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An action learning method for increased innovation capability in organisations

Submission for category refereed papers

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Abstract

Product innovation in highly complex and technological areas, such as medical technology, puts high requirements on the innovation capability of an organisation. Previous research and publications have highlighted organisational issues and learning matters as important and necessary for the development of innovation capability. Action learning requires reflections of the ways things are carried out, changes in current actions, implementation and improvement and thereafter another round of reflections. This could be difficult for one organisation to carry out internally and so this research uses a learning network setup involving several organisations for inter-organisational action learning.

The purpose of this article is to describe the learning network setup used in a current action learning project in the med tech industry, and to discuss the initial experiences gained. The research project aims at increasing the innovation capability of the participating organisations. The method used is based on action learning and involves representatives from industrial partners, public health organisations and academic partners. The different organisations run innovation projects over a time period of three years, and meet three times a year in learning network sessions with the purpose of developing knowledge by action learning interaction between the different. During these learning network sessions the participants are facilitated to go through different phases: reflections, new concepts, new actions, implementations and new reflections.

The paper elaborates on theories of innovation capability and learning networks, and thereafter the methods of action research, experiential learning and action learning. The action learning network structure, the experiences gained in the initial phases of the project, and the experience of action learning and learning networks is then presented. The importance of trust building between partners in the network in order to facilitate action learning and development of innovation capability is experienced and discussed, as is the learning that takes place in the interaction between academics from different disciplines in their interaction with the practitioners.

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Introduction

Product innovation in highly complex and technological areas, such as medical technology, puts high requirements on the innovation capability of an organisation. In such complex structures, the required knowledge for innovation is not usually possessed within or created by just one single organisation. One aspect of innovation capability is therefore the generation of new knowledge in collaboration with partners (Li and Vanhaverbeke, 2009). Innovation can thus be considered as an interactive, interdisciplinary phenomenon. In accordance with this, previous research and publications on innovation have highlighted organisational issues and learning matters as important factors for the development of innovation capability.

Although innovation capability is regarded as a complex phenomenon where organisational and learning matters are highlighted, research on innovation and innovation capability is dominated by quantitative studies based on testing of hypotheses. However, Pedler and Trehan (2008) raise the issue of putting energy and research resources into finding the “right” answers in research on organisational practices, such as, for example, in research on innovation capabilities of organisations. Thus they agree with several other authors who also recommend qualitative methods when researching organisational processes that involve or affect individuals or groups of individuals, since qualitative research provides clear explanations of activities in organisations (Gummesson 1985; Foote Whyte 1991; Greenwood and Levin 1998). Pedler and Trehan (2008) propose action learning as one qualitative method suitable for organisational research, since it offers a means of engaging the participating organisations and individuals around the ideas, questions and actions forward on problems that they experience in practice within their organisations.

The aim of this article is to describe and discuss the learning network set-up and initial experiences gained in a recently started action research project, called InnoPlant. The research project is about innovation capability in organisations and development of procedures for increased innovativeness. The method used, in the learning network setup, is action learning and in local projects action research is used. The major goals for the overall research project are:

- to contribute to knowledge regarding how sustainable, innovation fostering interactions between producers, users and purchasers can be developed,
- to contribute to knowledge regarding the use of action learning in a learning network setup to develop innovation capability in inter-organisational learning.

In the research project the public healthcare system, industry and academia have converged to learn about the development of innovation capability in organisations. The public healthcare system and the medical technology industry share a need and have a common concern to develop innovative products. In public healthcare this need is due to the increasing costs of healthcare at an unsustainable rate, which calls for more efficient and effective products. In the medical technology industry this need has grown out of increased competition. For inter-organisational action learning, sharing the same inquiry and a real concern is pre-requisite (Coughlan and Coughlan, 2004). The goal for the industrial partners participating in the research project is to enhance their organisations’ innovation capability through new ways of working with the interactions between user, buyer and producer, with the involvement of academic partners. This complex set-up of different organisations also needs an adaptation of action learning into a structured process, whilst still respecting the core $L=P+Q$ of action learning (Coughlan and Coughlan, 2004). Based on a research approach of action learning,

action research and experiential learning, a learning network is applied in order to develop the innovation capability and support the learning process in the participating organisations. The next section introduces the theoretical framework and methodology discussion for the outline of the research project. Following that, the research design, conditions for the learning network and the action learning activities are described. Finally, the initial findings and insights are discussed.

