Facilitation – a supporting approach towards successful University-Business Knowledge Collaboration

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Abstract

This paper focuses on the developments of methods to facilitate and stimulate knowledge collaboration between small and medium-sized enterprises (SMEs) and researchers.

The method presented in the paper is based on the experience from two projects managed by Aarhus University, Denmark. Both projects focused on creating development, innovation and ultimate growth in the private sector via facilitated knowledge collaborations between SMEs and researchers.

The facilitation approaches undertaken have all aimed at creating mutual trust, communication, shared goals and the best outcomes in regards to learning, impact and ultimate innovation and growth. The facilitation method developed is divided into three phases: a preliminary phase, a knowledge collaboration phase and a concluding phase. All phases involve a third party facilitator. Facilitation in the preliminary phase focuses on need assessment and matchmaking with relevant researchers. Facilitation in the knowledge collaboration phase focuses on the ongoing matching of expectations and objectives and also includes processes that challenge the partners to reflect on the new knowledge created in the collaboration to support organisational learning and outcome. In the concluding phase the partners are facilitated through a process to both evaluate and reflect on the outcome of the project and next steps are planned.

The results from the two projects show that facilitation of all phases of knowledge collaboration between SMEs and researchers creates value for all participants. The projects have provided useful insight into different enablers and barriers that may occur in SME – university collaborations and hence practitioners experiences of different supporting facilitation methods that may be applied to match SMEs and researchers, and to address potential different expectations and objectives, cultures, time frames, modes of communication etc. Based upon our findings we recommend that knowledge collaborations between SMEs and researchers are facilitated – and that facilitation is crucial if the SMEs have no previous experience collaborating with researchers.

Keywords

University-Business Knowledge Collaboration, facilitation tools, matchmaking, SMEs, enablers, innovation

1. Introduction

Open innovation has been widely accepted as a new paradigm for innovation. (Chesbrough, 2003). It introduces a new organisational innovation which targets at utilizing both internal and external innovation resources to gain new knowledge and to strengthen productivity, competitiveness and growth in firms. As the nature of innovation changes to become open there is a growing need for businesses to leverage knowledge and resources from outside sources such as knowledge institutions and universities. Collaboration between businesses and knowledge institutions has shown to be important for innovation and economic development, and the benefits for businesses in employing external knowledge, from knowledge institutions, have been documented. (Baba, 2009; Barge, 2011; FI, 2011). It has been recognised that small and medium-sized enterprises (SMEs) are important actors in creating, applying and introducing innovation in local economies. (Curran,1994). However, SMEs are not accessing and benefiting from the knowledge generated at universities to the same extent as larger business does. (Laursen, 2004; FI, 2011). Thus, there is a perceived gap between SME's and universities.

A university-business landscape involves multiple stakeholders with multiple and often contradicting objectives and organisational mindset and cultures. There is an extensive amount of literature on university-business interaction including literature which has identified both barriers and enablers for collaboration. (Brunell, 2010; Perkmann, 2012; Schofield, 2013; Science-to Business Marketing Research Centre, 2012; Wit E, 2014). The inherent barriers between universities and business may therefore become a rate limiting step in the drive for increased successful innovation. It is therefore important to understand these barriers and the mechanisms which can be used to address them. However, most literature focuses on larger business and especially literature on practices to reduce and manage the identified barriers in SME-university collaborations is scarce.

This paper focuses on the developments of new methods to facilitate and stimulate knowledge collaboration between SMEs and researchers. The method presented in the paper is based on the experience from two projects managed by Centre for Entrepreneurship and Innovation, Aarhus University, Denmark. Both projects focused on creating development, innovation and ultimate growth in the private sector via facilitated knowledge collaborations between SMEs and researchers. The paper presents a method for facilitating collaboration between SMEs and researchers designed to reduce and manage barriers and enhance enablers in this type of collaboration.

The paper will first give a short introduction to the projects from which the method has been developed, followed by a description of the approach towards facilitating of the collaboration. The facilitation method is then presented followed by a discussion of the findings and recommendation and suggestions for further research and action.

