

Relevance through Consortium Research? Findings from an Expert Interview Study

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Abstract. The Information Systems (IS) community is discussing the relevance of its research. Design-oriented IS research is considered a promising approach since it combines practical relevance and scientific rigor. Only limited guidance, however, is available for the researcher to gain access to and exchange knowledge from the practitioners' domain. This is surprising insofar as the IS "ecosystem" is under change and research and innovation largely takes place in the practitioners' community. Consortium research addresses the issue of getting access to and exchanging knowledge from the practitioners' community. It supports the development of artifacts and is characterized by close cooperation between the university and its partners in all stages of the design-oriented research process, practical validation of research results with partner companies, and a focus on the practical benefits of the research, with all research activities being funded by the consortium partners. The research question posed in this paper is what consortium research contributes to design-oriented IS research against the background of the aforementioned phenomena. The paper presents the findings from an expert interview study among professors of the German-speaking IS community in Europe.

Keywords: Consortium Research, Design Science Research in IS, Research Relevance, Expert Interviews.

1 Introduction

1.1 Motivation and Problem Statement

In the Information Systems (IS) research community, three phenomena can currently be observed. First, the community is debating on how to deliver results of practical relevance, which was illustrated by the theme "Doing IT Research That Matters" of 2009's International Conference on Information Systems (ICIS) and the focus topic "Relevant rigor - rigorous relevance" of 2007's European Conference on Information Systems. The transfer of principles of design sciences from other domains, such as engineering, to IS research [1] meanwhile is considered to be a promising way of addressing the problem appropriately. Design-oriented IS research aims at delivering results which are of scientific rigor and of practical relevance at the same time [2]. An integral part of design-oriented research is to identify and describe a relevant practical

problem, with the design-oriented IS researcher gaining access to the knowledge of practitioners, i.e. the “research environment” [1].

Second, existing research so far has provided only little guidance and support for gaining this kind of access. Peffers et al., for example, mention that resources required for this activity would include knowledge of the state of the problem and the importance of its solution [3], but do not specify this any further. And Guide and van Wassenhove e.g. discuss partnerships of researchers and practitioners on a very generic level [4].

Third, the “ecosystem” in which IS research is taking place and the roles of the actors within this ecosystem are under change. Today, research and innovation in the IS domain are largely taking place in the practitioners community [5], i.e. in user companies, in consulting companies, in software companies, and, increasingly, in companies providing electronic services. In order to be able to accomplish innovation, all these companies are using resources that are much larger and more powerful than the resources available in academic research institutions. As a consequence, business decision-makers tend to ask industry experts for help instead of addressing academic researchers. Like the CEO of a large Swiss bank explained to the authors: “When we face a problem, we look for the best consultants worldwide. University research is government’s business.” This corresponds to past research findings saying that it remains difficult for researchers to get access to high potential research topics [6].

Motivated by the observation of the aforementioned phenomena, the authors were asking themselves how consortium research relates to the current debate. Consortium research is a form of cooperative research between researchers and practitioners without exclusive usage rights. The consortium research method supports the development of artifacts. It has been developed by the authors based on the experience of almost twenty years of collaborative research in IS. It is characterized by close cooperation between an academic research institute and its partners in all stages of the design-oriented research process, practical validation of research results with partner companies, and a focus on the practical benefits of the research, with all research activities being funded by the consortium partners.

1.2 Research Question and Contribution

In this context, the research question addressed by the paper is: What is the contribution of the consortium research method to design-oriented IS research against the background of the aforementioned phenomena? The research question can be further detailed:

- What role does academic IS research play in the ecosystem and what benefit does it provide for companies?
- How can IS research gain access to the practitioners’ knowledge base? Do universities encounter difficulties when trying to access this knowledge base?
- Can consortium research in general facilitate and contribute to the attainment of practical knowledge, and, if so, under what conditions?

The first question focuses on the overall context in which the method is supposed to be applied whereas the second question aims at studying the purpose for which the method was developed. Finally, the third question aims at evaluating the consortium

research method itself. This differentiation follows the “situational” notion of a method [7], i.e. its adaptability to specific project conditions.

The paper follows a qualitative empirical approach. It acknowledges the fact that regional differences exist in the world-wide IS community. Whereas the Anglo-Saxon community is rather following a behavioristic research paradigm, European, and in particular Central and Northern European, researchers have a long tradition in design-oriented IS research [2, 8]. In German the discipline is referred to as “Wirtschaftsinformatik”. In this regard, expert interviews were conducted with eleven IS professors holding chairs at universities in Austria, Germany, and Switzerland.

