

Anchoring Tablets in Organizational Practices - a Practice Based Approach to the Digitalization of Board Work

Completed Research Paper

Jenny S. Z. Eriksson Lundström

Dept. of Informatics and Media

Uppsala University

Uppsala, Sweden

jenny.eriksson@im.uu.se

Mats Edenius

Dept. of Informatics and Media

Uppsala University

Uppsala, Sweden

mats.edenius@im.uu.se

Abstract

Drawing on new technologies, decision makers attempt to design and make real visions for the future of organizations and society. Aiming for successful enactment, instead they are often faced with resistance or unintended changes to existing practices and values. This paper addresses this challenge from a practice theory perspective. Taking our departure in the reflexive dualities of practices and constitutive rules, we present and put into action an analytical model to shed light on how IS-enabled organizational change is enabled and sustained via dynamic interplay, inherent relations and performative enactment. The empirical material consists of interviews and observations in a Swedish municipality. The contribution includes an account as to how the enactment and definition of fundamental social relations affect the introduction of digital board packs via tablets to either serve as a catalyst to establish and reproduce new setups and practices in the board room or simply fail.

Keywords: Societal impacts of IS, IT-enabled change, Practice Theory

Introduction

On the verge of a paradigm shift pushed by new technology, decision makers find themselves relying on information and communication technology (ICT)-solutions in trying to design and make real visions for the future of organizations and society. Drawing on ICT/new technologies to ensure beneficial organizational or societal outcomes in line with the intentions of these decisions is another thing. When trying to grasp the underlying structures for success or failure, these seem fragmented, heterogeneous and prone to contradiction. In this pursuit, the logic of technological determinism has been a dominant approach in understanding and investigating the relationship between technology and organizations. Technology is seen as an independent variable and social structure as a dependent one in conjunction with that technologies “embody” social structures. Well planned and well-constructed technology is supposed to produce anticipated outcomes (cf. Perrow 1967). However, the deterministic approach has not exhausted all the possible answers. The information systems literature shows that implementing new technologies in organizational settings is a far cry from anticipated outcomes. Rather the opposite is true. Change in work practices that emerge as the introduction of different technologies is shown to be both unanticipated and goes in different, often undeterminable directions (Robey and Boudreau 1999).

Alternatives to deterministic approaches have been put forward by different prominent thinkers. Heidegger has invited us to regard the world as technologically framed, i.e. that the questions about technology is changed with the answer (as opposed to determined, see for example Feenberg 1999). Furthermore, modern thinkers argue that technology as well as the social both are a cause and effect,

emergent and structuring (cf. Giddens 1984). This view, has been further put into practice by Orlikowski in her works, showing that information technology (IT) and social structures are intertwined (e.g. Orlikowski 2000), further elaborated in contemporary works illuminating that both technology, structures and outcomes arise at the intersection of social and material (Leonardi 2013; Orlikowski and Scott 2008). Hence, it has been well argued that the dynamics of the social and the material that arises when human activities are effectuated, has implications that go beyond the original purposes and become difficult to grasp solely within a deterministic approach (cf. Feldman and Orlikowski 2011). Still, we note that Desouza et al. (2006), Benbasat and Zmud (1999) and Lyytinen (1999) all challenge established social theory for its usefulness from a practitioner perspective. Their argument is that the rigor of the research is dependent on the suitability of the chosen theory for the area of application and not primarily on its general theoretical robustness. In a similar vein, fixing the value of theory as the usefulness of practitioners, Schatzki et al. (2001) emphasize that theory development lies in the hands of the practitioner. Such quite pragmatic approach places emphasis on the usefulness of research as well as the rigor of practice without ignoring that all practices are theory laden. What is needed is to highlight everyday events, individuals, their actions and how this affects practice (cf. Levina and Vaast 2008).

On this basis we shift the discussion about ICT in an organizational setting by not primarily focusing on lawlike claims about generality and determinism given form by intangible ideal factors. Instead we posit that practice theory (or social practices) with its focus on dynamics, inherent relations and performative enactment can offer a powerful analytical framework to investigate the daily use and adaptation of information technologies.

In the contemporary discussion practices have taken a prominent role with its own epithet “the practice turn” (Schatzki et al 2001). However, practice theory has during the last decades served as an umbrella for different approaches. From the literature we find a consensus on practice as embodied organized human activities, recurrent, and that the nexus of practices are mediated by entities such as humans and artifacts (Vaast and Walsham 2005; Schatzki 2005; Reckwitz 2002; Knorr Cetina 2001; Bourdieu 1990).

Nevertheless, there is an ongoing and vigorous discussion about the nature of the embodiment and the entities that mediate activity, and whether these entities are relevant to practice besides serving as mere intermediaries among humans (see Leonardi et al 2012; Schatzki et al 2001).

The “practice turn” has been applied to different concepts as for example knowledge (Orlikowski 2002), change (Schatzki 2005) and strategies (Vaara and Whittington 2012), but the focus of enquiry has also been directed to how practices emerge through information technology and how these practices are related to organization change (eg. Vaast and Wahlsham 2005, Newell, 2005). We agree with Vaast and Wahlsham (2005 p. 66) when they notice that the literature has not yet examined, at the micro level, what makes agents transform the way they work within a new IT-environment, generating new practices and how these changes may be shared among members of the same group consequently interfering with imminent challenges, such as the adoption of potentially beneficial technology in organizational routines and institutionalized practices (Leonardi 2011).

Moreover, Giddens’ theory of structuration is indeed still an important source of inspiration within this discussion. However, by placing emphasis on the dynamic interplay between the social and the material Orlikowski and others distance themselves from Giddens with a critique of the duality of structure for technology. They argue for approaches that open up the “black-box of IT” by, for example, stressing that the actions that constitute technology often are separated in time and space from the actions that are constituted by the technology (Ibid 1992 p.12). It is within this way of thinking Sewell (1992) reorganize and redefines Giddens, by arguing that theory of change cannot be built into a theory of structure unless we adopt a far more multiple, contingent, and fragmented conception of society of structure and that we should focus on ordinary operations of structures that can generate transformations (1992 p. 16). We sympathize with Sewell’s thoughts about how structuration theory can be reorganized and extended, not only for furthering the understanding of what change in practice involves, but also deepen our knowledge of how practices are sustained and reproduced in different organizational environments.

This line of inquiry is part of a larger study with the overall aim to take part in the contemporary discourse about knowledge and understanding of change in social practices. The theoretical approach of our inquiry is inspired by Swidler (2001) who argues that the culture of an organization, may be studied via close observation of its discourses and practices in either the intricate practices of a micro level (cf. Knorr

Cetina and Cicourel 1981) or at the symbolic and ritual practices of the macro level of an organization (cf. Geertz 1973).

In our study, a decision was taken in a Swedish Municipal Board to increase the possibilities for innovative business development and effect repatriation in the publicly owned corporations by the use of ICT-solutions. In addition, the decision maker hoped to reduce the cost to produce wise decisions. At the site of our study, the board of the publicly owned housing corporation (below the board), the decision is manifested as mandatory digitalization of board packs and memoranda.

In the following section, we introduce an analytical template and framework for our inquiry. A practice theory approach to technology-induced changes in the board work setting. Thus, our study draws on the stance that an intricate bundle of practices lie behind the scene of every aspect of social causation. Some of which are more central, more controlling, more anchored than others.

We provide an outline to the methodology of the study, and the empirical materials that illustrate our study are presented. Our analytical model is introduced together with a discussion and analysis. The results show how the model could be used to understanding the underpinnings of resilience (or lack thereof) of a particular IS-initiative. Finally, the implications are discussed in the concluding remarks.

Legitimizing Decision Making in Board Work – an Analytical Template

Relevant for our inquiry, in the discourse of board meetings we may distinguish several routines that together form three different, but interrelated roles: First, the board members monitor executives; second, the board is responsible to define, create and implement a corporate strategic plan; third, the board members represent the company and legitimize the business to its environment (see Ruigrok et al 2006). These different roles have been in focus for different studies in the field with emphasis on the board meeting's monitoring and strategic role (Ruigrok et al 2006; McNulty and Pettigrew 1999). Within this conventional approach to board work, the analysis provides a meta-level perspective on e.g. the role of executive directors in the meetings, gender equality, etc. (cf. Hill 1995).

