



**Researcher-Practitioner
Collaboration and Knowledge
Transfer: Results from an Online
Survey**

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Abbreviations

AIS	Association for Information Systems
BE	Business Engineering
CC CDQ	Competence Center for Corporate Data Quality
DSR	Design Science Research
IS	Information Systems
SECI	Socialization, Externalization, Combination, Internalization

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Abstract

Researcher-practitioner collaboration has been receiving much attention in the debate about relevant Information Systems (IS) research. Successful collaboration between researchers and practitioners requires the transfer of knowledge, both from research to practice and vice-versa.

The working report presents the results of an online survey on researcher-practitioner collaboration among design science researchers. It does not aim at interpreting the results, but rather forms as their documentation. The results can then be taken up in further research activities.

1 Introduction

Researcher-practitioner collaboration has been receiving much attention in the debate about relevant Information Systems (IS) research. Successful collaboration between researchers and practitioners requires the transfer of knowledge, both from research to practice and vice-versa. The following chapters present the results of an online survey on researcher-practitioner collaboration among design science researchers. The work addresses the following questions:

- What are manifestations of researcher-practitioner collaboration in IS research?
- What methodologies and techniques are used for knowledge transfer in researcher-practitioner collaboration?
- What challenges and obstacles do researchers encounter in researcher-practitioner collaboration?

The call for participation in the survey was sent to the members of the Association for Information Systems (AIS)¹. The survey aimed at providing insight into the collaboration between researchers and practitioners in Design Science Research (DSR) [Hevner et al. 2004] in general and with regard to collaborative creation of knowledge in particular. Three questions out of six dealt with the knowledge creation aspect, namely the question concerning research methods used for knowledge creation in collaborative DSR, the question on knowledge creation processes used (according to the SECI model introduced by [Nonaka/Takeuchi 1995]), and the question concerning challenges and problems that are encountered. The questions were closed and allowed multiple responses. 34 researchers took part in the survey between January and March 2011.

¹ See <http://start.aisnet.org/> for details.

2 Cases of Researcher-Practitioner Collaboration

Researcher-practitioner collaboration refers to the interaction between researchers and practitioners during the research process within a collaborative research project. Question Q1 refers to the personal experience of the respondents in this regard.

Question Q1: How many projects with researcher-practitioner collaboration have you participated in?

Figure 1 shows that almost half of the respondents have participated in five or more collaboration projects.

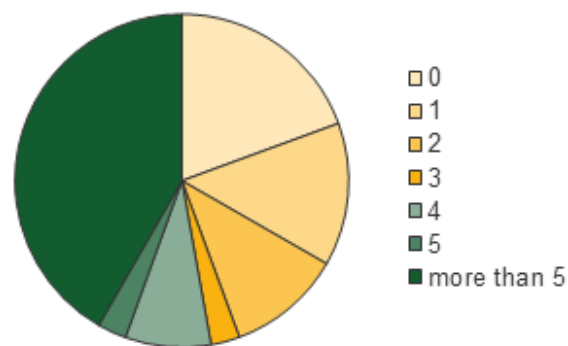


Figure 1: Survey Results for Question Q1

Question Q2 addresses the type of theory pursued as a target outcome of the collaborative research endeavor.

Question Q2: Gregor [2006] proposes a taxonomy of theory types in IS research. What type(s) of theory has your collaborative research mainly been aiming at?

- *Analysis (says what is)*
- *Explanation (says what is, how, why, when, and where)*
- *Prediction (says what is and what will be)*
- *Explanation and prediction (says what is, how, why, when, where & what will be)*
- *Design and action (says how to do something)*

Figure 2 shows that more than 70 percent of the respondents aimed at design and action theories, followed by more than 40 percent for theories of analysis.