The paper contributes to the body of knowledge by providing expert assessments of the role of academic IS research in relation to the practitioners’ community and of the role of consortium research in this context. Section 2 of the paper outlines the background of the research in the fields of design-oriented research, its organization, and the exchange of knowledge between researchers and practitioners, before the consortium research method is introduced. Section 3 then introduces the research approach. Results of the expert interview series are presented in Section 4. The paper concludes with a summary and an outlook to future research in Section 5.

2 Background

2.1 Design-Oriented IS Research

A first framework for design-oriented IS Research was introduced by March and Smith in the mid 1990s [9], followed by guidelines for design-oriented IS research issued by Hevner et al. [1]. Based on this theoretical foundation, standards and processes have been introduced that are supposed to guide the researcher through the research process. Among them are the Design Science Research Methodology (DSRM) [3] and the concepts presented by Rossi and Sein [10].

On top of that, significant attention has recently been given to the evaluation of artifacts [11, 12]. Only little research, however, has been done to help researchers in the early activities within the design-oriented research process, namely problem identification and motivation, and definition of objectives for a solution. Gill and Battacherjee propose recommendations for the improvement of the researcher-practitioner relationship, but focus on bilateral and not multilateral collaboration [13].

Corresponding to the fact that little research is available regarding access to and exchange of knowledge in design-oriented IS research, literally nothing can be found regarding the organization of design-oriented IS research. Back et al. have outlined the compliance of the Competence Center (CC) concept at the Institute of Information Management at the University of St. Gallen with the guidelines of design-oriented IS research [14]. Broadening the scope of analysis, there are forms of organization which foster user integration in the design and development process in the area of technological innovation. “Living labs”, for example, have evolved in recent years to evaluate and validate new IS solutions in close collaboration of solution providers and users [15]. By their nature, their focus lies mainly on instantiations.

2.2 Research Collaboration and the Transfer of Knowledge

In design-oriented disciplines, such as engineering, research cooperation of different actors along the value chain has a long tradition. Different forms of cooperation from the perspective of a user company can be distinguished by reference to exploitation rights and the relationship between cooperation partners (suppliers/customers, neutral partners, competitors) [16].

Social sciences, and in particular management research, have long been aware of a “relevance gap” within their discipline [5]. Pettigrew identifies the need for a re-engagement between researchers and practitioners to overcome this gap [17], forming a starting point for a movement which is referred to as “engaged scholarship” [18]. It assumes that research is a collaborative achievement between researchers and practitioners which relies, among others, on the joint advancement of knowledge.

Knowledge, in general, can be either “explicit” or “tacit”. Whereas the former refers to a systematization of cognitive content, the latter is not systematized and is possessed by individuals only [19]. Of high relevance for the cooperation between academic researchers and practitioners is the conversion of knowledge from explicit to tacit and vice versa. Four types of knowledge conversion and knowledge transfer, respectively, can be determined [20, 21]:

- “Socialization” describes the tacit-to-tacit knowledge transfer. An example of this would be the transfer of experiences about stakeholders and organizational change management within an organization through a participatory action research project.
- The second type of conversion is “Externalization”, in the process of which tacit knowledge is converted to explicit knowledge. An example of this would be the evaluation of design artifacts by focus groups and interviews including subsequent explication according to grounded theory principles by using e.g. coding techniques.
- The explicit-to-explicit knowledge transfer is referred to as “Combination”. An example of this would be a joint researchers-practitioners project team in which researchers bring in their expertise on reference modeling and practitioners deliver well-documented business processes.
- “Internalization”, as the fourth type, refers to the conversion of explicit knowledge to tacit knowledge. An example of this can be found in participatory action research and training sessions.

At present, only little research is available investigating the transfer of knowledge between researchers and practitioners in the domain of design-oriented IS research or the application of engaged scholarship principles to the latter. One of only few examples is the work by Mathiassen and Nielsen who analyzed the adoption of engaged scholarship in the Scandinavian IS community [22].

