

IRIS

Selected Papers of the
Information Systems Research
Seminar in Scandinavia

Nr. 2 (2011)

Coordinating Editor:
Judith Molka-Danielsen
Molde University College, Norway

Issue Editor:
Kai K. Kimppa
University of Turku, Finland

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Association for Information Systems

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Issue Theme “IRIS 34 ICT of Culture – Culture of ICT”

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Table of Contents

Foreword by the Editors	5
<i>Judith Molka-Danielsen and Kai K Kimppa</i>	
Research Papers	
Organisational Processes in the Secondary Software Sector: A Case Study on Open Source Software Adoption	9
<i>Erik Olsson, Brian Lings, and Björn Lundell</i>	
How Fashion Brands Learned to Click – A Longitudinal Study of the Adoption of Online Interactive and Social Media by Luxury Fashion Brands	25
<i>Rina Hansen</i>	
Developing Metrics for Analyzing IT Supported Student-Teacher Interaction in Higher Education	43
<i>Linda Nordström, Pia Svanberg, Johan Lundin and Lars Svensson</i>	
Software Design for E-Services	59
<i>Maike Hecht and Susanne Maass</i>	
Hybrids Acting on the Hybrid Arena – Investigating Crimes Committed by Digital Natives	69
<i>Erik AM Borglund, Lena-Maria Öberg and Thomas Persson Slumpi</i>	
Priming a Pilot Implementation: Experiences From an Effects Specifications Workshop	79
<i>Magnus Hansen and Maria Ie Pedersen</i>	
Social Media, Convergence and IT – A Case of Finnish Advertising Sector	95
<i>Mari Ainasoja, Vivek Kumar, Mikko Ahonen and Mikko Ruohonen</i>	
Information Classification on University Websites: A Two-Country Card Sort Study	109
<i>Ather Nawaz, Torkil Clemmensen and Morten Hertzum</i>	
Exploring Brokering Situations in an Innovation Boundary Context	123
<i>Lars-Olof Johansson, Ulrika Lundh Snis and Lars Svensson</i>	
The Walking Video Interview (WVI) as Potential Technique to Tap into the Everyday Experiences of ICTs	139
<i>Pernilla Gripenberg</i>	
Information Security Culture in Russian ICT Small and Medium Size Enterprises	157
<i>Hannakaisa Isomäki and Oleksandr Bilozarov</i>	
The Community Power Concept: Mitigating Urban-Rural Digital Divide with Renewable Energy Mini Grids	173
<i>Hanne Cecilie Geirbo</i>	
A Perspective of Post-Merger Integration: Administrators Do Not Necessarily Resist Changes	183
<i>Siw Lundqvist</i>	

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Foreword

Judith Molka-Danielsen, Kai K. Kimppa

Information Systems Research Seminar in Scandinavia (IRIS) is the title of an annual meeting of Information Systems (IS) researchers. The IRIS seminar distinguishes itself as the eldest IS seminar in the world, as it has been established in 1978. IRIS is organised by the IRIS Association, which is a chapter of the Association for Information Systems (AIS). IRIS offers a unique format in the IS field that utilises working groups led by an established researcher in the field, and in which all the papers of the working group are read by all participants of that group. Each group member in turn comments on the other papers of the group. IRIS is also a forum for networking activities. In the traditional seminar segment called the IRIS games, participants learn to know each other through intellectual and team building exercises. Contact through these activities lead to both friendships and academic collaboration with lifelong impacts on careers. The IRIS seminar is especially beneficial to PhD students in helping them to establish new networks and aiding them in raising the quality of their research. In the late years, IRIS has been combined with the Scandinavian Conference on Information Systems (SCIS) to ensure the participation of a wide range of both starting and established academics in the IS field.

The articles of this second issue of the *IRIS Selected Papers of the Information Systems Research Seminar in Scandinavia* were originally proposed by the working group chairs and vice chairs (senior IS researchers). All of the papers of the IRIS seminar have gone through a peer review process, after which the chairs and vice chairs of the groups were requested to suggest one to two best papers of their groups for this publication, which were then improved according to the feed back from the IRIS seminar participants and finally passed through the selection criteria of the two editors of this issue, Judith Molka-Danielsen and Kai K. Kimppa. Judith Molka-Danielsen, the coordinating editor, represents the IRIS Association steering board, is the President of the IRIS Association and member of the board since 2008; issue editor Kai K. Kimppa was the Programme Committee Chair of the 34th IRIS seminar.

The 34th IRIS was hosted by University of Turku, Turku School of Economics, and held in Ruissalo national park, in Turku, Finland on the dates of August 16th to 19th, 2011. The theme of the 34th IRIS was ICT of Culture – Culture of ICT, as Turku was one of the two European Capitals of Culture during 2011, but also due to the importance of both the organisational culture's effect on IS and the culture within the IS field.

Selected Papers

Erik Olsson, Brian Lings and Björn Lundell, in their article "*Organisational Processes in the Secondary Software Sector: A Case study on Open Source Software Adoption*" give recommendations for knowledge transfer from a managerial perspective. They state that it is especially important that knowledge transfer is enabled from bottom-up and elaborate on what benefits for work practice can be gained from the changes introduced. Finally it is recommended that maintenance costs need to be taken into account early on in the project due to the differences of an open source software (OSS) system adoption to that of a proprietary system – an OSS system does not market itself in the organisation the same way a proprietary

system does. The introduction of OSS champions, strategists and specialists is offered as an answer to how to handle these issues correctly.

