

Strategies and Outcomes of Building a Successful University Research and Innovation Ecosystem

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Abstract: Óbuda University (OU) has created a regionally unique innovation ecosystem around the traditional university structure and organization. This includes their 7 faculties, the University Research and Innovation Center (EKIK), an independent academic organizational unit, their 3 Science and Innovation Parks, the Obuda Uni Venture Capital (OUVC) investment company, and the Initium Venture Labs technology transfer company. EKIK's main task remains the structured implementation of strategic research and innovation tasks at the University. It was established by the founding Rector, Professor Imre J. Rudas in 2012, and has been growing dynamically ever since, becoming an integral part of the main campus. EKIK's activities include basic research focusing on the PhD students, applied research involving the regional industrial partners, while developing and co-creating the university innovation strategy and innovation ecosystem. EKIK operates under the direct supervision of the Rector and cooperates with the faculties in the implementation of the research, development and innovation (R&D+I) activities. The purpose of the key EKIK projects is to undertake and manage interdisciplinarity along the strategic scientific topic areas of the University, thus providing priority and optimal implementation conditions for the research community, in accordance with the University's Institutional Development Plan. Beyond the research centers, the functional units of EKIK include the Innovation Office, and back in the day, it had incorporated the Science Organization Office and the Electronic and Digital Learning Materials Office. More recently, Óbuda University decided to enhance its innovation capabilities through establishing a technology transfer company, named Initium Venture Labs, completing the investment capabilities of OU.

Keywords: Innovation management; Applied Robotics and AI; Investor University; IP exploitation; Agile project management; Technology Transfer Company; Sustainable Innovation; ImreRudas@75

1 Introduction

Founded in 2010, as the legal successor of various tertiary education institutions, Óbuda University (OU) currently is one of the largest technical universities in Hungary. As a public-private foundation-managed (*Rudolf Kalman Foundation for Óbuda University*) higher education institution, it has 7 faculties and various research centers focusing on technology, architecture, mechanical, electrical, environmental, informatics, civil engineering, economics, and applied arts, with over 13000 students and 1500 academic staff [1].

The key interdisciplinary research, development and innovation activities of the University are carried out in the units of the University Research and Innovation Center (EKIK), which ensures the implementation of the rectoral science policy strategy. High-level, internationally relevant scientific activity is taking place in 5 topical research centers within the EKIK, led by distinguished professionals. In addition to the core research centers, a network of competence centers had been created. When former Rector Prof. Imre J. Rudas founded the EKIK in 2012, it was located in the Kiscelli street building, and had only 3 knowledge centers and a dozen research staff. Now, it employs more than 100 people in the research centers and around. The topical focus remained aligned with the rectoral strategy, also spearheading the technology transfer & innovation management activities of OU.

2 Research, Development and Innovation at OU

2.1 Priority R&D+I Areas

The rectoral strategy has long been topic-driven in R&D+I, recognizing the inequalities of the Hungarian higher education and the strategies for financing from the government level. To strengthen the EKIK's research centers, in line with the identified domestic and international trends, the focus areas of the University have been announced as (Figure 1):

- 1) Robotics and Artificial Intelligence (AI);
- 2.) Medical technology and digital medical devices;
- 3) Cyber Security;
- 4) Smart technologies (smart city, smart mobility);
- 5) Renewable and alternative energy sources (sun, water, hydrogen).

In addition to these, the University supports participation in external grant schemes with both material and in-kind contributions (e.g., support for relationship building

and consortium preparatory work). Researchers at EKIK devote a demonstrable part of their time to fundraising.



Figure 1

Technology focus domains of Óbuda University, in alignment with the Rector's Strategic Agenda

2.2 International Focus and Alignment

International relationships are crucial for OU from an R&D perspective to gain:

- Access to diverse expertise: collaborating with international partners (e.g., in Horizon and HU-RIZONT projects);
- Shared resources and infrastructure: such as the Da Vinci Research Kit (DVRK) and consortium [2];
- Apply together for funding and grants;
- Building international relationships;
- Access to international research markets (to support growth);
- Enhanced impact and visibility, along with ranking.

