

Dyrby, Signe Sofie

Doctoral Thesis

## Enterprise Social Media at Work

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**COPENHAGEN BUSINESS SCHOOL**  
SOLBJERG PLADS 3  
DK-2000 FREDERIKSBERG  
DANMARK

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**ENTERPRISE SOCIAL MEDIA AT WORK**

**Signe Sofie Dyrby**

# **ENTERPRISE SOCIAL MEDIA AT WORK**

The PhD School of LIMAC

**PhD Series 01.2016**

**CBS**  **COPENHAGEN BUSINESS SCHOOL**  
HANDELSHØJSKOLEN

PhD Series 01-2016

# Enterprise Social Media at Work

**Signe Sofie Dyrby**

Supervisors:

Tina Blegind Jensen

Michel Avital

LIMAC PhD School

Copenhagen Business School

Signe Sofie Dyrby  
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Signe Dyrby

Copenhagen, January 2015

# Abstract

This PhD thesis is concerned with the social dynamics of Enterprise Social Media (ESM) at work. As ESM technologies are making their way on to the organizational scene, knowledge about how to understand and work with these media are in demand. Existing knowledge about ESM in organizations highlights the technological features and the new possibilities for organizational work that these media bring forward. However, the open and perpetual display of organizational connections and conversations on ESM also presents a unique opportunity for studying the role of social interactions and relationships that underlie organizational work on these platforms.

The purpose of this PhD thesis is to examine ESM in light of its social dynamics and the implications of these for organizational work. In the context of this research, social dynamics refer to the interactions and relationships between actors in the organization. Conceptually the social dynamics of ESM at work are investigated in the light of three domains of ESM, sociality and work and their intersections. The investigation builds on the empirical setting of three organizations utilizing the ESM technology Yammer and involves the examination of the organizations' use of the platform through methods of interviews and observations onsite and online.

The thesis makes three central contributions to our understanding of the social dynamics of ESM at work. First, the thesis adds to existing perspectives on ESM in organizations by integrating the three domains of ESM, sociality and work. While the literature has so far treated these domains separately or in pairs, this research demonstrates how the social dynamics of ESM in organizations arise between the functionalities of the ESM technology, the sociality of the organizational members, and the work practices carried out. Second, the thesis presents a social fabric framework as a way of explaining, interpreting and understanding the social dynamics of ESM at work. Mapping the social fabric of the organization on ESM provides valuable insight into the dynamic and diverse nature of the relationships that form on the platform and how these create the basis of work. Third, the thesis contributes a relational constructivist perspective to the

study of the social dynamics of ESM at work that emphasize the study of relationships between actors rather than the study of individual actors.

Considering the social dynamics of ESM in organizations through the social fabric framework provides researchers and practitioners with a new way of understanding and theorizing about ESM at work.

# Dansk Resume

Denne ph.d. afhandling omhandler de sociale dynamikker omkring brugen af Enterprise Social Media (ESM) i organisationer. I takt med at ESM teknologier gør indtog i organisationer er viden omkring hvordan vi kan arbejde med og forstå disse nødvendig.

Formålet med denne ph.d. afhandling er at undersøge ESM i lyset af de sociale dynamikker som platformen introducerer i organisationer samt hvilke implikationer dette har for det arbejde der udføres i disse organisationer. I denne afhandling betragtes sociale dynamikker som sammenspil mellem interaktioner og overordnede forholdsmønstre mellem aktører i organisationen. De sociale dynamikker er således ikke begrænset til individer i organisationen men inkluderer interaktioner og forhold mellem individer, teknologien og arbejdet der udføres i organisationen. Konceptuelt undersøges de sociale dynamikker omkring ESM i lyset af tre domæner: ESM, socialitet og organisatorisk arbejde. Undersøgelsen bygger på empirisk materiale fra tre case organisationer der gør brug af ESM teknologien Yammer og involverer studiet af organisationernes brug af ESM teknologien gennem interviews og observationer i organisationerne og online.

Afhandlingen bidrager med tre centrale konklusioner vedrørende de sociale dynamikker omkring brugen af ESM i organisatorisk arbejde. For det første, bidrager afhandlingen til eksisterende perspektiver på ESM i organisationer ved at integrere de tre domæner ESM, socialitet, og organisatorisk arbejde. Mens eksisterende litteratur har behandlet disse tre domæner separat eller i par, demonstrerer denne afhandling hvordan de sociale dynamikker omkring ESM opstår i sammenspil mellem funktionaliteten af ESM teknologien, socialiteten mellem medlemmerne af organisationen, og de organisatoriske arbejdsprocesser. For det andet, præsenterer afhandlingen et social fabric rammeværk som et værktøj til at forklare, fortolke og forstå de sociale dynamikker på ESM i organisationer. Kortlægning af social fabric på ESM giver værdifuld indsigt i den dynamiske og differentierende natur som beskriver de forhold mellem medarbejdere som formes på ESM platformen samt hvordan disse skaber basis for

organisatorisk arbejde. Sidst, bidrager afhandlingen med et relation konstruktivistisk perspektiv til studiet af sociale dynamikker på ESM som bygger på at forstå forholdet mellem aktører i stedet for at studere aktørerne individuelt.

Overordnet giver det præsenterede social fabric rammeværk forskere og praktikere en ny måde hvorpå de kan forstå or teoretisere omkring ESM som en del af arbejde i organisationer.

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*“Pleasure in the job puts perfection in the work”*

(Aristotle)

# 1. Introduction

This PhD thesis presents a study of the social dynamics of Enterprise Social Media (ESM) at work. Organizations are increasingly exploiting the potential for utilizing ESM technologies to support organizational work practices (McAfee 2009). By 2016, fifty percent of large organizations will have Facebook-like internal social media and thirty percent of these will be considered as essential as email or telephones are today (Gartner 2013). As ESM technologies enter the organizational scene, knowledge about how to effectively utilize these media is in demand (Leonardi et al. 2013). The unique visibility and promotion of social connections among organizational members on ESM accentuates the relationships and interactions underlining organizational work. Existing insights into the use of ESM at work present the link between the technological capabilities and the potential for certain processes and outcomes, however there is still much to be done in exploring the social implications of utilizing ESM at work. This PhD research contributes to existing knowledge of ESM by investigating the social dynamics of organizations on ESM platforms and the implication of these dynamics for organizational work.

In organizations, ESM offers the benefits of increased connectivity among co-workers, easier and more transparent knowledge sharing and new ways of collaborating (Leonardi et al. 2013; McAfee 2009; Treem and Leonardi 2012). The literature on ESM adoption within organizations has shown how the technical capabilities that this social media technology brings with it can lead to an increase in work productivity and performance (Leftheriotis and Giannakos 2014). Encompassing the functionalities of a variety of online social media platforms, ESM is defined as,

*“Web-based platforms that allow workers to (1) communicate messages with specific coworkers or broadcast messages to everyone in the organization; (2) explicitly indicate or implicitly reveal particular coworkers as communication partners; (3) post, edit, and sort text and files linked to themselves or others; and (4) view the messages, connections, text, and files communicated, posted, edited and sorted by anyone else in the organization at any time of their choosing.”* (Leonardi et al. 2013:2)

In comparison to existing organizational technologies, ESM provides an added layer of visibility and transparency of conversations and knowledge that were previously only visible to the people directly involved in the dialogue or knowledge exchange (Treem and Leonardi 2012). The increased visibility and transparency of connections and information is presumed to provide the organizational members with a greater insight into the knowledge and interests of their colleagues, as well as use this knowledge as part of the work they do in the organization (Günther et al. 2009). At the same time, the preservation of information on the digital platform allows organizational members to visit and revisit content when they wish and creates a knowledge repository in which organizational knowledge and experience is preserved (White and Lutters 2007). These added functionalities attribute the ESM platform a role of enhancing and enabling organizational members to carry out their work, as well as developing and maintaining connections internally within the organization. In a recent report, Gartner (2013) observed that a majority of the social business efforts, such as ESM, in organizations will not achieve this intended benefit due to inadequate leadership and an overemphasis on technology. So while the technological features of ESM offer opportunities for communication and work, organizations are also facing challenges of how to understand and incorporate ESM technologies within the organization.

### **1.1 Challenges for Enterprise Social Media at Work**

Using ESM at work refers to the activities and practices, which organizational members carry out on the ESM platform as part of their job. Interestingly the challenges of ESM at work are closely linked with its opportunities. Leonardi et al. (2013) highlight four communication-based opportunities for ESM in the form

of social capital formation (DiMicco et al. 2009; Steinfield et al. 2009), boundary work (van Osch and Steinfield 2013), attention allocation (Bateman et al. 2011) and social analytics (Gibbs et al. 2013; Zhang et al. 2007). Exploring these opportunities, van Osch et al. (2015) reveal how challenges emerge in the form of reluctance to share information online, privacy and confidentiality concerns, misplaced allocation of attention, and lack of formalization of the ESM communication. These challenges correspond to some of the well-known issues of technology use and adoption in organizational work in terms of providing incentives for technology use (e.g., Barrett and Konsynski 1982), establishing procedures and processes for technology adoption (e.g., Karahanna et al. 1999) and creating a link between work practices and the technological opportunities (e.g., Majchrzak et al. 2000). However, challenges of ESM also appear to manifest themselves in the organizational members' task of navigating the ESM technology as a 'social' platform. Implementing an ESM technology highlights the social connections and networked community of an organization for everyone to see and be a part of (Millen and Patterson 2002). Consequently, it seems important to recognize that the open display of the organizational social network draws focus to challenges, such as inclusivity and connectedness related to the social dimension of work in the organization (van Marrewijk 2004). In this context, the increased focus on establishing connections and the development of social networks among organizational members presents a new awareness of the social aspects of organizational work (Wasko et al. 2004).

One of the reasons why the use of ESM in organizations might encounter problems is that too little attention has been paid to understanding ESM in relation to, and as a part of, the organization's social dynamics. While many organizations recognize the importance of how their members interact with each other and form social connections as part of their organizational life, articulating the meaning of these relationships and their implications for work remains challenging. The emphasis on the social network and the connectivity of the employees found in the premise of the ESM technology presents an opportunity for exploring the underlying social dynamics inherent in organizational work.

In studies of information systems in organizations, the entanglement between social dynamics and technology in organizations has been emphasized by numerous theorists (e.g., Leonardi 2011; Leonardi 2013; Leonardi and Barley 2008; Orlikowski 2007; Orlikowski 2009). These studies highlight how the social dynamics between individuals and the technology utilized are inseparable and continuously enact each other within the organization. In exploring the role of ESM within organizations, practitioners and researchers have placed heavy emphasis on the technological aspects in terms of functionalities and outcomes (Muller et al. 2012). Given the growing adoption of ESM technologies and the forecasts of the increasing role that these technologies will come to play in organizations, I would assert that it is important to consider the role of ESM in relation to the social dynamics it introduces for organizational work. In particular, I pursue an exploration of the social dynamics of ESM and how this influences organizational work. Through understanding these dynamics, we will be able to transcend the description of technological functionalities and the outcome of the ESM technology use towards a deeper understanding of the evolving social dynamics on ESM in organizations.

## **1.2 The Purpose of the PhD Research**

Based on the outline of the current situation of ESM in organizations and the challenges that the technology presents, I believe it is highly relevant to conduct research that can uncover and highlight central elements of ESM in relation to, and as a part of, the social dynamics of the organization. Through this study, I wish to add to the existing perspectives on ESM in organizations by providing an in-depth understanding of the social dynamics of ESM and the implications of these dynamics on organizational work. The research question guiding this investigation is:

*What are the social dynamics of enterprise social media in organizational work?*

The purpose of this research is to gain an understanding of the social dynamics of ESM at work. Social dynamics refer to the interplay of continuing interactions and

overall patterns of relationships between actors in the organization. In this context, the social dynamics do not depend on the organizational members alone, but also include interactions and relationships of technology and work within the organization. To address the research question, I approach the study through an investigation of the three domains of *ESM*, *sociality* and *work*, and their intersections. The three domains are considered as the following: the *domain of ESM* refers to the technology and encompasses its functionalities and uses; the *domain of sociality* refers to individuals associating with each other and how they form relationships based on these associations; and the *domain of work* refers to the work practices taking place in the organization in terms of the activities that are a part of the organizational work. Through this investigation, I wish to draw attention to how ESM at work can be studied and understood through the intersections of the different domains, with a focus on understanding the social dynamics of the ESM technology in the organization. Consequently, I wish to show how gaining insight into the social dynamics of ESM can allow a deeper understanding of the implications of ESM at work for both researchers and practitioners.

The research adopts a constructivist perspective, focusing on the relational aspects of understanding ESM, sociality and work. The findings from this research are oriented towards an investigation of the underlying social and material relations that form the social dynamics of ESM at work. From an empirical perspective, the study is approached in two stages. Initially, a pilot study involving the use of social media in the context of a political campaign provides preliminary insight into the sphere of social media and helps frame the research interest. Secondly, the main part of the research is based on the study of organizational use of the ESM platform Yammer across three different case organizations: an IT consultancy, an industrial power and automation company, and a health organization. Demonstrating different degrees of Yammer use and success, the research of the three case organizations provides a comprehensive representation of how ESM is a part of work.

The research offers three important contributions. First, the study adds to existing perspectives on ESM in organizations by offering insight into the three areas of

ESM, sociality and work in the context of ESM at work. Second, the research presents a social fabric framework that encompasses all three domains of ESM, sociality and work in the study of ESM in organizations. The utilization of the social fabric framework to describe and work with ESM within the case organizations provides a valuable language and approach for evaluating the current situation as well as directing future work. Third, the research highlights how taking a relational constructivist perspective provides analytical potential in the investigation of ESM at work by shifting the focus from the individual actors to the relationships between them. Considerations of practical implications reveal how expanding our understanding of ESM at work through the integrated domains of ESM, sociality and work provides managers with valuable insight into how to work and succeed with ESM.

### **1.3 Thesis Structure**

The thesis consists of a cover chapter and a collection of four papers. In the cover chapter, I synthesize the research conducted in the papers. The cover chapter is not only meant to summarize the research but also to complement the papers.

The cover chapter is divided into five chapters. In the first, I introduced the study and provided the background of the PhD research. Chapters two presents a review of existing perspectives on ESM in organizations and provide a reflection on what these perspectives offer for the understanding of ESM at work. This chapter is intended to review and evaluate existing perspectives and position my research. In the third chapter, I summarize my research design and describe my research philosophy, methodological considerations and case organizations, as well as provide an account of my research process. The fourth chapter explores a unified perspective of ESM, sociality and work for understanding ESM at work. This chapter is structured through the different insights gained from the ongoing research and highlights how each of the research perspectives adds to the understanding of ESM at work. The final chapter presents the conclusions and considers implications for research and practice.



The four papers follow the concluding section and are ordered in the sequence in which they are written. In relation to the overall thesis, the papers address different aspects of ESM, sociality and work.

An outline of the central aspects in each of the papers is provided in Table 1.

<b>Table 1: Overview of Papers and Focus</b>			
<b>Papers</b>	<b>ESM</b>	<b>Sociality</b>	<b>Work</b>
1. Strategic Use of Social Media in Political Campaigning: Perceived Affordances and Actual Use of Facebook	X		X
2. The Effect of Enterprise Social Media on Organizational Work	X	X	
3. Reshaping Organizations: Enterprise Social Media and the Changing Social Order of Organizational Practice		X	X
4. Weaving Enterprise Social Media into the Social Fabric of Organizations	X	X	X

The four papers are presented below with a brief summary of each and how they relate to the overall work of the thesis.

### **1. Dyrby, S. and Jensen, T.B. Strategic Use of Social Media in Political Campaigning: Perceived Affordances and Actual Use of Facebook.**

A version of the paper published as Jensen, T.B. and Dyrby, S. (2013). *Exploring Affordances of Facebook as a Social Media Platform in Political Campaigning*. In *Proceedings of the 21<sup>st</sup> European Conference on Information Systems - ECIS 2013. Best paper 1st runner up*. The paper included in this dissertation is an extended version of the ECIS paper.

This paper addresses the domains of *ESM* and *work* through an investigation of Danish political parties' strategic use of the social media platform, Facebook, in their campaign. The paper pursues the following research questions, 1) *What do political parties perceive Facebook to afford in their campaign strategy?* 2) *How*

*are these affordances reflected in the political parties' actual actions? and 3) Which strategic considerations can the link between perceived affordances and actual use add to the discussion of social media use in political campaigning?*

The investigation was based on interviews with the people responsible for social media in seven Danish political parties, as well as posts and comments made on the parties' Facebook walls before, during and after the Danish general election in 2011. Utilizing an 'affordance approach' (Treem and Leonardi 2012), the collected data was coded in two stages. First, the interview data was analyzed by posing the question, 'what does Facebook give the political parties the opportunity to do?' Second, the Facebook comments and posts were analyzed by asking, 'what did the political parties then actually do?'

The findings revealed the political parties' perceived affordances of using Facebook for political campaigning in terms of what they wanted to *facilitate*, *project* and *enhance*. The subsequent investigation of the parties' actual use of Facebook showed that the majority of the intended affordances were acted out in practice; however the findings also highlighted that certain aspects were neglected by the political parties and that new types of affordances surfaced through the actions on the Facebook platform. The findings led us to suggest several strategic considerations for working with social media in the context of political campaigning in terms of 1) planning the social media strategy based on the perceived affordances, 2) operationalizing expected opportunities into actual use, and 3) performing ongoing evaluation of the balance between perceived affordances and activities to determine continuous use.

The findings from this paper address the two domains of *ESM* and *work*, emphasizing the importance of thinking strategically about both the perceived affordances and the actual actions carried out when working with social media. Applying the affordance approach in this study demonstrated the importance of considering the processes of bringing perceived affordances into actions on social media. While the paper did not deal directly with ESM but rather focused on the social media platform Facebook, it nonetheless provided insight into working with social media technology according to a specific set of perceived affordances and activities. Furthermore, the work in this paper fuelled my interest in researching social media in the context of organizations and organizational work.

## **2. Dyrby, S., Avital, M. and Jensen, T.B. The Effect of Enterprise Social Media on Organizational Work.**

Paper accepted for JAIS Theory Development Workshop at The International Conference on Information Systems – ICIS 2013. The paper included in this dissertation is an extended version of the JAIS Theory Development paper.

This theory development paper addresses the domains of *ESM* and *sociality* by investigating the effect of ESM on organizational work and demonstrating how this effect depends on the interactions between organizational members on the ESM platform. The paper pursues the research question *How do enterprise social media affect organizational work?*

The investigation led to the development of a theoretical model outlining how the influence of perceived ESM affordances on organizational practice is mediated through interaction on the ESM platform. Reviewing the literature on ESM in organizations, five main groups of perceived ESM affordances were discovered in terms of how ESM afford *distribution*, *association*, *amplification*, *contextualization* and *preservation* of information and people. The process of active actualization was described as the point where the perceived affordance was manifested in actions carried out by an individual or a group (Bernhard et al. 2013; Strong et al. 2014). On the ESM platform, this process of actualization was argued to take place in the interactions between individuals as they carry out activities of posting and commenting on the platform.

The theoretical investigation yielded six theoretical propositions and a model outlining how the perceived affordances of ESM can be actively actualized through interaction between individuals on the platform. The theoretical reflections revealed that the interactions between the organizational members on the ESM platform rely on the micro-level action and reaction of organizational members through posting and commenting, as well as recognizing each other's contributions through likes. The findings emphasized the importance of interaction on the ESM platform for a perceived affordance to be actualized into actions on the platform and to influence organizational work.

The findings from this paper address the two domains of ESM and sociality through the investigation of the role of interaction on the ESM platform in the

active actualization of perceived ESM affordances. Building on the findings concerning the actualization of affordances in paper 1, this investigation revealed how the effect of ESM on organizational work require considerations of not only the perceived affordances of the technology, but also of the active actualization of these affordances through the interaction between organizational members on the platform.

### **3. Dyrby, S. Reshaping Organizations: Enterprise Social Media and the Changing Social Order of Organizational Practice**

Paper accepted and presented at The 30th European Group for Organizational Studies (EGOS) Colloquium 2014.

This paper addresses the domains of *sociality* and *work* through an investigation of the organizational social order that influences practices of knowledge management in an organization adopting ESM. The paper pursues the following research question: *What social order guides practices of knowledge management on enterprise social media?*

The investigation presented the case of an IT consultancy adopting the ESM technology Yammer and drew on historic accounts of technology use within the organization as well as interviews with organizational members. The analysis of the collected data was carried out using Foucault's (1977) *dispositif* analysis to examine and understand the social order that emerged as the result of ESM adoption in an organization. *Dispositif* analysis describes how a certain 'thing' has worked or continues to work predisposing to the patterns of relationship that guide practices in a collective (Raffnsøe et al. 2014). In particular, the research in this paper investigated the use of ESM for the practice of knowledge management and outlined the underlying *dispositif* that come to guide the practice of knowledge management as the ESM technology becomes more dominant.

The findings revealed two *dispositifs*, describing how knowledge management practices are enacted first through a *dispositif of hierarchy* and, after the ESM adoption, through a *dispositif of network*. Taking a historical perspective on organizational work in the study of the case organization emphasized how the

changing dispositif influenced the interactions and practices of the organizational members. This study showed how the adoption of ESM technology acts as a catalyst for a reordering of the overall patterns of relationship that guide practices in the organization.

The findings from the paper address the two domains of sociality and work. Through the dispositif analysis, sociality is described on the macro-level as a certain pattern of relationships between organizational members, objects, and the institutional mechanisms of the organization. The findings further highlighted a changing dispositif for the organizational practice of knowledge management from a hierarchical dispositif towards a networked dispositif. In this context, the relation between sociality and work is highlighted through the influence of the changing dispositifs on the organizational practice. In contrast to the findings from paper 2, which focus on the micro-level description of the social interactions and the activities between organizational members, this paper demonstrated how macro-structural patterns of relationships provide insights into the sociality of organizational members in the context of work on ESM.

#### **4. Dyrby, S., Jensen, T.B., and Avital, M. Weaving Enterprise Social Media into the Social Fabric of Organizations.**

A version of the paper published as Dyrby, S., Jensen, T.B., and Avital, M. (2014). Enterprise Social Media at Work: Weaving the Social Fabric of Collaboration. *Proceedings of the 35th International Conference on Information Systems. ICIS 2014*. The paper included in this dissertation is an extended version of the ICIS paper.