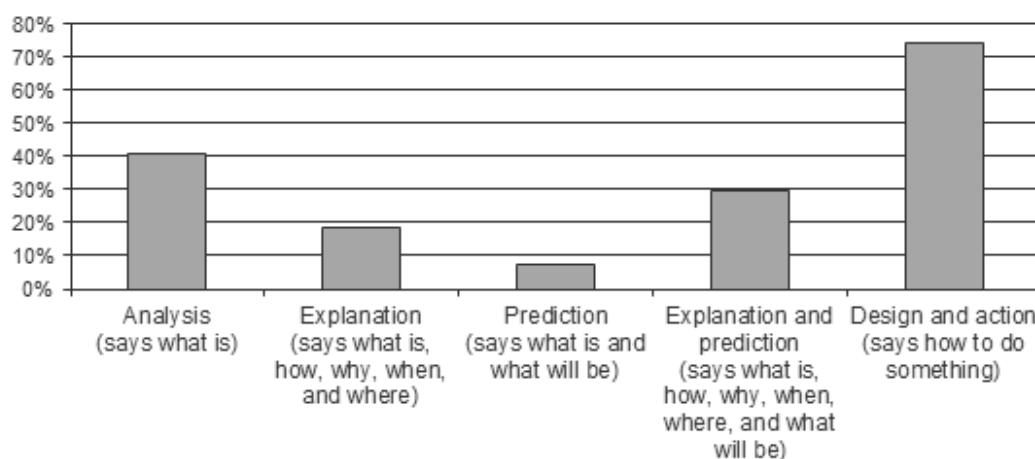


Figure 2: Survey Results for Question Q2

3 Knowledge Transfer in Researcher-Practitioner Collaboration

Numerous research methods can be applied in collaborative research projects, supporting different types of knowledge transfer within researcher-practitioner collaboration. Question Q3 addresses the personal experience of the respondents with regard to different research methods in this regard.

Question Q3: Please indicate which of the research methods listed below you have already applied to transfer knowledge from researchers to practitioners and vice versa.

21 out of 25 respondents confirmed the use of case studies. Empirical methods such as expert interviews (15 out of 25), surveys (14 out of 25), and focus groups (12 out of 25) follow next. Only eleven out of 25 respondents in the online survey claimed to have used this method. The same is true when it comes to prototyping (10 out of 25).