Innovation capability

As the objective of the research project is to develop the innovation capability of the participating organisation, definitions of the phenomenon are described here. A company's innovation capability is frequently described as its ability to continuously develop innovations as a response to a changing environment. Continuous innovation increases a company's chances to obtain sustainable competitive advantage (Teece, 2007). Rare, inimitable and non-substitutable resources are significantly contributing to a company's success in the competition (Wernefelt, 1984). These resources can be materialistic (e.g. machines) but also persons, relationships or inter-organisational networks. As this article concerns a learning network approach to develop innovation capability we focus on the abilities that are related to a company's inter-organisational networks and external collaborations.

In a changing environment a company must possess the ability to reconfigure, renew, and recreate these resources in order to obtain the innovation capability. A company's innovation capability can be described at several different levels and from several different perspectives. This can be obtained through double-loop learning in an organisation and between organisations. Thus, the concept of innovation capability includes work procedures, organisational and technical learning, and adapting to new contextual environments (Norell Bergendahl et al., 2008). Olsson et al. (2009) identified six important factors for an innovative company: user understanding; resources; risk taking environment; learning and re-use of knowledge; balancing creativity and structure; and leadership. These factors address the benefits (and challenges) of approaching the innovation capabilities of an organisation, as the term 'capabilities' comprises processes as well as more tacit activities such as leadership and risk taking. Furthermore, innovation capability is interactive, cumulative and cooperative between different organisations, which require an organisation to be able to learn and transfer knowledge (Li and Vanhaverbeke, 2009).

Learning networks

Networking and network research based on action research was focused in Scandinavia in the mid 1980's. By then, attention had shifted from the intra-organisational group perspective to the inter-organisational network perspective. On a basic level, learning networks can be defined as a network formally set up for the primary purpose of increasing knowledge (Bessant and Tsekouras, 2001). The actors in the network provide an arena for experience exchange and learning where "old truths" can be challenged and new perspectives formed (Bergh, 2009). According to Bessant et al. (2003) learning networks may encompass different learning targets - for instance: increased professional knowledge and skills; improved awareness of a particular field; improved knowledge regarding regional interests; sharing knowledge on how to do a particularly novel task. Learning networks can be seen as an arena for the use of different learning methods, and therefore offer a good basis for inter-organisational learning to take place. A learning network set-up provides opportunities to exchange experiences on new theories and existing models relating to the issues each company is working with (Ritzén et al. 2005). In a learning network involving academic researchers, the

participating organisations initiate change while the researcher facilitates the basis for initiation, dialogue, participation and reflection (Rasmussen, 2004).

Previous research indicates that the interaction between different disciplines with practitioners in learning networks creates a learning context for all parties, which demands learning and the creation of new knowledge that is both useful and general for the involved parties. Engaging in this type of learning process is therefore useful and enriching for the learning, professional development and competence of academics (Karlsson et al 2007). Newell and Swan (2000) have demonstrated the importance of the development of trust for collaborative knowledge sharing and knowledge creation in networks. Thus trust can be regarded as a prerequisite for the success of putting things forward in an action learning set-up. According to recent studies by Bergh et al (2010) trust building can be divided into three parts: commitment, companion, and competence. Commitment trust is about dialogue, rules and goal setting. Keywords for companion trust are interaction, socialization and communication. Finally competence trust building contains components like experience sharing, time and feedback. Commitment trust is mainly built during the early stages of the network and is a pre-condition for building companion trust, which, in turn, is very much a pre-condition for building competence trust. To build trust on all levels (commitment trust, companion trust and competence trust), takes time in the initial phase of the network and must also be maintained during the whole process. Actions involving all partners in a network are necessary in order to build trust on all levels.

