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FORMATION OF THE ECOSYSTEM OF THE EDUCATIONAL PROGRAM BASED ON SOCIAL NETWORKING SITES TECHNOLOGY

Анотація. The paper investigates the problem of transforming existing approaches to the formation of new effective links between universities and all stakeholders, which becomes the basis for creating competitive educational programs. The purpose of the study is to determine the prerequisites for the formation of an ecosystem and substantiate the concept of interaction between key stakeholders of the educational program based on partnership, network communications and digital transformation.

Based on results of the SWOT analysis of the acting master's educational programs, where the authors work, the feasibility of forming information and communication space of educational program as an ecosystem with the use of all opportunities provided by digital technologies is proved, in particular: the reasons for the inefficiency of existing communication channels within university educational programs are discovered; opportunities and limitations of social networking technology in the deployment of the educational program SMART platform are revealed; the concept of such a virtual space is proposed; benefits of the platform for key stakeholders in the educational program are substantially analyzed. SMART platform architectonics of the educational pro-

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gram is elaborated that describes deciding components of the platform considering the needs of key stakeholders of the educational program and SMART principles of ecosystem formation.

The request of members of the educational community for the formation of an open learning space solves the following tasks: 1) students receive direct access to all educational materials, relevant information on cooperation with companies and participation in research projects; 2) expanding the boundaries of educational products, the use of new tools and forms of educational work, the involvement of business experts in the educational process; 3) direct access of employers to program students as potential employees, which minimizes transaction costs for finding personnel with a high level of practical competence, attracting young talents, introducing modern training content in accordance with professional standards. Such collaboration will be able to ensure the relevance of scientific research, enhance its practical significance and facilitate the transfer of innovative technologies into the business environment.

The article was prepared based on the results of the German Ukrainian Technology Transfer University Internships Program 2021 (https://sites.google.com/view/guttup/).

Keywords: ecosystem; educational program; social networking sites; SMART platform; stakeholders; communication; digital transformation; university.

Introduction. The changes taking place in the educational process are primarily related to the spread of digital technologies. These new trends have been realized by graduates, employers and educational institutions. Modern technology is changing much faster than people are willing to relearn. Such transformations create a new challenge for the education system — the need to transform existing approaches to learning, to create new effective links between universities and all stakeholders, which is the basis for creating competitive educational programs.

Digital transformation is increasingly being integrated into public life. In the context of ensuring the quality of the educational program, these concerns, first of all, changes in the infrastructural provision of social communications and methods of disseminating and searching for information. So, digital transformation is a driver of the transformation of the education system in the direction of building educational ecosystems. The educational program is the core around which communication and information processes between stakeholders are built. The interests of the target audience in the context of ensuring the quality of the educational program are as follows. Employers are interested in business development through knowledge of the professional community and the academic environment, work with talents and the possibility of hiring young professionals with advanced applied practical skills. Applicants and students are interested in studying on educational programs that provide an opportunity for global access to knowledge and promising employment for self-realization.

Thus, a problem of forming the information and communication space of the educational program as an ecosystem with the use of all the opportunities provided by digital technologies is arising. This view of the interaction of participants in educational programs leads to the search for effective models for managing information exchange between participants in an educational program and the external environment (societies, regulatory organizations, expert communities, etc.). It seems that such models should

be prompt in responding to the requests of stakeholders, effective in the context of ensuring their functioning, promising in understanding innovative openness and the ability to quickly (without losing effectiveness) transformations.

It is also necessary to take into consideration the urgent need for a steady increase in the competitiveness of domestic M'sPEs, including on the international market of educational services. According to the QS International Student Survey 2020, based on a survey of almost 79 thousand international students from 93 universities in 16 countries of the world [1], the following should be considered critical to the success of educational programs:

– International student recruitment strategies and solutions should be informed by the changing dynamics in demand as a result of COVID-19;

– Institutions need to consider the consistent importance of teaching quality in student decision making and the vital role technology plays in this area;

– Streamlined and clear communication, utilizing the channels and methods that students prefer, needs to be a core priority for universities across the globe;

– Universities need to recognize the importance international students place on graduate outcomes and why an institution's graduate employability is more important than ever.

