THE CROWDFUNDING TECHNOLOGY IN DEVELOPMENT OF THE NATIONAL TOURISM SYSTEM

Abstract. The article substantiates the sense of crowdfunding and determines a list of participants of crowdfunding projects. The author has proposed a scheme for implementation of a crowdfunding tourism project, indicating the main stakeholders. The author has substantiated directions of implementation of projects, using crowdfunding in the national tourism system. The author has suggested a “house” of crowdfunding for projects of the national tourism system. The article determines advantages and disadvantages of crowdfunding for the main stakeholders and the society.

Keywords: crowdfunding, crowdfunding technology, national tourism system, tourism projects, project stakeholders, direct beneficiaries of a project, investing

JEL Classification: E22, L83, O017

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КРАУДФАНДИНГОВІ ТЕХНОЛОГІЇ
В РАЗВИТИИ НАЦІОНАЛЬНОЇ ТУРИСТИЧНОЇ СИСТЕМИ

Аннотация. В статье обоснована сущность краудфандинга и краудфандингових технологий, определен круг их участников. Предложено процесс реализации краудфандинга туристического проекта с указанием основных стейкхолдеров. Обоснованы направления реализации проектов с помощью краудфандинга в туристической системе. Предложено «архитектонику» краудфандинга проектов национальной туристической системы. Определены преимущества и недостатки краудфандинга для основных стейкхолдеров и общества.

Ключевые слова: краудфандинг, краудфандингові технології національна туристична система, туристичні проекти, стейкхолдери проекту, прямі бенефіціарні проекту, інвестування.

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Introduction. In the postindustrial society, a national tourism system is a component of social and economic, cultural, and international development of countries. According to statistical reports of the World Tourism Organization (UNWTO), growth rates of amounts of world tourism flows have accounted for 6% per year and growth rates of foreign exchange earnings from tourism activity have accounted for 14% since the ‘50s of the 20th century. These figures are higher than annual average rates of world economy growth. Experts of the UNWTO prognosticate a 4–5 percent annual increase of total tourism flows and a 5–7 percent increase of revenues from international tourism travels [1]. The scale as well as social and economic potential of the tourism system together with its multi–functionality oriented towards satisfaction of a complex of tourists’ consumptive needs require a portfolio of projects to be put into action. This portfolio includes tourism, infrastructure, event, image, information, and communication projects. At the same time, the projects contain components such as marketing, financial and information support, technologies, staff, logistics regardless of the level of their implementation (local, regional, national, and global).

Usage of innovation technologies, particularly crowdfunding, in the projects is important for maximization of the positive social and economic influence of the tourism system on the national economy state. Construction of the world–famous tourism attraction Eiffel Tower is a result of crowdfunding application. This fact is an argument in favor of the above–mentioned statements.
Summarizing the indicated arguments, the authors state that a necessity of application of new technologies for minimization of contradictions between goals of functioning of tourism activity entities and social economic tendencies of development of the national tourism system increases under conditions of environment instability, unconducive conjuncture, and escalation of competition in a tourism service market. A need of studying a vector of crowdfunding technology application in tourism activity is of particular importance for solving this scientific problem.

**Analysis of recent researches.** Significant conceptual frameworks of application of crowdfunding and corresponding technologies are considered in scientific papers of P. Belleflamme, T. Lambert, and A. Schwienbacher (P. Belleflamme, T. Lambert, A. Schwienbacher, 2013) [2]. The scientists have explained substantive aspects and the main forms of crowdfunding project implementation. L. Kuts [3] and Yu. Herneho [4] have analyzed a process of investment funds accumulation based on crowdfunding in their papers. A set of scientific papers of O. Marchenko [5], Z. Tiahunova, and V. Bondarenko [6] contains substantiation of social and economic conditions and the practice of crowdfunding implementation in Ukraine and in the world. L. Kovalenko and N. Kolotova [7] have presented results of the analysis of crowdfunding platform activity and implementation based on tourism projects. Comparative analysis of scientific papers on crowdfunding enables to reveal partiality and ambiguousness of theoretical and methodical developments regarding application of their results in management of the national tourism system.

An article purpose is to substantiate a vector of application of crowdfunding technologies in implementation of tourism projects and indication of their value for development of the national tourism system.