Action learning, experiential learning and action research

The basis for this research project lies in inter-organisational learning among participating organisations and academic partners. A learning network structure forms the arena where action learning is used for system change for innovation capability and innovative actions in the participating organisations. When action learning is used for system change in complex settings, as in this project, it is suggested that participants from different institutional backgrounds cooperate to learn from each other in order to create change at different levels of the system (Hoes, Regeer and Bunders, 2008)

Action learning refers to group learning that enables development of people and organisations. One core element of action learning is a bottom-up approach to learning through reflection on one's own experience (Hoes, Regeer and Bunders, 2008). Even though action learning differs from experiential learning, the cyclic learning process is similar. According to Kolb (1984), experiential learning is a process where learning is initiated by an action then followed by reflection on the action, preferably together with others. The actions following the reflection should then be focused on changing the initial pattern of behaviour, implementation and improvement, followed by another round of reflection to complete and continue the learning cycle. Thus it is important to construct arenas and processes that enable people to gain first-hand experience and to learn. Experiential learning involves the interplay of experience and reflection and this is also the case in action learning. But in contrast to action learning, experiential learning can be a passive process (Simpson and Bourner, 2007). Action learning can be seen as a particular form of experiential learning, but stresses the aspect "learning by doing something different" rather than just "learning by doing". Mezirow (1990) sees reflection as a necessary but not sufficient condition for action learning, stating that it is necessary to go deeper and question the conditions and convictions that influenced the practical work. Reflection at this deeper level serves to provide participants with a focus to the root of the problem in order to change their perspective of it. Revans (1982) agrees with this and argues that without practical action no significant action learning will take place. He further describes action learning as a learning model including three steps: 1) the creation of a

problem solving strategy including a situation analysis; 2) realization of the strategy including research, hypothesis, experiment, review, display of results; 3) the relation of the learning process to the strategy. The first phase of creating a problem solving strategy requires a common issue or concern. Pedler and Tahrán (2008) stress the importance of bringing new questions and perspectives to the present situation, in order to move things forward and to learn and understand. The participants in action learning receive help from the researchers in structuring their experiences, so that, they can describe and put a label on a phenomenon, and realize that they are not alone in experiencing it. Additionally, the participants are exposed to how others perceive their work situations, views that are often quite different from their own. In some cases individuals are challenged, but in other cases they receive confirmation that they are thinking along the “right” lines. Marsick and O’Neil (1999) emphasize two common conditions for action learning, namely that the participants meet on equal conditions and are committed to solve unstructured problems where there is no “right solution”.

Alongside the inter-organisational learning network setup for action learning, the participating organisations make changes in local projects which are followed by the researchers in local action research projects. Action research is a democratic methodology that builds on similar principles as action learning, both in terms of “action” and in terms of cyclic learning processes. Action learning, however, pays more attention to creating a context of learning (such as in the learning network setup of this project), and focusing on practical development rather than on knowledge creation for society (Simpson and Bourner, 2007). Action research is performed with close interaction between the researcher and the employees of the organisation studied. Thus action research is often characterised as an interactive cyclical process (with phases of planning, action, observing, analysis and reflection) as a basis for new planning and action (Ballantyne 2004). Typical for action research is that the researcher interacts with actors to develop a shared horizon of practical change. The creation of knowledge then takes place as an ongoing dialogue and reflection about the experimental implementation of actions (Hans van Beinum, et al. 1996). The criteria for truth or new knowledge are not merely measuring collected data from the field, but more a question of creating experiences which can potentially change the values and beliefs of all participants’ considering an activity (Aagard et al, 2006). Pålshaugen (1998) argues that action research should concentrate on methods for dialogues, including all the interest groups inside and relevant interest groups or partners outside the enterprise. The aim of these dialogues is to drive democratic change within an organisation. Organisations which sufficiently facilitate and support these discussions and take care of the changes are referred to as *development organisations* in contrast to *productive organisations*, which only focus on running the everyday business (Pålshaugen, 1998).

Research design

The research design in the present project builds on the previously described theoretical foundation and methodological aspects. The public healthcare system is represented by two county councils, the medical technology industry by three companies, and academia by engineering faculties from two universities and a faculty of social science from third university. A fourth organisation is involved in the project, namely the “Centre of Technology in Medicine and Health” (www.ctmh.se), which is in itself a joint effort between two major universities and one county council to promote research and commercialization activities in the field of medical technology. All parties are located in Sweden, and their roles can be described as follows.

