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Pasi Raatikainen

*Tampere University, pasi.raatikainen@tuni.fi*

Samuli Pekkola

*Tampere University, samuli.pekkola@tuni.fi*

Matias Nurminen

*Tampere University, matias.nurminen@tuni.fi*

Maria Mäkelä

*Tampere University, maria.makela@tuni.fi*

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# MASTERPLOTS IN INFORMATION SYSTEMS IMPLEMENTATION

## *Research Paper*

Pasi Raatikainen, Tampere University, Tampere, Finland, pasi.raatikainen@tuni.fi

Samuli Pekkola, Tampere University, Tampere, Finland, samuli.pekkola@tuni.fi

Matias Nurminen, Tampere University, Tampere, Finland, matias.nurminen@tuni.fi

Maria Mäkelä, Tampere University, Tampere, Finland, maria.makela@tuni.fi

## **Abstract**

*Information systems (IS) implementation is essentially a social activity. Technical solutions emerge from the humans' social interactions and cognitive processes and are then planted into the IS users' subjective realities. These interactions are referred to as narratives, aka stories. Yet the narratives are anything but a simple form of information transfer. Rather than revealing objective facts, narratives make sense of the users' subjective experiences from their reality, and more importantly, their surrounding context. Narratives are thus not just simple standalone stories but draw from masterplots engaging with the actors' deeper and embedded perceptions. Both culturally and socially determined masterplots and specific, situated narratives may thus have an influential position in IS implementation. To explore the occurrence of different masterplots in large-scale IS implementation, we conducted a case study to identify and analyse the masterplots the IS actors resort to when making sense of their own professional and personal experience.*

*Keywords: Information Systems, Implementation, Narratives, Masterplots.*

## **1 Introduction**

Information systems (IS) are increasingly critical in today's organizations. They are the backbone for everyday business processes. This results in that most employees already are or become IS users (Leonardi, 2011). Despite their increasingly significant role, implementing IS has continuously proven challenging (Staehr et al., 2012), as shown by the piling failure reports (Baghizadeh et al., 2020; Dwivedi et al., 2015). Often social and organizational issues rather than pure technical details are accounted for the main problems (Baghizadeh et al., 2020; Berente et al., 2019; Berente and Yoo, 2012; Lyytinen and Robey, 1999). Clarification for these sociotechnical struggles is much needed.

Sociotechnical struggles are concretized in situations where different actors', such as IS users' or system developers', subjective conceptualizations of reality meet with the new technological artifact (Davidson, 2006; Orlikowski and Gash, 1994). IS thus function both as an indispensable element of organizational life, infusing the users' activities (Lamb and Kling, 2003) and still partly remaining as an imperceptible component of their everyday routines, interacting for example with perceived structures and culture (Alvarez, 2008; Ernst et al., 2018; Jones and Karsten, 2008; Orlikowski, 2007) and institutionalized perspectives (Berente et al., 2019; Berente and Yoo, 2012; Pouloudi et al., 2016; Reay and Hinings, 2009). This implies that IS are not just tools to be taken into use, but they are deployed into the reality where their users act (Orlikowski and Scott, 2008). This position subjects them to different interpretations (Davidson, 2006; Lim et al., 2011; Mesgari and Okoli, 2019; Orlikowski and Gash, 1994), connoting for instance what is considered a successful IS implementation

(Dwivedi et al., 2015; Ylinen and Pekkola, 2018). Implementing large-scale IS into an organization concretizes different interpretations through collaborative efforts (Alanne et al., 2015; Dittrich et al., 2009; Sawyer, 2001).

Capturing the sociotechnical context and converting its corresponding needs into implementation efforts is evidently challenging. Almost imperceptibly the result may be that the new IS is not in full harmony with the organizational reality (Ajer et al., 2021; Berente and Yoo, 2012; Ernst et al., 2018; Jones and Karsten, 2008). However, identifying the interpretations that different actors perceive is difficult as they are not often in an explicit form (Orlikowski and Gash, 1994). To understand the situation, it is necessary to enter into the actors' reality. Here the concept of narratives turns out beneficial as it is natural for people to resort to narratives when they try to reach a personally adequate perception of their surroundings. In other words, narratives are efficient cognitive tools for organizing time, process, and change (Herman, 2009; White, 1981). However, while narratives offer views of the reality where their tellers live, they neither represent a simple form of information-transfer that faithfully attempts to convey the objective reality, nor simply emerge from what the individual is experiencing. Instead, the narratives find inspiration from skeletal masterplots that explain sporadic events that would otherwise be difficult to comprehend (Abbott, 2008, 2002). Masterplots are culturally and socially conditioned models that offer a familiar and appealing structure for narratives. The narratives are nevertheless both constituted and propagated socially as they shape our interactions with others, and they are shared with others in encounters that, in turn, have the potential in becoming new narratives (Herman, 2009, p. 9).

IS research considering narratives is rare (Sahni and Sinha, 2016). While their presence for instance in IS development has been briefly explored (Alvarez & Urla, 2002), their relation to a larger social context is not discussed, nor has the potential in understanding them as informative yet complex information sources been entirely revealed. Instead of being merely stand-alone stories generated and told in a vacuum, the narratives are linked to their surrounding context (see Herman, 2009). This makes them relevant for IS research since implementing an IS is a story of different interpretations driving the efforts (Lim et al., 2011; Orlikowski and Gash, 1994). This story comprises issues such as the tension between institutionalized perspectives (Berente et al., 2019; Gosain, 2004; Reay and Hinings, 2009), complex social actors (Alvarez, 2008; Carter et al., 2020; Lamb and Kling, 2003), and collaboration with intrinsic goals (Pouloudi et al., 2016; Sawyer, 2001; Sawyer, 2000).

This complexity and potential but limited support of narratives motivate our paper. In this paper, we study the masterplots and the resultant individual narratives pertaining to these masterplots in the large-scale IS implementation and show their presence and some consequences. We seek an answer to the question: "What kind of masterplots meet in a large-scale IS implementation?" We conduct a qualitative single case study of a large-scale IS project, where a group of municipalities and several healthcare and social care organizations are implementing a shared patient record system. We argue that these masterplots frame the actor groups' interpretations and corresponding actions.

We organize the paper as follows. First, related IS research and narratives are reviewed. Second, research methods and the case setting, and our findings there are presented. This is followed by discussions and concluding sections.

## **2 Related Literature**

IS comprises of people, processes, data models, technologies, and formalized languages, that are structured to support organizational functions (Hirschheim et al., 1995, p. 11). IS, such as Enterprise Resource Systems (ERP) are implemented into organizations to facilitate streamlined business processes and operational efficiency while integrating multiple users into the shared system (Kähkönen et al., 2017). They are designed to improve an organization's performance by improving the ability to produce crucial information throughout the organization (Beheshti, 2006).

