A relevant issue: Establishing collaborations with multiple practitioners

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Abstract

Practice research involves many different stakeholders who contribute to and derive benefit from the research in different ways. While current practice research has already begun to explore practitioner-researcher collaboration we need to further expand our understanding of how this relationship can be established and be made relevant for multiple practitioners. Against this backdrop, the research question addressed in this paper is: how are practice research collaborations established so as to be relevant to a multitude of practitioners with different motivations and goals? To address this issue, this paper examines practitioner-researcher collaborations in a large-scale regional innovation network, ProcessIT Innovations. Practice research provides good opportunities for fruitful collaborations between practitioners and researchers; however, the approach requires a dedicated effort to ensure engagement and relevance in the long-term. In practice projects it is necessary to expend a great deal of effort on facilitating practitioner-researcher collaboration and on managing the diverse set of agendas involved. Our results show that in order to make the collaborations relevant to practitioners it is important to develop the sensing capacity to detect problems and issues in the local practices. In order to enable this capacity in ProcessIT, former practitioners were hired. Moreover, our results show that contributions to local as well as general practices can be organised within an innovation system by forming branch clusters and by involving end-user and supplier companies in the projects.

1   Introduction

Research relevance has long been an issue in the information systems (IS) research discipline. Research is deemed to be relevant for a stakeholder when it addresses their specific needs (Rosemann & Vessey, 2008). Often the issue of relevance is addressed from the viewpoint of professionals (practitioners) (see, for example, Applegate &

King, 1999; Applegate, 1999; Benbasat & Zmud, 1999; Davenport & Markus, 1999), as having an impact beyond their own research community is important for a discipline's existence and long-term development (Rosemann & Vessey, 2008).

Focussing on real problem is an approach which can increase the relevance of research, as the output in these cases will be important for the stakeholder experiencing the problem. To ensure the practical relevance of research, different approaches have evolved that attempt to strengthen the relationship between the research and the empirical field. Schatzki et al. (2001) describe the *practice turn* in science, and other authors in various disciplines also emphasise this emerging practice orientation (e.g., Feldman & Orlikowski, 2011; Pickering, 1995; Reckwitz, 2002; Whittington, 2006). Examples of approaches that include intervention in practice and collaboration with practitioners are action research (Baskerville, 1999; Rapoport, 1970), participative research (Elden, 1983), collaborative practice research (Mathiassen, 2002), practical inquiry (Stevenson, 2005) and pragmatic inquiry (Metcalfe, 2008).

Practice research (PR) has gained increased attention in the IS field as a way in which to conduct practice oriented research (Goldkuhl, 2008; Goldkuhl & Julkunen, 2011; Nordström & Axelsson, 2011). The PR approach was first introduced by Goldkuhl (2008) as a practical inquiry approach, but was later developed and relabelled as PR. Practice research is based on the pragmatic stance that knowledge contributes to the improvement of existence through informed actions, and research should thus be useful for practitioners as well as for researchers (Goldkuhl & Julkunen, 2011). In order to improve existence, PR needs to inquire into local practices, i.e. to find ways by which to improve the local situation. In respect of its contribution to research as well as to local practices, PR has similarities to action research (McKay & Marshall, 2001); however, unlike action research, PR also stresses the contribution to general practice (Goldkuhl, 2012).

Two essential questions have been generally addressed and well explored in research on PR: *what* is done, and for *whom*? The what is the improvement of existing practices through the advancement of knowledge; the whom, for the most part, are practice communities, although PR identifies three target practice communities: the research community, the local practice and the general practice (Goldkuhl, 2012). However, the *how* question has not been sufficiently addressed so far in PR. The how question is essential, as the advancement of knowledge about, and improvements in practices requires the establishment of a fruitful interaction and collaboration between practitioners and researchers (Coghlan & Shani, 2005).

Goldkuhl and Julkunen (2011) argue that we need to find ways in which to engage researchers in practical development and practitioners in knowledge development. However, with a few exceptions, most research in this area tends to limit the complexity and only focus on the involvement of one research organisation and one practitioner organisation. For example, Cronholm and Goldkuhl (2004) address the empirical research practice as an arena where only one business organisation is present. Nordström and Axelsson (2011) explored the practitioner's motivation for participation in PR and identified the opportunity to influence research, to increase competence, to be part of a social community and to solve specific problems as the practitioner's motives to participate in PR research. While this research provides valuable insights into how practitioner-researcher

collaborations can be established, it is limited by only focusing on one stakeholder's motivation.