- **Engineering faculties of universities** – The engineering faculties of two universities are represented by two professors, four senior researchers and two Ph.D. students from product development departments. There is a surmountable physical distance between the universities and the other participating organisations. The role of academia in the learning network is to facilitate meetings between participants and turn questions for reflection into new actions. Researchers take part in the ongoing action research project at each organisation aiming at increasing product innovation capability. The researchers' role in the learning network is to facilitate a learning situation by raising relevant questions and perspectives.
- **Social science faculty** – The social science faculty at one university is represented by one professor and a masters student from an ethnographic department. The role of the ethnographic researchers is to perform a meta-level study on the research project to describe how the culture within this type of project can be developed. Furthermore, the ethnographic researchers are continuously providing feedback to the other participants in the research project regarding the working climate and working procedures.
- **Medical technology industry** - The medical technology companies are developing and commercialising products within the fields of mobility devices, sterilisation equipment and anaesthesia systems. Each company brings one innovation project to the research project. In the learning network there are two representatives from each company, holding positions of R&D manager or product manager in their organisation.
- **Public healthcare system** - The county councils provide one product innovation project each, concerning the development of a tool for heart failure diagnosis and an IT system in healthcare. A project has also been initiated where certain inventive employees within the public healthcare system are invited to participate in workshops considering the conditions for realizing product innovations in public healthcare. In the learning network, each county council - is represented by a practitioner working with the innovation project and someone who works with strategic issues regarding innovation.
- **Centre of technology in medicine and health** – The assistant director of CTMH is the project coordinator and is responsible for the planning and coordination of the learning network meetings.
- **Guest lecturer** – Different guest lectures are invited to introduce the topic for each meeting in the learning network. The lecturer can be a practitioner with relevant experience or a researcher with interesting research results.
- **Steering committee of directors** - The steering committee of directors includes professors, CEO's and directors from the participating organisations. The role of the steering committee is to monitor and support the project and provide top-down support for the actions taken in the organisations, as well as disseminating and communicating in their home organisations.

The main idea of the research project is that each county council and company designates one innovation project to be involved in an action research project supported by academia. The experiences and learnings from these projects are then brought by representatives of the organisation to the learning network meetings, where they are shared, questioned, further explored, discussed and reflected upon with the other organisations. The reflections and learning from these meetings are then brought back and exposed in the action research projects in the organisations and in the academic setting. These learning network meetings take place three times a year, hosted by the participating organisations. In addition, the steering committee has regular meetings twice a year. The set-up of the research organisation is illustrated in the descriptive model presented in Figure 1.