Rina Hansen looks at how 15 luxury fashion brands have developed their social and interactive online technologies in a four year period from 2006 to 2010 in the article "*How Fashion Brands Learned to Click – a Longitudinal Study of the Adoption of Online Interactive and Social Media by Luxury Fashion Brands*". A revised and extended version of Yang *et al's* (2008) 8C framework is presented, and found to be useful for luxury fashion brands' Web 2.0 technology adoption. It can be used both by the luxury fashion brands already existing in online environments and those aspiring to get visibility there.

In their article "*Developing Metrics for Analyzing IT Supported Student-Teacher Interaction in Higher Education*", **Linda Nordström, Pia Svanberg, Johan Lundin** and **Lars Svensson** the authors develop relevant metrics to measure the use of ICTs by teachers' for interaction with students. They find that teachers currently use various communication channels, which sometimes supplement each other, but at times can also be in conflict with each other. In the study, it is however found, that most teachers (81%) found the time used to communicate with students through ICTs to be time well spent.

Maike Hecht and **Susanne Maass**, in their article "*Software Design for E-Services*" describe the changing environment of e-services – many services are not offered by service professionals, but as self-service, or even as the authors call it, for a 'working customer'. Even though the companies have no formal obligation towards the 'working customers', it is beneficial for the companies to see to it, that their needs are taken into account, lest they loose the customers to competition. Thus, listening to the 'working customers' needs and including them to participate in the design of the e-services they use will benefit both the customers and the companies.

In the article "*Hybrids Acting on the Hybrid Arena – Investigating Crimes Committed by Digital Natives*" **Erik A.M. Borglund, Lena-Maria Öberg** and **Thomas Persson Slumpi** present a problem facing today's criminal investigation in a situation where both analog and digital crime is used combined. The criminals work as 'natives' in both digital and analog environments, whereas the police has these roles typically separated. This provides the criminals with an edge on functioning in hybrid arenas. The article calls for the police to create a holistic understanding of both areas to be able to fully answer the changing needs of the criminal investigation – and if need be, to reorganise the law enforcement.

In the article "*Priming a Pilot Implementation: Experiences From an Effects Specifications Workshop*", written by **Magnus Hansen** and **Maria Ie Pedersen**, the initial findings of an exploratory action research study conducted in the Danish health care sector about effects specifications using the systems development method Effects-driven IT development (EDIT) to aid in developing an electronic ambulance record (EAR) in prehospital care system are reported. The authors approached the stakeholders – who came from a wide range of different groups – first with interviews to collect a large amount of desired effects of the system to the work practices. A workshop organised after the interviews was used to prioritise the desired effects to 20 most important ones. In the study it was found that explaining both the political environment as well as the technical functionality of the IT artefact were equally important, as the prioritisation of effects depended on understanding them.

Mari Ainasoja, Vivek Kumar, Mikko Ahonen and **Mikko Ruohonen** write about how social media shapes advertising sector in Finland and how this relates to development needs of customer relationship management (CRM) systems in their article "*Social Media, Convergence and IT - A Case of Finnish Advertising Sector*". They categorise the implications of this convergence to three areas of integration in marketing practice: integration of 1)

company functions, 2) media and message parts and 3) service providers, and provide seven development needs for social CRM systems in the advertising sector.

In the article “*Information Classification on University Websites: A Two-Country Card Sort Study*” **Ather Nawaz**, **Torkil Clemmensen** and **Morten Hertzum** use brainstorming, card sorting and information-retrieval tasks to study how 14 Pakistani and 14 Danish students classify information of university websites. The study finds that despite some similarities in the way the student groups classify information, clear differences can also be found in all three activities. Some preliminary results on how this could be explained through cultural differences are also presented in the article. It seems, that comparing locally produced and used websites could aid in cross-country Human Computer Interaction (HCI) research and practice.

Lars-Olof Johansson, **Ulrika Lundh Snis** and **Lars Svensson** look into “*Exploring Brokering Situations in an Innovation Boundary Context*” on a living lab process. The three different stakeholder groups studied were researchers, ICT developers and next of kin to demented elderly persons (as users). The authors describe the boundary relationship as a duality of boundary objects and brokering activities and situations. Boundary objects play an important role for communicating perspectives and knowledge sharing among Communities of Practice (COP). Brokering are done by people who introduce elements of practice between COPs. In the paper it was found that the use of several different kinds of boundary objects helped the different groups to understand each-other. The authors contribute with a process model that describes the dynamics of an innovation boundary context with two levels of brokering: product/service brokering and process brokering.

In the article “*The Walking Video Interview (WVI) as Potential Technique to Tap into the Everyday Experiences of ICTs*”, **Pernilla Gripenberg** combines lessons learned in the domestication, new media and communication research, mobile ethnography and the use of video for studying the interaction of the social and material to how contemporary, technology infused everyday life could be better understood using a walking video-interview. The walking video-interview can provide us with a better understanding of the individual ICT-landscape the way the observed users experience the technologies which they use. Sociomaterially complex environments require rich (and due to the richness, challenging) methods for a better understanding of them.

In their article “*Information Security Culture in Russian ICT Small and Medium Sized Enterprises*”, **Hannakaisa Isomäki** and **Oleksandr Bilozerov** present a Grounded Theory based study in which they produce an initial categorisation which shows essential features of information security culture in Russian ICT SMEs. As information security awareness of corporate managers in the studied companies seems to be low and information security related investments are seen rather as ‘just one more expense’, the development of information security culture of the companies is fairly slow. Isomäki and Bilozerov categorize the areas which need to be taken into account for a better information security culture to issues of awareness, requirements in business partnership, funds, policy, personnel training, violations and trust.