2.3 Consortium Research

Consortium research [23] as a method aims at the development of artifacts within a collaborative environment. It focuses on research areas in which no exclusive exploitation rights are desired by the research partners. As a consequence, it mainly addresses research topics which are to be investigated along a value chain or in co-operation with

neutral partners, such as industry associations, standards bodies, or software companies. The method comprises four phases, namely “Analysis”, “Design”, “Evaluation” and “Diffusion” (see Fig. 1) which is in accordance with the principles for design-oriented IS research proposed by the “Wirtschaftsinformatik” community [24]. The “Domain” is the area in which the method is to be applied and in which it is supposed to yield new insights [25]. It includes both “practical” and scientific knowledge with the former typically being tacit knowledge [20]. Often, it is not produced according to scientific standards and is usually not well-documented (which is why the document symbols have dotted lines) [13].

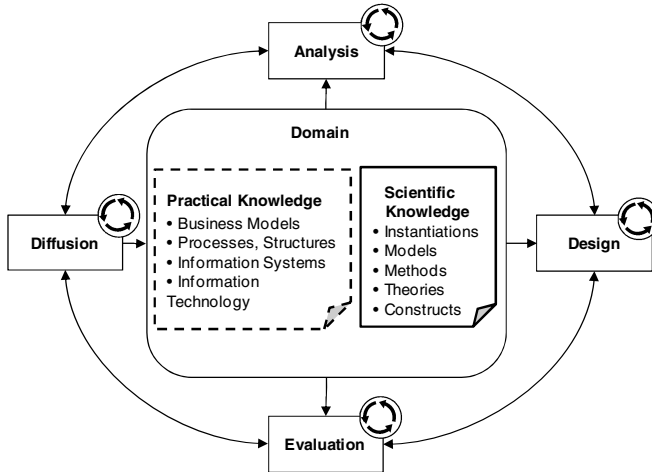


Fig. 1. Consortium Research

Consortium research refers to research projects in which a number of partner companies together with academic researchers work on a certain topic under the following conditions:

- Academic researchers and practitioners commonly define research objectives, assess progress of work, and evaluate project results.
- Research partner companies participate in research projects with their own experts and grant university researchers access to their knowledge resources.
- The results of the research are artifacts that offer substantial benefit for the companies participating.
- The companies participating test the artifacts developed in their business settings.
- The companies participating finance the research through money and human resources.
- The research results are made accessible to the public.

Consortium research uses different research approaches to transfer knowledge between academic researchers and practitioners from the partner companies (see Table 1). They are used according to the recommendations of existing inventories for IS research methods [26-28].

Table 1. Knowledge Transfer in Consortium Research

“Socialization” (tacit → tacit)	“Externalization” (tacit → explicit)
Action research	Case studies
Creativity techniques, such as morphological analysis	Expert interviews
	Focus groups
	Grounded action research
	Surveys
“Combination” (explicit → explicit)	“Internalization” (explicit → tacit)
Case studies	In-house seminars
Content analysis	Joint project teams
Market surveys	

Considering the portfolio of alternative forms of engaged scholarship proposed by Van de Ven [18], consortium research can be viewed as a combined instantiation of both the third and the fourth quadrant, namely “Design and evaluation research” and “Action/intervention research”.

Due to space limitations this paper cannot further elaborate on method details. However, a full documentation is available as a working paper [23]. A case study illustrating and discussing the consortium research method has been accepted for presentation and publication at the 18th European Conference on Information Systems (ECIS 2010) [29].

3 Research Approach

The paper addresses the research question as to what is the contribution of consortium research to design-oriented IS research against the background of a number of phenomena observed. It follows a qualitative empirical approach and uses a series of expert interviews for data collection. An expert interview study is not based on a randomly selected sample, but rather on a group of intentionally selected individuals who have expert knowledge and, as a consequence, are of particular interest to the subject matter under study. Typically, expert interview studies involve only a small number of participants [30, 31].

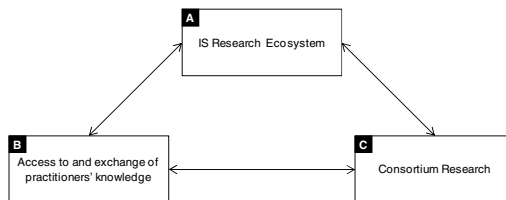


Fig. 2. Research Framework

Figure 2 shows the research framework underlying the expert interview survey. It illustrates the concepts and its interrelations as derived from the research question. Participants in the expert interview survey were eleven professors holding chairs in the field of IS at a university in the German-speaking countries in Europe. Table 2 shows the names of the experts, their affiliation, and the date and time of the interview. In addition to the experts participating, the authors invited another five experts of which one declined participation and four did not respond to the invitation.

