Sustainable project management: Results of research on Russian enterprises

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Abstract—More and more enterprises in Russia are turning to the strategy of sustainable development and introducing sustainable management practice of their projects. Under sustainable or green project management is meant such kind of management which achieves right balance of economic, environmental and social effects, both currently and in the long term from the standpoint of the interests of future generations. The aim of the proposed study was to study green project management practice in the strategy of sustainable development. In-depth interviews and questionnaires were chosen as research methods. Due to the achievement of the goal, the article presents some experience of sustainable project management of Russian enterprises. The results were achieved using preliminary development of the original methodology for assessing the maturity level of sustainable project management. Investigations were fulfilled at 34 enterprises in the regions of Russia. The analysis focused on four indicators’ blocks of green project management: institutional, economic, environmental, social. A description of the sustainable development strategy presented at the enterprises under survey, the degree of balance in the strategy of the economic, social and environmental aspects of sustainability, the orientation of the strategy to the needs of future generations were observed. A quantitative integral assessment of the maturity level of sustainable project management in enterprises is given. The novelty of the idea is both a new methodology used for data collection and the results obtained with its help. For the first time qualitative and quantitative parameters of the green project management state at the enterprises of Russia are presented. The effect of sustainable development strategy implementing is shown. These results can be useful for all enterprises having chosen the path of sustainable growth and interested in green project management.

Keywords — project, project management, sustainability.

I. INTRODUCTION TO THE RESEARCH PROBLEM.

Many companies proclaim their strategy for sustainable development. A significant number of enterprises do not bring their strategic attitudes towards sustainability to the level of their implementation in everyday practice. At the same time only some of these enterprises implement this strategy through sustainable projects and sustainable project management within the framework of their core activities. Often, strategic plans are implemented in separate social or environmental projects not directly related to the main activity of the enterprise. This problem needs studying. It is important to understand how enterprises are progressing in the implementation of their sustainable development strategy in the practice of project management, what obstacles arise, and what experience can be borrowed from the leading enterprises.

II. THEORETICAL ASPECTS OF THE RESEARCH.

The issue of sustainable development had been brought to life by the profound transformations taking place in the market economy as a result of globalisation. “Sustainable development is a development that meets the needs of the present generation without compromising the needs of future generations. It is not a static state of harmony, but a process of progressive change, in which the exploitation of natural resources, the direction of investment, the focus on technological progress and institutional change meet the needs of the future and the present.” [1].

Sustainable development or harmonious, balanced development is a process of economic and social changes in which exploitation of natural resources, investments’ direction, orientation of scientific and technological development, personal development and institutional changes are coordinated with each other. They strengthen current and future potentials to meet human needs and aspirations.

The main objective of sustainable development proclaims satisfaction of human needs and aspirations. It is important to emphasise that sustainable development requires meeting the most vital needs of all people and giving everyone the opportunity to equally satisfy aspirations for a better life.

The concept of sustainable development emerged as a result of combining three main points of view: economic, social and environmental ones. These are three closely interrelated and interdependent areas of a single whole. Having this approach, an organisation is considered as a socio-economic system. Economic goals (profit, income) in this case become secondary ones to the goal of preserving environmental integrity.
At present, many businesses choose sustainable development as their strategy. The advantages of this strategy are as follows:

- improving the company’s image, reputation growth in the environment;
- the growth of the company's value due to an increase in the assessment of its reputation;
- media coverage of the company (indirect advertising);
- sales growth and improved market position;
- increased staff satisfaction;
- reduction of undesirable staff turnover;
- increase in labour productivity;
- facilitating access to investments;
- tax benefits, etc.

In order to obtain these effects, the sustainability strategy must be supported in specific ways of its implementation, in particular, the implementation of green projects in the enterprise practice. These projects require a special management system – sustainable management. The term “sustainable project management” was first used by the Executive Director of the Business Council for sustainable development (BCSD) J. Hugh Faulkner (1994) [2]. Today, this term is widely used in practice and scientific research. Sustainable project management is defined as management promoting the inclusion of sustainability criteria at all stages of the project life cycle and in all functional areas.

III. METHODOLOGY AND METHODS OF RESEARCH.

The purpose of the proposed research was to study the practice of sustainable project management of enterprises in Russian regions.

In-depth interviews and questionnaires were chosen as research methods. In-depth interviews were conducted with the management teams of enterprises, which have a high level of green project management and set their strategic goal of sustainable development. The survey was conducted at enterprises that have not only high but also medium and low level of green project management. The study using these methods was conducted at 34 enterprises of different regions of Russia of the following industry: oil production and processing, chemical production, engineering, construction, aircraft construction, trade, financial services, IT industry, consulting. The sample consists of 53% of large enterprises, 19% of medium-sized enterprises and 28% of small enterprises. The study involved enterprises of the cities: Moscow, Omsk, Yekaterinburg, Arkhangelsk, Kazan, Krasnoyarsk, Chelyabinsk.

The study was conducted using a technique that has scientific novelty and is developed with the participation of the authors of the paper. The methodology includes four groups of indicators of sustainable project management: economic, environmental, social and institutional ones. Each indicator of the method has a score in points. The method involves evaluation of both private indicators and the integral quantitative indicator of the green project management maturity level. This is the novelty and originality of the methodology, as the currently available methodological developments do not involve the assessment of an integral indicator or do not include a group of institutional indicators.

This method is created on the basis of scientific research of various authors [1, 2, 3, 4, 5, 6, 7, 8, 9], as well as a specialized standard for green project management GPM P5, developed by the international organisation „Global green project management” (GPM Global) [3].

