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AN INNOVATIVE PLATFORM WHICH HELPS TO ESTABLISH AND TO EXTEND UNIVERSITY- BUSINESS COOPERATION

The paper presents the issue of lack of university-business cooperation. Theoretical attention was put into E-Business definition, Problem Based Learning at Lodz University of Technology and European Union Research focused on higher education institution and company's relationship in Poland. In the article the solution for communication improvement was introduced. The innovative platform placed on a university website was described. Such platform will help to establish new relationships and extend existing ones.

1. Theoretical background

1.1. E-Business

According to the *definition E-Business is the use of the Internet to network and develop business processes, electronic commerce, organizational communication and collaboration within a company and with its customers, suppliers, and other stakeholders. E-businesses use the internet, intranets, extranets and other available networks to support their organizational processes*². It is possible to distinguish three major types of E-business models: B2C, C2C and B2G. B2C stands from business to customer relations and models where an organization offer a product or service for a customer like virtual shop Amazon.com. Customer to customer model is about business relations or interaction between different customers, average players on the market for example ebay.com offer such possibility where one person can sell his or her belongings to another person. Business to government model is about cooperation between national entities,

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² Collin Combe Introduction to E-business management and strategy, 2006, p. 1.

organizations and private companies by selling products or services, exchanging information using special platform. Launching a project by or communication between a university and a company can be treated as e-business. The main advantages of existence and implementation of E-business is time and cost reduction. Thanks to the use of an electronic device and the Internet data is available all the time and is can delivered to other party immediately³. When it comes to the costs, lack of paper documentation, envelopes and logically warehouses to store them an organization can save significant amount of money introducing E-business tools.

1.2. Higher Education Institutions

Polish law on Higher Education states that higher education institution *is an establishment providing degree level education, founded in compliance with the procedures laid down in the Act*. Lodz University of Technology which is a public higher education institution is defined as a higher education institution established by the State, with the State represented by a competent authority or public administration body⁴. Based on the abovementioned definitions Lodz University of Technology can be treated as a governmental organization. The main aim of universities is to teach students and provide them with an appropriate knowledge to be attractive on a labor market. During studies learning outcomes can be introduced using five different tools: lectures, tutorials, laboratories, seminars and projects. Being up to date to the current needs of the market universities started to focus more on the practical use of gained knowledge in projects.

International Faculty of Engineering at Lodz University of Technology introduced innovative way of teaching called Problem Based Learning. PBL is about solving real life problem using gained knowledge. The aim of such an approach is to stimulate students to work in group, to think out of the box, and to motivate them to be curious of the world. All the projects were conducted under supervision of lecturers; however, their role was to give an advice to the team not to lead members of the group⁵. One of the Problem Based Learning projects was research about handling services prices strategies where group analysed offers of the airport handling service providers and conducted an observed price strategy. Thanks to such activates graduated students are better prepared to act on a labor market and are conversant with organizational behaviour of future employers.

³ The Ontario Government, How you can profit from e-business, 20133, p. 2.

⁴ Dziennik Ustaw – Official Journal of Laws of 2005, No.164, item 1365.

⁵ Problem Based Learning,

http://www.ife.p.lodz.pl/sites/default/files/pliki_publiczne/pbl/pbl-in-folder-2013.pdf
[access 20.10.2016].

1.3. University-Business Cooperation in Poland

European Union created Europe 2020 program which aim it to establish well-functioning and better developed relationship between universities and business players in order to increase productivity and employment⁶. Such a cooperation will provide mutual benefits for both parties; higher education institution could increase inflow of money to universities budget and organizations may gain or maintain their competitive advantage⁷ on already saturated market. Another direct beneficent will be well a tough students whose knowledge will fits to the needs of the potential employers⁸. What is more, local economy would be an indirect beneficent of the cooperation by increased standard living and stimulated economic growth⁹. Well-functioning cooperation has a positive influence not only on the internal stakeholders but it has macroeconomic impact.

European Commission in 2011 made a research in order to analyze how university-business cooperation is functioning. The market analysis was based on interviews with experts and surveys sent to the higher education institution in EU, over 3,000 institutions in 33 countries¹⁰.

According to the respondents eight types of university-business cooperation can be distinguish:

- Governance – academics are involved in decision-making process of an organization;
- Entrepreneurship – HEI cooperate with organization during market analysis and first steps of star-up creation;
- Lifelong learning – courses provided by HEIs for adults and employees of external institutions, companies;
- Curriculum development & delivery – joined development of courses and modules. External guest lecturers are invited to teach students;
- Commercialization of R&D results – commercialization through disclosures of patents and licensing;

⁶ European Commission (2011). Council conclusions on the role of education and training in the implementation of the 'Europe 2020 strategy. Official Journal of the European Union (2011/C 70/01).

⁷ OECD, Organization for Economic Cooperation and Development (2002). Benchmarking science-industry relationships. Access [20.102016].