2.3 Innovation Approach

Óbuda University has reinvented its innovation ecosystem in the past 5 years. In order to optimize the internal R&D+I capacities, the involvement of industrial players, it was necessary to establish a thematic, professional internal service center, housed within EKIK. The strategic goal has been to empower and capacitate the research fellows and talented students to jointly invest into the development of new technologies and methods, to be partially utilized at OU, in spin-off companies or forming the foundation of further industrial R&D+I projects and collaborations.

The whole university command chain, rapid reaction approach to innovation and pro-inventor bylaws support this. In the long term, the strategic partners can find stable values in the industrial training programs, sustainable workforce supplies, IPR services and beyond. Moreover, OU was among the firsts to establish industry departments, industrial PhDs and offer direct cooperation in its Science and Innovation Parks.

2.4 “Investor University” Approach

The leadership of OU well understand that in order to create a more efficient research management process, the University needs to provide a knowledge and innovation management structure, therefore an Innovation Pyramid was established (Figure 2). The University has expressed its willingness to invest into talents, prospects, and businesses alike. If necessary, the University can create a target company (Initium Holding SPV) to support such activities. As a result, project generation rate can increase and application and project implementation are optimized for the University's strategic processes. Using the experience and business practices OU decided to move forward by creating the region's first university venture capital, therefore the OUVVC (Obuda Uni Venture Capital) was created to bring in more market knowledge and investor expertise (Figure 2).

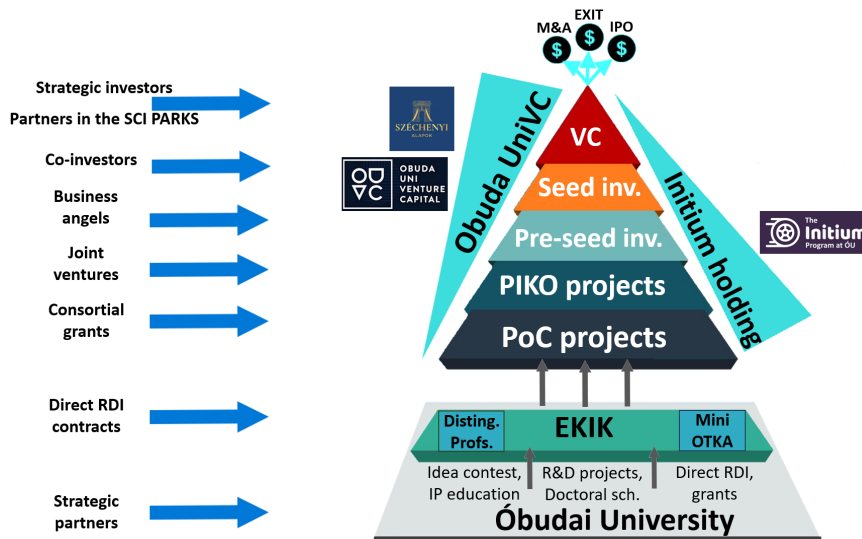


Figure 2

The ecosystem approach of Óbuda University, involving internal and external stakeholders to support the value creating along the innovation chain. The Innovation Pyramid is established on the foundations of the research centers, science labs, and eminent projects of the engineering community of the University. Along the development stages, in each phase, projects and teams receive substantial support for their innovation projects, both in the form of mentoring and monetary support.

3 The Background of EKIK

3.1 The Role of EKIK

EKIK is an independent academic organizational unit of the Óbuda University, which main task is the structured implementation of the strategic research and innovation agenda of the institution. EKIK's activities include basic research focusing on the doctoral students, applied research involving the regional industrial partners, while developing and co-creating the university innovation strategy and innovation ecosystem. EKIK operates under the direct supervision of the Rector and tightly cooperates with the faculties in the implementation of R&D+I activities at the various levels of R&D+I projects. The organizational units of EKIK include the Innovation Office, and back in day, it incorporated the Science Management Office, and the Electronic and Digital Learning Materials Office. The purpose of the EKIK projects is to undertake and manage interdisciplinarity along the strategic scientific topic areas of the University, thus providing priority and optimal implementation conditions for the research community, in accordance with the University's Institutional Development Plan [1]. The Rector decides on the priority status of the projects hosted by EKIK, including direct EU-funded (H2020, Horizon Europe) grants (except for Erasmus), national priority grant schemes (National Laboratory Project (NLP), Competence Centers (FIEK, KK), Lendület, Thematic Excellence Programme (TKP) etc.), as well as the University's own strategic grants aimed at improving the scientific reputation and international recognition (Researcher of excellence – Distinguished Professor program).

