

РОЗВИТОК КООПЕРАЦІЇ “ПІДПРИЄМСТВО – УНІВЕРСИТЕТ” В УКРАЇНІ

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Кооперація між підприємством та університетом відіграє важливу роль в економічному, інноваційному, технологічному та науковому розвитку країни. Подано модель екосистеми, що містить основні типи партнерських стосунків, контактні аудиторії, стратегічні фактори розвитку кооперації. Зазначено основні бар'єри розвитку взаємодії в Україні, а також вплив партнерства на навколишнє середовище. Наведено переваги партнерства типу “win-win” для студентів, викладачів, науковців, компаній, уряду та суспільства. Розроблено можливі варіанти розвитку кооперації між підприємством та університетом в Україні.

Ключові слова: університет, компанія, кооперація, партнерські відносини.

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UNIVERSITY COMPANY COOPERATION DEVELOPMENT IN UKRAINE

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The university company cooperation (UCC) plays great role in economic, innovative, technological and scientific development. For more than 25 years, many Ukrainian business and academic leaders have high interest in cooperation and mutual research between their companies and universities. Only a few universities had cooperation with enterprises, mostly in technical area. The aim of the article is to underline the key points of UCC and to present proposition of mutual cooperation development in Ukraine. The article presents the ecosystem model that includes main types of partnership relations (in R&D, mobility of students, commercialization of R&D, curriculum development and delivery, lifelong learning, entrepreneurship and governance), target audience (stakeholders) and strategic factors of cooperation creating (strategies, structures, activities and framework conditions). Cooperation development in Ukraine depends on ages of academics working in the university, ages of leaders working in business, the area of knowledge, the type of university, the location of representatives. The main barriers of cooperation between university and company and their influence on the Ukrainian environment are presented. The key barriers of cooperation development in Ukraine include: lack of financial resources, lack of contact people, corruption and bureaucracy. Also in Ukraine most academics are not engaged in cooperation with business. The win-win partnership benefits for students, academics, companies, government, society are shared in the article. They include economic development, better performance of the business, equipment modernization, high level of knowledge transfer, stability on the labor market, innovation activity, practical knowledge and skills of the graduates, achieving the

mission of the HEI. One of the best practices of successful strategic university company cooperation development in Ukraine was TEMPUS project of NEFECIE (National Education Framework for Enhancing IT Students' Innovation and Entrepreneurship). The results of the project were creating a Virtual Innovative Space, promotion of students entrepreneurship and innovation projects IT-Eureka! Ukraine, creating new educational courses and others. The propositions for future partnership relation that was increase in Ukraine are given and contained encouraging students and academics to take part in Erasmus, Horizon 2020 programs; developing activities to support students in innovation entrepreneurship; promotion a good practice and success in existing UCC; developing different tools for better partnership relations; inviting business delegates to the universities and create common courses; informing academics about possible cooperation; creating development programs, agencies for supporting cooperation; increasing collaboration with the HR department of companies to offer students greater opportunities for practices and others. Future strategic partnership will force economic growth, competitiveness and make challenges in Ukrainian society.

Key words: university, company, cooperation, partnership relations.

Statement of the problem. Nowadays our society meets a great number of challenges in industrial and technological sectors. University can't be so dynamic as a market that is why cooperation among them provides an opportunity to fill the development gap and make the environment more balanced.

Unfortunately, there are some barriers of cooperation between university and company in Ukraine: lack of financial resources, lack of contact persons, different models of communication of institutions, gaps in confidentiality. The main barrier seen by most representatives in Ukraine are focused on high level of bureaucracy and corruption.

Analysis of recent research and publications. The problems of the university company cooperation, its benefits and the main barriers occupy an important place in the researches of the foreign and Ukrainian scientists. Thus, the development of the UCC devoted to the researches of H. Gogl, C. Schedler, A. Kok, T. Darvey, V. Galan-Muros, V. Lytvynov, V. Saveliev, V. Kharchenko and others.

Goals of the article are: to describe and analyze the ecosystem of the UBC, to characterize the main barriers and benefits of cooperation in Ukraine and their influence on society, to explain the main ways of cooperation development, that will promote UCC in Ukraine.

The main material of research. Section 1. University company cooperation

University company cooperation is a number of operations between university and company for receiving mutual material and/or nonmaterial benefit. Successful collaboration of university in synergetic relationship with government and business can become the perfect driver of knowledge-based economy.

