The innovative company – cooperation between university and business

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Abstract: The present paper is a continuation of a series of articles about a model developed by the author to support the processes of a socio-technical system. Moreover, the subject of competence centers is rarely discussed and thus, this paper is one of a few which discuss the use of a model to develop competence centers. The author also presents the current situation of the units cooperating in academic and business environments. The paper presents the possibility of using a dynamic structure to develop University Competence Centers and realize common projects between university and business environments.

1. UCCs – cooperation networks

Thanks to the activity of a network of UCCs, these centers could gain a far greater, real influence on shaping regional politics. Membership in regional cooperation networks dedicated to integrating (cooperating in) business and academic environments, as well as developing these networks by bringing in new business and academic partners, are indispensable tools that support this kind of incentive. Choosing a proper form of enterprise is another key issue discussed by the author in the process of defining the UCCs’ functioning model. In the author’s opinion, UCCs should take on features characteristic of a virtual enterprise.

A virtual organization is one of the most important forms of enterprise which has emerged in the last 20 years. A virtual organization is a new organizational model where technologies are used to create dynamic relations between engaged persons, assets and ideas (Goldman et al., 1995). Thanks to contemporary development the dependence between location and efficiency of on-going processes has decreased – assets of an enterprise can remain dispersed and do not have to be centralized like in traditional corporations (Warner and Witzel, 2005). Application of the best practices for virtual organizations (main mechanisms) leads to abandoning rigid hierarchy and bureaucracy typical for traditional organizations. The most important features of a network of UCCs’ activity as a virtual organization are listed below:

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Flexibility – the idea behind virtual organizations’ activity is their immediate creation out of dispersed elements which can be restructured or closed down after the accomplishment of an appointed goal, with assets used for different purposes. It is not to be forgotten that this type of organization will only be as flexible as its staff and senior management (Goldman et al., 1995);

Remote work – replacing traditional work environment with virtual communication networks means that the place in which tasks are carried out becomes of secondary importance (Blecker, 1998). Thanks to this approach it is possible for dispersed teams to work together, which undoubtedly has an impact on the agility and dynamics of UCCs’ teams’ functioning;

Hybrid forms – consortia of corporations and business units functioning within a loose structure both in the short run and long run¹.

Fig. 1 depicts academic centers engaged in a cooperation network of University Informatics Competence Centers (UICCs) which are being developed in northern Poland.

In the author’s opinion such an approach supports development and increases the level of advancement in cooperative actions within a network, which in turn can lead to a growth of cooperating academic and business units through learning, acquiring and skilful integrating of key competences in conditions of limited resources. Fig. 2 presents a cooperation network of UICCs.

In the author’s opinion, an action to place a UCC in a wider context should be undertaken while preparing a concept of its activity. Bearing in mind the global character of issues such as: knowledge transfer, technology, innovation, as well as limited possibilities of local market, it is a UCC’s senior management’s job to ensure membership in international networks. An analysis of an international network of business-related institutions shows great variety in activities, services offered and forms of organization. From the point of view of a UCC’s activity, networks that support entrepreneurship with a sizeable offer of various services, as well as with

¹Franke U., "The Virtual Web as a New Entrepreneurial Approach to Network Organisations", 1999
thematic networks linked with a UCC’s activity (e.g. Enterprise Europe Network) seem to be the most attractive. Membership in an international cooperation network is characterized by access to state-of-the-art technology, research results, information and know-how in the area of the undertaken cooperation. A network of international-level connections is shown below (Fig. 3).

Currently existing networks that amalgamate business-related institutions function on an “open” basis in the majority of cases, meaning that they offer paid mem-
2. Cooperation between Academic and Business Units in Poland

The increased interest in new technologies and innovative solutions is conducive to the development of cooperation between academic and business environments. There are about 100 Academic-Business Units (ABUs) in Poland (PARP, 2009).

The largest of this group is NOT (Federation of Engineering Associations) – 40%, the biggest Polish association representing professional engineers and technicians with 110,000 members and 49 regional branches (Engineering Associations) across the country. Fig. 4 shows the percentages of individual units.

![Fig. 4. Academic-Business Units in Poland.](image1)

Research Units – 30% are the second biggest ABU. Then there are Independents companies (16%), Research Units (9%) and Science and Technology Parks (about 5%).

Financing activities is a major limitation in developing cooperation. The main sources of funding ABUs are: Grants and dedicated projects (46%), broadly understood Consulting (19%) and coaching (10%). The above statement is presented in a pie chart.

ABU activity has a wide range of stakeholders. Their main clients are: SMEs – 46% (small and medium-sized enterprises), researchers (25%), students (9%), and starting entrepreneurs (8%). The share of each group is presented below (Fig. 6).

![Fig. 5. Sources of founding.](image2)
3. A UCC’s functioning model

A general model of a UCC’s functioning with four main distinguished stages of cooperation: Identifying, Defining, Realizing projects, and Results in three areas of activity: a Sponsoring Group, a UCC Management Centre and a Project Environment is shown in Fig. 7 (OGC, 2010).

UCC’s driving forces are business needs and problems stemming from activity characteristics and dynamically changing market conditions. Identifying those needs, as well as assumptions of on-going cooperation should be a relatively short-term process in which initial assumptions are proposed in a form of a business proposal. Assumptions for a new cooperation should define key requirements, budget, a general schedule of conducted work and time allotted for expected product delivery. In consequence of these actions a core team supporting a UCC Manager who represents a Sponsoring Group, as well as a UCC Management Centre and Project Environment should be appointed.

The next stage of cooperation which tackles detailed planning of tasks that are key to realizing support team’s goals takes place on the level of a UCC Management Centre. A decision for or against principality of cooperation should be the result of the aforementioned stage. An individually-tailored Zachman’s Spreadsheet based on six fundamental questions (What? How? Where? Who? When? Why?) directed at the main parts of a UCC’s team (a UCC Manager, an Operational Manager, a Business Change Manager, a Project Executive, a Project Manager) may turn out to be a helpful tool.

The consequence of the above stage of activities is realizing project tasks based on previous assumptions. The scope of the planned cooperation, as well as the outcomes of previous projects will greatly affect the number of launched projects. For this reason this stage requires most support for on-going activities through starting processes that support proper realization of projects. Two main mechanisms of project realization support are generating new knowledge and using it diligently in the form of delivered potential (knowledge, good practices, methodologies, standards, technologies, etc.) during further realization of project tasks.

Results are the concluding stage of activities. Its purpose is to decide if the appointed goals were accomplished. If that was the case, an expected product/service becomes a starting point for further cooperation; if not, an assessment of actions to
be corrected regarding the success of incentive’s realization takes place.

The solution shown above, which can be used as a ready-made framework to be implemented as part of a project simulation and realization environment, should be based on the best standards and good practices characteristic of an area of on-going activity.

References

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