Hanne Cecilie Geirbo’s article “*The Community Power Concept: Mitigating Urban–Rural Digital Divide with Renewable Energy Mini Grids*” explains how renewable energy mini grids extended from mobile towers can provide electricity for various purposes in rural areas of low Gross Domestic Product (GDP) countries – both for domestic and commercial purposes of supporting the use of ICTs. To be able to utilise ICTs for the benefit of the rural community, human resources, social factors (e.g. social exclusion or gender) and local economic conditions need to be considered in a holistic manner, taking into account issues such as urban-rural digital divide, electricity access, topographic challenges and economic

sustainability. For the system to be sustainable, the telecom company providing the energy must benefit from expanding their markets, but also the government needs to commit to the concept – to a concept that starts small but is capable of expanding to the needs of the community as both domestic households and local industries electricity use grows.

Siw Lundqvist informs the readership of the book on findings which are needed for a successful post-merger integration, such as embracing openness to change, the necessity of providing means for adapting to new systems and to contribute to new routines, in the article “*A Perspective of Post-Merger Integration: Administrators Do Not Necessarily Resist Changes.*” Even though employee resistance to change is often presupposed, if the merger is handled well, a majority of those affected by it can still rather wish for further changes – sometimes even if the merger of the systems is viewed negatively. The research is based on a longitudinal study starting already pre-merger, and shows that the negative effects described in merger related literature can be countered.

A Perspective of Post-Merger Integration: Administrators Do Not Necessarily Resist Changes

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Abstract. Mergers often fail, which makes it important to understand more about what could promote successful mergers. This paper reports on a longitudinal case-study following a merger from the administrators' perspectives. Prior findings showed administrators that were positive to the merger and to reengineering initiatives and that were confident about their skills. The present study showed that the administrators wished for further development even if some found the realized changes to have influenced their work negatively. The findings confirm the importance of applying various types of advice on how to prevent resistance to changes, which includes embracing openness to changes and the necessity of providing means for adapting to new systems and to contribute to new routines. The case-study aims at adding further to the knowledge base on how to facilitate post-merger integration with a focus on understanding the human factors that either contribute to or hinder a merging process.

Key words: Post-Merger Integration (PMI), Information Systems (IS), Business Process Reengineering (BPR), Business Process Management (BPM)

1 Introduction and background

There are many studies about organizational changes and mergers, focusing on expected resistance to changes whilst providing advice on how to prevent resistance to change (e.g. Kotter and Schlesinger 2008). The topic is important because post-merger integrations (PMI) are known to fail more than they succeed (Blake and Mouton 1984; Epstein 2004; Marks and Cutcliffe 1988). When the information systems (IS) are subject to changes in an organizational change employees who are discontented with the new situation could blame the IS instead of searching for the underlying reason [1]. To acknowledge the role of the human factor (i.e. how the people in the organization are thinking and acting) is critical. If the employees are invited to participate in the processes and understand the reasons behind the merger they will more likely contribute to a successful merger and PMI (Abrahamson 2000; Bradt 2008; Empson 2000; Hallier 2000; Michelman 2007; Schweiger and Denisi 1991; Schweiger and Weber 1989; Smith 2005; Washington and Hacker 2005). Otherwise, the prospect of having to change their IS, routines, place of work and colleagues could worry the employees and make them act with resistance to the approaching changes. Management has to be prepared for various manifestations of resistance and reactions in a merger as: lowered

productivity, motivation and performance, absenteeism, voluntary turnover, health problems and power struggles (Alaranta and Viljanen 2004; Cartwright and Cooper 1995).

An ongoing longitudinal case-study (Fig. 1) follows a merger between two universities, from the administrators' (members of the administrative staff) perspectives. It was a friendly merger of relatively equals taking the best from each other. The new organization aimed at using the resources more effectively and to better take advantage of opportunities for organizational development but also for rationalizations. The case-study investigates the administrators' opinions about their Information Systems (IS) and their work situation in general in the merger. The organizations that are studied, Org D and Org E (pseudonyms out of consideration for the respondents), were located on different sites at a distance of about 100 kilometers – so even after the merger (will be referred to as the DE-merger). The administrative staff's assignments embrace a variety of duties, for which they need IS. Both organizations handled the same type of duties. Therefore a reengineering of the existing administrative processes was inevitable in order to hinder the administrators' duties at the two sites overlapping or interfering with each other – but also because of the intention behind the DE-merger to gain in effectiveness and use the potential for rationalization.

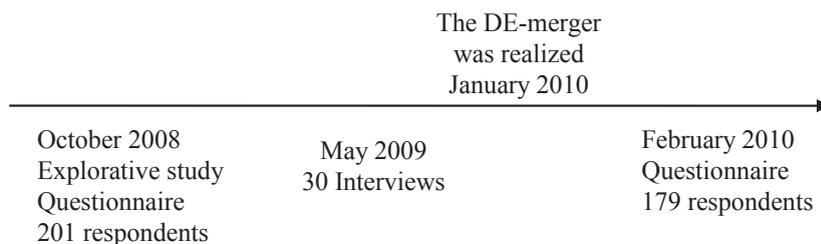


Figure 1: The timeline of the longitudinal case-study so far.