Contemporary PR collaborations are often complex, involving practitioners from different sectors with varying motivations for participation. A single research project can include practitioners from multiple organisations and researchers from various academic disciplines, and the project may have a funder who is expecting certain outcomes. Cronhom et al. (2011) address this complexity and argue that we need to understand researcher-practitioner collaborations as collaborative practices, consisting of a cluster of local practices and researchers working together. According to Mathiassen (2002) the challenge in collaborative practices is not so much in deciding which methods to choose, rather in finding practical ways to support the diverse and sometimes contradictory goals involved in such efforts, i.e. to make the collaboration relevant to all stakeholders.

While current PR has begun to address the question of how PR collaborations should be organised we need to broaden our understanding of how these relationships can be established so that they are relevant for multiple stakeholders. Against this backdrop, the research question addressed in this paper is: *how are PR collaborations established so as to be relevant to a multitude of practitioners with different motivations and goals?*

To address this question, we will examine practitioner-researcher collaborations in a large-scale regional innovation network, ProcessIT Innovations (in short, ProcessIT) that was designed to stimulate economic growth and increase competitiveness in northern Sweden. The program was initiated in 2004 as a joint venture between commercial and public interests, and engaged the traditionally strong local process industry as well as the emerging local IT industry in a network with many participating firms, public authorities, and local universities.

2 Practice Research

Practice research was introduced by Goldkuhl (2008) as an alternative and a complement to action research. While action research aims to contribute to changes in a local practice and to scientific knowledge, PR adds a focus on contributing to general practice. Following the ideas of action science, as formulated by Argyris et al. (1985), PR emphasises "knowledge in the service action" (p 78). In addition, PR also builds on Dewey's (1938) pattern of inquiry and the idea "to improve the world a little".

As a research subject, PR produces knowledge about and for practices (Goldkuhl, 2011). PR research has three target groups: the scientific community, local practice and general practice, as depicted in figure 1. The scientific community provide relevant theories and receive the scientific knowledge produced. The local practice constitutes the study object that the research produces knowledge about, but that knowledge is also presented back to this practice as a local practice contribution. General practice is seen as the main target group and refers to a set of different practices with relevant similarities.
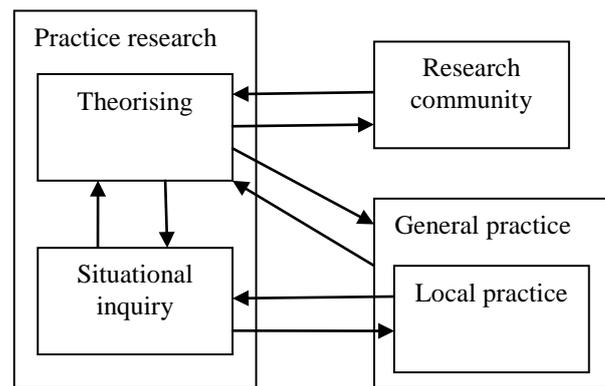
Figure 1. The anatomy of practice research (Goldkuhl, 2011)

To enable the study of local practice and produce useful knowledge it is often necessary to get close to the studied practice in order to reveal more than what is immediately visible (Gummesson, 1991). Goldkuhl (2011) argues that to reach this closeness, PR needs to be performed as a collaborative effort between researchers and practitioners. However, the author suggests that this do not require practitioners to be involved in all research related issues such as planning, selection of methods and theorising.

2.1 Relevance in Practitioner-researcher Collaborations

As practice research means research on and for practices and is often conducted in practices, it is important to be close to the practice and to gain access to information that may not be immediately visible (Goldkuhl, 2012). In PR it is of interest to discover what is actually going on in practices and not only what people think is going on (Argyris et al., 1985). The research work conducted directly in relation to the practice is called situational inquiry (Goldkuhl, 2011). The knowledge interest in such inquiries is guided by a problem and the need to solve this problem (Dewey, 1938). In PR the problem driving the inquiry is, with few exceptions, located in the local practice.

Establishing and maintaining good practitioner-researcher collaborations is crucial to support the situational inquiry and the production of results that are relevant to the practice. The researchers need to engage in the practice to gain in-depth insights into the problems of and real setting that characterises the practice being investigated. In addition, the research process needs to be structured and managed in a way that facilitates the production of rigorous and publishable scientific results. While current research efforts in PR have produced valuable insights into what is being done in PR and for whom (Goldkuhl, 2012) the literature has less to say on the issue of how it should be done, especially in collaborations involving more than one practitioner organisation. Cronholm et al. (2011) address this issue and argue that collaborative practice (Mathiassen, 2002) is a suitable concept to use when interpreting collaborations involving clusters of local practices and researchers working together.