Perhaps the most critical yet problematic task in the IS implementation relates to unravelling the user-needs and carrying out appropriate measures during implementation. For instance, mistakes in

requirements engineering (Beimel and Kedmi-Shahar, 2019; Sutcliffe et al., 1999) represent a root cause for significant problems later during the process (Chakraborty et al., 2010; Darke and Shanks, 1997). Misinterpreting the needs easily steers this process into a flawed direction (Alanne et al., 2015; Sutcliffe et al., 1999). The result may be that the system benefits the users differently (Ylinen and Pekkola, 2018), is culturally unfit (Ernst et al., 2018), or that the system supports some institutional perspective and suppresses the others (Berente et al., 2019; Gosain, 2004).

For large systems, the implementation tasks cannot be conducted through a single perspective. Instead, implementing a large-scale IS is a collaborative activity of numerous parties having different and fragmented expertise who are in charge of different inputs for the process (Dittrich et al., 2009; Kähkönen et al., 2017). Often, the underlying system product is developed by a vendor who thus owns this product and is capable of modifying it (Dittrich, 2014; Dittrich et al., 2009; Light, 2005; Singh and Pekkola, 2021; Xu and Brinkkemper, 2007). The system product is not ready for deployment straight from the vendor but requires customizations and configurations (Dittrich, 2014; Dittrich et al., 2009; Light, 2005; Singh and Pekkola, 2021; Xu and Brinkkemper, 2007) often conducted by a specialised consultant organization (Howcroft and Light, 2006; Kähkönen et al., 2017; Metrejean and Stocks, 2011). The ultimate system is deployed into client organizations where users, the complex social actors (Lamb and Kling, 2003), take the system as a part of their reality (Orlikowski and Scott, 2008).

This collaboration in the IS implementation implies that the shared objectives, perceptions on ends and means (Kirsch and Haney, 2006) and goals (Sawyer, 2000) vary. IS implementation is thus subject to alternative interpretations (Lim et al., 2011; Mesgari and Okoli, 2019; Orlikowski and Gash, 1994). For example, the users are conceptualized in alternative ways (Isomäki, 2002) and perspectives on how to address them in the development vary (Iivari and Iivari, 2011, 2006). While each user-centred approach assumes that they are serving the users best, they significantly differ in terms of practically addressing the users (Iivari and Iivari, 2011). The system deployment could also be conducted for example incrementally or as a “big bang” (Ludwick and Doucette, 2009, p. 26). Evidently the perceptions steer the implementation to different crossroads.

Developing and implementing IS is essentially a social activity. There the requirements engineering activity attempts to elicit the needs that the system should fulfil (Appan and Browne, 2012; Beimel and Kedmi-Shahar, 2019). In this activity, the users and the analysts interact in order to produce a systems specification that is, in large parts, steering the subsequent development and implementation activities (Chakraborty et al., 2010; Davidson, 2002; Kirsch and Haney, 2006; Thanasankit, 2002). Here it is crucial to acknowledge that these participants are human actors with their flaws and limitations, such as biases (Holmström and Sawyer, 2011; Kirsch and Haney, 2006), cognitive limitations (Appan and Browne, 2012, 2010), assumptions (Al-Karaghoulis et al., 2000; Sutcliffe et al., 1999), and perceptions (Davidson, 2002; Holmström and Sawyer, 2011; Lim et al., 2011; Orlikowski and Gash, 1994). Collaborative actions should produce a shared understanding of what is needed from the future system and what is the best way to achieve this outcome (Holmström and Sawyer, 2011; Rosenkranz et al., 2014). This need should be interpreted similarly throughout the implementation process, since the system often requires customization and configuration before it is ready for deployment (Dittrich et al., 2009; Sawyer, 2000). IS and its needs are thus socially constructed.

However, not only is the IS implementation inherently social but so is also its use. The users are social actors and IS “infuse their everyday actions” (Lamb and Kling, 2003, p. 197). This means that IS are not merely used but rather they become an integral part of the multidimensional social context where the users act (Orlikowski and Scott, 2008). IS users interpret the technological solutions in different ways and by sensemaking attempt to place the technologies in their world (Davidson, 2006, 2002; Hsiao et al., 2008; Orlikowski and Gash, 1994). IS implementation is thus interacting with the organization’s social context, such as user identities (Alvarez, 2008), environment, affiliations, and interactions (Lamb and Kling, 2003) and institutionalized perspectives (Berente et al., 2019; Berente and Yoo, 2012; Reay and Hinings, 2009). Implementing organizational IS is evidently much more complex than just shifting to use a new tool. A better understanding regarding different actors’ sensemaking of IS is urged (Hsiao et al., 2008; Mesgari and Okoli, 2019).

Social construction of IS is a popular research stream (Leonardi and Barley, 2010; Lim et al., 2011; Mesgari and Okoli, 2019). Inspired by Bostrom and Heinen (1977) Orlikowski and Gash (1994) pioneered the discussion on how actors' make sense of different IS-related activities such as IS use and design through frames that alter their perceptions. Interestingly, such interpretations are not solely individual but actor groups often develop not identical yet relatively similar interpretations – shared frames (Davidson, 2006; Orlikowski and Gash, 1994). This implies a significant topic to consider in IS implementation context that is essentially a collaboration of different parties. When the interpretations of central actors, in this case the collaborating implementation parties, significantly differ, issues will emerge (Orlikowski and Gash, 1994). However, empirical research seems scarce for studies exploring interactions between the interpretations of the various implementation parties. Also, identifying the interpretations is difficult because they rarely find their way to the surface in an explicit form during activities (Orlikowski and Gash, 1994). Yet the tension between interpretations may represent antecedents for many issues as they drive the efforts of the parties. We argue that awareness regarding narratives as a significant step towards addressing issues in the flux of varying interpretations that IS implementation is evidently.