However, by investigating board work as the discourse in which the routines happen, we find a semiotic system of interrelated meanings that constitutes structures and cultural practices. In other words, for our empirical setting, the board of a large housing company, with their activities, e.g. reading, writing motions, participating in meetings etc., the board members partake in and relate to both the social collective that "constructs" the board, and partake in and relate to the social structuring of the board as part of the organizational structures/practices of this particular organization.

In this continuous interplay, the structures of the material employed as means for enacting board work activities are merely come to being by being imprinted by cultural schemas, and thus thanks to these schemas, the observable discourse and practices are reproduced. Conversely, the reproduction of discourse and practices caters for the robustness of the cultural schema.

Structures are made up by both schemas and resources (Sewell 1992). However, what makes continuity of structures possible is not to be regarded as a closed system. Rather the opposite. Structure is dynamic, because it is a continually evolving outcome of processes of social interaction and resourceful agencies and, moreover as Swidler (2001 p. 79) stresses "...structures are multiple and intersecting, because schemas can be generalized to new situations and can sometimes generate unpredictable resource outcomes, and most importantly because the schemas implicit in arrays of resources can be "read" in multiple and sometimes competing way".

As argued by Swidler (2001 p. 82), the key to the reproduction of routines as social practices may be derived from what people perceive as strategic in a world that presume the rules underlying the patterns. In this way a practice itself may be an anchor for reproducing the rule it enacts (cf. Armstrong in Swidler p. 83), i.e. the existence of which logically depends on the rule, for example, how to play chess or conduct a marriage ceremony (cf. Searle 1969). In our empirical setting, an example would be for a regular participant of the board meetings to adapt the own behavior in a way that ensures that the board itself is preserved. Furthermore, this practice may be localized and firmly reproduced to fit the dominating

cultural schema to the point that a revision of routines (for more rational ones) is not possible. Or at least to the extent that it organizes or constrains other schemas. This may be illustrated by the following examples of impact of the cultural schemas and practices on the way the board members of HC (below the board members) adapt or rather (refrain from adapting) their activities to the new material resources, while they still have to fulfil the same role and responsibilities during the board meeting.

Observation: Board members and some official representatives of HC attend the board meetings. During board meetings, only the board members sit at the table. The official representatives sit on chairs that are placed in the low corner of the board room. No tables are available. The use of paper based boards packs is well supported by this arrangement, but in order to use the digital board pack and take notes with the tablet (or pen and paper), support for the tablets is needed. For the purpose of effectively taking part in the meeting, the available surfaces seem not sufficient. Despite there being available seats at the table, none of the official representatives moves to the table. Instead the official representatives use the window sill, available chairs and the floor as support for their tablets.

For theorizing this empirical setting the notion of constitutive rules as a manifestation of the above described cultural (virtual schemas) becomes key. In our case a constitutive rule may be the following legal statute (but not necessarily restricted to such formal rules):

“all members of a board needs to be well informed before the board makes its decision.” (The Swedish Companies Act 8:17).

This constitutive rule, in turn affects (forms/constrains) social practices via ongoing dynamics, inherent relations and performative enactment giving rise to an “anchoredness” of practices. Simply, this may be illustrated by the following statement of one of our respondents:

“we can never put ourselves in the position in which one of the board members hasn’t gotten enough information so that a decision cannot be taken. Formally it is the case that such a decision can be challenged and nullified, and thus the decision needs to be readdressed. According to the Swedish corporate law all members of a board needs to be well informed before the board makes its decision.” CM p. 4

So if we want to know what anchors (social) practices, or how it comes that some practices are firmly anchored, in different cultural acts we have to shed light on social processes (Sewell 1992). Suggested by Swidler (2001), a practice is more resilient when many interconnected practices embody the same schema. Also, the interactional nature of the routines stems from the need to engage others, and consequently results in reproduction of common structures. The anchoring practices are enactments of constitutive rules that lend power to the practice to structure the basic social relationship of the discourse in question and the activities that take place within it. A public enactment of the constitutive rule via the anchoring practice strengthens the dual relationship.

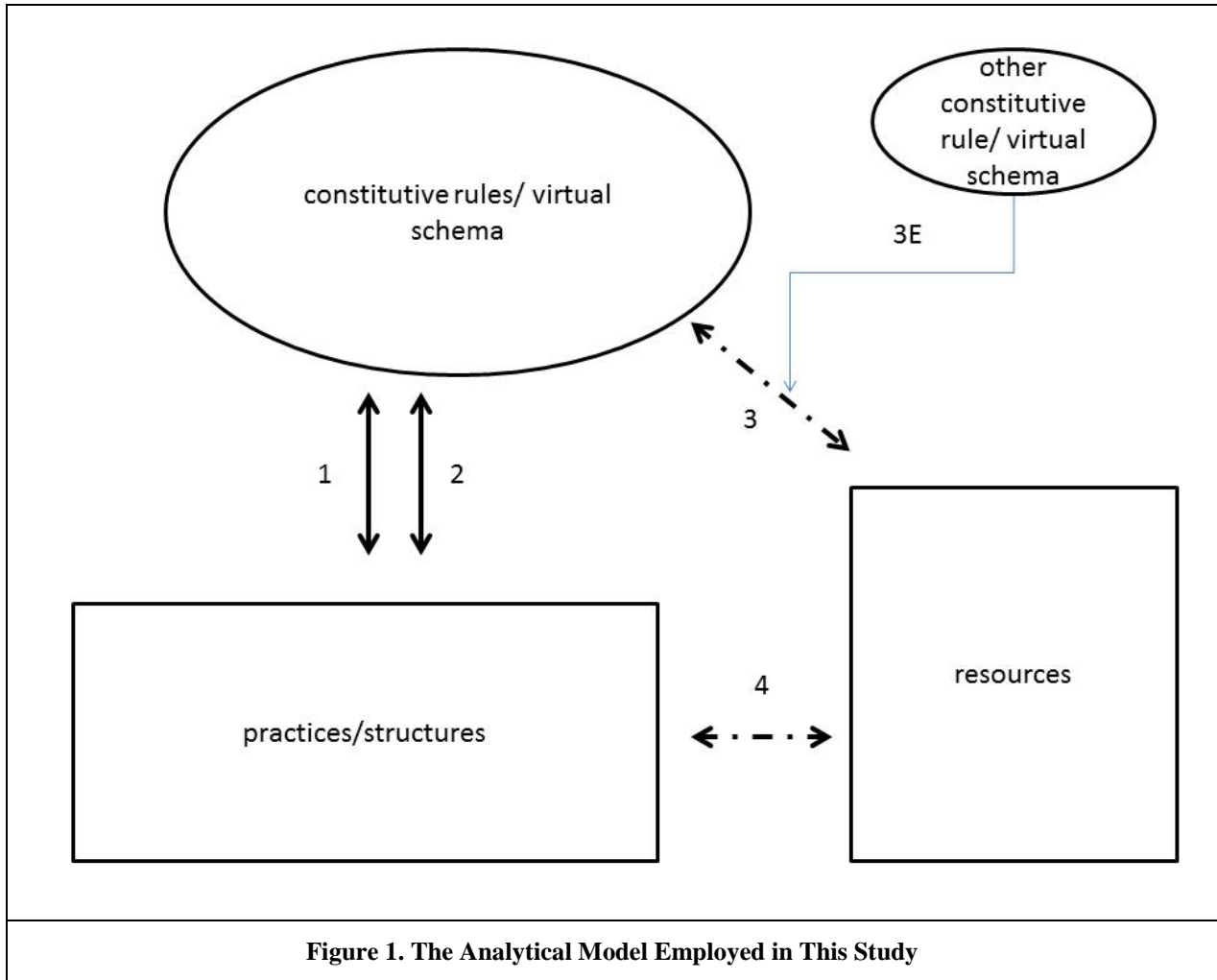
We take our departure in the reflexive dualities of practices and constitutive rules for investigating the introduction of new resource, a tablet, to our empirical setting. However, to complete this tentative analytical template we need to add the concept of resources in relation to dynamics, inherent relations and performative enactment. We agree with the observation of Orlikowski (1992), that resources are not solely black-box entities as they, when enacted, hold transformative capacity (Sewell 1992) – and hence, they hold some agency of its own (cf. Leonardi 2011).