While collaborative practice is valuable for understanding practitioner-researcher collaborations, we still need to explore how these efforts can be organised to make them relevant to multiple stakeholders. Relevance has long been addressed as an issue

for researchers, who need to make the research relevant for practitioners (Rosemann & Vessey, 2008). While this may be challenging in collaborations involving one practitioner organisation, it is even more so in collaborative practices involving multiple practitioner organisations.

In his study of collaborative practice research, Mathiassen (2002) pinpoints the challenges involved in such collaborations, "practitioners must, on the one hand, agree to become objects of study. Practitioners must accept having meetings tape-recorded, they must engage in critical reflections of their practices, and they must be willing to report weaknesses and failures of their efforts. Researchers must, on the other hand, commit themselves to improving practices and adopt flexible research approaches as practices change and new priorities emerge" (p 329).

However, the pressure to produce practical results may give the research results a secondary priority (Baskerville and Wood-Harper, 1996). Balancing the production of practical results and research results may thus be a challenging balancing act (Mathiassen, 2002). Benbasat and Zmud (1999) characterise the relevance of an article's content using the dimensions of relevance: interesting, applicable, current and accessible. Klein et al. (2006) developed these dimensions further into the dimensions of relevance: importance, accessibility and applicability.

First, importance means research that meets the needs of practice by addressing a real-world problem in a timely manner, and that can act as the starting point for a solution of the problem (Rosemann & Vessey, 2008). Second, accessibility of research to practice is concerned with whether the research is understandable, readable, and focused on results (Klein et al, 2006). Third, applicability encompasses whether the research paper is complete, provides guidance/direction, and concrete directions (Klein et al., 2006).

While the second and third dimensions of relevance are mostly concerned with the published results of the research (Rosemann & Vessey, 2008) the first dimension, importance, concerns the initiation of the research – building research projects that are important for practice. In this paper we will focus on the importance dimension of relevance, as the focus of the papers is how PR collaborations are established.

3 Research Design

3.1 Case Study

In order to explore the issue of how PR collaborations are established so as to be relevant to a multitude of practitioners with different motivations and goals we have investigated ProcessIT, an innovation system in northern Sweden. ProcessIT was started, with financial support from the national innovation agency, Vinnova, in 2004 as an R&D program focussing on emerging IT solutions for process and manufacturing industries in northern Sweden. Our research has focused on the organisation of the innovation system and the work to ensure relevance for all participating practitioners. We have been particularly interested in how the management has been able to accelerate practitioner-researcher collaboration.

To study ProcessIT we adopted the case study method, based on a number of considerations. First, multiple data sources and theory driven data analysis are key characteristics of case study research (Yin, 2003), and we had access to very rich data about the network. Second, the case study method has a distinct advantage in situations where how or why questions are being asked about events over which the inves-

tigator has little or no control. Our investigation was driven by just such a question, based on retrospective analysis of events that had shaped ProcessIT. We ensured credibility by making our research project an explicit part of the ongoing innovation efforts in ProcessIT and by having ProcessIT managers critique relevant parts of our analysis.

Both authors have been involved in ProcessIT, which gives us valuable insights into the practice of ProcessIT. The first author has been part of the ProcessIT management group since 2010, and the second author since its establishment in 2004. Each year we have participated in monthly meetings of the group, in board meetings about six times a year, and in annual workshops evaluating and planning R&D projects and activities. By participating in the steering group we had full access to the case and could observe actions and problems as they appeared, not just how people talked about them. However, to be part of the practice also raises a bias issue. To complement our own data collection ProcessIT has enlisted a third party evaluator who collects data from the involved stakeholders in order to evaluate the program. This data complements our own.

3.2   Data Collection and Analysis

In exploring ProcessIT we have reconstructed the project history, investigated different stakeholder groups' activities and opinions, and, examined the context in which these activities occurred. A longitudinal design and our direct access to multiple data sources allowed us to gain a comprehensive and rich understanding of the context and the associated behavioural consequences, and also of how actions and perceptions of different stakeholder groups evolved over time.

Among the primary data sources were audio recordings of management meetings and interviews with key stakeholders. We participated in and documented more than 190 meetings over the period. The purpose of these meetings was to monitor progress, discuss plans, and coordinate implementation. We also had unrestricted access to more than 300 documents, including project status reports, minutes of meetings, plans, and project reports.