For human beings it is natural to use narratives as a cognitive tool for organizing time, process, and change (Herman, 2009). A narrative is a particularized account of sequenced events that are by the narrative and plot construction made to appear to have relation and sense (Bruner, 1991; Herman, 2008). This cognitive process is sometimes referred to as narrativization (Fludernik, 1996; White, 1981). While being a universal tool for sensemaking, a prototypical, tellable narrative foregrounds the personal and the unexpected; it conveys what it is like for a certain individual to live through a disruption in the storyworld (Herman, 2009). By narrativizing the virtual chaos of events, a human actor is able to find some coherence that resonates with their perception of the world (Fludernik, 1996; White, 1981). People consequently share glimpses of their perceptions of reality with their narratives. However, the narratives are also subject to strategizing and rhetorical factors. This means that the stories of failure, conflict, and personal disappointment are more tellable than the success stories or the stories of “business as usual.” Storytelling is in fact particularly impactful, when the told narrative connects storyteller's and her presumed audience's experience (Mäkelä et al., 2021). The IS users quite often produce compelling narratives that point out external difficulties in their work to deflect blame from the past inefficiencies (Alvarez & Urla, 2002). Such narratives effectively convey information about the users' perceptions on subjectively constructed reality. In contrast, an IS that works like a charm is not an interesting topic for a narrative. One of the dangers of narrative is that a personal narrative may become disproportionately representative and even normative when shared with others (Mäkelä et al., 2021). Thus, while the narratives are informative on the subjective reality, they do not present an objective reality, and they often leave, for instance, positive aspects aside. Nevertheless, the narratives paint the picture of the world for human beings and thus guide their behaviour there.

The concept of masterplot, derived from interdisciplinary narrative studies (Abbott, 2008, 2002), captures the culturally and socially conditioned nature of narrative meaning-making. The way individuals utilize masterplots in their personal accounts has also been understood as likened to the act of ventriloquism (Jensen Schleiter et al., 2019). Masterplots are skeletal, easily recognizable models that give familiar, shareable, and portable shape to the individual, situated narratives, and as such, function as tools for both telling and interpreting narratives. They provide almost subliminal models for narrating the surrounding world's phenomena: it is the skeleton of how the narrative of something is usually told. Masterplots reflect the fact that certain ways of telling are more acceptable and available than others in a certain historical period, culture, or social situation. Masterplots tie together the narratives that could otherwise seem separate and individual. Narrative ways of making sense of IS projects are thus affected by culturally and societally dominant ways of conceiving both the human-technology relationship and the users' and developers' professional roles. While the masterplots make the verbalization and sharing of IS implementation experiences possible, they inevitably obscure and ignore certain aspects of the process and communication there. For instance, in organizations, some

widely shared narratives are powerful not only in aligning the actors' perspectives, but also in creating organizational inertia and blind spots by their compelling nature (Geiger and Antonacopoulou, 2009).

Capturing the intangible social environment and its needs appropriately is difficult. Eliciting the actors' needs in a social context is a cumbersome task (Beimel and Kedmi-Shahar, 2019). The IS users comprise their world perception into narratives that they tell to IS developers (Alvarez & Urla, 2002). The developers, seeking objective facts, however, take these narratives as messy implying difficulties in their comprehension. Often this results in adopting an incomplete perspective. There is a tendency to rely on a perspective that is satisfactory rather than optimal (Chakraborty et al., 2010; Pitts and Browne, 2007, 2004) and addressing what is said instead of what is needed (Holmström and Sawyer, 2011). The narratives, however, would convey valuable information if it is looked beyond what is precisely said by engaging in interpretation of these narratives. For example, university administration narrating about irresponsible students to deflect blames of past ineffectiveness (Alvarez & Urla, 2002) could reveal cues of experiences, identities, and organizational culture these users perceive, which easily clashes with a new IS (Alvarez, 2008). Consequently, the narratives offer a valuable entry point into the perceived reality where the users act, and where the IS will be implemented.

The complexity in IS implementation is thus a result of a socially constructed tangible product (IS) that is implemented into organizational context comprising many intangible, interpretational, embedded and significant factors. The work in IS implementation and its different phases is evidently subject to different views, which, have to be ultimately harmonized. However, capturing different perceptions is a non-trivial task as they lay deep in the actors' subjectively held conceptualizations of reality, which is partly subconscious and may thus be not easily identifiable. This may explain why the systems end up not serving the organizations' needs well (Berente and Yoo, 2012; Gross and Pekkola, 2010). In this context, narratives and the skeletal masterplots that propose an easily comprehensible explanation of events, could offer a significant explanation of what views and forces are driving the IS implementation.

### **3 Research Approach**

In this paper, we study a large IS renewal project. In this project, a patient record system is acquired and implemented for a consortium of several public healthcare and social care organizations. The system is estimated to serve around 35.000 social and healthcare professionals and influence around 1.6 million citizens. Total project costs are estimated to be around 600 million euros, from which the technology is approximately 200 million euros.

This case is unique in [the country] in its nature, size, and complexity. The project was launched in 2012. Procurement began in 2013 with a shared procurement strategy and followed the negotiation procedure (Moe and Newman, 2014). The system candidates were assessed by weighting the quality criteria to price. Usability was thus a prioritized criterion. The procurement resulted in that an offshore vendor with a packaged system was contracted. The acquisition began in 2016 with actual implementations starting in 2018 and (planning to) end in 2021. The vendor, local developers in charge of acquiring and implementing the system, numerous client organizations, and the citizens were the primary stakeholders. The client organizations include primary health care organizations, run by each municipality, that are the main contact point towards citizens. More specialized services, such as surgery or cancer treatments, are provided by hospitals, own by the municipality consortium. The social care services, offered by the municipalities, comprise a wide range of services, such as social counselling, rehabilitation, and mental health work to ensure social security and wellbeing. The client organizations have numerous intersecting processes when offering treatment and services for patients and clients. Often the citizens simultaneously use numerous services. Thus, the implementation of a shared IS and common patient records to all client organizations makes sense.

We utilize an interpretative qualitative single case study approach (Walsham, 1995). This is because IS implementation is essentially a social process (Newman and Robey, 1992) that should be understood in its social and political context (Butler and Fitzgerald, 1997; Myers, 1995). Also, interpretivism (Eriksson and Kovalainen, 2015, p. 20) is an evident choice as it sees reality through the

constructions, mainly language and shared meanings. It thus puts the focus on human interpretations and meanings that are perceived as central IS implementation factors (Walsham, 1995). This approach is aligned with the narrative theories, which considers people as storytellers using narratives to construct their reality (Fisher, 1984).

We conducted twelve interviews with the key project stakeholders (see Table 1). The interviews were conducted between the fall of 2019 and the spring of 2020. This was after the first system deployments. We used the snowballing sampling, i.e. we asked the interviewees to name subsequent, influential and relevant people (Morgan, 2008). The first three interviewees were provided by the case company. The interviewees included management level actors from the local development organization and a consultant that worked with the social care professionals (Con1). Their positions varied from the highest level of management (M1, M2, Clin1, M5, and M10) to those who manage the development of a certain product or module (M3, M4, M8) or unit (M9) and those who are responsible for a certain aspect of the system (M6) or process (M7). Thus, the perspective we attained is mostly from the local developers' management perspective. There is however also a view into the operational level (Con1). We see the local developers' management level perspective as appropriate because management is responsible for the overall management of the project and thus their views are most likely more influential than those of individual actors from operational level. Also, in the overall project, the local developers are in the position of a middleman and should thus have a view to both directions – to the vendor and client organizations. The possibility to compare the strong management perspective with the view from the operational level is also interesting.