2. Framework and Approach

The method presented in the paper is based on the experience from two projects managed by Centre for Entrepreneurship and Innovation (CEI), now Research and External Relations, Aarhus University, Denmark. Both projects focused on creating development, innovation and ultimate growth in the private sector via knowledge collaborations between SMEs and researchers. In the following a brief presentation of the two projects will be provided, followed by a description of the approach taken towards developing a new supportive facilitation method to stimulate knowledge collaboration between the SMEs and researchers.

2.1 The project 'Shortcut to New Knowledge'

Genvej til Ny Viden (2011-14), in English *Shortcut to New Knowledge* was initiated by Central Denmark Region and managed by (CEI) at Aarhus University, Denmark. The project was financed by Central Denmark Region and the EU Regional Fond. The overall objective of the project was to further innovation in SME's through knowledge collaboration between SMEs and researchers to hereby create the basis for growth and potential commercial profit. Furthermore, one of the aims of the project was to develop new methods for knowledge collaboration. SMEs were recruited to the project though collaboration with the municipal and regional business councils and marketing of the projects in newsletters etc. The project offered SMEs in Central Denmark Region, with no prior experience with collaborating with researchers, the opportunity to collaborate with researchers from both Danish and foreign research institutions (universities and research and technology organisations), through a two phases model. In each phase the SMEs could apply for co-financing for the involvement of researchers as well as facilitators to help with project management and facilitation.

The SMEs and researchers engaged in collaboration projects with the aim to develop new products, services or new ways of doing business, all based on the need of the SME. The knowledge-based collaborations had the aim of ensuring face-to-face and two-way interactions between SMEs and researchers; these types of collaborations resemble a combination of the modes of innovation, which term as DUI- (e.g. Doing, Using, and Interacting) and STI-modes (e.g. Science, Technology, and Innovation). (Jensen, 2007). The researcher contributes with open and public knowledge, tools and methods without any IPR restrictions.

The innovation projects were knowledge-based collaborations divided into processes with a preliminary phase, a clarification phase and a main phase - the knowledge collaboration phase - and could last up to three years. In the 3-year period 52 SMEs completed the preliminary phase with a remaining 34 SMEs receiving funding for the main phase. In total, 31 SMEs completed the preliminary phase and the main phase.

As operators and managers of the project CEI had the task in the project to develop new methods for collaboration between the SMEs and researchers participating. The approach to this task and the methods develop are described below and in section 3.

2.2. The project 'Facilitated Knowledge Vouchers'

The project *Facilitering af videnkuponer* (2013–15), in English: *Facilitated Knowledge Vouchers*, was a small-scale project, initiated as a collaboration between Central Denmark Region, the Ministry of Higher Education And Science, and (CEI), Aarhus University. The aim was to utilize and further develop the methods for facilitation developed in the project *Shortcut to New Knowledge*. In this project *facilitated knowledge vouchers*, an initiative initiated and financially supported by the national Innovation Fund, Denmark, were coupled with a facilitator and a facilitating approach based on the facilitation methods developed during the Shortcut to New Knowledge project.

The general Knowledge Vouchers were offered to SMEs in Denmark with no prior experience collaborating with researchers. The SMEs were provided with the opportunity to collaborate with researchers from Danish universities and knowledge institutions. The SMEs could apply for co-financing to support the partnering with researchers. The overall aim of the *Knowledge Vouchers* was to further development and innovation in SMEs through collaborations with researchers. SMEs were recruited to the project through collaboration with the municipal business councils. A total of 6 SMEs from Central Denmark Region participated in the project *Facilitated Knowledge Vouchers*. The individual projects had duration of approximately 9-12 months. CEI acted as facilitators in the project.

