CROWDFUNDING – AN INNOVATIVE METHOD OF FINANCING IN UKRAINE

The research identified innovative characteristics of crowdfunding, which make it an effective way of financing projects of social and economic development. It is hypothesized that the most effective methods of financing modern innovations are related to the environment of their functioning – the modern information and communication space represented by the Internet and social networks. This study reveals the essence of the concept of crowdfunding as an alternative way of financing creative ideas, startups, innovations, the latest technologies, socially significant projects in the conditions of the development of computerization and informatization. The subjects of this financing instrument are identified, and the essence of the online platforms, which are used to attract monetary allocations for the financing of the projects presented on them, is determined. The advantages for individual investors regarding investing money through crowdfunding are summarized. Approaches to understanding the essence of crowdfunding have been found. The criteria for evaluating the level of crowdfunding development are proposed: the degree and timeliness of information provision, the level of activity, the diversification of types of platforms, the interaction of the resource with the banking sector, the level of public awareness, the level of state influence. The state regulatory policy regarding crowdfunding in various states was analyzed and its financial management in Ukraine was proposed. It was established that, under the conditions of insufficient financial resources, crowdfunding is a high-quality alternative to standard investment methods, and the main environment of the subjects is medium-sized enterprises in Ukraine. The factors hindering the development of an alternative method of financing in Ukraine are outlined, as well as recommendations are provided for its further functioning in our country.

Keywords: financing, crowdfunding, innovation, social and economic development, local community, Internet platforms, social-networks.
Statement of the problem. In modern conditions, the socio-economic development of both individual unions and society in general depends on prospects and the ability to attract and productively use financial resources. The rapid flourishing of the Internet space contributed to the emergence and more developed activity today, not only the emergence of the newest forms and organizations of business, including electronic ones, namely: network marketing, startups, outsourcing, crowdfunding, crowd-sourcing, fundraising. In the socio-economic development, the financing of projects of innovative direction begins the creation of a significant market opposition to the usual forms of encouragement and obtaining financial resources, such as bank loans, state loans or issues of shares, bonds, investment certificates, promissory notes. It is worth emphasizing that at the end of the 20th century, Bill Gates himself called modern banking institutions "dinosaurs", due to the fact that modern advanced technological systems make it possible to greatly reduce costs, which in turn destroy the banking system that exists today [1]. In addition, thanks to the integration and development of the latest, trending technologies, social networks and new forms of public finance have appeared, which focus on community participation, and not on state support or common property. Under various circumstances, the communities believe that the fastest and most productive way to solve problems is not to attract bank funds or government loans, but best of all, it is financing at the expense of one's own strength and capabilities. In this article, we intend to make an economic analysis of the potential of one of the newest, innovative financial instruments, namely crowdfunding. Markets of financial resources and their newest directions point to the effective application of trendy IT technologies, where crowdfunding is the most effective new tool for financing innovative projects of socio-economic development and society in general.

Analysis of the latest studies and publications. Modern scientific awareness of information and network crowdfunding as a fundamentally modernized material means and its application in financial relationships is just beginning. For the most part, publications that cover this topic and its development try to understand the vision of additional financing through crowdfunding from different angles, but unfortunately, they focus their attention only on isolated aspects. The theoretical basis of this article is the research of scientists who are addressing the study of methods of financing innovative projects aimed at social and economic prosperity. In his writings, J. Lerner very aptly sheds light on the shortcomings of well-known techniques and methods of attracting additional financing for innovative projects through the prism of socio-economic growth [2]. A lot of attention has also been paid by scientists to problems related to the difficulties of supporting, encouraging and attracting financing at the first stages of the implementation of projects from the external environment with funds from banking institutions or state investments, or with their own [3–5]. A significant number of pilot projects remain without the attention of investors and additional funding due to a lack of funds and conviction on the part of investors regarding the need to invest in the project, which could act as a guarantee of granting allocations to financial investors in the short or long term [6–9]. I consider it necessary to single out publications that cover research on the emergence and development of crowdfunding as a separate form of financing. E. Mollik focuses his attention on the trends of popularization of public financing, so to speak, shared cost [10]. Many scientists have publications devoted to the problems of analysis of forms and methods of joint cost (purchase of derivatives, loans) [11–13]. The analysis of the research by P. Belleflamme and his co-authors [14] showed that crowdfunding can act as an additional financing tool, having its advantages on a par with well-known financing methods due to the possibility of using bias in the fee to increase the effectiveness of the project. Due to this, business structures can achieve significant privileges in the short term and move to a privileged level of development of their company. In some cases, the community directly participates in decision-making regarding the content of the project and the process of its implementation. The work of B. Helen and K. Eisenhart [15] is devoted to the issue of forming strategic connections between organizations and communities and their further use. Analyzing the publications on the interaction of firms and Internet communities, we note the study by K. Miller and co-authors [16], which proves that organizations are able to benefit by making community representatives promoters of their projects. The tendency to
connect the development of collective methods of financing with the development of information technologies in the conditions of globalization is also observed in the studies of Ukrainian scientists. Among these studies, it is necessary to single out the works of O.V. Dlugopolsky, dedicated to the development of the public sector of the economy and public finances in the era of global transformations [17; 18].