For domestic universities, the prevailing approach remains, according to which the management of educational programs occurs within the framework of the traditional organizational hierarchy (administration-faculty-department), which to a certain extent narrows the scope of the educational program functionality. The official university website is now the main source of information on university education programs. Nevertheless, the official website of the university does not allow solving a number of problems faced by participants in modern educational programs and are often solved sporadically using disparate tools (for example, MOODLE for organizing educational content, email and online messengers to support operational communication between professors and students. etc.). The following issues remain unresolved:

– creating and maintaining network collaborations (working, research and project groups) between students, professors, potential employers and expert communities, especially given the constraints imposed by the pandemic;

– providing access to developers and professors of educational products (courses, trainings, educational projects, etc.) to applicants and potential business partners in order to promote the educational program and increase the level of professional training of its graduates;

intensification of academic mobility programs for students and professors of M'sPE, including within the country and abroad, etc.

Background and research objectives. The purpose of this study is to determine the prerequisites for the formation of the ecosystem and substantiate the concept of educational program key stakeholders' interaction on the basis of partnership, network communication and digital transformation.

To achieve this goal the following tasks are solved:

– to analyze and generalize the problems of establishing and maintaining effective communications between key stakeholders in existing master's educational programs;

– to identify the basic needs of key stakeholders in the context of communication support and information exchange;

– to form a conceptual approach to the formation of information and communication space, suitable for maximum satisfaction of the needs and expectations of key stakeholders and adequate to the conditions of the digital society.

To solve the set tasks, the idea of J. Moore ecosystem was considered as a base and possibility of extrapolating it for the organization of educational activities was investigated. The essence of this idea is to consider the organization as part of an ecosystem that brings together different industries and creates conditions for growth based on the principles of cooperation and competition at the same time. An ecosystem is a dynamic network that is capable of producing added value through collaboration and competition [2]. To identify the existing prerequisites for such a transformation in the higher education system, we carried out a SWOT analysis of master's educational program (M'sEPs) that allowed to reveal problems and prerequisites for the implementation of the new concept of the communication platform. In accordance with the Edward Freeman model of stakeholders [3], the interests and needs of stakeholders in educational programs were identified, which provide formation the initial requirements for the concept of SMART platform of educational program.

Based on the results of recent research in the field of creating portals for the needs of educational institutions (for example, [4], and taking into account the experience of the authors of this publication in the use of various digital tools to establish and maintain effective communication at M'sEP, in the constructive part of our study we relied on such managerial and technological approaches for their transfer to the educational process:

Agile management. Application of Agile principles provide testing of new educational products in focus groups, flexible response to the needs of consumers of educational products during the educational process, cooperation with business (employers), direct communication as the most effective way to exchange information [5, 6].

Expectation tree, foresight sessions. Tools for finding out student expectations, students' reaction in the learning process, two-way communication, timely receipt of feedback [7, 8, 9].

Social networking sites (SNSs). Virtual communities where users can create individual public profiles, interact with real-life friends, and meet other people based on shared interests [10, 11].

Digital public goods. Public goods in the form of software, datasets, AI models, standards or content, which are usually free cultural works and contribute to sustainable national and international digital development [12, 13, 14].

Smart Learning Environments. IoT-based learning solutions, which are seamlessly integrated into our working and learning environment. Smart learning environments are therefore physical environments enriched with context-aware digital devices to improve and accelerate learning. Based on that, they can recommend the right learning content in the right place and at the right time. That's especially useful for life-long workplace learning [15, 12].

Machine Learning (chatbots). Machine learning refers to the ability of a system (in this case, the chatbot) to learn from the inputs it experiences. One of the ways they achieve this through natural language processing, or NLP, which refers to any interaction between computers and human language [16].