This paper addresses the domains of ESM, sociality and work by the development and use of a social fabric framework. The social fabric is defined as a metaphor that describes the threads of relationships between people in a collective which are shaped and reshaped by the prevailing beliefs and practices in a collective as well as its technological milieu. The paper pursues the two research questions 1) *What characterizes a social fabric on enterprise social media?* and 2) *How can social fabric explain collaboration on enterprise social media?*

The investigation was carried out across three organizations utilizing the ESM technology Yammer. The data was collected through interviews and observations both offline in the organizations and online on the Yammer platforms. The data analysis was done in two phases. The first phase investigated what characterizes the social fabric of ESM in one of the case organizations. Controversy analysis was applied as a way of revealing interactions among organizational members and explaining the core dimensions around which the interactions took place. This analysis provided five threads of the social fabric. Mapping these threads based on data from the Yammer use in the case organization enabled the formulation of a social fabric framework, revealing how relationships of certain natures form on the platform. In the second phase, collaboration as instances of organizational work on the ESM platform was explored in the two additional case organizations using the social fabric framework to demonstrate the different social fabric configurations that form and to discuss their implications for collaboration.

The controversy analysis revealed five threads in the social fabric: *Professional-Personal Content*, *Necessity-Frill Evaluation*, *General-Specific Context*, *News-Chatter Perception*, and *Praise-Reprimand Giving*. Investigating how these threads become interwoven resulted in the creation of a framework that highlighted five patterns in the social fabric of directive, informative, communitive, distinctive and corrective relationships which form on the ESM platform. The conclusions showed how the social fabric help outline the nature of collaboration on ESM platforms, reveal their unique configuration, and illustrate how organizational work is carried out through the social relationships that are enacted and performed by the organizational members.

The findings from this paper address the three domains of ESM, sociality and work, and provide an integrated perspective on ESM through the social fabric framework. The use of the controversy analysis further proved a beneficial way of investigating ESM at work, as the focus on controversies allowed consideration of both the organizational members and the ESM technology without making distinctions between the two.

## 2. Existing Perspectives on Enterprise Social Media in Organizations

In this chapter, I present and discuss existing perspectives on ESM in organizations. The purpose of this section is three-fold. First, I situate the literature on ESM in different fields and describe the characteristics of the technology. Second, I investigate the literature on ESM in organizations according to three main streams: ESM as an organizational technology, ESM as a part of organizational work, and ESM as social organization. Third, I consider the literature on affordances of ESM as an approach for studying the social dynamics of ESM in the organization and review this perspective in relation to my study. I summarize the findings by reflecting on how the main insights from the existing literature inform the research in this thesis.

### **2.1 Enterprise Social Media in Organizations**

In the following review of literature on ESM in organizations, I draw on perspectives from computer supported collaborative work (CSCW), human computer interaction (HCI), computer-mediated communication (CMC), and information systems (IS) and management. I do not wish to provide a detailed review of each of these fields, but rather focus on the perspectives they present on ESM in organizations. Before presenting the detailed review I reflect on what constitutes an ESM technology and provide an overall outline of the main perspectives on ESM across the different research fields.

ESM is considered in many different forms across the available literature, ranging from instant message services to blogs and micro-blogs as well as online social networks. For the purpose of this review, it is therefore important to consider what characterizes the ESM technology. Enterprise Social Media presents an integrated platform for employees to communicate, connect and interact (Leonardi et al. 2013). The ESM term denotes many different types of social media used for internal communication in organizations (McAfee 2006). In the early literature, studies have investigated the impact of the rapid communication carried out

through instant messaging in terms of quick problem solving and iteration (Isaacs et al. 2002; Nardi et al. 2000). Enabling the delivery of longer messages and statements, blogs have been studied as both an external and internal communication media for organizations (Jackson et al. 2007). The studies on the internal use of blogs presented its possibilities for personal profiling and for employees at various levels of the organization to express their opinions in an open and informal format (Efimova and Grudin 2007; Huh et al. 2007; Yardi et al. 2009). Similarly, the adoption of micro-blogging in organizations encouraged all employees to contribute with small messages and status updates on their work, reflections and knowledge sharing (Günther et al. 2009; Honey and Herring 2009; Zhang et al. 2010). In literature on electronic networks of practices the electronic capabilities enforced the connections between people in the organization (Wasko et al. 2004; Wasko and Faraj 2000). Finally, the use of social network sites in organizations led to the incorporation of many of the functionalities found in existing social media into one platform that encompasses instant messaging, electronic networked connections between employees and micro-blogging features of status updates (Ellison et al. 2015). Overall, ESM technologies embrace the open structure of micro-blogging, the electronic network connectivity and the instant message functionality and comprise a mix of these existing technologies.

Apart from the different perspectives on what constitutes an ESM technology, the literature also takes different approaches to describing the use of ESM in organizations. In CSCW and HCI research, ESM is studied in terms of the motivation and engagement of individuals (e.g., DiMicco et al. 2008; Nardi et al. 2000; Steinfield et al. 2009) as well as how people use the ESM technology (e.g., Huh et al. 2007; Muller et al. 2012; Zhang et al. 2010). The motivations pertain to the desire to share with colleagues at a personal level and the ability to convince others to support ideas and initiatives on the platform (DiMicco et al. 2008). On ESM user's behavior varies in their posting and reading activities and the interactions on the platform are characterized by a continuous reorganizing based on the individual user's interest and time (Muller et al. 2012; Zhang et al. 2010). Moreover, the research in this field places emphasis on the new dynamic conditions for social interactions that electronic and networked media bring with them in terms of integration and feedback between group members (Taha and Caldwell 1993). In the CMC literature, investigations have explored social



networking online (Ellison et al. 2015) and its influence on organizational work in terms of openness and specific affordances (e.g., Gibbs et al. 2013; Majchrzak et al. 2013). Addressing both the positive and negative affordances of ESM, this stream of literature places emphasis on the dynamics of ESM enabling social interactions online that bear resemblance to physical work spaces (Leonardi et al. 2013). IS and management research on ESM in organizations has predominately focused on the implications of ESM on organizational performance as well as the opportunities and challenges that such media provides for organizational work (Butler 2001; Kane and Alavi 2012; Wasko and Faraj 2005). In this line of study, the concept of social capital has been applied to describe the value of who people know and the exchange of such value within the networked structures (Huysman and Wulf 2005; Tsai and Ghoshal 1998; Wasko and Faraj 2005). Research has emphasized social capital in the networked structure of electronic networks of practice and its influence on the use and sharing behaviors on the networked media (Wasko and Faraj 2005). Among these studies are also earlier efforts that explored the implications of electronic media in organizations through a focus on the significant effect of social context on the information exchange that takes place through an electronic medium (Sproull and Kiesler 1986). In particular, the studies highlighted how the use of electronic media creates new organizational dynamics in the networked organization in which the concepts of content and context become fluid and transcend boundaries (Lea et al. 1995).

In the following review of literature on ESM in organizations, I consider ESM in broad terms, encompassing the different media types outlined above, namely instant messaging services, blogs and micro-blogs, and social networks. The review highlights three streams in the literature on ESM: as an organizational technology, as a part of organizational work, and as a social organization.

### ***2.1.1 Enterprise Social Media as Organizational Technology***

The description of the technical aspects of ESM in organizations stems from the initial research on social media from boyd and Ellison (2007) and Kaplan and Haenlein (2010), detailing social media as reliant on user-generated content and the networked connections that the media make possible. The changing perception

of a technology's utility when used in the workplace (O'Mahony and Barley 1999; Wellman et al. 1996) has required research to explore how the technical properties of social media manifest themselves in an organizational context. The literature describing ESM as organizational technology outlines the *characteristics*, the *functionalities* and the *design* implications of these technologies in the organizational context.

The *characteristics* of ESM emphasize how the technology offers a new way for employees and people to connect, interact and communicate with others (Dimicco et al. 2008; Zhang et al. 2010). While existing organizational technologies have presented opportunities for communication and collaboration among individuals, ESM offer increased visibility and transparency of these communicative and collaborative processes (Riemer and Scifleet 2012). As an integrated platform combining features of micro-blogging, social tagging and social networking (Leonardi et al. 2013), ESM is characterized by its open infrastructure and egalitarian nature (Gibbs et al. 2014). The emphasis is on user participation and the construction of a platform where individuals share information and communicate about both formal and informal topics (Holtzblatt et al. 2010; Ip and Wagner 2008; Rober and Cooper 2011). Relying on the formation of a network of both weak loosely founded and strong long lasting ties between individuals, ESM provides the ability to build communities of practice through the online platform (Fulk and Yuan 2013; Majchrzak et al. 2013).

The *functionalities* of ESM technologies are described in the literature through the material properties of the ESM platforms. In terms of technical capabilities, ESM adopts a Facebook-like nature, allowing organizational members to post and comment as well as share interests (DiMicco et al. 2008). ESM enables users to exchange messages with others and groups through broadcasting information within the networked platform (Zhao and Rosson 2009). Through the visibility of the message exchange and connections, particular co-workers are indicated as partners (Treem and Leonardi 2012). In the sharing of information on the ESM platform, individuals are able to post, edit, and sort text and files at all times

(Holtzblatt et al. 2010; Leonardi et al. 2013). In particular, the increased visibility of behaviors and information is what distinguishes ESM technology from existing organizational technologies, making activities that were previously invisible within the organization visible (boyd 2009; Erickson and Kellogg 2000; Grudin 2006; Leonardi et al. 2013; Majchrzak 2009; Thom-Santelli et al. 2008). Conversations persist on the ESM technology through the sustainable repository which the online platform provides and consequently information remains available long after it was originally posted (Binder et al. 2009; Leonardi et al. 2013). Finally, one of the advantages of the ESM technology is found in the digital traces of activity, which enable a new form of organizational social analytics that reveal activity, connections and experts (Richter and Koch 2008; Smith et al. 2009).

The *design implications* of ESM in the organization are linked to the technology's objective of enabling internal communication across several departments, incorporating multiple functionalities of information sharing, editing, commenting etc. (McAfee 2006). The ESM platform is designed with the intention of creating a flexible knowledge repository in which information is stored and maintained as well as edited (White and Lutters 2007). As ESM represents a new technology within the organization simple usability and functionality are a priority (Hauptmann and Gerlach 2010) in order to encourage employees to use the technology in their work practices. This is evident as the ESM technology adopts familiar social media attributes such as using @ and # signs (Honey and Herring 2009). The purpose of the ESM design is to create a technical platform that takes users from reader-to-leader (Preece and Shneiderman 2009) by transforming their behavior of passive observation of the activities of others on the platform to one where they themselves act and take the lead in promoting their own ideas and perspectives. The encouragement of use can be achieved through features of communication channeling and event notifications (Millen and Patterson 2002).

Table 2 presents the main perspectives on ESM as organizational technology.

<b>Table 2: ESM as Organizational Technology</b>	
<b>Topics</b>	<b>Perspectives</b>
Characteristics	<ul style="list-style-type: none"> <li>• ESM as a new way of connecting, interacting and communicating with other people (Dimicco et al. 2008; Riemer and Scifleet 2012; Zhang et al. 2010)</li> <li>• ESM as an integrated platform of micro-blogging, social tagging and social networking (Leonardi et al. 2013)</li> <li>• ESM as open infrastructure of a democratic nature (Gibbs et al. 2014)</li> <li>• ESM as based on user participation (Holtzblatt et al. 2010; Ip and Wagner 2008) and bottom-up media (Rober and Cooper 2011)</li> <li>• ESM as reliant on the formation of ties (weak and strong) between colleagues (DiMicco et al. 2008)</li> <li>• ESM as communities of practice (Fulk and Yuan 2013; Majchrzak et al. 2013)</li> </ul>
Functionalities	<ul style="list-style-type: none"> <li>• ESM allows users to exchange messages with others and groups (broadcasting) (Zhao and Rosson 2009), indicate particular co-workers as partners (Treem and Leonardi 2012), and post, edit, and sort text and files (Holtzblatt et al. 2010; Leonardi et al. 2013)</li> <li>• ESM provides increased visibility of conversational behaviors and information (boyd 2009; Erickson and Kellogg 2000; Grudin 2006; Leonardi et al. 2013; Majchrzak 2009; Thom-Santelli et al. 2008)</li> <li>• ESM preserves conversations (Binder et al. 2009; Leonardi et al. 2013)</li> <li>• ESM reveals activity, connections and experts through analytics (Richter and Koch 2008; Smith et al. 2009)</li> </ul>

Design implications	<ul style="list-style-type: none"> <li>• ESM is designed for internal communications (McAfee 2006) and creating a flexible knowledge repository (White and Lutters 2007)</li> <li>• ESM is built on simple usability and functionality (Hauptmann and Gerlach 2010; Honey and Herring 2009)</li> <li>• ESM is designed using features of communication channeling (Preece and Shneiderman 2009) and event notifications (Millen and Patterson 2002)</li> </ul>
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The perspectives on ESM as an organizational technology emphasize the opportunities that the technology creates through its characteristics, functionalities and design. From the existing literature, three key insights can be found with regard to describing ESM as an organizational technology. First, ESM is *characterized* as a new technology for organizational members to interact and connect through user participation and the formation of ties. Second, the *functionalities* of visible message exchange, indication of connections between co-workers, abilities of posting, editing and sorting of files, along with the use of the continuously created data for analytics, set ESM apart from existing organizational technologies. Finally, ESM in organizations is *designed* for simple usability and recognizable functionality and includes push features that channel communication and event notifications. The review of the literature emphasizes how ESM in the organization builds upon and accentuates communication and interaction practices already in place, as well as how ESM technology is bringing these practices into the open through the transparency and visibility provided on the platform. The increased visibility of organizational practices and interactions indicates that, as researchers and practitioners, there is much to learn about organizational dynamics through simply observing and evaluating the posts and comments exchanged between organizational members on the ESM platforms. This presents a unique opportunity for observing practices of organizational members both in retrospect and as they are taking place.

### ***2.1.2 Enterprise Social Media in Organizational Work***

The literature addresses ESM in the organization in relation to the specific the *work practices* that are supported on the platform and the underlying *work processes* that arise as a consequence of adopting these platforms. In particular, a lot of emphasis is placed on the technology as part of the daily work within the organization.

The *work practices* that are supported on ESM in organizations rely on the functionalities that the media provides for information sharing (Damianos et al. 2007) and communication between organizational members (Lyons et al. 2012). With the use of ESM, communicative practices become more abstract in the way that employees must address larger, and, to some extent, unfamiliar, audiences when communicating on an ESM platform (Marwick 2011). Communicating in this manner gives employees the opportunity to self-publish content (Efimova and Grudin 2007) about work or even of a more private nature (DiMicco et al. 2008). Sharing various types of information as well as the ease of communicating with a wide audience through the platform enables open and cross-boundary communication between the members of the organization (Gibbs et al. 2014).

Through reliance on the information sharing opportunities on ESM platforms, the practices of knowledge sharing and creation are carried out via the publicly visible knowledge conversation that takes place between individuals (Majchrzak et al. 2013). The knowledge sharing and creation is dependent on features of the network including the macro-structural properties, the structure and relational quality of the ties within the network and the individual motivations (Wasko et al. 2004). In particular, the social capital generated through the platform and support for relationships and interactions influence the way knowledge sharing is shaped on ESM platforms (Ellison et al. 2015). The support of knowledge sharing and creation influence the practice of collaboration on the ESM platform. Collaboration is supported on the ESM platform by the availability of knowledge about the organizational members areas of expertise (Huh et al. 2007) as well as shared and accessible content (Brzozowski 2009), allowing individuals to identify collaboration partners and opportunities. Through information about who knows

what, the ESM platform facilitates access to experts and allows for connections to be established (John and Seligmann 2006). In the networked connections on the ESM platform, practices of learning are facilitated (Hauptmann and Gerlach 2010) through individuals coming together and engaging in shared sense-making (DiMicco et al. 2009). Although the ESM platform is highlighted in many studies as an enabler of organizational practices, some also raise concerns about ESM serving as a disruptive factor in work practices (Agarwal and Karahanna 2000), raising concerns that the attention individuals must now give to the social medium will draw focus from their actual work.

The *work processes* that arise as a consequence of ESM use in an organizational context describe the underlying steps of activities that support the work practices. The flexibility of the ESM platform in terms of posting, editing and commenting provides support for processes of ad-hoc work (Wagner 2004). The iterative processes that take place on ESM engage employees in ad-hoc sharing of messages and encourage open conversation (Farrell et al. 2008). The continued processes of information contribution and disclosure can lead to social recognition within the ESM network (Sarita Yardi et al. 2009) but, at the same time, raises concerns among employees about sharing draft documents (Danis and Singer 2008; Holtzblatt and Tierney 2011). In this sense, the ESM platform presents a double-edged sword where employees are sharing publically their information in an effort to gain attention on the online platform (Wasko and Faraj 2005) while still remaining dubious about sharing too much information or information that makes them appear unknowledgeable (Millen et al. 2006). In accordance with this, employees on the ESM platforms seem to engage in processes of monitoring and comparing their own performance with that of others (Farzan et al. 2009). On the management side, the governance processes surrounding ESM use within the organization has raised issues with regard to audience management strategies and how to handle the balance between public and private content and the grouping of social ties (Marwick 2011). Studies of governance in ESM have revealed how, in some cases, regulating codes of behavior develop in an ad hoc manner in accordance with the participation of colleagues and managers (Wattal et al. 2009) while others are crafted based on the existing policies of the organization (Vaast and Kaganer 2013). An overview of the literature on ESM in organizational work is presented in Table 3.

<b>Table 3: ESM in Organizational Work</b>	
<b>Topics</b>	<b>Perspective</b>
Work practices	<ul style="list-style-type: none"> <li>• ESM facilitates more abstract and less formal communicative practices (Marwick 2011)</li> <li>• ESM encourages self-publishing of content (Efimova and Grudin 2007) on work or a more private nature (Joan DiMicco et al. 2008)</li> <li>• ESM creates open and cross-boundary communication (Gibbs et al. 2014).</li> <li>• ESM makes knowledge conversations publicly visible (Ann Majchrzak et al. 2013)</li> <li>• ESM supports collaboration through providing access to knowledge (Huh et al. 2007), experts (John and Seligmann 2006) and shared and accessible content (Brzozowski 2009)</li> <li>• ESM encourages learning through the networked connections (Hauptmann and Gerlach 2010) and shared sense making (DiMicco et al. 2009)</li> <li>• ESM creates a disruptive factor at work (Agarwal and Karahanna 2000)</li> </ul>
Work processes	<ul style="list-style-type: none"> <li>• ESM gives rise to ad hoc work processes through incremental information generation (Wagner 2004)</li> <li>• ESM provides opportunities for processes of disclosing information openly (Danis and Singer 2008; Holtzblatt and Tierney 2011; (Yardi et al. 2009)</li> <li>• ESM generates iterative processes (Farrell et al. 2008)</li> <li>• ESM leads to monitoring and comparing own performance with that of others (Farzan et al. 2009)</li> <li>• ESM encourages processes of seeking attention and standing out on the online platform (Wasko and Faraj 2005)</li> </ul>



Two key insights are gained from the existing literature with regard to ESM in organizational work. First, *work practices* of communication, knowledge sharing, collaboration and learning are all related to the use of ESM technology within the organization. Second, iterative and ad hoc *work processes* emerge on ESM, however the platform also exposes work processes that involve attention seeking, lack of recognition and reluctance to share certain forms of information. In this sense, a wide range of work practices are carried out through the ESM platform and the processes by which these practices are carried out are heavily influenced by self-interest and iterative ad hoc procedures.

### ***2.1.3 Enterprise Social Media as Social Organization***

The ‘social’ component of ESM in organizations has also received some attention in the literature and the social aspects appear to be quite central in understanding ESM in the context of organizations. The social perspectives on ESM in organizations have been described in terms of the *social structure* and the *social mechanisms* that are at work in the organization.

ESM appears to encourage certain types of *social structures* in the organization. The networked structure promoted on the ESM platform has challenged the way in which organizational structure is displayed. Through ESM use, the personal social network has become an alternative to the well-known and established organizational chart (Nardi et al. 2000). Professionals use internal social networking sites to build stronger bonds with their peers (DiMicco et al. 2008) and enhance their social capital (Steinfeld et al. 2009). While the organizational chart may still display the formal positions of the people within the company, the new social connections formed on ESM can challenge this through allowing employees to connect with each other across departments and organizational boundaries. The associations created in the ESM network are manifested in two forms of association: the association to another person in the form of a social tie, and the association to a piece of information (Treem and Leonardi 2012). While these associations have been present in organizations before, ESM now takes part in facilitating these associations in a way that has not previously been the case

(Treem and Leonardi 2012). This perspective places focus on how associations on ESM are made much more explicit through the open documentation of activity afforded by the media. In addition, the associations appear to be a way for individuals to connect with others that they did not previously know (Zhang et al. 2007). The ESM platform creates a community network, providing a structure for sharing resources and building relationships (Muller et al. 2012). The community feeling fosters a sense of belonging and can unite dispersed members of the organization (Ehrlich and Shami 2010; Jackson et al. 2007; Leidner 2010). In these connections, ESM not only strengthens the sense of community but can also reveal the network closeness between employees, both professionally and personally (Wu et al. 2010). Research on this network closeness demonstrates how both personal and professional sharing enables the formation of relationships (DiMicco et al. 2009) that merge ties of public and private groups (Marwick 2011).

The *social mechanisms* of ESM in organizations entail perspectives on interactions and motivation for engagement that exist among users of ESM. The relationships and the relational quality of connections are an important foundation for the use of ESM in organizations (Ellison et al. 2015; Wasko et al. 2004). Social interactions are supported by ESM, creating an environment of higher psychological safety that aids people who are normally less inclined to interact (boyd and Ellison 2007). The open and democratic nature of the ESM platform further facilitates cross-boundary interactions between individuals by breaking down boundaries of time and place (Gibbs et al. 2014). The use of ESM in organizations has been associated with the social capital benefits of access to new people and expertise and belonging to a community (Leonardi et al. 2013; Steinfield et al. 2009). In an organizational context, the dynamics of social capital also benefits practices of knowledge contribution (Ellison et al. 2015; Wasko and Faraj 2005). Social engagement on ESM can be encouraged and maintained through design elements such as conversation channeling, event notification, selection criteria for community members and specific discussion topics (Millen and Patterson 2002). The ESM platform can also encourage people to engage in defensive self-representation (Gibbs et al. 2013) where the pressure of maintaining

the social connections can lead to a displaced focus and a disproportionate amount of time spent on promoting oneself on ESM. An overview of the central perspectives on ESM as social organization is provided in Table 4.

