

## NEW APPROACH TO FINANCIAL SUPPORT ORGANIZATION OF UKRAINIAN ENTERPRISES' MODERNIZATION

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*Abstract. One of the main conditions for innovational modernization is its proper investment support, which in the current Ukrainian situation is quite problematic. Problems of financial support modernization of Ukrainian enterprises are due to shortage of investment resources, primarily at small and medium enterprises, insufficient capital market development, credit resources that are too expensive. Solving this problem is seen in finding new approaches to financial modernization providing. The authors proposed a new approach to the development of financial support of Ukrainian enterprises innovative modernization that is based on their institutional support and the use of crowdfunding technology and requires the establishment of particular industry regional associations and their working elements - Centers of enterprises' modernization. Formation of such associations as part of the regional modernization fund will contribute to financial security problem solving of Ukrainian enterprises modernization.*

*Key words: modernization of enterprises, collective financing, crowdfunding, regional fund of enterprises' modernization, center of enterprise' modernization development.*

### 1. Introduction

One of the main conditions for the enterprises' modernization of any economic sphere is its proper financial support. The situation with the modernization' financial support of the Ukrainian enterprises of fat-and-oil industry is characterized by investment resources deficit, and in the country there is inefficient amortization policy, underdeveloped capital market and, consequently, limited opportunities for investment sources. Finding ways to solve this problem brought us to the understanding that further development of these processes depends on the availability and effectiveness of new forms of funding and institutional support to enterprises.

### 2. Materials and Methods

The crisis that is growing in Ukraine, technical and technological state of enterprises and their lack of funds, increasing requirements for product quality and opened by European community opportunities to enter European markets, force our manufacturers (especially small and medium) to be more inclined to the opinion on whether consolidation is the issue of financial support for innovation modernization. It is clear that market conditions have competition among producers, which by its nature supposedly prevents such consolidation. But foreign survey of development projects successful implementation indicates that in such situations, companies have to operate on the principle of optimal combination of competition and consolidation. Addressing innovative modernization is seen in such enterprises, firstly, as a voluntary association of their regional associations and, secondly, as the application

of such associations within the elements of crowd sourcing technologies.

During the study of problems of enterprises' financial security modernization we used methods: factor analysis of economic phenomena or the study of factors influencing modernization processes in enterprises; optimization of economic decision-making or determining priority of modernization investment projects of the regional development fund modernization.

### 3. Results

International experience suggests Regional Development Agency (RDA) as a form of institutional support of regional development. According to the foreign experts, such agencies "are cooperating with local and central authorities as focal centers for strategic planning and territorial development of supported projects, they ensure effective cooperation of authorities-business-community and create a qualitatively new economic environment" [1, p.3].

The issue of regional development agencies as a basis for the infrastructure development of Ukrainian regions went up back in 2001. As it is stated in [2, p.72] Regional Development Agency had become "the moderator of the regional development process." Unfortunately, this did not happen. The legal status of these agencies has not been recognized by the government. But at this time in some regions of Ukraine non-profit organizations emerged and are the analogues of Regional Development Agencies. The experience of these institutional structures shows that not all of them solve the problem that based on the international experience of such structures, should be inherent to their essence.

Today's challenges require modernization` problems solving of the innovation conditions of enterprises as they are unable to solve them alone. Conducted analysis has showed, that primarily it is concerned with medium and small enterprises, which mostly no funds to modernize or specialists in modernization potential` evaluation, they don't know how to develop strategies, programs and projects of modernization. Addressing the problems of enterprises` innovative modernization is seen by us in applying the elements of crowdsourcing technologies.

Crowdsourcing is a technology of intellectual cooperation of combined by social media networks implied knowledge agents that are aimed at creating a joint intellectual product; technology network integration of many people implied knowledge, the intellectual interaction of which has no territorial, corporate, professional, social, cultural and other restrictions [3, s.113].

Analysis of international experience showed that in recent years there is widespread use of crowdsourcing technology as a tool for project funding at the level of the enterprise. Crowdsourcing technologies are: crowdfunding, crowd strengthening and crowd recruiting. The most common among them is crowdfunding, which is defined as "collective purse".

It should be noted that the term "crowdfunding" has appeared not so long ago, but the idea of collective funding is not new. Breakthrough for crowdfunding technology has occurred in 2012. According to [4], in 2012, the world held more than 1 million of successful fundraising campaigns for various business and social projects. The amount of funds raised via crowdfunding platform was 2.7 billion USD [4, p.80].

Recently among entrepreneurs there is an understanding that the quickest and most effective way to solve the problem of finding resources for their own development is not in the search of the cheapest credit or lobbying the authorities, but self-financing, including the use of crowdfunding [3, p. 117]. We consider the use of appropriate crowdfunding technology as "collective purse" in funding of oil and fat enterprises` innovative modernization.