The interviews followed a thematic open interview protocol, where the interviewer does not lead the discussion into pre-defined directions. As an illustrative example, the interviewees were asked to describe the project from their perspective. With these descriptions, interesting issues emerged. All interviews, approximately an hour each, were conducted face-to-face in the case organization premises by two interviewees. All interviews were conducted and analyzed in [language name]. Only illustrative quotations were translated into English.

Index	Title
M1	Chief Technology Office
M2	Director of Development
M3	Solution Architect
M4	Business Manager, Social Care
M5	Chief Executive Officer
Clin1	Clinical & Social Care Lead
M6	Usability Manager
M7	Director of Human Resources
Con1	Consultant for Social Care
M8	Business Manager, Digital and Citizens Services
M9	Head of Software Development Unit
M10	Development Manager

*Table 1. Interviewees*

To identify the narratives, we focused on reoccurring conceptualizations and definitions. For the purpose of this study, we grounded our view of narratives with a definition provided by Herman (2009, p. 9). This emphasizes a narrative as a representation of sequenced events structured to make sense of an experience. During coding, continuously appearing definitions and conceptualization were coded as narrative components while following an open coding approach (Urquhart, 2012). The coding began without preliminary code categories, but we limited the perspectives of narratives on those of the three main stakeholders (vendor, local developers, and domain professionals from the

client organizations). Vendor's and domain professionals' narratives were interpreted from descriptions that the developers provided. This means that the events are viewed through the local developer's perception. This enabled us to attain a wide perspective of the context since the local developer is arguably the most central actor. Similar conceptualizations were grouped to form larger code categories. This process of grouping and creating categories was iterative and continuous throughout the analysis. Rather than focusing on short individual tellings, we aimed to find similarities and recurring patterns between the tellings that form collective narratives. Interpretively we theorized these collective narratives as masterplots. Finally, we analyzed the narratives and their central principles and activities and theorized the relationships between the narratives and the critical actions.

## 4 Findings

We identified three distinct masterplots that influenced the individual narratives about the IS renewal process, told by the actors. These masterplots emphasized the ease of use as the key to success, the IS's role as a guide towards business-like service production, and information system as the necessary evil for users.

### 4.1 Ease of use as the key to successful implementation

The local developers stated that they focus on users and usability *"in exceptional amounts"* [M6]. Usability was prioritized already in the procurement and acquisition phases. The developers emphasized they were trying to ensure they choose the system with the most potential in terms of usability. They set requirements, to be followed during the implementation, by user-centred design heuristics. Ultimately they were convinced they had chosen the best usable system.

The efforts on usability continued throughout the project. Domain professionals participated in many design workshops and provided the users' perspective. Usability tests were conducted continuously. The basic principle was that the system should be as simple as possible to use because the users *"are initially not fully aware of their needs. So first they need simple tools"* [M2]. The developers also explained that the system supports the end-user customization. The users could for instance modify system interfaces and create shortcuts because they have *"their own preferences, and not everything should be suppressed because they support fluency"* [M2].

The emphasis on usability was well-argued. The domain professionals need to first learn how to use the system so that they get used to it. A similar case was distinguished in an earlier implementation project where *"those users, who had declared that they shall use the new system over their dead bodies, now want that system back"* [M2] – even though the old system had not been significantly evolved. Flattening the learning curve was thus the main objective since the easier the system is to use, the sooner it becomes the preferred system. This was emphasized also in the context of implementing shared processes, because most often *"if doing things the right way is easy, then the things shall be done the right way"* [M2]. However, there was a countless number of unsatisfied users, who were mainly complaining about different changes. The local developers stated that some issues the users bring up are *"real problems and some are things that simply require them to get used to them"* [M2]. A large-scale IS implementation enforces process changes and realignment. This causes significant changes in the domain professionals' mundane work routines. Whether the changes are wanted or preferred, they need to be done to support the system integration. It was difficult for the domain professionals to understand that the changes had been *"decided together"* [M6] by their management.

The local developers, however, did not have complete freedom to customize the system for their users. While individual system packages were configurable, possibilities to modify there were limited. This resulted in a process where *"you can choose between two modules, both having different support for modifications"* [M2]. The usability manager stated that *"sometimes you are surprised when you thought that some little thing is easy to change, but then you realize that it, in fact, isn't. This comes*

*back to the vendor's restrictions because it is not always clear what you can configure and what you cannot*" [M6]. The implementation was thus about identifying the best possibilities and making reasonable compromises. For instance, some medication-related functionalities were not optimal for local customs, but the vendor was unwilling to change them because the vendor considered their processes should be used. In such situations, the developers had to create bypasses so that the system can be used in the local environment.

#### **4.2 Information system as a guide towards business-like service production**

The vendor had a significantly different view on how social and healthcare services should be produced. The vendor's masterplot for IS implementation was based on a view that a strong business perspective and centralized decision-making best supports efficient and standardized service production and delivery. The local developers explained that the system, in its basic form, is developed with a view that *"wants the system to work efficiently, so that many customers may be claimed and charged for money... Many functions are done with money in mind"* [M9]. The developers argued that this service production approach is not suitable for the local environment and required significant adapting. For example, for the vendor it was confusing that: *"you pay money to individual clients, such as income support for a citizen... This is somehow confusing for [the vendor] because, from their perspective, the direction is that system is used to charge the clients. So invoicing works very well"* [M3].

The business-like mindset was widely recognizable in how the vendor operated. The developers said that when they requested changes from the vendor, the fluency in processing the change tickets varied. Often, if the vendor *"perceived something being good and saleable, they would implement it into the system quite quickly"* [M3]. Strong hierarchies, centralized decision-making, and efficiency promoting culture were also perceivable in the vendor's operations. For the developers, the working environment at the vendor's site seemed *"very tough... they are willing to switch their management personnel a just couple of months before the deployment. This seems quite radical from our perspective"* [M3]. The same perspective was evident in the vendor's IS implementation instructions. At first, the local developers did: *"not fully understand [them] because they [the vendor] don't say it explicitly because it is obvious for them. They think that any decision-making power cannot be assigned to the lower hierarchy levels with a mandate. They want much more straightforward decision-making"* [M2].