⁸ Bozeman, B., Boardman, C. (2013). Academic Faculty in University Research Centers: Neither Capitalism's Slaves nor Teaching Fugitives. *The Journal of Higher Education*, 84(1), pp. 88-120.

⁹ Etzkowitz, H., Leydesdorff, L. (2000). The dynamics of innovation: From National Systems and "Mode 2" to a Triple Helix of university-industry-government relations. *Research Policy*, 29(2), pp. 109-123.

¹⁰ Science-to-Business Marketing Research Centre (2013). *The State University Business Cooperation in Poland*, p. 3.

- Mobility of students – temporary movement of students to companies;
- Mobility of academics – temporary movement of teachers to the business and employees to university;
- Collaboration in R&D – joint R&D activities, R&D consulting, joint publications company and academic employee¹¹;

Comparing the extension of above-mentioned types of UBC in Poland and average rate in Europe, in Poland the most popular is student mobility, lifelong learning and curriculum development & delivery and the least extension belongs to mobility of academics and commercialization of R&D. On the other hand, in Europe the most popular tool in UBC is collaboration in R&D, mobility of students and lifelong learning. Last places belong to governance and mobility of academics. Collaboration in R&D is on the fifth out of eight places concerning Poland¹².

Main obstacles which constrict university business-cooperation are those connected with lack of or disturbances occurred in communication like business lack awareness of research made by university, bureaucracy, difficulties in finding appropriate collaborating partner, lack of well-informed contact person from both sides¹³.

According to the European Union, Poland has one of the weakest relationship between higher education institution and organizations. In order to change it corrective actions has to be undertaken. Communication plays virtue role not only in case of university-business cooperation, but in each part of people business and private life. Having this information in mind a project aimed to communication development has to be introduced¹⁴.

2. Innovative platform

2.1. Aim of the project

The main idea is to create a virtual platform which enables exchange of information between high education institution and business players on the market. Stakeholders of the platform are employees of the universities including administrative staff, dedicated to the project business people and students. The main goal of the platform is to establish, develop and increase the cooperation between HEI and companies. Another value is enlargement of university activity market awareness.

¹¹ *Ibidem*, p. 6.

¹² *Ibidem*.

¹³ *Ibidem*, p. 7.

¹⁴ *Ibidem*, p. 1.

2.2. Platform description

The platform will be placed on the University website in the cooperation section.

When it comes to the cost, especially code development, it can be financed by a university using employees or outsourced – hiring external company. Profits from potential relationships with companies will cover the spending related to the introduction of the platform. Concerning the code development university employees – informatics can be used because of not complicated structure of the code. In some cases, the service can be outsourced.

Fig. 1. Platform contact form

Source: <http://pp.rossmann.com.pl/PD/OfferFormSite.aspx> [access 20.10.2016].

User of the portal after opening the website will have to choose the topic (scientific cooperation, topic for the student project or request for scientific consultation) next step is choose of the area of the cooperation. On the list will be placed all faculties, departments and student scientific groups. On the portal place for description of request and availability of adding attachments will be included. Additional part of the view is contact details (name, surname, company name, e-mail address, telephone and additional information if wanted). Anti-boot security will be placed as well in form of typing mix of letters and digits. Example of a platform is placed bellow based on already existing solution in one of the Polish company. The company is using such form for contact with suppliers.

After sending the request, it will appear in form of e-mail both in university employee account and sender. An appropriate e-mail will be assign to the department and faculty. After signing in to the user view the receiver, firstly dedicated person, who will forward information to the specialist in the department, have time to accept, refuse or change addresser of the request. What is more, university employee can ask for more information and start conversation with the company using platform. In case of question sent to the company the information is present in form of email with link to the conversation in the platform software. Each request will have its own ID number. User of the platform can search for request using companies name, ID number or date. There will be also two groups in the user view – accepted and denied requests.