The initial phase of this technology is the formation of so-called crowdfunding platform, or the initiator (enterprise) which begins this idea of related businesses consolidation. Through voluntary association of companies that are located in a particular region, the regional association of enterprises will be created to address the issues of modernization development. Creation of a regional association of enterprises` modernization must be done, in our view, according to the following principles:

- Voluntary entry on the basis of common interests`;
- Industry sector;
- Regional location;
- Equality of participants;
- Organization of relations between the members on a contractual basis;
- Collegiality;
- Self-financing;
- Self-management.

The working body that will contribute to the modernization problems` solving of enterprises-members of the association should be, in our opinion, the Modernization Center of enterprises-members of the regional association (MCR).

MCR is the institution that is formed in the region to promote the modernization of companies on its territory. Mission of MCR is a generalization of "collective interest" for the enterprises` modernization in the region. That is, the center becomes the center of the ideas and projects formation for modernization of enterprises-members of the regional association.

We believe that the functions of the modernization center of enterprises-members of regional associations should be:

- Assessment of the company` modernization potential;
- Development of strategies and projects (programs) of modernization;
- Evaluating the effectiveness of modernization projects (programs);
- Formation of modernization fund of enterprises-members of regional associations;
- Determination of modernization priority for members of regional associations;
- Promotion of modernization programs for the members of the regional association.

In our opinion, MCR should function as a non-profit organization that is funded by contributions from the enterprises that voluntarily entered the regional association.

Crowdfunding technology involves the formation of Financial Development Fund. Under this it seems appropriate for enterprises that are united in a regional association to successfully meet the challenges of modernization by assigning funds in the regional fund of modernization development. In the circumstances, this form of reciprocal financing is of vital importance. Consolidated interest of the industry in the region in the production of high quality products serves as the purpose of this investment.

Financial Development Fund can acquire real legal force in the structure of Centre` constituent documents through the developed and approved Regulations on regional modernization fund of enterprises-members of regional associations, where there are stated the conditions such fund` formation. The most important among them are: mandatory (minimum) amount of fees, procedure and terms of payment and priorities (as compensation) by increasing the amount of contributions above the minimum.

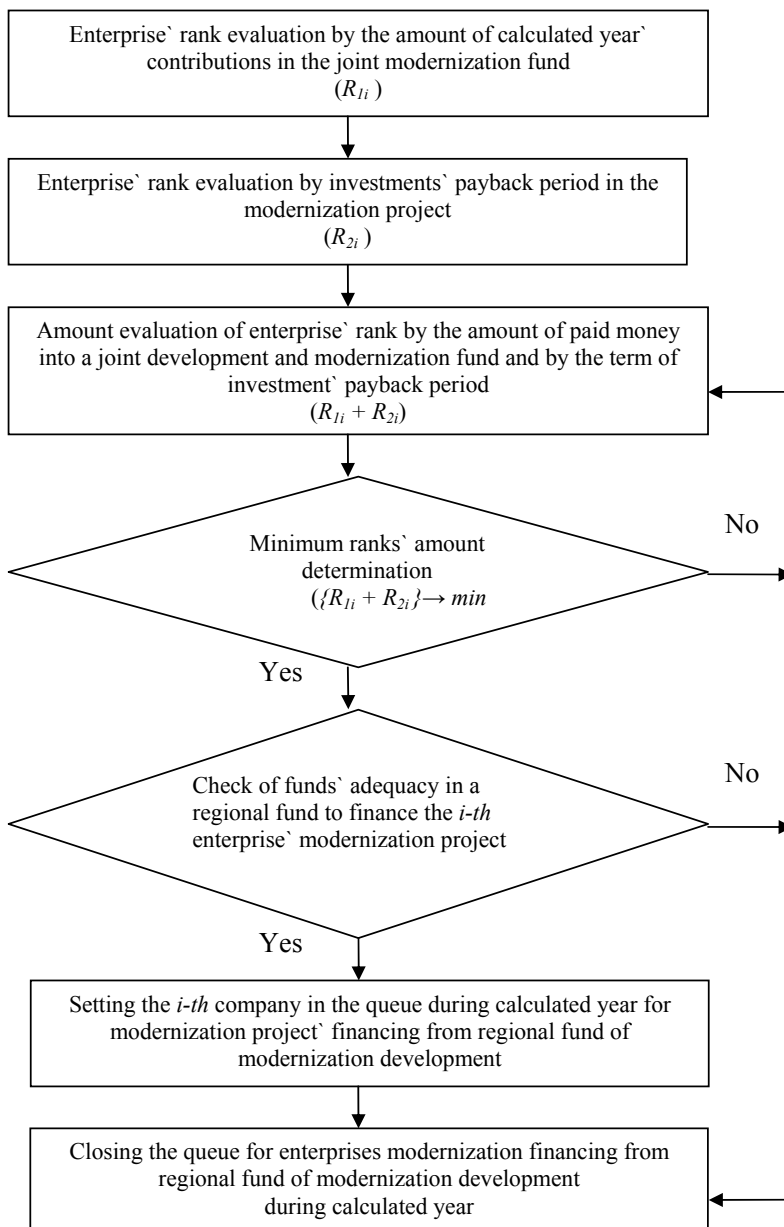
To finance the modernization of collective enterprises by creating modernization fund, banking institution must be defined, that will be serving the creation, existence and expenses of the fund.