3.2 Core Activities

According to the founding rector's intentions, EKIK continues to date to excel in research and development. The thematic focal points have proved to be instrumental to improve the university–industry relationship system. EKIK provides conscious development of digitalization, gaining a competitive advantage in the field of applied AI. Researchers at EKIK are able to continuously apply and succeed in realistic and performance-based grants, and support even technology developers, spin-offs, startups or even SMEs and large companies. Their involvement in the education programs at the faculties contributes to the management of shortage of technical specialists. The strategy includes the active management of the Intellectual Property, including patents and registered know-hows. EKIK aims to build more effective, structured research connections and continuous close cooperation with various actors. EKIK is stepping up, where needed to affect and guide government strategy and acquire targeted funding for the key domains, where necessary (this include partnership with the National Innovation Agency (NIÜ) and the National Research, Development and Innovation Office (NKFIH)). It follows

an *End-to-End innovation management* paradigm, offering services internally and externally from idealization to productization (Figure 3).

Moreover, EKIK is capable of supporting the development of business strategy and product development capacities of partners, attracting international R&D capacities, embedding these, and state support, even in the most challenging domains, such as medical technologies – up to the point of clinical validation and improvement of practices. EKIK may provide mentoring and financing for newly created companies, keeping startups in the country.

EKIK is involved in international standardization at various levels, submitting national delegates to the ISO Technical Committee on Robotics (TC 299) standardization committee focusing on the safety and performance of medical robots and to the ISO Technical Committee on Healthcare organization management (TC 304) working on hand hygiene and patient safety standards, furthermore, EKIK is involved in the IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems [3]. The researchers of EKIK have contributed to over 10 published international standards so far, including the first ever medical robotics standard [4], the first ethical robotics standard [5], and the first global standard on hand hygiene [6].



Figure 3

End-to-end Innovation Model of EKIK, offering complex engineering services “From the formula to the prototype and beyond”

3.3 Research Centers of EKIK

The R&D+I activities of EKIK are realized in the non-independent organizational units, research centers, which function as competence centers in their particular domains. These are professional research workshops operating on the premises or branches of the University, carrying out R&D+I projects directly connected to a strategic focus areas, directed by outstanding experts who have achieved international recognition in their fields.

3.3.1 Antal Bejczy Center for Intelligent Robotics (IROB)

The Antal Bejczy Center for Intelligent Robotics (IROB, <https://irob.uni-obuda.hu/en/main/>) was among the first research competence centers established at Óbuda University, practically a year before the official foundation of EKIK. The godfather of the IROB, Tony Bejczy (Figure 4) is probably the most renowned Hungarian roboticists who worked over 3 decades at NASA Jet Propulsion Laboratory (JPL) in Pasadena, CA, fundamentally contributing to our knowledge on space robotics and teleoperation [7].



Figure 4

Renowned NASA research engineering lead and honorary professor of Óbuda University, Antal Bejczy among former rectors of the university, late Prof. János Fodor and Prof. Imre J. Rudas

IROB task is primarily to develop a unified concept for university robotics development, research and education, to design and implement joint projects with faculties and other centers, and to coordinate interdisciplinary grant applications. IROB defines its mission as the development and propagation of robotics applications in academic circles and beyond, while maintaining a scientific edge. It unites the stakeholders of the domestic robotics industry and by organizing regular professional programs, it provides space for cooperation to develop. IROB performs R&D+I services for economic, scientific and professional organizations founded on the existing knowledge base. It is a member of numerous national and international robotic associations, most importantly, an active participant of the euRobotics aisbl (<https://eu-robotics.net/>) and the IEEE Robotics and Automation Society (<https://www.ieee-ras.org/>).

Research engineers from IROB were among the founders of the Sustainable Robotics initiative (<https://www.sustainablerobotics.org/>), aiming to bring closer and integrate ESG (Environmental, Social and Governance) aspects to the applied research (Figure 5) [8-11].

IROB also plays a significant role in education (BSc and MSc programs, but mainly at the level of PhD). It brings together the activities aimed at ensuring that the University's robotics education can build on state-of-the-art hardware and software platforms [12, 13].

