SME UNIVERSITY COLLABORATION A ROADMAP TO SUCCESS

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Rezumat. Lucrarea prezintă cele mai importante rezultate privind o metodologie de colaborare între universități și IMM-uri. Proiectul european SUPORT examinează cunoștințele și tehnologiile actuale privind scenariile de transfer de cunoștințe între întreprinderile mici și mijlocii (IMM-uri) și instituțiile de învățământ superior (HEIs) în șase regiuni diferite ale Europei (Irlanda, Marea Britanie, Franța, Germania, Polonia și Spania). Pe baza acestor studii, această lucrare dezvoltă resursele (foi de parcurs, cursuri de instruire, materiale on-line), pentru a permite IMM-urilor să spargă barierele și de a avea acces la cercetarea în stare latentă din instituțiile de învățământ superior. Universitățile sunt ajutate pentru a găsi piețe de desfacere pentru cercetările actuale și anterioare, ceea ce le face mai receptive la nevoile curente ale pieței. Pe baza acestor rezultate lucrarea indică foi de parcurs grafice pentru a ghida participanții la proiecte de colaborare - o hartă în mod special pentru personalul din universități și un altul pentru IMM-uri. Aceste foi de parcurs sunt concepute ca "instrumente de consiliere" pentru cercetători și directori/manageri astfel încât aceștia să lucreze și, ulterior, să realizeze proiecte în colaborare.

Abstract. The paper presents the most important results on a methodology of collaboration between universities and SMEs. The SUPORT project examines the current knowledge and technology transfer scenarios between Small and Medium Sized Enterprises (SMEs) and Higher Education Institutes (HEIs) in six different regions of Europe (Ireland, UK, France, Germany, Poland and Spain). Based on these studies the project developed resources (roadmaps, training courses, on-line materials) to enable SMEs to break down barriers and gain access to dormant research at HEIs. Universities are facilitated to find outlets for current and previous research, making them more responsive to current market needs. Based on these results the paper is indicated graphical roadmaps to guide participants in collaboration projects — one map specifically for HEI personnel and another for SMEs. These roadmaps are designed as 'aides memoire' for researchers and owner/managers as they embark upon, and deliver collaboration projects.

Keywords: SME University SUPORT Collaboration Roadmap

1. Introduction

The "European Paradox" [1] refers to the perceived failure to translate scientific advances into marketable innovations. This paradox suggests that investments in R & D at the university level alone are no panacea for curing stagnant economic growth and high levels of unemployment. Rather, mechanisms are needed to ensure that such costly investments in new knowledge actually spill over into commercialisation and business activity.

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Knowledge, technology transfer, licensing and the resulting product development are complex processes. University researchers and commercial entities, especially small and medium enterprises, frequently experience barriers to their effectively engaging in, and benefitting from, such projects. Partners involved often get discouraged by the complexity of the steps involved, and the lack of understanding of each other's motivations and impulses. Barriers to co-operation need to be understood in order to be abolished.

To encourage more spin-outs and licensing arrangements it is necessary to 'plan for success'. A structured framework for developing and implementing successful collaboration projects between industry and research departments is necessary and a number of roadmaps and training materials supporting successful collaboration – highlighting the benefits, challenges and preparatory stages – have been developed by the SUPORT project team.

2. The SUPORT Project

The SUPORT project examines the current knowledge and technology transfer scenarios between Small and Medium Sized Enterprises (SMEs) and Higher Education Institutes (HEIs) in six different regions of Europe (Ireland, UK, France, Germany, Poland and Spain). Based on these studies the project developed resources (roadmaps, training courses, on-line materials) to enable SMEs to break down barriers and gain access to dormant research at HEIs. Universities are facilitated to find outlets for current and previous research, making them more responsive to current market needs.

The following outlines the SUPORT project which forms a part of the actions under the European Commission's Erasmus Lifelong Learning Programme. (Further details at www.suport-project.eu)

2.1. Methodology

The overall methodology followed was to use the resources of the project partners in each country to access directly owner/managers of SMEs, university researchers and business support intermediaries to understand the current situation regarding university and small business collaboration. These direct contacts were interviewed and questioned about their experiences with collaboration projects. The results of these interviews was then analysed, collated and used to determine the deficiencies in the collaboration area and lay the groundwork for developing training and other resources to assist HEIs and SMEs execute more successful collaborative projects.