The starting point of the study took place before the merger directly involved the administrators even if decisions were made earlier. The findings conflicted with what is mostly argued in the literature about employees that are anxious and troubled about organizational change. A majority (57 %) of the respondents was positive to the merger and they also expected changes (63 %) of their assignments (Lundqvist 2009; Lundqvist 2010a). They were confident of their abilities to learn to handle new IS and of their IS skills and knowledge. A majority had a high level of education – 67 % had an academic degree and 14 % some academic education. They found themselves to be dependent on well-functioning IS to perform their duties and wanted to keep their IS as it was and further develop it in the merger (not replace it).

Findings from the second study in 2009 (Lundqvist 2010b, 2010c) and were also conflicting with the common opinion of employees resisting change. The study showed that a clear majority (93 %) were explicitly open-minded to redesign of their IS and routines; they were not worried (60 %) and they considered their competencies as utilized (63 %) in the merger; they were happy with the overall information (85 %) even if 44 % of those lacked specific information about their employment. The fact that the administrators at the two sites performed the same duties pointed to a possible down-sizing of the staff. From document reading it was obvious that the top managers were appointed very late in the process, which

was pointed out as a reason for many administrative decisions to have been postponed (Lundqvist 2010b, 2010c).

The purpose of the present empirical study was to add further to the knowledge base on how to succeed with PMI from a soft side perspective – i.e. acknowledging the humans who could either contribute to or hinder a successful integration process. The search for solutions to the high degree of merger/PMI failure does not necessarily mean finding immediate solutions but to “open up new ways of seeing” the problems of practical concern (Zundel and Kokkalis 2010). The findings from prior studies of the DE-merger were promising for a successful post-merger integration because of the administrators’ positive expectations of the merger in general, of the reengineering and their own competences (Lundqvist 2009, 2010a, 2010b, 2010c). These themes should therefore be further investigated and the research questions for this paper are:

- Do the administrators find the reengineering attempts that were made successful?
 - What influence do new routines have on the administrators’ work situation?
 - What influence do new IS have on the administrators’ work situation?

Findings from the present study are reported and discussed in the theoretical framework of reengineering, in the light of expected employee resistance to organizational changes. Common wisdom and findings from other studies that employees are mostly resistant to organizational changes will be challenged as our findings conflict with them.

The rest of this paper is structured as follows: In section 2 a summary of essential findings from the literature is presented and then the method is discussed. Subsequently key findings are presented and discussed before concluding the article.

2 Summary of essential findings

The relevance for the DE-merger is highlighted (*italics*). Business Process Reengineering (BPR) is about reengineering in order to enhance and optimize the performance of companies by using Information Technology (IT). A good starting point for reengineering initiatives is to carefully consider what processes are really needed and to focus on how to optimize those (Ascari et al. 1995; Hammer 1990). *In the DE-merger there was a potential need for reengineering of the administrative processes especially since the former operations must remain approximately the same which does not necessarily mean that they have to be performed at both places.* Pentland et al. (2010) define routines as recurrent patterns of action and argue that the same routine can generate many different patterns. *Applying this definition on the DE-merger implies that the same duties that we know occurred at both the former organizations, most likely could have been accomplished in different ways. Hence the processes must be understood, analyzed and probably also redesigned in order to avoid inefficiency and misunderstanding.* However BPR initiatives do sometimes result in down-sizing which the BRP programs have been criticized for (Grey and Mitev 1995) even if this is not a goal in itself (Marjanovic 2000). *Down-sizing might be necessary in the merger since the two organizations probably have duties that overlap even if some will be regarded as necessary to handle at both locations. The prospect of a possible down-sizing could have worried the personnel and interfered with their participation in the reengineering process.*

How down-sizing can worry employees is discussed in the literature (Grey and Mitev 1995; Marjanovic 2000).

Bashein and Markus (1994) argue some important conditions for preventing BPR failure and find for example empowered and collaborative workers to be a precondition for successful BPR. *The findings from prior studies* (Lundqvist 2009, 2010a, 2010b, 2010c) *point towards facilitating conditions regarding these issues*. Bashein and Markus (1994) argue the importance of positive preconditions concerning the strategic context of growth and expansion as well as of shared visions and sound management processes. *These seem to have been met in the former Org D and Org E because the focus was not on downsizing but on further development – a vision that was shared during a rich communication/information process that was appreciated by the administrators during the process* (Lundqvist 2010a, 2010c).

Information Technology (IT) has always been a fruitful partner in the BPR program Hammer and Champy 1995, 2003; Harrington et al. 1997; Willoch 1994). Hammer and Champy (2003, p. 5) claim that “Without reengineering, information technology delivers little payoff; without information technology, little reengineering can be done”. *In the DE-merger the IS are important and the physical distance between the two locations implies that the administrators have to rely on well-functioning technical solutions for e-meetings and reliable web based applications for cooperation in order to be more effective while performing with the level of quality that is required*. Hammer and Champy (2003) point out the need for reengineering teams with a mix of insiders (that are familiar with the processes) and outsiders (i.e. employees outside the actual processes). Harrington et al. (1997) report on a case study where the employees were happy about the possibilities offered by their new IS but experienced problems with empowerment, control and commitment in the new organization (after the reengineering). *These are relevant issues after the DE-merger - not least because of the two locations and the inherent need for managers to give attention to both places equally (which was a criterion for the appointments of managers in the new organization) and for the administrators to co-operate effectively*.

Grey and Mitev (1995) discuss the increase of unemployment that BPR might cause and find this to be worrying for those who remain after a down-sizing since they have to face all that the change brings on. *If the DE-merger ends up with a down-sizing this would likely influence the job situation for the administrators*.

3 Method and data collection

The present empirical study was realized shortly after the merger and follows up on two prior studies. The longitudinal case study follows the Yin (2003) methodology and combines qualitative and quantitative methods with document reading in order to triangulate the findings.

