The Crowdfunding Platforms Financing Models Analysis

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Abstract. The present article is devoted to crowdfunding, an innovative direction. Crowdfunding is a modern method of project financing securing that allows a large number of people (individual investors and startups) to attract money for financial, commercial, cultural and social projects online, often in exchange for future products and services. The purpose of this study is to discuss and present the potential of crowdfunding as an integral part of the investment infrastructure including the analysis of models providing crowdfunding platforms financing. This target is achieved through a systematic approach involving empirical research analysis, bibliometrics analysis and publication content analysis. The main theoretical constructions and conclusions are based on the evolutionary theory of crowdfunding platforms. The assumption of the study is that a crowdfunding approach can increase the innovative projects financial and commercial success. Crowdfunding is growing in the United States and has successfully become a new form of project funding. The authors describe the experience and the structure of business ideas and startups crowdfunding using the example of the Kickstarter, a technological platform for social innovation in the United States. The authors assert that this experience can not only be successfully transferred to Russia but can also become an effective mean of attracting foreign investors to the country’s economy. Authors consider the essence, forms, advantages, disadvantages and perspectives of crowdfunding in this context.

1 Introduction

Attracting funding and investments for innovative projects and solutions is an urgent problem at the current stage of economic development of any country especially during the financial crisis. There are many forms of financing for the development of projects in our country such as leasing, franchising, know-how, loans, bonds, factoring and investment forums but the problem of attracting investment funds remains unsolved. The development of information technology (IT, ICT) and increased access to the Internet provide financial conditions for the creation of specific innovative mechanisms and financing the projects initiation in all sectors of the economy. The topic of this article is relevant and modern on such background.

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Innovation is an important force of economic growth and development in the long term. It can be defined as the process of bringing new products, market services and production solutions and technologies to market resulting in new profitable enterprises and well-paid jobs.

The lack of internal and external funding sources is a major challenge for the development and commercialization of innovative products in both manufacturing and non-manufacturing sectors. Financing innovative startups and relevant business ideas is a difficult process due to lack of experience and resources and high risks. Many projects were abandoned because of the lack of funding mechanisms. However, the development of IT and the world’s transition to a digital economy has created new opportunities to overcome these disincentives. Crowdfunding is one of the digital (information platforms which is widely used in the US and allows investment in higher-level projects.

Crowdfunding is a method of financing a project or business by collecting huge amounts of small money from a large number of people, usually on the Internet. In other words, crowdfunding helps entrepreneurial and business ideas. Many articles exploring the emergence of crowdfunding, its mechanisms and the potential economic and entrepreneurial significance of its development have been published on the Internet recently [2-5]. Crowdfunding can be divided depending on the way the target entity and investors are rewarded (Figures 1, 2).

![Crowdfunding classification by the purpose](image)

**Fig. 1.** Crowdfunding classification by the purpose
Fig. 2. Classification of crowdfunding by the type of the reward

Depending on the collecting type crowdfunding can take the following forms:
1) Community grant - the funder participates but does not gain any financial benefit.
2) Non-cash returns - investors participate to get a new product or service.
3) Financial reward (crowdinvesting) - the investor's participation in the project and income from selling new developed products/services or having a stake in the project.

Thus, crowdinvesting in its turn is represented in the following forms:
- royalties - a share of profit from the project;
- private loan - the providing a credit at a predetermined interest rate and for a predetermined period;
- share financing - the purchase of the company’s stocks.

2 Materials and Methods

The author used such general scientific methods as analysis, synthesis, statistical method, method of abstract thinking, etc. in the research. In addition, a large amount of periodic and statistical material has been analyzed.

3 Results and Discussions

The effectiveness of using the crowdfunding platform is based on the example of the Kickstarter, a successful crowdfunding platform. Kickstarter is “a crowdfunding site founded in 2009 in the US to raise money for creative, scientific and industrial projects”. Kickstarter “funds various projects including cinema, comics, video games and music” [6]. Fundraising for communities is mainly done through crowdfunding platforms (CFPs) - online platforms that bring donors and financiers together to fund specific events. Projects have different characteristics and financiers’ preferences vary from project to project. In contrast to dating or real estate platforms, crowdfunding platforms do not work on one-to-one basis but on one-to-many basis which means that multiple sponsors are required for a project and targeted funding is to succeed. Although this feature is specific for many crowdfunding platforms, incentives for backers and sponsors to offer specific projects significantly vary depending on the type of the platform.