To ascertain the current 'status of SME/HEI collaboration throughout Europe each partner was asked to contribute examples of regional good practice in technology

transfer. The collected good practices were concentrated into a set of fifteen exemplary items that demonstrated the 'state of the art' [2]. These best practices were then used to guide the development of subsequent studies and questionnaires.

The next step in the process of research was a methodology report along with a review of the submitted good practice examples. The report included prepared interview guidelines for each of the three target groups (SMEs, HEIs and Business Intermediaries). The sets of questions were designed to uncover the different barriers SME and HEI face in order to cooperate. [3]

The methodology applied included face-to-face interviews and focus groups in each region. By incorporating participants with diverse backgrounds the partners were able to examine what the preferred levels of transfer might have been and if the applying barriers differed. The guided interviews determined if the participants had ever engaged in transfer activities, whether it was a good experience and the factors leading to that perception. Another area of interest was, which benefits the parties involved perceived or expected. It was important to learn in detail about the way SMEs and HEIs perceive each other. Mental barriers were to be unveiled and emphasized by the personal experience of the interview participants.

After the initial interviews had been conducted and results analysed, the second interaction-based layer of the needs analysis survey was prepared. The intention of the focus group sessions was to discuss and specify the major findings of the first set of interviews. Also, this process was an opportunity to develop a strategy on how to implement the findings and lessons learned into a Roadmap and E-Learning material that were to be created. The partners had multi-hour concentrated sessions with target group representatives.

Based on the results of this research a series of collaboration roadmaps was developed. On these roadmaps a training programme for HEIs and SMEs was developed and the project partners are currently preparing on-line 'bite sized learning' modules for each group.

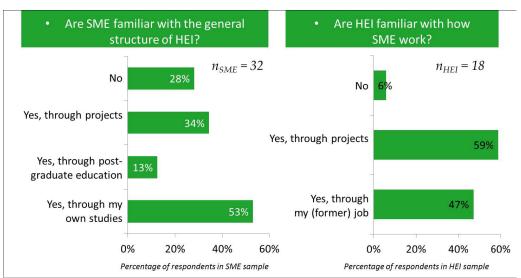
2.2. Summary of Results

Details of the project results can be found in the published report [4], with the major findings detailing:

- Personal experience with the different possible types of transfer activities
- Reciprocal perception of the parties in connection with transfer activity
- Personal experience of the participants in reflection to the other party
- Motivation/possible benefits of transfer for the parties involved
- Existing barriers that participants face when engaging in transfer activities
- Expectations of the participants about the transfer process and interaction

An example of the findings is shown here:

Table 1. SME/HEI Familiarity



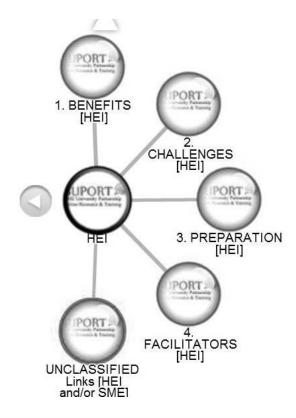


Figure 1 On Line Bite Sized learning – PearlTree.

Table 2. Collaboration Roadmap – For HEI personnel.



SUPORT is a network of Business Development Agencies and Higher Education Institutes in the European Union which is supporting SME/HEI collaboration.

The studies showed that the major areas of disconnect and concern between the SMEs and the HEIs centred on four key areas:

- The *BENEFITS* that can accrue to an organisation through collaboration projects
- The CHALLENGES organisations face when engaging in collaboration
- **PREPARATION** required for a collaboration project
- The role of outside *FACILITATORS* in successful collaboration projects.

Based on these results the project team constructed graphical roadmaps to guide participants in collaboration projects – one map specifically for HEI personnel and another for SMEs [5]. These roadmaps are designed as 'aides memoire' for researchers and owner/managers as they embark upon, and deliver collaboration projects. See Table 2, as an example. The team are also developing 'bite-sized' learning modules to facilitate researchers and business people to gain deeper understanding of the collaboration process. These modules will be delivered using an innovative internet tool (see Figure 1) and will be available through the project website www.suport-project.eu

Conclusions

There is good practice across Europe in collaboration projects. SMEs and HEIs need to understand the Benefits and Challenges in working together. SMEs and HEIs need to structure their Preparation for collaboration and need to investigate the use of Business Intermediaries to support their work.

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