Moreover, we follow the transformational focus put forth by Sewell (1992) who argues that structures can be seen as composed simultaneously of virtual schemas and of resources. The schema is what makes resources meaningful as a resource. The resources are here and now, they are to be seen as actual. Resources can be human or non-human (Sewell 1992), like objects (or other material entities like hardware and software (Leonardi 2011) or emotional commitments. Hence, also schemas are by definition capable to be exchanged, switched or transferred to other environments. Consequently, this means that cultural schemas are never entirely predictable. A comment, for example, that is found to be very funny in one context is never guaranteed to be received as funny in another etc., which means that schemas will work differently when they are put into practice and therefore will potentially be subject to modification. This is as Sewell (Ibid) has highlighted an important conclusion because it both recognizes the agency of social actors and builds in the ever present possibility of change into the concept of structure, still with a potential for reflexive capacity. Together with the affordance and constraints of resources, their actions

give rise to ways of enactment of cultural schemas as reproductions or transformations of organizational practices.

We have schemas, dominating schemas manifested in constitutive rules and...”practices as simultaneously material and enacted, but also patterned and meaningful, both because they enact schemes and because they may be read for the transposable schemas they contain” Swidler p 79.

With this background we describe the following preliminary model of the ongoing dynamics, inherent relations and performative enactment that constitute the reflexive dualities of constitutive rules and practices, the reflexive duality of practices and resources as well as constitutive rules and resources (see Figure 1):



We see the following continuous interactions: 1) The constitutive rule/virtual schema gives meaning to the practice, and thus, it legitimizes, constrains and shapes the practice. 2) The practices instantiate the constitutive rule, and by this instantiation or enactment, the practice provides legitimacy to the constitutive rule in the particular site. 3) The constitutive rule sanctions/legitimizes the resource and provides it with an interpretation/meaning as well as a scope for this legitimate use in the particular setting. Resources in turn, enable new interpretations of the constitutive rule. In this way the resource aids the interpretation of the constitutive rule as to whether it can give legitimacy to a practice. 4) The resource partakes in the particular enactment of the practice. In the same time the enactment of the practice affects and constrains the use and usefulness of the resource. As stated above, at the core of our model, in line with Swidler (2001), these dualities are ongoing, continuously reproducing and reenacting or being overridden in the particular setting.

What does this mean for bringing in emerging technologies in organizations? Bringing in a new resource in the form of a tablet into the board meeting it sets in motion interplay with the constitutive rules of what a board meeting is by its members by their saying and doing, which in turn anchoring different constitutive rules and making them resilient. However, what is at stake is how different specific practices seem to maintain the constitutive rules in some directions, at the same time excluding others, and in other situations promoting earlier excluded ones or inaugurating new. Furthermore, such analysis might shed light on the potential loss of the capacity of different technologies potential in different contexts.

Method

The presentation at hand may be viewed as a conceptual inquiry, readily lending itself as philosophical exercise. However, as stated by Sewell (1992) – even though activity only can be understood as composed by virtual schemas (i.e. culture and social structures), the extent to which these are brought into being can only be understood when enacted for a resource. This directs our ambition to study practices via close observations in a micro-level setting. For this reason, a single in-depth case study was adopted to obtain rich and naturalistic data. The case study methodology is frequently criticised for being dependent on a single case, which renders it incapable of providing a generalising conclusion. However, Yin (2009) had extended and complemented this argument by proposing that there is a difference between analytical generalisation and statistical generalisation. In analytical generalisation, previously developed theory (in this paper theory developed by Sewell, Swidler, Giddens etc.) is used as a template to compare empirical results of the case study (Yin, 2009, p.15). Moreover, our approach is also suitable, given the explorative character of the study and our intent to illuminate the practices at work.

Empirical setting

The municipality of Stockholm is one of the largest municipalities in Sweden. In 2007 as part of the Vision 2030 - a World-Class City of the municipality and its IT-program for digital renewal and green-IT the city council decided to take a strategic stance towards IT as means of its overall business development. The strategic decision state that IT should be seen as a tool in the daily work of the municipality. Over the next few years, the city committees and boards should digitalize board packs and memoranda. For implementation the choice of material arrangement was set on tablets. The particular brand of tablet was made based on existing procurement contracts, and hence, the choice of hardware and particular software was already pre-made. An introduction on how to use the tablet and software was given to the board members. Largely, no additional instructions on how the implementation was to be executed accompanied the tablets.

Housing Corporation in Sweden (HC), is one of the municipality's publicly owned housing corporations. It was established 1937. It services one of the largest municipalities in Sweden with publicly owned housing. In 2014, 49000 tenants were living in flats provided and serviced by HC. The tenants are of heterogeneous economic and social backgrounds. HC has 300 employees and a yearly overturn of 1,9 billion SEK. The board consists of seven regular members and seven deputy members, who all politically appointed and represent their political parties. The political governance of the municipality reflects the governance of the board. Usually, the board members are very experienced in board work, as being appointed to this board is considered an important and prestigious political assignment. In addition, three official representatives are elected into the board.

The main manifestations of the board work are the meetings and the preparations of the meetings. The meeting is prepared by the CEO in close connection with the chairman. The meeting agenda, which includes details of the date, time, venue and agenda items, and a board pack, containing minutes from the previous meeting, reports, proposals and the necessary documents that are needed for the discussion at the meeting, are organized and sent out from the secretary of the CEO. Traditionally, at a set date the secretary collects the material and arranges it in a chronological order according to the agenda items. Then she sends out the board pack, traditionally via messenger service. The meeting takes place in the conference room of HC. The room is well equipped with quality Swedish furniture, technological artefacts such as projectors, loudspeakers and fans to support the meeting. An oval meeting table seats the board members, with the chairman at the high end of the table. The CEO is seated next to the chairman. The

official representatives are seated in a separate row of chairs at the opposite end of the room. As no table is available, they are positioning their paper and tablets on their lap. During the meeting the chairman chairs the meeting according to the agenda and assigns the word to the members of the board as they request it. Objections and comments are added. For certain issues on the agenda an official, the CEO or specially invited speakers give presentations to the board.

Data Collection

In order to understand how the strategic decision was implemented and its consequences for the board work, we conducted long standing observations in the board. To ensure trust in the board we choose to conduct overt observations (cf. e.g. Creswell 2012; Adler and Adler 1994). To mitigate any effect the researcher had to the board members, triangulation with practitioner-researcher observation by one of the board members was also employed. In this way changes in the activities could be interpreted with more confidence. The doings of the board were the focus of this study, but in order to gain a deeper understanding of the routines, observations were complemented with in situ interviews with the full board of HC. The regular members of the board are four male and three females and three official representatives, two females and one male. In addition, the board has seven deputy members, six males and one female. The ages of the full board range from 25 to 70, with a median age of 57 and an average age of 54. Regardless of role in the board, the members all are experienced computer users in the sense that they are using or have been using computers for work and for political assignments on a daily basis. Their earlier experiences of tablets were very varying, ranging from no previous experience to having incorporated a tablet into their everyday doings in leisure and work (i.e. both for the board activities as well as other work assignments unrelated to the board work).

In Table 1 the methods for collecting the empirical material are presented. The empirical material is collected during the period 2012-2014.

Method	Description
Observation	3 years of Practitioner-Researcher participation in board meetings as a board member prior to the introduction of the tablets, participant in the education on the tablets, and ongoing
	2 hours of Complete-Observer participation at a board meeting approximately 12 months after the introduction of the tablets
Interviews	15 semi-structured interviews of 30-100 minutes with 15 respondents. The respondents consist of all regular board members and officials of the public housing corporation

The interviews ranged from 30 to 100 minutes. Each interview was digitally recorded and later transcribed verbatim. In addition, notes were taken throughout each interview. The interview questions were used as a guide for the conversation, rather than as a strict question-and-answer tool. In this way, the interviewers were able to structure the conversation in a way that obtained the most relevant information about how the respondent's perceived the introduction of tablets. During the interview with the various representatives, the discussions were substantially richer in content than the following texts and summary depict.

Parallel with the empirical fieldwork we also started to conduct a thematic analysis (cf. Taylor and Bogdan 1998). Inspired by the technique of grounded theory (Strauss and Corbin 1998; Glaser and Straus 1999) we conducted an iterative textual analysis of the interviews transcripts and field notes. This process was

proceeded by multiple readings and coding of the empirical material. Different data were identified and put into different sub-themes of classified patterns in line with Conostas' (1992) note that the interpretative approach should be considered as a "distinct point of origination" related to our theoretical framework.