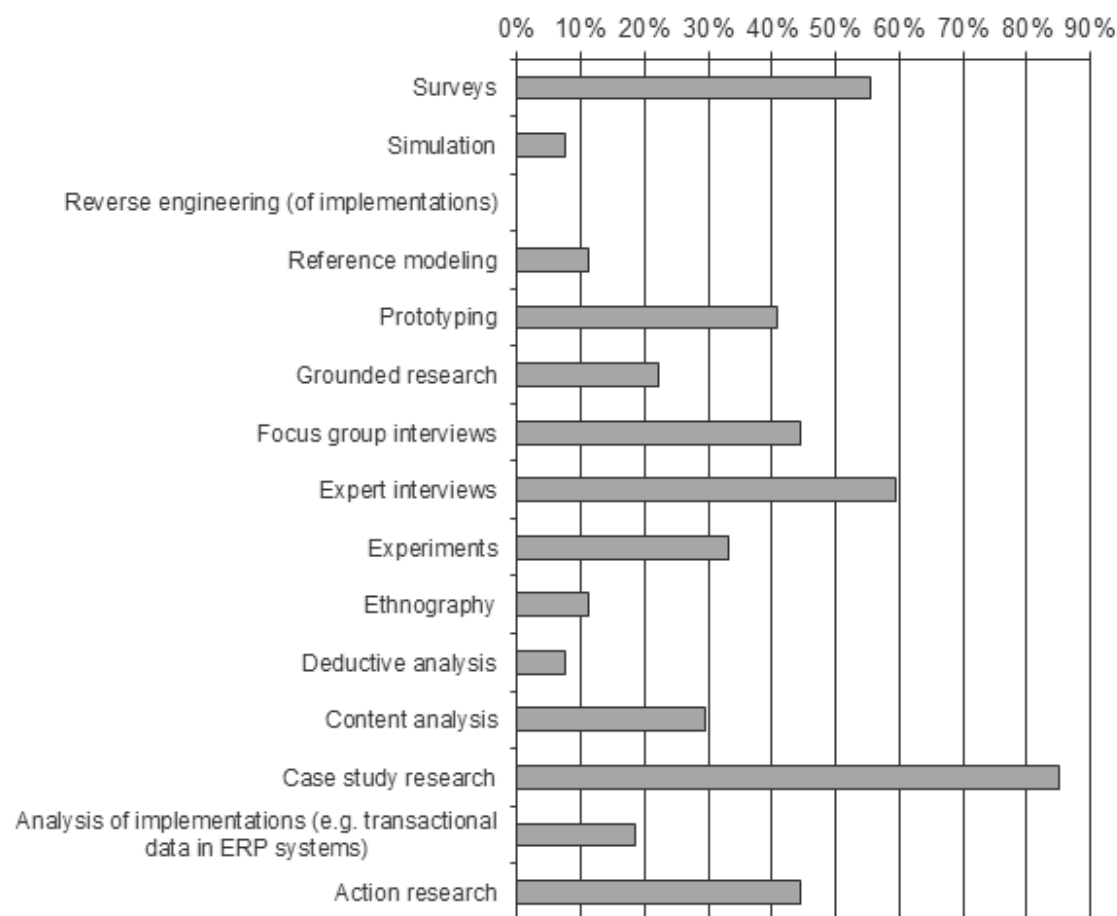


Figure 3: Survey Results for Question Q3

Question Q4 looks closer into the different knowledge creation processes which were performed by the respondents in a collaborative research project. Nonaka and Takeuchi [1995] propose four different knowledge creation processes:

- Socialization is the transformation of tacit into tacit knowledge.
- Externalization is the explication of tacit knowledge.
- Combination is the creation of knowledge out of existing explicit knowledge resources.
- Internalization is the conversion of explicit into tacit knowledge.

Figure 4 shows the so-called SECI model integrating the four processes.

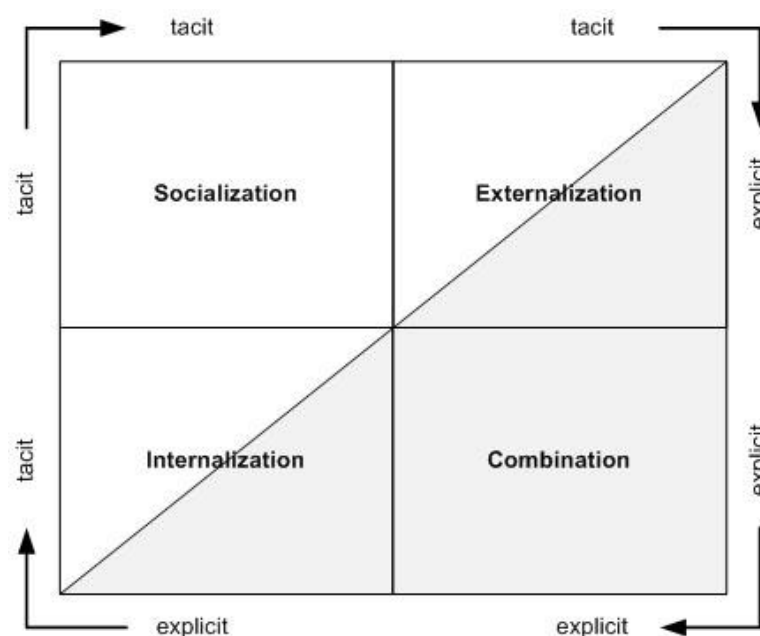


Figure 4: Knowledge transfer processes [Nonaka/Takeuchi 1995]

Question Q4: Researcher-practitioner collaboration requires transfer of knowledge. Nonaka and Takeuchi [1995] propose four different knowledge transfer processes (socialization, externalization, combination, and internalization), supporting conversion of tacit and explicit knowledge. Please indicate which types of knowledge transfer between researchers and practitioners (and vice-versa) you have already supported in a collaborative research project.

As Figure 5 depicts, the respondents said to have experience with socialization (14 out of 26), externalization (17 out of 26), combination (15 out of 26), and internalization of knowledge (13 out of 26).