2.3 Approach used in the development of methods to stimulate knowledge collaboration between SMEs and researchers

Our overall approach for developing methods to support the collaboration between the participating SMEs and researchers in the projects described above was to focus on an approach that could reduce and manage the possible barriers to the collaboration and enhance enablers. As both projects aimed at further innovation in the SMEs through development of new products, services and processes through the collaboration with researchers, our main focus was on the needs of the SMEs and their value of the projects.

As previously mentioned a number of barriers and enablers for university-industry collaboration have been identified. Barriers towards collaboration with universities in general and for SMEs have been identified, and among these are: a lack of awareness of the value of external knowledge from knowledge institutions, problems identifying the right person at the university, resource limitations, and a low absorptive capacity of the SMEs - the ability to recognise the value of external knowledge, assimilate it and apply and commercialise it. Furthermore, studies have indicated differences in expectations and objectives, time frames and perspectives and differences in

organisational mindset and cultures as barriers of collaboration. Enablers of collaboration have also been identified and include shared objectives and goals and relational aspects such as trust, mutual respect and communication. (Brunell, 2010; Perkmann, 2012; Schofield, 2013; Science-to Business Marketing Research Centre, 2012; Zahra, 2002; Darsøe, 2012).

One approach towards supporting group collaboration, which has been applied in numerous settings, is facilitation. To facilitate means to make easier or less difficult. Our approach to facilitation refers to 'a process through which a person helps other work effectively and draws out the knowledge of group members in order to achieve superior results' (Bens, 2007). Thus our approach to support the collaboration between the participating SMEs and researchers in the projects described was to involve a third party facilitator in all phases of the collaboration. We focused our approach on processes and the development of tools that could support all phases of collaboration: from the first contact with SMEs, through matchmaking with researcher(s), throughout the collaboration process until the completion of the collaboration. The facilitation approaches undertaken have all aimed at supporting: the scoping of ideas, matchmaking between SMEs and researcher(s), matching expectations and addressing objectives and differences in culture and creating mutual trust and clear communication. Moreover, we focused facilitation processes that challenge the partners, especially the SMEs to reflect on the new knowledge created in the collaboration and support to organisational learning and best outcomes with regard to learning, impact and ultimate innovation and growth.

3. Results

The facilitation method developed via ongoing learning and outcome from the two projects described above is divided into three phases: a preliminary phase, a knowledge collaboration phase and a concluding/final phase. See figure 1. All phases involve a third party facilitator. In general the facilitation approaches undertaken have all aimed at creating mutual trust, communication, shared goals and the best outcomes with regard to learning, impact and ultimate innovation and growth.

The preliminary phase

The preliminary phase features the processes of screening, need assessment, matchmaking and scoping of the collaboration project.

The first step in the process is the screening of the potential SME using a questionnaire. The purpose of this initial screening is to ensure that the SME fulfil the criteria for participation in the projects and have an idea of an innovation project which may require external research based knowledge. The screening is done by telephone.

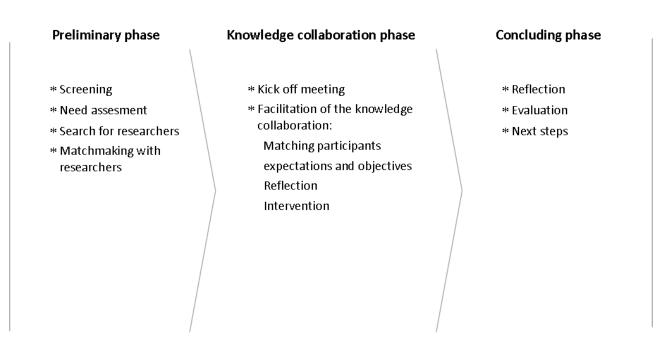


Figure 1: An overview of the facilitation method divided into phases. If needed, multiple iterations of the processes in both the preliminary and the knowledge collaboration phases can take place.

