Innovative approaches to organizing examination work of expertise, promoting products and services based on the principles of system management

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Abstract. Innovation is an essential element of the economic development of modern organizations and enterprises. They have a dual impact on the dynamics of economic growth: on the one hand, they open up new opportunities for economic expansion, on the other, they make it impossible to continue this expansion in traditional directions. The state, society, business organizations are consumers of innovative products. This is why, as a research and educational system, many universities, especially National Research Universities, can become suppliers of innovative products based on their research, educational and manufacturing sites. The article considers one of the options for the possible integration of scientific and educational potential into the market of innovative products by organizing the work process of the Center for Expertise and Promotion of Innovative Urban Planning Products on the basis of the principles of system management: customer orientation, leadership, staff interaction, process approach, improvement, fact-based decisions, relationship management. This approach will ensure high productivity and will contribute to customer satisfaction with innovative products. The considered process includes the stages of creating a bank of innovative products and promoting products among potential consumers in the market.

1. Introduction
The growing needs of society determine the need for innovation, and the scientific community is currently the source of the development of innovative products. As part of the program for the training of specialists in urban planning, universities envisage the creation of regional innovation platforms.

As part of the implementation of the Program, it is proposed to make a decision on the organization on the basis of the University of the Urban Development Center (hereinafter the Center) of expertise and promotion of innovative products, the mission of which is to universalize the transformation of problems arising in the field of urban planning business into innovative developments.

The activities of an organization striving for high performance and customer satisfaction should be based on the principles of system management set out in the standard GOST R ISO 9000-2015 “Quality...
management systems. Basic provisions and vocabulary "[2, p.3-7]. Let's consider the implementation of the principles on the example of the organization of the Center's work.

2. Results
The first principle of systems management is customer orientation. The goal of any organization is to provide a service or supply a product. The first step towards achieving this goal is to determine who our consumer and what his requirements are for the result of our work. First of all we studied tendencies in the external environment that can facilitate or hinder the work of the Center: fast obsolescence of technology; business needs for basic and improving innovations; the need for conscious change management; complication of risks; innovative outsourcing; universalization of technologies, the need for a fast transfer; outdated business models of interaction between business, science and education; lack of institutions for interaction between scientific personnel and the business community on mutually beneficial terms; failure of planning and budgeting systems in business and methods of promoting Start-up projects; lack of clear tools for the commercialization of start-up projects in the over-the-counter; high barriers to entry into big business.

The working group identified the stakeholders of the Center, as well as the input and output values (Table 1).

![Table 1. Stakeholders of the project.](image-url)
The second principle of systems management is the leadership role of top management. If the initiative to implement the project does not find support from the top management of the organization, then it may end in failure. Of course, this is not a universal rule, but, as practice shows, the more involvement the leaders demonstrate in relation to the project, the more likely it is to be implemented. The management of the organization must see the benefits of this project. The project for the creation of the Center is supposed to implement the Programs of interaction with the administration of the Irkutsk city and the Irkutsk region - the main consumers of educational organizations. The working group also made a presentation of the project with a justification of economic efficiency.

The third principle of systems management is staff involvement. It is important that employees of educational organizations are interested in the implementation of the project. After all, the staff of the organizations has a high level of competence, competitiveness in the labor market and high scientific potential.

The motivation for the participants of the Center can be the following: finances (salary); the ability to implement ideas by participating in real projects; participation in a community of like-minded people; increased publication activity; diversification of publications. The opportunity to move up the professional ladder in the form of recommendations for master's, postgraduate, doctoral studies, employment in prestigious positions of enterprises of participants in this project and scientific activity. The fourth principle of system management is the process approach. Any activity of the organization can be
considered as a process [3, p.2]. When considering the first principle of system management, we considered the inputs and outputs of the process of examination and promotion of innovative products, and at this stage, we have identified the algorithm for the implementation of the project, the timing and those responsible for its implementation (table 2).

**Table 2.** Stages and timing of the project.

| Stage № | Stage name                                                                 | Implementation period | Single point of accountability                                                                 |
|---------|-----------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------|
| 1.      | Creation of a working group. The group consists of leading scientists from the department of the university complex. Group size 5-7 people (there may be several groups depending on the number of directions and specializations). | 1 week                | Management of an educational organization or structural unit                                    |
| 2.      | teach to working group members                                              | 1 month               | Training center, Interdisciplinary Regional Center for Advanced Studies                          |
| 3.      | Development of a project evaluation methodology.                            | 1 month               | Working group                                                                                    |
| 4.      | Hiring a manager to promote the center's innovative developments. The manager can be a specialist with experience in urban planning enterprises. | 1 month               | Educational organization management                                                             |
| 5.      | Formation of the "initial capital" of the center - the bank (base) of projects. The base can be formed from the existing developments of the university complex. A commercial proposal is made from these projects. | 2 months              | Working group                                                                                    |
| 6.      | Project activities of the center. Replenishment of the bank of projects. All ideas included in the center go through an examination procedure, to which, as necessary, outside specialists are involved. As a result of the examination, it is possible to combine projects that have a common point of application, but related to different scientific aspects. Further, there are three ways to accumulate ideas: - "Bank of Ideas" - completed projects that have practical application from which a commercial proposal is formed for promotion; | constantly            | Working group                                                                                    |
- "Reserve Bank" - projects that currently, for some reason, have no practical application with existing customers;
- projects requiring revision. These projects receive recommendations for revision and attracting experts to work on the project.
    At this stage, it is necessary to involve a lawyer in the work of the center to resolve issues of intellectual property protection.

7. Promotion of innovative projects (presentation at competitions, technical and economic councils, exhibitions, etc.) constantly Center manager

The fifth principle of systems management is improvement. Urban development organizations that do not adhere to a policy of continuous development cease to exist as a result of competition. Only an orientation towards continuous improvement of activities, a reaction to internal and external changes helps to find new opportunities. It is this approach that lies in the Center's Policy and Objectives. The sixth principle of systems management is decisions based on facts. It's no secret that the likelihood of achieving the desired result increases if decisions are based on data analysis and evaluation, and not only on an intuitive understanding of the situation. The Center plans to conduct an ongoing analysis of external and internal factors, the requirements and expectations of stakeholders and an analysis of the results of activities by top management. The seventh principle of systems management is relationship management. For the effective work of the organization, relationships with stakeholders are very important (table 1).

The relationship must be built on a long-term basis and is managed. To implement this principle need to overcome some barriers [4], which include: bureaucracy; weak communication within teams (between departments); different vision of the result (expectations); insufficient funding, especially at the initial stage of the center; lack of “one door” mechanisms for enterprises that are interested in innovative products.

3. Discussion

The analysis of the activities of twenty-seven urban planning organizations showed the relevance and lack of information at enterprises and organizations related to the activities of an organization striving for high performance and customer satisfaction, about the need to transfer their work to a new professional level or be based on the principles of system management. Research has shown that the application of all seven principles will allow obtaining complex information, both research and analytical and practical.

4. Conclusion

The organization of the Center's work will solve the problem of the lack of innovative products in the field of urban planning and timely delivery of information to the attention of potential consumers, and will enable the educational organization to diversify the flow of funds through the commercialization of scientific developments.

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