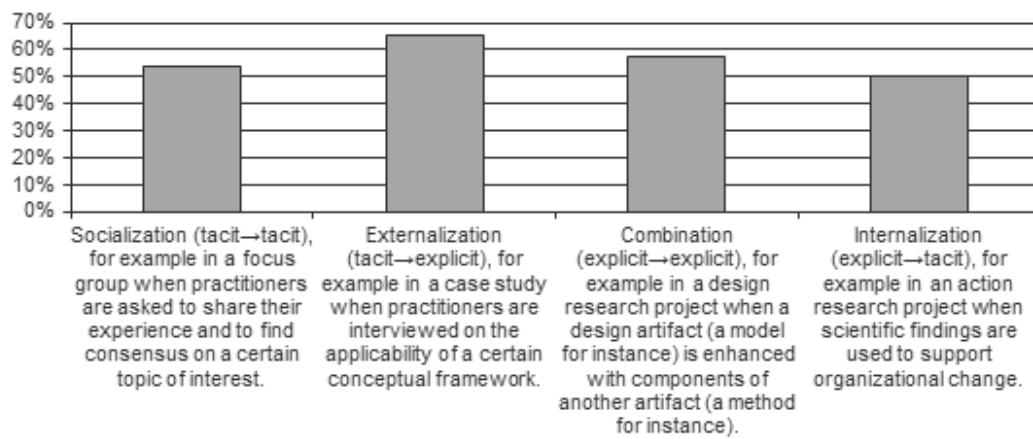


Figure 5: Survey Results for Question Q4

4 Challenges and Obstacles in Researcher-Practitioner Collaboration

Regarding researcher-practitioner collaboration, multiple challenges and obstacles may occur.

Question Q5: Please indicate what challenges you have encountered in the course of researcher-practitioner collaboration.

The findings on obstacles incurred for knowledge creation in collaborative DSR projects that were identified in literature are partially supported by own data gained in the field.

