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**COOPERATION OF SCIENCE WITH THE BUSINESS
AS A TREND IN HIRING STAFF**

Abstract. The article focuses on cooperation between business and science, considered as a means of achieving mutual benefits, in particular, supporting business innovation and ensuring their access to potential employees.

The authors suggest steps towards closer cooperation between the university and local entrepreneurs on the example of the initiatives of the Faculty of Management, University of Lodz.

Key words: recruitment, science and business cooperation, human resource management.

1. INTRODUCTION

Carrying out the transformations resulting from the operation a knowledge based economy make it necessary to revise the existing methods and measures implemented under the personnel function. This is particularly true of employee recruitment in organizations that are increasingly turning to new solutions, especially since in today's job market we are dealing with heterogeneous resources (Antczak, 2009, p. 249), and the demand for jobs exceeds the supply. In this situation, it appears that help for college graduates entering the labour market can be a cooperation of science with the business community as an area for facilitating and supporting the employment of workers. This issue is also becoming important now, especially since the above-mentioned effect can generate new jobs and facilitate the graduates to develop their careers.

The aim of this paper is to present and highlight the cooperation of science with the business community as an example of the Faculty of Management, University of Lodz as an example indicating the presence of contemporary trends influencing and facilitating employment in the labour market.

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2. CHANGES IN THE SPHERE OF EMPLOYMENT

Currently we are dealing with permanent changes in the labour market. They are the result of: increasing the competitiveness between enterprises and the percentage of graduates leaving colleges, unfavourable demographic trends, increased product and service innovation and the development of information technology. The main sources of changes in labour relations – employment also includes changes related to labour productivity, globalization, the potential of the working and waiting for work, caused by, inter alia, the lengthening of life, increase in the level of education, preference for another model of family life and the rise in the employment rate of women (Orczyk, 2004, p. 124). Homogeneity is increasingly being replaced by resource heterogeneity in the labour market, which affects the stratification of the wages due to the availability of specialist expertise. Followed by the change in perception of work and the employee towards the individualization of employment relations and the use of flexible forms of remuneration, participation in profits and methods of knowledge management (Antczak, 2009, p. 249). Employment model is also changing, aimed towards flexible forms of employment. According to M. Gableta, the crew core definitely takes on the importance without which organizations can't exist, and the circle of loosely related workers is widening, characterized by distinct compared to permanent workers. This is mainly due to differences in forms of employment, the nature and durability of ties with the organization (Gableta, 2003, p. 127). These changes result primarily from a different perspective on the status of man and his work in the organization. As an important factor conducive to the positive perception of these change in employment, employers recognize the possibility of reducing labour costs, the adjustment of the quantitative structure of the human potential for changing the organization and diffusion of knowledge workers (Cierniak-Emerych, 2010, p. 366). Therefore, the structure of competence and functions of the modern worker is changing. In today's knowledge based economy groups of workers whose main competence is based on physical and motor efficiencies (manual workers) also lose the sense, and ranks of those with specific advanced knowledge (knowledge workers) grow (Bohdziewicz, 2008, p. 179). The literature indicates that knowledge workers make up more than half of all workers in developed countries (Mladkov, 2011, p. 260). P. Drucker describes such a worker as a person who uses the knowledge at work, has unique powers, seeks to personal mastery and adds value to the organization (Mladkov, 2011, p. 260). According to A. Miś they are key personnel to support the success of organizations operating in a competitive environment, where knowledge occupies a prominent place (Miś, 2009, p. 273). The organization develops, therefore, the awareness that knowledge contained in the minds of employees is now its strength and success (Tomys, 2009, p. 104). Because knowledge workers create different sectors such

as management, medicine and health care, business and financial operations, law, education, training and other, and in the near future are expected to continue their growth (Davenport, 2007, p. 18-19), special place is occupied by students and university graduates, whose future work will be based on four pillars underpinning a knowledge based economy.

In these conditions the changes associated with the labour market and the functioning of the worker in modern organization should look for such solutions within the personnel function, which will facilitate the assimilation of the individual requirements of modern times. It seems that these new trends could include cooperation of science with the business as an activity aimed particularly at people entering the labour market.

3. COOPERATION OF SCIENCE WITH THE BUSINESS – THEORETICAL FOUNDATIONS

Universities and other academic institutions are the creators of product, marketing and organizational innovation and participate in the process of their implementation. In many countries and regions, the general direction of development of university practice is open to cooperation with business (Sieniewska, Ziolo, 2010, p. 336).

However, analysis shows that the Polish economy is still little innovative. In terms of innovation lags behind most EU Member States. According to the latest edition of the European Innovation Scoreboard report (European Innovation Scoreboard – EIS, January 2010) Poland jumped from the group of catching-up countries to a group of moderate innovators. In this group, Poland ranked second-last position after Czech Republic, Portugal, Norway, Spain, Greece, Italy, Malta, Slovakia and Hungary, and before Lithuania. According to the results of the study, Poland has a lower than average for all countries of the European Union level of Summary Innovation Index (SII), but higher than the EU average growth rate of this indicator (Report on the state of the economy, 2010, p. 216).