<b>Table 4: ESM as Social Organization</b>	
<b>Topics</b>	<b>Perspectives</b>
Social structure	<ul style="list-style-type: none"> <li>• ESM highlights personal social networks as an alternative to the organizational chart (Joan DiMicco et al. 2008; Nardi et al. 2000; Steinfield et al. 2009)</li> <li>• ESM promotes associations formed between people and content (Treem and Leonardi 2012)</li> <li>• ESM enforces networks of community (Ehrlich and Shami 2010; Jackson et al. 2007; Leidner 2010; Michael Muller et al. 2012)</li> <li>• ESM promotes network closeness between employees both professionally and personally (DiMicco et al. 2009; Marwick 2011; Wu et al. 2010)</li> </ul>
Social mechanisms	<ul style="list-style-type: none"> <li>• ESM creates higher psychological safety (boyd and Ellison 2007) across organizational boundaries (Gibbs et al. 2014)</li> <li>• ESM fosters social capital (Ellison et al. 2011; Steinfield et al. 2009; Wasko and Faraj 2005)</li> <li>• ESM creates social engagement (Millen and Patterson 2002)</li> <li>• ESM builds on relationships and build relationships (Ellison et al. 2015; Wasko et al. 2004)</li> </ul>

The social perspectives on ESM in organizations place attention on the social structure and social mechanisms that evolve with its use. From the existing literature, two key insights are revealed. First, the *social structure* of the ESM platform is based on a communal social network of associations between people and content, forming relationships of both personal and professional closeness.

Second, relationships and social interaction on ESM platforms enforce the *social mechanisms* on the platform and create social capital benefits and encourage the design of ESM platforms to stimulate social engagement. The social organization surrounding ESM platforms focus on relationships and the communal nature in which both professional and social connections are at play and must be cultivated.

### 2.1.4 Summarizing the Literature on ESM in Organizations

Reviewing the existing literature on ESM in organizations revealed a series of insights with regard to ESM as organizational technology, in relation to work practice and with certain implications for the social organization. Table 5 provides a summary of the insights and the implications of these for this study.

<b>Table 5: Insights from Literature on ESM in Organizations</b>		
<b>Streams of literature</b>	<b>Insights</b>	<b>Implications for this study</b>
ESM as organizational technology	<p><i>ESM is characterized</i> as a new way of interacting and connecting through user participation and the formation of ties between individuals.</p> <p><i>ESM provides functionalities</i> of visible message exchange, indication of connections between co-workers, the posting, editing and sorting of files as well as data for analytics.</p> <p><i>ESM is designed</i> for simple usability and recognizable functionality including push features that channel communication and event notifications.</p>	The new way of interacting and connecting on ESM and the visibility of activities and information on ESM platforms suggests that both researchers and practitioners can learn more regarding organizational dynamics by observing and evaluating what takes place on the ESM platform.
ESM in organizational work	<i>ESM encourages work practices</i> of communication, knowledge sharing, collaboration and learning are all related to the use of ESM technology	A range of work practices is a part of the use of ESM in organizations but the

	<p>within the organization.</p> <p>ESM promotes iterative and ad hoc <i>work processes</i> are supported on the ESM platform but processes of attention seeking, lack of recognition and reluctance to share certain information exist on the platform.</p>	<p>processes by which these practices are carried out are highly influenced by self-interest and iterative ad hoc procedures.</p>
ESM as social organization	<p>ESM enforces a <i>social structure</i> of a communal social network of associations between people and content, forming relationships of both personal and professional closeness.</p> <p>ESM emphasizes the <i>social mechanisms</i> of relationships and social interaction on ESM platforms creates social capital benefits and encourages design in order to stimulate social engagement.</p>	<p>The social organization of ESM platforms focuses on relationships and a communal nature in which both professional and social connections are at play and must be cultivated.</p>

In my PhD research, I seek to combine these insights in my understanding of the social dynamics of ESM at work. In particular, the integration between the material features, the work carried out and the social dynamics is most pertinent. In the existing literature on ESM in organizations, the perspective of affordances has been utilized as a means of investigating the intersection between the material properties of the ESM technology and the social aspect of action-taking possibilities perceived by organizational members in the context of work. In order to evaluate and relate this perspective to my study, the literature on affordances of ESM in organizations is reviewed. The purpose of this review is not to provide an overview of all the literature on affordances but to gain insight into how affordances have been used to explain the dynamics of the ESM in organizations.

## 2.2 Affordances of Enterprise Social Media

The concept of affordances has been widely adopted in both IS and management literature as a means of bridging the social and the technical elements of technology implementation and use. The affordance literature can be roughly divided between the perspective of Gibson (1977), describing how the perceived affordances of an artifact depend on the dynamics between the actor and the environment, and the design perspective of Norman (1999), in which affordances are ‘designed-in’ properties of an object placed there by the designer to be discovered by the users. In bridging these two perspectives, Hutchby (2001) describes how an artifact will have certain material properties but affordances are manifested in the opportunities and constraints which the individual actors attach to the artifact. Hutchby (2001) emphasizes how affordances exist as a relationship between an actor and artifact, as it depends on the action capabilities of the actor in the environment and reflects possible actions on the artifact itself. The affordances of an artifact can then change across different contexts, but the materiality cannot (Hutchby 2001). In literature on affordances of IT artifacts, examples of all three perspectives are evident. Prominent in the HCI field, Norman’s (1988:2002) perspectives have fuelled discussions about design of information and communication technology as well as of its use (Gaver 1991). The IS and management literature has gravitated towards the perspectives of Gibson (1977, 1986) and Hutchby (2001) in the investigation of affordances as relational and dependent on the actors’ interaction with the environment, the social context, and the artifact. To provide an overview of the use of affordances in the literature, I consider the existing perspectives in accordance with two dimensions of individual-organizational affordances (Leonardi 2013; Majchrzak and Markus 2012) and perceived-actively actualized affordances (Kytä 2004; Strong et al. 2014).

The individual-organizational dimension of affordances refers to the level on which the affordances emerge. *Individual affordances* are linked to the perception of affordances of a certain object from the perspective of an individual. Individuals are actors who subscribe to emerging action goals and through doing so, perceive affordances of the material objects in their environment (Seidel et al.

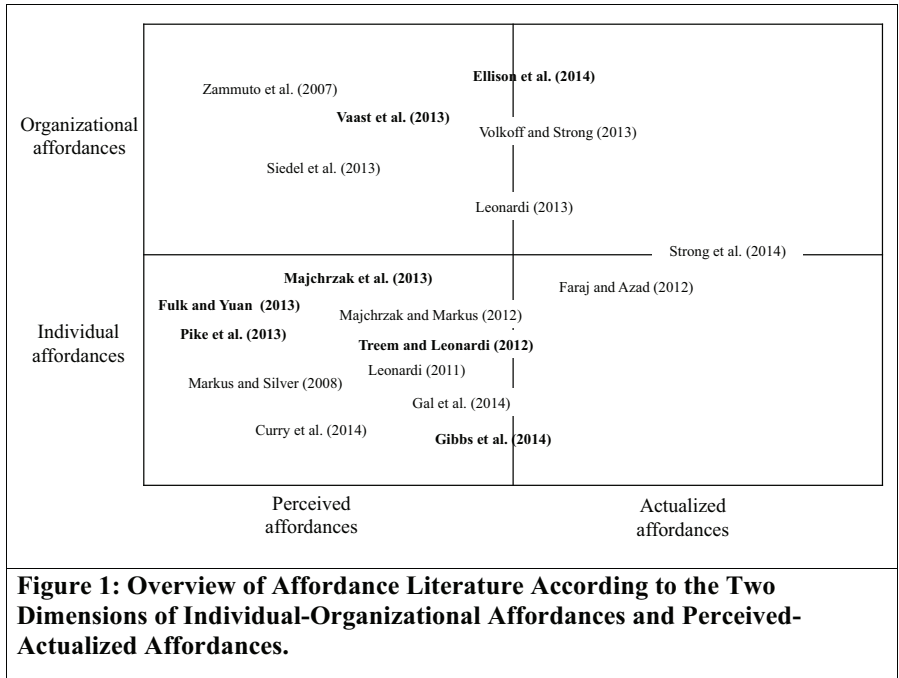
2013). The individual predispositions influence the perceived affordances of an object (Curry et al. 2014). In comparison, *organizational affordances* are characterized by the extent to which the potential enabled actions are associated with achieving organizational-level outcomes that support organizational-level goals (Strong et al. 2014). Organizational affordances can take two forms: the collective affordance which is collectively created by the members of a group as the result of a pooled individualized affordance, and the shared affordances that are shared by all members even when completing non-interdependent tasks (Leonardi 2013; Leonardi and Barley 2008). The collective affordances arise in the aggregate and allow the collective group to achieve something that they could not otherwise have done. The collective affordance then refers to the diverse use of the same system where individual actors perceive distinct affordances that are essential for the group as a whole to complete its work (Leonardi 2013; Oborn et al. 2011). In comparison to the collective affordance, the shared affordances refer to when a group of users infer the same affordance into an object. Shared affordances are then likely to arise in teams which work closely together to achieve a group-level goal (Leonardi 2013). Even though affordances have been largely considered in the context of individuals, the organizational affordances that support the organization of work and are collectively determined provide an insight into the broader meaning-creation and structure of the organization (Ellison et al. 2015). An organizational affordance can then be characterized by the potential for coordinated action by a group of actors (Zammuto et al. 2007)

The perceived-actively actualized dimension of affordances refers to how affordances become manifested. Actualization of affordances is defined as the actions taken by actors as they take advantage of one or more affordances to achieve immediate concrete outcomes in support of organizational goals (Strong et al. 2014:70). Affordance actualization can be considered in two respects as either *actively actualized affordances*, which refer to utilized and shaped affordances, or as *passively actualized affordances*, which refer to perceived affordances (Kyttä 2004). In the process of actualization, the perceived affordances will always precede the active actualization of the affordances (Kyttä 2004). In any situation, many possibilities for action exist but the majority of them will not come to be

actualized (Stoffregen 2003). For the active actualization of an affordance to take place, the affordance must become real and manifested in the actions of the individual or the group of individuals involved with it (Turvey 1992). To map the existing literature according to this dimension, I refer to the passively actualized affordances as perceived affordances and the actively actualized affordances as actualized affordances.

Figure 1 maps different perspectives on affordances and technology in the literature in accordance with how they reflect the dimensions. The perspectives highlighted in bold represent the literature taking an affordance approach to the study of ESM in organizations. While many of the perspectives on affordances appear to overlap somewhat, and combine several of the affordance perspectives, Figure 1 enables a look into which areas have dominated the literature. The diagram clearly shows that the most emphasis has been placed on the individual affordances perspective, which overlaps with the perceived affordance perspective. This link is in compliance with the perspectives from both Gibson (1977; 1986) and Hutchby (2001) in which the material properties and the individual perceptions are enmeshed in the understanding of affordances.





The figure also demonstrates how the literature dealing with affordances of ESM in organizations has taken a perceived affordance perspective and investigated these perceived affordances according to how they emerge at an individual and organizational level. Through the intersection of perceived and individual affordances, ESM can both create opportunities (Fulk and Yuan 2013) and constraints (Gibbs et al. 2014) in respect to knowledge sharing between individuals in organizations. The perceived affordances are linked to the individuals' interaction with the environment and ESM platform (Leonardi et al. 2013). Beyond individual affordances, studies of ESM from an affordance perspective place emphasis on how the organization takes part in forming the individual perceptions towards shared affordances (Treem and Leonardi 2012). Ellison et al. (2015) show how an organizational affordance perspective can be utilized to investigate collective affordances and affordances of organizing on

enterprise social network sites in an organizational context, as well as how these affordances shape organizational practice.

The review of affordances in the studies of ESM in organizations presents a starting point for building our knowledge about social aspects of ESM at work, and provides opportunities to discover the dynamics between the social action and the material properties of the technology. The review highlights certain characteristics of the affordance view on ESM, which are adopted for the purpose of this study. First, affordances are relational in the sense that they are not inherent to the artifact or the individual, but rather arise in the relation between the two (Hutchby 2001). Second, affordances represent possibilities for action (Stoffregen 2003) in the sense that they can be realized or actualized by a specific individual, yet also by a group of individuals. Third, affordances can be viewed as both enabling and constraining action (Hutchby 2001).

In the existing literature, the affordance perspective provides insight into the ways in which ESM technology enables and constrains a variety of organizational practices. For example, the openness afforded by ESM has proved to both enable individuals to share and make information visible (Yardi et al. 2009; Treem and Leonardi 2012) while also inhibiting individuals' sharing of information due to concerns of disclosing 'unfinished' material or ideas (Danis and Singer 2008; Holtzblatt and Tierney 2011; Majchrzak et al. 2013). Figure 1 revealed how focus has been placed on the perceived affordances of ESM with little attention to how these become actualized in the actions of individuals and organizations. In accordance with the argument made by Faraj and Azad (2012), I believe that we can take the affordance concept further in the study of work and social interactions in an ESM context. Faraj and Azad (2012) assert that an affordance should be viewed as a multifaceted relational structure and not as a single attribute or property of the technology or the actor. In this sense, an affordance is enacted not in a single instance but rather arises out of several mutual relationships between the technological artifact and the actors (Faraj and Azad 2012). For the study of ESM at work, this implies moving beyond talking about specific users utilizing a set of features of ESM technology towards outlining the actions, abilities and the social environments that are a part of interaction with ESM technology.

### **2.3 This Study in Relation to Existing Research**

While investigating the relationship between information technology and organizational work is not a new topic within IS research (e.g., Gal et al. 2014; Olesen and Myers 1999; Sanders 2007), technologies such as ESM highlight the importance of considering the social implications for using and working with them (Faraj et al. 2011; Kudaravalli and Faraj 2008; Lazar and Preece 2002). The review of existing literature underlines how ESM provides an opportunity to re-examine organizational work through the added emphasis on the social networks and relations between organizational members. The insights gained from the review of the literature on ESM in organizations reveal three important points: 1) the visibility of activities and information on ESM platforms show that there is much to learn about organizational practices through observing and evaluating what takes place on the ESM platform, 2) the wide range of work practices that are a part of the use of ESM in an organizational context are carried out through practices heavily influenced by self-interest and iterative ad hoc procedures, and 3) the social organization surrounding ESM platforms focuses on relationships and the communal nature in which both professional and social connections are at play and must be cultivated. The use of affordance theory in the study of ESM in organizations presents valid insight into the socio-material dynamics of the technology and how we should consider the ESM technology in relation to the individuals who utilize it. However, it also reveals that there is still more to learn about these dynamics of ESM in an organizational context. The affordance approach provides insight into the perceived opportunities and constraints of ESM for individuals in organizations, but investigating how these become manifested in the social practice of organizational work could provide further insight into ESM in the organizational context. This implies thinking about the actions, abilities and the social environments that are a part of the interactions with the ESM technology.

Drawing on the insights from the review of ESM in organizations this study of social dynamics of ESM at work includes consideration of the technological capabilities that the ESM platform offers for investigating and observing activities and interactions, the self-interest and ad hoc processes that drive organizational

work practice on the platform, and the communal structure and social mechanisms that promote relationships in the organization. Enhancing the existing literature, this research integrates these material and social perspectives through the investigation of the actions and the social environment in which the ESM technology is situated within the organization.

## 3. Research Design

In this chapter, I present my research design and the underlying assumptions of the constructivist approach that is guiding this research. In particular, I highlight the relational perspective within this approach to present the ontological, epistemological and methodological assumptions that inform the study of social dynamics of ESM at work. Second, an overview of the case organizations is provided. Third, the process of the data collection and analysis is outlined and the research design is evaluated. Finally, I provide an account of my research process and describe key knowledge and experience gained throughout my PhD work.

### 3.1 Constructivist Approach and the Relational Perspective

A constructivist approach focuses on understanding the complex world of ‘lived-in’ experiences from the point of view of those who live in it (Schwandt 1994:6). The world and its meaning is seen as constructed between individuals, and in order to understand the world, one must interpret it. The processes of inquiry require the consideration of “world-making” in terms of ongoing processes of making and remaking (Goodman 1978:6). In this sense, we create the world as we live in it and our understanding of the world around us is informed by the pluralistic character of reality through the various symbols and language systems used to describe it and the malleable character of reality as stretched and shaped to fit the actions of human agents (Schwandt 1994). Constructivists focus on the ongoing production and organization of the world and use these dynamics to investigate systems of representations, social material practices, laws of discourse and ideological effects (Lincoln and Guba 2013). Within the constructivist approach, different ways of understanding and working with the constructions of reality have dominated the discourse. Constructivist perspectives range from the focus on the internal cognitive behaviors of the individual (Goodman 1978), to the social constructivist perspective (Gergen 1985) and the constructivist paradigm (Lincoln and Guba 1989), stressing the interaction between the observer and the observed as a joint construction process. While these three perspectives all focus on the individual(s) as the point of departure, one stream of literature within the constructivist approach emphasizes the relational constructionist perspective

(Gergen 2009; Hosking 2011). Moving away from the individual subject as the center for the constructions of reality, the relational perspective focuses on the relational processes as the ongoing medium in which relational realities are always in construction (Hosking 2011). In this sense, the relationship becomes the focal point of investigation and individuals are considered in terms of their relationship, rather than as individual actors (Gergen 2009).

In social studies of organizations, the relational approach emerged as a challenge to the highly individualistic methodologies that dominated previous perspectives (Özbilgin 2006). As part of a constructivist perspective, the relational perspective views social life and meaning as constructed and shaped by human thoughts, practices and relationships rather than having an absolute meaning of their own. The relational perspective then deals with the ‘how’ of constructing and says little about the ‘what’ or ‘content’ of the construction (Hosking 2011). The relational perspective is a way of orienting the focus towards the relational processes of a practice world and the ways in which particular relational realities are constructed and reconstructed (Hosking 2011:57). For the study of ESM at work, the relational perspective can help cross the boundaries between the subject-object differentiations by moving focus to the relationship as the point of investigation. The focus is then on the relational processes at play and how reality is constructed and reconstructed in these relational processes rather than on the specific entities of the individual or the technology and how these construct reality. In this study of ESM at work, the relational perspective adds insight into the social dynamics by allowing the understanding of these dynamics at a relational level rather than an individual one. Moreover, the relational perspective is relevant in this study as it allows the integration of the material properties of the ESM technology and the social relationships between organizational members. This is achieved through the focus on the dynamics of the relationship between the technology and the organizational member and not their individual characteristics.

To provide further insight into the implications of the relational perspective for the study of ESM at work, the ontological, epistemological and methodological implications are considered next.

*Ontology* refers to the nature of reality and how we may understand it (Guba and Lincoln 1994). The relational perspective centers on relational processes and it is these processes that actively create and maintain stabilities (Hosking 2011). In accordance with its constructivist roots, the relational perspective is not oriented towards some objective truth or reality, but rather sees reality as evolving and composed of ongoing relational processes that change over time and space (Gergen 2009). In organization studies, the relational ontology presents a number of assumptions of reality (Bouwen 1998). First, the relational perspective emphasizes how a mutually dependent relationship exists between the individual and the organization through which they sustain their mutual existence. It is in the coordination of organizational activities that individuals and organizations constitute each other (Gergen 2009). Second, language is a key component of the generative process involved in the constitutive relationship between the individual and the organization, and communication makes it possible for language to generate meaning (Bouwen 1998). Third, interaction at the individual and group levels in organizational settings serves to generate and shape shared meanings and bring forward both innovation and continuity (Bouwen 1998; Gergen 2009). The self-determination of individuals is then based on a knowing from within that comes from experiences gained through previous relationships (Gergen 2009). The relational perspective in the study of ESM from an organizational context therefore reveals the social dynamics of the organization in terms of relationships and relational practices that are continuously forming and re-forming. The ontological assumptions of the relational perspective also place strong emphasis on the relation as the foundation for the ‘being’ of individuals and underline how the relations, which the individual is a part of, are both a prerequisite for, and a result of, individuals being in the world (Gergen 2009). In this sense, the study of the social dynamics of ESM at work must consider the individual and the ESM technology in terms of and in light of the relations in which they take part, and how these relations are central for their existence.

*Epistemology* concerns the theory of knowledge and the relationship between the knower and what can be known (Hirschheim and Klein 1989). In line with the constructivist approach, the relational perspective relies on interpretations as a part

of knowledge creation. The relational perspective requires the researcher to pursue personal development through reflexive practice, engagement in the research context and an ability to engage with participants in the process of analysis and sense-making (Bradbury and Lichtenstein 2000). I, as the researcher, become involved in the knowledge creation process, just as I become involved in the relationships that make up the inquiry process. The objects of inquiry are the relational processes themselves, and knowledge is generated through co-ordination or organization of activities and the construction and reconstruction of a certain 'form of life' (Hosking 2011). This means that the relational processes are both the 'unit of analysis' and the point of stability and change (Hosking 2011:59). The epistemological stance therefore emphasizes how knowledge is created on an ongoing and evolving basis as relational processes are enacted, observed and interpreted by individuals and the researcher. The individual and the researcher are linked, and the creation of knowledge occurs as the investigation unfolds. For my study of the social dynamics of ESM at work, this creates the opportunity for me, as the researcher, to actively engage in the inquiry and take part in the relational processes themselves. It also implies that the knowledge created through the research process is evolving and constantly changing. The generation of knowledge as part of this research then aims to reflect this ongoing construction and reconstruction of knowledge by considering the generation of knowledge about social dynamics of ESM in organizations as evolving and continuing.