If the SME passes the screening process they then enter into the process of preliminary need assessment. The need assessment and idea qualification is defined using either a questionnaire or the NaBC method (Carlson, 2006). The purpose of the need assessment is to define possible innovation ideas of the SME and to establish if these ideas are correspondent with the need for research based knowledge and a collaboration project. The process of deploying the NaBC method is used to identify and refine an idea with potential business merit. The NaBC framework comprises the four fundamentals that define a project's value proposition: N = Need, a = approach, B = benefitand C = Competition. In our setting we used the model/framework in a slightly modified way as a tool to assist the SME in explicating a project idea, which focuses on the project's possible implication for the future strategy, line of business and overall value in terms of competitiveness and growth potential for the SME. The exploration of needs helps the SME to realise the need for external knowledge for their innovation ideas and serves as a tool for the facilitator for identifying relevant researchers that match the need of the SME and their innovation idea. Moreover, the first meeting with the SME is also used to introduce the framework of the projects and align expectations towards the SME in respect of their willingness to spend a sufficient amount of resources, time, and energy in the collaboration.

The purpose of the matchmaking process is to identify the right research area and researchers appropriate for the innovation project of the SME. In this process the need of the SME is the determining factor for the search. Possible researchers are contacted and if the researchers have the motivation, time and engagement/commitment to enter into a collaboration whit the SME, a meeting between the SME and the researcher(s) is scheduled. In many instances we found that in

order to realise the objective of the innovation project it was necessary to include different research areas, as many of the projects were multidisciplinary.

The purpose of the first meeting between the SME and the researcher(s) is to establish if the researcher(s) matches the need of the SME with regard to research area, and also to ensure that there is a match on the personal level to ensure a fruitful and trustworthy relation between the partners. The first meeting also addresses and matches the objectives and expectations of the partners, and hereby the establishment of a platform for potential joint knowledge collaboration. Moreover, if there is a common ground for collaboration, scoping of the innovation project is performed by the partners. If the outcome of the meeting is an agreement between the SME and the researcher towards a common collaboration project, both partners are following introduced to the application requirements of the projects.

In some instances the process in the preliminary phase clarifies that collaboration with researchers is not the appropriate solution for the SME. In these instances we sought to help the SME to other regional or national programs, if needed.

The knowledge collaboration phase

Facilitation in the knowledge collaboration phase focuses on the ongoing matching of expectations and objectives of the partners, to ensure an ongoing fruitful and trustworthy relation between the partners, and also includes processes that challenge the partners to reflect on the new knowledge created in the collaboration and support to organisational learning and outcome. Furthermore, the facilitation focuses on the adaption of the researcher's knowledge to meet the need and opportunities of the SME.

All collaborations are initiated by a project kick-off meeting between all participants applying a standard agenda to ensure that all aspects of the collaboration are covered and to enhance the best communication, relationship building and trust between the partners. The meeting starts by a presentation by the SME to make sure that they take ownership of the project. The remaining part of the meeting is facilitated by the facilitator using the standardised agenda which includes: A presentation of the participants, project objective, success criteria of the all partners, resources, area of responsibility, way of communication, working method, project milestones and activities and finally formal agreements and administrative procedures.

After the kick-off meeting the facilitator facilitates the collaboration according to the key focus points mentioned above. This includes facilitation of meetings and workshops between the partners and correspondence with both partners in between the face-to-face meetings. In general the activities and tools used vary and are applied dependent on the context. The facilitation of the project also includes processes that challenge the partners to reflect on the knowledge created in the collaboration and support of organisational learning and outcome. The approach is based on the assumption that facilitated interventions and reflections can create the basis of enhanced individual and organisational learning. Thus, by supporting the SMEs and researchers in different processes

that focus on interactions between explicit and tacit knowledge, the knowledge can be shared by others and become the basis of new knowledge. The new knowledge can then be shared within the organisation in process called knowledge socialisation, also referred to as organisational learning. (Nonaka 1994).