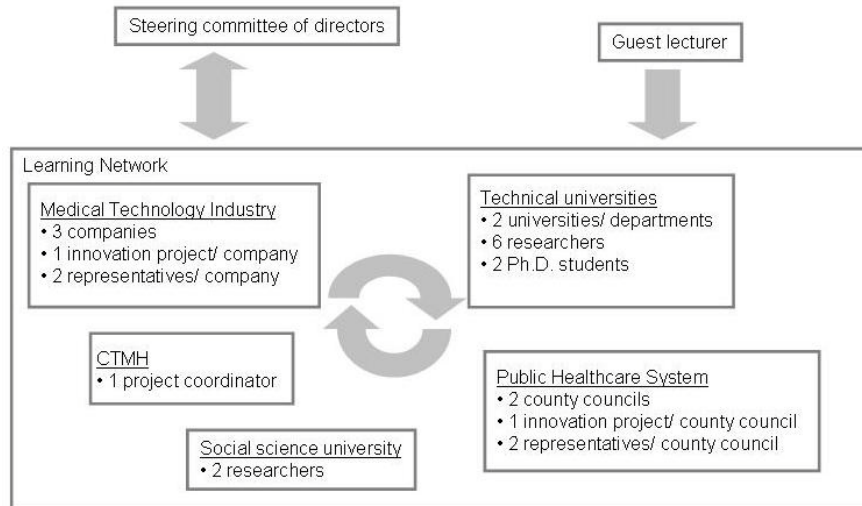


Figure 1: A descriptive model of the learning network organisations

The action learning and action research methods used in this research project combines several approaches with the common purpose to inspire the participating organisations to implement new ways of working to increase their innovation capability through trustful collaboration and learning between the involved parties. To implement sustainable new ways of working in the participating organisations puts high demands on the organisations, as well as high ambitions from the individuals acting in the project, and strong support from the sponsors in the respective organisations. This means that the change project needs long term commitment and mutual trust from all attendees. The commitment from sponsors is formalized in the steering committee, while the trust building is made possible through the length of the research project and the set-up of regular meetings among network members.

The set-up includes three different approaches:

1. *Action learning network:*

This approach includes learning network meetings involving all parties three times a year. Such meetings have two objectives. The first is to feed in knowledge from actual and recent research in a field called for from the participant organisations. Here the researchers can transfer knowledge about research in the field of interest or invite experts if it is out of their own research area. The second objective is to report and set new goals for the local projects, including feed-back and benchmarking with the colleagues from other partners. This second part includes sessions of learning between and within the participating organisation and between and within the academic partners. The researchers' role is to facilitate and turn questions for reflection into new actions.

2. *Local empirical action research studies and feedback discussions:*

Depending on current need in the organisations, local empirical studies can be coaching the change process, or auditing capabilities, creative climate or other performances. These studies are driven by the research group in collaboration with the local partners and contribute to broadening the commitment and learning in the organisation. This may lead to new ways of doing things locally.

3. *Local driven innovation fostering projects:*

These projects are chosen by each organisation as needed, and can differ between product innovation projects, organisational development projects, or other types of

business development. The local projects should be prioritized by the unit and be possible to follow up in a defined way by the researchers throughout the entire research project.

The three approaches of the method are intertwined in a system, all contributing to the total learning and establishing of new ways of working for increased innovation capability in the organisations. The setup is visualized in Figure 2.

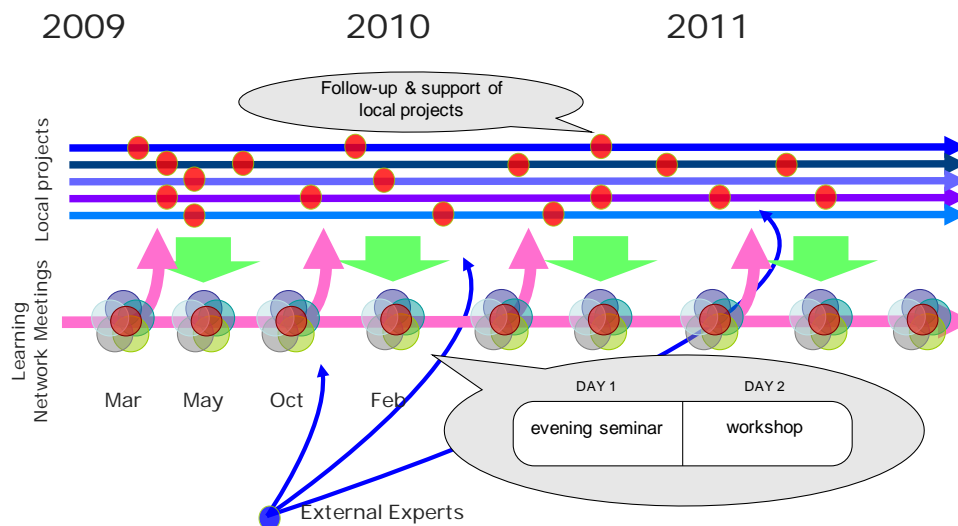


Figure 2: Learning network principle in research project

The network organisation can be seen as having two main aims. One is to facilitate innovation capability within the participating organisations. The other is to develop sustainable relations and trust between researchers from participating universities and participating organisations. This will create a learning network that can also be useful in future development of innovation capability and problem solving in general. To fulfil these aims, the trust making processes have to be supported in all phases of the network, including the initiation, establishing and elaboration phase. The learning network meetings are all setup around a specified theme based on the needs identified from participants in the previous meeting. Each meeting follows a three step procedure:

- ▲ Knowledgeable guest lecturer, invited based on needs from previous network meetings
- ▲ Inter-disciplinary action learning workshop on the theme and concerns raised
- ▲ Presentation of the actions in local projects with inquiry/feedback from the group leading to new actions

Innovation capability in the action learning network

The research project has been going on for one year and will continue for two more years. The first year has mainly focused on the research set-up, formalizing the learning network and initiating the local action research projects in the organisations.