*Methodology* refers to how the inquirer researches what he/she believes can be revealed (Guba and Lincoln 1994:108). From the relational perspective, the method involves a means of capturing the interrelatedness, intersubjectivity and interdependence of the individual and organizational phenomena (Özbilgin 2006). The constructions of the world can only be captured through interaction between and among investigators and respondents (Guba and Lincoln 1994). From a relational perspective, this applies to the relational processes as both the unit of analysis and the process of investigation (Gergen 2009). The relational perspective in a constructivist approach adopts open multi-logical approaches that are participatory, collaborative, appreciative, and dialogical (Hosking 2011:60). A relational method involves considerations of knowledge in terms of contextual



implications through placing the phenomenon in its social and historical context (Özbilgin 2006). The methods must then reflect an awareness of the interdependencies between individual, organizational and contextual phenomena. In the study of the social dynamics of ESM at work, this implies venturing into the field of study and engaging with the field. The focus on uncovering the dynamic social processes of ESM at work makes the adoption of a qualitative research methodology appropriate (Maitlis 2005). In particular, qualitative methods are sensitive to the organizational context and offer the potential for focusing on idiosyncratic activities (Pettigrew 1992). Consequently, adopting a qualitative approach falls within the frame of this thesis research and the study of ESM at work.

The ontological, epistemological and methodological considerations have some central implications for the study of the social dynamics of ESM at work. First, the relational perspective allows for reality to be constructed at the level of the relationship. In this sense social dynamics arise through relation and relational processes between entities and not in the individual entities acting alone. Second, the focus on relation processes as the unit of analysis creates the opportunity for treating the social and the material as a collective entity. This is achieved through focus on the relationship they are a part of, rather than their activities as individual actors. Third, the relational perspective implies the adoption of a flexible set of methods that can facilitate the exploration of phenomena in practice as they develop, as well as allow the researcher to engage with the participants in, and for, the purpose of interpretations and constructions that take place.

### ***3.1.1 Case Study Method***

The qualitative research in this study is carried out using a *case study method*. A case study is an empirical inquiry that investigates a contemporary phenomenon within its real life context, particularly when the boundaries between phenomenon and context are not clearly evident and when they rely on multiple sources of evidence (Walsham 1995; Yin 1994:13). The case study method was deemed appropriate for this research as the theoretical knowledge of the phenomena of

social dynamics on ESM was limited and the context was of importance (Cavaye 1996). Additionally, applying the case study method to the relational study of ESM in organizational work gave me the opportunity to explore the phenomenon without relying on predefined boundaries. The case study method considers the phenomenon in its natural context, thus not only creating an opportunity for an in-depth investigation of the particular phenomenon but also the relationships between the phenomenon and the context (Cavaye 1996). In the case of this research, the delineation of the different relationships between organizational actors, and how these dynamically develop and evolve, requires them to be studied in their specific context.

In IS research, case studies have been approached from both positivist (Yin 1994) and interpretive (Walsham 1995) perspectives. Constructivism and interpretivism are related approaches to research as both are reliant on a world view that emphasizes a world of lived reality and situation-specific meanings constructed by the social actors (Schwandt 1994). In accordance with the underlying assumptions of the constructionist approach and relational perspective informing this research, I opted for an interpretive case study. The interpretive perspective ascribes meaning to organizational structure and social relations through the individuals' interactions in the social world (Orlikowski and Baroudi 1991). Moreover, the interpretive case study places emphasis on producing and understanding the contexts in which the information system works and exists (Walsham 1995). Meanings, in this context, arise out of social interaction, and it is through iterative processes between individuals that meanings are developed and modified (Boland and Day 1989). In the study of ESM at work, the interpretive case study method can then inform the study of the social dynamics of ESM in an organizational setting and allow for the understanding of how social relationships are constructed (Orlikowski and Baroudi 1991). Utilizing the interpretive case study method in this study, relationality is constructed at the level of the relationship, with the emphasis on the interactions between individuals. In interpretive case studies, my own subjectivity as a researcher will inevitably influence the interpretations of those being researched (Walsham 1995). While this can create challenges of biased and individual interpretations, it also enabled me to observe the phenomenon in its natural context. Reporting on the research findings of the interpretive case research was important in order to present the logical consistency

of the interpretations, the explanation of subjective meaning, and the establishment of adequacy by showing evidence of the rationale behind actions taken in this research (Lincoln and Guba 1985). The practice of this documentation is elaborated on in section 3.6, which evaluates the study.

Studying the social dynamics of ESM at work from a relational constructivist perspective provides a basis for shifting focus from the individual towards the relational processes between individuals, and between individuals and the ESM technology in an organizational context. In this sense, the relational processes are a part - and a result - of the construction and reconstruction of reality within the organization and surrounding organizational work. For example, the relationship between the ESM platform and an organizational member is both a prerequisite of the construction and reconstruction of reality on the ESM platform, as well as a result of the construction and reconstruction of reality on the ESM.

### **3.2 Initiating the Study**

The outline of how the study was initiated introduces the processes and procedures that guided the initial steps of the research. The following provides a description of how I gained access to the field and my role as a researcher.

#### ***3.2.1 Accessing the Field of Study***

Engaging with the study of ESM at work from the constructivist and relational assumptions required the research to take place in its original setting. Considerations about how to access and engage with the field are important. Not only gaining access but also maintaining it becomes an important part of the work in a field study (Benbasat et al. 1987; Walsham 1995). Accessing the field of study in this research took place in two phases. The first was part of my initial study based on my interest in investigating the phenomenon of social media. This study served as a catalyst for my interest in - and approach to - studying the social dynamics of social media in an organizational context. The second entailed the main research efforts, and dealt with the study of ESM in three organizational case settings. In the following, I outline the two phases placing emphasis on the second

phase as the studies in the three organizations informed the main part of my research.

In the initial phase, my contact with the field was through the study of the social media platform Facebook in the context of political campaigning (for details see paper 1). In this study, the interview data was already collected as part of a previous research effort<sup>1</sup> and gaining access to the field was centered on the online Facebook platform and the political parties' Facebook pages. The public availability of their Facebook pages created very low barriers of entry to the field, as the information was made publicly available on the Facebook platform. In this sense, I was able to capture the content through screenshots of the Facebook pages of each of the political parties. The low access barriers created a unique opportunity for the initial investigation of the social media phenomenon; however, it left me with many unanswered questions in terms of the considerations, thoughts and actions taken by individuals on the platform. The initial study then provided me with questions that informed the next phase of engaging with the field as well as some insights into obtaining data from a social media platform.

The second phase, which came to dominate my research, was based on the investigation of ESM in an organizational context. The investigation adopted a collective case study approach in which the instrumental study extended to several cases (Stake 1994). Selecting the case organizations was, to a high degree, based on identifying the organizations making use of an ESM technology. With this in mind, the initial work comprised of laying out the landscape of ESM technologies. Mapping this landscape revealed many different ESM technologies, and among these, the platform 'Yammer' seemed to dominate the ESM landscape. Acquired by the Microsoft cooperation in 2012, the Yammer platform had become incorporated in the new Office365 software package, which resulted in a wide implementation of the platform in many organizations (Wilhelm 2014) and earned it a place on Gartner's Magic Quadrant for Social Software (Drakos et al. 2014) as one of the most popular ESM technologies. Offering an interface broadly similar to that of Facebook's, the Yammer platform provided an appropriate link to my

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<sup>1</sup> The data comprised of seven interviews with the person responsible for social media in seven Danish political parties. The interviews were carried out as part of a master thesis project.

preliminary study, and consequently I decided to look for organizations utilizing this platform. The next step was to find and choose a setting where the phenomenon could actually be studied (Walsham 2006). For my study of ESM at work, this meant identifying an organizational setting where the adoption of Yammer had already taken place. In order to find potential organizations, I conducted various searches online for articles, reports or organizational website entries that indicated that an organization was utilizing Yammer. I then approached the identified organizations (seven organizations) through an email expressing my interest in their organizational use of Yammer, providing details about my PhD study as well as enquiring about a possible collaboration (Appendix 1). The emails were then followed up by a telephone call. Through these efforts, contact was established with one organization, a Danish IT consultancy hereafter referred to through the pseudonym TopConsulting (cf. section 3.3.2), who I had contacted on the basis of an article in which the CEO attributed a workplace award to the organization's use of the Yammer platform. Following an initial meeting, collaboration was agreed upon, giving me access to conduct observations and interviews within the organization with the objective of studying the organizational use of the Yammer platform. The relatively open access to the organization enabled me to conduct my studies through a mix of observations, both onsite at the organization and online on the Yammer platform, as well as engage with employees through ad hoc conversations and interviews. As the research frame and the premise of the study had been left open, I began my investigation by engaging in observations onsite in the organization as well as online on the Yammer platform (the observation process and procedure is detailed in section 3.4.1). I obtained a workspace onsite and my own profile on the Yammer platform and was able to spend my days working and talking to people within the company. Through these observations, I started to identify individuals who would be interesting to interview and those interviews allowed me to identify additional interviewees (the interview process and procedure is detailed in section 3.4.2).

The input and insights from the first case study convinced me that including additional case studies of Yammer in an organizational context would be

beneficial for the overall purpose of the study. While the selection of the first case organization was based upon the very broad criteria of simply gaining access to an organization utilizing Yammer, the insights gained from the first case study helped inform certain criteria for the selection of the next cases. According to Benbasat et al. (1987), the selection of case site must be carefully considered rather than opportunistic. The selection of the first case setting was somewhat opportunistic but also served as a way of gaining the necessary knowledge about the phenomenon of interest to formulate more careful criteria for the additional two cases. The criteria for the selection of additional cases were framed according to my interest in investigating the preliminary results gained in the first case study across differing contexts. Consequently, the additional case organizations were identified based on the following five criteria: 1) the utilization of identical ESM platform (i.e., Yammer must be adopted into the organization's daily work practices), 2) sector diversity (i.e., the case organizations should represent different sectors), 3) stage of ESM use (i.e., the case organizations should represent different stages of ESM use), 4) size of organization (i.e., the case organizations should differ in size), and 5) full access (i.e., access to close scrutiny of their work practices through interviews, field observations, Yammer logs, and other written material). The preliminary results obtained from the first case study allowed me to provide more concrete descriptions of the study's intent and focus when contacting the new case organizations. These efforts gave access to two additional cases, one in a Power and Automation Company, hereafter HighPower (cf. 3.3.3) and one in a Health Organization, hereafter BetterHealth (cf. 3.3.4). In terms of access, BetterHealth lived up to the fifth criterion and provided full access to onsite and online observations as well as interviews, whereas access to the online platform was not granted at HighPower but was compensated by the opportunity to obtain screenshots and data extractions from the platform. The approach taken in the first case study served as an instrument as to how I could best study the Yammer use in the two additional case studies (Stake 1994). In addition, an initial meeting was carried out with the contact person in both organizations to discuss and frame the purpose and scope of the research study.

Returning to the point by Benbasat et al. (1987), maintaining access to the field is important. The observations and interviews within the three case organizations were carried out over a period of approximately eleven months. At the end of each investigation, I created a small report for each of the organizations, detailing the interview output and the preliminary insights from my research (Walsham 2006). In addition, a follow up meeting was encouraged to take place after I had had time to process and further develop my results. This meeting was scheduled in order to make room for additional input and feedback on the research results from the organizations and also to provide the organizations with insight into the broader results of the research.

My main objective with the field of study was to gain access to a field and select cases that enabled me to investigate the phenomenon of interest (Henfridsson 1999). In this sense, I have identified and studied three cases that all provide insight into the utilization of ESM at work (section 3.3).

### ***3.2.2 My Role as a Researcher***

As a part of the relational constructivist approach and the interpretive case study method, it is important that I consider my role in the research process (Hosking 2011; Schwandt 1994; Walsham 1995). In the terminology of Walsham (1995), the researcher can take on the role of an outside observer, implying that the researcher maintains some distance to the field, or as an inside or participant observer, where the researcher plays an active part of the field in focus. In this study, I assumed the role of an inside observer in the sense that I obtained access to the Yammer platform and engaged with the organizational members at each of the case organizations when going about their daily work. However, I did not actively participate in the execution of the work of the organizational members but rather observed them as they went about their daily practices. Gold (1958) distinguishes between the participant-as-observer and the observer-as-participant role to highlight different ways of going about observations. In line with this, my role as a researcher followed the observer-as-participant role, as I conducted more formal observations and did not spend so much time participating in the actual work being done in the organization (Gold 1958). The purpose of my study was to

investigate and gain an understanding of the social dynamics surrounding ESM use and not to alter or take action with regards to these. Consequently, I did not participate actively in the work with the ESM platform but acted as an observer of the work processes and interactions taking place around the platform. While I did not participate actively in the actual work practices, the observations of the everyday work at the organization enabled an understanding of the work processes and procedures that were present in the organizations (Stake 1994).

My role as an inside observer and an observer-as-participant had both advantages and disadvantages. The advantages of this approach became clear through the way in which the employees did not have to be circumspect in their opinions, as I had no formal position within the organizations. This involved a certain level of trust being established between the informants and myself, the researcher, and this was reflected in how the organizational members felt comfortable expressing both positive and negative opinions during the interview. The disadvantages of the observer role were in the potential difficulties in getting a more in-depth 'insider' perspective on activities within the organization. In my time at the organizations, I attempted to mitigate this by staying curious and asking questions when something was mentioned that I did not know of, for example details of a certain work process, abbreviations etc. With respect to the ontological, epistemological and methodological perspectives guiding this research, the inside observer role provided me with the opportunity to observe the relationships as they formed, but my active participation in them was limited to me engaging as an observer-as-participant as I did not take part in the actual work processes in the organizations.

### **3.3 Research Setting**

The sample of cases selected for this research was based on an interest in the phenomenon of social dynamics evolving around the use of ESM technologies in organizations. The collective casework nature of the case study approach placed focus on the selection of cases that represented the phenomenon and also allowed for a similar instrumental approach to each of the case settings (Stake 1994). The three cases selected all utilize the ESM platform Yammer as well as showed an interest in participating in the research, but the cases also differed in the terms of sector, stage of Yammer use, and organization size. The objective of the different



characteristics of the three cases was to utilize the multiple cases to represent a variety of Yammer use and enable comparisons between the cases (Glaser and Strauss 1970) that would permit a replication strategy (Yin 1994). Below I present the descriptions of the Yammer platform and the three case organizations under investigation.

### ***3.3.1 The Yammer Platform***

The study was carried out in three case organizations working with the ESM platform, Yammer. The Yammer platform allows organizational members to connect with each other, share information across teams and organize projects online (Yammer 2015). In its first version, launched in 2008, the Yammer platform was promoted as a micro-blogging tool, emphasizing the sharing of small messages and updates. The Yammer platform has since developed and is now labeled as an Enterprise Social Network encompassing multiple functionalities including the connection of people in a networked manner (see screenshot in Appendix 2). Each organizational member on the platform is set up with a personal profile to which they can add their personal information and photo, follow other organizational members, share knowledge with specific persons or general groups and create or join specific work groups. Central to the Yammer platform is the newsfeed, which constantly displays the newest and most popular news in the organizational members' network. This newsfeed will automatically update when new stories emerge from the organizational members' network or groups, as well as bring forward the posts and comments that are receiving the most attention from others in the network. The dynamic newsfeed then enables organizational members to be made aware of what is going on in the organization through the constant updates on the newest posts and comments (Yammer 2015). The newsfeed has two settings for the organizational members to choose from. One is the organizational members' personal newsfeed and the other is the 'AllCompany' newsfeed, displaying all activities on the Yammer platform. The Yammer platform also enables the formation of groups that organizational members can both create, invite others to and be a part of. These groups are created from the bottom up and anyone can create a group on the platform. In particular, the group structures can facilitate work on specific projects or

conversations about certain themes (Yammer 2015). The Yammer platform allows all organizational members to contribute content and news, while the features of tagging and searching enable organizational members to search for the information they need. The groups can be open or closed, though the editing of posts on the platform is restricted to the administrators. In the everyday use of the Yammer platform, organizational members can post a range of content including messages, questions, pictures and videos, links etc., to the newsfeed or to specific people or groups on the platform. The posts are then displayed and preserved on the Yammer platform and can be liked or commented on by other organizational members. Most of the interactions on the Yammer platform are public and every member of the platform can see and comment on them. It is, however, possible to set up private groups in which the content shared will only be visible to those who are members. The Yammer platform can be used in a desktop version or through a mobile app.

### ***3.3.2 Yammer at TopConsulting***

The first case organization is a Danish IT consultancy company. The company currently has 43 employees and specializes in consultancy services within Microsoft solutions, assisting large international companies. Most employees work from client offices on a daily basis. In the summer of 2012, Yammer was adopted as a tool for internal communication and collaboration on the initiative of the new CEO. Through its affiliation with Microsoft products, the company not only uses Yammer for its own internal communication but also sells the tool to its clients. The company has placed Yammer as a mandatory and central communication channel for all operational information in the organization and has encouraged employees to join and engage on the media as part of their daily work. In 2013, when the company received an award for the best workplace, the CEO attributed part of the reason for this to the Yammer platform and the social interaction it facilitated. In the daily work practices the company uses Yammer to share updates on projects and clients as well as photos and occasional jokes.

### ***3.3.3 Yammer at HighPower***

The second case organization is an industrial power and automation company. Worldwide, the company has approximately 130,000 employees. I gained access to the Danish branch of the company, which has approximately 600 employees. Most of the employees in the Danish branch are located in three main offices across the country. Yammer was adopted as part of a company-wide upgrade to the Office365 software in September 2013. The company had previously used Lotus Notes as a communication tool and Yammer was introduced as a supporting technology for the implementation of the new Office365 system. The use of Yammer has, since its introduction, spread out through the company and Yammer is now used across a number of projects and work groups. In the daily work practices the organizational members use Yammer to post questions and obtain updates on the current state of projects.

### ***3.3.4 Yammer at BetterHealth***

The third case organization is a non-profit research-based organization, supporting research and work about health issues. The organization consists of a large number of scientific researchers including doctors, chemists and biologists, as well as an administrative and business division and a large base of volunteer workers. The IT department initiated the use of Yammer in November 2013 with the long-term objective of connecting research staff and volunteers and enabling them to share knowledge and coordinate work. In the short term, the IT department makes use of Yammer to manage projects and to become familiar with the technology before introducing it to the entire organization. On a daily basis the IT department mostly uses Yammer as a repository for information in the form of article sharing and updates on where to locate manuals and other operational material.

An overview of the case organizations is presented in Table 6.

	<b>TopConsulting</b>	<b>HighPower</b>	<b>BetterHealth</b>
<b>Business Area</b>	IT Consultancy for Microsoft Solutions	Power and automation technology	Healthcare research and development
<b>Organization Type</b>	Consulting	Manufacturing	Applied research
<b>Number of Employees</b>	43 employees	600 employees (local), 130,000 employees (global)	300 employees and about 40,000 volunteers
<b>Yammer Implementation</b>	July 2012	September 2013	November 2013

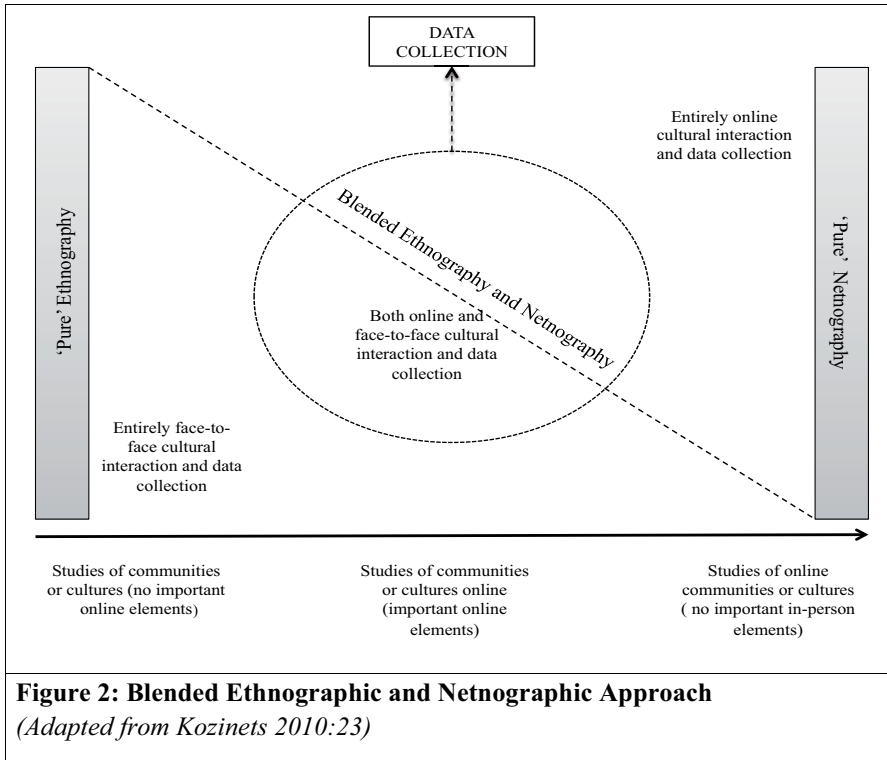
### **3.4 Data Collection**

The data collection is situated in a specific context and involves collection of data on processes and relationships between, and amongst, individuals and organizations (Özbilgin 2006; Walsham 1995). Adopting a relational perspective requires focus on the collection of data that makes us able to gain insight into the relationships between actors. In case study research, evidence can be collected through six sources (Yin 1994): documentation, archival records, interviews, direct observations, participant observations and physical objects. In interpretive case studies, the primary source of data is the interview as it gives insight into the interpretations and understanding of individuals (Walsham 1995). However, constructing qualitative data benefits from establishing a triangulation between data sources that can help in mitigating the biases related to interpretation of evidence (Darke et al. 1998). In my efforts to obtain data and method triangulations (Guba and Lincoln 1994), the data for this research was collected through two main methods: extensive observations within the organizations and on the ESM platform, and semi-structured interviews with organizational members.