Results. The implementation of the master's program according to the basic principles of ecosystems requires consideration of the following initial conditions:

– the principles of interaction between organizations and individuals in the ecosystem provide for the mutual interest of a significant number of participants (students,, professors, graduates, employers, government and non-governmental institutions), which only through cooperation can create added value; the dynamic nature of networking based on the deployment of technologies within the ecosystem in order to increase its productivity; creating a separate culture as a set of goals and values that support all participants [17];

– Master's programs have specifics in the training of specialists, which is manifested in the research component and increased attention to the specialization of practical training of graduates who must be competitive in the labor market both in the current period and in the strategic perspective.

The study of the existing conditions for the implementation of the MEP, in particular on the basis of SWOT-analysis (Figure 1), allows us to identify their competitive advantages and development goals. In particular, Competitive advantages, which are mobility, fast updating, support of needed communications in concrete moments.

Consequently, the defining goal is an interest in communication to solve problems (business search for staff, professors — updating courses, students — finding the first job, corporate universities — verification of methods, theoretical verification, terminological consistency).

The results of the analysis of strengths and weaknesses of the educational program "Business Economics", opportunities and threats to its improvement indicate the possibility of implementing several development strategies, including: a) "success creation" through the introduction of educational products using innovative approaches, innovative methods and learning technologies with active involvement of expert practitioners; b) "maintenance of achievements" due to further improvement of educational platform solutions based on available resources (Microsoft 365, Moodle, author's business simulations); c) "survival" — improving the mechanism of informing stakeholders about the possibilities of the program and maintaining feedback; d) "proactive behavior" — to develop and implement the concept of smart-specialization of the educational program.

Each of the proposed scenarios for the development of the educational program is not mutually exclusive and can be implemented on a single basis — the formation and implementation of the concept of smart-specialization of the educational program as its key dynamic ability.

SWOT	**S (strengths)** • Combining a traditional academic approach with modern digital business management tools (1C, Diamond FMS, Microsoft 365) • Knowledge and application of theoretical and methodological tools, experience in developing educational materials • High level of digital competence of professors and students • Understanding of directions of formation of individual educational trajectory for applicants of higher education	**W (weaknesses)** • Lack of system in the relationships of different groups of program stakeholders • Imbalance of interests and involvement of different groups of stakeholders of the program in the implementation of the educational process in the educational program (in particular, in the pair "business — academic environment") • Linear communication of professors with students, lack of team principle of interaction • Imperfect tools for attracting, motivating applicants for higher education to non-formal education • Insufficient involvement of students in research work and academic mobility programs
O (opportunities) • Availability of digital platform solutions • Strengthening the role of online communications in a pandemic (COVID — a favorable condition for digitalization) • Growing needs of employers for graduates with smart skills	**S-O (success creation)** Introduction of educational products using innovative approaches, innovative methods and learning technologies. Involvement of professional practitioners in the educational process as guest speakers, customers and project experts.	**W-O (proactive behavior)** Formation of competitive advantages on the basis of smart-specialization of the educational program as its key dynamic ability.
T (threats) • Psychological unreadiness of students and professors for effective online communications • Insufficient digital literacy of the population • Severing offline business relationship • The emergence of private business schools that interact with business	**S-T (retention of achievements)** Holding round tables, seminars. Improving educational platform solutions based on available resources (Microsoft 365, Moodle, business simulations).	**W-T (survival)** Introduce regular stakeholder surveys to identify their expectations and maintain partnerships. Improving the mechanism of informing stakeholders about the possibilities of the program.

Figure 1. SWOT-matrix of educational program development strategy formation

Source: by the authors.

The practice of developing master's programs in domestic universities, as evidenced by expert assessments of participants of the German Ukrainian Technology

Transfer University Internships Program 2021 as well as the results of our MEP's self-analysis, identified strategic assets (Table 1) that are critical to meeting the needs of key stakeholders and creating an educational program ecosystem.