Table 2. Expert Interviews

Expert	Affiliation	Date	Time
Prof. Rainer Alt	University of Leipzig	2009-07-29	15.00 - 16.00
Prof. Walter Brenner	University of St. Gallen	2009-07-22	10.00 - 11.00
Prof. Hans Ulrich Buhl	University of Augsburg	2009-06-19	12.15 - 13.15
Prof. Elgar Fleisch	University of St. Gallen	2009-09-07	11.00 - 12.00
Prof. Ulrich Frank	University of Duisburg-Essen	2009-07-21	15.15 - 16.00
Prof. Lutz Heinrich	University of Linz	2009-07-21	16.00 - 16.45
Prof. Thomas Hess	LMU Munich	2009-06-23	11.00 - 12.00
Prof. Dimitris Karagiannis	University of Vienna	2009-09-14	17.30 - 18.30
Prof. Peter Mertens	University of Erlangen-Nürnberg	2009-07-16	11.00 - 12.00
Prof. Elmar Sinz	University of Bamberg	2009-09-21	16.30 - 17.30
Prof. Robert Winter	University of St. Gallen	2009-06-22	11.00 - 12.00

Data collection was based on semi-structured interviews. A questionnaire was used consisting of ten open questions (see Appendix). Prior to the interviews, all experts were provided with a working paper describing the consortium research method and the questionnaire. The average duration of an interview was about one hour, all of them were tape-recorded. The recordings were then transcribed. Data analysis followed a stepwise approach [32]:

- First, transcribed data was paraphrased and condensed.
- Second, the data was compared to identify differences between and consensus among the experts with regard to certain questions.
- Third, the information was conceptualized following the principles of qualitative content analysis [33].
- Fourth, theoretical conclusions were drawn. Following Jarvinen’s taxonomy of research methods, the paper falls in the category of “theory-creating approaches” [34]. More precisely, it aims at developing the foundation for an “explaining theory” [35].

The limitations of the study basically lie in its lack of representativeness, which holds true for expert interview studies in general, and in the specific selection of experts, which was mainly driven by the authors’ subjective assessment regarding the competence and experience of the study participants in the subject matter investigated.

4 Result Presentation

4.1 IS Research Ecosystem

The role IS research is playing in the ecosystem was discussed intensively in all interviews. The question related to this issue explicitly referred to the interplay of researchers with industrial partners and software and consulting companies.

Two interviewees stated that the role of IS research had to be derived from its “mission”. One expert said that the main objective of doing projects with practitioners was “to help practitioners and, what I judge equally important, to serve the discipline, to gain insight on its object of research”. Moreover, it was mentioned that it was critical for IS research to “bring things forward”. Despite the fact that this demand was undoubted, some interviewees explained that the means as to how IS research should do so were not clear for an integrative discipline such as IS. Since it combined computer science on the one hand and business economics on the other hand, it had to find the right balance between engineering and sociological approaches to research. The current debate about the epistemological foundation of the discipline was accompanied by a perception from practitioners which differed from that in our disciplines. One interviewee mentioned medicine and law as areas where it was common knowledge that “leading things take place at universities”. He elaborated that this was totally different in IS.

Apart from that, it was stated as important to know the “rules of the game”, and to know that they were different in the research community on the one side and the practitioners’ community on the other side. One expert stated that synergies between them ranged in the area of “about 10 percent”, and that at his chair he clearly distinguished between activities for the practitioners’ community and activities for the research community.

Another concept was resources. It was commonly acknowledged that manpower was clearly bigger in the industry. Due to such limitations “IS research can only pick up individual questions”. Also, in order to be taken seriously it was required to stick to a certain research topics for years. Otherwise, research would not be able to build up the knowledge to discuss on at “eye level”.

One interviewee pointed out that the role of IS research changed with the “lifecycle” of research topics. He explained that research usually started with a technological invention and innovation. In this first lifecycle phase, IS research would help find innovative solutions. Also, in this phase academic IS research might be faster than industrial research because companies typically had to overcome barriers first. The second phase of the lifecycle was then characterized by applying innovation in certain domains, e.g. value chains. IS research would in these phases produce methods and reference models, for instance. In a third phase of the lifecycle, IS research focused on learning from applying the methods and models developed. The goal was to “finally extract fundamental concept”, i.e. theorizing the findings.

