

OBJECTIVES OF THE UNIVERSITY AS AN INTEGRATOR OF KNOWLEDGE-MANAGEMENT WITHIN CROSS-INDUSTRY ECOSYSTEM

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Overview of the cross-industry ecosystem:

Study of a cross-industry ecosystem as a system of integrating knowledge is based on the methodology of system approach in a view of the law of self-organization. A complete definition of an innovation ecosystem was formulated in the scientific work by O. Granstranda and M. Holgersson: «An innovation ecosystem is the evolving set of actors, activities, and artifacts, and the institutions and relations, including complementary and substitute relations, that are important for the innovative performance of an actor or a population of actors» [1, p. 3]. The essence of cross-industry ecosystems is in the collaboration of actors from different sectors in the field of cross-industry projects. Therefore, one of the main objectives of a cross-industry ecosystem is transferring of knowledges between economic agents. This thesis was confirmed in 2019 by N. Farhadi in his book "Cross-Industry Ecosystems", where the author develops the theoretical and methodological foundations of the new concept, highlighting the growing complexity of cross-sectoral economic growth [2].

Traditionally, the role of universities has been limited to teaching students and conducting fundamental research, which often had positive spillover effects for industry (real sector of the economy), as well as stimulating regional economic growth [3]. The university can be an ecosystem actor by applying intellectual, reputation and financial capital to create and maintain a strong ecosystem [4]. However, it is necessary to take into account the ability of the ecosystem to organize itself. The interaction of enterprises with universities gives them access to specific knowledge and the ability to conduct research at a high quality level, as well as opportunity for innovative development.

Moreover, the report of the Organization for Economic Cooperation and

Development describes the main formal and informal channels of such interaction [5]. Formal channels include the following: research collaborations, operations with intellectual property (sale licenses, patents, etc.), scientific mobility, spin-off organizations in the university environment and students who were employed in industry. Informal channels include publication of research results, conferences and networking interaction, geographic or territorial proximity, technology sharing (research centers, laboratories) and continuous training of employees [5].

University as an integrator within cross-industry ecosystem:

To become an actor in cross-industry ecosystem the university should move away from the role of a highly specialized university and become an innovative type of university under new economy conditions.

The main objective of the university as an actor is to increase the knowledge accumulated by ecosystem through processing and transformation of information into knowledge, generation of new information and new knowledge. Thus, the direct influence of the university on others ecosystem actors consists in the transfer of knowledge along the chains: «university - cross-industry project - production - economy» or «university – cross - industry project - science - innovation - economy». The objectives of universities in the cross-industry ecosystems are presented in the Figure 1 and reflect the following issues:

- actors should define and articulate a vision of the ecosystem as a whole;
- to evaluate the role of each actor, predict the development of the ecosystem and design strategies;
- to form a community of actors, finding them by the level of KPI;
- to find existing projects to include them in ecosystems as subprojects into new cross-industry projects;
- to integrate knowledge of technology, competencies, best practices and communicate them to the actors of the ecosystem;
- to initiate new ideas, technology of projects in the interests of ecosystems;

- to be a provider of projects implemented in the ecosystem or in other community.

<p>The Idea: Ideas generating centers, which are working for the realization and implementation of cross-industry projects, inter alia research centers, innovative complexes, including geographically remote unity.</p>	<p>The Professional Training: Platforms for accessing the technological and human potential practices of the world's best centers of excellence in various industries.</p>
<p>The Business: Platforms for supporting cross-industry projects (in analytical, forecast, socio-economic, investment and financial spheres).</p>	<p>The Human Resources: Platforms for human resources preparation for high-tech businesses and specific industries.</p>

Figure 1. Objectives of the universities in the informational, organizational, technological fields of the cross-industry ecosystem

Source: Compiled by the author based on the source [6]

Objectives of the university as an ecosystem integrator:

The main objectives of the university as a cognitive actor of the ecosystem namely are:

- multiculturalism and multilingualism;
- interdisciplinary and cross-sectoral communication skills;
- ability to use system engineering as a holistic and systematic way to lead all processes, study phenomena of science and society on the basis of interdisciplinarity, as well as the ability to identify complex systems and work with them;
- the use of digital education as the main feature of communication and knowledge-management;
- division of responsibilities between all actors of an ecosystem based on the collaboration, communication, integration, reproduction and processing of knowledge;
- customization of educational processes due to cognitive and intellectual level of each student;
- project-management skills;

- ability to work in fast-changing modern conditions, inter alia by managing sophisticated automated complexes;
- ability to focus on obtaining new knowledge and practices.

Conclusion:

This article describes the main features of the objectives of universities' activities within the cross-industry ecosystems on economic development of regional and national systems. In the modern world, it is necessary for universities to become more competitive and effective in science and knowledge-management field. Therefore, collaborations are vital for universities, as knowledge integrators and consolidators within cross-industry ecosystem, to achieve the goals of a particular ecosystem.

References:

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INTEGRATION OF INFORMATION TECHNOLOGY WITH HUMAN RESOURCE TRAINING AND ITS IMPACT ON PERFORMANCE

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Introduction

Technological advancements which lead to rapid growth in innovation have become the requirements in every organization which caused every organization to adopt the policy of ‘culture of learning organization’ in order to capture knowledge and skills and disseminate it among coworkers. The impact of the changing nature of the integration in information Technology and Human resource training helps organizations to bridge the gap for the organization goal and employee performance, resource sharing, and hence promote development.

Literature Review

The advantages of IT are not only beneficial to productivity and profitability but also in the growth and development of the HR to attain a knowledgeable workforce who are able to process various functions and enhance productivity.

The integration of IT and HR helps in facilitating HR core functions within the organization such as having a healthy staff pool, career development, compensation issues, safety and health of employees as well as employee and labour relations [1].

The implementation of a dedicated Human Resource Management systems which rely on IT professionals to develop and maintain an integrated HR management system helps the organization in various forms such as cost