### ***3.4.1 Observations***

The observations in the organizations were approached both onsite and online. A blended ethnographic and netnographic approach was adopted, focusing on online and face-to-face interaction and data collection (Kozinets 2010). Based on the ethnographic method, netnography focuses on the observation and engagement in an online community setting. Ethnographic methods are characterized by observations in a certain environment, the generation of largely unstructured empirical materials, a limited number of cases, and a primarily interpretive analysis involving descriptions of phenomena (Atkinson and Hammersley 1994). As with ethnography, the point of netnography is to observe the individuals in their natural context to see how they behave and interact (Kozinets 2010). Figure 2 illustrates the premise of a blended ethnographic and netnographic approach.

The increasing adoption of computer-mediated communication has made considerations of the online environment significant when exploring the interactions of individuals in organizations (Garcia and Standlee 2009). The blended ethnographic and netnographic approach emphasizes a combination of online and face-to-face interaction and data collection. Observations can be problematic as it is not always clear what to look for or where. Before undertaking netnographic and ethnographic studies, a set of guidelines must be formulated for the researcher (Kozinets 2010). These guidelines are not set procedures but rather aid the researcher in the data collection process and help maintain a level of coherence between the data collected. In order to guide my observations, I created a schema before entering the field, detailing the type of observation as well as the place, people and method which worked as a guide for the initial observations (Appendix 3).



The blended ethnographic and netnographic approaches involved the collection of three different types of data. The first type of data collected was *archival data* observed directly from the pre-existing communication and interaction between employees on the Yammer platform. The data from the Yammer platform was logged in two ways, first through the creation of a pdf-format printout of all interaction on the platform and second in an Excel spreadsheet, listing each entry in a separate line. The reason for the two formats was to preserve the contextualization of the platform through the screenshots as well as the more static representation of the entries in the Excel spreadsheet.

The second type of data collected as part of the observations was *elicited data*, where data was co-created through personal and communal interaction between the organizational members and myself, the researcher (Kozinets 2010). The generation of elicited data implied my engagement in the community through the collection of conversational data (Schultze 2000). During the observations, I would engage in informal chats both online and offline with any organizational member as part of the conversational interactions (Kvale 2008). For example, I joined the ‘share your code’ group on the Yammer platform at TopConsulting, leading the members of the group to engage in banter and post friendly jokes about how they ‘looked forward to seeing my coding’. I followed up on this remark by responding how I was planning to learn from the best, and some of the members then provided me with more detail and links to their work. In this sense the informal conversation on the Yammer platform gave me insight into the work of the members in the ‘share your code’ group as well as an understanding of the dynamics of the work group through the informal tone of their interactions. Furthermore, the interviews also served as a part of the elicited data (the interviews are elaborated on in 3.2.4). Lastly, extensive *field notes* were created in order to record my observations of the onsite and online observations (Kozinets and Wojnicki 2010). The generation of field notes was based in a structured manner and included templates for online and offline observations as well as my own experiences (Schultze 2000). In order to structure my field notes, I set up an Evernote<sup>2</sup> account, creating separate documents for each observation session. I developed a coding scheme to mark the text according to questions, reflections, issues for further investigations, and issues I did not understand (Appendix 4). These codes served as a way of navigating the field notes and also provided me with subject matter for informal talks and the interviews with the organizational members. The data collected through the observations was carefully stored in separate folders, with each case organization divided into sub sections of the archival, elicited and field note data.

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<sup>2</sup> Evernote is note-taking software, which provides access to the notes through various devices such as computer, mobile, and tablet.

### 3.4.2 Interviews

The interviews were conducted with organizational members within each of the three case organizations. As an exchange of views between two people talking about a topic of common interest (Kvale 2008), the interviews worked as a way of gaining insight into the opinions and reflections of the organizational members on their use of ESM at work. The purpose was to gain a greater understanding of people's experiential life and to engage individuals directly in a conversation where I, as the researcher, would get a first-person account of the participants' social realities. My role was then to facilitate the participants in reaching beyond the superficial layers of their experience in order to generate informative, novel accounts of the phenomena of interest.

In preparation for the interviews, an interview guide (Appendix 5) was created with the aim of getting the participants to provide narrative accounts (Czarniawska 1997) of their experiences with and reflections on the use of the ESM platforms in their organization. This interview guide reflected some of the issues that had arisen from the initial observations within the organization as well as the overall research focus of gaining insight into the social dynamics surrounding the use of Yammer in the case organizations. The interview protocol was designed to get the organizational members to share their own stories about the use of the ESM platform. I asked organizational members to tell me about their experiences with the ESM platform within the organization, both positive and negative. For example, the interviewees were asked to describe an episode in which the ESM platform had enabled them to connect with their colleagues followed up with questions of *how* and *why*. This strategy was adopted to ensure that the data generated from interviews was as rich as possible in order to fulfill the objective of providing insight into people's life worlds (Schultze and Avital 2011). As specific issues related to the use of the ESM platform emerged, the interview guide was subject to small modifications throughout the study (Huberman and Miles 1994). For example, the initial interviews revealed interesting insights into the considerations regarding audience on the Yammer platform, which led to the inclusion of questions asking organizational members to elaborate on their



considerations of audience when explaining their activities on the Yammer platform.

A good informant is one who has the knowledge and experience the research requires, the ability to reflect, and the time and willingness to participate in the study (Morse 1994). The selection of interview participants was initiated through interviewing those individuals who showed the most activity on the Yammer platform within each of the case organizations. As the interviews progressed, so did the knowledge of which organizational members to talk with. In the interviews, it was also important to be aware of the implications related to the complex social situation of the interview (Alvesson 2003). This was considered as interviewees might have their own agenda for the interview and, similarly, the interpretation of the interview data might be influenced by certain factors. For example, for some interviewees in one of the case organizations, it was important to appear more engaged with the ESM platform than they actually were. To mitigate this, my observations offline and online in the organizations served as an approach to enrich and verify the data collection (cf. section 3.2.3).

The interviews lasted between 20 and 60 minutes and were recorded and transcribed verbatim. The recording of the interview was done in order to allow me, as interviewer, to focus on the interview process rather than being preoccupied by taking notes during the interview. Following each of the interview sessions, I noted down some of the key points of the interview. Each of the interviews was then manually transcribed within twenty-four to forty-eight hours following the interview session (Huberman and Miles 1994). Table 7 provides an overview of the data collected in the three case organizations.

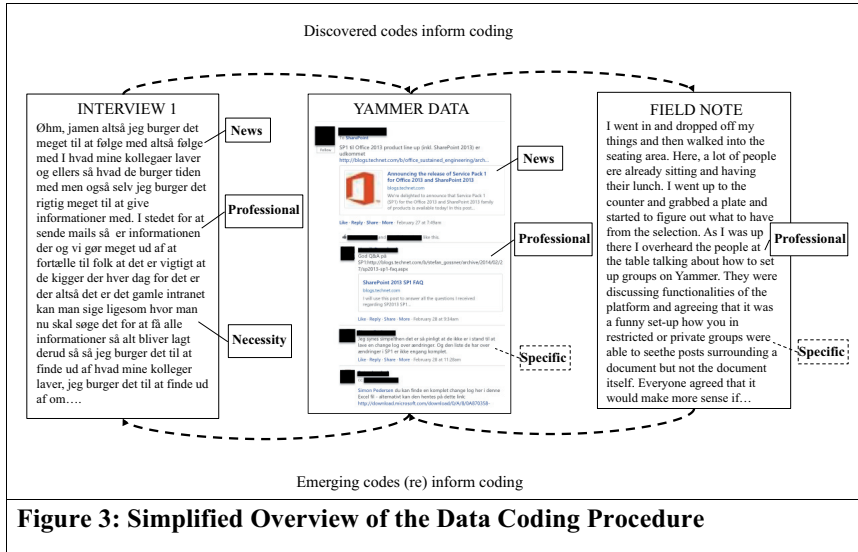
The varying amount of data collected across the three case organizations reflects the nature of the access given to each of the case organizations. While the access to TopConsulting and BetterHealth involved obtaining a login to the Yammer platform and gaining access to interviews with a range of organizational members, the access at HighPower involved data extracted from the Yammer platform and insight into the opinions of a few organizational members. However, the rich data set extracted from the Yammer platform at HighPower provided a great amount of insight into the interactions on the Yammer platform, which informed the analysis and results.

<b>Table 7: Overview of Collected Data</b>			
	<b>Case organization: TopConsulting</b>	<b>Case organization: HighPower</b>	<b>Case organization: BetterHealth</b>
<b>Duration</b>	Feb. 2014 – Nov. 2014	Jun. 2014 – Sep. 2014	July 2014 – Nov. 2014
<b>Field Observations (onsite/ on Yammer)</b>	165 hours onsite 198 hours on Yammer	10 hours onsite 3 hours on Yammer	18 hours onsite 26 hours on Yammer
<b>Access to the field / contact person</b>	Yammer responsible	Project coordinator of Yammer	IT manager responsible for Yammer introduction
<b>Total no of semi-structured interviews (20-60 minutes)</b>	24 interviews: 1 CEO 1 Managing Partner 1 HR Manager 8 Solution Providers 7 Senior Consultants 3 Consultants 2 Sales Employees 1 Marketing 1 Assistant	4 interviews: 1 Project Manager (2) 1 Communications Manager 1 IT manager	10 interviews: 1 IT Manager 4 System Administrators 3 IT Support agents 1 Administrators 1 Developer
<b>Informal interactions</b>	Yes	No	Yes
<b>Follow-up visits</b>	Yes	No	Yes
<b>Documents and archives</b>	Yammer posts and comments: 1,997 posts 2,696 comments	Yammer posts and comments: 559 posts 602 comments	Yammer posts and comments: 153 posts 124 comments
<b>Other data</b>	Participation in company events	Meeting on Yammer strategy	Meeting with external Yammer providers

### **3.5 Data Analysis**

As part of the qualitative approach, data analysis was not separated from data collection (Huberman and Miles 1994; Kozinets 2010). In this sense, the data analysis for this project did not follow an ‘off-the-shelf’ process, but rather emerged as the data collection and the subsequent work with the data evolved (Preissle and Grant 2004). The data analysis process in this research was influenced by a number of factors. First, the generation of the field notes, which included reflections and interpretations of the observations that served as a way of processing and analyzing the data on an on-going basis (Garcia and Standlee 2009). Second, the development of research papers as part of the thesis process involved a consideration of the data from different theoretical perspectives. Third, the three different case settings, although approached with a similar data collection design, generated new findings that needed to be considered as part of the ongoing data analysis. Common to the data analysis process was the use of qualitative data coding techniques to process and interpret the collected data. The data coding approach involved making sense out of the data collected by dividing it into text pieces and ascribing meaning to these pieces through interpretations (Creswell 2012). The coding process was carried out using the software, MAXQDA. As the data collection involved both the archival, elicited and field note data collected as part of the observations, as well as the interview transcriptions, the use of the data coding process and software allowed for a triangulation of the collected data. In practice, this meant that all the collected data was uploaded to and processed through the MAXQDA software. This allowed for the codes assigned to the different text pieces to transcend the analysis of the different data files. Figure 3 demonstrates a simplified view of the data coding process, showing how the discovered codes from one document would inform coding of the next (the movement from left to right) and how emerging codes would re-inform coding (the movement from right to left). The example in Figure 3 shows how the codes ‘News’, ‘Professional Content’ and ‘Necessity’ emerge from the coding of the INTERVIEW 1 document and how two of these codes are also reflected in the YAMMER DATA coding. While the FIELD NOTE coding reveals ‘Professional content’ it also uncovers a new code of ‘Specific context’. The discovery of this new code then re-informs the coding of the YAMMER DATA when the text is

revisited according to this code. In this sense, the data coding process was ongoing and involved an iterative process of coding and re-coding as new codes emerged.



Moreover, the data coding software MAXQDA allowed for the attachment of a small descriptive text to the codes in order to document and preserve the meaning of the code guiding the continuous coding process. The paper-based format of the thesis resulted in multiple rounds of analysis of the collected data, and through doing so, introduced a theoretical triangulation through the different perspectives that informed the data coding (Lincoln and Guba 1985). In line with the main objective of the research, the coding process revolved around the investigation of the social dynamics surrounding ESM use in the organizations. However, the data analysis for each of the papers led to the investigations of these dynamics in separate data analysis from an affordance perspective (in paper 1), a historical perspective (in paper 3) and a controversy perspective (in paper 4). These cycles of analysis influenced both the data collection and data analysis, emphasizing the iterative work with the data. The reduction and representation of the data also differed in each of the paper analyses. In this sense, the data collected was

approached from different angles and came to reveal different insights into the study of the social dynamics of ESM at work. However, the triangulation of data sources and collection methods remained constant in the different rounds of analysis. While the life cycle of qualitative research has certain advantages in terms of the flexibility of adjusting instrumentation and analysis in accordance with the increasing understanding of the setting, some challenges also exist in terms of establishing the validity of the research (Huberman and Miles 1994), which I will address next.

### **3.6 Evaluating the Research Approach**

The evaluation of the research considers two forms of validity criteria: formative and summative (Lee and Hubona 2009). Formative validity refers to the process by which the research progresses, while summative validity refers to the evaluation of the sum or result of the process (Lee and Hubona 2009). Achieving formative validity in the research undertaken by this study required following a set procedure to guide the research process (Lee and Hubona 2009). In this qualitative research, ongoing iterations and adjustments to the observational protocols and the interviews reflect an understanding of the setting (Huberman and Miles 1994). To evaluate the research approach, considerations of the trustworthiness of the method are included (Lincoln and Guba 1985). Determining trustworthiness helps establish the research through ensuring credibility, transferability, dependability and confirmability of the research (Lincoln and Guba 1985).

*Credibility* was addressed in the research through allowing time in the field to become oriented with the situation within each of the case organizations (Lincoln and Guba 1985). The majority of time was spent in two of the case organizations, TopConsulting and BetterHealth, where I was able to spend time in the companies with the employees and establish trust between the employees and myself, the researcher. In the case of HighPower, however, access was limited, thus only allowing limited time to be spent within the company. Establishing the credibility of the research also involved the technique of triangulation (Lincoln and Guba 1985). The triangulation was sought on three levels, in terms of data, theory and

method triangulation (Denzin and Lincoln 1994). The data triangulation involved gathering data from different sources of individuals within each of the case organizations across a period of time. In this sense, many individual opinions and perspectives emerged regarding the use of ESM within each of the organizations. The theory triangulation occurred as a result of the paper-based approach to the research. Through the different theoretical lenses applied in accordance with each of the papers, the triangulation of theory resulted in different perspectives, which added to the final conclusions of the research efforts. Applying more than one theoretical schema in the data analysis has contributed to the overall insights gained as part of the research. Additionally, discussing the data with my supervisors and presenting papers at conferences also provided insights that informed my interpretation of the data. Finally, a methodological triangulation involved using more than one method to gather the data. Method triangulation was achieved by collecting both interviews and observational and archival data demonstrating the activities around the ESM platform across the three case organizations. This proved extremely valuable in uncovering what was going on within the organizations and helped add transparency to what the organization's members were expressing and how this was reflected in their behavior.

To account for *transferability*, the collection of the broad variety of data within the organizations required the description of everything that was observed and collected during the study. Accounting for transferability of the results involved the consideration of how the results can be transferred to another setting (Lincoln and Guba 1985). Transferability is linked to accounts of the *dependability* and *confirmability* of the results (Lincoln and Guba 1985). Inspired by the requirements for a confirmability audit (Halpern 1983), I sought to systematically document my research efforts throughout the research process in four specific ways. First, in regards to the data collection, this involved the documentation and storing of the raw data from the Yammer platforms, field notes and interview data in a repository. Second, the data reduction and analysis processes were documented in the form of the field notes and analytical reflections in each of the developed papers as well as a thoroughly documented coding process. Third, process notes were created that detailed my initial reflections before entering the

field, and procedures for observations and interviews, as well as the instrument development, including my interview guides and the field note coding schemas. Finally, as part of my PhD study process, material relating to the intentions and progress of my PhD was formulated in reports that were delivered on a bi-annual basis. The thorough documentation worked as a way of documenting my process and the choices made along the path of the research. The ongoing assembly of these documents served as a way of establishing transferability, dependability and confirmability of the results through the detailed recordings (Lincoln and Guba 1985).

Summative validity was achieved by allowing the results of the research process to be empirically tested (Lee and Hubona 2009). In practice, this was done through both inter-case testing of the developed results within a single case and through applying the results across the three case organizations. This became particularly explicit in the development of the social fabric framework in paper 4. The first version of the paper investigated the use of the social fabric threads to describe and understand different activities within a single case organization. In the elaborated version of the paper, the social fabric threads were compiled based upon a cross case study of the three case organizations and the framework tested in relation to collaborative activities within each of the cases.

Accounts of validity help strengthen the contribution of the research and position it as something which should be considered (Lee and Hubona 2009). In respect to the contribution of this research, a few additional remarks is made concerning the transferability of the results attained (Lincoln and Guba 1985). This study is approached from a relational constructivist position and relies on the use of the interpretive case study method. This implies that the results obtained are subject to interpretation and are context specific (Klein and Myers 1999). The efforts of this research are therefore not to establish a single truth, but rather to contribute new insights into the phenomena of interest (Walsham 1995). The purpose of the research effort then is to move from empirical statements reflecting the observations of the case studies to theoretical statements in the form of rich

insights (Lee and Baskerville 2003). In accordance with this, rather than prescribing single truths or facts about the social dynamics of ESM at work, this research instead seeks to conclude its results in terms of rich insights outlining the broad implications of the study findings (Walsham 1995).

### **3.7 The Storyline of My Research Project**

The story of the research process has involved both easy and difficult considerations, conscious and unconscious choices, and the journey has, in some cases, depended on faith and luck. Nevertheless, these factors are all part of what has molded this research and provided inspiration for future work to be conducted. The story of my research process is therefore intended to be a confessional account (Henfridsson 1999; Schultze 2000), as well as give insights and transparency to my research as a whole. The research process of my thesis has been exciting and challenging and involved trips down several paths. Throughout this process, I have investigated different approaches within sociomaterial, sociological and organizational research, which have all come to influence the work and results of the thesis research. In this account, I will seek to explain this journey through the different perspectives and understandings that I have gained from each of them as the research progressed.

My story begins at the time when I was formulating my research proposal as part of my application for the PhD position. At that time, I was finalizing my Master's thesis on the meaning of information management; a thesis that had sent me into a deep investigation of existing literature in an extensive search for a conceptual definition of information management. While I had enjoyed tracing the history and origin of a concept, it had also made me hungry to conduct more empirical research. As a result of this, my PhD application took form, putting emphasis on investigating the dynamics of information sharing and leadership formation in organizational networks in the context of social media. Following acceptance into the PhD program, I was excited to start the research process. The initial meetings with my supervisor, Tina Blegind Jensen, generated considerable discussion about the foundations of social media and how we could understand this complex phenomenon. Commencing my work by gaining an understanding of what social media meant as a phenomenon appeared to be a perfect starting point for my



investigation. At that time, I did not know that understanding ‘the social’ and ‘the media’ would eventually come to dominate the course of my PhD work. In my initial work uncovering social media as a phenomenon, my literature search revealed articles concerning the use of social media (e.g., Bertot et al. 2010; Correa et al. 2010; Gil de Zúñiga et al. 2012), human behavior on social media (e.g., Khan and Jarvenpaa 2010; Hughes et al. 2012) and the adoption of social media (e.g., Nah and Saxton 2013; Wang and Zhang 2012). However, at that time not much of the existing work seemed to deal with the entanglement between the social and the media. To investigate this entanglement, the work of Orlikowski (2007), Orlikowski and Scott (2008), Leonardi (2010), and Leonardi and Barley (2008) on sociomateriality and the mutually constitutive relationship between the material and the social dominated many of my readings at that time. This led to a paper co-authored with my supervisor, Tina Blegind Jensen, exploring affordances of social media in political campaigning, which was accepted for presentation at the *European Conference on Information Systems*. Serving as my first attempt at article writing, this paper allowed me to explore the affordance concept as a way of describing social media through this mutually constitutive relationship between individuals and technology that had inspired me from the sociomaterial thinking. Providing insight into the political parties’ perceived affordances of the social media platform Facebook and the actions taken by political parties on their Facebook pages, the article highlighted the difference between the political parties’ ‘intended’ and ‘acted out’ activities on the Facebook platform (see paper 1), making me curious about the role that the ‘social’ played in the translation of the perceived affordances of the social media into actions.

Inspired by the development of the first article, and a desire to explore more of the social aspects of this form of media, I collaborated with my two supervisors, Tina Blegind Jensen and Michel Avital, on a theoretical paper exploring how to investigate social media in light of its social and interactional aspects. A first version of this paper was accepted and presented at the *JAIS Theory Development Workshop at ICIS 2013*. The point of this research effort was to go back to the fathers of sociology (Durkheim, Marx and Weber) and draw on their perspectives in order to understand how we can explain ‘social’ before linking this to the media

developments. I was very excited about investigating some of these seminal ideas of sociological thinking, and thus engaged with these works with great enthusiasm. This enthusiasm was, however, somewhat short-lived as the deeper I involved myself in the thinking of these great sociologists, the more confused I became as to what to take with me and how to further work with this. While these sociological works inspired me a great deal, they represented some of the most challenging readings, consequently summarizing and working with these ideas proved problematical and resulted in a lot of lengthy meetings with my two supervisors. Eventually, a focus on the micro-sociological perspective on ‘being social’, drawing on works from Weber (1948), Mead (1934), Garfinkel (1967), Goffman (1959) and Blumer (1969) allowed us to outline some core modes of behavior which constitute social actions. Further, summarizing the work of scholars in media (Innis 1951; Lazarsfeld and Merton 2004; McLuhan 1964; Schultz 2004; Shannon and Weaver 1948) allowed a formulation of how media affords dissemination, amplification, contextualization, integration and preservation of information. Linking these two main perspectives of ‘being social’ and ‘media’ provided us with a number of propositions as to how social media was linked to the social interactions between individuals. The presentation of the paper at the JAIS TDW at ICIS 2013 offered a wealth of valuable input and the main feedback centered on questions of empirical examples and evidence – in short, I needed a context and empirical data. The ideas of this paper were since developed further (see article 2), to address the two domains of media and sociality through the investigation of the role of interaction in the actualization of perceived ESM affordances.