The analysis was conducted by reappraising the activities from a historical perspective. We made a time based description of ProcessIT and divided it into three periods. For each period we focused on describing key activities from a practitioner-researcher collaboration perspective and how ProcessIT tried to establish relevant PR projects.

4   ProcessIT Innovations

ProcessIT Innovations is a collaboration centre in northern Sweden with the strategic aim of bringing together the region's process and IT industries, along with relevant research in the regional universities. The aim is to reinforce existing process industries and develop the region's IT industry into an internationally competitive position. In order to maintain its competitiveness, the process industry demands new, effective ways to measure, control, and regulate production processes such as the development of communications, infrastructure, user interfaces, and business proposals. There is great potential for an IT company which is successful in meeting these demands and challenges from the process industry.

4.1 Establishing ProcessIT

ProcessIT originates from discussions back in 2003, when a group of representatives from the IT industry, universities, and public authorities tried to launch a general IT R&D program. After the program failed to obtain support from industry and national funding agencies, a new group of representatives, focused on IT innovation within the dominant process and manufacturing industries of the region, came together. The aim was to support regional innovation, with the participation of industry, universities, and public authorities, in order to accelerate regional growth and increase competitiveness, based on research driven IT innovation.

During 2003 and 2004 a raw model of ProcessIT was developed, and a project was established to secure central government funding. A few firms, representatives from public authorities, and a small group of researchers worked on developing a proposal to present to the national innovation agency Vinnova, with the potential to guarantee substantial central funding for ten years. The final application for the R&D program involved seven industrial plants, a handful of IT firms, two county council administrative boards, four municipalities, and about ten researchers. In late 2004, ProcessIT was awarded long-term funding by Vinnova. Representatives from industry dominated the board that had been formed to supervise the application process. The board appointed the leader of the application project as managing director. As soon as the program was launched, participation increased.

ProcessIT has a board of directors comprising representatives from the region's trade and industry, universities and local communities. The board includes representatives from the process and engineering industries, international suppliers to industry, ICT companies, the universities of Luleå and Umeå and the county council administrative board. The executive management group is led by a CEO who has a background in the ICT and automation industry. Moreover, the group consists of representatives from the process industry, municipalities and universities.

Table 1 presents facts regarding funding and the number of partners in ProcessIT for the period 2005-2010. Table 2 presents facts regarding the contributions of ProcessIT between 2005 and 2009.

	Funding of the innovation system from 2005*						Number of partners involved in ProcessIT					Ongoing projects	
	External project funding			Public funding		Revenues	Industry partners			Public partners			
	Fund. agencies	Industry cash	Industry time	National publ.	Regional publ.	Total	Process & manufact	IT-suppliers	Total	University staff	Public authorities	Pre-studies	R&D projects
2005	130	15	219	450	185	999	15	15	30	30	6	8	5
2006	163	75	384	600	666	1 887	18	30	48	72	6	17	9
2007	365	75	499	674	420	2 032	19	35	54	78	6	15	12
2008	456	75	588	319	741	2 180	24	33	57	59	6	25	11
2009	599	69	1 392	557	1 263	3 878	26	34	60	69	6	19	16
2010	650	85	1 468	596	1 653	4 452	29	38	67	57	6	28	19

Table 1. Activities and funding of ProcessIT between 2005 and 2010.

	Outcomes from project activities between 2005-2009						
	No of activities	Research publications	New products	New companies	New installations	New project activities	New jobs
From prestudies	61	28	12	2	10	30	11
From projects	25	53	7	2	19	14	17
Total	*86*	*81*	*19*	*4*	*29*	*44*	*28*

Table 2. Contributions from ProcessIT between 2005 and 2009.