IROB operates the "MakerSpace" creative workshop/machine shop and 3D printing house, as a service providing to the entire OU community [14]. IROB ensures a professional and infrastructural background for the operation of the OU College for Advanced Studies of Robotics (ROSZ).



Figure 5

Sustainable Robotics framework created by the new SR initiative, following the UN Sustainable Development Goals concept (Courtesy of K. Holland) [8]

The research engineering domains and project focus of the IROB includes:

- Advanced and non-linear robot control [15, 16];
- Applied AI and ML [17, 18];
- Robot navigation and SLAM [19];
- Laboratory automation [20];
- AR/VR/XR technologies [21, 22];
- Agri-food robotics [23];
- Robotic meat processing (H2020 No 871631) [24-26];
- Safety of autonomous vehicles [27];
- Urban air mobility [28];
- Surgical Data Science [29];
- Robot-Assisted Minimally Invasive Surgery improvements (Da Vinci Research Kit) [30-31];

- Image-Guided Surgery (OU Consolidator Researcher grant) [32, 33];
- Technical and non-technical surgical skill assessment [34-36];
- Ultrasound-guided robotics [37].

3.3.2 BioTech Research Center (BioTech)

The BioTech Research Center (BioTech, <https://biotech.uni-obuda.hu/>) conducts R&D+I projects in the health-engineering interdisciplinary field to develop new technologies, software, and hardware that effectively support advances in the medical field in both research and clinical practice (including medical image processing, medical image acquisition, medical data analysis, eHealth, bioinformatics, cancer research, biotechnology, tissue engineering). The research center continuously provides infrastructure for university researchers and students to cultivate a wide range of cyber-medical systems topics and to implement their innovative ideas.

Key projects included at BioTech:

- Development and testing of a framework supporting the sustainable implementation of telemedicine-based forms of care [38];
- Digital pathology (medical image processing) [39];
- Bioinformatics research for various diseases [40];
- Data mining and artificial intelligence in eHealth [41];
- Developing MassVentil, a novel patient ventilation system (<https://massventil.org>) [42].

3.3.3 The Physiological Controls Research Group (PhysCon)

The Physiological Controls Research Group (PhysCon, <https://physcon.uni-obuda.hu/en/home-english/>) is a non-independent organizational unit operating within the framework of EKIK, whose aim is to create and maintain an innovative scientific community and research laboratory that, with high-level and highly interdisciplinary specialized activities, talent management and doctoral supervision, educational capacity expansion, domestic and international relationship building, contributes to the organization, definition, and integration of the scientific field of health engineering, to the creation of new results, and – through these – to the University's development goals and teaching-research work by project generation, professional event organization, and high-level publication activities (conferences, magazines and books). Their projects target various subdomains of physiological and bioinspired systems development:

- Mathematical modeling and simulation of physiological and pathophysiological processes [43];
- Regulation of physiological and pathophysiological processes and development of regulation algorithms, particularly in the field of cancer treatment (ERC Stg Tamed Cancer) [44,45];

- Biostatistical analysis of physiological and pathophysiological processes (National Laboratory for Health Security) [46,47];
- Development of decision support for personalized medicine using automated (artificial intelligence, control technology) methods [48];
- Codimension bifurcations for continuous and discrete (smooth and non-smooth) dynamical systems (H2020-MSCA-RISE-2017 – 777911) [49].

3.3.4 Health Economics Research Center (HECON)

The Health Economics Research Center (HECON, <https://hecon.uni-obuda.hu/>) is the EKIK center responsible for the research and education strategy of health economics at Óbuda University. HECON aims to perform health technology assessment for Hungarian and international pharmaceutical-, medical device and digital health companies as applied research center, while its basic research activities are focused on the methodological development of health technology assessment for medical devices and digital health interventions. Their projects have been mostly financed by the Ministry of Technology and Innovation / NKFIH. HECON has been providing Hungarian contribution to so far 16 EU-financed research projects. Key research areas include:

- Health economics, health technology assessment, evidence synthesis [50];
- Assessing the societal and economic value of health innovations [51];
- Evaluation of digital medical devices, and digital health interventions (TKP2021-NKTA-36) [52];
- Evaluation of patient reported outcomes and quality of life (EQ-5D) [53-55];
- Development of methods for the assessment of medical devices [56].