Another question in this context related to the practical utility IS research is supposed to deliver. One expert said that originality of results was key for practical utility. Another interviewee explained that IS research had to find interdisciplinary answers to interdisciplinary questions. Considering that, IS research had to provide practitioners with methodologies and tools to solve their problems. This “means to an

end” perspective on the outcome of IS research was mentioned by three participants in the study. One expert used the term “empowerment”.

In this context, one interviewee agreed that such results only in few cases were exploitable for scientific purposes, and that it was up to “our ‘parallel managers’ of public and private funded projects to leverage the synergies”.

On the other hand, this interviewee said that IS research did have advantages compared to industrial research because it “has a better research infrastructure: highly-skilled employees with latest methodological knowledge and thematic continuity”.

The third question of the questionnaire explicitly referred to the result types IS research is expected to deliver. The answers given by the interviewees correspond with the design-oriented history of IS research in Central Europe. The list of responses includes (in alphabetical order):

- Business cases
- Case studies
- Concepts, constructs
- Expert assessments
- Evaluation
- Methods
- Prototypes
- (Reference) Models
- Reviews
- Simulations
- Surveys and studies

The list reflects the strong grounding of the experts in the design-oriented IS research approach. The majority of the interviewees considered artifacts as the main result type. However, critical opinions were articulated regarding the engineering roots of design-orientation. One expert stated that in engineering disciplines the proof of feasibility often was considered as artifact evaluation. He called it “somewhat frightening” that no attention was paid to economical implications. On the other hand, another interviewee warned of the technical sciences “decaying” to social sciences.

In contrast to the majority of the experts who tried to identify concrete examples of result types, one participant of the study tried to bring the question for result types into line with the overall purpose of science. In the trilogy of “describe”, “explain”, and “design”, he argued, practitioners were interested in “everything relating to design”. On the other hand, another expert stated that the development of common terminology had a practical value on its own, especially because the problems IS research is addressing are of interdisciplinary nature.

4.2 Access to and Exchange of Practitioner’s Knowledge

The analysis of the data transcribed and the first coding revealed that items no. 4 and 7 of the questionnaire led to similar results. The questions as to how IS research can get access to practical knowledge and the question for solutions for potential problems in doing so were too closely related to each other, so that the concepts emerging from the data overlapped. Therefore, the two questions were merged into “How access practical

knowledge". Moreover, item no. 5 resulted in the same concepts as item 2. Obviously, "solutions" were subsumed under "utility", being the broader concept.

The first concept regarding how practical knowledge could be accessed is "collaboration". Three experts pointed out that a certain intensity in the collaboration between researchers and practitioners was needed in order to allow for access to the often tacit knowledge in the practitioners' community. Moreover, it was stated that the supervision of master theses or infrequent interviews were not sufficient. Practitioners needed to make a clear commitment to the collaboration in order to make it productive. Examples of such a clear commitment could be the assignment of staff or the release of a budget to a joint project. Industrial partners' funding of the project was considered a clear indication for the depth of the collaboration, because in each partner company someone "has to justify the Euros to be spent". With regard to this, one interviewee pointed out that it was mandatory to offer "whatsoever incentives" to practitioners. Without, he argued, no access to experts in partner companies would be achieved.

Besides the involvement in joint research projects, networking ability was mentioned as a prerequisite for sound access to practical knowledge. Networks would enable researcher-practitioner relationships over a longer period of time compared to concrete research projects.

Two interviewees argued that collaboration with practitioners was not valuable per se. Instead, the researcher "has to catch the right persons", those who were truly knowledgeable. This relates to the question regarding so-called "best practices", which are often demanded by partner companies collaborating with academic researchers. The interviewees pointed out that it was often not easy to distinguish between "best practice" and "just good or moderate practice".

A significant part of the interview time was spent on the questions concerning problems in accessing and exchanging practitioners' knowledge. One expert said that IS research first had to acquire a certain status (of expertise) before access is granted by partner companies.

Another concept in this context was scope. Often the scope of research collaboration is unclear, leading to expectations not met and decreasing confidence in researchers' ability to solve problems relevant for practitioners.