For more than 25 years, many Ukrainian business and academic leaders have high interest in cooperation and mutual research between their companies and universities. At the beginning, mutual projects were tiny and isolated. In 2011 first technological clusters appeared in Ukraine. It encouraged creation of community of information technology (IT) companies, which together with universities and local authorities develop IT sector. The clusters implement a unique large-scale analytical study of the entire Ukrainian IT market with a high representation. Now this project can provide accurate and complete information about the number of IT workers, their kind of employment, qualification and wages [1].

The process of building the cooperation in Ukraine was slow and met a lot of barriers. In spite of difficulties, both university and company representatives realize the benefits from participating in joint research. The main advantages of cooperation are the extensive knowledge formation and new innovations development. The impact of cooperation can be direct and indirect and presented on a fig. 1 lower.

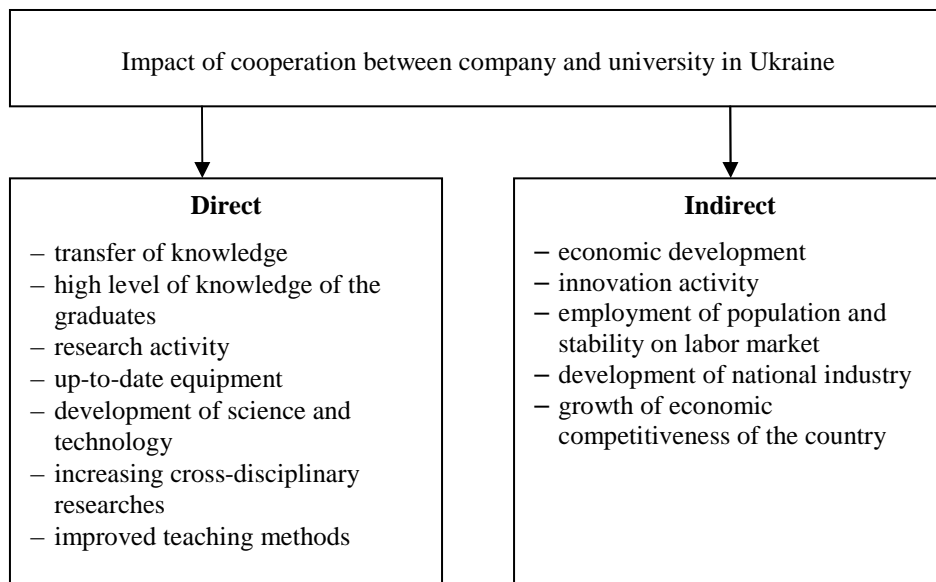


Fig. 1. Impact of UCC development

Source: developed by author of the article

Impact of real community structures can be seen in most European countries. Such cooperation become popular even in neighboring countries. For example, Europe 2020 strategic plan has recognized the importance of the role of high education institutions (HEIs) in the transfer knowledge to society and vital contribution to Europe’s economic competitiveness. Cooperation provides a range of advantages and benefits for HEIs, students, business, society [2].

In Ukraine most academics are not engaged in cooperation with business. For instance, in European Union approximately 40 % are engaged in medium and 20 % in some small communities, therefore, for UCC it is necessary to find what factors can support future cooperation development. Tab. 1 below outlines main benefits and possibilities of the cooperation.

Table 1

Main benefits and possibilities of the UCC in Ukraine

	Stakeholders	Benefits and possibilities
1	For students	Improving learning style, practical knowledge and skills, modern equipment, development of students’ employability skills
2	For companies	Better performance of business and development, innovation development, new partnerships, marketing and public relationship programs
3	For economy and society	Development of industry, new technology creating, labor market stability, increasing of GDP and economic development of Ukraine
4	For university and academics	Achieving the mission of the HEI, vital researches, innovation activity, high reputation of the researches

Source: developed by author of the article

Well-managed partnership produces a growing number of professors and graduate students who can think and act across the cultural divide, connect with the key research interests of a company and work harmoniously to define big and common strategic goals [2].

Section 2. Ecosystem of partnership relations

There are different factors that have impact on UCC. They include ability to cooperate in different areas, rate and status of universities, demographic and economic situations in Ukraine. As well not every

company and university can fully understand the benefits of mutual cooperation. That is why it is necessary to develop motivators for future cooperation. So, the main goals of university-business development in Ukraine are:

- business eco-system development;
- establishing contacts and cooperation promotion between companies and universities.

Cooperation development in Ukraine depends on ages of academics working in the university, ages of leaders working in business, the area of knowledge, the type of university, the location of representatives. In European Union for example the location of university has a great influence on UCC. In Ukraine due to strong IT development the cooperation with polytechnics and applied sciences universities has the highest level of cooperation.