In line with my initial PhD proposal, I was interested in investigating the social media phenomenon in an organizational context. Obtaining access to case settings proved to be challenging and getting an organization to open up and participate in the research was not an easy endeavor. After some unsuccessful attempts, I finally entered into collaboration with a Danish consultancy company (TopConsulting), which was utilizing the ESM platform Yammer for internal communication. The collaboration with this company had many exciting consequences for my further PhD work. While immersing myself in the everyday practices of the company was

challenging at first, and involved crossing some personal boundaries such as approaching people in their daily work and finding my place in the organization overall, I started to gain great insight into how the ESM platform was a part of the organizational life and how it played a role in the interactions between the members of the organization. At this time, I had been engaged in a PhD course on modern sociological theory. The course had, in particular, introduced me to Foucault's (1977) ideas of *dispositif* as systems of relationships that can be established between elements of discourse, institutions, regulatory decisions, etc. The *dispositif* is described as a pattern of social action, which demonstrates how a certain thing has worked or continues to work in predisposing to social interactions (Foucault 1977). In this sense, the idea of *dispositif* served as a way of describing the overarching patterns that influence social interactions between individuals rather than the micro-sociological acts that had served as the basis for my second paper. As a way of familiarizing myself with the historical developments within TopConsulting, and to explore this idea of *dispositif*, I wrote Paper 3, entitled *Reshaping Organizations: Enterprise Social Media and the Changing Social Order of Organizational Practice*, which was accepted for the meeting of the *European Group on Organizational Studies*. This study allowed me to observe the changing *dispositif* within the organization as Yammer became part of the organizational practices and, in particular, how the practices of knowledge management was enacted through these overall systems of relationships. More importantly, it placed emphasis on the implications of Yammer for the way relationships between individuals formed on the platform. As the empirical work progressed and the data material grew richer through the addition of the two other case studies, challenges in terms of how to confront and work with the data analysis became more and more dominant. My focus now set on exploring how social interactions and relationships between individuals were emerging and shaping through on the ESM platform was informed by Latour's (2005) work on reassembling the social. In particular, the focus on letting the observation of controversies serve as the basis for explaining the social revealed a valuable practice approach to explaining the social interactions and relationships that were forming in the organizational use of ESM. The rich data collection allowed a triangulation of the interview data, online and offline field observations, and archival data from the Yammer platform to uncover instances in which

disagreements emerged between individuals as well as between individuals and the platform (see details in paper 4). Moreover, I came across the concept of social fabric as a way of describing what comprises social interactions and relationships between individuals. Working with the controversy analysis and the social fabric allowed the development of a social fabric metaphor. The social fabric metaphor as a way of understanding and describing ESM at work was presented in paper 4, entitled 'Enterprise Social Media at Work: Weaving the Social Fabric of Collaboration.' This was accepted and presented at the *International Conference on Information Systems* (co-authored with Tina Blegind Jensen and Michel Avital). The work for this paper allowed us to delineate different threads of the social fabric and to show how the weaving of these threads played a vital role in the organizational practices of collaboration. In order to further develop these findings, we included empirical material from the two additional case organizations also using the Yammer platform. Through these additional findings, I worked with my supervisors on elaborating the conceptualization of the social fabric and mapping the threads of the social fabric into a framework (found in paper 4 as an extended version of the ICIS paper, submitted to MISQ).

Summing up my thesis work proved to be challenging. The work done on the final article dealing with the social fabric had inspired consideration of a relational perspective (Gergen 2009) to the study of ESM. Reviewing my work using principles from the relational perspective provided a frame for combining the different studies. The different papers seemed to reflect elements of this relational way of thinking from the relational character of the affordances in paper 1, the role of social interaction in the actualization of perceived affordances in paper 2, the dispositif as a system of relationships in paper 3, and, lastly, the social fabric as a way of understanding and working with patterns of relationships in paper 4. While the relational perspective was not part of my initial thoughts, it has provided me the opportunity to add relational thinking to my perspectives and results from the study of ESM at work. The different inputs and perspectives outlined in this story have all been steps along the path towards my understanding of the social dynamics of ESM at work. At the ICIS Doctoral Consortium in December 2014, my mentor advised me to write my cover chapter from the heart and to present my

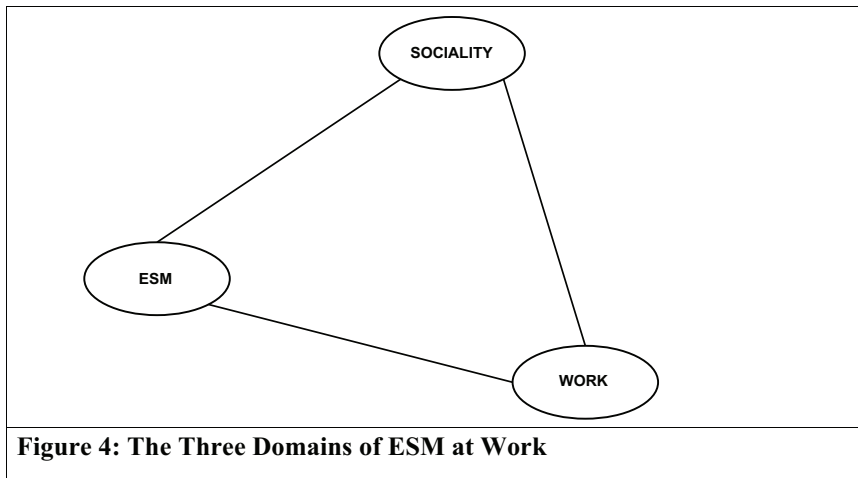
own ideas and perspectives drawing on all that I had learned throughout the course of my thesis. In this sense, writing the cover chapter for my thesis has come to represent a summary of all of these efforts and how they have led to my contribution to knowledge on social dynamics of ESM at work. This account of my research process has thus served two purposes: the first to provide transparency of how the research developed and the second as a way for me to think and reflect upon my work as a whole.

# 4. Social Dynamics of Enterprise Social Media at Work

In the following section, I synthesize the results of the research and relate the findings from each of the research papers to an overall framework for describing the social dynamics of ESM at work. The purpose of this section is not only to summarize insights gained from my research but also to reflect on how each of the papers have added to, and challenged my understanding of, the social dynamics of ESM at work. I start by outlining the perspectives gained on the three domains of ESM, sociality and work. Drawing on these perspectives, I propose an integrated view reliant on a social fabric metaphor for understanding the social dynamics of ESM at work.

## 4.1 Perspectives on Enterprise Social Media, Sociality and Work

The research focuses on the three domains of ESM, sociality and work to explore how these interact in the context of ESM use. Figure 4 illustrates the three domains at play in the investigation.



**Figure 4: The Three Domains of ESM at Work**

The perspectives presented on ESM, sociality and work build on insights from the research efforts and papers, as well as the underlying relational and constructivist approach guiding the research. By providing my perspective, I wish to highlight certain issues and downplay others with the objective of providing insight into how the three domains are considered in this research and how they constitute the frame of the study.

#### **4.1.2 Enterprise Social Media**

The perspective on ESM in this research takes its point of departure from my initial interest in investigating social media. Kaplan and Haenlein (2010) define social media as

*“A group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content.”* (Kaplan and Haenlein 2010:61)

This definition highlights the importance of user-generated content and the technological possibilities of Web 2.0, including increased connectivity and access to people and content. In an organizational context, the functionalities and use of a technology are often reexamined (O’Mahony and Barley 1999; Wellman et al. 1996). While ESM rely on the same underlying principles found in the definition of social media, the particular context and the implications of the technology on work invoke a definition of ESM as presented in the introduction,

*“Web-based platforms that allow workers to (1) communicate messages with specific coworkers or broadcast messages to everyone in the organization; (2) explicitly indicate or implicitly reveal particular coworkers as communication partners; (3) post, edit, and sort text and files linked to themselves or others; and (4) view the messages, connections, text, and files communicated, posted, edited and sorted by anyone else in the organization at any time of their choosing.”* (Leonardi et al. 2013:2)

The definition of ESM highlights workers as the users as well as the way in which the technology allows them to achieve certain activities of communication and information sharing in the context of their interactions within the organization. In

my research, I have studied social media in the context of political campaigning (paper 1) as well as at the everyday use of ESM in organizational contexts (papers 2, 3 and 4). While the research efforts have addressed different user groups and areas of use, the results show how the ESM technology provides certain opportunities and implications for the social dynamics on the platform.

**Perceived and actualized affordances of ESM:** The concept of affordances has played a central role in informing my perspective on social media and ESM (Gibson 1977; Hutchby 2001; Treem and Leonardi 2012). The underlying assumptions of this research position the concept of affordances in a relational ontology. An affordance is, therefore, not a single attribute of an object, an actor or the environment but instead emerges from a relational structure in which the relationships between the object, actor and environment are continuously enacted (Faraj and Azad 2012; Hutchby 2001; Stoffregen 2003). The research in paper 1 framed the perspective on affordances of ESM and investigated the perceived affordances of the social media platform Facebook, in the context of the Danish general election campaigns. While the findings provided insight into a number of perceived affordances of what the political parties wanted to facilitate, project and enhance, they also raised questions about how these were reflected in the actual actions that the political parties carried out on Facebook. The study revealed differences in the political parties' actual use of Facebook in comparison to the perceived affordances, giving an indication that the intentions for use are not enough to ensure a certain action. This demonstrated how the many potential opportunities of social media also required an enactment of these through the actions of individuals. Based on these insights, the study of ESM affordances in organizations took form.

In paper 2, the literature review on ESM affordances (boyd 2012; Ellison et al. 2007; Fulk and Yuan 2013; Gibbs et al. 2013; Leonardi et al. 2013; Majchrzak et al. 2013; Pike et al. 2013; Treem and Leonardi 2012) revealed five groups of perceived affordances that emerge in terms of distribution, association, amplification, contextualization and preservation of information and people. Describing how these perceived affordances manifest themselves in the context of ESM use for organizational work revealed how the perceived affordances of ESM



must be actively actualized (Strong et al. 2014) through social interactions on the ESM platform in order to influence organizational work. This research highlighted the relational character of the ESM affordances and underlined the way in which social interactions on the ESM platform are central in the enactment of the perceived affordances into actual actions. The two studies show that affordances of ESM can be understood on two levels: the passively actualized (perceived) affordances, and the actively actualized affordances manifested through actual actions (Strong et al. 2014). The passively actualized affordances refer to the perceived opportunities that the organizational members attribute to the ESM technology, and the actively actualized affordances refer to the actual actions taken based on the opportunities afforded (Strong et al. 2014; Turvey 1992). In particular, the study in paper 2 introduces social interactions on the ESM platform as a central part of the translation of perceived affordances into actual action. The findings in paper 2 highlight active actualization of the ESM affordances as being important in determining which activities of organizational work are carried out on the ESM platform. Understanding the affordances of ESM in organizational work thus involves a consideration of both perceived and actively actualized affordances.

**ESM as a part of organizational relationships:** In the context of sociology, affordances imply that technology has some inherent properties; however, the technology does not completely determine individual action but provides different opportunities and interpretations (Hutchby 2001). Referring to the possibilities that an object offers for action, the concept of affordances provided an understanding of relationships that depend on the materiality of the object and its use by the individual (Leonardi and Barley 2008). In my initial investigation of social media, in paper 1, I came to understand the importance of the media's role in the investigation of the affordances attached to the medium when users engaged with it for a specific purpose (paper 1). However, the research in paper 1 revealed that the actions of the users appeared to differ from the perceived affordances when actually acted out on the platform. These changes could be attributed to the actions of both the individual and the technology, offering integration possibilities that were not envisioned by the users before the actual engagement with the social

media (Treem and Leonardi 2012). As an example of this, the findings in paper 1 demonstrate how the integration and sharing of information in different formats such as video, links etc. emerged as an unintended activity encouraged by the social media through associating video and article links with the posts and comments made on the platform (paper 1, p. 35). The social media then became an actor in these relationships by prompting certain activities and playing a part in the interactions that comprise the relationships on the social media platform. This research relies on a relational view which implies that attention must be given to the relationships that ESM are a part of in order to understand how the media is involved in organizational work (Gergen 2009). In this sense, the introduction of ESM into the organization and the role that the technology actively plays in prompting and promoting activities implies a consideration of ESM as an actor and part of relationships in the organization.

**ESM as a way of investigating social life:** ESM enables the investigation of social life through the opportunity of observing and capturing the online social interactions among individuals that digital media offers (Venturini and Latour 2010). The studies of ESM in this research prove how data extracted from the platform itself presents a way of looking at interactions that have taken place, or are taking place within the organizational settings (paper 4). The preservation of information on the ESM platform creates a way to trace interactions and to study the flow of information in the online network (Leonardi et al. 2013). The literature study revealed how ESM has been used to identify experts in organizations as a result of this increased visibility (Damianos et al. 2007). Within the scope of this research, this idea is extended to not only include the identification of specific individuals in the organization but also as a way of identifying interactions and relationships while they are ‘in the making’ (Latour 2005). In this sense, the observation of the practices on the ESM platform informs our knowledge about the relationships that are being both formed and reformed by use of the ESM platform.

The perspective on ESM in this research reveals how ESM is considered in terms of both perceived and actively actualized affordances, emphasizing the translation of perceived affordances into actual actions taken. ESM plays an important role, both in this translation and in the relationships that form on the platform through prompting certain activities and playing a part in the interactions that make up the relationships on the ESM platform. Finally, ESM provides a way of investigating the interactions and relationships on the platform through the preservation of conversations and the traceability of the interactions on the digital platform.

#### ***4.1.2 Sociality***

Including the aspect of sociality has been one of the most interesting endeavors but also one of the biggest challenges of my research. While the concept is often used loosely to describe an overall state of social existence, very few descriptions of what it actually entails are to be found in the literature. Recent literature on social media has introduced the concept of computed sociality describing how the underlying algorithms and social data configurations on social media introduce changes in community life and sociality online (Bowker 2013; Kallinikos and Tempini 2014). Considering sociality online then requires attention to the premise that the technology creates for the interactions and relationships that emerge on the social media platform. The investigation of ESM at work gave insight into the interactions and relationships on which sociality among organizational members develop on the platform. I have engaged with several approaches that have helped to inform the view of sociality. Additionally, working with the empirical cases has allowed me to challenge the conceptual understanding I gained, giving way to a dynamic understanding of what sociality can mean in the context of ESM at work. The perspective on sociality is informed by research efforts that include sociomateriality, micro- and macro-sociological perspectives, and the ideas of a relational being.

**Sociality through social and material interaction:** Engaging with some of the literature on materiality and sociomateriality as part of the initial reading of my PhD research, I was inspired by the interrelationship between the material and the

social. In IS literature, the sociomaterial perspective has been part of the conceptualizing the relationship between the material and the social in terms of both the interaction between the two and in regard to how they are engaged in a mutually constitutive relationship (Kautz and Jensen 2013; Leonardi 2011; Leonardi 2013; Leonardi and Barley 2008; Orlikowski 2007; Orlikowski 2009). In paper 1, sociomateriality guided the investigation of the affordances of the social media platform Facebook in the context of the Danish general election campaign, allowing for the description of the social enactment of the material capabilities of the medium by the individual campaign managers (Treem and Leonardi 2012). The investigation primarily focused on the material properties but left unanswered questions regarding how these perceived affordances manifested themselves in the use of social media. Paper 2 gave insights into the role of social activities on ESM by investigating the role of social interaction in the translation of perceived ESM affordances into actions taken on the ESM platform. The social dynamics of the interactions then appeared as a way of understanding how the ESM platform became a part of organizational work. In paper 4, the entanglement between the social and the material was found in the ongoing process of reordering of the social interactions between organizational members on the ESM platform. The analysis of controversies in the organization regarding the use of ESM revealed that ESM usage encourages organizational members to debate their social activities. For example, the organizational members would debate if telling a joke on the ESM platform would be appropriate and they would question what was acceptable to share with their colleagues. This questioning of social activities and behaviors introduces an interesting dynamic with respect to how the entrance of ESM as an organizational actor leads the organizational members to reconsider their behavior. The entanglement between the social and the material in the use of ESM at work is emphasized in the relationships that form on the platform as well as in the continuous construction and reconstruction of these. Understanding sociality in the context of ESM at work therefore emphasizes how the way in which organizational members relate to each other on the ESM platform is composed of the constitutive and evolving relationship between the ESM technology and the social interactions and relationships that form on the platform.

**Sociality encompassing a micro and macro perspective:** In the research efforts, the investigation of sociality has included considerations of micro perspectives of individual actions and interactions (paper 2) and macro perspectives of patterns of relationships and overall structures (paper 3). Ultimately, the perspective on sociality in this research is considered in terms of how sociality takes form in the interactions between individuals as well as in overall patterns of relationships on the ESM platform. The micro-sociological emphasis on interactions as the basis of the social world allows focus on certain activities between individuals and the dynamic relationships through which the social is formed (Smesler 1995). From a micro perspective, sociality can be understood as something, which continuously occurs and develops through the exchange of actions between people. The focus on social interactions as a key impetus for the active actualization of ESM affordances in paper 2 revealed insights into the importance of these interactions in bringing ESM to life and integrating it into organizational work. In the relational sociology, it is important to focus on interactions, because little of what we do can be properly understood or explained without reference to the interaction in which our actions are embedded, and that gives them context and meaning (Crossley 2010). The interactions thus create a frame of reference and will influence what will be enabled and constrained later in the relationship. When we interact, we mutually modify each other's conduct, forming an irreducible and dynamic whole (Crossley 2010). In this sense, the interactions provide opportunities for the sociality of individuals through activities that are acted out and responded to by another individual (Gergen 2009). Networks of relations and interaction involve actors who interact and form relations (Latour 2005). Consequently, it is the actors on the ESM platform who collectively drive interactions and the network formations. Action is always oriented towards other individuals and events within the networks in which the actor is embedded (Crossley 2010). Based on these actions social relations are live trajectories of iterated interaction (Crossley 2010:28). A social relation is therefore not an object but rather a shifting state of play within a process of social interaction. In this sense, to say that two people are related is to say that they have a history of past and an expectation of future interactions and that this shapes their current interactions.

Sociality was investigated from a macro perspective in paper 3, dealing with the changing social order that, in an organizational setting, ESM forms a part of. In this paper, Foucault's (1977) notion of *dispositif* worked as a way of understanding the overall patterns of social action that guide practices in an organization. The *dispositif* refers to a system of relationships that is made up of various elements such as discourses, institutions, laws, power relations and regulations. These systems influence or work predisposing on elements in the organization and, by analyzing the change in *dispositif*, insight can be gained into how the social order forms and develops (Raffnsøe et al. 2014). The social order can then be challenged by different events, and this will cause the whole system of relationships - the *dispositif* - to change. The results from this article revealed an emerging *dispositif* of a network replacing one of hierarchy in the case organization. In this study, sociality was explored in relation to broader systems of relationships that form the social world around us and impact the way in which social order is established. The approach in paper 3 further revealed the importance of a historic perspective when we discuss sociality, as the way in which the social order will form is influenced by the history, which it comes from (Crossley 2010). Thus far, the work has revealed a relational character of sociality that is part of both the micro perspective of interactions (paper 2) and the macro perspective outlining systems of relationships (paper 3).

**Sociality as relational:** The theoretical views of Gergen (2009) and Foucault (1977), which inform the research efforts, place the individual as involved in sociality from the beginning of their existence. In fact, the individual does not exist without sociality. Individuals are connected and it is through their relation to others that they act, think and function (Gergen 2009). Papers 2, 3 and 4 explored this relational character of sociality by focusing on interactions and relationships as the foundation of organizational work. As part of this research, sociality is considered as involving an 'other' through the relational structures that dominate the organizational constellations (Gergen 2009). Co-action becomes central for the social to exist, since reason, meaning and purpose for the individual cannot exist in isolation but must come from the affirmation of actions from another individual (Gergen 2009). Relationships become central to our interactions and we carry with

us experiences from one relationship into the next (Gergen 2009). In the study in paper 4, the use of the ESM platform led the organizational members to engage in a dynamic construction and reconstruction of their sociality through a continuous dialectic on how to interact and engage with each other.

The research effort in paper 3, describing the macro level view of dispositif as a system of relationships, offers the operationalization of how the history of existing relationships are continued in new relationships and how these come to influence each other (Gergen 2009). Investigating the empirical cases, ESM appeared as an important part of the relationships that were depicted and enacted by the organizational members. In the social relationships of the case organizations, the ESM technology became part of the relational foundation that formed the basis for work. This related back to the early research work in paper 1 and allowed me to further frame the relational perspective of affordances in terms of the active part that the ESM technology had in enacting the relationships of organizational members.

Reflecting on the articles, my perspective on sociality has taken form. Sociality in the context of ESM at work refers to the relationships among actors of all kinds engaging in activities of interaction. Sociality is found in interaction between actors but also in overall patterns of relationships, creating systems of reference in the light of which new relationships emerge.

#### ***4.1.3 Work***

The empirical investigation in the case organizations placed heavy emphasis on the need for specific targets and goals for work in relation to the use of ESM (see paper 4). Consequently, both managers and organizational members across the case organizations stressed how the most challenging aspects of the ESM use were how to include the technology in work practices. The perspective on work in this research has relied on the investigation of different work practices as well as the underlying social mechanisms of work in organizations.

**Work as based on interaction:** Inspired by the perspective of organizational work from paper 2 and the relational constructionist perspective (Gergen 2009; Hosking 2011), organizations in this research come into existence through the relational coordination of practices. It is in the daily interchange between organizational members in complimenting and criticizing, passing and retaining information, smiling and frowning, demanding and resisting, controlling and consenting that organizations work (Shaw 2002). Every relationship becomes a potential source of value creation as the mutual affirmation among organizational members can make something appear worth doing (Gergen 2009). What is created in the organization emerges out of the interaction between organizational members. The relational perspective established that social relationships do not exist by themselves but rather emerge through the collective work of participants (Gergen 2009). For people to work together they must be willing to enter into a group and work on the basis of the group's norms and beliefs. The interest in the social and interactional character of organizational activities requires a focus on the work and discourse that places the object and the material environment at the center of analysis (Heath et al. 2004). The co-action of work is then implied in the interactions between actors in the organization. As highlighted in the findings of paper 4, the Yammer platform plays an important part in enabling and maintaining the co-action between the organizational members.