Table 1

STRATEGIC ASSETS THAT CAN BE OBTAINED FROM THE SYSTEM OF MEASURES TO IMPROVE THE EDUCATIONAL PROGRAM

Components	Strategic assets				
	Human resources	**Social resources**	**Technical resources**	**Informational resources**	**Financial resources**
Educational activities	Participants of guest lectures	Problem-oriented lectures, trainings, and webinars from guest speakers from business and partner universities	Microsoft 365 (MS Teams), Moodle, YouTube	Sites and information resources of partner organizations	Budget of the special fund of the University
Research activity	Creative teams of researchers	Research project groups for colleagues from partner universities and business structures	Services of creation of bibliographic lists, electronic libraries, sites of the publishing house	Databases, incl. scientometric bases	Budget of the special fund of the University
Practical training	Practice managers at enterprises	Internships, thematic excursions, internships on the basis of partner companies	Business simulations. Professional software products (Diamond FMS)	Cases, software products, guest trainings, management technologies	The budget of the special fund of the University
Communication component	All stakeholders of the program	Social communications through the alumni association, working project groups, etc.	Social networks	Information base of the enterprise	The budget of the special fund of the University

Source: by the authors.

Educational program stakeholders through interests and influence have access to a process that goes beyond the purely educational and acquires the shape of the educational ecosystem. Key stakeholders of the educational program are employers, students, graduates, consulting companies, and international organizations. Their interests and influence are crucial to the concept of interaction of key stakeholders in the

educational program. In turn, the effective communication process of these stakeholders creates additional benefits for them.

The survey of interest and influence of stakeholders of the educational program (which took place through negotiations, foresight sessions, questionnaires) allowed to obtain the following results on stakeholders' groups of and their expectations, contributions and benefits (Table 2).

Table 2

STAKEHOLDERS, THEIR ACTIONS AND BENEFITS

Stakeholders	What do they get?	What do they give?	Benefits
Employers	Reliable information about gifted youth Ability to adjust the EP Participation in the development of discipline modules according to the requirements of the industry Taking part in SEC	Up-to-date information on the state and development of enterprises Possibility of internships, practices, excursions Information about potential partners Excursions	Improving the image of the enterprise Selection of skilled workers
Students	Up-to-date information on the possibilities of strengthening practical training and self-presentation on the labor market	Actual feedback and requirements to the profile of the educational program.	Expansion of networking. Direct access to potential employers.
Graduates	International internship Practice Employment Participation in round tables	Connection with HEI Current information about the industry and jobs (from the point of view of the graduate)	Employment Career development
Students studying (including vulnerable categories)	Internship (dual education) Internship/practice Getting access to the author's courses Participation in round tables	Joint discussions on the development of the industry University feedback	Selection of perspective professional areas
Consulting companies	Acquaintance with potential partners Participation in discussions of industry issues	Author's courses Consultancy Providing students with internships	Improving the image Promotion of consulting services
International organizations (GIZ, USAID, PROUN etc)	Expand the range of potential program participants Current information about the professional interests of young people Partnership	Grant programs International internship programs Dissemination of information about the prospects of society	Involvement of talented youth in projects
Employment Center (if applicable)	Opportunity to provide additional employment services	Advising on the employment procedure Providing information assistance to graduates Current information about the labor market Excursions	Additional information about potential employees

Source: dy the authors.

The correspondence of the educational program to the interests of the target audience is ensured through the institutional, organizational and methodological components. The institutional component provides the opportunity to use the resources of the University`s departments in the educational process. For example, in the Kyiv National Economic University such departments include: Management Consulting Institute, Center of International Academic Mobility, Center of Corporate Relations, Institute of e-learning of State Higher Educational Establishment. The Institute of Management Consulting, as a provider of relations with relevant associations through which the transfer of modern management technologies and consulting on best practices implemented in the teaching of disciplines in the format of business games, group projects, trainings, discussions of practical business cases. Center for International Academic Mobility, which promotes the internationalization of the program by promoting the participation of professors and students in international research and teaching. KNEU Corporate Relations Center as the coordinator of relations of KNEU named after V. Hetman with enterprises and organizations of various sectors of the economy, industry associations, as well as government agencies in order to provide undergraduates with opportunities for quality practical training and employment, effective work with graduates of the University, providing proposals to improve the content of the educational program by members of the professional advisory committee of KNEU. Institute of Distance Education — provides the organization and conduct of training using distance learning technologies. The existing organizational component ensures the conduct of classes in the formats of trainings and research. The methodological component provides an opportunity to implement practice-oriented learning and discussion in each discipline of relevant cases and challenges of business practice. Correspondence of the educational program to the interests of the target audience presented in the Table 3.