For university business development it is necessary to pay attention to it's ecosystem. Such ecosystem is complex and consists of strategies, structures, activities, leaders and framework conditions. There is a model of UBC Ecosystem that includes different elements. It includes levels, factors and key members. The ecosystem consists of visible and nondisabled areas. The figure 2 shows the UBC Ecosystem with all elements.

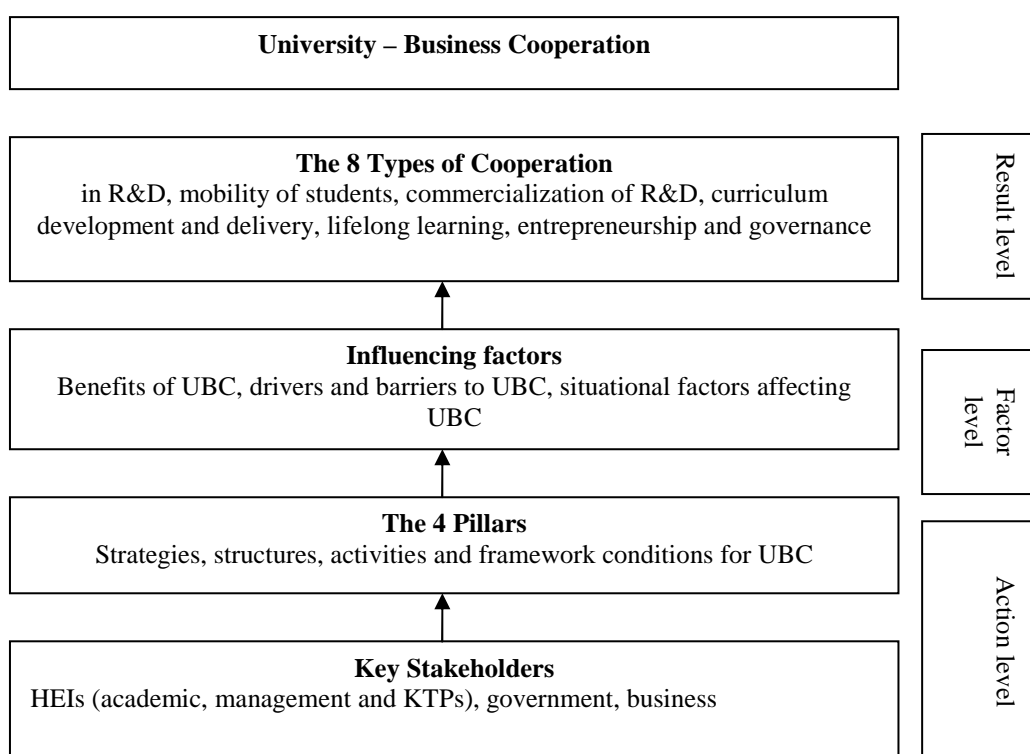


Fig. 2. University business ecosystem model

Source: Darvey, T., Galan-Muros, V. [3]

As it is shown there are eight most popular in European Union types of cooperation. The main ways in which university and business cooperate are:

- common research and development (consulting, cooperation in innovations, publications);
- mobility of academics and students;
- commercialization of R&D (development patents and licenses);
- innovative entrepreneurship;
- lifelong learning;
- governmental programs.

In Ukraine four main types of cooperation are spread. They include students pre-diploma and externship practices, common research and development, lifelong learning and governmental programs.

Section 3. Development of mutual work

It is necessary to have contact persons at institutions, universities and companies that will specialize in UCC (mobility, practices) in Ukraine. The example model (fig. 3) of cooperation with key contact persons is presented below. As we can find, the cooperation is based on communication between university project coordinator in one side and project manager of the company on the other. Communication between target persons provides better understanding of tasks and ideas of the common project, increase responsibility.