**Results.** The national tourism system as dynamic structure is based on implementation of tourism projects, in which a project triad “time”, “budget”, and “quality” underlie project functioning. Existence of restrictions imposed on a project requires usage of innovation technologies. At the same time, crowdfunding is able to become a regulator for funding of a tourism project budget under conditions of financial resource scarcity. Comparative analysis of a concept “crowdfunding” [2; 3; 4; 8] enables to indicate that its economic sense encompasses:

- efforts of entrepreneurs regarding financing of projects based on implementation of financial funds owing to Internet–technologies;
- a process of implementation of financial resources based on Internet–technologies aimed at achievement of goals;
- exchange of financial resources for a product as a future preference according to results of project implementation;
- a mechanism of consolidation and distribution of relatively insignificant financial contributions from persons in exchange for shares or obligations of financial return and other non–financial benefits.

Consequently, the scientific community has formed a position regarding defining crowdfunding as a source of involvement of financial resources. Therefore, there are reasons to mention that crowdfunding is multi–functional instrument, which enables to:

- raise funds for a project;
- promote a project (brand), even before the beginning of its implementation or possibly after unsuccessful collection of funds;
- organize and monitor a project;
- form loyalty on the part of investors and other groups of stakeholders. Correspondingly, it is expediently to indicate the main stakeholders of crowdfunding:

  a) authors of a project (direct beneficiaries are “transferees of charitable assistance payments, who receive benefits from one or several benefactors to achieve certain goals” [9]), who seek to put a particular innovative project into effect. It is important to use crowdfunding in start–ups being “a partnership of two or more persons formed to create an innovative product or a service, which is at the beginning stage of entrepreneurial activity with scarce resources and needs additional venture investments” [10, p. 287];
b) a crowdfunding platform is an Internet–platform, which accumulates information on projects demanding financing and allows access to content–resources of each project;
c) investors (sponsors, philanthropists), i.e. persons, who potentially interested in idea implementation and give money to translate the idea into reality;
d) banks, which are used for carrying out banking transactions; nevertheless, the authors highlight that crowdfunding minimizes the role of intermediaries, particularly banking institutions; such effect strengthening an economic component of crowdfunding; the authors informs on appearance of branchless banks being “banks, which function only within a network, i.e. they are elements of a distributional strategy, which is applied for providing customers with financial services without usage of banking branches (offices)” [11, p. 649];
e) consulting agencies, PR–agencies, legal services firms, and experts as consultative participators;
f) implementers of information support (social networks, mass media, opinion leaders, bloggers, particular sponsors, philanthropists).

Researching a vector of application of crowdfunding in development of the national tourism system, the authors underline expediency of inclusion of marketing technologies in a crowdfunding technology portfolio. The mentioned fact is stipulated by properties of the national tourism system, which is a component of an economic system and is based on inter–sectoral interaction of the spectrum of economic entities regarding projecting, production, implementation, promotion, and organizing tourism product consumption. Tourism projects implemented within this system stipulates a multiplicative effect, which emerges due to aggregated nature of tourism activity. Research of the national tourism system enables to determine that its successful development requires involvement of basic crowdfunding technologies as well as marketing technologies aimed at providing promotion of a project (projects) in a market. The outlined propositions regarding extension of limits of understanding crowdfunding is oriented towards stimulation of components of the national tourism system. Correspondingly, the authors suggests defining crowdfunding as a time–bound synthesized mechanism of common funding and promotion of a project (product) through Internet–technologies based on involvement of financial investments of stakeholders for future preferences.

Such definition of crowdfunding indicates the sense of crowdfunding technologies as a set of financial, marketing, information and communication technologies, and psychological methods and instruments aimed at involvement of financial resources for a project, its promotion, and putting into practice.

Figure 1 shows a process of putting a crowdfunding tourism product into effect, indicating the main stakeholders.

Having assessed activity of the known world crowdfunding platforms Kickstarter\(^1\) [12], IndieGoGo\(^2\) [13], the specialized tourism platform Travelstarter [14], and the Ukrainian platform Spilnokosht (Big Idea) [15], the authors indicated generalized expenses of direct beneficiaries (authors) of a project for carrying out a crowdfunding campaign. They are as follows:

a) platform charges (approximately 5%);
b) payment system charges (5%);
c) income tax (according to legislative norms);
d) expenses for bonuses, gifts to investors for financial assistance, and gift delivery.