Table 3

CORRESPONDENCE OF THE EDUCATIONAL PROGRAM TO THE INTERESTS OF THE TARGET AUDIENCE

Target audience	Goals	Ways to achieve goals
Goals of Applicants and Students	1. Obtaining up-to-date information on labor market trends 2. Gaining experience of interaction with potential employers 3. Understanding of the structure of the educational program (normative and selective disciplines) and the peculiarities of educational program teaching 4. Undertaking practice and internship at enterprises 5. Internship abroad 6. Participation in joint projects with market leaders 7. Career opportunities	**Attraction of information, social, technical, financial resources for:** – dissemination of relevant information about employment, possible contradictions after employment and during the work of graduates and students at enterprises – joint discussion of topical scientific and practical issues (round tables, conferences) – placement in the public domain of the educational program – providing information about vacancies – organizing internships, exchanging experience with foreign educational institutions and enterprises, conducting remote webinars, lectures on topical global topics and issues, listening to author's courses, providing certificates that are valuable for employers – dissemination of information on EU curricula, professional reference information, continuing education programs, joint research, inclusion of components of dual education

Table 3

Target audience	Goals	Ways to achieve goals
Goals of potential Employers	1. Reduction of transaction costs for hiring young specialists with the necessary developed practical skills 2. Access to expertise through exposure to the professional and academic environment 3. Maintaining / increasing competitive positions through familiarization with scientific developments, participation in technology transfer and effective work with talents 4. Obtaining methodological support from the scientific community	**Attraction of information, social, technical, financial resources for:** – providing recommendations for further employment of gifted youth – development of corporate entrepreneurship through cooperation in the field of technology transfer based on scientific research. – providing information for joint writing with professors of business cases based on the materials of enterprises operating in Ukraine, disseminating their practical experience – attracting employers to lecturing and conducting trainings for a more complete disclosure of the practical component of disciplines – attracting active young people — graduates who collaborated with enterprises during their studies (dual education) – holding round tables, seminars, conferences, forms with the participation of educational institutions, public non-governmental organizations and employers

Source: by the authors.

Maintaining the viability of the educational program ecosystem is possible by deploying an appropriate technological solution, which seems possible to us in the form of the *concept of SMART platform of educational program as* a virtual space for supporting remote interaction of all participants of the educational program by means of smart-technologies (sites, social networks, chatbots, cloud storage, complex digital solutions for education and business, etc.).

The implementation of such a solution is quite possible, as there is already experience in using certain digital tools to ensure effective communication between program participants (e.g., Facebook, Viber, Telegram, email, etc.) and create knowledge spaces in the educational process (MOODLE, Microsoft Teams, Google Class, Trello, Padlet, sites etc.). The proposed platform solution allows to combine already known digital tools and new technical solutions (chatbot, VR, etc.) on a single basis and to develop a "friendly" to all stakeholders' communication space to address operational and strategic objectives of educational, practical and research character.

Advantages and opportunities created by the smart platform of the educational program:

– one "entry point" to the content of the program and its participants;

– support for network communication between program stakeholders;

– integration of educational content, communication channels and presentation content, taking into account the requests of stakeholders;

– higher level of information mobility of the program and its participants.

Limitations and risks of creating and implementing a SMART platform educational program:

– insufficient digital literacy of users;

– insufficient motivation of representatives of the academic environment;

– additional burden on professors and students — coordinators (administrators) of the SMART platform;

– information danger and increasing attention to the protection of copyright on educational content.

The creation of a digital space takes into account the directions of educational transformation and provides global access to knowledge.