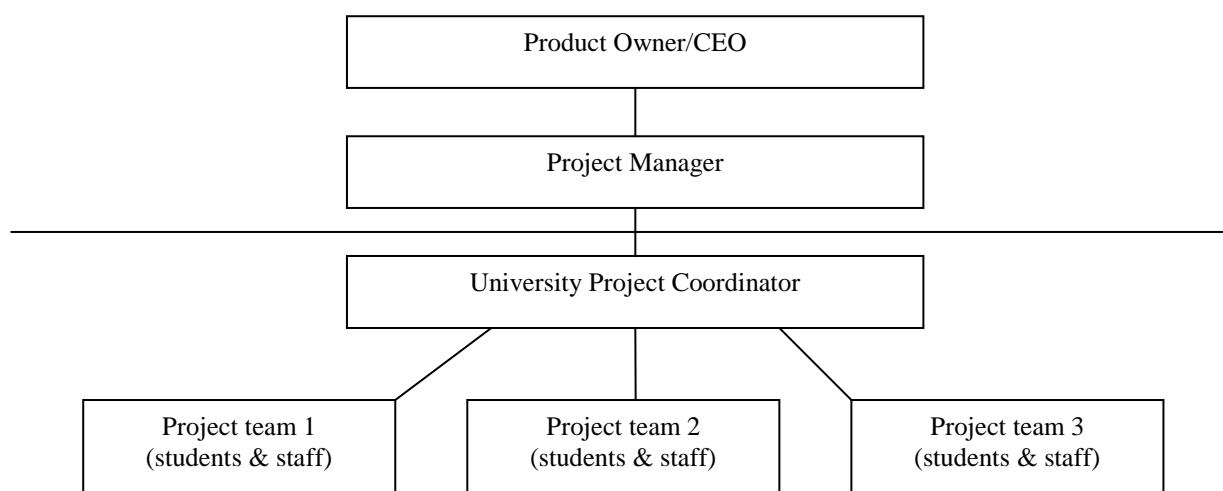


Fig. 3. Contact UCC persons model

Source: developed by author of the article

Leaders of the partnership relations are academic, business, government. They have a great role in increasing cooperation between university and company and have to support the active involvement. The managers need to be strongly oriented, active, motivated, cooperation desirable and provide relationship management support (recruiting, promotion can be used to motivate academics to cooperate). The impact of collaborative research is maximized by open publication of achieved results.

One of the examples of successful strategic university development in Ukraine was TEMPUS project of NEFECIE (National Education Framework for Enhancing IT Students' Innovation and Entrepreneurship). The universities from Ukraine were Lviv Polytechnic National University, Ivano-Frankivsk National Technical University of Oil and Gas, Kharkiv National University of Radioelectronics, Vinnytsia National Technical University, Odessa National Politechnic University. The main objectives of the project were:

- identification of the best models and frameworks for university – company cooperation;
- development of an infrastructure that enables the sustainability of a new ecosystem of university-company cooperation;
- development of a web portal called Virtual Innovative Space to maintain contacts between students, companies and universities as well as to enable knowledge transfer between the actors;
- to influence the national standard for IT education in Ukraine;
- to develop and deliver new course on innovation and entrepreneurship for Ukrainian staff and students [4].

The results of the project were creating a Virtual Innovative Space, promotion of students entrepreneurship and innovation projects IT-Eureka! Ukraine, creating new educational courses, the Student's Forum "Student Government: Problems and Prospects" organization, First Forum of Innovations for IT-students was conducted; exchange course for students in Linnaeus University took place.

To summarize, universities in Ukraine have to create a positive environment, communicate system, and demonstrate best practices. There are a lot of drivers that can help to facilitate cooperation: mutual trust, understanding of common interest, flexibility.

Possible action for cooperation development in Ukraine can be:

- creating development programs, agencies for supporting cooperation;
- promotion a good practice and success in existing UCC;
- increasing collaboration with the HR department of companies to offer students greater opportunities for practices;
- developing regulations and laws of cooperation;
- inviting business delegates to the universities and create common courses;
- concentrating on those university strategies that have the highest impact on UCC;
- developing different tools for better partnership relations;
- encouraging students and academics to take part in such programs as Erasmus, Horizon 2020;
- developing activities to support students in innovation entrepreneurship;
- informing academics about possible cooperation.

Strategic cooperation will make teaching more modern and will develop people with such skills that will be needed for new innovation markets.

Conclusions and recommendations for further research. Cooperation between company and university has impact on different areas of society existence. It can be perceptible in economic development of the country, innovation activity, stability on labor market, graduates level of knowledge. The main benefits of cooperation are: practical knowledge and skills of students, better performance of business, innovation development, increasing of GDP, and development of industry.

The key barriers of cooperation development include: lack of financial resources, lack of contact people, corruption and bureaucracy. They can be outdone through promotion a good practice of UCC, developing regulations and laws of cooperation, developing activities to support students, inviting business delegates to the universities and creating common courses.

Strategic partnership will force economic growth, competitiveness and make challenges in Ukrainian society.

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