In paper 2, organizational work is explored with regard to how it builds upon interactions between organizational members. Organizational work can be considered as a multivalent concept encompassing a variety of practices characterized in many different fashions such as clerical, artistic, managerial, craft, supervisory, production, professional, routine, knowledge, symbolic, emotional, informal, technical, individual and collaborative work (Orlikowski et al. 1996). Common to these activities is the human ability to act and interact in a workflow of activities and processes within the organization (Yu and Mylopoulos 1993). In the process of work, the organization serves as a reference point in which the individuals evaluate their interests and reflect upon their actions and commitments (Manning 1982). Organizational work emerges as a social activity of people interacting and engaging with each other to reach a certain goal (Neff 1977).



Consequently, the network of interactions among organizational members is at the center of organizational work and what is created in the organization emerges out of organizational members engaging with each other (Gergen 2009). In this sense, organizational work is not only driven by monetary or individual agendas but also depends on the interactions and connectivity between organizational members. Rice et al. (1985) define how “*organizational work refers to human activities, in the context of formal organizations, performed with the intention of producing something of acknowledged social value*” (1985:296-297). This definition highlights the importance of obtaining acknowledged social value of the activities performed in organizational work. The interactions within the organization create the foundation for the activities, which take place, and can in turn both strengthen or inhibit the structures that underlie organizational work (Corbin and Strauss 1993). The social structures of interaction that underlie organizational work are important both as a mechanism for organizational activities but also as a way for individuals to orient their practices towards obtaining socially recognized value (Corbin and Strauss 1993). In a study of the link between performance of organizational members and their social connectivity, Castilla (2005) highlighted how the productivity of call center workers went up when they engaged in interactions and activities with their colleagues during work. This study joins others (e.g., Fischbach et al. 2009; Leiter and Maslach 2001; Reagans and Zuckerman 2001) in placing emphasis on the importance of social connections between organizational members and how strengthening these connections can increase work productivity. Investigating organizational work is then not just a matter of looking into organizational practices and their outcomes but also of investigating the social connections that enable and support this work.

**A multi-level perspective on work:** The focus on certain work practices in the research is visible in paper 3, which deals with knowledge management, and paper 4, which deals with collaboration. Both of these investigations reveal the complexities inherent to these work practices and how ESM technology brings about certain aspects that need to be considered. Paper 3 demonstrated how ESM are part of a new organizational social order, which impacts the work practices. In paper 4, the investigation of collaboration as an organizational practice on ESM

demonstrates how the foundation for collaboration can be explained by emphasizing the relationships that form the basis of collaborative activities. In this sense, the collaborative practices are based on the foundation of interactions between organizational members and the ESM technology. Papers 3 and 4 both highlight a multi-level perspective on work in which it is considered in terms of the relational basis for work, the actual activities carried out, as well as the outcome of the work efforts. In the review of the literature on ESM in organizations (cf. section 2.2), work on ESM has mostly been addressed in terms of its outcomes, such as increased collaboration or a higher degree of knowledge sharing; yet the underlying basis for these outcomes in terms of foundational relationships and actions are yet to be displayed. The perspective on work in this research underlines the relationships that form the basis of work and how these are manifested in actual actions carried out on the ESM platform.

In this research, organizational work begins at the level of the relationship, including consideration of a variety of actors and practices, as well as how these practices and relationships construct and reconstruct outcomes of organizational work.

The perspectives presented on the three domains of ESM, sociality and work all inform the understanding of the social dynamics of ESM at work. Table 8 presents an outline of the perspectives.

<b>Domain</b>	<b>Insights Gained from the Study</b>
Enterprise Social Media	ESM is explained by perceived and actualized affordances in relation to organizational work. ESM plays a role in the translation of perceived affordances into actions and in the relationships that form on the platform. The digital traces of activities on the ESM platform provide an opportunity to investigate interactions and relationships on the platform.

Sociality	Sociality refers to the relationships among actors of all kinds (social and material) who engage in activities of interaction. Sociality is found in interactions between actors but also represent systems of reference in the light of which new relationships emerge.
Work	Organizational work begins at the level of the relationship, including consideration of a variety of actors and practices, as well as how these practices and relationships construct and reconstruct outcomes of organizational work.

The outline of the central domains depicts how each of them is considered in this research. Based on these perspectives, I present an integrated view that draws upon the three domains to explain the social dynamics of ESM at work.

#### **4. 2 Combining Perspectives on Enterprise Social Media, Sociality and Work**

The overall objective of the research is to investigate the social dynamics of ESM at work. Through my research process, I have investigated the material aspect of ESM through affordances and sociality through social interactions and relationships. However, what ultimately provided me with the main insights into the social dynamics of ESM at work was the interaction between the material and social and how these were enacted in the practice of work on the ESM platform. The perspectives offered in this research reveal how the three domains of ESM, sociality and work do not exist in isolation. Rather, they should be considered as a whole in understanding the social dynamics of ESM at work. To formulate a unified perspective that encompassed these observations, the metaphor of social fabric and the approach of a controversy analysis are introduced.

##### ***4.2.1 The Social Fabric Metaphor***

The creation of a unified perspective encompassing the domains of ESM, sociality and work required considerations of how to address the three aspects within an overall frame. In paper 4, the social fabric metaphor is introduced as a way of investigating the underlying patterns of relationships that explain how the social dynamics of the organization are continually forming on the ESM platform. The

social fabric metaphor is used to portray the shared basis upon which individuals interact and engage with each other and entails the study of practices taking place on and around the ESM platform in organizations.

The *social fabric* metaphor has been applied in economics, sociology, human ecology as well as organization and management studies, as described in Table 9.

<b>Table 9: Application of the Social Fabric Metaphor Across Disciplines</b>		
<b>Description</b>	<b>Discipline</b>	<b>Reference</b>
Social fabric is used to define and articulate social structure and social change by measuring and evaluating the <b>flow</b> between central components of a social system such as cultural values, social beliefs, institutions, attitudes and technology in society.	Economics	Bodin and Prell 2011; Hayden 1986; Hayden 2006; Gill 1996 Natarajan et al. 2009
Social fabric is used to describe a variety of <b>relationships</b> in social life ranging from interpersonal processes and networks to social institutions and structures, from primary groups and symbolic interaction to social movements and large-scale organizations and systems.	Sociology	Alario and Freudenburg 2003; Broadbent 1986; Short 1984
Social fabric is used to investigate social life in an urban environment by zooming in on the <b>material-immaterial milieu</b> , delineating connections between infrastructure, technology, power relations, everyday experience and family relationships.	Human ecology and urban studies	Corcoran et al. 2007; Henderson 1995; Pflieger et al. 2008
Social fabric is used to depict the prevailing <b>beliefs and practices</b> of relationships between organizational members and technology in a networked group or organization.	Organization and management	Baldwin et al. 1997; Moolenaar and Slegers 2012; Van Maanen and Schein 1979; Wenger 1996; Zammuto et al. 2007

Across all these disciplines, the term ‘social fabric’ was used to describe the social system of interrelationships that exists between individuals, groups, technology and institutions forming a coherent whole. The relationships that make up these social systems vary from large-scale networks and organizations to small-scale interactions between people and objects. The articulation of the social fabric metaphor in this research is investigated in detail in paper 4, drawing on the insights from existing literature.

The social fabric metaphor is used to delineate and explain the relationship between various elements of a dynamic social system (Gill 1996; Hayden 1986, 2006; Natarajan et al. 2009) with a focus on the relationships (Alario and Freudenburg 2003; Broadbent 1986; Short 1984) that reflect and are reflected in the prevailing beliefs and practices between people (Van Maanen and Schein 1979; Moolenaar and Slegers 2012; Pflieger et al. 2008; Wenger 1996; Zammuto et al. 2007). In paper 4, the social fabric as a metaphor makes available the use of attributes of a fabric (Lakoff and Johnson 2003) to accentuate how the threads of interactions between people and the technology express the prevailing beliefs and practices that make up the social fabric of their dynamic relationships. In a metaphorical sense, the social fabric is then comprised of threads of interactions that weave together to form social relationships on ESM. Subsequently and within the bounds of this study, social fabric is defined *as a metaphor that describes the threads of relationships between people in a collective. The social fabric is shaped and reshaped by the prevailing beliefs and practices in a collective as well as its technological milieu.* The social fabric can be observed in the flow of behaviors and narratives expressed and experienced by individuals in a collective.

Adopting a social fabric metaphor creates the possibility for the intangible component of the ‘social’ to be explained through the attributes of a fabric (Lakoff and Johnson 2003). Describing the social thus becomes a matter of identifying threads of a fabric and understanding how these weave together. In this way, the social fabric portrays the shared basis upon which individuals form social relationships. The relational perspective emphasizes how social relationships are constructed and reproduced through the collective work of participants (Gergen 2009; Hosking 2011). Describing the social dynamics of ESM at work by use of

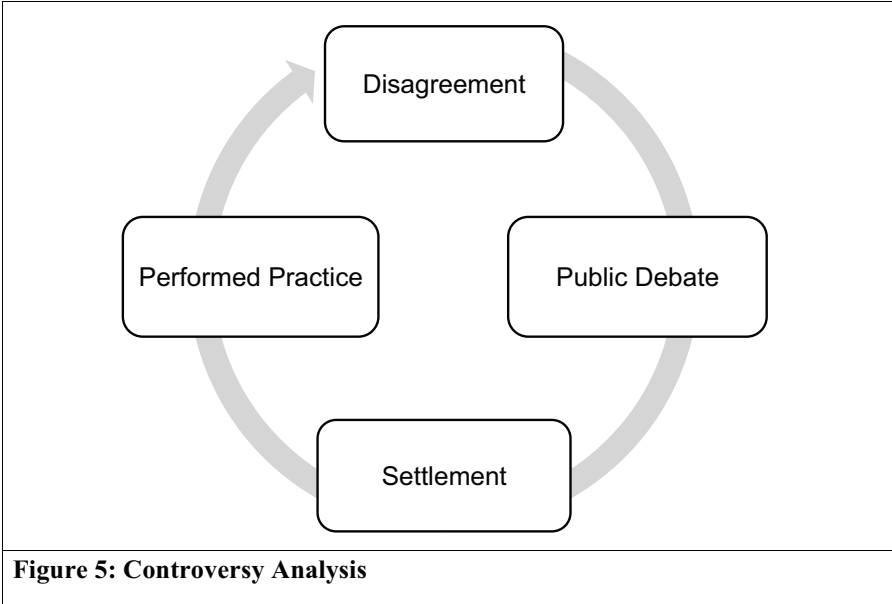
the social fabric metaphor is then a matter of observing practices and interactions between people in the technological milieu of ESM and delineating how these create relationships on the platform. The ESM technology enables us to show these practices and interactions as they evolve and look at how relationships are constructed and reconstructed on the ESM platform.

#### ***4.2.2 Revealing the Social Fabric through Controversies***

In paper 4, the ESM platform is characterized by fluidity and the flow of resources and people interacting and forming relationships on a moment-to-moment basis (Faraj et al. 2011; Mol and Law 1994). Consequently, relationships on ESM are not something which can be predefined or solidified, but rather should be considered in terms of their fluid character and momentary existences. In order to observe and describe such fluid dynamics, we need to investigate the instances in which interactions become explicit (Venturini 2010). One approach to observe beliefs and practices, as they surface in an organizational context is to look for controversies among organizational members. Controversies are a normal and inevitable part of the social world and it is through disagreements and debate that opinions and meanings are made explicit (Latour 1988, 2005). Subsequently, looking for controversies are a way of exploring situations in which interactions and opinions are made explicit in the use of ESM. In particular, controversies entail situations in which organizational members disagree. The disagreements do not have to reach a state of open fights, but they are often examples of clashing worlds that must come together in the creation of a shared universe (Venturini 2010). The life cycle of a controversy starts when actors realize that they cannot ignore each other, and they end when some form of agreement is reached among the involved parties (Venturini 2010).

Documenting a controversy entails an outline of the circular process in which a local disagreement evoke a public debate, which reaches a settlement that then become manifested in the performed practice (see Figure 5). The circular motion, outlining the controversy, highlights how the performed practices will exist on a momentary basis until they are questioned in a new disagreement (Latour 2005). Outlining the controversy according to this cyclical process exposes the

underlying dimensions of the controversy interactions (Latour 2005). Paper 4 demonstrates how to single out controversies concerning the use of Yammer in the case organization TopConsulting by analyzing the data from the interviews, the posts and comments from the Yammer platform, as well as the observations. The three data sources all serve as a way of exposing the controversies, as the triangulation allows multiple perspectives on what is going on in the organizations. The interviews provide insights into the perspectives of the organizational members and the offline observations give context to these reflections. In addition, the ESM platform allows for a unique way of looking at the actions and activities of the organizational members, as the interactions are displayed on the ESM platform and provide a representation of them ‘in the making’.



In the next section, I present the development of the social fabric framework, which draws upon the basis of the social fabric metaphor and the use of the controversy analysis to describe and explain the social dynamics of ESM at work.

### ***4.2.3 The Social Fabric on Enterprise Social Media***

The social fabric on ESM was identified through the development of a social fabric framework (paper 4). The process of uncovering the social fabric was based on first eliciting the threads of the fabric and then mapping these according to how they weave together to form the social fabric (Appendix 6 provides a detailed outline of the approach). To identify and describe the social dynamics of ESM at work, utilizing the ideas of the social fabric metaphor and the controversy analysis reveal a number of threads that describe the interactions involving Yammer at TopConsulting. The reflection of the controversies includes considerations of both organizational members and the ESM technology as equal actors within the controversy formation. Detailed descriptions of the controversies are highlighted in paper 4. However, in order to give insight into the social fabric analysis and findings, I will provide a brief summary of the results with regards to eliciting the threads that make up the social fabric and mapping the threads into a social fabric framework.

*Eliciting the threads* of the social fabric was based on the utilization of the controversy analysis to study the collected data material across the three case organizations. The coding process followed the controversy analysis approach (c.f. section 4.2.2) and revealed controversies that emerged surrounding the use of Yammer in the TopConsulting case organization. From the analysis of the controversies, threads of the social fabric emerged, documenting the interactions of the controversies. An overview of the controversies and the discovered threads are found in Table 10.



**Table 10: Summary of the Controversy Analysis and the Emerging Social Fabric Threads**

<b>Threads of Social Fabric</b>	<b>Professional – Social Content</b>	<b>Necessity – Frill Evaluation</b>	<b>General – Specific Context</b>	<b>News – Chatter Perception</b>	<b>Praise – Reprimands Giving</b>
<b>Disagreement</b>	Disagreeing on the appropriateness of social content on Yammer.	Disagreeing on the required need to use Yammer.	Disagreeing on the inclination to share with everyone on Yammer.	Disagreeing on the relevance of certain content on Yammer.	Disagreeing on the nature of feedback on Yammer.
<b>Public Debate</b>	Debating the mixing of professional and social content on Yammer.	Debating the positioning of Yammer as the central communication channel.	Debating who to address on Yammer with what information.	Debating effective communication and information overload on Yammer.	Debating the legitimacy of reprimanding on Yammer.
<b>Settlement</b>	Accepting social content on the Yammer platform.	Engaging with Yammer remains ‘formally’ optional.	Moving conversations of limited interest from the general context into specific groups.	Recognizing news and chatter perceptions as subjective and contextual.	Favoring positive deviance in feedback giving on Yammer.
<b>Performed Practice</b>	The content posted on Yammer is of both a professional and social nature.	Management communicates solely on Yammer turning it into a necessity for staying informed.	Special interest groups are established on Yammer.	Individuals filter and consume information on Yammer according to what is relevant to them.	Praise is used more frequently than reprimands on the Yammer platform.

The first controversy dealt with disagreements concerning the appropriateness of social content on the Yammer platform. The controversy revealed a thread of the

social fabric that concerns the balance between professional and social content on the Yammer platform. This thread was reflected in the interactions between individuals in which they would debate if social content such as jokes, private pictures etc. belonged on the Yammer platform or if only professional content should be shared. For example, as one organizational member at TopConsulting expressed “*All that social stuff, the jokes and the like, I could do without. I focus on the coding and the topics that are interesting to me...*” (SC1\_TC). This opinion was opposed by other organizational members who valued when jokes and more informal information was shared. The Yammer platform encourages the sharing of work-based content by asking organizational members to contribute ‘What are you working on?’ in the status bar (Appendix 2). However, the open format of the status post allows for organizational members to post what they like and not necessarily what they are working on. The ***Social-Professional content thread*** represents how interactions are emerging based on the establishment of a balance between the two types of content on the Yammer platform.

The second controversy dealt with disagreements about required need to use the Yammer platform. This controversy revealed a thread in the social fabric, which dealt with the evaluation of Yammer platform engagement as a frill or a necessity. In this disagreement, opinions about how important it was to engage on the Yammer platforms fueled the interactions. At TopConsulting, the controversy emerged through the disagreement between a consultant and the HR manager on whether engaging with the Yammer platform was either necessary or optional. As the Yammer platform encourages the wide distribution of messages throughout the organizational network, the HR manager assumed that the message would reach everybody in the organization. However, as the HR manager’s message failed to reach the consultant, a disagreement is revealed concerning the frequency of checking the platform, which leads to a miscommunication between the two. In this case the interaction around the Yammer platform uncovers how the organizational members show a different evaluation of the necessity of engaging on the Yammer platform. The balance between the evaluation of the Yammer platform as a frill or as a necessity influenced the interactions on the platform through the constant evaluation of who will see and respond to the shared

information. Further, the *Necessity-Frill evaluation thread* highlights the importance of identifying and recognizing the balance of organizational members' evaluation of the ESM platform.

The third controversy dealt with disagreements on the inclination to share with everyone on the Yammer platform. This controversy revealed a thread of the social fabric, dealing with the balance between general and specific context that the Yammer platform provides. The disagreement raised issues in relation to what context the Yammer platform should provide and included interactions about who to address on the Yammer platform and how. At TopConsulting, the event of buying and selling products on the Yammer platform demonstrates a difference of opinion concerning if the information distributed on the Yammer platform should address a general context or a specific context. The disagreement emerged as organizational members started to question the appropriateness of the very specific selling and buying conversation on the general Yammer platform. Interactions on the Yammer platform are based on the relational exchange of posts and comments in a quick manner and reach a wide audience, distributing the specific conversations throughout the Yammer network. The amplification and dissemination of the posts by the Yammer platform allowed the conversations to spread out through the organization, generating a visibility of all the interactions around the specific topic. This wide distribution of information ignited the public debate between the organizational members who enjoyed the selling and buying conversation and other organizational members who deemed it inappropriate and interrupting on the platform. The Yammer platform enabled the dissemination of information across the entire organization through the general newsfeed that the platform infrastructure makes available (Appendix 2) while also providing the opportunity to tag certain organizational members. This enabled the users to obtain constant updates on what is going on, but also precipitated concerns over whether or not content should be accessible to all. The balance of the *General-Specific Context* on the Yammer platform is visible in the interactions on the platform in the shift between the general context of the platform and the special context of interest groups or addressing particular individuals.

The fourth controversy dealt with disagreements about the relevance of certain content on the Yammer platform. This controversy revealed a News-Chatter Perception Thread of the social fabric reflecting the balance between information and conversations perceived as news and chatter on the Yammer platform. In this disagreement, the organizational members' perceptions of what is relevant come into play and form the basis for the evaluation of the amount of news and chatter on the Yammer platform. For example, one organizational member at TopConsulting noted, "*I value the posts on coding and do not care for the rest – sometimes I miss important information because it gets lost in all the other information on there*" (SC3\_TC), indicating that there was too much chatter on the platform and that he had a very specific view on what was news. Another organizational member from TopConsulting voiced a different opinion, "*I think of it as my company newspaper and read it when I am on the train or have time to check-in*" (SP1\_TC). The Yammer platform displays all messages equally in the newsfeed and assessing what constitutes news is then up to the individual on the platform. This is, to some extent, enabled by the platform through promoting messages that relate to the groups, which the individual organizational member is a part of, but the newsfeed will also include, more general information distributed to the 'AllCompany' news feed. The ***News-Chatter Perception Thread*** highlights how the organizational members' interactions with the Yammer platform are influenced by the balance of news and chatter perceptions of the information shared on the platform.

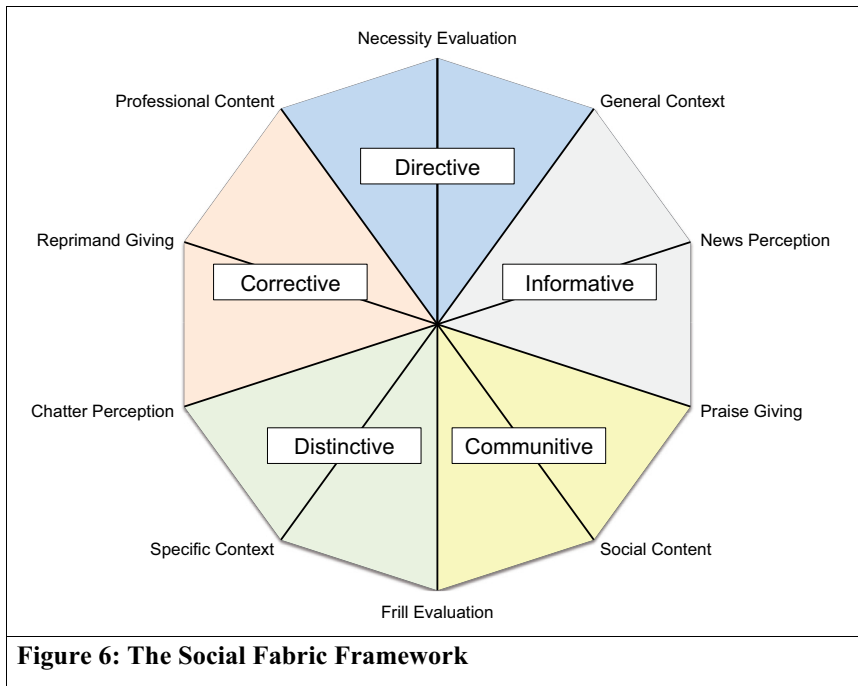
The fifth controversy dealt with disagreements on the nature of feedback the Yammer platform. This controversy revealed a Praise - Reprimand Giving thread of the social fabric, which dealt with the balance between the amount of recognition and reprimands given on the Yammer platform. As part of the technological features of the Yammer platform, a 'praise' label exists which can be attached when recognizing a comment, a person, or an achievement. The Yammer platform encourages praise, yet the data collection and analysis revealed that a level of reprimand also appeared to find its way onto the platform, fuelling debate about the use of Yammer for both praise and reprimands. At TopConsulting, one organizational member reprimanded on Yammer, "A

*reminder to all – especially now with the Christmas lunch coming up. REMEMBER: Big bladder little hose – please step one step closer to the toilet. Not that nice having to wipe up a big lake in the bathroom :-(" (HR1\_TC). While others in the organization also noted, “I have praised someone and this was really nice – it is a good way to show what a colleague has done and then to have people recognize her achievement” (SC4\_TC). The Yammer platform was serving as a public forum for addressing when something was not okay but also as a place to recognize the achievements of others. The **Praise-Reprimand Giving thread** presents an interesting dynamic of the interactions on the Yammer platform in that the balance of both can contribute to the creation of a welcoming and encouraging but also serious online environment.*

Eliciting the threads of the social fabric served as the first step. The next part of the analysis involved mapping the social fabric threads according to how they related to each other and using this to describe the relationships between organizational members.