4.2 Organising Practitioner-researcher Collaboration

The ProcessIT network involves many different organisations and people. To better understand their needs and motives ProcessIT has organised them into four different stakeholder groups, as presented in figure 2. To technology users, i.e. process industries, the technology suppliers represented solution providers and partners which were willing to take long-term responsibility for product and the research groups could contribute with innovation. To technology suppliers, the process industry represented the market and a first potential customer with requirements, and the research groups represented potential knowledge relating to some specific problem with the identified product. To research groups in universities, the process industry provided access to a very demanding industry context, and the technology suppliers were potential partners willing to commercialise their research findings. Public authorities value the growth in the region and were able to support the network with funding.
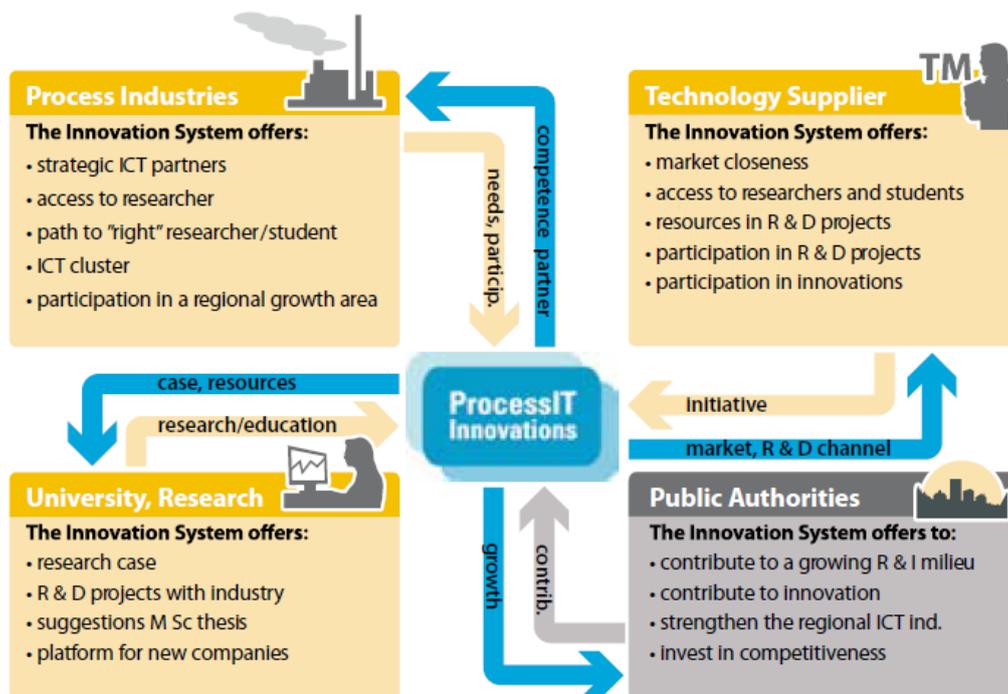

Figure 2. Stakeholders' interests in and value added by ProcessIT.

ProcessIT is based on a three-part R&D project strategy illustrated in figure 3. ProcessIT aims to facilitate the process from the idea to the new business by bringing together researchers, technology suppliers and industry in every project. By 'new business', ProcessIT mean new products or services that will solve problems and be useful both in and outside the local practice where they were developed. However, each project does not deliver a finished product or service, but each should constitute a step on the way, with the end in mind. The project strategy was identified as necessary in order to serve the interests of each group of stakeholders. Process industry and technology suppliers have a day-to-day business that requires support from problem-solving solutions. To learn how the strategy could be translated into practice, it was elaborated, experimented with, and evaluated throughout the early years. For the management of ProcessIT it was important to have a project strategy that would bring the identified stakeholders together in such a way as to realise the targeted synergies.
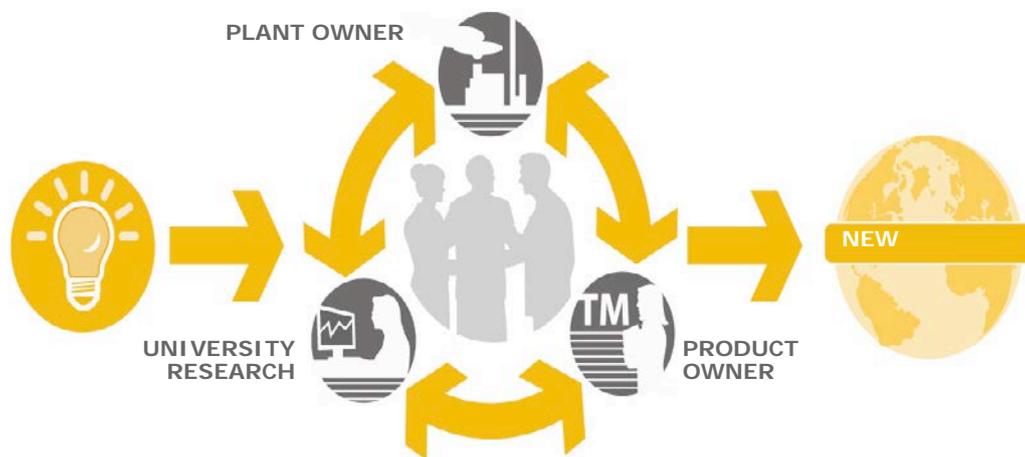
Figure 3. Three-part R&D project strategy

4.3   Creating Relevance in Practitioner-research Collaborations

Period 1: (2005-2006)