One of the processes that is applied for reflections and to support the organisational learning and absorption is for instance a knowledge mapping exercise, inspired by Vail (Vail, 1999). Applying the knowledge mapping exercise the SME and in some instances also the researchers, are firstly asked to write down all new knowledge elements and know-how obtained in the project so far and place this in a coordination system with adaptability at the X-axis and novelty value on the Y-axis, as illustrated in Figure 2. From these key elements and know-how three areas are selected rated after importance for the project and the SME. The SME is then asked to make plan of actions for these different knowledge elements.

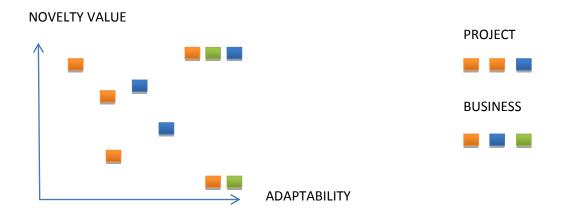


Figure 2: Illustration of the knowledge mapping exercise.

Another process applied to make the SMEs reflect on their mode of knowledge sharing and understanding of the knowledge collaboration with the researcher is a LEGO exercise. In this exercise LEGO Serious play is used as a tool to engage participants from the SME in a dialog about their current organisational practice for knowledge sharing and their understanding of the collaboration project. The SME is for instance asked to build their understanding of the knowledge collaboration in LEGO. An example of this is shown in figure 3.



Figure 3: An example of a "knowledge collaboration landscape", build by an SME.

The concluding phase

In the final phase of the collaboration the facilitator guides the collaboration partners through different processes to support evaluations and reflections on the outcome of the project and to plan the next steps. The aim of these processes is to ensure the best possible completion of the collaboration for all partners and to encourage and possibly help the SME to adapt, further develop and commercialise the "result" of the knowledge collaboration.

For reflection on the process and knowledge created in the collaboration, both knowledge mapping and questionnaires may be applied. The knowledge mapping exercise is here used as a tool to support the SME in making plans of actions based on the new knowledge generated through the collaboration project. As part of this process we also aim at assisting the SME in the further exploration of their innovation potential by initiating initiatives for marketing, commercialisation and organisational adjustments Thus, we also aim at referring the SME to other regional or national programmes and initiatives.

A final evaluation, in the form of semi-structured interviews, is performed with both SMEs and a selection of the participating researchers. For the interviews we develop questionnaires which cover questions related to all aspects of the collaboration process: expectation beforehand, match and collaboration with the researchers, the role of the facilitator, outcome, interests in further collaboration with researchers, advice for new projects etc. The questionnaire and the approach for conducting the interviews are inspired by Vogt (Vogt 2003).

The semi-structured interviews have two functions. First of all it allows the SME to reflect on the whole process, the collaboration, outcome etc. Moreover, the interview provides us with valuable empiric material for our further development of supportive methods for university-SME

collaboration and analysis of the building stones of a knowledge collaboration and outcome. (Bager, 2015; Filip, 2015; Frølunde, 2014).

4. Main Findings and Discussion

Based on the results from the two projects we have learned that facilitation of all phases of knowledge collaboration between SMEs and researchers creates value to all participants. The facilitation has shown to have a number of effects as described by the participating SMEs and researchers during the final evaluations of the projects. In general, the majority of participants expressed benefits connected to the facilitation by a third party facilitator.

Facilitation was shown to have a positive effect on:

- > Introduction of the knowledge collaborations to SMEs without prior experiences of collaboration
- > Making entrance to universities and knowledge institutions easier
- > Finding the right researcher(s) for collaboration
- > Matching the SME and researcher
- > Matching of expectations and objectives
- > Matching of cultures
- > Building trust and respect
- > Keeping the process and project on track
- > The SMEs ability to absorb new knowledge and create organisational learning
- > Openness of the SMEs for further knowledge collaboration