The purpose of the article is to deepen the theoretical and methodological foundations and opportunities for the formation and spread of crowdfunding under the conditions of official transformations of the stock market.

Presentation of the main material. The content of the concept of "crowdfunding" (Ukrainian: "community", from the English crowdfunding, crowd - "crowd", funding - "financing") was formed under the influence of the concepts of micro-financing [19] and crowd-sourcing [20], however, modern crowdfunding is its own unique category fundraising As often happens with new concepts in the sphere of public relations, scientific ideas about crowdfunding are in a state of evolutionary formation, which makes categorical definitions of this phenomenon quite limited. In one of the few published reviews dedicated to this topic, A. Schwienbacher and B. Larralde define crowdfunding as "an open competition, mainly via the Internet, to collect financial resources either in the form of a donation or in exchange based on various forms of reward and/or support the right to vote on initiatives aimed at achieving specific goals" [21]. However, even this broad definition potentially leaves out of the attention of scientists such examples of crowdfunding as peer-to-peer lending [22], fundraising fundraising by fans of music bands [23], etc. In our opinion, modern attempts to give a complete definition of crowdfunding are premature, since the content of this concept covers not only many current possibilities, but also ways of using collective finance in areas that will arise in the future. The information to involve these methods in today's analysis has not yet been created. Therefore, it makes sense to use a narrow definition of the term "crowdfunding" depending on the specific field of its use, leaving room for further evolution of the concept. For example, P. Belleflamme gives the following definition of crowdfunding in the business context: crowdfunding is the effort of entrepreneurs and their groups to finance their projects (cultural, social and non-commercial), relying on relatively small contributions from a relatively large number of people using the Internet, without standard financial intermediaries [14]. This formulation does not consider two aspects from the work of A. Schwienbacher and B. Larralde – the goal of crowdfunding and the goals of investors [21]. Both aspects are obviously of great importance, but they are also such components of crowdfunding that there are many variations. In addition, this definition does not take into account approaches by which individuals are involved in crowdfunding either as founders (of cultural, social, commercial or non-commercial projects) or as investors. Defining and characterizing these approaches is important for substantiating the motivation for the participation of owners of financial resources in collective financing. In the table 1 shows the types of crowdfunding depending on the reward for its participants (sponsors or investors). Crowdfunding allows you to attract financial resources of a large number of people (individual communities, different groups) through the Internet for the implementation of various ideas and projects (mostly startups). The service is usually provided through specialized Internet platforms that help create the most complete description of the project or financing need. As a rule, they allow you to use attachments in the form of photos, links to videos, documents (business plan, etc.). The necessary amount for financing, the period for which the money is raised and the desired percentage of the potential investor's income are indicated here. If the project is of a social nature, donations are usually indicated as non-refundable financial assistance. Often, such portals promote projects in popular social networks, send messages to potentially interested groups.

We can single out such features of Internet crowdfunding that make it an effective and innovative way of financing projects. First, the crowdfunding platform has certain advantages compared to economic agents that traditionally allocate and distribute funds according to spending directions (financial intermediaries or government institutions), and combines two functions – both the accumulation of funds and the determination of spending directions.