From the beginning of ProcessIT, it was obvious that the ideas of what ProcessIT should be, and what a regional innovation system was, differed considerably among the key stakeholders. Among researchers, the idea that ProcessIT was an ordinary funding agency was widespread, and many IT firms had problems in conceiving of ProcessIT as something other than a consultancy broker. To ProcessIT management, these ideas were clearly identified as misinterpretations obstructing the intent to build collaborative R&D activities and trust; hence a lot of energy was put into discussions with those whose ideas were like these. Taken together, the varying perceptions of ProcessIT did slow down the creation of relevant collaborations, but they also initiated a lot of activities that helped frame the overall collaboration.

During the first years of ProcessIT, the bulk of the projects were built by researchers, and, after a short while, a couple of the projects came to be seen as successful to all of the involved stakeholders. These projects were thus recognised as important exemplars, providing evidence that the three-part project strategy worked, and

being used as case studies to demonstrate to stakeholders how to use the network in valuable ways, but also to help guide ProcessIT management in facilitating the formation of new projects.

During this period management continuously stressed the significance of identifying and clarifying the needs of the process industries, and the importance of building R&D projects accordingly. To better understand the conditions of each group of stakeholders, ProcessIT hired practitioners to handle the relationships with industry, and academics to handle the relationships with universities. The motives and goals for each stakeholder could, thereby, be more easily identified and handled in both the network and the formation of projects. This contributed to the network in the intended way, and stakeholders, especially those from industry, repeatedly stressed the value of this.

Period 2: (2007-2008)

During the second period it became clear that the pace with which ProcessIT identified, initiated and conducted projects was too slow. In most cases the process of establishing new projects had been led by researchers from the universities, but the projects that were identified as most successful and relevant were the ones initiated by IT providers, who were pushing for a specific solution. These projects showed how IT firms were able to verify their solutions in relation to the potential needs of IT user organisations within the process industry. Because of this, ProcessIT started to favour project proposals put forward by IT firms and to encourage people from these firms to propose and take charge of new projects. However, although they were not initiating the project, the projects still involved researchers. These actions helped increase the pace with which projects valuable to the IT firms as well as to the plant owners and the research groups were established and helped set up appropriate collaborations within ProcessIT.

For organisations to commit to and invest in ProcessIT projects, it was identified as important to find appropriate and fair ways to manage outcomes. Organisations planning to take part in projects had to be confident that the value added through the activities was to be distributed equitably, and that the potential commercialisation was not dealt with unfairly. Besides encouraging IT firms to engage in projects, ProcessIT management, therefore, put great efforts into developing transparent project procedures, incorporating explicit notions of fairness into the relationships between project partners. Situations where firms suspected that other firms would capitalise on commonly produced outcomes without allowing the others to gain anything from the collaboration were considered to be a key risk. This helped reduce some concerns that prevented stakeholders from taking part in specific projects.

To further improve the relevance of ProcessIT's activities, two project officers were hired in 2008 to continuously visit industry sites and act as brokers (boundary-spanners) who focused on identifying new and promising matches between needs and solutions, and hence would be able to build new strong collaborative R&D projects. Through this structure, ProcessIT was able to increase the number of projects, and clearly improve the pace and quality of the overall innovation process by more efficiently handling the cycle of needs-meeting-ideas-for-solutions.

In order to maximize the number of boundary spanning activities between stakeholders, ProcessIT decided to increase its financial support for prestudies and meetings, and thus let the stakeholders involved in larger R&D project cover a larger share of this cost. This helped ensure that the projects the stakeholders were involved in

were regarded as relevant. Moreover, the management started to perform many different forms of boundary spanning activities, helping organisations identify ideas and promising partners to collaborate with, and thus helping with the initiation of projects.

Period 3: (2009-2010)

In 2009, a new period in the development of ProcessIT took off. Substantial additional funding was allocated and the board decided on a new activity plan. Important activities were to better organise the different groups of stakeholders in order to identify more relevant needs and those technologies with the potential to produce new areas of IT solutions for the process industry. In 2009, ProcessIT established two industry clusters (one in pulp & paper and one in mining) and two technology clusters (one in vision based measurement and one in interaction technologies). These clusters substantially increased the number of industry relevant projects and were received very positively by industry. Through clusters, firms and research groups with clear interests in these areas could focus on the most challenging needs of and most promising technology areas for their organisations, and identify and define strong and relevant ProcessIT projects accordingly that helped solve a problem common to many different local practices.