Another concept mentioned was the necessity to have complementary goals. Quite often, goals differed, e.g. when researchers are interested in publishing the project results and practitioners want to keep the results confidential. One expert pointed out that the more innovative and original an outcome of a project was, the more unlikely was its publication. According to other interviewees, another conflict of interest lies in the different systems of evaluation criteria, with practitioners only being interested in economic and monetary evaluation, whereas these are evaluation criteria not satisfying rigorous scientific standards.

Apart from that, time was considered a problem when it comes to accessing and exchanging practical knowledge. This was true both for researchers and practitioners, with the researcher having limited time because of other goals he/she has or wants to achieve (academic career, teaching, academic self-administration etc.), and the practitioner demanding fast results, often at the cost of scientific rigor.

Finally, one expert said that different terminology and language in general hindered efficient collaboration between researchers and practitioners. He argued that as

a researcher “if one does not speak the language of practitioners, he/she will not be able to understand the answers” to his/her questions.

4.3 Consortium Research

While the first two questions focus on the context in which the consortium research method is supposed to be used and the problem which it is supposed to solve, the third question deals with the consortium research method itself. Items no. 8 and 10 of the questionnaire were merged into one question. Almost all experts believe that consortium research makes a substantial contribution to accessing and exchanging practical knowledge. One of them stated that in IS research everything is allowed that pays off. “If it increases the body of knowledge or solves a problem, we will just use it.” Two experts, however, were skeptical about the contribution of consortium research and said there was nothing special about it. Others stated that its “bundling effects” and its duration over a considerable period of time set it apart from comparable approaches, especially regarding research topics which were considered pre-competitive by partner companies.

Also, one expert mentioned that consortium research was an appropriate approach for “cross-topics”, i.e. topics which require collaboration of companies along the value chain, across multiple corporate functions etc. In cases like these, consortium partners would benefit most from “many-to-many” collaboration.

Moreover, consortium research was considered by some interviewees to facilitate the transfer of knowledge not only from practice to research but also vice versa, allowing companies to “see if there is something new in research”.

The last question dealt with the evaluation of the method design. The item in the questionnaire referred to enhancements, changes and deletions. A number of points were made by the experts here, one being that the consortium research method would not provide support in dealing with intellectual property rights. Another critical aspect referred to the method identifying the roles involved in doing consortium research, but falling short of explaining the role profiles sufficiently. A certain set of skills was needed for the post-doc researcher that goes beyond typical requirements in academic settings, among them project management, relationship management, and communication skills.

One expert said the method appeared to him like a combination of “a method for project management and a research approach”, bearing the danger of not being understood by neither community. Consortium research probably might not meet the requirements of the research community nor the practitioners’ community by “a hundred percent”. This statement is in line with another comment describing consortium research as a meta-method which combines various different research approaches.

Another aspect which is missing relates to personal continuity. Especially publicly-owned companies tend to reorganize resulting in interrupted project involvement of partner companies. One expert wondered about how to deal with sequential vs. parallel iterations of design cycles. Since many companies were involved in the design of certain artifacts, he asked for the opportunities and limitations of parallel and sequential organization of design and evaluation activities, respectively.

One interviewee mentioned team size as a critical factor for an academic institution to do consortium research. In order to manage the consortium and produce rigorous and relevant results, a big enough team of researchers would be required.

Finally, one expert said the major constituent of consortium research’s manifestation as a method was the stability it provides - with all its advantages and disadvantages. Among the advantages is planning security in terms of budget and results, whereas among the disadvantages is adherence to certain expected procedures or decision-making processes and inflexibility.

5 Discussion of Results

The data analysis results in nine theoretical categories. Three of them relate to the positioning of IS research in the ecosystem and its role in particular. Two categories have been identified for accessing and exchanging practical knowledge and for consortium research itself. Figure 3 shows the final concepts and categories. Certain concepts emerge from the data more frequently than others. An example is the lifecycle of research topics. It was discussed in the context of the IS research ecosystem as well as of potential scenarios for consortium research.

Another protruding concept relates to skills. Special skills are required to achieve research results of practical utility. And special expertise is needed for conducting consortium research since it combines project management and design-oriented IS research.

Moreover, a number of aspects have been identified for the advancement of the consortium research method. Among those are its demarcation from alternative design-oriented research approaches, the positioning in the lifecycle of research topics, the incorporation of necessary skills for the involved roles, and recommendations for appropriate consortium compositions.