The effects of the facilitation were associated with all phases of the collaboration. In general, the participants estimate the preliminary clarification, defining the framework of the collaborations and reconciliation of expectations and objectives prior to and at the beginning of the collaborations, to be very important and in some cases essential to the success of the collaboration. For the SMEs the introduction of the projects and the matchmaking process undertaken by the facilitators, were highly valued. As the SMEs had no prior experience with collaboration with researchers, many of them would not have known how to approach the universities and researchers on their own. Furthermore, several of the SMEs expressed that the addition of the facilitator to the initial processes of meeting the researcher and establishing the match gave them a feeling of security. Effects at later stages of the collaboration and in the concluding part were also acknowledged. These were related to the facilitation of the ongoing matching of expectations and objectives, the facilitators' ability to keep the process and project on track and the processes utilised to enable the SMEs to reflect on the outcome of the collaboration and enabling absorption and implementation of the new knowledge

generated in the collaboration. Additionally, many of the SMEs expressed values related to the final evaluation of the project. This process both created a reflective space to reflect and express positive and negative experiences encountered. One aspect, which may not be directly related to the facilitation process but more to the collaboration process as a whole, is the SMEs openness towards further knowledge collaborations and collaborations with external partners in general. The majority of the SMEs indicated that they were interested in entering into collaborations with researchers again in the future and for some the collaborations continued after the end of the projects and others again entered new collaborations with other researchers.

In our analysis we have identified a number of collaborative characteristics. We found reoccurring elements that enhance the interaction between the participants which are characterised as enablers. The participants also encounter challenges throughout the collaboration, which are characterised as barriers. (Filip 2015; Frølunde 2014). An overview of some of the identified enablers and barriers are presented in Table 1. In general, we find similarities between the enablers and barriers we identified and the finding by others (Brunell, 2010; Perkmann, 2012; Schofield, 2013; Science-to Business Marketing Research Centre, 2012; Zahra, 2002; Wit, 2014). In addition we found enablers and barriers which may provide useful insight into different enablers and barriers that may occur in SME-university collaborations. We have identified some enablers that are closely related to the persons involved, such as: curiosity and motivation. These enablers may be difficult to enhance by facilitation, however, it provides indication of aspect that facilitators should be aware of when screening both SMEs and researchers for collaborations. Especially as lack of motivation and commitment from researchers involved was found as a decisive barrier for the success of the collaboration. Fortunately, this barrier was only encountered in a few cases. This illustrates that even though a facilitator was present, challenges may occur. We found some barriers within the SME that are not directly connected to the collaboration but which may impede the outcome and utilisation of the knowledge collaboration, the main challenge being the reallocation of resources and people for the implementation. Thus, to a facilitator this should be a point of attention.

When the effects of the facilitation approach as presented in section 3 are compared and related to the enablers and barriers, we would argue that the facilitation approach both supports the enhancement of enablers and the reduction of barriers.

In summary, we find that the use of facilitation tools has a value-adding effect in all stages of the collaboration and have positive effects on reducing barriers towards collaboration.

We have learned that introductory matching of expectations between researchers and SMEs is crucial. It is important that the different objectives for the participants are articulated both up front and during the collaboration and that the diversity is appreciated and respected. Furthermore, we have learned that the ongoing evaluation of the collaboration, interventions and reflections about the new knowledge/skills obtained, creates awareness about the value of knowledge creation and interaction that is beneficial for the SMEs.

Table 1. Identified enablers and barriers.

Enablers	Barriers
Trust	
Mutual respect	Challenges for collaborations across organisational borders e.g., project management challenges
Chemistry	
Alignment of expectations and objectives	Lack of motivation and commitment (researchers)
Curiosity	Differences in expectations
Motivation	Reallocating resources and people for the implementation
Face to face interaction	mpenentation