3.1 Data collection

Before the longitudinal case study started the administrators' participation was solicited by top managers in both organizations – as recommended by Bell and Opie (2002). The distribution list for this study was based on the administrator list from 2008. A total of 302 questionnaires were sent to the administrators employed in the former Org D and Org E. Before this the distribution list from the first round was revised and those (13 administrators) were removed

that were known to have left the new organization. Newly employed administrators were not included in the list because of the scope for the longitudinal case study.

Before the questionnaire was sent to the administrators there were two people within the organization (not administrators) who tested the functionality (e.g. that the follow up questions were presented when they should) and proofread the questionnaire. This procedure led to minor changes in the formulation of a couple of answering alternatives. The pre-test was also to estimate the time required to answer the questions.

After the questionnaires were sent out, auto replies from the e-mail system provided information saying that another 21 administrators had left their jobs, after the first round of questionnaires was sent. With these people excluded, 281 questionnaires had a realistic opportunity of reaching administrators in the new organizations. A total of 179 respondents participated in the study and the total response rate is 64 % (in Org D 60 % and in Org E 69 %). The fall off is larger in Org D (40 %) than in Org E (31 %).

Because the study aims at being a total study of the administrative staff it is important to take a closer look into the group that did not participate. One factor to scrutinize was the respondents' gender. The web-survey tool made it possible to see who got reminders and their names revealed their gender: of those who did not participate 15 % are male and 85 % female. The corresponding figures in the respondent group are 22 % male and 78 % female. They are not the exact proportions but not quite different either – still it is important to bear this in mind while concluding from the study. Statistical analysis of the data was conducted using SPSS 17.0 and Texttalk Websurvey. I am following Bell's (2006) definition of anonymity which means that not even the researcher should be able to connect any answer to any individual; the web-survey tool provided the required functionality.

The longitudinal case study follows the DE-merger process and the administrators are in the middle of a change process – which is likely to continuously influence their opinions. However, if the study would be performed in another merger with a context of that kind, the study could result in similar findings. Bell (2003) discusses the importance of acknowledging if something special has happened just before the data collection that could have influenced the respondents' answers. In this case the merger had newly been carried out. The reason for realizing a study after such a short time was to get an on-the-spot account of the administrators' opinions at just that time – i.e. when it was almost inevitable that their emotional reactions to the merger and how it was handled would influence the findings. I consider this an important phase of the process seen in a longitudinal perspective.

The participants were informed of the ongoing longitudinal study in the autumn of 2008 which could have been helpful for their understanding of this follow-up questionnaire. No technical failure or any misunderstanding of the questionnaire was reported. As recommended by Eliasson (2006) I have carefully checked that data were correctly coded and entered in SPSS.

3.2 Method discussion

An important fact to consider while studying organizational problems is the researcher's pre-understanding of the problem and the institutional context. According to Gummesson (2001) the researcher's access to real-world data and pre-understanding are more likely to occur for a researcher with initiated knowledge of the organization that is investigated. Such knowledge is available to a consultant or someone inside the organization.

Concerning the ongoing longitudinal case study it should be declared that I have individual knowledge about the organizations in the DE-merger that provides pre-understanding of the problems studied and of the organizational culture. Full information on how/why is not revealed because of the nature of the study, which is anonymous. However, it could be said that I have earlier been working with administrative tasks for many years in different public organizations (similar context and culture) and during these periods I have been involved in a lot of networking activities that have helped to form pre-knowledge of the problem and of the organizational culture in this case setting. I have a thorough pre-understanding of the problems I am investigating and of the organizational customs in Org C and Org D. The administrators, participating in the study, are fully aware of my knowledge of the situation and the organizations and I have not had any negative remarks about it.

Shotter (2006) introduced the “withness-thinking” and contrasts it with the “aboutness-thinking”. An important perspective of Shotter’s (2006) concept deals with how the researcher meets with the participants in a certain study and he argues the importance of an open-ended dialogue. The present study, where the data collection is handled by a questionnaire could be seen as totally contradictory to the inter-activity that lies in the “withness-thinking” concept. However I consider my pre-knowledge, as described above, as a base for the inside knowledge that was used during the formulation of the questionnaire. I had knowledge of the problems that the administrators were facing in the merger and the post-merger integration.

The individual knowledge of the studied organizations has also given access to plenty of documents and information about the merger – these information sources could have been made available anyway but the pre-knowledge and understanding of the context made it easier and not so time consuming.

Zundel and Kokkalis (2010, p. 1211) argue the need for researchers performing organizational studies to “‘lighting up’ new ways of seeing”. An approach that could be applied on the longitudinal case study since a large part of the research’s relevance is to gain further understanding of the problems that the referred practice experiences – i.e. how human factors could hinder or contribute to a successful PMI process. In the literature numerous suggestions on how to prevent PMI failure and resistance to organizational changes are proposed. Nevertheless, these insights are not always acted on - and when they are it does not always solve the problem. Hence “new ways of seeing”, as Zundel and Kokkalis (2010, p. 1211) argue, are likely to be an appropriate way of narrowing down the PMI problems.

4 Findings

The study was performed shortly after the merger so the findings should be looked upon in the light of the short time that has elapsed. Anyhow seven respondents have revealed their concerns for the fairness/correctness of judging the merger effects after such a short time - which was not at all subject for this study.