Compared to financial intermediaries, crowdfunding is characterized by greater flexibility and can include experiments in areas of activity and projects. Compared to public institutions, crowdfunding projects have such advantages as the speed of allocation of funds (the term of fundraising is clearly defined), transparency of information about the project, accountability and responsibility to the community.

Secondly, the use of crowdsourcing technologies makes it possible to produce both commercial goods and so-called local public goods, the production of which in significant volumes was traditionally done only by the state. In particular, these are local improvement projects, assistance to certain social categories of the population, etc. This becomes possible due to the use of market practices during project preparation: assessment
Types of crowdfunding depending on the reward for participants

<table>
<thead>
<tr>
<th>Species</th>
<th>Characteristics and application experience</th>
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<tr>
<td>With no reward</td>
<td>Donations are usually voluntary acts done altruistically and without any obligation to the recipient. Most often, this model is used in social, political and medical projects (raising funds to help in the treatment of a disease or for the activities of a charitable organization). Examples of such platforms include <a href="http://www.betterplace.org/de">http://www.betterplace.org/de</a> in Germany. Until 2012, this direction was dominant within the framework of crowdfunding.</td>
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<tr>
<td>With a non-financial reward</td>
<td>Currently, this is the most widespread crowdfunding model in terms of the number of platforms. It has proven itself as an effective fundraising tool for any projects, from creative design to complex technological products. The main feature of this model is the provision of a non-financial reward in return for support. The non-financial reward can be expressed in the form of a recorded album, an invitation to a concert, a mention in the credits, the first sample of the produced product, an autograph, and anything else that the project author's imagination can do. A special case of a non-financial reward scheme is the pre-order model. In this concept, the reward can be the product itself. For example, a book, movie, music album, software, new gadget, etc. The authors of such projects promise to deliver the product immediately after its production. The most successful platform that works on the principle of non-financial rewards based on the pre-order model is Kickstarter, which raised $320 million in 2012 alone.</td>
</tr>
<tr>
<td>With financial reward (crowdfunding)</td>
<td>The main characteristic of crowdinvesting, which distinguishes it from other forms of crowdfunding, is the presence of a financial reward, which the sponsor (in this case, the investor) receives in exchange for his support. Three main forms of crowdinvesting: <strong>a) royalty model.</strong> This model is a logical continuation of the non-financial reward scheme. In addition to non-financial bonuses and various incentives, the sponsor (investor) receives a share of the income or profit of the project it finances. This approach is actively practiced in the field of music financing (SonicAngel), game development (LookAtMyGame), films (Slated), etc. The royalty approach is quite promising, as it allows, on the one hand, to preserve the element of participation and involvement of the crowdfunding participant, and with another — to financially motivate him; <strong>b) public lending.</strong> The leader in the number of funds raised and the subject of close attention of specialists. The main advantage for lenders is higher profits and the very possibility of granting a loan in a very wide range of industries. The borrower wins due to lower rates and convenience of obtaining a loan. A key characteristic of this form of crowdinvesting is the presence of a clear schedule for returning loan capital to investors. That is, the investor has all the information in advance about when he will get back his investment along with the stipulated interest. The source of financing is exclusively the funds of individuals. Public lending is divided into two subspecies – financing of legal entities and financing of individuals. There are fewer platforms operating in the segment of lending to legal entities, but the volume of accumulated funds is larger. In particular, the Funding Circle platform, the market leader in Great Britain, in 2012 helped attract more than $250 million from individuals. Lending to individuals can exist in the form of public lending and in the form of P2P lending, when the borrower communicates with a direct lender. In this case, the crowdfunding platform is an intermediary and, to some extent, a guarantor of the entire procedure. The first crowdfunding platform operating on the principle of lending was the British Zopa. Other successful projects include Smava in Germany, Babyloan in France and many other platforms. The market leader is the American platform Lending Club, which from the beginning of 2007 to October 2013 raised more than 2.7 billion dollars. In 2013, Google Corporation announced the purchase of a minority stake in the Lending Club platform, thereby signaling the promise of this approach. A special case of lending to individuals is the social lending model. It is characterized by minimal loan interest or their complete absence. The main purpose of such loans is to provide assistance to the poor, primarily in developing countries. The largest representative of this model is the KIVA platform, through which more than 500 million dollars passed. loans This approach is about loans, not charity. Received loans must be returned; <strong>c) shareholder crowdfunding.</strong> One of the most innovative forms of crowdfunding, where as a reward the sponsor (investor) receives part of the property, shares of the company, dividends or the right to vote at the general meeting of shareholders. But along with the innovative form of crowdfunding, this approach is at the same time the most discussed and controversial, because it affects the organizational and legal form of the enterprise and is associated with increased risk for investors. It was expected that in the United States of America since 2013 (after President B. Obama signed the JOBS Act in April 2012), crowdfunding platforms will be able to legally offer this form of crowdfunding to non-accredited investors (that is, ordinary citizens). However, the SEC (Securities and Exchange Commission) has not yet issued guidelines allowing this type of investment. However, American crowdfunding platforms actively continue to appear and, pending official permission, work in a limited mode. One such platform is EquityNet, which has been around since 2005. In Europe, equity crowdfunding makes full use of legal freedom. One of the successful examples is the British project Seedrs, which specializes exclusively in equity crowdfunding. An important milestone in the further development of this type of crowdfunding was the adoption of a law in Italy that legalizes this method of investment for startups.</td>
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Source: compiled by the author based on [11; 12; 13; 22; 23; 24]
of demand for project implementation results, promotion among interested audiences, distribution of project results among crowd investors (priority provision of benefits, differentiation depending on the amount of the contribution, etc.).