Hence, the study is inspired by this way of regarding generalisation and it is centred on a more intuitive, empirically grounded generalisation that sees a harmonious relationship between the reader's experiences and the case study itself (Stake 1995). From such a standpoint, a case study is both the process of learning about the case and the product of our learning. The intention of our case study has not primarily been to solve the problem at stake, but to work with the situation that presents itself in each case, to clarify and gain a better understanding (cf. Stake 1995; Hanson 1958).

Result

From the vision statement of the municipal board, we find that the goal of digitalisation of board packs and memoranda was to enable monitoring of quality and facilitating to make wise decisions, while reducing the cost to produce decision making.

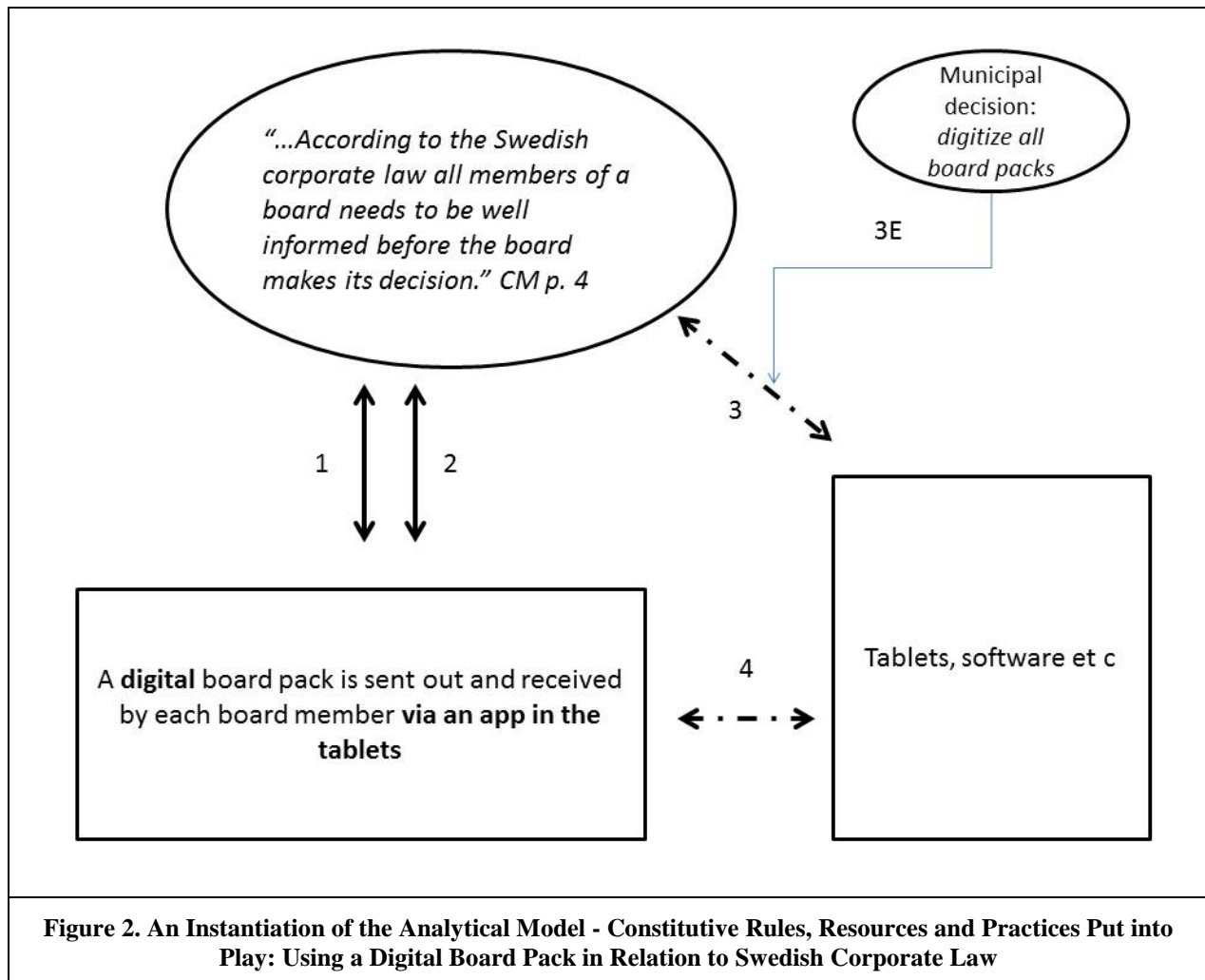
Several of the board members express very positive beliefs on the tablets and what it will be able to accomplish for their board work activities. The results also indicate an ambiguity in what the tablet is and how to relate to it in the first place. Despite actual previous experience of malfunctioning and flawed software that made the activities difficult to accomplish in the same domain, some board members are still hopeful that they will be able to get improvements. Several respondents draw on analogies to beneficial use of tablets in other domains to express and make sense of the tablet. Often referral is made to perceived benefits of other experienced users. A focus on ease of use of the tablets concerning weight, availability etc. is in the foreground and the green initiative is mentioned explicitly although more peripheral. In a couple of other cases the analogy is made to other domains of use e.g. the use of tablets for learning in pre-schools, to justify why this policy-based decision is beneficial despite the high initial cost of providing tablets to the board.

The strategic vision is part of the norms of the organization, which manifest themselves as part of the organizational structure and thus exercise an impact on the "willingness" of the collective to implement the policy-based decision in the routines and activities of the board, as well as impact on the board members of the board as a social collective. Norms such as legal prerequisites for the board, as well as expectations from society and organizational structures are expressed as important to the board members. The observation is not surprising as this alignment to patterns of the societal and organizational structures are directly translatable to the legitimacy of the board work as well as the role of representative of their political party and thus political beliefs (see Figure 2).

This social interaction constitutes meaning among the board members, give transformation capacity (power to act) and the capacity is guided by the applications of norms (cf. Giddens 1984). Based on this normative influences following examples of snapshots of the resulting continuous interactions could be recognized (See Figure 2, relations 1-4):

1) A constitutive rule/virtual schema in our case concerns the right of each board member to be well informed before the board makes a decision. It directly follows as a rule from Swedish corporate law (see The Swedish Companies Act ABL 8:17). Formed and legitimized by the ongoing activities of the board members, this constitutive rule gives meaning to the practice of providing each board member with the board pack as it is interpreted to contain the necessary information.

Moreover, via the current way of carrying out the activities in the boards of the municipality it is anchored in the norms of the organization as well as perceived as important by the respondents, both for the micro level setting and for maintaining organization (see the statement of respondent CM p 4 presented above on page 4).



As a new rule to consider it is now ruled by the municipal board the board packs are to be digitized (see the Vision 2030 - a World-Class City of the municipality and its IT-program for digital renewal and green-IT, 2007).

“the top management said that now we want to try to digitalize the information and thus we are now to use tablets. Fine, the board said. We Swedes never question a new technology. We take it as it comes.” DD p. 16

2) The board members acceptance to use of the digital board packs instantiate another constitutive rule that emanates from the Municipal decision, and by this instantiation or enactment, the practice continues to provide legitimacy to the constitutive rule of keeping each board member to be well informed before a particular meeting.

3) The embodied new constitutive rule sanctions/legitimizes the sending out of a digital board pack (the manifestation of a modified practice) and thus the resource, i.e. the tablet by which the board pack is made available. It provides the tablet with a first outline of interpretation/meaning as well as a scope for its legitimate use during the board meeting.

By the continuous interplay between the tablet and the existing ways of working practices are continuously enacted, reinterpreted or even made obsolete. Hence, the practices of the board are modified to allow for alteration of the practices to include the tablet in the board work activities.

As an additional example of a reinterpretation, due to the previous experiences of use and concerns of barriers of using the tablets for the board members, as well as the impact of the first constitutive rule regarding information availability, the chairman constrains the impact of new constitutive rule on the practices of the board, thus allowing for the board pack to be presented in both digital and paper form.

“...then there is [a decision or an idea to stop sending out paper]. There's the idea but we may, well, those who want paper will receive the paper pack.” CK p 13

Regardless, the tablet enables new legal interpretations of the first constitutive rule regarding the format (digital) and ways of enacting the constitutive rule concerning information availability (that before the decision in the municipal board would not have been possible). In this way the tablet aids the interpretation of the constitutive rule as to whether it can give legitimacy to a particular practice, e.g. when a certain piece of information is to be made available to the board members.

