Ukraine. The most famous are "Spilnokosht" ("Big Idea") and "Komubook", which are aimed at the development of civil society and the distribution of novelties of literature on the market (Otlivanskaya, 2018).

Based on the review of interpretations of the essence of crowdfunding in modern conditions, in our opinion, it is appropriate to single out the following aspects:

1) the crowdfunding platform is a complex mechanism in the socio-economic space that ensures the interaction of demand for investment resources (represented by investment objects: usually innovative ideas/ projects) and investment proposals using Internet capabilities;

2) from the point of view of the owner of a promising idea/project, crowdfunding should be interpreted more narrowly as an innovative way of accumulating investment resources using the Internet for the possibility of its implementation. Still, this is the primary purpose of crowdfunding;

3) of course, crowdfunding platforms are attracting more and more investors according to modern development trends.

Therefore, from the point of view of the owner of investment values until the moment of investment, they have not yet become an investment), crowdfunding platforms provide innovative investment opportunities, and crowdfunding can be considered as an innovative way of investing (to highlight this very aspect of it, the term "crowdinvesting" is also used, narrowing it down to the case the presence of a financial effect for the investor. However, the presence of a long-term non-financial effect, for example, social, environmental, etc., is also considered a valid investment goal today). As for the non-financial reward, the authors of the projects can express it in the form of the first sample of the produced product, a recorded album, an invitation to a concert, an autograph, a mention in the credits, etc., which is determined by the creativity of the authors' imagination. The pre-order model is also distinguished as a special case of non-financial reward (the reward is the product itself, for example: a new gadget, software, book, movie, music album, etc., which is promised to be delivered immediately after production).

Thus, with the development of IT technologies, new trends in the investment environment related to such phenomena as crowdfunding and crowdfunding platforms are increasingly asserting themselves. The crowdfunding sector in the socio-economic space is growing rapidly from year to year. The need to implement innovative ways of forming investment resources in Ukrainian realities is becoming particularly urgent, as there are certain difficulties with traditional ways of financing investments to meet development needs. The crowdfunding sector has significant financing potential, especially for small and medium-sized enterprises.

Summarizing the research it can be argued that in the conditions of increased competition for limited funds among enterprises, one of the promising and effective tools for their involvement is becoming crowdfunding. In this study, a database of works was formed and analyzed scientists focused on crowdfunding research. Needs improving the analysis of the factors of the emergence and development of crowdfunding systems. It was found out that the existence and development of crowdfunding is influenced by a large number of factors. As a result, a typology of factors for the

development of crowdfunding activity was developed and their influence on global trends of crowdfunding was investigated. The main analyzed factors that affect crowdfunding activities, it is proposed to divide them into two groups: general (economic) and special (social) factors. The obtained results create prerequisites for further in-depth study of the theory and practice of crowdfunding, and also provide an opportunity to apply them for further scientific developments in the financial sphere, law-making and norm-making activities of state authorities.

References

Abakumenko A., Kutsenko, B. I. (2016). Crowdfunding as a tool for the formation of innovative technological projects. *Chernihiv Scientific Journal*, 1 (7), 52–60.

Cordova, A., Dolci, J., & Gianfrate, G. (2015). The determinants of crowdfunding success: Evidence from technology projects. *Procedia, Social and Behavioral Sciences*, 181, 115–124. <https://doi.org/10.1016/j.sbspro.2015.04.872>

Cordova, A., Dolci, J., & Gianfrate, G. (2015). The determinants of crowdfunding success: Evidence from technology projects. *Procedia, Social and Behavioral Sciences*, 181, 115–124. <https://doi.org/10.1016/j.sbspro.2015.04.872>

Ibrahim, N., & Verliyantina. (2012). The model of crowdfunding to support small and micro businesses in Indonesia through a web-based platform. *Procedia Economics and Finance*, 4, 390–397. [https://doi.org/10.1016/s2212-5671\(12\)00353-x](https://doi.org/10.1016/s2212-5671(12)00353-x)

Otlyvanska, G. A. (2018). The prospects and possibilities for using crowdfunding in the investment activity of ukrainian enterprises. *Problems of economics*, 2, 276–281. https://www.problecon.com/export_pdf/problems-of-economy-2017-2_0-pages-276_281.pdf

Schetinina, E. (2020). Equity crowdfunding as an alternative model of business financing at the early stage of development and startups: international approaches. *Economic vector*, 1, 22–27. <http://www.singep.org.br/3singep/resultado/251.pdf>

Shvets, L. (2019). Ukrainian crowdfunding: principles of successful implementation. *Bulletin of the Kharkiv National University of Internal Affairs*, 4 (63), 243–251. https://essuir.sumdu.edu.ua/bitstream-download/123456789/80188/1/Zakharkin_crowdfunding.pdf

Silver, L., Berggren, B., Fili, A.. (2016). The role of crowdfunding in entrepreneurial ventures: an analysis of recent trends in Sweden. *Investment Management and Financial Innovations*, 13(1), 221–229. [https://doi.org/10.21511/imfi.13\(1-1\).2016.09](https://doi.org/10.21511/imfi.13(1-1).2016.09)

Vasilchuk, I. (2013). Crowdfunding as the phenomenon of the post industrial economy. *Effective economy*, 11, 78-83. <http://www.economy.nayka.com.ua/?op=1&z=2500>

Mayorova, T., & Petrenko, I. (2018). Crowdfunding as an innovative platform for smes development. *Development of small and medium enterprises: the EU and East-partnership countries experience: monograph / [Britchenko I., Polishchuk Ye. and all] / Edited by Igor Britchenko and Yevheniia*

Polishchuk : Wydawnictwo Państwowej Wyższej Szkoły Zawodowej im. prof. Stanisława Tarnowskiego w Tarnobrzegu.

https://ir.kneu.edu.ua/bitstream/handle/2010/29490/%D0%A2_%D0%9Cayorova.pdf?isAllowed=y&sequence=2

Tanklevska, N., Povod, T., Ostapenko, A., & Borovik, L. (2021). Crowdfunding Development Trends: Foreign Experience and Ukrainian Realities in the Digital Economy. In *International Conference on Business and Technology* (pp. 897-908). Springer, Cham.

Sheina, E. G., Kurdyumov, A. V., & Izmodenov, A. K. (2020). Development of the Crowdfunding Financial Mechanism in the Framework of the Digital Economy. In *Institute of Scientific Communications Conference* (pp. 571-580). Springer, Cham.

Chandna, V. (2022). Social entrepreneurship and digital platforms: Crowdfunding in the sharing-economy era. *Business Horizons*, 65(1), 21-31.

Andrianova, A. (2020). Countering the financing of terrorism in the conditions of digital economy. In *Digital Transformation of the Economy: Challenges, Trends and New Opportunities* (pp. 20-31). Springer, Cham.

Kim, M. J., & Hall, C. M. (2020). What drives visitor economy crowdfunding? The effect of digital storytelling on unified theory of acceptance and use of technology. *Tourism Management Perspectives*, 34, 100638.

Ziegler, T., Shneor, R., & Zhang, B. Z. (2020). The global status of the crowdfunding industry. In *Advances in crowdfunding* (pp. 43-61). Palgrave Macmillan, Cham.

Medina-Molina, C., Rey-Moreno, M., Felício, J. A., & Romano Paguillo, I. (2019). Participation in crowdfunding among users of collaborative platforms: the role of innovativeness and social capital. *Review of Managerial Science*, 13(3), 529-543.