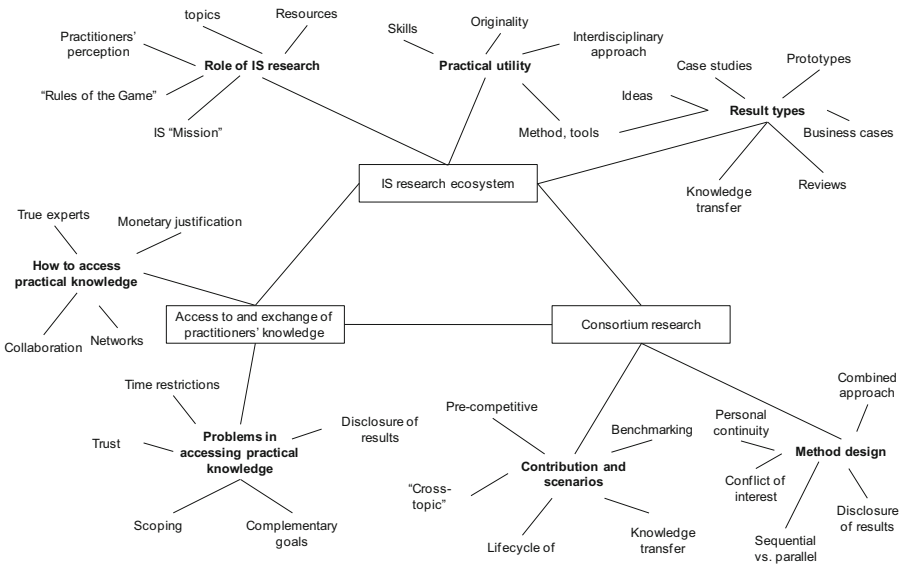


Fig. 3. Final concepts and categories

6 Summary and Outlook

The paper addresses the research question as to what consortium research can contribute to design-oriented IS research in the context of the current debate on the irrelevance of IS research and the changing research ecosystem. The paper presents and discusses the results of an expert interview study which was conducted among eleven professors holding chairs in IS research at universities in Austria, Germany, and Switzerland. In doing so, the paper focuses on the Central European form of IS research, known in German as “Wirtschaftsinformatik”. The paper investigates the context in which consortium research is applied and the problem it is supposed to solve, namely accessing and exchanging practitioners’ knowledge, before it evaluates the method itself.

The paper makes a contribution to the relevance of the discipline’s results. It shows that consortium research is not a panacea to the relevance debate, but that it combines certain constituents which facilitate access to and exchange of practitioners’ knowledge and, hence, support the early phases of design-oriented IS research. Apart from that, the expert interviews identified a number of aspects which need to be taken into account by any research method aiming at delivering research results of practical utility. Among those are the types of results required, required skills and competencies and potential problems which must be avoided.

The study, however, has some limitations. As the sample is relatively small, which lies in the nature of expert interview studies, generalizability of the results is not possible. Apart from that, while the selection of the experts was carried out randomly, it is based on the experience and assessment of the authors, i.e. it was subjectively biased. Also, the study only investigates the German-speaking IS research community. Its result cannot be transferred to other communities with different histories and self-conceptions.

Nonetheless, the study lays the foundation for further research. First, the findings from the interviews will be incorporated in the consortium research method. Second, they will be mirrored against the perception of the practitioner’s community; in particular against the views of participants of former consortium research projects.. And third, the study might encourage future research aiming at the analysis of different design-oriented IS research approaches in terms of area of application, limitations, prerequisites etc.

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Appendix: Questionnaire

ID	Question
A	Role of IS research in the ecosystem
1	What is the role of IS research in the interplay with user companies, software vendors, consulting companies etc.?
2	What benefit can IS research deliver to the practitioners' community?
3	What are appropriate result types? Can these result types be disseminated in the scientific community?
B	Access to and exchange of practitioners' knowledge
4	How does IS research get access to practitioners' knowledge? How can it be studied, analyzed and evaluated at reasonable cost?
5	Is IS research capable of delivering new solutions to the practitioners' community?
6	Is access to the practitioners' knowledge a problem for IS research?
7	If so, what are potential solutions?
C	Contribution of consortium research
8	Can the method for consortium research contribute to the solution of the problem?
9	How to assess the method for consortium research? What should be enhanced, changed, or deleted?
10	What are appropriate usage scenarios for the consortium research method? What are limitations?