“After all, we do this for, among other things, for us to stop sending out paper ... now we have a point in my calendar called “Board mailings”. By then everything must be signed and then my secretary assembles the board pack and then copy... But of course the advantage of this is that one can in the moment that the Chairman has issued a case and I have approved it, she can make it available.” JM p. 4

4) The tablet partakes in enabling the particular enactment of the practice. This opens for new practices and new interpretations of the constitutive rules. As an example: If a board pack is sent out and then a modified board pack is sent out in paper form, which is the correct board pack? In the same time the enactment of the practice affects and constrains the use and usefulness of the tablet.

Observation: During the presentation the tablets are placed on the table, or kept passively in the laps of the board members. Their focus is with the presenter or at the screen. This is to be compared to the paper versions of the presentation. Two board members have the presentation available in paper form. They use the papers very actively, turning pages with emphasis and interchangeably looks on the presenter, the screen and the papers. Almost as if the use of the digital version of the presentation (color) is off-limits for use while the presenter speaks.

We also note that despite the tablets given to the board members are all alike, there are two distinct opinions expressed regarding the mobility of the tablet. The first one is that its main contribution is that it is lightweight, easy to bring along and readily available.

“The tablet simplifies emailing. It is so much easier to switch sites and to see what has happened. You are continuously updated.” BL p. 12

The other main opinion is the opposite, the tablet is perceived as clumsy, and heavy compared to the expectations.

“It is somewhat heavy. It is heavier than I had expected, but it is manageable. BI p.9”

It suggests that it is not simply the a priori affordances or constraints of resources that forms and maintains new practices (cf. Orlikowski 1992). Regardless if one ascribes to the belief that we can find the deep structure from which every practice emanates or not we can ask why some beliefs are more firmly anchored and thus result in activities that lead to different outcomes. Do they emanate from a larger set of consistent beliefs or experiences?

Anchoring Tablets in the Cultural Practices of Board Work

Above we posed the question, what happens if we regard practices as simultaneously material and enacted, but also patterned and meaningful.

From our empirical material we see that one respondent remarks that it lies in the Swedish culture to have a technology positive attitude, which may be an explanation to the willingness to adopt the policy based decision

Despite that most respondents indicate that society has provided positive influence on how they perceive the tablets, one respondent shares an illustrative example of the precedence of micro-level social relationships over material advantages and cultural beliefs on material relationships. It comes from the implementation of the policy-based decision in another part of the organization that resulted in a negative impact on using the tablet:

"It was almost as if you gave the impression that you were not prepared for the meeting if you didn't bring the paper pack as well. You looked as if you only had your tablet and everyone else had the paper pack which made you look as you weren't properly prepared." JJ p. 5

Perhaps the beliefs by the members are more persistent and more likely to structure other domains of thoughts (perceptions) when they constitute social relationships than for example material relationships? Such social relationships are posited to exist on a micro-level as the above macro-level rules of Swedish identity and the strategic decision of the municipal board are not enough to change the above board that JJ takes part in.

This opens up for further questions not only how practices are sustained by difference in depth and impact, but also reproduced (otherwise they could neither be regarded as recurrent sustainable activity). Hence, by affirming this slightly different point of departure, or rather perspective, where we study both how practices are sustained, but also potentially obsolete and faded out. Let us illustrate some possible outcomes how this strategy can work put in practice by setting up the three tentative hypotheses of Swidler (2001 p. 86f):

1. *We may posit that practices that enact constitutive rules that define fundamental social entities, are likely to be central - anchoring whole larger domain of practice and discourses.*

The empirical material indicates that there is an expectation from some board members that the transition to digital board packs needs to be slow and may pose a challenge to the board members, and, hence, the change is done gradually.

"Well, we cannot stop with paper at once but we will gradually phase out the paperwork" CM p. 4

In addition the empirical material indicates that the members of the board seem to sport an attitude that is very allowing and supportive. The results indicate that some board members have taken the role to ensure that this attitude is manifested and reproduced during meetings:

"in particular X who do not mind to say that I understand nothing, and it's very good because then there is no need. Yes, then all can say yes, I do not understand either. It will be very nice." JM p. 9"

Clearly, this feeling of empowerment via the collectively expressed cultural attitude and the not-knowing is viewed as important for the working climate of the group.

However, more far-reaching for the constitutive rule of legitimized board work, despite this positive climate, few of the respondents state that they feel confident with using the tablet after the introductory training. Almost all respondents express that on behalf of the group they were satisfied with the training process, as most see a need for others to get training at the given level. However, both newcomers to the tablets and experienced tablet users indicate that the training was not spot-on for their needs. We observe that from the empirical material no requests for extra training have been voiced in the board.

Conclusively, despite the positive attitude towards the policy-based decision and the tablets, the lack of alignment between the functionality of the tablets and software and the activities of the board, i.e. the requirements from the organization on the functionality of the tablets, may have resulted in actions with impact on the board member's ability to carry out their responsibilities. As a consequence also the

functioning of the organization has been impacted in a non-intended way (cf. the vision statement of the municipal board).

"Yes, it was decided and it came to both the e-readers, or tablets, and then also our phones that they have chosen that. And so, yes. You could think about, but there is no question that I have had any influence on but it's just. I can say, for me it's a shortcoming that we will still end up in. If I really should be working on something or write something, it's clear that I do not use the tablets. Because it's impossible to write on it. I mean if I'm going to write. I can answer emails and such, but if I must write something longer emails or documents, it is clear that I do not use it. JM p. 5

- 2. We may posit that practices may be more firmly anchored when they are at the center of antagonistic social relationships.*

From the empirical material we find that three respondents voice some more negative or ambiguous beliefs. As an example one respondent indicate that the new phones aren't always more easy to browse and manage.

"And it is so easy when you have paper, I think it is that you've got an overview. It's just to take the example of all those who have smartphones and whatever it is called when they are to use their calendar functions. I mean you have got to always sit and wait for them. MS p. 4"

Interestingly enough the same respondent is also the one who expresses to have given thought to how to avoid using the tablet.

But it is of course possible to export then to one's own email and then print it from your computer. So it is always possible to do it like this... and that's what I've decided. I think it's nice to have as little paper as possible and so. And then it's a matter of habit. MS p.4

- 3. We may posit that the establishment of new social practices appears not so much to require the time or repetition that habits require, but rather the visible, public enactment of new patterns so that 'everyone can see' that everyone else has seen that things have changed.*

Observation: *"One of the board members apologizes for not bringing the tablet. The reason being that 'I didn't bring the tablet, because I have been traveling'." Meeting E*

Observation: *"Everyone brought their tablets. The first thing that happened was that the chairman acted upon the paper version of the agenda, which was different from the digital version." Meeting D*

The members of the board express an attitude towards each other that is very allowing and supportive. The empirical material indicates that some board members have taken the role to ensure that this attitude is manifested and reproduced during meetings:

"Well, we have a very nice board and a good atmosphere and then of course when everyone got their new tablets so it was even. Then everyone is happy, if you understand. So it is as well, so nice and stuff. There's very little prestige, people say happily that I understand nothing and how should I do this. It contributes to a good atmosphere, I think, and will surely do so in the future... in particular X who really love to say that I understand nothing, and it's very good because then no need. Yes, then you can all say yes, I do not understand either. It will be very nice." JM p.9

Another illustrative example, already mentioned, of this preposition shows that this public enactment can also be used to manifest refraining from adopting new patterns:

"It was almost as if you gave the impression that you were not prepared for the meeting if 'bring the paper pack as well. You looked as if you only had your tablet and everyone else had the paper pack which made you look as you weren't properly prepared." JJ p. 5

The above example lends itself well to asking ourselves the question what makes a resource appropriated for the practices? According to the continuous interactions of our model, in this case (see Figure 3a), the practice of reading from the tablet no longer gains legitimacy from the constitutive rules that anchor the social relations in this board (Figure 3 a relations 1 and 2). Despite that the strategic decision of the municipal board stipulates a mandatory use of digital board packs (and in other settings such as the board of HC is enacted as a constitutive rule). Instead other, overriding constitutive rules e.g. regarding polite friendliness are given precedence (see Figure 3a the bold oval “politeness”) and reproduces the previously used practices of using paper board packs in the board meetings. As indicated in the empirical material the choice of paper as the (only) legitimate choice of board pack (i.e. only acceptable resource, see Figure 3a the bold square “paper”) has a visible public enactment (see Figure 3a criterion c) as all board members had the paper pack at the board meetings. Clearly in this particular board the choice of resource for the board pack had become the center of an antagonistic social relationship (see Figure 3a criterion b), which may be explained as fundamental for defining this particular board (see Figure 3a criterion a). Thus, the interrelations 1, 2, that enact the constitutive rule of digitizing board packs via new practices that in turn legitimizes the municipal board decision as a constitutive rule affecting the board work practices, relation 3 that legitimizes the mandatory municipal board decision via tablets, and relation 4 that reforms practices and legitimizes the use of a digital board pack are overridden by the relations 1a, 2a, 3a and 4a. On this note, Swidler (2001 p. 88) remarks: “Thus the norm of polite friendliness is reproduced by the very real fear that conflict in a group can destroy the voluntary participation upon which it depends”.