Diagnosis of participating organisations

Due to the open ended approach of the research project, the research group has primarily dealt with the diagnosis of the organisations and the current situation of the specific local projects.

This corresponds with Revans (1982) who suggested that the initial activities in action learning comprise a situation analysis and the creation of a problem solving strategy. The diagnosis has been carried out through interviews, workshops and surveys in each organisation, as well as reviews of internal documents. The diagnosis has focused on generating a general understanding of the organisations' current working procedures, but has also sought to identify areas of improvements and research questions regarding the companies' user orientation and innovation capability. In parallel with the emerging research focus of the organisations, the researchers have developed a theoretical framework that matches the organisation's needs. This has been done by literature reviews and re-utilization of previous research results.

Examples of improvement areas and questions that have been recognized during the initial diagnosis in the medical technology companies include:

- How can companies in a systematic manner continuously recognize the needs of current and potential users and develop flexible working procedures where these needs guide the initiation and development of new products?
- How can a company involve its users to develop products that hold a higher degree of user worthiness?
- How can a closer relationship to the user influence the transformation from a producing company to an innovative company?
- How can a company develop an understanding among their employees, not only for the users' needs, but also for the purchasers' incentives to buy a product? How and to what extent should these incentives guide the design?

Examples of improvement areas and questions that have been recognized during the initial diagnosis in the public healthcare system are, for instance:

- How can robust forms for collaboration between clinicians and companies regarding product innovations be developed and implemented?
- How can the public healthcare system utilize their full potential to contribute in the initiation and development of new products?

These questions and issues, form the basis for inquiry under specified themes at the learning network meetings. The organisations in the learning network have totally different experiences regarding innovation work. While some organisations in the network have a long tradition and experience in innovation, others have just recently started their journey towards becoming innovative organisations. Furthermore, the fact that the organisations are dealing with different types of products can make it difficult to find common issues. To adjust the action research projects and the learning network meetings in a manner so that they satisfies and include everyone is a frequently recurring challenge.

Experiences from the initial phase

The main and most important experience drawn so far from the entire set-up of this action learning project is that progress in this type of project, involving more than one organisation, requires a comprehensive set-up for trust-building among the participating organisations and the individuals involved. This trust building has been on-going and been evident during the whole first year, with a clear evolution in the levels of trust from commitment, to companion and finally to competence trust (Bergh et al 2010). The commitment trust building was accomplished through the initial meeting where the different people had the opportunity to get

to know each other on a personal level, and the set-up was planned to enable the participants to perform trust-building actions. The first meeting was set-up at a neutral location outside of the participating organisations, i.e. not at the location of any participating party, in order to create a physical space which was new and unknown for all and thereby not considered as anyone's territory. The aim was to develop both commitment and companion trust, although the level reached at this first meeting was only on commitment level. It was not until the second meeting, hosted by one of the industrial partners that the active trust-building process started on the next companion level and the atmosphere "opened up". Potential reasons for this were that the participants knew each other after the first meeting and the hosting organisation took an open minded approach, presenting their way of working, both strengths and experienced challenges in their way of working with innovation. In this way, the organisations hosting the learning network meetings stimulated the trust building process and engagement. This also resulted in a deepened professional trust between the representatives from the companies and thereafter they contacted each other to discuss professional matters between meetings. The professional trust is a part of the competence trust in the network. This professional trust building has been more difficult for the researchers to attain, especially towards the companies. This might be due to different perspectives regarding theory and practice, different views on the researchers' role, and an open ended research approach which might appear to be out of focus.