IV. DISCUSSION OF THE RESEARCH RESULTS.

First of all, we obtained an integral indicator of the comprehensive assessment of the green project management maturity level. The results suggest that:

- 12.5% of enterprises have a high level of maturity;
- 18.8% of enterprises have a maturity level above average;
- average maturity level has 37.5% of the enterprises;
- 15.6% of enterprises have a below-average level;
- 15.6% of enterprises have a low level.

That is, the sample includes companies with different levels of maturity of green project management. The third part of the enterprises has reached a high level of maturity, the third part of the enterprises have low, and below the average levels, the remaining enterprises have shown an average maturity level. To sum up, the practice of enterprises with different degrees of development of green project management will be presented further. However, all enterprises included in the sample set have sustainability guidelines in their strategy and have started to implement green projects. These enterprises can be seen as leaders in sustainability.

In addition to the integrated complex indicator, several particular indicators were analyzed during the study. As figure 1 shows, many enterprises have a sustainable long-term balanced development strategy or plan. It can be assumed that the concept of sustainability is primarily applied at the strategic level. The idea of a balance of economy, ecology and society in orientation to long-term prospects incorporated in this concept is welcomed in strategy of the surveyed enterprises.
Figure 2 confirms the conclusion. The study has found that the strategy of sustainable development of enterprises includes not only economical but also social, environmental principles. At the same time, it is obvious that economic goals and criteria are in priority. To a lesser extent, enterprises declare environmental aspects in their strategies. This is a typical situation for enterprises in the country and regions that are just beginning implementation policy of sustainability. It takes time and experience of sustainability for enterprises to gradually come to understand the importance of economic, social and environmental balance.

Figure 3 shows how balanced are economic, social and environmental objectives in projects. As you can see, about every fourth company does not put just three types of tasks. Only 8.8 per cent of enterprises always set all three goals. The rest of the acceptances, depending on the projects, set all three tasks.

Let us turn to the analysis of some particular indicators of the maturity level of green project management in enterprises. First of all, consider the indicators of social responsibility in the project activities. Positive is the fact that almost half of enterprises (48%) recognise corporate social responsibility measures as economically beneficial. The remaining 52% of enterprises have zero profitability of social programs. It is noteworthy that not a single enterprise declared unprofitable social events.

Key performance indicators, such as decent work practices (occupational safety, staff training, equal opportunities) and ensuring health and safety of consumers of products and services of projects, are used more often in project management. The least relevant in the project activities of enterprises is the indicator of support for trade unions. The remaining social indicators of sustainable projects (respect for human rights, ethical behaviour) are used by about half of the surveyed enterprises (Fig. 4).

Let us turn to the assessment of indicators of the environmental component of sustainable projects. On the question of whether the enterprise has implemented a system of environmental impact assessment of the projects being implemented prior to the start of their launch, the following answers were received:

- Yes, it was implemented – 33%;
- this system is not used – 50%;
- the system depends on the project; not all projects have it – 17%.

The question “Do you use the products of local manufacturers (suppliers) to reduce transportation costs and reduce the impact on the environment?” was received the following answers:

- Yes, we use – 50%;
- no, we do not – 35%;
- it is difficult to say – 15%.

Let us turn again to the practice of using key performance indicators in project management. But now we begin from the environmental point of view. Enterprises in their green projects use the following indicators:

- use of materials and other resources – 56%;
- transportation – 44%;
- energy use – 41%;
- water use – 35%;
- carbon footprint and harmful emissions into the atmosphere – 21%.
In general, it can be said that the social and environmental dimensions of sustainability are quite high. It should be borne in mind that the sample includes the leading enterprises in the practice of green project management.

Together with the positive facts of enterprises’ appeal to environmental and social practices, the study allowed to formulate the problem. It lies in the fact that the balance of the three components of sustainability (economy, social policy, environment) in the projects has not yet been achieved. Confirmation can be found in the answers to a number of questions. For example, on the question of what goals in the projects are in priority, 91% of enterprises named economic goals. 68% of enterprises recognized their projects as economically sustainable. The vast majority of enterprises (about 65%) use mandatory economic key indicators such as return on investment, net present value, cash flow, job creation, market share, taxation.

It should be noted that sustainability-oriented thinking is gradually emerging among project managers. The vast majority of them (79%) agreed with the statement that the implementation of the principles of sustainable development leads to the success of the economic organisation in Russia. According to respondents, the balance of economic, social, environmental principles in project management has a positive impact on the following indicators:

- a positive image of the organisation;
- quality process of project management;
- value of project results;
- increasing the chances of project and product success;
- project risk reduction.

Enterprises believe that public policy measures can positively influence the more active use of sustainability policy. Some 80 per cent of enterprises identified the use of tax incentives to encourage private direct investment in sustainable development, financing sustainable infrastructure in the region and the country, financing basic research, using legislation and enforcement measures to prevent unsustainable practices, and developing and supporting the generally accepted system of sustainability assessment and reporting as significant measures.

V. CONCLUSION

Thus, the study showed that at the strategic level, enterprises are aware of the importance of balancing economic, environmental and social aspects of doing business. At the same time, economic targets are still the priority. Not all companies that have chosen a sustainable development strategy to implement it in their current projects. Enterprises are just beginning to turn to green projects and their management practices.

Nevertheless, there are some positive changes in this direction. The results of the study suggest that the enterprises of many Russian regions are at the beginning of the development of their practice of sustainable project management. The first steps are successful, but further amplification and distribution of this practice are required.

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