3.3.5 Cyber-Medical Competence Center (KIKOK)

The Cyber Medicine Competence Center (KIKOK, <https://kikok.uni-obuda.hu/>) started operating in March 2020 with the aim of creating new value in the field of cyber medicine by utilizing the synergies of corporate innovation and the University's research and development capabilities. This activity is also strengthened by a major national grant entitled “Creation of an innovation service provider base for the development of cyber-medical systems for diagnostic, therapeutic and research purposes” – primarily focusing on tumor therapies, digital performs unique developments in pathology and technologies that help patients live with diabetics. A key element of KIKOK is that the interdisciplinary cooperation of many scientific fields and stakeholders takes place at the campus. One of the research issues how mathematical tools of system and control theory can be used to model physiological processes, and to design algorithms that facilitate the process of personalized healing. The knowledge created in the framework of the research, such as the mathematical model of tumor growth and therapy optimization

algorithms, Health 4.0. according to the directive, can become the cornerstones of cybermedicine [57, 58].

3.3.6 Precision Farming Research Center (Prec_G)

The purpose of the Precision Farming Research Center (Prec_G) is to create and operate an interdisciplinary research group and scientific team that examines the practical application of modern technologies and their integration possibilities, primarily to support precision farming, as well as to research branches such as the circular and green economy. Another goal of the center is to support translational education, i.e. the up-to-date integration of high-quality knowledge, technological development and application results of remote sensing, GIS, sensor technology, AI into education, which is a precondition for the effective sustainability, innovation and digitalization of agriculture and related fields [59, 60].

3.3.7 Other Key Research Domains

EKIK has been traditionally a strong advocate of various emerging interdisciplinary research activities in the past 10 years, notable examples include smart cities [61], smart infrastructure [62] and smart materials [63], digital health [64] and digital infection prevention [65], plus renewable energy and sustainability [66] and AI-based cybersecurity [67].

The EKIK remains open to outstanding scientists and researchers who aim to bring their knowledge and experience to OU. The ongoing Distinguished Researcher of Obuda University program continues to attract highly cited and renowned professors from all around the world, who are expected to set up their own research centers within EKIK in the near future.

4 Key International Partnerships

It is necessary to continuously ensure compliance with the criteria of domestic and international R&D+I schemes, grant structures and supporting an ever-growing pool of international partnerships, for which an entire foreign affairs directorate was established in 2023 at university level. The organic connection to international research trends is mediated by the EKIK International Advisory Board and by the tight cooperation with the IEEE Hungary Section (brought to Óbuda University by Professor Rudas). During the IEEE–OU co-organized annual international conferences and symposia, the professional relationship building is facilitated. Current efforts of EKIK include strategic collaboration with the top 250 universities, supported by the HU-RIZONT program.

OE Distinguished Researcher program was launched in 2022, and is currently managed by EKIK. Each year, up to 5 outstanding foreign and national researchers may join to the University with a special excellence-based support package. They

constitute the class of Distinguished Professors, Consolidator Researchers and Starting Researchers of the Excellence Program. For them, the goal is not only to fulfill the composite scientific indicators aligned with the strategic metrics, but also to reach the next step of the individual career degree (e.g., habilitation, DSc, etc.).

EKIK has always looked upon its international professional network as a key to his success. Into the existing research cooperation the CISST center of Johns Hopkins University, the Stanford Artificial Intelligence Lab, the Harvard John A. Paulson School of Engineering and Applied Sciences, the PERK Labs at Queen's University in Kingston, the Hochschule der Bayerischen Wirtschaft (HDBW), the Advanced Robotics Centre National University of Singapore (NUS), and the Austrian Center for Medical Innovation and Technology (ACMIT) [69-71] are involved.

5 Vision for an Innovation Ecosystem

To boost the efficiency of internal and collaborative innovation management, EKIK has been a strong advocate of hands-on coaching and mentoring approach. Through micro-investments, the EKIK has started to implant the seeds of student innovation in 2019. In 2022 the Óbuda University decided to become an Investor University, thus the OUVC was established in 2023, later on, the technology transfer company, Initium. While the University keeps direct and indirect profit expectations, it can leverage the investments at multiple levels, from brand awareness to freshmen recruiting, making the micro-investments profitable. The topical focus remains aligned with the strategic research agenda of OU, taking into account the ESG and sustainability aspects as well.