Thirdly, there is a reduction in transaction costs for organizing project financing due to fewer intermediaries. When receiving funding, such intermediaries are the crowdfunding platform and the banking institution servicing the deposits. Thus, the number of hierarchical levels at which decisions are made regarding the specifics of financing is significantly reduced, while the range of possible crowd investors is greatly expanded.

Fourth, crowdfunding attracts investors en masse, appealing not only to economic motives, but also to common social interests. Among the large number of potential crowd investors, it is necessary to highlight the criteria that unite them.

The experience of successful financing shows that projects related to the interests and identity of representatives of a specific economic community are in demand. Therefore, it is important for project authors to determine the characteristics of the community, its composition, and further promote the project, focusing on it [17]. It should be noted that communities can be combined in different ways. In the case of a community with common components of identity (for example, professional groups), project initiators face additional transaction costs for informing a wide range of individuals. On the other hand, when working with local community development projects, the costs of informing the interested group are significantly reduced, since the size and composition of the community are clearly defined and coincide with certain territorial boundaries. An additional advantage of working in territorial communities is a higher level of social capital than when working with unrelated individuals. This becomes possible due to close and versatile connections within the community.

Fifth, collective methods of project financing significantly expand the list of traditional investment methods. This is confirmed by the fact that in the USA (which is the leader of crowdfunding activities) in 2012 there were changes in the legislation that increased the amount of investments that organizations can raise with the help of collective financing without the corresponding emission of securities to the amount of 1 million dollars [25].

Sixth, the crowdfunding financing scheme has significant advantages for investing in innovative projects, as it removes a number of significant limitations of traditional financing methods.

Crowdfunding is a more accessible tool for attracting funds for innovative projects than other modern sources. In connection with the development of crowdfunding, various forms of it were formed (Table 2).

Table 2 shows that there are four main forms of crowdfunding. The main difference between these models is the availability and method of obtaining benefits for investors. Innovation is traditionally financed in two main ways. The first is that companies invest heavily in research and development. The disadvantages of this method are that such investments are made by large companies with a significant market share, and therefore, their goal is not so much the development of new risky areas as the maintenance of existing positions. According to the second method, investments are made by venture investors who invest their financial resources in the projects of innovative companies, receiving a share in the capital. According to the study [26], the efficiency of these two methods differs – venture capital shows three times higher returns. However, this type of capital also has disadvantages related to the behavior of venture capitalists. The first drawback is the focus of venture investors on a limited range of the most popular and potentially most profitable areas of activity. Most often, these directions are not important for solving