Digital space (SMART platform) — a laboratory in which the links between scientific thinking, research, technology in the educational space are formed and combined with business, which allows you to share skills, experience and transfer the latest technology to stakeholders.

The SMART platform is formed by the following thematic segments (fig. 2):

About us: mission, goals, tasks, contacts (chatbot for fast communication, switch-link to the telegram channel).

Educational process: list of educational components, syllabuses.

Students: graduates (digital portrait — educational path, circle of scientific interests, practical skills, research topics, expectations after graduation, contacts in social networks); students studying (digital portrait).

Projects: planned, existing (current), realized, team.

University partners: list, links, compatible projects.

Business partners: list, links, compatible projects.

International connections: list, links, compatible projects.

Information partners: employment centers, authorities.

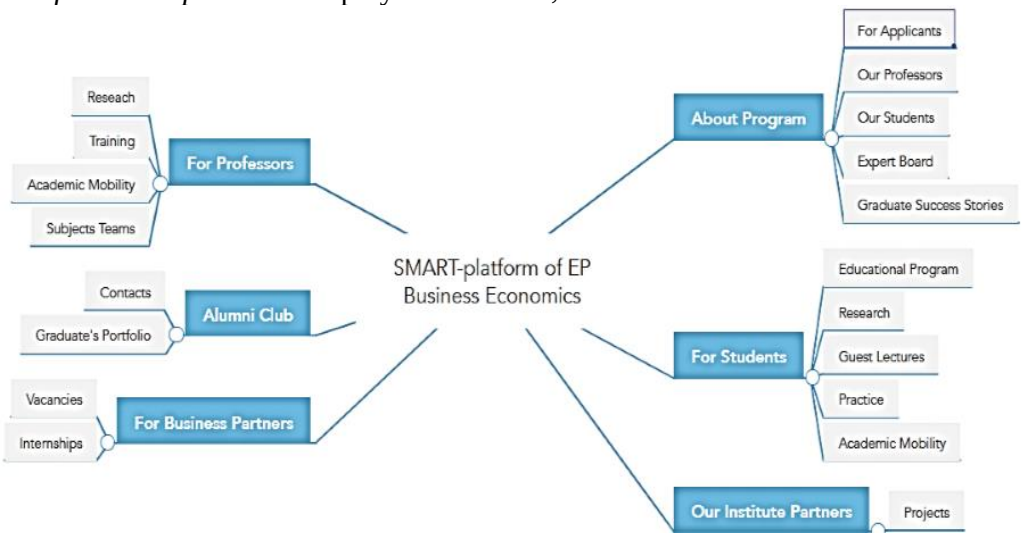

Figure 2. Architectonics (concept) of the smart-platform of the educational program

Due to the latest trends in academic and business environment educational program has become a core of educational ecosystem. Nowadays it is essential to consider and balance the interests of all stakeholders, including students, professors, employers, state and international organizations.

The Smart platform is an online digital tool, meeting place for constant interaction of the faculty with its stakeholders. In a digitally globalized world such platform might really foster interactions between students, graduates, representatives of business, state and international organizations (Table 4).

Table 4

POSSIBLE CONNECTIONS AND TYPES OF INTERACTIONS BETWEEN STAKEHOLDERS

Connections	Types of communication/interaction
University — Graduates-students	dissemination of relevant information and coverage of problems that arise during employment, possible contradictions after employment and during the work of graduates; exchange of relevant and useful information of graduates with students about practical aspects of work; exchange of relevant and useful information of graduates with students about the most interesting areas of research and their benefits in professional activities; joint discussion of scientific and practical issues at round tables during conferences; placement in the open access of educational programs and syllabuses, which allow more complete acquaintance with elective subjects.
Graduates-University	exchange of real information about the labor market, outlining the contradictions that arise when comparing the obtained theoretical knowledge and their practical implementation; recommendations of graduates on the adjustment of content modules and their content; creation of a digital portrait of graduates (educational path, range of scientific interests, practical skills, research topics, expectations after the completion of the University, contacts in social networks).
University — Employers — Graduates	joint research, a combination of dual education; formation of the base of thesis (topics of work, problem studies, proposals and calculations); holding round tables, seminars with the participation of the maximum number of stakeholders; involvement of employers in lecturing for a fuller disclosure of the practical component of the discipline.
University — Consulting agencies-Graduates	discussion of labor market trends; recommendation of listening to author's courses, providing certificates valuable to employers; filling with reference information on the project website, which is useful for all stakeholders; providing recommendations for the employment of gifted youth; providing information on vacancies, counseling (employment center).
University — International organizations — Students	organization of internships, exchange of experience with foreign universities and enterprises; dissemination of information on EU training programs, remote webinars; lectures on current global topics and issues.