However, crowdfunding platforms are characterized by the fact that they fund only projects that achieve a predetermined and published funding goal. The platform-participant which supported the project with a promise of funding is obliged to provide the funds only
if the funding target indicator is reached. If the funding target is not reached the project is not funded and therefore cannot be implemented.

Global and Russian crowdfunding platforms analysis

The first crowdfunding platform is the Artist Share Project, a crowdfunding music site founded in the US in 2000. Its origins can be traced to the recent spread of such phenomena as microfinance and crowdsourcing as well as the popularization of the Internet which has led to the new crowdfunding platforms emergence. Totally, there are more than 450 crowdfunding platforms in different regions 41% of which are located in the USA, 9% in France, 7% in Germany and 1% in Russia [6].

As we stated, Kickstarter is the world’s largest crowdfunding platform operating online since the end of April 2009. More than 20 million people have provided financial support and helped to raise $5.8 billion and more than 200,000 projects have been successfully funded since then. It is known for the record-breaking collection of inventions and computer games. The flagship of Russian crowdfunding - Flipper Zero (“a tamagotchi hack” which can control all kinds of electronic devices) - raised $4.8 million. The campaigns on Kickstarter can be run by adult residents who must have a bank account in one of 21 approved countries. Russian entrepreneurs need an intermediary or a company registered in another country. The cost of the site is 5% and the remaining 5% is the aggregator commission.

Zopa is the world’s first CP - a crowdfunding platform that has raised more than £5 billion from nearly half a million borrowers since 2005. During that period investors raised more than £350 million totally. Loans up to £25,000 are offered. The platform received a banking license in 2020. It is open to the UK residents.

MicroVentures organized in 2009 became the first venture capital firm in the financial sector to launch a publicly available investment platform. Venture capitalists, accredited and unaccredited organizations and investors can invest financial resources in proven innovative startups. 110,000 investors have invested more than $220 million in more than 400 companies on this platform.

Planeta.ru - the authors of the platform raised about 1.5 billion rubles and successfully implemented more than 6,500 projects on various topics during nine years of its existence. In addition, the company is actively developing services for authors and project participants including a crowdfunding school, a video course “crowdfunding.rf”, a store “crowdfunding.rf” and its own transport logistics service.

There has been a funding program for the authors of “Support the Planet” since the middle of 2020. Special projects are presented and cooperation with large brands is established on a regular basis. The program works according to a flexible 50% model which considers the project successful if more than half of the required amount is obtained. The commission for using the platform and payment systems is from 15% to 10% depending on the obtained amount. There is no commission at all in case of an unsuccessful fee.

“Potok” - Alfa-Bank’s crowdfunding platform launched in 2016 has become the largest online lending service for small and medium kinds of business in Russia. By the end of 2020 the total amount of loans issued through the platform exceeded 10 billion rubles. More than 11,000 investors are registered on the platform. The average real return on a pre-tax portfolio is 29.8% in relative terms. It is important to note that borrowers can receive from 100,000 to 20 million rubles for business development.

The loan period is from a week to a year. There is one-time commission for considering an application which is 3% of the loan amount. There is no commission for investors.

Only in the first quarter of 2022 the total of investments made through crowdfunding platforms exceeded 3 billion rubles. The crowdfunding market noticed a positive increase in the number of authorized companies, the amount of transactions and the customers’ base expansion in 2021. It is important to note that the market continued to grow in the first
quarter of 2022 despite the new challenges. There are currently 61 investment platform operators. Crowdfunding using collective funds to finance projects is the most common and it is expected that its share will be 64% or 9.06 billion rubles in absolute conditions in 2021. 2.29 billion rubles were raised in the first quarter of the current year. This sector attracts investments at a growth rate of 15-35% per year [4].

The second category is crowdfunding collective investment through the purchase of corporate securities. The issuer raised 4.74 billion rubles in 2021 and 1.06 billion rubles in the first quarter of 2022.

