37 Collaborating University and Business Networks Fostering Rapid Value Creation

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Regional development, regional impact and knowledge transfer are main key words when the value creation of HEIs in Europe. This paper deals some models which are also carried out in practice or are just under progress concentrating in enterprises and enterprise clusters. Different phases and steps of knowledge transfer and value creation are analysed.
At first in setting up the enterprise cluster is that the enterprises in the cluster have long and fruitful co-operation history with the university identified so called “strategic partnership”. This is needed to invite suitable enterprises into the cluster e.g. the enterprises acting at different fields but owning almost the same market area. University cluster/network is building up the necessary knowledge transfer concept and is also responsible necessary project management actions. This also requires just like in the case of enterprises that the universities identify their key knowledge and have long experience of mutual applied research projects.
There are several other necessary parameters, actions and partners which are needed to fulfil the goals of above type knowledge transfer service process e.g. EU, national and regional programs of industry and commerce to guarantee also the necessary funding. Although the case studies of the enterprise clusters are in the main focus of the present paper also the several cases of different types of co-operation and knowledge transfer processes with fruitful experiences based on a long history will be discussed.
The main implications followed from this study that value creation in the case of enterprises needs that universities combine and build their knowledge for the service process to make real co-operation business with enterprise clusters. Additionally, the real identification skills from universities are needed to fulfil enterprise needs which is realistic following the present study only in the case of long time co-operation between universities and enterprises at the level of strategic partnership.
One of the key results of the present paper is that the rapid value creation of the applied model of knowledge transfer from university network to business enterprise clusters. The other one is that in the present model of the enterprise cluster is also giving additional business to enterprise member in the cluster also giving deeper, more realistic and business oriented focus for the applied research of universities. The present study also shows that the co-operation with enterprises in the narrow niche field of the university is rarely fostering the value creation anyway in short terms.

37.1 Keywords

Knowledge transfer, value creation, enterprise cluster, HEI cluster, strategic partnership

37.2 Introduction

The Finnish Universities of applied sciences(UAS) got their updated law by the government where stated that universities are doing research which is specially serving regional needs of surrounding business and public sector, also giving additional value for university teaching. UAS´s in Finland started with temporary pilots 1992 and from the early begin applied research was one of main profiles although UAS´s have all the time searching their main research profile and also several committees have been sitting to study the profile. Finnish universities have been also very active in this profile discussion.
Last signals from ministry of education and culture are supporting research work in powerful networks and clusters. UAS's have been very active in international networks but national networks have had lower activity because internationality has been a governmental guideline for Universities.

Universities including UAS´s and traditional ones (first university in Finland started already 1640 in Turku) have large amounts of projects where enterprises are invited as partners, which is very natural because it is the demand of governmental and EU funding authorities. In this connection, the real client demands and needs of businesses are getting severe attention. This means that in many cases business is not the active partner of the project and that´s why bigger and bigger attention should be paid to study the real needs of business users. That fosters partners' activity in innovation actions during the projects. Active business partnerships will also create many new ideas for successful start-ups of knowledge intensive enterprises.

There is 15% effect of applied research in the new funding model of UAS´s which in a way adds research activities although it is still significantly lower compared to traditional universities.

The focuses of applied research are defined by EU, national and regional strategies as well as by business guideline of separate municipalities. That´s why roles of identification of business' needs by universities are more and more necessary that the funding strategies are coincide with real needs.

UAS´s are active with business co-operation and they have important role and tools to identify real needs of R&D and organise necessary knowledge transfer processes to fulfil customer updated needs also. Some tested models of clustering and knowledge transfer are studied in the next chapter.

37.3 Case models value creation and knowledge transfer

Present cases consist of different co-operation and strategic models including enterprise clusters, university and city networks concentrating on South-West region in Finland.

Many years ago, Satakunta UAS and Turku UAS started their organised co-operation in the first phase. Before that co-operation has happened in separate fields e.g. entrepreneurship, physiotherapy and multifield research projects. Organised co-operation based on two UAS' strategical focuses and their combination is clearly stronger in the case of challenging R&D projects.
The official collaboration focuses were defined as follows; entrepreneurship, energy and environment, welfare, and intelligent networks. Cooperation has now reached also organisational levels where two universities have signed a Strategic Federation Agreement. The purpose of the Agreement is to describe and define the main idea, goals and modus operandi of the Southwest Finland's Universities of Applied Sciences, CoastAL. Furthermore, the Agreement defines the main principles concerning the operations and management, the right of decision of the jointly agreed bodies, and the grounds for this right of decision. Following the Alliance agreement also the main research focuses are slightly changed.
At southwest the maritime industry is dominating in four cities, Pori, Rauma, Uusikaupunki and Turku. These cities organised a special project LOURA to foster maritime industry especially in the fields of research and education. The main purpose was to build up an active innovation platform and all the themes for knowledge development were; maritime, energy, environment, innovations, tourism and future education. Loura coordination model is presented in Fig. 1.

