

**Yevheniia KHAUSTOVA,**

Dr. Sc. (Economics), Professor, Department of Economics  
*Kyiv National University of Technologies and Design*

## **SCIENTIFIC PARKS AS INNOVATIVE ECOSYSTEMS OF UNIVERSITIES**

The innovative ecosystem of a university is formed as an open and dynamic structure that integrates educational, scientific, and entrepreneurial activities, thereby ensuring the transformation of knowledge into socio-economic outcomes. Contemporary trends in higher education demonstrate that universities are no longer merely educational centers—they are becoming full-fledged actors in the innovation market, capable of generating and commercializing intellectual products, particularly through the establishment of scientific parks.

For a higher education institution, alongside the obligations concerning the material support of a scientific park, the advantages of such cooperation include opportunities to receive income from lease and licensing agreements. However, from the standpoint of intellectual activity capitalization, the following aspects gain particular importance: market orientation of fundamental and applied research; enhancement of the professional competencies of academic staff, students, and postgraduate researchers through industrial internships and participation in start-up projects; attraction of external funding for research projects; reduction of research costs due to long-term technological cooperation; access to new management methods and innovation commercialization practices; expansion of business partnerships and strengthening of academic reputation, which also increases the potential pool of applicants and trainees; development of a modern material and information infrastructure based on parity use; distribution of costs for intellectual property registration and legal protection; opportunities to obtain tax and other incentives; and high business involvement in developing educational programs and curricula.

From the perspective of business, participation in innovation projects of a scientific park established at a university provides the private sector with several benefits: reduction of transactional and organizational-managerial costs of

scientific and innovative activities; rational distribution of property rights and resources related to innovation; simplification of procedures for concluding agreements on external research and development; access to scientific-technical and patent information; international information exchange with the university's foreign partners; targeted personnel training; and the creation of new employment opportunities [1].

The activities of scientific parks result in both commercial and non-commercial implementation of start-up projects. Commercial transfer within the implementation of start-ups and research outcomes of university departments may occur through relevant institutional structures within the university, as well as through the establishment of “related business” structures or separate legal entities—joint ventures (Chapter 26 of the Civil Code of Ukraine [2]) or subsidiary enterprises (Articles 63, 126 of the Commercial Code of Ukraine [3]).

In Western business incubator practice, such enterprises are referred to as “spin-off” companies. Moreover, the separation of related business structures within corporate organizations may follow the model of “spin-out” companies. The relationships between a university and spin-companies are based on equity participation from the founder, which may include the university itself, its academic staff, students, and alumni. Under the spin-company models practiced in the United States, universities contribute up to 40% of licenses for the use of their research results to the statutory capital of such companies. To increase the value of research results transferred to spin-companies and ensure their capitalization, universities secure the corresponding intellectual property assets through patenting, certification, or by maintaining the key results under commercial secrecy (know-how).

The establishment of spin-off companies from a university or its scientific park as a parent organization occurs at the initiative of the developers of the innovation, namely participants of the start-up or research project (academic staff, students, and other individuals). In this process, the spin-off becomes an independent enterprise without managerial control from the parent university, gaining autonomy in production, marketing, and management decisions. However, the university may continue to provide support through searching for investors; purchasing the company's first product to ensure cash flow; providing premises, laboratories, equipment, and communication facilities; and offering consulting services.

If the founding university holds a controlling share, the spin-off company and its assets may be reintegrated into the university structure, or the university's equity share in the company may be sold without the right to receive future dividends (returns on the invested intellectual capital). If the founding university does not hold a controlling share, reintegration becomes problematic; however, the university retains the right to its portion of the company's equity, including the right to a share of the profit generated by the company's projects.

The financial performance of spin-companies serves as an indicator of the commercialization outcomes of university research activities, measured through revenues such as licensing fees and dividends received by the university as the parent organization. More importantly, however, the effectiveness of spin-companies contributes to strengthening the university's innovation capacity, developing entrepreneurial functions, and enhancing relational capital.

Thus, the organizational and economic aspects of research capitalization in public higher education institutions include:

1. Formation of an internal database on intellectual property and expansion of personal research cooperation channels with leading educational and scientific institutions (including scholars and researchers), taking into account priority research areas and prior experience.

2. Ensuring legal protection through national and international registration of intellectual property and monitoring annual maintenance fee payments.

3. Valuation of the institution's intellectual assets, including intellectual property objects, and their incorporation into the institution's assets in accordance with National Public Sector Accounting Standard (NP(S)BODS) 122 "Intangible Assets" [4] and National Standard of Valuation No. 4 "Valuation of Intellectual Property Rights" [5].

4. Assessment of the quality and quantity of intellectual assets and resources involved for the purpose of determining the level of development and utilization of intellectual capital.

5. Identification of market demand for prospective intellectual property and assessment of possibilities for meeting such demand (depth and condition of developments, available capabilities, expected effect, readiness and potential for investment, socio-economic factors).

From the standpoint of research capitalization within commercial and non-commercial transfer processes, the most critical issues among the listed ones include:

- valuation of intellectual property created within open innovation environments and regulation of licensing payment procedures in transferring rights to other parties, directly related to the development of innovation capital;

- expansion of collaboration channels and establishment of open-type innovation structures to conduct scientific research and enhance its effectiveness through the development of intellectual capital, particularly human capital and relational capital.

### **References**

1. Khaustova Ye. B. *Knowledge Transfer and Venture Investment in the Activities of Higher Education Institutions*. In: State and Trends of Modern Entrepreneurship: Monograph / Ed. by M. P. Denysenko. Kyiv: DKS Center LLC, 2019. Pp. 392–410.

2. Civil Code of Ukraine, No. 435-I. URL: <https://zakon.rada.gov.ua/laws/show/435-15>

3. Commercial Code of Ukraine, No. 436-I. URL: <https://zakon.rada.gov.ua/laws/show/436-15>

4. NP(S)BODS 122 “Intangible Assets”, Ministry of Finance of Ukraine. URL: <https://zakon.rada.gov.ua/laws/show/z1018-10>

5. National Standard No. 4 “Valuation of Intellectual Property Rights”, Cabinet of Ministers Resolution No. 1185. URL: <https://zakon.rada.gov.ua/laws/show/1185-2007-%D0%BF>