The system supported strongly processed service production, as planned by the vendor. This means for instance structured reporting, standardized processes, system monitoring, and demanding that all processes are followed. The local developers perceived that the system increasingly *"takes part in the activities the domain professionals perform, and guides them towards a certain operating model"* [M2]. The developers explained that for the domain professionals, *"this sort of guidance is relatively new, and it feels foreign and unpleasant"* [M2]. Although the new operating principles were mostly hoped by the management of client organizations, some were too extreme. The developers explained that *"the system may, in a way, punish the user if things are not done correctly"* [M9], which, however, is not adaptable or acceptable in the local environment. Nevertheless, the developers saw that the system *"makes the domain professionals' work visible... It is easy to see what one has done and where, and in this way, it opens up the work practices. This is very good from the managements' perspective"* [M10].

#### **4.3 Information system as the necessary evil for domain professionals**

All domain professionals did not react positively to the implementation. The local developers summed that the user *"feedback has been partly quite poor"* [M5]. They mentioned that when the public media collects feedback directly from the doctors, it *"wasn't exactly flattering us"* [M5]. The local developers claimed that this situation was not surprising, since *"change resistance is a natural function for all humans. It requires at least a slight dissatisfaction with the current state in order to be*

ready for the change” [M6]. All users were not ready for radically changing work practices. This resulted in dissatisfaction.

It is difficult for the domain professionals to identify the reasons for the changes. Often the users just “*blame the system for something that in fact even isn’t the system’s fault*” [M6]. This means the system was not completely understood, and this was the reason the users “*do not understand which restrictions are caused by their personal computer, by the system, or by the vendor*” [M3]. When the configuration was done according to the user feedback, the users “*may not notice what in fact has even changed. Everything is as horrible as before*” [M3]. Clearly, the users had difficulties comprehending the change and its friction.

Difficulties in understanding the system implementation influenced the domain professionals’ perceptions. In general, they were not pleased with any IS in their workplace. As the local developers said, there are “*of course those medical specialties that would just rather do their work and forget that they even have to use any information systems*” [M6]. These prejudices dismantled in how the users reacted towards new functionalities and processes. A consult in the social care sector explained that “*in the system, you can write referrals and forward them. They stay inside the system the whole time. It is confusing that there is a significant concern in how the users could know that the referral has been transferred successfully. We are talking about referrals moving inside the system. If there is some sort of error, it would simply be placed in an error basket*” [Con1]. The domain professionals are thus doubtful towards IS in general. They do not trust the systems they do not fully understand.

For the domain professionals, the system implementation is evidently not just about learning how to use the new system and its interfaces. The change is much deeper, and considers the domain professionals’ perceptions about their work environment. Web-based appointment booking functionality caused negative reactions because social care professionals “*have a need for a feeling of being in control. And when the booking is moved into the system, they feel like just anyone can book their time. So, they lose the control. They first need to perceive that they are still in control*” [Con1]. Similarly, the shift towards more standardized service production was not simple. The local developers explained that “*the guidance from the system and its predefined processes that, in fact, are based on the recommendations,*” [M2] is difficult to accept because, especially the doctors “*perceive that things should be done very individually*” [M2]. The benefits from the new system are not easily recognizable. For example, the shift from a free form text to structured reporting is not “*easy for the doctors at that moment, but it supports the organizational processes and knowledge management*” [M5]. The value of structured reporting may not, however, be only positive. The structured reporting results in that “*the work done by the domain professionals becomes visible [for the others]. If the employee is not fond of that, she may not consider it as an advantage. But it is very good from the management’s perspective*” [M10].

## 5 Discussion

Masterplots that describe IS implementation are identifiable from the interviews. They explain the actors’ interpretations regarding the implementation. Table 1 summarizes the masterplots in our case. Our findings demonstrate that information regarding different interpretations driving the collaborative IS implementation efforts (Davidson, 2006; Orlikowski and Gash, 1994) is embedded in masterplots.

Perspective	Masterplot	Narrative
Local developers	Usability will conquer the inevitable resistance	Domain professionals’ natural tendency to resist changes explains IS implementation struggles. Once the professionals learn how to use the new system, they become fond of it.
Vendor	IS is a processed service product to be sold.	Social care and healthcare are best executed with business logic that supports hierarchy and efficiency. IS should support this principle and similar logic ought to be followed during its implementation.

Domain professionals	IS implementation is the bringer of chaos	IS are necessary evil, that need to be used although they cause disruption in the professional's most vital work functions, especially when new systems are implemented.
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Table 2. Masterplots in IS implementation

Three distinctive masterplots can be identified. First, the developers' masterplot outlines an IS implementation where the domain professionals, who are by their nature hesitant towards the changes and IS in general, slowly learn how to use a new system. The domain professionals shift their view from resisting the new IS to preferring it when they become fluent with it. Second, the vendor's masterplot, as projected and implied by the local developers, constructs social and healthcare as following a business logic. This emphasizes efficiency, processes, and hierarchy, and constitutes a view of how the IS should be implemented, constructed, and used. Third, the domain professionals' masterplot – as told by themselves or constructed in the local developers' narratives – gives rise to a narrative where a new IS breaks the existing harmony in an organization and introduces unnecessary chaos there. While a previous IS may not be seen as perfect, the users have become relatively fluent with it and could focus on actual work tasks. The new system breaks this situation.

While the IS implementation most likely results in benefits, that are also experienced by the domain professionals, the domain professionals do not consider this. They mostly emphasized how the new IS disturbed their personal world of experiences. This partly results from the experiences of past IS (Ludwick and Doucette, 2009), partly from social influence of others (Venkatesh et al., 2003). Their masterplot consequently initiated cautious behaviour towards new IS and general resistance to change. The users' position is natural for masterplots to occur as these masterplots offer comprehensible explanations of the events. The resisting users often form coalitions (Lapointe and Rivard, 2005) and masterplots may serve as a glue that holds such shared interpretations together. However, in oppose to the local developers' masterplot, the change the professionals experience is much broader. The new IS do not just request them to learn to use the technology, but it interacts with their subjective reality and perceived organizational structures (Jones and Karsten, 2008), their logic in service provision (Berente and Yoo, 2012; Reay and Hinings, 2009), organizational culture (Ernst et al., 2018), and the determinants of use acceptance (Venkatesh et al., 2003). This behaviour is evident in the domain professionals' reactions toward new functionalities, such as web-based booking. These functionalities clashed with their perceived reality where they are in control over their work processes. Obviously, some tension emerged. The tendency to resist changes thus only partly explains why the users object the new IS implementation (Laumer et al., 2016). Using this explanation thus significantly simplifies the cause for the problems (Bhattacharjee et al., 2018; Lapointe and Rivard, 2005). This, for its part, explains why the focus on ensuring good usability did not fade out the tensions that emerged during the implementation.