However, from our original board of HC we can also recognize a more positive tone towards tablets. The interrelations are simulated in Figure 3b:

“I thought that it was an excellent idea. ... I had seen people. Actually, I was on the verge to buy one myself, because I have seen my children use these. It is an incredibly good invention. But before I got to purchasing one it was announced that all in the board was to get a tablet.” DD p.3

“Well, I was more curious as to how it would be to use it as I saw these possibilities from how X [one of the other board members] uses the tablet. So I thought that this will be exciting...” BL p. 6

“It has simplified, above all for those that already use, that have already used the tablet at the board meeting. Both the CEO and several of the board members... Primarily as they do not have to keep the high piles of paper in front of them and browse in. Instead of going through a bunch of papers, with a couple of clicks you at once get what it is about. CM p. 18”

Observation: *At meeting E all board members are bringing their tablets to the meeting. Meeting E*

In this way it could be argued that the resources also seem to be ascribed some agency (see Orlikowski 1992, Leonardi 2011), as they are given a scope and legitimacy from the constitutive rules, as well as provide the constitutive rules with sources for meaning in enacted practices. However, important to our approach, it is via the ongoing dynamics, inherent relations and performative enactment in the local setting, the resources are given a scope and legitimacy from the constitutive rules, as well as provide the constitutive rules with sources for meaning in enacted practices.

From the empirical material we also recognize practices that may result in establishing new practices and reproducing them into new structures.::

“ If the board has a tablet and you work in an tablet so it also means that it is okay that I am introducing it elsewhere in the company. So I can see eventually that all my service technicians should have one, And then it's so... Yes, I have learned from a wise colleague here in Stockholm city that is that you must always ensure that the board gets it first, then you can have it in the organization... It is a way to implement something in the organization. If the board has it they will think that this is of course a great instrument...Because then they know how good it is and how it... So, first, that it is positive for the board work, but also to then be able to implement it in other parts of HC.” JM p. 10

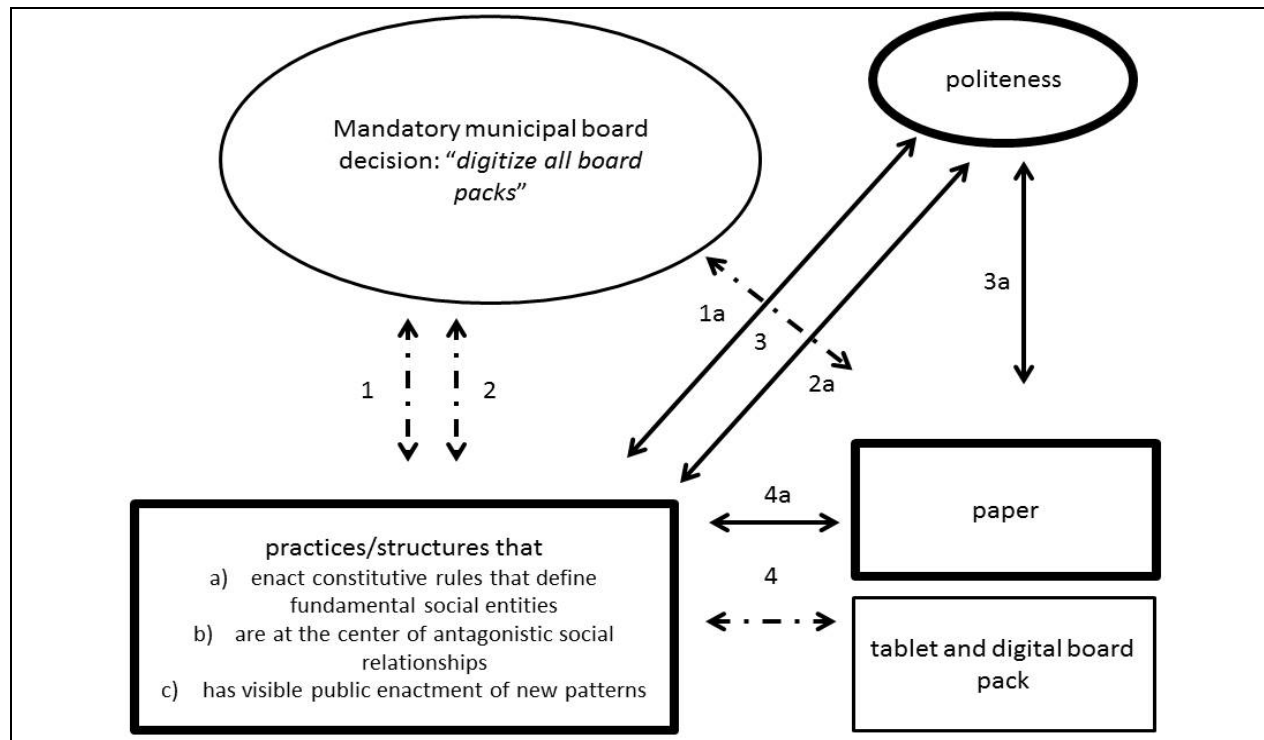


Figure 3a. Preserving the Old Ways -The Case of Practices that Enacts the Definition of a Fundamental Social Entity Override the Mandatory Municipal Board Decision and Causes Paper to be the Only Acceptable Resource for Enacting Practices Related to Reading from the Board Pack during Board Meetings