In general, we found that all collaborations were unique and hence facilitation was context dependent. The facilitation in the preliminary phase and at the initiation of the collaboration was found to be essential. Here the facilitator had a role of framing and guidance of the participants towards a common understanding and matching of expectations. In some instances the facilitator also functioned as a translator between the researcher and the SME, especially at the initiation of the collaboration. The need for facilitation during the collaboration varied. In some collaborations an atmosphere of mutual trust and respect was initially created and alignment of expectations and objectives easily reached and sustained during the collaboration. In other collaborations the facilitator had an important role in the ongoing alignment of expectations, time horizons and communication mode, and in some instances the facilitator had to unravel conflicts that evolved. Some collaborations benefited from facilitated workshops and meetings; in other situations the facilitator had a substantial role as a supporter of the project management. Tools and exercises to strengthen learning and anchor the new generated knowledge were frequently applied. Moreover, the facilitators used tools to challenge, provoke and turn things upside down in order to strengthen the collaboration process and outcome. In summary, we found that the facilitators need to have the ability to step back and observe the collaboration from sideline, to focus on the essence, to ask the right questions, apply tools, or support the next steps in the process, in regard of what is appropriate for the situation.

In our experience, facilitation of collaboration projects between SMEs and researchers requires facilitators with both in-the-moment facilitation competences and theoretical and/or practical knowledge about processes and human behavior. Preferably, the facilitators should understand and have knowledge of the organisational mindset and culture of both SMEs and researchers. Furthermore the facilitators must have a sense of the situation and be able to act accordingly as all collaboration projects are unique and require different approaches to facilitation. Moreover, the

facilitation requirements shift during the collaboration stages. Thus, facilitators of SME-researcher collaboration need skills to navigate in the changes in collaborations and also have the ability to enter different roles, adapt and use tools appropriate for the situation.

Our model for facilitation has focused on knowledge collaboration between SMEs and researchers. We believe that the method, or parts of this, can be successfully applied by other universities and research and knowledge institutions, as it has no specific requirements regarding regional and university characteristics and as it holds no apparent limitations regarding business or field of research.

The facilitation approach, processes and tools have had a special focus on the needs of the SMEs as the projects for which they were developed had the overall aim of furthering innovation and growth of the SMEs. Thus, it remains to further develop supportive facilitation methods that focus evenly on the outcome for both SMEs and researchers. We are currently in the process of developing a supportive facilitation method based on researchers' need for interaction and collaboration with SMEs. Whether the methods developed or parts of them would be transferrable to collaborations between large business and researchers remains to be investigated. We envision that some of the tools applied in the preliminary phase and at the beginning of the collaboration regarding the matching of expectations and objectives would be suited in this setting as well.

5. Conclusions and recommendations

Collaboration between businesses and universities has been shown to be important for innovation and economic development, and the benefits for businesses in employing external knowledge, from universities, have been documented. However, the great majority of SMEs do not collaborate with the universities. An explanation for this might be that the SMEs face a complex set of barriers to assess the knowledge from universities. Thus, the ability to build supportive methods for successful SME-university collaborations partnerships is important.

In this paper we have presented a facilitation method which can support the collaboration between SMEs and researchers. We find that the use of facilitation tools has a value-adding effect in all stages of the collaboration and positive effect on reducing barriers and enhancing the collaboration. We have learned that introductory matching of expectations between researchers and SMEs is crucial. It is important that the different objectives for the participants are articulated both up front and during the collaboration and that the diversity is appreciated and respected. Furthermore, we have learned that the ongoing evaluation of the collaboration, interventions and reflections about the new knowledge/skills obtained, creates awareness about the value of knowledge creation and interaction that is beneficial for individuals, their organisations and their collaboration partners outside the organisation.

Our results show that the need for facilitation is context dependent and requires facilitators with both in-the-moment facilitation competences and theoretical and/or practical knowledge about processes and human behaviour.

Based upon our findings we recommend that knowledge collaborations between SMEs and researchers are facilitated – and that facilitation is crucial if the SMEs have no previous experience collaborating with researchers. Our results have already created awareness and hence adaption of third party facilitation in other regional and national programmes in Denmark for both individual SMEs and clusters. The facilitation method has potential of being adapted in different international settings in the future, such as in H2020 projects, international networking activities, open innovation processes, triple/quarto helix collaborations etc. Furthermore, the method can be applied in training courses for future facilitators of knowledge collaborations.

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