A prerequisite for effective participation in the Modernization Center of enterprises-members of the regional association is an active cooperative with the executive power and, above all, with local governments, whose functions are responsible for regional development. Such cooperation should be carried out on the basis of public-private partnerships.

As it is noted above, one of the functions of the modernization for enterprises-members of the regional association is to determine the order of enterprises' modernization fund use. This order should be determined on the basis of the prospects accurate analysis of enterprise' development, developed modernization projects for members of the regional association and choice of optimal variant of funds' combined use.

The reason for the use of optimal variant finding of the enterprises created modernization fund can be, in our view, in the minimum period of investment' return in the modernization project adopted by the company and the share of the accumulated rank amount of the contributions in calculated year of the company in a joint modernization fund development.

Procedure for determining priority of finance modernization of the regional association of manufacturers' member is represented in the following algorithm (Figure 1).



**Table 1. Algorithm for sequence priority determining of modernization for members of the regional association**

As shown in Figure 1, primarily on the basis of the funds' amount that are accumulated in modernization fund during the calculated year, rank companies are determined by the amount of money they invested ( $R_{1i}$ ). The next step is to determine the enterprise' ranks in the term on investment' return in their modernization projects ( $R_{2i}$ ) and amounts of the calculated ranks ( $R_{1i} + R_{2i}$ ), which ranged from minimum to maximum. The highest rank should be considered the one with minimal value.

The first in line for funding from the regional fund of modernization development must be the company with the highest total ranking, i.e. in which the sum of ranks ( $R_{1i} + R_{2i}$ ) is minimal.

The selection of each subsequent *i-th* enterprise in the financing line is made through the adequacy of funds' considering in the modernization development fund.

As a result of payments occurs such situation when the sum of ranks ( $R_{1i} + R_{2i}$ ) of enterprises is the same. In this case, priority is given to such company, which rank  $R_{1i}$  is higher, so the proportion of total investments in modernization fund is greater. In our view, this approach motivates the company to increase the amounts of voluntary contributions to a common fund of enterprises' modernization.

The creation of Modernization Center of enterprises-members of the regional association and formation of modernization fund within the framework of such association will allow the enterprises that enter the regional association, the real chance of modernization reforms.

#### 4. Conclusions

The study of financial support of Ukrainian enterprises modernization has let us made the following conclusions. Modern technical and technological state of significant amount of Ukrainian enterprises requires modernization and innovation process' activation and the creation of appropriate conditions.

One of the main conditions for the modernization is its proper financial investment. The conducted analysis of investment forms and sources of Ukrainian enterprises' modernization has proved the problems' existence that are caused by the shortage of investment resources, primarily at small and medium enterprises, the slow development of the capital market, too expensive credit resources. Solving this problem requires new approaches finding and implementing that will help to provide financial modernization. Thus, according to the authors, is an approach based on institutional support of enterprises using crowdfunding technology.

The main idea of the proposed new approach is to build Modernization Centers on the basis of regional associations of a particular industry and to develop modernization fund for enterprises-members of the regional association.

Modernization Center of enterprises is an institution that is formed in the region to promote the companies modernization on its territory and performs its function. The mission of these centers is the generalization of “collective interest” for the enterprises’ modernization in the region.

Formation of the regional fund of modernization and development in regional associations contributes to the problem of financial security solving of Ukrainian enterprises’ modernization.

One of the functions of the proposed Modernization Center is to determine the priority of modernization for regional associations’ member by regarding funds availability in the joint regional fund of development and modernization, also optimization of its use.

The reason for finding the optimal variant of the created modernization fund use can be, in our view, the minimum period of investment’ return on the modernization project that is adopted by the company and the accumulated rank share during the calculated year that includes the amount of company contributions in a joint fund of development and modernization.

The development of Modernization Center of enterprises-members of the regional association and such part formation of this association that will fund the modernization of enterprises, which enter the regional association, is a real chance for modernization reforms.

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