Source: by the authors.

Possible outcomes of the digital communication between educational program's stakeholders might be online and face-to-face events, such as round tables, seminars, conferences etc. It should significantly improve the quality of the program itself due to the active interaction between different groups of interest. Digital format should also simplify interaction on an international level eliminating costs on travelling to enrich the program with best foreign practices.

On the other hand, we realize that the project requires regular management and moderation of the platform using social media, chat bots and other digital tools.

Conclusions.

1. Digitalization is the main trend in the configuration of socio-economic relations, which influences the definition of teaching methods, communication channels and the content of educational programs. The influence of this factor requires universities to take an active position in the processes of providing infrastructural support for the development of the curriculum, the formation of an effective communication policy, which become the driving force behind the transformation of the educational ecosystem. The main request from key university stakeholders is transparency, accessibility and ease of interaction for all participants, especially in the online space. However, the existing architecture of the official websites of universities is complex and inflexible, which does not allow meeting the needs of participants in the educational process, does not meet the existing requests of applicants, students and employers.

2. Analysis of the value proposition of the educational program "Business Economics" for different stakeholders allowed to identify areas for improvement by expanding the involvement of experts in the process of preparing relevant curricula of disciplines, practical and research tasks, cases. At the same time, the competences of professors to apply educational technologies based on Microsoft 365, Moodle, author's business simulations, allowed to form modern educational content from presentation materials, teaching videos, practical tasks, which opens new opportunities for digital educational environment.

3. The request of members of the educational community for the formation of an open learning space was implemented on the basis of the Social Networking Sites technology, which makes it possible to present the educational program in the form of an open academic platform, which solves the following tasks: 1) students receive direct access to all educational materials, relevant information on cooperation with companies and participation in research projects; 2) expanding the boundaries of educational products, the use of new tools and forms of educational work, the involvement of business experts in the educational process; 3) direct access of employers to program students as potential employees, which minimizes transaction costs for finding personnel with a high level of practical competence, attracting young talents, introducing modern training content in accordance with professional standards. Such collaboration will be able to ensure the relevance of scientific research, enhance its practical significance and facilitate the transfer of innovative technologies into the business environment.

4. The proposed SMART platform should ensure a partnership of applicants, undergraduates, graduates, employers and professors in order to effectively use digital communication tools and create relevant information support for the educational process, promote the development of cooperation both in the form of network and binary communications (student guarantor — employer, professor-employer, graduate-professor, etc.).

5. The value of the SMART platform for the program lies in the possibility of strengthening the personal brands of professors and students, increasing the reputation potential of the educational program, developing partnerships with professional experts to enhance the relevance and practical value of educational products, including by introducing elements of dual education, creating mobile research groups based on the deployment of an effective collaboration of program participants and its external stakeholders.