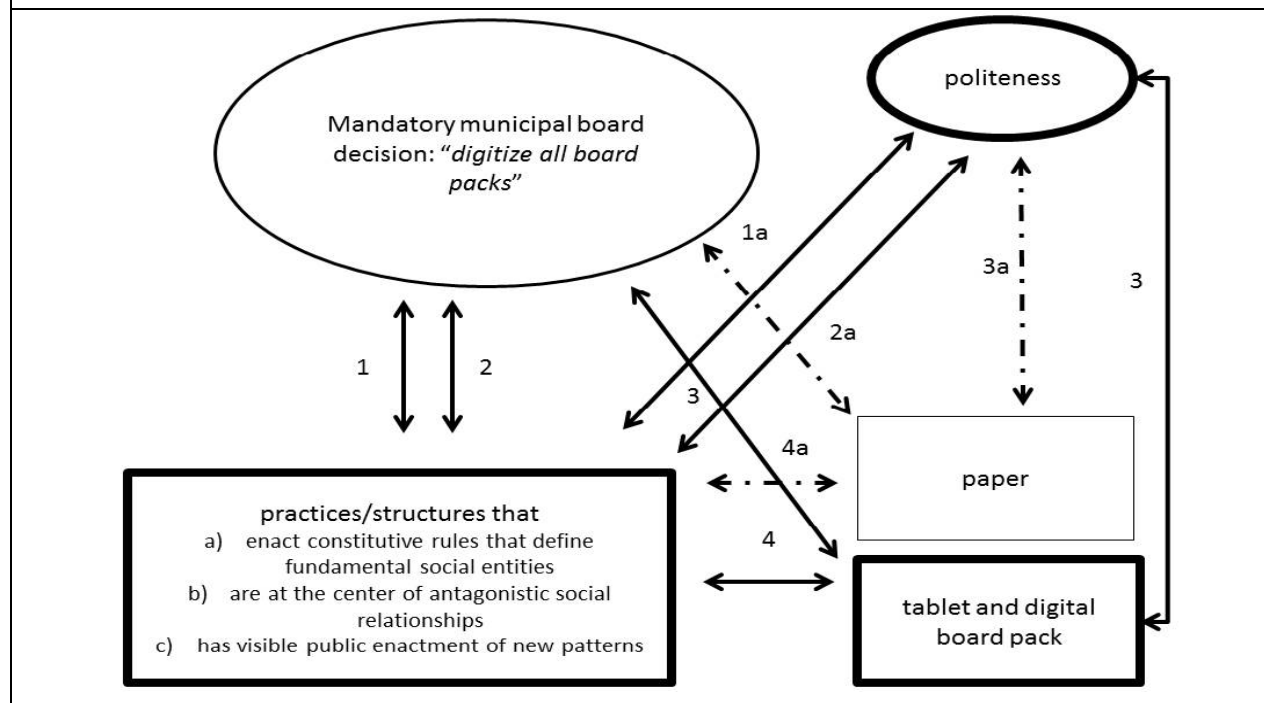
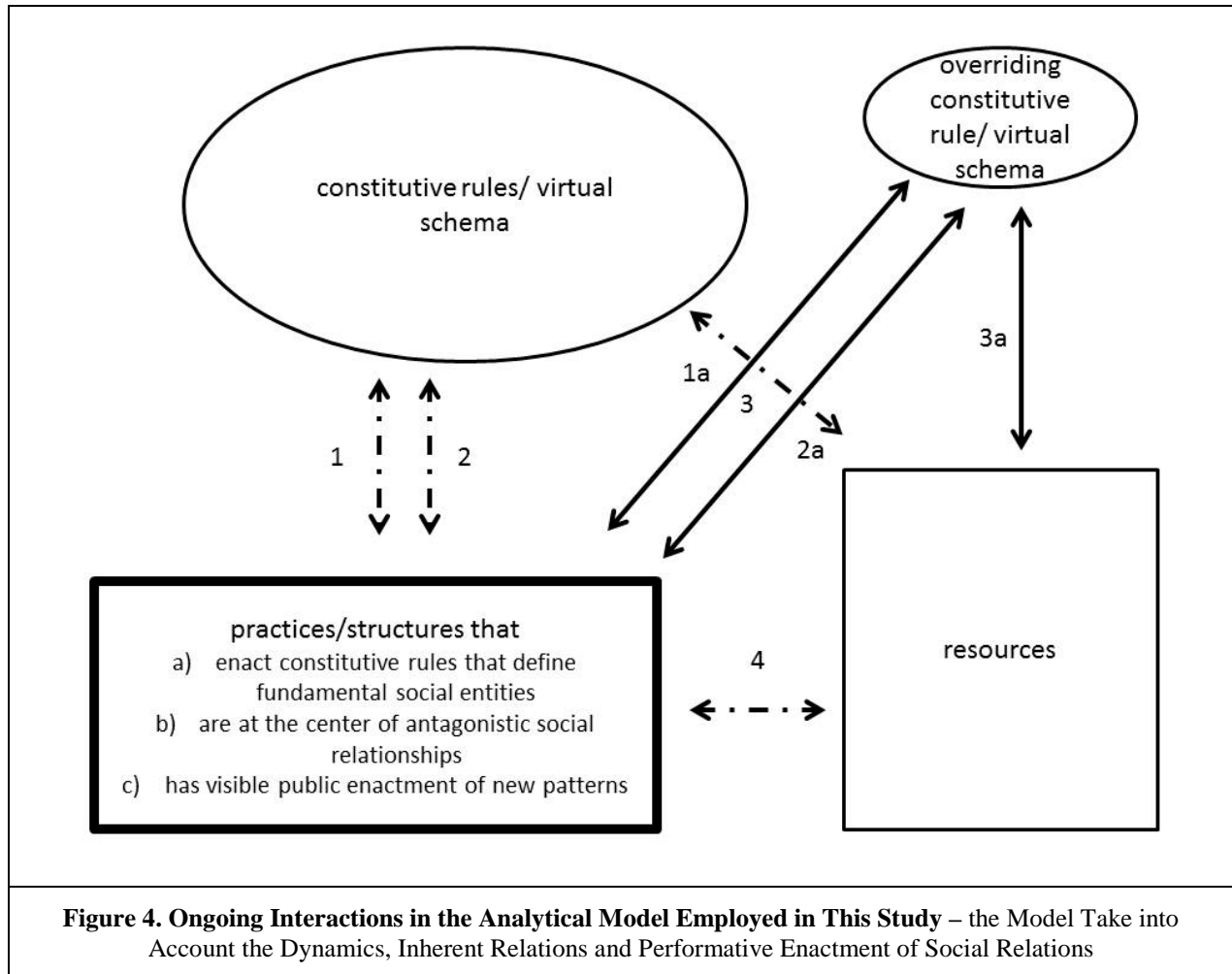


Figure 3b. Adapting the Practices - The Case of Practices that Enacts the Definition of a Fundamental Social Entity are Aligned to the Mandatory Municipal Board Decision and Causes Tablet and Digital Board Pack to be an Acceptable Resource for Enacting Practices Related to Reading from the Board Pack during Board Meetings



“If it was optional to have the tablet or paper and a majority is sitting with the tablet, I would certainly be affected. Think that seems pretty handy and good too. While it is easier to remain in prejudices against technology if the majority of the surroundings do too.” LJ p.8

Observation: *At meeting C one of the board members did not bring the tablet. During the meeting when all other board members check, read, or interact with the tablet, the board member finally picks up the mobile phone. After a while the board member positions the mobile phone at the table just like others have placed their tablets. The board member repeatedly leans in to the adjacent board member and checks this person’s tablet. At the following meeting the board member in question has brought the tablet and holds on to it during the entire meeting. Meeting C*

Observation: *“Everyone brought their tablets. The first thing that happened was that the chairman acted upon the paper version of the agenda, which was different from the digital version. As this happened he was kindly corrected by the others who used the digital version of the agenda.” Meeting D*

Conclusively, it is the multiplicity and transposability of constitutive rules, the dynamic enacting of resources and structures together with resourceful and knowledgeable agents that makes transformations possible. Hence we augment our tentative model as presented in Figure 1 by visualising the transformative capacity of the ongoing transformations of social relations (Figure 4). By drawing on the analytical model we are able to unveil aspects of how the continuous interaction between resources, practices and constitutive rules establish, reproduce or discard legitimacy and by doing this call for a discussion about IT-related change for individual growth and societal development. To us one imminent societal challenge is the unbiased adoption of ICT as a panacea for success. In this way, without an

increased understanding of different types of materiality (non-human resources) and how they are put into practice in various settings, lot of resources may be spent in vain and the potential of ICT to better the future may be lost. In this way it may affect social practices to the detriment of both information transparency/opaque and successful routines for activities affected by social relationships

Conclusion

On the verge to a paradigm shift pushed by new technology, decision makers find themselves trying to design and make real visions for the future of organizations and society. Ensuring compliance with the intentions of these decisions is another thing. Gaining legitimacy for the decisions is difficult and when trying to grasp the underlying structures for success or failure, these seem fragmented, heterogeneous and prone to contradiction. Traditionally perceived to deal with the internal states of individuals or collectives of individuals (cf. e.g. Parsons 1966; Weber 1946), at a first glance the pursuit stand out as even more complex when the focus of theoretical inquiry.

In this paper we have argued that practices are culturally constituted, and convey meaning. By doing this we have tried to go beyond the discussion about the means of implementing new information technologies from a technology-triggered change model or adaptive-structuration theory model (see Leonardi 2013). What people say and do is a melting pot of enacted schemas and resources put into action. The implementing of tablets in a board meeting context could therefore be regarded as a (non-human) resource in this context. However, what has been shown is that the potential of the tablet as a resource could be consistent with, or even anchor, the board meeting as a specific cultural act (i.e. constitutive rule). But much more is going on under the surface. Arguing that practices primarily coordinate basic social relationships, makes it possible to see how different discourses goes in different directions than just to praise new technologies. Nevertheless, to see and illuminate these discourses are of importance to get further understanding about how the tablets are enacted and utilized as a resource.

A tablet can be used in many different ways. Thus our approach has provided further insights into how strategy work may take place and the role of the actors involved. However, our tentative analytical model may work as a template to go further in the analysis of social practices.