4.1 Descriptive characteristics of the respondents

The total response rate is 64% (Org D 60 % and Org E 69 %). A majority (78 %) of the participants are female (Org D = 75.5 %; Org E = 82.4 %) and 31 % are younger than 41 years

(Org D = 28.7 %; Org E = 33 %). Before the merger 52.5 % of the respondents were employed at Org D and 47.5 % at Org E.

4.2 Changed routines were more negatively experienced than IS changes

There were 57 % of the respondents that found that their IS gave sufficient support “mostly” or “always”. A majority had “totally” or “partly” changed IS (78 %) or/and routines (79 %) after the merger. (Fig. 2.)

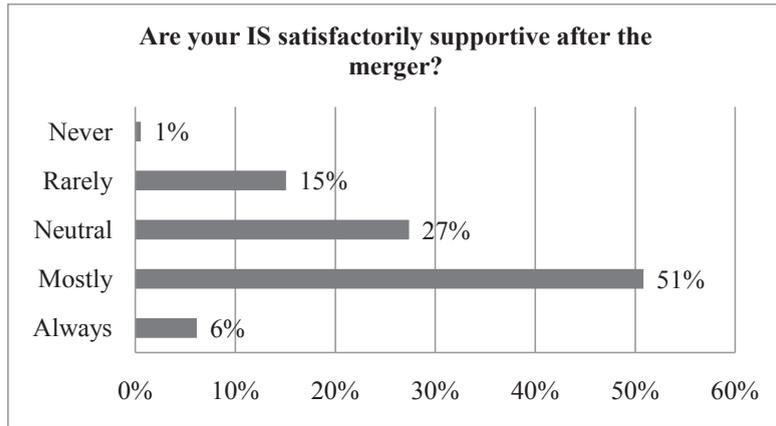


Figure 2: Respondent opinions about IS’ supportiveness (N=179)

A majority (56 %) of the respondents that had changes of their IS found the changes to have a “neutral” influence on their job and 41 % of those that had routine changes found the influence to be “neutral” (Fig. 3). Of those whose routines had not been changed there were 26 % that wished for changes of their routines and 19 % that wished for changes of their IS.

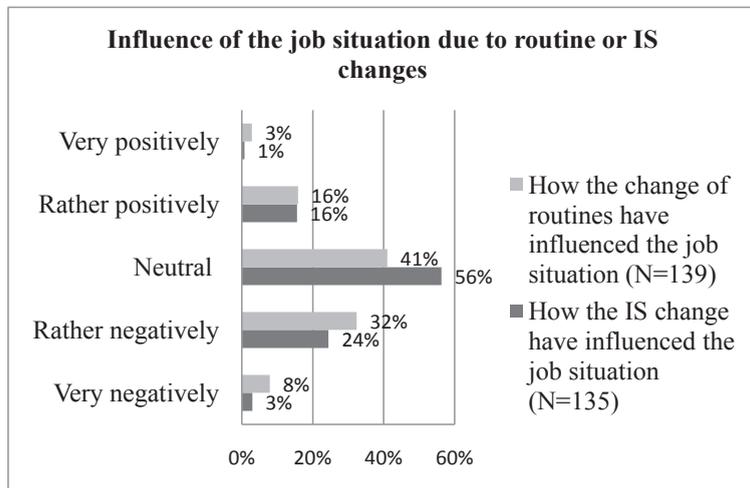


Figure 5: Opinions on IS’ supportiveness vs the influence of routine changes

Nevertheless, the changes of routines were found to have more negative influence on the job as 40 % found them to have a rather negative or very negative influence. The corresponding figure for the influence of the IS changes was 27 % that found them to have a rather negative or very negative influence on their job situation (Fig. 3). Figures 4 and 5 show cross-tabulation of opinions of IS to be supportive and of how changes of IS and routines have influenced the work situation. There are more counts on the negative side of the experienced influence of carried out changes (both routines and IS) than on the positive.

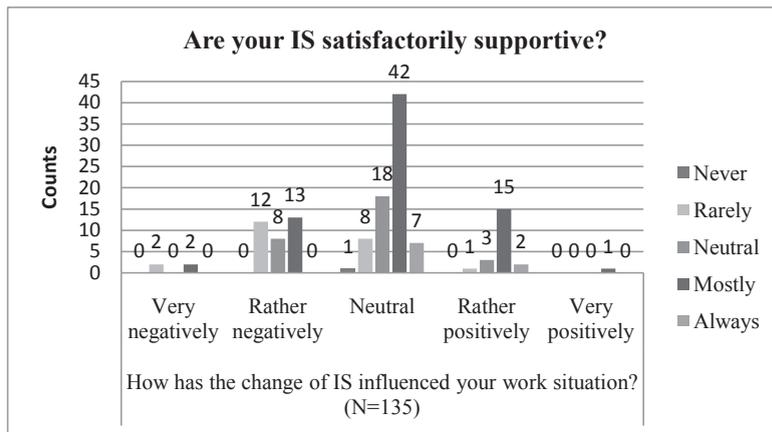


Figure 4: Opinions about IS' supporting capabilities vs the influence of changed IS