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ФОРМИРОВАНИЕ ЭКОСИСТЕМЫ ОБРАЗОВАТЕЛЬНОЙ ПРОГРАММЫ НА ОСНОВЕ ТЕХНОЛОГИИ СОЦАЛЬНЫХ СЕТЕЙ

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Аннотация. В статье раскрывается проблема трансформации существующих подходов к созданию новых действенных связей между университетами и всеми заинтересованными сторонами, что становится основанием для создания конкурентоспособных образовательных программ. Целью исследования является определение предпосылок для формирования экосистемы и обоснования концепции взаимодействия ключевых стейкхолдеров образовательной программы на основе партнерства, сетевой коммуникации и диджитал-трансформации. Авторы доказывают целесообразность формирования информационно-коммуникационного пространства образовательной программы как экосистемы с применением всех возможностей, предоставляемых диджитал-технологиями, в частности: раскрывают причины неэффективности действующих коммуникационных каналов в рамках университетских образовательных программ; выявляют возможности и ограничения технологии социальных сетей в развертывании SMART-платформы образовательной программы; предлагают концепт виртуального пространства; анализируют удобства платформы для ключевых стейкхолдеров образовательной программы. Представлена архитектоника SMART-платформы образовательной программы, которая описывает определяющие компоненты такой платформы с учетом потребностей ключевых стейкхолдеров образовательной программы и SMART-принципов формирования экосистемы. Предлагаемое платформенное решение позволяет объединить уже известные диджитал-инструменты и новые технические решения (chatbot, VR etc.) на единой базе, развернуть “дружественное” по отношению ко всем заинтересованным сторонам пространство общения для решения оперативных и стратегических задач образовательного, практического и исследовательского характера.

Ключевые слова: экосистема; образовательная программа; социальные сети; SMART платформа; стейкхолдеры; коммуникация; цифровая трансформация; университет.

ФОРМУВАННЯ ЕКОСИСТЕМИ ОСВІТНЬОЇ ПРОГРАМИ НА ОСНОВІ ТЕХНОЛОГІЇ СОЦІАЛЬНИХ МЕРЕЖ

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Анотація. У статті розкрито проблему трансформації існуючих підходів щодо створення нових дієвих зв'язків між університетами та усіма зацікавленими сторонами, що стає підґрунтям створення конкурентоспроможних освітніх програм. Метою дослідження є визначення передумов для формування екосистеми та обґрунтування концепції взаємодії ключових стейкхолдерів освітньої програми на засадах партнерства, мережевої комунікації та діджитал-трансформації. Автори доводять доцільність формування інформаційно-комунікаційного простору освітньої програми як екосистеми із застосуванням усіх можливостей, що надають діджитал-технології, зокрема: розкривають причини неефективності чинних комунікаційних каналів у межах університетських освітніх програм; виявляють можливості та обмеження технології соціальних мереж у розгортанні СМАРТ-платформи освітньої програми; пропонують концепт такого віртуального простору; ґрунтовно аналізують вигоди платформи для ключових стейкхолдерів освітньої програми. Представлена архітектоніка СМАРТ-платформи освітньої програми, яка описує визначальні компоненти такої платформи, визначені із урахуванням потреб ключових стейкхолдерів освітньої програми та SMART-принципів

формування екосистеми. Пропоноване платформне рішення дозволяє об'єднати вже відомі діжитал-інструменти та нові технічні рішення (chatbot, VR etc.) на єдиній базі та розгорнути «дружній» по відношенню до усіх зацікавлених сторін простір спілкування для вирішення оперативних та стратегічних завдань навчального, практичного та дослідницького характеру. Запит членів освітньої спільноти щодо формування відкритого навчального простору вирішує такі завдання: 1) учні отримують прямий доступ до всіх навчальних матеріалів, актуальної інформації про співпрацю з компаніями та участь у наукових проектах; 2) розширення меж освітніх продуктів, використання нових засобів і форм виховної роботи, залучення до навчального процесу експертів бізнесу; 3) прямий доступ роботодавців до студентів програми як потенційних співробітників, що мінімізує трансакційні витрати на пошук кадрів з високим рівнем практичної компетентності, залучення молодих талантів, впровадження сучасного навчального змісту відповідно до професійних стандартів. Така співпраця зможе забезпечити актуальність наукових досліджень, підвищити їх практичну значущість і сприятиме перенесенню інноваційних технологій у бізнес-середовище.

Keywords: екосистема; освітня програма; соціальні мережі; SMART платформа; стейкхолдери; комунікація; цифрова трансформація; університет.

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