\(^1\) Kickstarter : 121,000 of projects during eight years; a sum of raised funds accounts for more than $2.9 billion; thirteen million investors (a commission fee – 5%); it uses the payment system Amazon Payments (a commission fee – 5%);
\(^2\) IndieGoGo : a commission fee – 4%; the payment system PayPal (5%, in some cases they may compensate fees).
In order to analyze prospects of crowdfunding development in Ukraine, the authors have analyzed amounts and sources of funding capital investments [16, p. 36] (Table 1).

Analyzing data of Table 1, the authors make the following conclusions:

- during 2010–2015 the trend of amounts of capital investments in the national economy of Ukraine looks positive regardless of fluctuations (2013–2014), particularly the rate of growth for the indicated period accounted for 51.2%;
- the main sources are as follows: own funds of companies and organizations, a share of which vary within 61.1–70.5%, banking credits and other loans (7.6–15.2%), and population funds for housing construction (7.3–11.7%); other five determined sources of financing (funds of the state budget, local budgets, foreign investors, domestic investment companies, foundations, and other sources of financing) are inconsiderable and their share accounted for 0.4%–7.2% during the indicated period;
- other sources of funding, which may potentially include crowdfunding, vary within 2.1–2.9%.

**Fig. 1. The implementation of tourism project crowdfunding**

Source: Developed by the authors

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- other sources of funding, which may potentially include crowdfunding, vary within 2.1–2.9%.
Taking into account the above–mentioned data, there is a need to activate and popularize involvement of financial funds for implementation of national tourism projects through crowdfunding technologies. Nowadays, investing own or outside funds and venture investing are the main methods of involvement of investments for implementation of innovative tourism projects. Nevertheless, implementation of national tourism projects, which is based only on the indicated methods, may bring particular disadvantages and restrictions: a) full or partial absence of own funds and high credit rates; b) a high level of a risk for venture capital.

From this standpoint, crowdfunding, which is “a phenomenon and the beginning of formation of a new financial market segment – a market of alternative funding” [17, p. 5], may become a real source of financing. Implementation of tourism projects based on crowdfunding allows a beneficiary as a crowdfunding subject to obtain a real financial result.

The authors have further analyzed dynamics and amounts of capital investments by type of economic activity, which form the national tourism system (Table 2).

Dynamics and amounts of capital investments attracted in the tourism system of Ukraine by certain types of economic activity\(^4\) for the period 2010–2015 (values at factual prices, million hryvni)
Having considered the data of Table 2, the authors conclude that: a) an amount and a flow of investments in the tourism system during the last five years, which have increased until 2013, dramatically reduced during 2013–2014, and gradually increased in 2015, do not express the general situation regarding investment processes in Ukraine; b) since amounts of investments in the tourism system are inconsiderable, it is expedient to apply crowdfunding.

According to the data of the national crowdfunding platform Spilnokosht [15], 14 projects (8.6% of a general amount of platform projects) have been implemented during 2014–2016 (Table 3).

Dynamics of amounts of tourism projects implemented through the platform Spilnokosht for the period 2014–2016

<table>
<thead>
<tr>
<th>Figures</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Total for the period 2014–16</th>
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<tr>
<td></td>
<td>units</td>
<td>share of a general amount of platform projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of successful projects</td>
<td>2</td>
<td>2</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Amounts of raised funds, thousand hryvnias</td>
<td>37,8</td>
<td>38,2</td>
<td>648,5</td>
<td>834.7</td>
</tr>
<tr>
<td>Number of investors, persons</td>
<td>156</td>
<td>52</td>
<td>1100</td>
<td>1393</td>
</tr>
<tr>
<td>An average amount of contributions from one investor, hryvnias</td>
<td>242</td>
<td>733</td>
<td>589</td>
<td>599</td>
</tr>
</tbody>
</table>

Source: [15]

One thousand ninety three investors have collected 834.8 thousand hryvnias within the framework of the indicated projects. On average, one investor has contributed 599.0 hryvnias, which is 29.6% more than an average amount at the platform (462 hryvnias). Dynamics of amounts of tourism project implementation through the crowdfunding platform looks positive. Two projects have been implemented during 2014–2015. In 2016 investors supported implementation of 10 projects. In two months of 2017, the platform enabled implementation of two projects.