The developers' masterplot locked their perspective on usability. The reasons were twofold. First, the developers had only limited possibilities to modify the system (Dittrich et al., 2009; Sawyer, 2001) as, after all, it was only the vendor who developed it and who was able to do major modifications (Sawyer, 2000). The developers' masterplot clashed with the vendor's strong narrative on how the services should be provided and how the IS implemented. The developers had to comply with this perception. On the other hand, the client organizations were in charge of appropriate change management measures (Boonstra and Broekhuis, 2010; Leonardi, 2011; Ludwick and Doucette, 2009). The developers were thus a middleman who could just configure the system within certain strict limitations. Second, the developers' masterplot narrated the domain professionals being restrictive towards all changes because they have to be trained to use the new system. The developers perceived that the best way to aid this process is by focusing on usability, which would flatten the learning curve. This masterplot unfolded in user involvement when configuring the system, testing usability, and implementing end-user customization functionalities. Their masterplot was thus characterized by a pronounced tendency to represent vicarious experientiality - the developers were eager to imagine "what it is like" (see Herman, 2009) for the domain professionals to learn and use the system. These

projected experiences of the users were, however, mostly used to support the developers' own pre-existing perception of the usable IS.

The masterplots aided the sensemaking of a complex context and concretized their different perceptions into seemingly reasonable actions. Masterplots are powerful in creating compelling representations. They help people by offering an attachment while trying to understand the incoherent and in large part intangible reality. For this reason compelling organizational narratives create inertia and alter the organization's dynamics (Geiger and Antonacopoulou, 2009). The domain professionals embraced the perception that the new IS is the main cause for problems while the root causes were actually deep in how the organizations have operated earlier. The IS implementation was merely a catalyst for the issues. Consequently, difficulties cannot be avoided if a solution (focus on usability) is not aligned with other masterplots. Similarly, the vendor's masterplot resulted in a perception that the IS may follow a similar logic that has worked in their earlier contexts and cultures. Their approach emphasized business-like service provision which was not supported in our context, for instance by the physicians (Reay and Hinings, 2009). The vendor's masterplot did not take into account the fact that the domain professionals could hold a radically different perception of their role as professionals and the role of IS in service production (Hsiao et al., 2008). The vendor's perspective required that the developers make their best efforts in adjusting how *the vendor's masterplot* unfolds. All this resulted in competing masterplots, each having their own emphasis and blind spots.

## **6 Conclusions and Contributions**

This study sheds light on the IS implementation by revealing the presence of narratives that different actors' resort to, and illustrating their relationship to skeletal masterplots. As our case illustrates, these narratives are not simply individual stories but are drawn from the powerful and skeletal masterplots, used by the actors when grounding their stances. These masterplots inspire collective interpretations of the events for different actor groups. Evidently, the identification and analysis of the masterplots offer valuable insights for the collaborative efforts necessary in large-scale IS implementation.

First, the masterplot the vendor assumed suggests strong processes and hierarchies. This masterplot is informative especially for the local developers who are responsible for implementing the system into the client organizations. The local developers are also ensuring the client organizations' preparedness regarding the change. Second, the domain professionals' masterplot should be considered especially by the local developers and the client organizations. The new IS and the changes it introduces (and even enforces), require strong and purposeful efforts and activities. Their masterplot may help in understanding the needs and obstacles, to be challenged with proper support, training, and communication. If the masterplots are able to prosper and sustain, the actors will cling on them as they offer a simple and compelling explanation for displeasing events. Different masterplots may thus explain the events and problems in IS implementation.

We contribute to both research and practice. For research, this study illustrated that IS implementation is indeed a socially constructed activity (Holmström and Sawyer, 2011) with different narratives (Alvarez & Urla, 2002). More interestingly, the study revealed and exemplified the relationship between the narratives and masterplots, and social constructivism in the IS context. There has been a lot of discussion in IS discipline on how the technological solutions are socially constructed (Davidson, 2006; Lim et al., 2011; Orlikowski, 2000), and even the presence of narratives has been briefly visited (Alvarez & Urla, 2002). However, the link between the areas has not been shown or studied. This study has thus showcased how the organizational narratives find their inspiration from more general and collective masterplots. Consequently, the study provides a theoretical grounding for future research to draw more implications on narratives and masterplots, and their interplay with actions in IS implementation. This would result in a better understanding of the sociotechnical mess. Already now our small yet insightful analysis revealed fundamental contradictions in the actors' perceptions. Those contradictions provide an explanation for challenges and problems in IS implementations.

For the practice, this study showed the importance of awareness on narratives and masterplots in the IS implementation. The practitioners in IS implementations should identify and analyse the collaborating parties' subconscious narratives since they evidently drive everybody's actions. Second, the practitioners should become aware of their own masterplots. All masterplots frame the actors' perceptions and actions and create blind spots. Those things may eventually creep on the surface and cause various tricky symptoms. Our insights thus are helpful for the collaborating IS implementation parties such as vendors, local developers (and other consultants) and client organizations, who work in the flux of varying interpretations.

This paper has limitations. First, this is a single case study in [country name]. Other masterplots may thus be identified in other contexts. Second, we viewed the events through the perspective of the (local) developers. Thus, our perspective is altered by the developers' perceptions of the events and other actors. Third, our approach is interpretative. However, we [the authors] are experts on IS and narratives, so we have triangulated the data from several viewpoints.

Our view on IS implementation supports the argument that the problems in IS implementation are not simply technical but rather social and organizational. We propose that these issues result from human beings and their struggles in comprehending the confusing reality. To find satisfying explanations, they resort to narratives that are inspired by compelling and skeletal masterplots. While they adequately help sensemaking, they do not represent objective reality. As our study showed, these masterplots attempting to explain the events meet and conflict. When each offers their own explanations of what is going on, the tension will emerge.