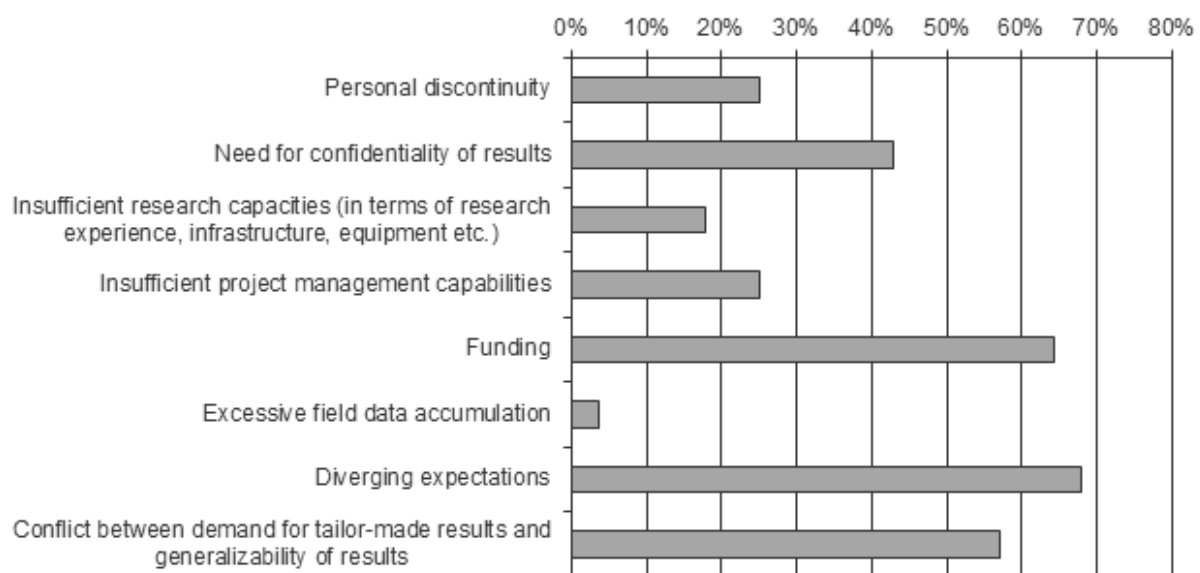


Figure 6: Survey Results for Question Q5

With regard to lack of appropriate skills six out of 27 respondents in the online survey stated that “insufficient project management capabilities” on the researchers’ side hindered the creation of knowledge. The obstacle “diverging stakeholder interests” was considered by far the biggest challenge to knowledge creation in collaborative DSR settings. Two thirds of the respondents in the online survey reported to have personally encountered this challenge. Furthermore, one participant in the online survey said that “conceptualization of what is being researched is probably the most important thing”. Referring to the lack of methods he calls for, what he calls, “ontology management”. Personal discontinuity as a resource problem was

confirmed by six out of 27 respondents in the online survey. However, in the list of eight challenges asked for, this item ranks fifth. Thus, it was not deemed to be of strong impact.

The obstacle “insufficient research capacities” was confirmed by less than 20% of the participants.

5 Consortium Research Goals

Consortium Research is a multilateral form of researcher-practitioner collaboration [Österle/Otto 2010]. It has been applied by the Institute of Information Management at the University St. Gallen² since the early 1990s. Rooted in DSR, Consortium Research pursues different goals.

Question Q6: Please indicate on a five-point scale (from 0=not important to 5=extremely important) your opinion on the importance of the following research goals.

The results of Q6 in Figure 7 show that collectively defined research goals and constant commitment are most important.

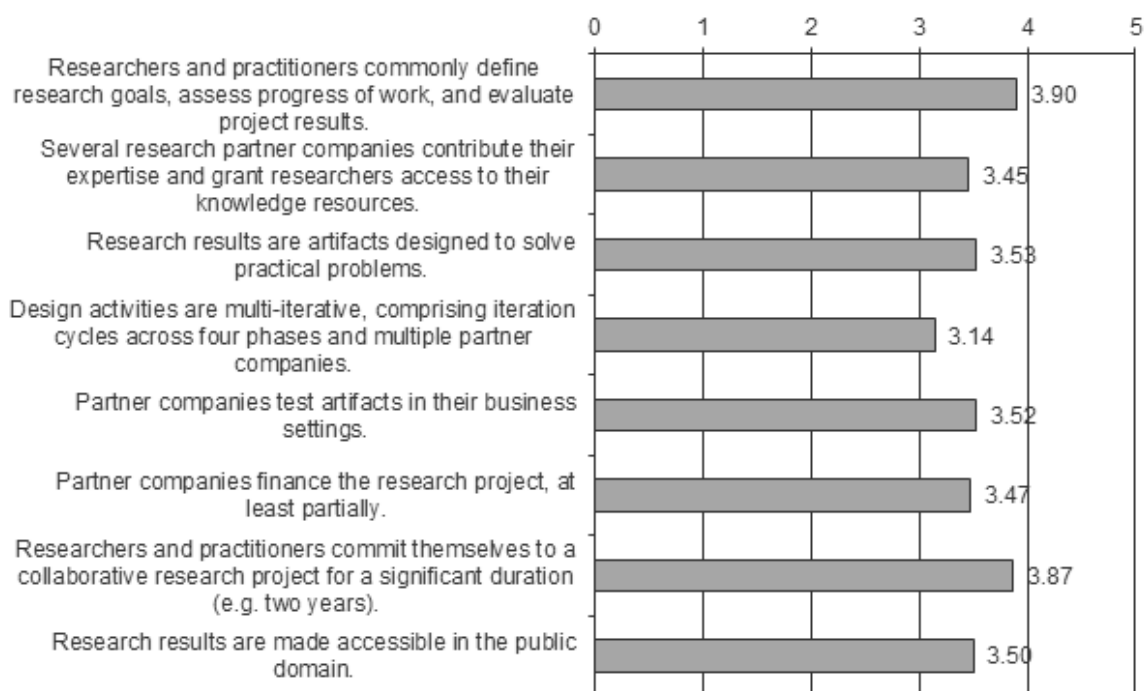


Figure 7: Survey Results for Question Q6

² See <http://www.iwi.unisg.ch/> for details.

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