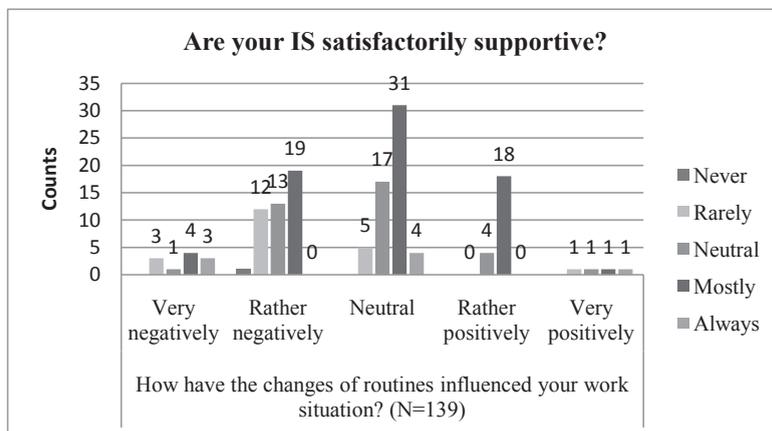


Figure 5: Opinions on IS' supportiveness vs the influence of routine changes

There were no differences in opinions about the influences of IS and routines on the job situation depending on gender (Mann-Whitney U-test) or age (Kruskal-Wallis test) [37]. The difference that was found with the Mann-Whitney U-test concerned how IS changes have influenced the job situation depending on the former employer ($r = -0.22$; $mdn=3$). However, the influence was found to be small - below .3.

A majority of the administrators that participated in the survey found the opportunities for further development as not being utilized satisfactorily since 58 % said that the management should have taken the chance to change more and 27 % had no specific opinion – 15 % found the management to have done what it takes to exploit the opportunities for further organizational development in the merger. As Figure 6 shows, dissatisfaction with the managements’ efforts for further organizational development did not totally hinder the respondents’ experience of IS to be supportive.

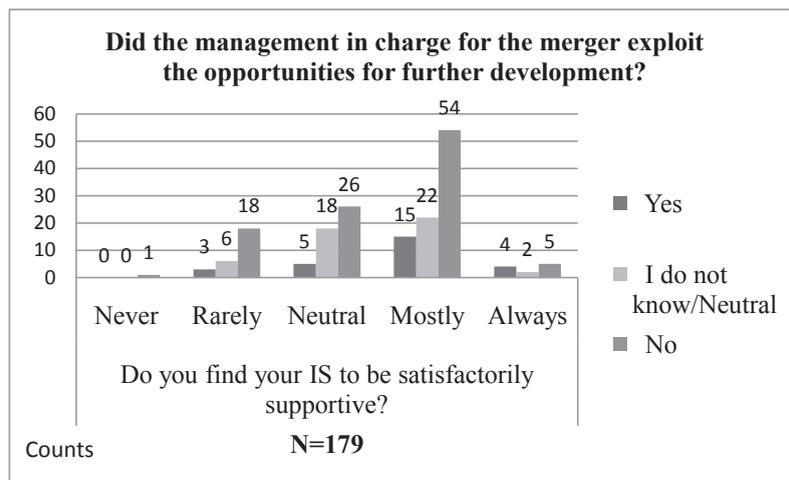


Figure 6: IS’ supportiveness vs management’s efforts for further development

5 Discusson

5.1 Prior findings were promising for a successful PMI

Employee resistance to change is often presupposed. The most frequently argued means for easing resistance to change in the literature could be comprised into four categories (Table 1): i) trust and understanding; ii) training and education; iii) participation and opportunities to make use of one’s competencies and knowledge, and iv) information and communication. Prior findings from the ongoing longitudinal case study (Lundqvist 2009, 2010a, 2010b, 2010c) indicate that these suggested means have been applied in the merger process, which would explain the conflicting findings.

<i>Author(s)</i>	<i>Trust and understanding</i>	<i>Training and education</i>	<i>Participation and knowledge</i>	<i>Information and communication</i>
Abrahamsson, 2000				
Alaranta & Viljanen 2004				
Blake & Mouton 1984				
Bradt 2008				
Cartwright & Cooper 1995				
Empson 2000				
Epstein 2004				
Hallier 2000				
Kotter & Schlesinger 2008				
Marks & Cutcliffe 1988				
Michelman 2007				
Schweiger & Denisi 1991				
Schweiger & Weber 1989				
Smith 2005				
Washington & Hacker 2005				

Table 1: Factors recommended in the literature for avoiding resistance to change.

5.2 A majority had their IS and/or routines changed

A clear majority had their routines (79 %) or IS (78 %) changed totally or partially. However more than half of the respondents (57 %) were satisfied with the support they received from their IS after the merger. The study from 2008 showed that a majority was dependent on well-functioning IS to perform their duties and wanted to keep their IS as it was and further develop it (Lundqvist 2009, 2010a). Findings from the second study showed that 83 % were satisfied with their IS (Lundqvist 2010c). Hence the present study shows that the satisfaction with the IS has diminished some even if a majority is still satisfied with their IS.

The management must facilitate organizational change by communicating the change message (e.g. Hallier 2000; Smith 2005). Prior findings (Lundqvist 2010c) showed that the administrators were satisfied with the information they had received - even if they lacked information about their employment and of what would happen to their IS after the merger. Despite of this a clear majority still looked forward to the merger with enthusiasm (Lundqvist 2010c). Those findings could be related to the former management's actions that had followed recommendations for avoiding employee resistance.

The findings, showing that the changes of IS (27 %) and of routines (40 %) were considered to have a negative influence on the job situation, are important for management to notice and further follow up on. These findings could partly be explained by the fact that the implementation phase is not quite finished and the routines have been implemented recently. Nevertheless, more troublesome understanding of the findings is that something happened during the implementation phase that disrupted the earlier well-managed merger process (Lundqvist 2010b, 2010c). A reason could be administrator opinions of not being involved and allowed to participate after the merger to the same (high) extent as before the merger

(Lundqvist 2010c). There was no difference in opinions about the influences of IS and routines on the job situation depending on gender or age. The difference that was found concerned how IS changes have influenced the job situation depending on the former employer – anyhow the influence was found to be small (below .3).