Under contemporary conditions, it is expedient to apply crowdfunding technologies in the tourism system in order to activate growth of tourism flows. These technologies enable to achieve the following goals:
- creation of new tourism products, tourism means (catalogues, guidebooks, vehicles, infrastructure objects, mobile applications, e-guides, etc.);
- restoration and renovation of cultural and historical objects, vehicles, infrastructure objects, etc.:
- involvement of new objects for a tourism process (industrial, natural, social and cultural, ethnographical);
- organizing events and trips;
- formation of a brand of tourism destinations.

Aims of crowdfunding technologies application consist in determination of factors, which form the motivation context of financial funds involvement. The system approach used for substantiation of conceptual frameworks of crowdfunding and critical analysis of tendencies of its formation enable to form organizational architecture of crowdfunding related to implementation of projects in the context of the national tourism system. Consequently, preconditions of application (encompass factors influencing expediency of crowdfunding technology application), a crowdfunding process, which allows a beneficiary as a crowdfunding subject to obtain a real financial result, and a social effect of crowdfunding form the system framework of crowdfunding projects of the national tourism system (Figure 2).
Having specified the sense and the system framework of crowdfunding projects of the national tourism system, the authors theoretically substantiated and detected particular advantages and disadvantages for stakeholders and a society (Table 4).

Summarizing researches of the conceptual frameworks of crowdfunding technologies application for efficiency of functioning of the national tourism system, the authors make several important conclusions. Firstly, crowdfunding technologies may become an effective instrument for raising foreign investments and a means of formation of the national tourism brand, which is “a key factor of success and a competitive advantage in the globalized world” [18, p. 42].

Obviously, crowdfunding is not a panacea for addressing problematic matters related to financing and promotion of tourism projects. Usage of crowdfunding is possible as an element of a package of different measures. Thus, implementation of crowdfunding ideas will conduce to receiving a social and economic benefit for development of the national tourism system through diversification of tourism product supply and the increase of tourism attractiveness. Therefore, the national economy may obtain a synergetic and multiplicative effect.
Advantages and disadvantages of crowdfunding for the stakeholders of project

<table>
<thead>
<tr>
<th>Advantages for investors</th>
<th>Disadvantages for investors</th>
<th>Advantages for society</th>
<th>Disadvantages for society</th>
</tr>
</thead>
<tbody>
<tr>
<td>presentation of own project to a wider audience</td>
<td>feeling of involvement in a socially important project and participation</td>
<td>existence of a socially important idea, a project, which may unite the population</td>
<td>a risk of rejection of a project by a society</td>
</tr>
<tr>
<td>receiving necessary financial resources in a short period</td>
<td>formation of investment portfolio</td>
<td>decentralization of investing</td>
<td>a risk of failure to obtain necessary financial resources</td>
</tr>
<tr>
<td>unique support and advertising by word of mouth</td>
<td>receiving information on an investment object</td>
<td>conducting to competition growth</td>
<td>a need for permanent involvement in a process</td>
</tr>
<tr>
<td>means of the decrease of an entrepreneurial risk</td>
<td>simplification of investment processes (owing to the Internet)</td>
<td>financial stability for the economy</td>
<td>a conflict of interests</td>
</tr>
<tr>
<td>extension of opportunities for monitoring a project</td>
<td>an opportunity of selection of an investment object</td>
<td>shifting problems regarding search of financial resources to other subjects</td>
<td>possible “theft” or “interception” of ideas</td>
</tr>
<tr>
<td>equalization of uneven distribution of information (information asymmetry) on a project</td>
<td>the decrease of inflation risks</td>
<td>possible reputational losses</td>
<td>a risk of carrying out banking transactions through the Internet</td>
</tr>
<tr>
<td>application of innovative Internet–technologies, expansion of Internet–banking</td>
<td>development of individual and social creativity</td>
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</table>

Source: developed by the authors

Conclusions. Researches of conceptual frameworks of building the efficient national tourism system require a symbiosis of innovative Internet–technologies, tourism projects, socially active stakeholders (legal and natural persons) in the form of crowdfunding. Application of crowdfunding technologies in the national tourism system of Ukraine expresses global trends and is influenced by factors of an environment and national mentality. Regardless of particular experience of application of crowdfunding in development of tourism projects of our country, crowdfunding is not the widespread practice. At the same time, there is positive dynamics of crowdfunding, which is stipulated by social and economic, political, and psychological factors. Crowdfunding technologies are able to actualize a vector of alternative innovative fundraising, promotion of tourism projects, and gaining social benefits.

Литература