One of the major barriers to the growth of economic innovation in Poland is the low level of expenditure on research and development. These expenditures in relation to GDP are one of the lowest among other countries (Small Statistical Yearbook, p. 293). The low level of expenditure is the consequence of the low level of involvement of private equity, primarily by businesses, which causes are believed to be the high cost and significant risk of such activities. Especially small and medium-sized enterprises, which dominate in the Polish economy lack their own resources for R & D activities. Also, venture capital (VC) funds investing in small projects are missing, which in many countries are an important instrument to implement scientific, research-development and innovation activity to economic practice (Grodzka, Zygierewicz, 2011).

It is commonly believed that economic development is the result of several factors, of which close cooperation of science and business is one of the key elements of success. In many cases, it determines not only the innovation of individual projects, firms, ventures but has a huge impact on innovation, and thereby the development of the country's economy. In Poland, the cooperation of these two communities is still insufficient (Dolnośląski Centre for Knowledge and Technology Transfer, 2011). It is evidenced by the study of recruitment company HAYS Poland, which aimed to see how the graduates act at first work. During direct interviews with managers of service centres belonging to the group's most desirable employers – Top 50 Employers, they had the opportunity to comment on the perceived deficiencies in the skills of graduates and to indicate what changes in the education system will allow for the training of the desired competencies (Naduk, 2011). In most cases, managers said that the main problem is insufficient knowledge of foreign languages, lack of practical knowledge and the inability to use basic applications or computer programs. To better prepare young staff to the needs of the labour market experts suggest the introduction of additional hours of language learning and enabling experienced persons being in contact with the business who use the latest technologies to conduct classes. The studies program would also be desired to contain refresher training and working with others or project ordinance. The opinion of employers also share those who have recently graduated from Polish universities and found employment in service centres. Therefore, the fact how big the differences are between the supply of higher education institutions and demand of modern labour market provide the first graduates' problems in finding employment, especially in accordance with a completed course of studies. The CSO data shows that only in the fourth quarter of 2009 over 178.000 people to 27 years of age with higher education were registered at the Labour Office as unemployed (Naduk, 2011).

At this point it should also be noted that the benefits of cooperation are mutual for both the business environment and for science. First, they result from the synergy of their areas of competence and technical, technological capacity and market synergies (Gwarda-Gruszczyńska, 2009, p. 43), and secondly, the establishment of cooperation is the way to achieve the goals and tasks in the sphere of production, sales, marketing, market mastering and creating their competitive advantage (Adamik 2008, p. 62).

4. HIRING WORKERS ON THE BASIS OF SCIENTIFIC COOPERATION WITH THE BUSINESS COMMUNITY ON THE EXAMPLE OF THE INITIATIVES OF THE FACULTY OF MANAGEMENT UNIVERSITY OF LODZ

Many universities and research centres are trying to change the negative image in the environment by taking a wide variety of initiatives. These include

Preincubators Business Incubators Technology Transfer Centres Office of Career and Technology Incubators (Sieniewska, Ziolo, 2010, p. 338).

Similar actions can be also seen on the side of entrepreneurs interested in not only the commercialization of new technologies developed by scientists, but also a valuable pool of future employees and partners, which are students and graduates. University of Lodz actively takes part in this trend, as stated in mission of the university, which says that “the University of Lodz is actively involved in innovative development of the city of Lodz region and the entire country, indicating the lines of action for resolving economic and social problems” (Senate Resolution No. 141 of Lodz Annex 1, 2009). University of Lodz Strategy for 2010–2015 clearly indicates that the university should build lasting relationships with employers in particular on the basis of consultation needs in science, teaching and mutual benefits (infrastructure, knowledge, *know-how*) and joint projects to promote the region and Lodz. Employers should be treated as a partner as co-authors of this strategy and its future beneficiaries. In addition, the University of Lodz in the strategy for 2010–2015 calls for the creation of a climate for entrepreneurship and self-government of students, running programs to support most active students and organizations, offer scholarships and the expansion of cooperation with public and private sponsors (Senate Resolution No. 141 of Lodz Annex 2, 2009).

University of Lodz has already made many significant efforts to strengthen ties between science and business. Some of them concern the strictly educational process which manifestations are the establishment of new courses and modifying existing program content (orientation to the labour market) and to establish cooperation with leading universities in the U.S. in terms of study and courses within the Polish-American Management Centre (since 1995, educated hundreds of managers), the launch of wide range of postgraduate studies (currently around 90). Motivation of adequate preparation of students for professional life is also manifested in entrusting by the university part of the classes to people from outside academia, equipped with practical knowledge. The activities directly aimed at facilitating the launch of vocational students are, in turn, initiatives such as the launch in 2002, the University Professional Career. Office holding coordinating internships, student placements and conducting recruitment for companies, organization of University Job Fair, along with the University Academy of Learning and other similar events of student organizations. Directly to business and business-type activities are addressed: the establishment of Innovation Centre (dealing with the transfer of technology) and Technology Transfer Centre University of Lodz in helping companies implement new solutions and looking for research results for the business or establishment in 2003 of the Business Management Department at the University of Lodz bringing together dozens of companies involved in the leading position in the region (materials on the UL <http://www.pracodawcy.uni.lodz.pl/StronaGlowna/ULdla-Pracodawcow/27.04.2011>).