Crowdfunding is becoming not only an innovative but also a promising and popular financial instrument for many investors and borrowers when capital markets and investment opportunities are becoming less. The quality of services offered by investment platform operators is growing due to the strong competition on the market.

According to IOSCO (International Organization of Securities Commissions, an international financial organization that unites national securities market regulatory bodies) and some other researchers, crowdfunding platform models can be divided into several categories by some basis [1, 10]. These models suit best for leverage investment mechanisms which crowdfunding is while organizational procedures for the allocation of funds between crowdfunders and investors suit well for crowdfunding platforms working with other forms of investment. Models can be differed as following:

- With a segregated client account;
- Notary;
- Balance;
- Guaranteed return;
- Offline.

The Notary model is a business model for the implementation of lending where an intermediary crowdfunding platform assumes the functionality of an intermediary between investors and borrowers [9]. The Borrower visits the online platform resource and submits a completed loan application form. The borrower’s risk profile is analyzed and the application is approved according to the insurance rules of the creditor bank. The borrower’s loan application is usually published on the platform website and is available to see for the investors. The creditor bank transfers the loan amount to the borrower as soon as a sufficient amount of investor funds enters the account. The borrower pays the investor’s funds back to the creditor bank after the loan is made. Investors who have invested in the project receive amount confirmation on the platform.

Funds are provided by the partner bank and redistributed through the platform in the Notary model. This model takes the regulator’s requirement that the lender must be properly registered (if a license is available) into account. The funds issued by the partner bank remain on the bank balance from one to two days. After they are transferred to the platform and distributed to crowdfunders in the form of special documents which are qualified as documentary assets - securities - in a number of jurisdictions. Thus, the risk of the default is transferred from the issuing bank to the crowdfunding platform. But in the Notary model the risk of the default is transferred from the issuing bank to investors themselves.

In the model with a segregated client account the contract between the guarantor and the investor is signed through a crowdfunding platform which connects the guarantor to an individual borrower. Investors can provide money to individuals or companies to finance projects by the following ways:
- auto search (an automated search based on random selection method and placement of applications on the platform);
- beneficiaries make their own choices from all applications according to their preferences.
In contrast to the notary model with separate customer accounts, the issuing bank does not participate in the process and the exchange of money goes directly between the lender and the borrower. The platform acting as an intermediary receives incomes and covers its outcomes by charging various commissions from loaners and sponsors to cover organizational and administrative expenses as an example.

P2P platforms can separate the funds of investors and depositors from the balance sheet of the platform where they are located and store them in legally separated client accounts. In this case platform client users usually do not have access to their funds in case of a platform crash.

Balance model. In the balance or portfolio model of lending implementation the platform extradites loans directly to crowdfunders and stores them on the balance.

The platform receives income from interested margin. As well as the other models, platforms charge additional fees such as loan management and various commissions.

The role of platforms in the guaranteed return model has significantly expanded. The platform establishes the terms of the fund and offers investors guaranteed income (usually 8-10%) agreed with the sponsor [8]. There may also act as a “third party”, an organization or structure that vouches for a sponsor’s investment and guarantees returns. This model is similar to creating a reserve fund for projects that have faced difficulties. However, the reserve fund consists of mandatory contributions from investors and sponsors in this case. This model requires direct interaction between the platform and the company to assess the overall loan worthiness of the company. The guaranteed return model is very popular in China (abbr. PRC).

Offline model. This crowdfunding model originated in China and spread across the country the same as the previous one. This model uses direct sales channels and offline methods to attract supporters including personal loan approval process. Once the project is funded and presented to the backer, the platform raises money on his behalf on its own. This model fits a certain Far Eastern mentality where some Chinese sponsors and backers want more personal contact and the opportunity to meet and get to know each other closer before the process of investing starts. This model is characterized by a small number of investors and low returns.

Different countries use different approaches to platform regulating. For instance, the UK platform’s finances and funds raised with it must be shared. If a platform becomes insolvent and the lenders no longer have access to raised funds those are returned to investors. By working with financial institutions existing, institutions (banks, clearing houses) and focusing on retained funds (rather than reinvesting unused funds) platforms can avoid regulation as financial service providers and can comply with the regulator’s requirements as financial settlement service providers.