To further increase the relevance for stakeholders, ProcessIT management put a lot of effort into defining and communicating goals for the whole program to each group of stakeholders in order to achieve two objectives: 1) helping stakeholders see the network as an extension and amplification of their own everyday performance, and 2) facilitating integration of the diverse interests of each group. To research groups, management made clear that both opportunity and value oriented research was highly encouraged. To IT firms, management continued to pursue the policy favouring their project proposals, but also emphasised the need to set goals that were attractive to researchers and processing firms. To plant owners, the message was the necessity for the program to proceed until utilisation led to business value, and the efficiency and effectiveness to achieve this if both providers and researchers were to take part.

In order to take into consideration the serendipitous nature of establishing in-depth collaborations, ProcessIT management tried to identify activities supporting an inter-organisational socialisation between individuals in the participating organisations. Social events received increased attention during meetings and other activities, and were undertaken in order to support a culture characterised by openness, curiosity and informal relationships. These events enable individuals from different organisations to get to know each other better, and, as a result, be better able to identify promising and relevant needs and solutions.

5 Discussion

This paper addresses the research question of how PR collaborations are established so as to be relevant to a multitude of practitioners with different motivations and goals. We have explored this through a case study of ProcessIT.

5.1 Building Relevant Collaborations

The defining characteristic of PR is that is aims to contribute to multiple practices. In action research this is denoted as the dual imperative (McKay & Marshall, 2001). Within PR the denotation could be the trifocal imperative with respect to the different

practices engaged in the research. To make the research successful it is important that it proceeds with rigour as well as relevance. In the IS discipline scholars have made a plea for more relevance without losing rigour (Applegate, 1999). Different scholars have argued for different approaches in order to meet this, for example to reappraise the topic of research publications (Benbasat & Zmud, 1999), change the view of rigour research (Davenport & Markus, 1999) or critically reappraise the institutional policies that govern research (Lyytinen, 1999).

Practitioner-researcher collaborations can be a demanding challenge where two diverging and sometimes conflicting cultures are linked together. From a practitioner perspective academic projects can be regarded as slow and vague, while academics can show little interest in improving local practices. To be successful it is important that all stakeholders engage in the collaboration, that practitioners become objects of study and that researchers commit to improving practice (Mathiassen, 2002).

Relevance for the involved stakeholders, in the form of how much importance they attach to the projects being initiated has been a central concern in ProcessIT from the day one. Understanding the problems/challenges for the local practices is, therefore, a basic concern in ProcessIT. Dedicated researchers can then, within the projects, focus on solving problems and issues as the research project unfolds. The experiences from ProcessIT suggest that it is important to develop a sensing capacity to identify the problems in the local practices. Initially ProcessIT conducted problem inventories and researchers were responsible for initiating projects along with practitioners from the business organisations. After a few years, dedicated project officers with a background as practitioners were hired to handle the relationships with industry and to initiate projects. These officers continuously visit industrial sites and serve as brokers by identifying relevant and promising matches between problems and problem solvers (researchers). The project officers serve as boundary-spanners who can detect the relevant problems in the local practices and organise projects with the relevant practitioners and researchers. This solution has improved ProcessIT's capacity to sense the business organisations' needs and organise collaborations that are important to the involved stakeholders.

5.2 Contributing to Multiple Practices

Mathiassen (2002) argues that collaborative practice studies should be organised to support diversity, but should also function as a shared space in which research initiatives can be formed as new ideas emerge. PR studies should contribute to local and general practice as well as to the scientific community. This is an extension of the collaborative action research efforts which include two separate, but intrinsically related learning process, a problem solving cycle addressing the situation at hand (local practice), and a research cycle aiming to contribute to a particular body of scientific knowledge (McKay and Marshall, 2001).

From a PR perspective, ProcessIT aims to solve problems in local practices as well as providing knowledge to general practice. The process industry and technology suppliers are local practices with specific problems that need to be solved. Contributions to local practice are mainly conducted in each project where problem-solving takes place and improvements are made throughout the process. Between 2005 and 2009 the projects resulted in 29 installations of prototypes, four new companies and 19 new products/services. All these are examples of contributions to local practices

where the project has identified a problem/need which has been solved and a solution has been demonstrated/installed.

By involving two forms of local practices (process industry and IT suppliers) ProcessIT also aims to provide knowledge to general practice. Firstly, by involving a number of process industries and establishing branch clusters, all projects are presented for and evaluated by a general practice that receives knowledge of ongoing projects. This is also valuable as the industries and the suppliers gain knowledge of more projects than simply those in which they are participating. Secondly, all IT suppliers involved in the projects are suppliers to more than one industry. Thus they are always interested in finding generalizable solutions that not only solve the problem in the specific local practice, but can also be transferred to additional local practices. The technology suppliers thus also help by serving as a guarantor for the interests of the general practices of their customers – an area they are often well oriented in.