<table>
<thead>
<tr>
<th>Charity model (donation based)</th>
<th>Reward-based model</th>
<th>Credit model (credit based)</th>
<th>Share model (equity based)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The service is not returned</td>
<td>The most widespread model of crowdfunding</td>
<td>The form of the microloan agreement among small investors through the Internet platform</td>
<td>Provides for the sale of a specific number of shares to individual investors in an open form, i.e. the project is offered to a wide range of potential investors</td>
</tr>
<tr>
<td>Funds are collected for various charitable institutions. For example, to treat a sick person, to build a boarding school for orphans, etc.</td>
<td>It has the nature of a subscription for a product that is the result of a project</td>
<td>Is a type of credit</td>
<td>Within the framework of the model, the following are distinguished: – collective co-financing of the company (many shareholders pay small amounts in order to earn in the future); – investment fund (shareholders create a fund in which they jointly invest in enterprises).</td>
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</tbody>
</table>

Source: developed by the author
fundamental scientific or social problems. The second disadvantage of venture financing is that the behavior of investors is closely related to the cyclical nature of economic processes, and therefore, in certain phases of the business cycle, they tend to avoid projects with a significant level of risks. Crowdfunding does not have the mentioned disadvantages of both venture financing and traditional financing of research and development. This method of financing remains limited in the amount of investment involved, and it is not suitable for large projects that require significant investments. However, it is quite suitable for most innovative projects that require small one-time investments [10]. Internet crowdfunding is just beginning to develop in Ukraine. Pioneers in this field were the "Ukrainian Charity Exchange" launched by the Viktor Pinchuk Foundation, "X-Ideas" from Nescafe and the "Velika Idea" website. The most popular Ukrainian Yu.M. Petrushenko, O.V. Dudkin. Crowdfunding as an innovative tool for financing projects of socioeconomic development is the crowdfunding platform "Spilnokost" on the "Big Idea" website. It is built according to the lean and do kickstarter principle. It is quite characteristic that the redesign of the "Big Idea" site, which enabled the crowdfunding tool to work, was itself financed through crowdfunding in the amount of UAH 38,260 [24]. The biggest success of the platform in Ukraine so far is the fundraising in early 2017 for the full-length film "Odesa Znaida" by director Heorhiy Deliyev (3.7 million UAH were raised out of the required 3 million UAH).

In order for crowdfunding to become a widely used source of financing in Ukraine, it is necessary to gradually implement a number of measures, which are presented in Figure 1. An important condition for carrying out the above-mentioned changes is orientation to foreign experience. A valuable example can be the experience of European countries, first of all, Great Britain and American countries, namely the USA. Thus, the National Securities and Stock Market Commission can use the practice of the American Securities and Exchange Commission (SEC) and publish, for a start, the Rules of Crowdfunding on the territory of Ukraine. Or, using the example of the Financial Regulatory Authority of Great Britain (FCA), which in 2014 created the Collection of Crowdfunding Rules, outline its rules adapted to Ukrainian realities. The next step should be the signing of a law like "The Jumpstart Our Business Startups" law issued by B. Obama (the so-called "crowdfunding bill") to finally legalize crowdfinancing in Ukraine as the most common type of crowdfunding.

**The conclusions.** Considering the constant development of crowdfunding, the emergence of new goals and forms of financing, attempts to give a complete definition of this concept are currently premature. In its most general form today, crowdfunding can be defined as the collective cooperation of people who voluntarily pool their financial or other resources together (mostly through Internet technology) to support the efforts of other people or organizations. Thanks to its innovative characteristics, crowdfunding has every reason to become a full-fledged player in the market of financial resources in the near future, displacing banks and other financial intermediaries in the competition. The conducted analysis proves that the most effective methods of financing modern innovations are related to the very environment of their functioning – the modern information space represented by the Internet and social networks. Through crowdfunding, innovative projects related to the development of information technologies, so-called startups, are being financed more and more today. As a result of writing the article,

| Ukrainian companies on Ukrainian and international crowdfunding platforms | | }