## References

- Abbott, H.P., 2008. *The Cambridge Introduction to Narrative*, 2nd ed. ed, Cambridge introductions to literature. Cambridge University Press, Cambridge.
- Abbott, H.P., 2002. *The Cambridge Introduction to Narrative*. Cambridge University Press, Cambridge.
- Ajer, A.K.S., Hustad, E., Vassilakopoulou, P., 2021. Enterprise architecture operationalization and institutional pluralism: The case of the Norwegian Hospital sector. *Information Systems Journal*.
- Alanne, A., Hellsten, P., Pekkola, S., Saarenpää, I., 2015. Three positives make one negative: public sector IS procurement, in: *International Conference on Electronic Government*. Springer, pp. 321–333.
- Al-Karaghoul, W., AlShawi, S., Fitzgerald, G., 2000. Negotiating and understanding information systems requirements: The use of set diagrams. *Requirements Engineering* 5, 93–102.
- Alvarez, R., 2008. Examining technology, structure and identity during an enterprise system implementation. *Information Systems Journal* 18, 203–224.
- Alvarez, R., Urla, J., 2002. Tell me a good story: using narrative analysis to examine information requirements interviews during an ERP implementation. *ACM SIGMIS Database: the DATABASE for Advances in Information Systems* 33, 38–52.
- Appan, R., Browne, G.J., 2012. The impact of analyst-induced misinformation on the requirements elicitation process. *MIS quarterly* 85–106.
- Appan, R., Browne, G.J., 2010. Investigating retrieval-induced forgetting during information requirements determination. *Journal of the Association for Information Systems* 11, 2.
- Baghizadeh, Z., Cecez-Kecmanovic, D., Schlagwein, D., 2020. Review and critique of the information systems development project failure literature: An argument for exploring information systems development project distress. *Journal of information technology* 35, 123–142.
- Beheshti, H.M., 2006. What managers should know about ERP/ERP II. *Management Research News*.
- Beimel, D., Kedmi-Shahar, E., 2019. Improving the identification of functional system requirements when novice analysts create use case diagrams: the benefits of applying conceptual mental models. *Requirements Engineering* 24, 483–502.
- Berente, N., Lyytinen, K., Yoo, Y., Maurer, C., 2019. Institutional logics and pluralistic responses to enterprise system implementation: a qualitative meta-analysis. *MIS quarterly* 43, 873–902.

- Berente, N., Yoo, Y., 2012. Institutional contradictions and loose coupling: Postimplementation of NASA's enterprise information system. *Information Systems Research* 23, 376–396.
- Bhattacharjee, A., Davis, C.J., Connolly, A.J., Hikmet, N., 2018. User response to mandatory IT use: A coping theory perspective. *European Journal of Information Systems* 27, 395–414.
- Boonstra, A., Broekhuis, M., 2010. Barriers to the acceptance of electronic medical records by physicians from systematic review to taxonomy and interventions. *BMC health services research* 10, 231.
- Bostrom, R.P., Heinen, J.S., 1977. MIS problems and failures: A socio-technical perspective. Part I: The causes. *MIS quarterly* 17–32.
- Bruner, J., 1991. The Narrative Construction of Reality. *Critical inquiry* 18, 1–21.
- Butler, T., Fitzgerald, B., 1997. A case study of user participation in the information systems development process. *ICIS 1997 Proceedings* 27.
- Carter, M., Petter, S., Grover, V., Thatcher, J.B., 2020. Information Technology Identity: a Key Determinant of IT Feature and Exploratory Usage. *MIS Quarterly* 44.
- Chakraborty, S., Sarker, Saonee, Sarker, Suprateek, 2010. An exploration into the process of requirements elicitation: A grounded approach. *Journal of the association for information systems* 11, 1.
- Darke, P., Shanks, G., 1997. User viewpoint modelling: understanding and representing user viewpoints during requirements definition. *Information Systems Journal* 7, 213–219.
- Davidson, E., 2006. A technological frames perspective on information technology and organizational change. *The journal of applied behavioral science* 42, 23–39.
- Davidson, E.J., 2002. Technology frames and framing: A socio-cognitive investigation of requirements determination. *Mis Quarterly* 329–358.
- Dittrich, Y., 2014. Software engineering beyond the project—Sustaining software ecosystems. *Information and Software Technology* 56, 1436–1456.
- Dittrich, Y., Vaucouleur, S., Giff, S., 2009. ERP Customization as Software Engineering: Knowledge Sharing and Cooperation. *IEEE Software; Los Alamitos* 26, 41–47.
- Dwivedi, Y.K., Wastell, D., Laumer, S., Henriksen, H.Z., Myers, M.D., Bunker, D., Elbanna, A., Ravishankar, M.N., Srivastava, S.C., 2015. Research on information systems failures and successes: Status update and future directions. *Information Systems Frontiers* 17, 143–157.
- Eriksson, P., Kovalainen, A., 2015. Qualitative methods in business research: A practical guide to social research. Sage.
- Ernst, S.-J., Janson, A., Peters, C., Leimeister, J.M., 2018. Understanding IT-Culture Conflicts to Drive Successful Technochange Projects – a Case Study. Presented at the ICIS 2017: Transforming Society with Digital Innovation.
- Fisher, W.R., 1984. Narration as a human communication paradigm: The case of public moral argument. *Communications Monographs* 51, 1–22.
- Fludernik, M., 1996. Towards a “Natural” Narratology. Routledge, London.
- Geiger, D., Antonacopoulou, E., 2009. Narratives and organizational dynamics: Exploring blind spots and organizational inertia. *The Journal of Applied Behavioral Science* 45, 411–436.
- Gosain, S., 2004. Enterprise information systems as objects and carriers of institutional forces: the new iron cage? *Journal of the Association for Information Systems* 5, 6.
- Gross, T., Pekkola, S., 2010. Three levels of failure: Analysing a workflow management system, in: *Reframing Humans in Information Systems Development*. Springer, pp. 191–210.
- Herman, D., 2009. Basic elements of narrative. John Wiley & Sons.
- Herman, D., 2008. Description, narrative, and explanation: Text-type categories and the cognitive foundations of discourse competence. *Poetics Today* 29, 437–472.
- Hirschheim, R., Klein, H.K., Lyytinen, K., 1995. Information systems development and data modeling: conceptual and philosophical foundations. Cambridge University Press.
- Holmström, J., Sawyer, S., 2011. Requirements engineering blinders: exploring information systems developers' black-boxing of the emergent character of requirements. *European Journal of Information Systems* 20, 34–47.