Here is the review of the crowdfunding platforms classification depending on the success or failure of the crowdfunding process in raising funds for project initiators. Practically, there are several main funding models in the world.

1. All-or-Nothing - the funds are paid if financial goals are achieved. If the goals are not achieved the funds are returned to the sponsor.
2. Keep-It-All - the raised money is paid out whether the goal is achieved or not. It is usually used in combination with a critical mass model.
3. Free donation - the sponsor determines the price of the product being created (e.g., a record or a book)
4. InDemand - a continuing model where financing is integrated into the stages of lending, reservation and customer attraction.
5. Tipping Point - the transferring of the raised funds when a “tipping point” is reached.

In the first case, AON platform establishes a targeting mechanism (required investments) and if the project financing campaign fails the company does not retain...
investment fund and the sponsor does not receive remuneration. This model is usually chosen by entrepreneurs who want to make it clear to potential sponsors that they are ready to undertake the project only if enough funds are raised. For this reason, AON projects are usually larger and more successful and investors are more sensitive to information provided by the sponsors.

The platform retains the user’s investment regardless of whether the required investment is made in contrast to the KIA model. This model is preferred by developers who can afford the long-term implementation of their projects. Return-on-focused investors prefer this model even if returns are sometimes reduced or delayed.

Douglas J. Cumming, Gael Leboff and Armin Schwienbacher analyzed more than 47,000 crowdfunding platforms on Indiegogo in their studies “Crowdfunding Models: Success or Failure”. They analyzed projects where participants could choose between AON and KIA models [7]. Most people chose the KIA project but the AON project was more successful (Figure 3).

![AON and KIA projects ratio](image)

**Fig. 3.** AON and KIA projects ratio
In general, the largest crowdfunding platforms analysis shows that the average income from one crowdfunding campaign is from 4% to 15% of the funds raised depending on the country and the product focus of the platform. Some platforms also offer the following payment options:
- a filing fee for companies presenting their business idea on the platform for the first time;
- a filing fee charged to cover the platform’s application processing expenses is a percentage of the application amount or a fixed amount;
- late payment interest.
There are other ways for donors to invest their funds in addition to the main models described above:
- “free price” when the donor determines the donation amount by himself;
- predefined payment amount;
- automatic payment for sponsored subscriptions.
Thus, each of these models classifies crowdfunding platforms according to the type of organization that implements the transfer and exchange of funds between donors and supporters. Each crowdfunding platform matches a model that fits its goals and the legal system of the country where it is located.

4 Conclusions

The following conclusions can be made based on the study:

The main disadvantage of crowdfunding is that it is a time-consuming process: it is not enough to place a project on the platform but it needs to be constantly promoted. It is important to note that some entrepreneurs manage to create a community through crowdfunding but as a rule the community presence is an important factor determining the crowd-campaign success.

Community funding is not suitable for authors who are not ready to make efforts for promoting their projects. However, such efforts are justified. They can not only earn more money but also have the advantage of free demand for their products.

Giants with the global fame - Xiaomi and Amazon - have created their own crowdfunding platforms for conceptual marketing research. Crowdfunding is used as an effective PR tool to attract partners and additional attention. It could be a round of pre-investment or a way to gain pre-orders and compensate the final sale.

In comparison with crowdfunding which does not require much effort to move the project forward, the platform has already registered investors searching for funding and is constantly trying to attract new investors.

However, borrowers may fluctuate due to higher interest rates and the need to work with more investors in comparison with traditional funds. Mutual funds and crowdfunding are not suitable for startups or business that has not made an operating profit during at least one reporting period.

Speed and automation are the undoubted advantages as loans are registered remotely and far faster than in traditional banks.

In general, modern computer technologies have significantly increased the amount and the dimension of innovative projects funding in various industries, created a transparent competitive environment, expanded the geographical boundaries of participants and reduced the expenses associated with bureaucracy and corruption. However, the effectiveness of crowdfunding platforms highly depends on information security measures. We suppose that crowdfunding platforms for social innovations can be an effective mechanism ensuring high visibility of cash transactions for improving funding innovative startups, business ideas, researches and developments. The example of Kickstarter proves
our conclusion that this platform has a great potential to develop innovations and attract investors.

References