Special position on the background of these initiatives take the above-mentioned activities of the Faculty of Management University of Lodz aimed to build close cooperation with the business world, enterprises and institutions of the region of Lodz. Naturally this trend favours the specificity of action of discipline which is management. Initiative allows the Department to pursue the objectives of its staff and students, as well as employers to facilitate access to the group most closely involved, equipped with directional degree of potential job candidates.

University of Lodz, Faculty of Management operate the various organizations involved in economic practice, both located in the structures of the faculty or university (Business Council of Professional and Career Centre) and those operating outside the structure. Business Council has worked with the Department of Management, University of Lodz since 2003. It brings together business leaders, mostly from the Lodz region – in the current term 2008–2013 they are, among others: Bank Zachodni WBK, PZU, PKO BP, Gatta and Infosys. The main objectives of the Council is co-operation with the Faculty of Management University of Lodz in the teaching process, implemented through the exchange of experiences between theoreticians and practitioners of management, support and participation of companies-participants in the initiatives of the Faculty of Management students and accepting University of Lodz trainees of the best students of the faculty to attract the best graduates of the Faculty of Management and preparation together with the Department consultancy and training offer for members of the Business Council (materials on Department of Management site at: <http://www.radabiznesuwz.pl/index.htm/29.04.2011>).

Association of Management Innovators, focusing active students, academic staff and representatives from the business world, supporting the students financially and providing them with its *know-how* has also been operating at the Faculty of Management since 2003. Association's mission is to inspire ambitious and enthusiastic people to personal growth and innovative activities for the development of socio-ecological region of Lodz. This is done by creating a climate of cooperation and exchange of information between staff, students and graduates of the Faculty of Management, University of Lodz and the Lodz region's entrepreneurs. Association among other implements interdisciplinary research programs, science camps training for all stakeholder groups such as co-organizer of Kitchen of Management – regular meetings of scientists, students and entrepreneurs, with a view to develop a basis for future cooperation in the search for innovative methods of management and economic solutions (Materials of Innovators Association management, http://www.innowa-torzy.pl/o_nas.htm / 04.29.2011).

Many scientific and business events are very often organized At Faculty of Management. They are aimed at students and graduates. These are: career guidance days or job fair. It is worth mentioning here about two important

events VI University Job Fair, where among exhibitors appeared brands such as Ernst & Young, Procter & Gamble, Nestle, Nokia and Hewlett-Packard. Job fair allowed students to hundreds of visitors to this event to familiarize with the profile of companies and get practical advice on career development recruitment requirements in force in their organizations (materials: <http://www.targipracy.uni.lodz.pl/12.04.2011>). The second initiative, Career Days were organized under the aegis of AIESEC, the formula was quite similar to the Job Fair – based on the presentation of more than 30 companies, ranging from multinational corporations, to local firms. Interested parties had the opportunity to become familiar with a wide range of practices, traineeships or work to learn more about the processes of recruitment or to talk with representatives about career opportunities. Skills Academy took place parallel to the exhibition. It is a series of free training courses for students, expanding knowledge, mainly in the area of competence of soft (material: <http://www.dnikariery.pl/secms/pl/edycja/lodz/13.04.2011>).

The above mentioned events are supported by continuous supervision of university staff involved in the monitoring of the local labour market and the activities of firms and institutions cooperating with the Faculty of Management University of Lodz (Section for the Promotion and Liaison in Business). Mandatory student practice carers fit in this area of operation. They are constantly expanding the database of companies cooperating with the university in terms of practices and often also employ graduates. On the basis of observation and Interfaculty comparisons made by the authors it can be concluded that the extent of support they receive student-trainees from the University at the Faculty of Management is particularly wide. What reflects these initiatives is the existence and development of modules on the website of the Faculty, which are offers of practices, work, training offered to students and contact information to the decision university staff ([http://zarzadzanie.uni.lodz.pl/Praktyki, Praca, Szkolenia](http://zarzadzanie.uni.lodz.pl/Praktyki,Praca,Szkolenia), 7.04.2011).

5. CONCLUSION

Polish companies are becoming participants in processes of integration and globalization, which means that innovation becomes a prerequisite for success. Innovative activity determines many factors that create a new context of innovation management in the enterprise (Zych, 2008, p. 613). One of the catalysts which increase the innovativeness of firms is cooperation with scientific research centres. Cooperation of science with the business means the development of science and business activities in new areas of research, commercialization of science, industry development, business and generating new products and services (Gwarda-Gruszczyńska, 2009, p. 44). To a number of

benefits of such cooperation we should also add those resulting from job creation and employment of workers. These observations can be regarded also as a voice in the debate on the direction and effectiveness of Polish higher education to prepare graduates for the requirements of the modern labour market.

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