5.3 Despite of some setbacks – a majority wished for further changes

Involvement and participation in an organizational change is argued in the literature to facilitate the process (e.g. Abrahamson 2000; Smith 2005; Washington and Hacker 2005). Before the merger there was a good atmosphere regarding the changes and a majority found their competencies to be utilized in the merger process (Lundqvist 2010c). This study found that a majority (58 %) considered the efforts for more far-reaching changes to be insufficient. Hence it could be a little confusing that 27 % of the respondents found the IS changes and 40 % of them found the routine changes to have a negative influence on their work situation. A plausible explanation could be that the changes that were realized were not what the respondents had expected or they did not find them to be adequate. One has to keep in mind that the administrators were looking forward to the merger with high expectations and were well-prepared for reengineering (93 %), which included a preparation for extensive changes (Lundqvist 2009, 2010a, 2010b). Time is another factor that probably has influenced this opinion since only a short time had elapsed since the merger was carried through. It must be taken into account that the administrators had not yet been introduced to all the changes that would be undertaken due to the merger since the new organization was not quite in place. Decisions were postponed and/or delayed; at least to some degree due to late appointment of the top-managers and the administrators were used to getting rich information during the merger (Lundqvist 2010c).

The use of IT for enhancing and optimizing the processes are viewed in the literature as an important part of reengineering and the systems have to be built, implemented and used in a way that supports the administrators' duties (Ascari et al. 1995; Bashein and Markus 1994; Hammer 1990; Hammer and Champy 1995, 2003; Harrington et al. 1997; Pentland et al. 2010; Willoch 1994). As discussed above the respondents were content with the support they got from their IS but this has diminished somewhat compared to studies before the merger.

A reengineering initiative is known to introduce a risk for down-sizing the work force (Grey and Mitev 1995; Marjanovic 2000). Prior findings did not show that the administrators feared down-sizing since they were looking forward to the merger and thought of it positively as also to reengineering initiatives to come (Lundqvist 2010b). Still an earlier study (Lundqvist 2009) found that there were respondents with time-limited employment (17.4 %) that could easier be dismissed. The present study did not explicitly look for opinions about job loss but asked how the merger met the respondents' expectations of the merger. The finding was that nearly half (49 %) of the respondents did not have any special expectations. However, a majority of the respondents were positive towards the merger and looked forward to it with excitement in prior studies (Lundqvist 2009, 2010b). Even if this could be related to the study being performed shortly after the merger still a majority of the administrators were not satisfied with the reengineering initiatives so far.

6 Conclusion and future research

The findings provide an on-the-spot account of the administrators' opinions, after the DE-merger was carried out, in order to create a basis for subsequent studies that will add further to the knowledge base on how to succeed with PMI – intentionally by gaining new insights on the problem surrounding merger failure. This section comprehensively concludes on the research questions, suggests implications of the findings and gives proposals for further research.

Do the administrators find the reengineering attempts that were made successful? The answer on this comprehensive research question points to a No since a majority (58 %) consider those to be insufficient. The sub-questions asked about how the respondents apprehended carried out changes of IS and/or routines to influence their work. The routine changes were found to have a more negative influence on the work situation (than the IS changes). The latter could be explained by the fact that the administrators were confident of their knowledge (well-educated) and found themselves to be skilled at mastering their IS and to learn to handle new IS (Lundqvist 2009, 2010a). It was not made clear if those who considered the changes to be negative were generally against changes or if they just did not find the changes that were undertaken to be functioning and/or not in accordance with their expectations and needs. However, a majority was not regarding the changes to have a negative influence on their work situation. However, this could point to that the reengineering, which was actually carried out, to be successful. Despite of this the reengineering attempts were too few and thereby were the further development processes not entirely successful. Prior findings had shown an explicit openness to reengineering of their duties and to the merger [19]. Hence the administrators were not afraid of changes; rather quite the reverse.

Common wisdom and findings from earlier research, cf. Table 1, (Abrahamson 2000; Alaranta and Viljanen 2004; Blake and Mouton 1984; Bradt 2008; Cartwright and Cooper 1995; Empson 2000; Epstein 2004; Hallier 2000; Kotter and Schlesinger 2008; Marks and Cutcliffe 1988; Michelman 2007; Schweiger and Denisi 1991; Schweiger and Weber 1989; Smith 2005; Washington and Hacker 2005) are challenged because the findings so far from the longitudinal case-study (Lundqvist 2009, 2010a, 2010b, 2010c) show that the administrators are not resistant to the changes in the merger. The present findings are also supporting the prior findings (from before and during the merger) - that were in conflict with the picture of employees to be resistant and reluctant to change. Notwithstanding, some of the respondents found the realized changes of IS and routines to influence their work situation negatively; a majority did not find the management's efforts for further development as satisfactorily. So, there was actually a wish for more changes as the present findings pointed to administrators that were open-minded towards reengineering even after the merger was carried out.

The implication for practice is an important insight that administrators are not necessarily against organizational changes - at least not if the advices in the literature, about how to prevent resistance to changes, are applied.

The implication for research is an inspiration to undertake further research in the field of reengineering of public administration focusing on management actions on how to prevent post-merger failure caused by human factors.

More studies have to be realized in order to proceed with the longitudinal case study and to follow how those positive opinions remain in a longer run. Themes that should be focused in

future studies are for example how undertaken changes will continue to influence the administrators' duties and their opinions and use of IS.

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