Moreover, the involvement of public authorities also contributes to general practice. These authorities can learn from the way practitioner-researcher collaborations are organised in ProcessIT and bring that knowledge to other projects they are funding. Moreover, authorities like the county council executive board have insights into many issues facing the region's companies and can, therefore, pose questions that need to be addressed to ProcessIT. The public authorities can also have an input into the management of an innovation system based on the findings from other innovation systems organising practitioner-researcher collaborations.
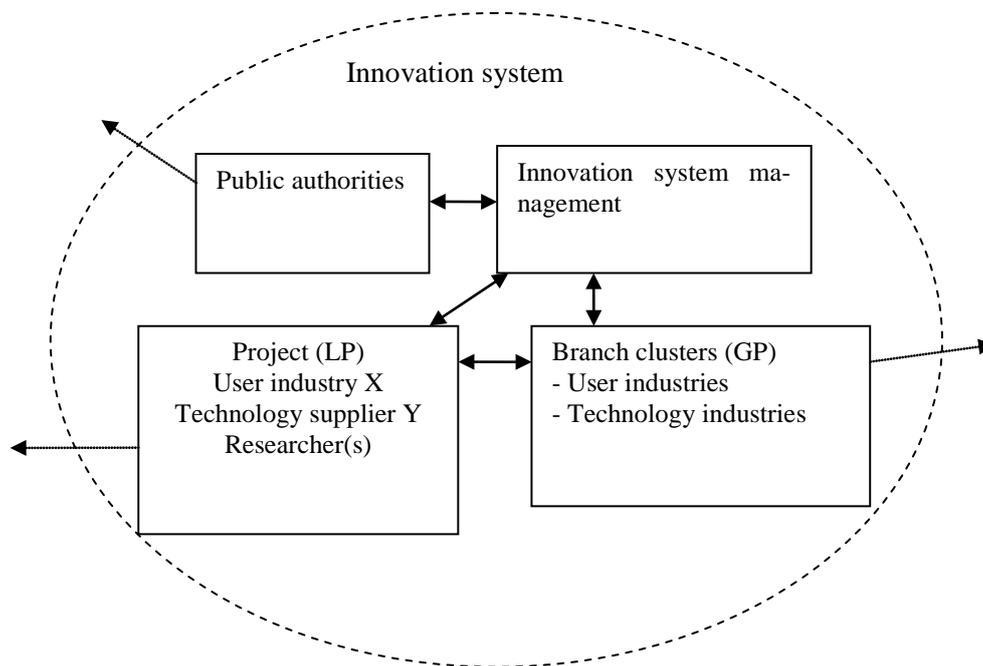

Figure 4. Organising contributions to local (LP) and general practices (GP)

In PR, contributions to general practice are an important output from the situational inquiry in local practices. The literature is, however, paying scant attention to how this contribution is organised when the projects involve more than one practitioner organisation. In this paper we suggest how contributions to general practice can be organised within an innovation system in order to ensure relevance outside the local practices involved in the specific project, and to ensure relevance for a multitude of practitioners. In the case of ProcessIT it is also evident that by involving supplier organisations the solution from a project in one local practice can be maintained and transferred to other local practices as well. Without a stakeholder which is interested in being responsible for developing and marketing a solution, the solution runs the risk, over time, of only being a solution in one local practice.

Figure 4 summarizes how an innovation system can be organised to contribute to multiple practice organisations. In this case, multiple technology user organisations, as well as multiple technology supplier organisations, participated in the innovation system.

6 Conclusions

PR provides good opportunities for fruitful collaborations between practitioners and researchers. But the approach requires a dedicated effort to ensure engagement and relevance in the long term. Current research has not addressed how these collaborations can be established in projects involving a multitude of practitioners. In this paper we have explored this through a case study of ProcessIT.

Our results show that in order to make the collaborations relevant for practitioners it is important not only to develop a sensing capacity to detect problems in the local practices, but also to check for these in the general practice. To organise this in ProcessIT, former practitioners were hired that had good insights into the local practice and an established network. Moreover, to make the collaboration relevant for practitioners it is important that all stakeholders make contributions. Our results show that contributions to local as well as general practices can be organised within an innovation system by forming branch clusters and by involving user and supplier companies in the projects.

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