5.1 Knowledge Management and Knowledge Transfer

According to OU's mission, its most important value is the lecturers and the students, and its trademark is the knowledge they shared and acquired. The University aims to manage this according to the following principles:

- primarily the creation of new knowledge and opportunities (Generation of Intellectual Properties (IP));
- then their preservation (management of IP);
- and finally, its utilization (IP utilization and management).

Organizational units responsible for innovation shall be able to adequately cover these three functions, with strengthened human and material resources.

- 1) Continuous, measurable development is now both an external (maintenance) and internal expectation regarding the created technical and intellectual works, which can be expressed primarily by the number of IP protections.
- 2) Preserving the value of IP is a task that requires the management of IP (in addition to legal protection, including know-how) in a portfolio approach, i.e., taking care of maintenance along professional guidelines, synchronizing related IP with technological synergies along, as well as the return of the most important results to the research and teaching work at OU.
- 3) Traditionally, domestic universities have not been able to succeed in utilizing their IP, because they do not pay enough attention to exploring and developing the business potential of professional processes. Utilization of knowledge appears as a priority task at the University in the innovation value chain, for which a separate entity, Initium was established. The legal and technical methods are to be developed, through which early-stage innovation projects can receive support based on their real needs, both financially and through professional and business development mentoring. This process supports both direct R&D+I collaborations (generating external income) and the start-up ecosystem.

5.2 Investor University Concept

In the case of its best-performing innovation projects, the need has become evident to support the project with some form of investment. For this, a framework of a new, pico-investment structure, the Initium Program was launched in 2023. OU's own startup companies may be founded, incubated and hosted on the campus (starting at Technology Readiness Level, TRL 1). The Initium is able to commit to piko-investments, pre-seed money and in-kind contribution to the selected projects. The University's own Venture Capital company, OUVC, attracts the best startup companies from in-house (graduates of the Initium Program at TRL 4+) and from the regional market. EKIK and the faculties can work together to maintain the deal flow and identify the suitable prospects. The portfolio companies may be supported with internal technical development services and engineering capacity. OUVC can also provide office space, accounting services, marketing support, and business development services. It is expected that in the coming years, there shall be a handful of scalable projects, and many more companies (at TRL 7+) will find a place in one of the 3+1 Science Parks built and managed by the University, thereby remaining part of the university's innovation ecosystem.

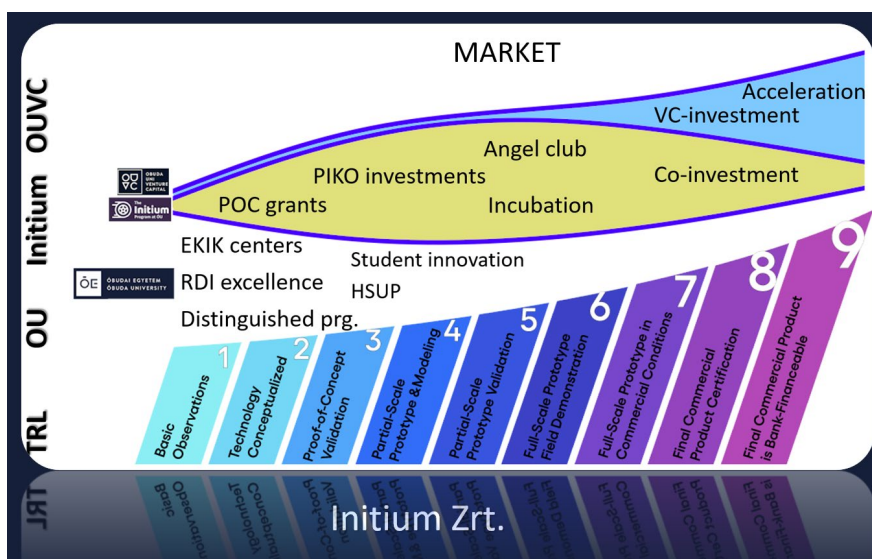


Figure 6

The complete value support provided along the innovation chain. While the Innovation Pyramid of Óbuda University (Fig. 2) depicts the vertical structuring of the ecosystem, this figure shows how the different stakeholders in the University Innovation Ecosystem can support the projects at different Technology Readiness Levels (TRLs).

The key point is that the University is able to provide value and adequate services to both internal and external innovation projects at all levels of the innovation chain. Depending on the size and degree of maturity, the EKIK itself or the Initium Program can support the projects in their initial and early incubation phases, and then the OUVC enters in the pre-seed, seed and acceleration phases. Successfully developing startups can access growth resources from SZTA or the international capital market.