### Table 3

<table>
<thead>
<tr>
<th>Indexes</th>
<th>Ukrainian Charity Exchange</th>
<th>Spilnokosht (Shared cost or Spilnokosht)</th>
<th>GoFundEd</th>
<th>Kickstarter</th>
<th>Indiegogo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of supported companies</td>
<td>1631</td>
<td>156</td>
<td>20</td>
<td>82</td>
<td>2300</td>
</tr>
<tr>
<td>Collected funds, USD USA</td>
<td>3581171</td>
<td>367551</td>
<td>22165</td>
<td>1458039</td>
<td>750000</td>
</tr>
<tr>
<td>Number of benefactors</td>
<td>514512</td>
<td>21448</td>
<td>550</td>
<td>Відсутні дані</td>
<td>4500</td>
</tr>
<tr>
<td>The year the platform was founded</td>
<td>2011</td>
<td>2012</td>
<td>2015</td>
<td>2010</td>
<td>2008</td>
</tr>
<tr>
<td>The average donation amount of a benefactor on the platform, in US dollars (funds raised / number of benefactors)</td>
<td>35217</td>
<td>17,14</td>
<td>40,3</td>
<td>Відсутні дані</td>
<td>166,67</td>
</tr>
<tr>
<td>Contribution for placing the project on the platform</td>
<td>0 %</td>
<td>10-15 %</td>
<td>10 %</td>
<td>5 %</td>
<td>5 %</td>
</tr>
</tbody>
</table>

**Source:** developed by the author based on [24]
the essence of crowdfunding was investigated, and it was determined that, subject to consideration of the peculiarities inherent in Ukraine, it is possible to successfully recognize crowdfunding at the legislative level, taking into account positive foreign experience. A number of problems that exist in the way of creating conditions for the spread and implementation of crowdfunding in Ukraine are outlined. The main stages of its spread in Ukraine are proposed. Further research is needed to determine the main principles of crowdfunding, a detailed study of all existing crowdfunding platforms in Ukraine, the features of the birth and development of startups, etc. Also, after analyzing current crowdfunding trends, we can conclude that the closed nature of investing in the scientific field and business will change rapidly, as the social network affects the flow of both information and capital to scientific institutions and companies. Crowdfunding provides various benefits to a wide range of users. This is due to its flexibility, community involvement and the variety of forms of funding it can offer. The development of crowdfunding as a more distributed method of capital formation is consistent with changes in the flow and distribution of information and the creation of new production capacities. Due to its limited size, crowdfunding cannot solve all financial problems by itself. But at the same time, crowdfunding is an alternative form of financing that can complement traditional financing. The growth rate of crowdfunding in both developing and developed countries indicates that it is capable of becoming a financial tool in most countries of the world. The topic of crowdfunding in Ukraine is still quite new and underdeveloped, which has specific problems that hinder its development. Looking at this, we can offer the following recommendations regarding the functioning of crowdfunding in Ukraine:

- Formation of legislation and the corresponding legal framework in the field of crowdfunding;
- To improve methods of communication between investors and project developers;
- Increase the level of trust by ensuring a more transparent collection of funds and ease of their transfer;
- Creation of consulting services in each city, which will inform about the financing procedure and help in the design of projects.

| Acquaintance of Ukrainian citizens with the newest method of capital mobilization – crowdfunding (through mass media, periodicals, etc.) |
|-----------------|-----------------|
| Legislative regulation of crowdfunding. Issuance of legal acts and/or regulations regarding the definition of the concept, permitted types of crowdfunding, the process of functioning of platforms and the establishment of moderate taxation |
| Improving the possibility and quality of making online payments to avoid fraud |
| Maximizing the transparency of fundraising and the convenience of the transfer itself, which will increase the level of public trust in this method |
| Increasing the responsibility of project authors for the startup nomination process, which should be based, first of all, on market research and compliance of the proposed product with truly innovative and strategically important goals (for example, sustainable development goals) |
| Promote the spread of crowdfunding platforms by establishing preferential taxation or state support in the first (pilot) stages |
| Establishing interaction with the banking system in the field of spreading crowdfunding as an alternative method of financing |

Figure 1. Stages of the spread of crowdfunding in Ukraine

Source: author’s development [27; 28]
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