Figure 1: Strategic research collaboration model (LOURA presentation material ppt)

Ministry of employment and the economy (previous Ministry of trade and industry) has organised Finnish development by 13 Centres of Expertise Program (OSKE). One of these programs is Maritime Cluster Program. Under that program the model of Meridiem was established. Meridiem's operational model strengthens the long-term development activities of the maritime sector and promotes networking at all levels (local, regional, national and international). Collaboration, networks, alliances and partnerships offer valuable opportunities to gain more visibility and momentum by working together. A shared pool of resources enables different actors to place more collective effort into supporting maritime-related competences and expertise, in order to address global challenges and opportunities. Special feature of Meridiem was that it includes 4 traditional universities and 2 UAS and remarkable amount of SME´s and the main idea is to organise fluent innovation actions through research cooperation between universities and SME´s. Networks of LOURA innovation platform are presented in Figure 2.

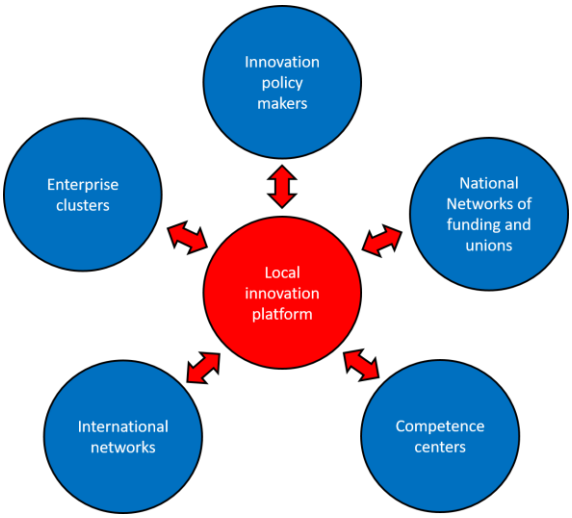

Figure 2: Networks of local innovation platform (LOURA presentation material ppt)

In the second case is also connected to marine in industry with the title PARTICIPATORY R&D (PRD). Partners were Satakunta UAS (SUAS) and industry. Industry enterprises had long time contract based strategical partnership with SUAS. SUAS and enterprises together defined updated needs of R&D getting the list of three most important topics in near future. Also Tampere University of Technology was engaged with the project. The three top topics were Lifecycle Business, Prototype Productization and PRD. After the analysis discussions PRD was selected the most important and current one for active processing.

> PRD means the process of R&D where enterprises which their own businesses are coinciding with the same client or client group. Partners together are searching and defining common R&D steps with the HEI network.

In both cases the co-operation between universities and enterprises is not at all straightforward. It is not normally familiar situation at the university to really identify updated needs of business. Even in the case that identifying is working, still the problem is to work with knowledge transfer and knowledge applications. The situation is getting harder when more than one university is acting together with other university or other universities.

Some guaranteed guidelines are needed to get success:

- Strategical partnerships are important because there is a long-term co-operation experience between university and enterprise. Following the long-term co-operation university is deep in the business of partner. Then, the university is able to follow ideas of R&D from enterprise point of view and it can even make suggestions for the needs of enterprise R&D.
- When several universities are working together it needs strong project management that universities identify their real substance how they are serving enterprise R&D project needs. Not only that but it is even much more difficult to identify how the university is serving partner university knowledge especially in the case that the university cannot directly serve the enterprise needs. When two universities have a long tradition in co-operation the fulfilling of each other's knowledge is possible and is even a fluent process.
- When public sector and municipal funding is engaged in the case of enterprise clusters and university networks the interests of different partners usually differ very

strongly. Therefore, the need of discussions and negotiations are never overexaggerated. That is the only way to find common interests for co-operation project and reach fostering success in R&D.

Elements of successful collaboration are shown above in figure 3.

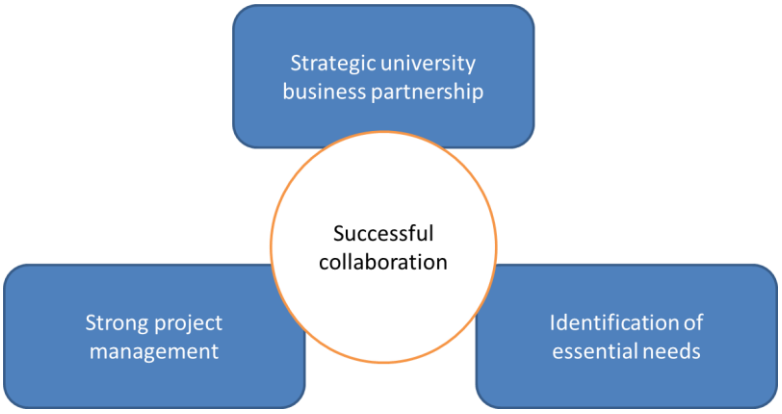

Figure 3: Elements of successful collaboration

37.4 Conclusions and recommendations

The main implications followed from this study is that value creation in the case of enterprises needs that universities combine and build their knowledge for the service process or even service product to make real co-operation business with enterprise clusters. Additionally, the real identification skills from universities are needed to fulfil enterprise needs. This is realistic following the present study only in the case of long time co-operation between universities and between universities and enterprises at the level of strategic partnership.
The applied model of knowledge transfer presented in this paper ensures rapid speed of value creation and transfer from university network to multi business enterprise clusters. The present model of the enterprise cluster ensures also additional businesses to enterprise members in the cluster also giving deeper, more realistic and business oriented focus for the applied research of universities. The present study also shows that the co-operation with enterprises in the research niche fields of the university is rarely fostering the value creation anyway in short terms.

37.5 References

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