5.3 Active Innovation Management

After becoming an investment university, innovation management develops into a critical process. OU basically invests on 3 levels and expects different direct returns at every stage:

- 1) A well-educated student: the result is a highly skilled workforce for industry and the academia alike, with expertise and leadership skills. Using the professional support of the Hungarian Intellectual Property Office (SZTNH), OU extends the teaching of basic IP knowledge to all students, and in the form of mandatory continuing education to all lecturers and researchers, so that in the future they do not allow critical innovation opportunities from an IPR point of

view to be lost due to lack of training or ignorance. In the area of innovation management, OUVC primarily deals with the formation and training of human resources.

2) Engineering solutions with IP protection: the University develops an IP portfolio of both technical problems arising in industry and innovative ideas for societal challenges. Organizational units cooperating in knowledge transfer (EKIK and beyond) ensure their proper integration in the education and research processes, as well as their conformity with external partners.

3) IP capital put to use: this gives the investing university its real strength and firm standing. Projects emerging from the University's innovation hubs (EKIK, Faculties, SPV) either as independent startups (startups, spin-offs) or externals, generating great technical and social added value are actively involved in the exploitation process. Continuous involvement of external innovation partners – applying the OUVC Venture Client model and thereby generating income – the innovation activities of many corporate partners can be accelerated cost-effectively, reducing the risk of failure.

As a new strategic element, partner companies may be involved in the technology transfer process along the entire span of the innovation value chain. The essence of the ecosystem approach is that no matter what level a partner appears (SMEs, large enterprises, domestic university or international partners), the University can select the ideal connection point at the appropriate level of the innovation pyramid. At the lower levels of the innovation chain, the University can provide a one-stop portfolio of innovation services through EKIK (R&D projects, IPR strategy, unique developments, benchmarking), through Initium SPV (know-how registry creation, technological validation, etc.). And at higher levels – as the only one in the region – able to rely on their own venture capital fund, OUVC, as well as in close cooperation with Széchenyi Funds Ltd. (SZTA), as a sister company. Teams that successfully participate in internal innovation competitions and idea contests also receive financial support for the preparation of their first prototypes (continuation of the Proof-of-Concept (PoC) competition).

Conclusions

The University's primary goal in the area of R&D+I is to continuously search for market needs and utilization opportunities in terms of its scientific and development results. To strengthen the startup ecosystem, maintain the initiatives launched in the previous NKFIH University Innovation Ecosystem program, and to remain an active participant in the umbrella organization, an investor university approach has been applied. In close cooperation with the professional work of domestic and international R&D strategic and supporting organizations, e.g., NIŰ and NKFIH, Óbuda University has invented and established the Innovation Pyramid, a technology transfer vehicle to support organic innovation and growth.

The establishment of Óbuda University's innovation ecosystem represents a significant milestone in fostering regional innovation and research excellence. Through the strategic integration of its seven faculties, the University Research and Innovation Center, science parks, investment companies such as Obuda Uni Venture Capital, and technology transfer entities like Initium LLC, the University has created a comprehensive framework to support the translation of knowledge into tangible societal benefits.

Under the visionary leadership of Rector Rudas, EKIK has emerged as a dynamic force driving forward the university's research and innovation agenda since its inception in 2012. Through its multifaceted approach encompassing basic and applied research, innovation strategy development, and ecosystem cultivation, EKIK has played a pivotal role in fostering interdisciplinary collaboration and advancing priority research projects aligned with OU's Institutional Development Plan and the Rectoral Strategy.

The collaborative ethos embedded within EKIK, coupled with its close partnership with the faculties, has enabled the seamless execution of R&D+I activities, ensuring optimal conditions for the research community to thrive. By harnessing the collective expertise across diverse disciplines, EKIK has facilitated the emergence of innovative solutions to address pressing societal challenges and drive economic growth.

Moreover, the strategic decision to establish Initium Venture Labs further underscores Óbuda University's commitment to bolstering its innovation capabilities and enhancing technology transfer mechanisms. By leveraging the synergies between academia and industry, Initium is poised to catalyze the commercialization of university-generated intellectual property, fostering entrepreneurship, and stimulating regional economic development.

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