Another experience drawn is that in order to create a trustful atmosphere, it is important to establish 'codes of conduct' or a contract to define roles and responsibilities at the start of a project that are agreed upon by all parties. This contract does not only lay the ground for the trust-building process, it further underlines the commitment from the participating organisations at the very start of the project. Furthermore, it requires strong support from top management in the companies and the organisations, as well as from the researching bodies. We experienced that this is also a prerequisite for an inter-organisational action learning project to take off.

On the third learning network meeting a high level of trust among the participants was experienced, which indicates that the trust-building phase takes time and effort. An open atmosphere emerged, with learning among participating organisations and sharing of *both* good and challenging experiences in the home organisation. After the second network meeting, where the host organisation set the scene for an open minded way of presenting their organisation and their problems, the organisations hosting the following network meetings also showed this open minded view and gave deep access to their home organisation during the visit. On the third meeting the trust building phase was so mature that participants started to share concerns and issues on innovation capability and their strategic issues, from their research and development organisations and practices. This sharing of concerns gave the participants new ideas on how to establish new ways of working for change that could be adapted for use within their home organisations. This level of trust and integration of competences indicates trust on the competence level.

The set-up of the third network meeting was more focused on future solutions than on trust building. A workshop approach, inspired by Jungk and Müllerts (1987) "future workshop" approach, was applied. The aim of the exercise was to identify the most essential capabilities regarding user driven innovation within the healthcare system and the medical technology industry. Once the capabilities were identified the group was asked to discuss these capabilities and pin-point, in a road-map, activities that would have to take place during the following ten years in order to realize these capabilities. At the end of the meeting the

participants had produced four road-maps (two for the healthcare and two for the medical technology industry) and they expressed their satisfaction with the exercise. It was evident during this exercise that the participant felt trust towards each other in sharing details about how they “really” work (even though these details may put them in an unfavourable light). In this phase competence trust was experienced.

In the third meeting the ethnographic study that has been following the project gave feedback to the group, and raised some new inquiries that focused on the learning process in the network. This feedback clearly raised some issues regarding the different vocabulary and different ways of communicating that dominate in the different organisations. This feedback resulted in a more conscious way of continuing the interaction among the participants of the meeting.

In every research meeting, the researchers have given a short presentation regarding the development of the theoretical framework. This has been a good way to tune the direction of the research, but also provides a way for the researchers to expose themselves and open up for discussions and reflection in the area between theory and practice.

The role of the researchers has clearly been to facilitate, to challenge and to inspire in these meetings but also to analyze, document and discuss learning outcomes from the meetings. The role of the researcher has not been to come up with solutions. However the initial experience was that the expectation from participants at the start of the project was that the researchers should bring in solutions. This might be due to the organisations’ previous experiences of using consultants who bring in answers to problems, and their lack of previous participation in action learning projects. Such expectations can also be influenced by seeing the universities as knowledge providers instead of partners to collaborate with in order to produce new knowledge. Enlightening the organisations to grasp that the researchers facilitate and affect the actions that the organisations will take, and that the solutions to problems should be generated in-house, took some time and was specifically visible in the industrial product developing organisations.

Conclusions

The conclusion so far from this continuing action learning project is that the action learning method is suitable for research and practice in enhancing innovation capability of organisations in an inter-organisational setting. It is further proved that regular learning network meetings for structuring the complex inter-organisational learning is a facilitating condition. One purpose of the research project is to develop a sustainable learning network for new innovative forms of cooperation between industrial partners, users and purchasers. A driving force for this development can be the action learning process, which includes the aspect of learning about learning in a network.

The initial findings conclude that a code of conduct and contracts are essential at the start of the project for commitment of trust in such complex setting. The most important experience drawn from the project is that the trust building among participants - from commitment trust, to companion trust and eventually to competence trust - is a necessity for the progress of an action learning project and that the time spent on trust-building is often under estimated. Further experience from the project is that it is not until trust-building is established that critical issues and concerns are raised and shared among participants, and the project comes into a phase of competence trust.

It is further established that the role of the researcher as a facilitator rather than as a solution maker is not immediately obvious and that the participants need to go through a learning curve with regards to the action learning method in order to understand the roles and contributions from themselves and the researchers.

The ethnographic study following the project clearly helps the facilitation of the learning process in the way it highlights issues around vocabulary and meeting principles among participants.

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