- Howcroft, D., Light, B., 2006. Reflections on issues of power in packaged software selection. *Information Systems Journal* 16, 215–235.
- Hsiao, R.-L., Wu, S.-H., Hou, S.-T., 2008. Sensitive cabbies: Ongoing sense-making within technology structuring. *Information and Organization* 18, 251–279.
- Iivari, J., Iivari, N., 2011. Varieties of user-centredness: An analysis of four systems development methods. *Information Systems Journal* 21, 125–153.
- Iivari, J., Iivari, N., 2006. Varieties of user-centeredness, in: *Proceedings of the 39th Annual Hawaii International Conference on System Sciences (HICSS'06)*. IEEE, pp. 176a–176a.
- Isomäki, H., 2002. The prevailing conceptions of the human being in information systems development: Systems designers' reflections. Tampere University Press.
- Jensen Schleiter, A., Ernst, J., Maagaard, C., Hansen, H., 2019. Engaging employees in CSR: A managerial masterplot for the good employee. *RASK—International journal of language and communication* 50, 167–184.
- Jones, M.R., Karsten, H., 2008. Giddens's structuration theory and information systems research. *MIS quarterly* 32, 127–157.
- Kähkönen, T., Alanne, A., Pekkola, S., Smolander, K., 2017. Explaining the challenges in ERP development networks with triggers, root causes, and consequences. *Communications of the Association for Information Systems* 40, 11.
- Kirsch, L.J., Haney, M.H., 2006. Requirements determination for common systems: turning a global vision into a local reality. *The Journal of Strategic Information Systems* 15, 79–104.
- Lamb, R., Kling, R., 2003. Reconceptualizing users as social actors in information systems research. *MIS quarterly* 197–236.
- Lapointe, L., Rivard, S., 2005. A multilevel model of resistance to information technology implementation. *MIS quarterly* 461–491.
- Laumer, S., Maier, C., Eckhardt, A., Weitzel, T., 2016. User personality and resistance to mandatory information systems in organizations: A theoretical model and empirical test of dispositional resistance to change. *Journal of Information Technology* 31, 67–82.
- Leonardi, P.M., 2011. When flexible routines meet flexible technologies: Affordance, constraint, and the imbrication of human and material agencies. *MIS quarterly* 147–167.
- Leonardi, P.M., Barley, S.R., 2010. What's under construction here? Social action, materiality, and power in constructivist studies of technology and organizing. *Academy of Management Annals* 4, 1–51.
- Light, B., 2005. Potential pitfalls in packaged software adoption. *Communications of the ACM* 48, 119–121.
- Lim, W.-K., Sia, S.K., Yeow, A., 2011. Managing risks in a failing IT project: a social constructionist view. *Journal of the Association for Information Systems* 12, 2.
- Ludwick, D.A., Doucette, J., 2009. Adopting electronic medical records in primary care: lessons learned from health information systems implementation experience in seven countries. *International journal of medical informatics* 78, 22–31.
- Lyytinen, K., Robey, D., 1999. Learning failure in information systems development. *Information Systems Journal* 9, 85–101.
- Mäkelä, M., Björninen, S., Nurminen, M., Raipola, J., Rantanen, T., 2021. Dangers of Narrative: A Critical Approach to Narratives of Personal Experience in Contemporary Story Economy. *Narrative* 29.
- Mesgari, M., Okoli, C., 2019. Critical review of organisation-technology sensemaking: towards technology materiality, discovery, and action. *European Journal of Information Systems* 28, 205–232.
- Metrejean, E., Stocks, M.H., 2011. The role of consultants in the implementation of enterprise resource planning systems. *Journal of Management Information and Decision Sciences* 14, 1.
- Moe, C.E., Newman, M., 2014. The Public Procurement of IS—A Process View, in: *2014 47th Hawaii International Conference on System Sciences*. IEEE, pp. 2158–2167.
- Morgan, D.L., 2008. Snowball Sampling, in: *SAGE Encyclopedia for Qualitative Research Methods*. pp. 816–817.

- Myers, M.D., 1995. Dialectical hermeneutics: a theoretical framework for the implementation of information systems. *Information systems journal* 5, 51–70.
- Newman, M., Robey, D., 1992. A social process model of user-analyst relationships. *MIS quarterly* 249–266.
- Orlikowski, W.J., 2007. Sociomaterial practices: Exploring technology at work. *Organization studies* 28, 1435–1448.
- Orlikowski, W.J., 2000. Using technology and constituting structures: A practice lens for studying technology in organizations. *Organization science* 11, 404–428.
- Orlikowski, W.J., Gash, D.C., 1994. Technological frames: making sense of information technology in organizations. *ACM Transactions on Information Systems (TOIS)* 12, 174–207.
- Orlikowski, W.J., Scott, S.V., 2008. 10 sociomateriality: challenging the separation of technology, work and organization. *Academy of Management annals* 2, 433–474.
- Pitts, M.G., Browne, G.J., 2007. Improving requirements elicitation: an empirical investigation of procedural prompts. *Information systems journal* 17, 89–110.
- Pitts, M.G., Browne, G.J., 2004. Stopping behavior of systems analysts during information requirements elicitation. *Journal of management information systems* 21, 203–226.
- Pouloudi, N., Currie, W., Whitley, E.A., 2016. Entangled stakeholder roles and perceptions in health information systems: a longitudinal study of the UK NHS N3 network. *Journal of the Association for Information Systems* 17, 107–161.
- Reay, T., Hinings, C.R., 2009. Managing the rivalry of competing institutional logics. *Organization studies* 30, 629–652.
- Rosenkranz, C., Vranešić, H., Holten, R., 2014. Boundary interactions and motors of change in requirements elicitation: A dynamic perspective on knowledge sharing. *Journal of the Association for Information Systems* 15, 2.
- Sahni, S., Sinha, C., 2016. Systematic literature review on narratives in organizations: Research issues and avenues for future research. *Vision* 20, 368–379.
- Sawyer, S., 2001. A market-based perspective on information systems development. *Communications of the ACM* 44, 97–102.
- Sawyer, S., 2000. Packaged software: implications of the differences from custom approaches to software development. *European journal of information systems* 9, 47–58.
- Singh, C., Pekkola, S., 2021. Packaged Enterprise System Customization - A Systematic Literature Review., in: *Proceedings of Hawaii International Conference on System Sciences (HICSS-54). Virtual Conference.*
- Staehr, L., Shanks, G., Seddon, P.B., 2012. An explanatory framework for achieving business benefits from ERP systems. *Journal of the Association for Information Systems* 13, 2.
- Sutcliffe, A., Economou, A., Markis, P., 1999. Tracing requirements errors to problems in the requirements engineering process. *Requirements Engineering* 4, 134–151.
- Thanasankit, T., 2002. Requirements engineering—exploring the influence of power and Thai values. *European Journal of Information Systems* 11, 128–141.
- Urquhart, C., 2012. *Grounded theory for qualitative research: A practical guide.* Sage.
- Venkatesh, V., Morris, M.G., Davis, G.B., Davis, F.D., 2003. User acceptance of information technology: Toward a unified view. *MIS quarterly* 425–478.
- Walsham, G., 1995. Interpretive case studies in IS research: nature and method. *European Journal of information systems* 4, 74–81.
- White, H., 1981. The narrativization of real events. *Critical Inquiry* 7, 793–798.
- Xu, L., Brinkkemper, S., 2007. Concepts of product software. *European journal of information systems* 16, 531–541.
- Ylinen, M., Pekkola, S., 2018. Searching Success in a Successful IS Acquisition, in: *Proceedings of the 51st Hawaii International Conference on System Sciences.*