We have put forth that more or less harmless discursively constructed phenomena and interactional patterns connected to board meetings might work to drive people to return to the constitutive rules in a way that make them blind to see the variety of different ways to use a tablet and in extension, modify the constitutive rules, that define what a boarding meeting is. Are the members of the board aware of this? It is hard to tell from our empirical material, but it make sense to paraphrasing Michel Foucault, who says that people know what they do; frequently they know why they do what they do; but what they don't know is what they do does (in Dreyfus and Rabinow 1983 p. 187). Our approach could be criticized for presenting an overly socialized view of technology (cf. Orlikowski 2000; Granovetter 1985). Seen in this perspective, the use of tablets practices are "embedded" in social relations (see e.g. Dalton 1959; Roy 1952). In Granovetter's (1985 p. 487) formulation: "Actors do not behave or decide as atoms outside of social context, nor do they adhere slavishly to a script written for them by the particular intersection of social categories that they happen to occupy. Their attempts at purposive action are instead embedded in concrete, ongoing systems of social relations". In this vein, we agree with Leonardi (2013 p. 64) who argues that at a macro-social level, "a technology-in-practice is really nothing more than a set of norms governing them, why, and how to use a technology in a specific setting".

Nevertheless, returning to issues of the usefulness of social theory (Desouza et al. 2006; Benbasat and Zmud 1999; Lyytinen 1999), by putting practices and practitioners in combination with constitutional social relationship at the center of the analysis may support a discussion about how new technologies can be used by stressing its further capacity as an important tool for efficiency, quality and improvements. We conclude by asking: What can be more practical than this?

References

- Adler, P. and Adler, P. 1994. "Observation techniques," in *Handbook of qualitative research*, N. K. Denzin & Y. S. Lincoln (eds.), Thousand Oaks, CA: Sage, pp.377-392.
- Benbasat, I. and Zmud, R. W. 1999. "Empirical Research in Information Systems: The Practice of Relevance", *MIS Quarterly*, (23:1), pp. 3-16.
- Bourdieu, P. 1990. *The Logic of Practice*. Stanford: Stanford University Press.
- Constas, M. A. 1992. "Qualitative analysis as a public event: The documentation of category development procedures," *American Educational Research Journal*, (29:2), pp. 253-266.
- Creswell, J. W. 2012. *Qualitative inquiry and research design: Choosing among five approaches*: Sage.
- Dalton, M. 1959. *Men Who Manage: Fusion of Feeling and Theory in Administration*, New York: Wiley.
- Desouza, K. C., El Sawy, O. A., Galliers, R. D., Loebbecke, C. and Watson, R. T., 2006. "Beyond rigor and relevance towards responsibility and reverberation: information systems research that really matters," *Communications of AIS* (17), pp 2-26.
- Dreyfus, H. and Rabinow, P. 1983. *Michel Foucault: Beyond Structuralism and Hermeneutics*. The University of Chicago Press.
- Feldman, M. and Orlikowski, W. 2011. "Theorizing Practice and Practice Theory," *Organization Science*, (22:5) pp. 1240-1253.
- Feenberg, A. 1999. *Questioning Technology*. New York: Routledge.
- Geertz, C. 1973. *The Interpretation of Cultures*. New York: Basic Books.
- Giddens, A. 1984. *The Constitution of Society: Outline of the Theory of Structure*, University of California Press: Berkley.
- Glaser, B. and Strauss, A. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*, Chicago: Aldine.
- Granovetter, M. 1985, "Economic action and social structure," *American Journal of Sociology* (91:3), pp. 481-510.
- Hanson, N. 1958. *Patterns of Discovery. An inquiry into the foundation of science*, Cambridge: Cambridge University Press.
- Hill, S. 1995. "The Social Organisation of Boards of Directors," *The British Journal of Sociology* (46:2), pp. 245–278.
- Knorr-Cetina, K. and Cicourel, A. V. (Eds.). (1981). *Advances in social theory and methodology: Toward an integration of micro-and macro-sociologies*. Routledge.
- Knorr Cetina, K. 2001. "Objectual Practice," in *The Practice Turn in Contemporary Theory*, T. Schatzki, K. Knorr Cetina, and E. von Savigny (eds.), London: Routledge.
- Levina, N. and Vaast, E. 2008. "Innovating or doing as told? Status differences and overlapping boundaries in offshore collaboration," *MIS Quarterly*, (32:2), pp. 307-332.
- Leonardi, P.L. 2011. "When Flexible Routines Meet Flexible Technologies: Affordance, Constraint, and the Imbrication of Human and Material Agencies," *MIS Quarterly*, (35: 1) pp.147-167.
- Leonardi, P., Nardi, B. and Kallinikos, J. (eds) 2012. *Materiality and Organizing – Social Interaction in a Technological World*. Oxford: Oxford University Press.
- Leonardi, P. 2013. "Theoretical foundation for the study of sociomateriality," *Information and Organization* (23), pp. 59-76.
- Lyytinen K. 1999. "Empirical research in information systems: on the relevance of practice in thinking of IS research," *MIS Quarterly* (23:1), pp. 25-28.
- McNulty, T. and Pettigrew, A. 1999. "Strategies on the Board," *Organization Studies* (20:1), pp. 47-74.
- Newell, S., Scarbrough, H., and Swan, J. 2001. From global knowledge management to internal electronic fences: Contradictory outcomes of intranet development. *British Journal of Management*, (12:2), pp.97–111.
- Orlikowski, W.J. 1992."The Duality of Technology: Rethinking the Concept of Technology in Organizations." *Organization Science*, (3:3), pp. 398-427.
- Orlikowski, W. 2000. "Using Technology and Constituting Structures: A Practice Lens for Studying Technology in Organizations," *Organization Science* (11:4), pp. 404-428.
- Orlikowski, W. 2002. "Knowing in Practice: Enacting a Collective Capability in Distributed Organizing," *Organization Science* (13:3), pp. 249-273.
- Orlikowski, W.J. and Scott, S. V. 2008. "Sociomateriality: Challenging the Separation of Technology, Work and Organization," *The Academy of Management Annals* (2:1), pp. 433–474.

- Perrow C. A. (1967). "Framework for the comparative analysis of organizations," *Amer. Sociological Review* (32), pp. 194-208.
- Reckwitz, A. 2002. "Towards a theory of social practices: A development in culturalist theorizing," *European Journal of Social Theory* (5:2), pp. 243-263.
- Robey, D. and Boudreau. M-C. 1999. "Accounting for the Contradictory Organizational Consequences of Information Technology: Theoretical Directions and Methodological Implications," *Information Systems Research* (10:2), pp. 167-85.
- Roy, D. (1952), "Quote Restriction and Goldbricking in a Machine Shop", *American Journal of Sociology* (57: 5), pp. 427-442.
- Ruigrok. W., Peck, S and Board, H. 2006. "Board Characteristics and Involvement in Strategic Decision Making: Evidence from Swiss Companies," *Journal of Management Studies*, (43:5), pp. 1201-1226.
- Searle, J. 1969. *Speech Acts: An Essay in the Philosophy of Language*, Cambridge: Cambridge University Press.
- Sewell, W. 1992. "A Theory of Structure: Duality, Agency and Transformation," *American Journal of Sociology* (98), pp. -29.
- Schatzki, T., Knorr Cetina, K., and von Savigny, E (eds.). 2001. *The Practice Turn in Contemporary Theory*, London: Routledge.
- Schatzki, T.R. 2005."The Sites of Organizations," *Organization Studies* (26:3), pp. 465-484.
- Stake, R. E. 1995. *The art of case study research*, Sage Publications, Thousand Oaks, CA.
- Swidler, A. 2001. "What anchors cultural practices," in *The Practice Turn in Contemporary Theory*, T. Schatzki, K. Knorr Cetina, and E. von Savigny (eds.), London: Routledge.
- Taylor, S. J., and Bogdan, R. 1998. *Introduction to qualitative research methods: A guidebook and resource*, 3rd edition, NY: John Wiley & Sons.
- Vaara, E. and Whittington, R. 2012. "Strategy-as-Practice," *The Academy of Management Annals* (6:1), pp. 285-336.
- Vaast, E. and Walsham, G. 2005. "Representation and actions: the transformation of work practices with IT us," *Information and Organization*, (15), pp. 65-89.
- Yin, R. K. 2009. *Case Study Research: Design and Methods*, Los Angeles: Sage.