ID	date of request	faculty / department	company	accept	refuse	FW
5360	2016-07-29 09:21:27	Oferta produktowa - Artykuły spożywcze		✓	✗	↻
5359	2016-07-28 13:47:42	Oferta produktowa - Parafarmaceutyki		✓	✗	↻
5357	2016-07-28 11:43:06	Inne		✓	✗	↻
5354	2016-07-27 15:35:27	Oferta produktowa - Zwierzęta	Unit s.o.	✓	✗	↻
5351	2016-07-27 10:28:55	Inne - Boże Narodzenie / Wielkanoc		✓	✗	↻
5350	2016-07-27 09:20:48	Oferta produktowa - Zapachy damskie i męskie		✓	✗	↻
5344	2016-07-25 16:36:38	Inne		✓	✗	↻
5343	2016-07-25 15:43:12	Inne - Higiena łamy ustnej		✓	✗	↻
5341	2016-07-25 13:53:36	Oferta produktowa - Akcje sezonowe		✓	✗	↻
5336	2016-07-23 08:27:12	Inne - Artykuły tekstylne		✓	✗	↻
5335	2016-07-22 15:30:17	Oferta produktowa - Zestawy upominkowe		✓	✗	↻
5334	2016-07-22 12:15:30	Inne		✓	✗	↻
5333	2016-07-22 10:59:01	Oferta produktowa - Akcesoria kosmetyczne		✓	✗	↻
5331	2016-07-21 15:53:23	Oferta produktowa - Herbaty		✓	✗	↻
5330	2016-07-21 15:19:12	Oferta produktowa - Artykuły tekstylne		✓	✗	↻
5329	2016-07-21 14:28:32	Inne	2-gi Dział Kodzi	✓	✗	↻
5328	2016-07-21 14:26:44	Inne		✓	✗	↻
5326	2016-07-21 13:13:39	Inne		✓	✗	↻
5325	2016-07-20 16:24:41	Oferta produktowa - Dermokosmetyki	PI SA	✓	✗	↻
5319	2016-07-19 15:50:38	Oferta produktowa - Artykuły spożywcze		✓	✗	↻

Fig. 2. Platform administrator view
Source: Kamila Kmiec, – ROSSMANN SDP.

Bellow above-mentioned model is present in form of map from the general point of view. The process starts when the need of cooperation occurs. After that user fills in the contact form on the platform and the information is sent to the higher education institution. After opening the request by the authorized person employed by a university, he or she has to make a decision whether to forward the request to another department, accept it and send it to the specialist or refuse it. Dedicated specialist can ask for further information needed for the potential project or without is officially inform the company about start of the cooperation.

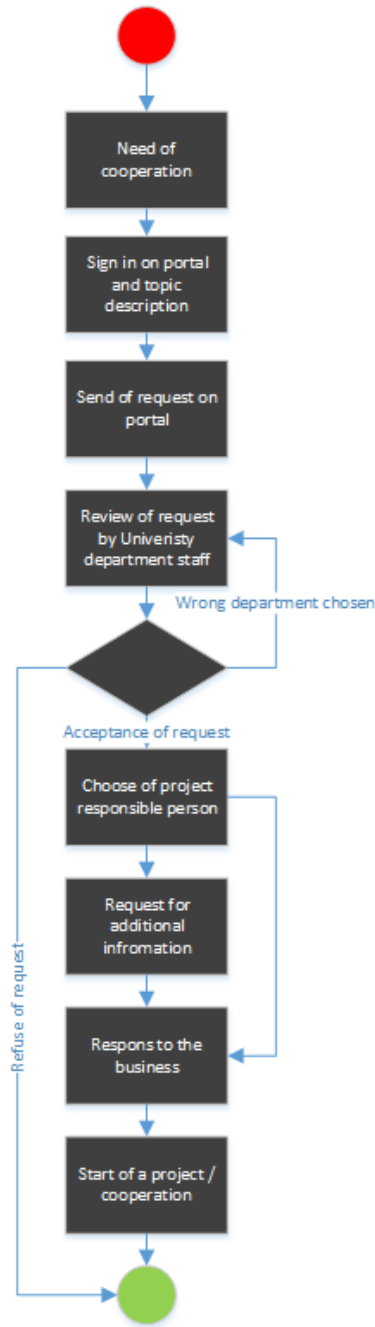


Fig. 3. Map of the information flow using platform
Source: own elaboration.

3. Conclusions

Proposed platform fulfil the aim presented in the paper. Definition of innovation delivered by Oslo Guide is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations¹⁵. Taking in to account this definition the idea of introduction of a platform can be called innovative for the higher education institution which already has not implemented it, like Lodz University of Technology Thanks to it, the university-business cooperation will be easier to establish and maintain. Such approach works in the business industry in supply chain management which gives positive perspectives for its functioning in UBC. Above-mentioned solution can be implemented in all types of higher education institutions because of its simple and universal structure. Having in mind results of European Union Science-to-Business Marketing Research Centre where communication was one of the most significant obstacle in UBC using the platform its impact can be diminish.

Literature

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¹⁵ Eurostat Oslo Manual Guidelines for collecting and interpreting innovation data 3rd edition OECD, 2005, p. 46.

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Summary

W artykule przedstawiono problem braku współpracy uniwersyteckiej i biznesowej. Teoretyczną uwagę poświęcono definicji firmy E-Business – nauczaniu opartemu na problemach na Politechnice Łódzkiej oraz badaniu Unii Europejskiej poświęconemu instytucjom szkolnictwa wyższego i relacjach z firmą w Polsce. W artykule wprowadzono rozwiązanie poprawy komunikacji. Opisano innowacyjną platformę umieszczoną na stronie internetowej uczelni. Taka platforma pomoże nawiązać nowe relacje i rozszerzyć istniejące.