*Mapping the threads of the social fabric* was done in relation to the empirical material extracted from the Yammer platforms in the TopConsulting organization. Eliciting the five threads of the social fabric provides insights into the dimensions on which the beliefs and practices on the platform form; however, in accordance with the definition of social fabric, these threads must also be mapped according to how they come together to delineate the relationships between people in a collective. Towards this aim, the relationships between the threads were investigated by using the data extracted from the Yammer platform in TopConsulting. Mapping the threads into a social fabric build on the *first step* of eliciting the social fabric threads and followed three additional steps. The *second step* explored the relationships between the social fabric threads through investigating instances in which they are highly related to one another. Accordingly, occurrences of social fabric threads were coded in posts and comments on Yammer and used to develop a coexistence matrix that presents the number of times in which two threads were manifested in the same data point (Appendix 6, Table 2). In the *third step*, the social fabric threads were arranged according to their level of coexistence, and delineated highly related social threads

into patterns of the social fabric (Appendix 6, Table 3). In the *fourth step*, we searched for instances of the social fabric patterns in the data and used these examples to describe the unique nature of each of the emerging patterns. The resulted set of patterns reflected the nature of the relationships among the organizational members on Yammer and provided a framework for representing the social fabric. The process of developing the social fabric framework is outlined in detail in Appendix 6 and paper 4. By following these steps, the social fabric threads were mapped into a social fabric framework that describes the nature of relationships on the Yammer platform. This gave insights into five patterns of relationships on ESM: *the directive, the informative, the communitive<sup>3</sup>, the distinctive, and the corrective*, as outlined in the Social Fabric Framework in Figure 6.



<sup>3</sup> Communitive: belonging to a community.

Together, the five patterns illustrated in Figure 6 explain the social fabric framework that describes the social dynamics of ESM at work. The *directive* pattern is characterized by the *necessity* of engaging with the ESM platform in order to stay informed about *professional* content disseminated in a *general* context. In the directive pattern focus is on the dissemination of professional content on the platform, and it is expected that this content will reach the entire group of participants. The Yammer platform enables the direction of messages of a professional nature in the general context of the group. This, for example, could include the delivery of important information at TopConsulting with regards to updates on general systems or when a server is down, which was only displayed on the Yammer platform. Directing messages to the entire group is enabled by the ESM platform acting as an intermediary receiver and transmitter of the information. The delivery of professional information in the general context, as well as the necessity of using Yammer to stay updated, creates a directive relationship among the organizational members.

The *informative* pattern is characterized by organizational members' perception of the information shared on the *general* Yammer platform as *news* and their subsequent *praise* of the information and/or the contributor on the platform. The news is distributed in the general context of the group, and organizational members acknowledge this information through praising them openly on the platform. In the analysis of the interactions between organizational members, it can be observed how the Yammer platform makes the information available to the group, though it is up to its members to engage in the informative relationship by acknowledging the information shared on the platform. This engagement can take place on the platform through liking and commenting on the messages displayed to show recognition of the contribution provided by the information. For example, at TopConsulting, posts giving advice about a new procedure to the entire group of members received a lot of recognition from employees who showed their gratitude for the information and followed up with additional input on their own experiences. In addition to this, the engagement demonstrated how positive comments and responses reinforce the news perception of the messages shared in the general context. In this sense, the distribution of information and the

recognition of its value in the general context of the Yammer platform create an informative relationship among the organizational members.

The *communitive* pattern entails the sharing of *social* content on the platform in interplay with *frill* evaluation and *praise* giving. Organizational members consider the Yammer platform as a place in which they can post social content and praise each other for various achievements. The entanglement of the Yammer platform in the community building is visible when relationships between organizational members develop through jokes, praise and likes shared in the online work setting. The organizational members then display an interest in engaging with each other on the Yammer platform through posting or sharing ideas on the platform. For example, at TopConsulting, the Yammer platform appeared to be a place where jokes and pictures of events were frequently posted, which generated a lot of comments and likes with organizational members joining in. The voluntary distribution of social content and the following praise giving creates a communitive relationship among the organizational members.

The *distinctive* pattern is characterized by interactions among a limited number of organizational members relying on *frill* evaluation, *specific* context and *chatter* perception. The Yammer platform creates a place for the organizational members to communicate with each other on any topic. Consequently, the distinctive relationships motivate members to engage with specific posts in some instances, while in other situations, the members ignore the vast amount of information being shared. An example of a distinctive relationship is found at TopConsulting, where a very specific coding problem is discussed between two people addressing each other specifically on the platform through using the @ functionality. As the example demonstrates, the distinctive relationship includes organizational members engaging and addressing each other in a specific context, often referring to or tagging a person directly in the post or comment made on the Yammer platform. The specific context characteristic of the conversation can be perceived as chatter for those organizational members not directly involved in the specific



context of the conversation. The use of Yammer to initiate conversations with specific organizational members creates a distinctive relationship.

The *corrective* pattern emerges when organizational members *reprimand* others on the Yammer platform in relation to *professional* content, which is considered as *chatter*. An example of corrective behavior can be found in TopConsulting, where an organizational member is telling the others off for leaving the office in a mess and obstructing his work. The interaction initiated here is then centered on the correction of other organizational members' behavior with a post expressing dissatisfaction about the way the wires are being re-arranged at the office. The Yammer platform's reach and cross-group posting amplifies the corrective behavior throughout the organization, however the post receives no comments or likes from other organizational members on the platform, which may imply that other organizational members perceive the information as chatter. The reprimanding behavior concerning a professional issue, which is not commented on, creates a corrective relationship on the Yammer platform.

The social fabric framework conveys how the threads of interaction weave together and gives rise to relationships of a certain nature. In the example from TopConsulting, both the organizational members and the Yammer platform interact to form these relationships. Through the process of observing the practices that form the interaction and interpreting how these interactions translate into relationships, the social fabric framework provides opportunities for understanding the social dynamics as they develop on ESM platforms.

An overview of the social fabric patterns and their characteristics is provided in Table 11.

<b>Table 11: Characteristics of Social Fabric Patterns</b>		
<b>Social Fabric Pattern</b>	<b>Threads</b>	<b>Characteristics</b>
Directive	Necessity evaluation Professional Content General context	Organizational members post highly relevant professional content to everyone on Yammer, making it necessary to engage on the platform to stay updated.
Informative	News perception General context Praise giving	Organizational members acknowledge information and each other through a praising behavior in the general context of the Yammer platform.
Communitive	Social content Praise giving Frill evaluation	Organizational members voluntarily engage on Yammer to post social content and praise each other for private and professional achievements.
Distinctive	Specific context Frill evaluation Chatter perception	Organizational members initiate conversations by addressing one or two other organizational members on the Yammer platform regarding specific issues.
Corrective	Reprimand giving Chatter perception Professional content	Organizational members reprimand others on the Yammer platform concerning a professional issue, which is not commented on and is considered as chatter by those who are not involved.

In order to investigate the application and use of the social fabric I present and reflect on how the social fabric forms across the three case organizations.

### **4.3 Interpreting Social Fabric Configurations**

The social fabric framework can help present both the practices of interaction and the patterns of relationships that are emerging as a part of ESM at work. In order to provide insight into how we can work with the social fabric for understanding the social dynamics of ESM at work, I investigated the Yammer data gathered at the three case organizations. The digital traces of the Yammer posts and comments

work as a way of examining practices and interactions in a long term perspective as well as when they are occurring (Venturini and Latour 2010). Analyzing the Yammer platform data from each of the case organizations creates a basis for investigating the social fabric as it forms on the Yammer platform.

The data analysis builds on the examination of the Yammer posts and comments collected from the three case organizations in accordance with the characteristics of the social fabric threads. The coding of the Yammer posts and comments followed the coding schema used for mapping the threads (see Appendix 6, Table 1) and revealed the frequency of posts that represented each of the thread manifestations. In order to visualize the overall representation of each of the threads, the number of posts for each thread manifestation was counted and this number was placed in relation to the total number of posts associated with the thread. For example, this entailed identifying and coding the posts and comments that represent socially-oriented content and then relating these to the total number of professionally- and socially-oriented content posts and comments on the Yammer platform. From this, the ratio of the thread manifestations was established, revealing how each of the social fabric threads was represented on the ESM platform in the case organizations (for details of this process see Appendix 7). Based on the thread ratios, the social fabric framework served as a basis for creating visual representations in the form of spider charts that displayed how the different threads manifest themselves in each of the case organizations. Below I demonstrate the results of the social fabric analysis. In the investigation of the social dynamics of ESM at work, I focused on two objectives; first, to investigate the social fabric as it develops over time and second, to investigate the social fabric in relation to a specific organizational work practice. The purpose of this analysis is to demonstrate how the social fabric framework provides insight into the social dynamics of ESM at work.

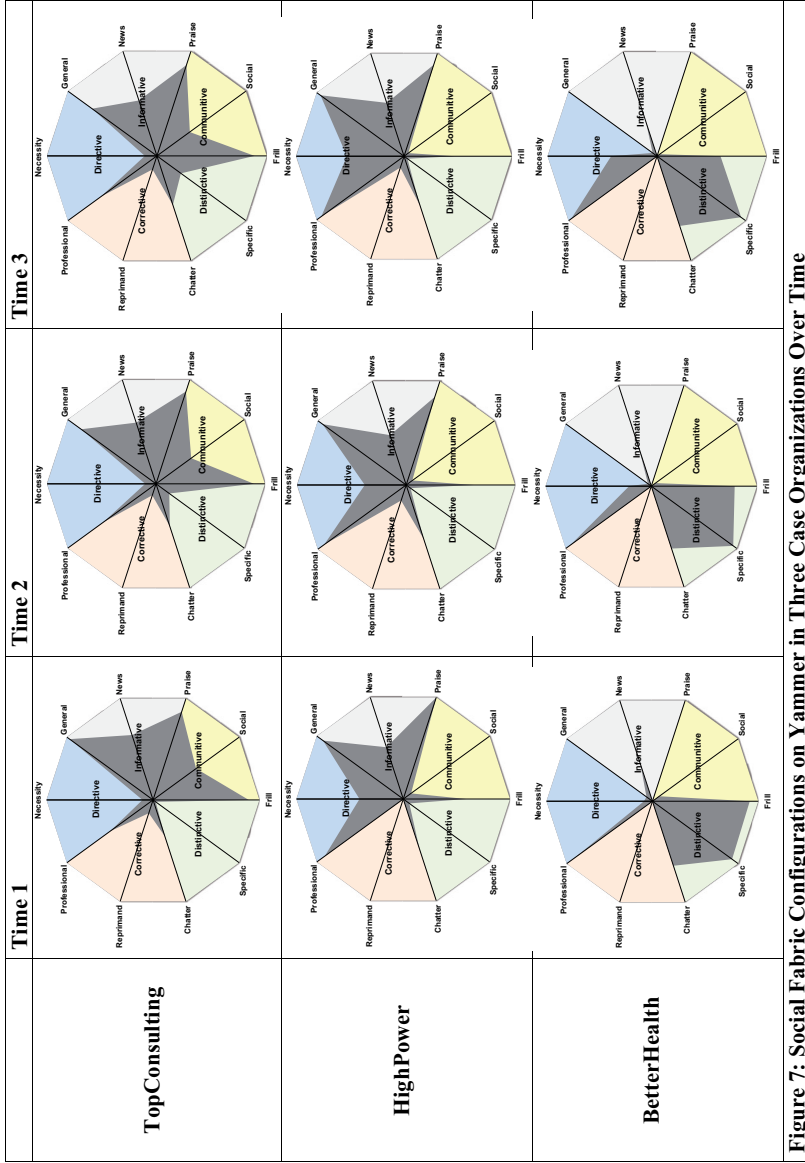
#### ***4.3.1 Looking at the Social Fabric over Time***

Visualizing the social fabric over time offers interesting insights into the way in which the social fabric developed in the general context of the three case

organizations. Figure 7 shows the development of the social fabric on ESM in the three case organizations over time (see Appendix 7 for data representation). The figure displays the configurations according to the social fabric framework and highlights the specific social fabric at each of the organizations in the grey markup. Looking at the social fabric of the organizations over time, the dynamic properties of the social fabric become apparent. Modeling the interactions taking place on the ESM platform provides an overview of changing relationships. Additionally, the picture of the social fabric across the three case organizations reveals some very different patterns of relationship emerging in each of the organizations. This conveys how understanding the social fabric becomes important, as the representation of it differs depending on the organization.

The visual representations of the social fabric provide two overall insights into the social dynamics of ESM at work in terms of their dynamic change over time and the different patterns across the three organizations. First, the evolving configuration of social fabric patterns demonstrate how the social dynamics are constructed and reconstructed on the ESM platforms as well as how the social fabric across all three organizations change over time. Looking closer at the social fabric configuration for TopConsulting, the social fabric shows how informative and communitive relationships dominate the initial interactions on the platform. Over time, it is visible how the informative relationships become a little less dominant and how focus is placed on the creation of distinctive relationships and interactions taking place in a specific context and encouraged from certain organizational members.

The use of the Yammer platform in TopConsulting therefore appears to be moving away from the more general informative relationships and towards more distinctive relationships involving only certain organizational members. In the context of TopConsulting, the change in social fabric configuration can be attributed to the growing size of the organization. The data displays the use of Yammer over a period of two years in which the organization has grown from ten to approximately fifty employees. In light of this, the social fabric appears to become more oriented towards supporting specific relationships between organizational members while still serving general informative relationships.



**Figure 7: Social Fabric Configurations on Yammer in Three Case Organizations Over Time**

In HighPower, the formation of relationships demonstrates how focus is placed in the creation of directive and informative relationships, in which professional content and news are shared and recognized in the general context of the platform. As the interactions on the platform develop, the social dynamics shift slightly towards more corrective relationships as well as more emphasis being placed on the directive relationship on the Yammer platform. The context at HighPower promotes the use of Yammer on a project basis (cf. section 3.3.3). The primary nature of the directive and informative relationships at HighPower demonstrates how the project focus is mostly centered on the delivery of messages and news using Yammer as a main channel.

Lastly, the development in the social fabric configuration at BetterHealth shows a strong emphasis on the creation of distinctive relationships, with focus on a specific context and the engagement of only some of the organizational members. The development of the social fabric configuration at BetterHealth demonstrates how a directive pattern of relationships emerges through the interactions over time, with a focus on interactions around professional content that can only be obtained through the Yammer platform. Utilizing the social fabric to understand the dynamics of the interactions and relationships on the Yammer platforms at the three case organizations over time provides insight into how the relationships on ESM are continuously constructed and reconstructed. It also gives insight into the direction in which the relationships on the ESM platform are moving. For example, in the case of TopConsulting, the relationship is moving from informative towards more distinctive relationships.

Second, the social fabric configurations that are observed across the three case organizations make evident how the social dynamics of the three case organizations form differently on the Yammer platform. While the Yammer platform provides the same functionalities for all three organizations, the interactions and the relationships that form on the platform are far from similar. This highlights the importance of considering the individual social fabrics of each organization when ESM is used at work. At TopConsulting, the social fabric displays a mix of informative, communitive and distinctive relationships between the organizational members on the Yammer platform. This social fabric then

presents an illustration of the organization whereby the social dynamics on Yammer are oriented towards a general information sharing that is recognized by a community, one in which social content is welcomed and where distinctive relationships emerge. The case study of HighPower also emphasizes the informative relationships, but the social fabric shows how directive relationships are also formed on the Yammer platform. The social dynamics are then characterized by the directing of professional content in general context interactions where the informative relationships are central and recognized. The controversy analysis of the debate professional-social content reflected how the culture of the organization to a high extent relies on these formal distributions of information. Finally, the fragmented social fabric emerging at BetterHealth highlights specific relationships and directive relationships, focusing on professional content and a necessity evaluation through posting of important information to the platform. The social fabric at BetterHealth seems to illustrate an issue that arises through the fact that, while organizational members are mostly interacting in distinctive relationships, there is also a tendency towards directive relationships and sharing of important information. In this sense, important information might not be seen or taken account of when, to a large extent, people interact on the platform based on distinctive relations. The social fabric can help distinguish the overall types of relationships that dominate the interactions and relationships on the ESM platform within an organization, as well as to indicate contradictions within the individual patterns.

#### ***4.3.2 Investigating the Social Fabric of Collaboration***

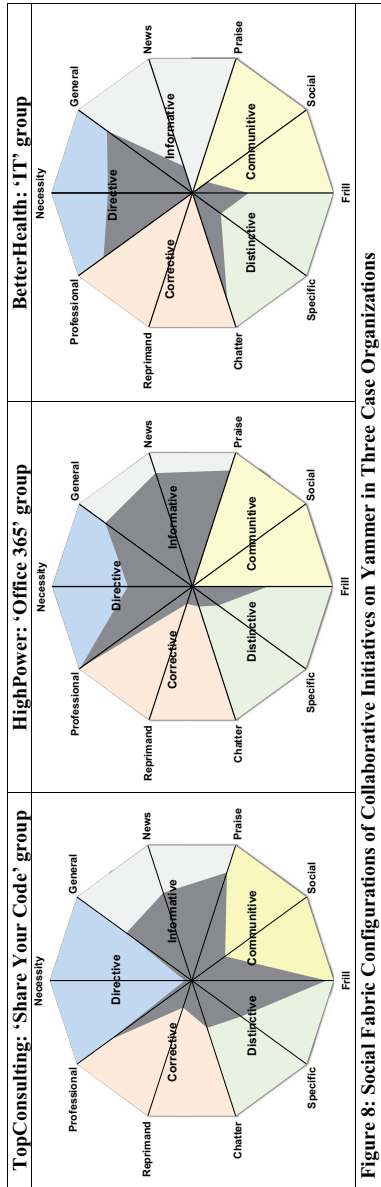
The use of the social fabric framework to analyze and present the overall patterns of relationships of ESM at work can help us understand and explain the social dynamics of ESM in the organization. In scrutinizing individual work practices, the social fabric can be used as a way of understanding the specific social dynamics underlying particular practices on the ESM platform.

Switching focus from the general context of the ESM platform as a whole and into specific work practices, the social fabric is used to analyze work groups centered on the practice of collaboration in the three case organizations. The analysis of the

social fabric underlying collaborative initiatives is presented in detail in paper 4. Figure 8 shows the social fabric configurations formed across three collaborative initiatives carried out on the Yammer platform in the three case organizations (see Appendix 8 for data representation). The collaborative initiatives selected all represent a Yammer group set up for enabling collaborative problem solving around a certain task. Again, it is evident how the social fabric forms differently across the three case organizations. In addition, the social fabric configurations reveal insights into how the relationships appear to highlight the different social dynamics on the ESM platform in the collaborative practices.

The collaborative initiative at TopConsulting is the Yammer group ‘Share Your Code’, which is set up for members to share knowledge and solve problems about coding. The purpose of the group is for organizational members to help each other solve concrete problems within coding issues. The social fabric configuration associated with collaboration in the ‘Share Your Code’ group are oriented toward relationships of an informative nature through the general context, news perception and praise giving. In addition, relationships of a more distinctive nature appear by the chatter about particular topics that are shared and discussed among a few group members. Besides this, the sharing of social content is supported by the members evaluating with the platform as a frill through voluntarily engaging in the group, thereby strengthening the communitive relationships. Finally, some corrective relationships emerge from the reprimands that follow chatter on professional content.





The collaborative initiative at HighPower is the group 'Office 365' that deals with the implementation of a new operating system. The purpose of the group is to enable organizational members to share knowledge and solve problems that they may have with the new system. The group consists of 120 members, all of which are users of the new system. The social fabric of the collaboration in the 'Office 365' group focuses on directive relationships by providing professionally-oriented content in a general context. In addition, informative relationships are observed in the large quantity of news acknowledged by the members of the group. Some distinct conversations emerged among members in specific contexts and dealing with off-topic issues. Lastly, corrective relationships emerge when the chatter perception of certain professional-content was reprimanded with regard to questions being asked that had already been answered.

The social fabric forming in the collaboration on the 'IT' group at BetterHealth shows the directive pattern and the distinctive pattern as dominant. The collaboration at BetterHealth is the 'IT' Yammer group, which was established to enable employees in the IT department to work together for the rapid sharing of knowledge and problem solving. The group has 16 members and its purpose is to share knowledge so that everyone in the IT department has a general idea of what is going on and can help each other solve problems with the IT systems. The formation of the social fabric in the 'IT' group at BetterHealth shows how the interactions are reliant upon a large quantity of professionally-oriented content which is presented in the general context of the group and which is aimed at providing important specific information that must be taken into consideration, reflecting a directive nature of the relationships. The directive pattern emerges when the IT manager encourages the members to read the articles and take note of his information. The distinctive pattern emerged, as interactions are voluntarily initiated by members on the platform aimed at a specific context and taking on the form of chatter. Finally, a limited news perception and a smaller amount of social content seem to introduce some hints of informative and communitive relationships, but these are inhibited by the lack of praise and recognition on the platform.

The different configurations of the social fabric provide insight into how the interactions guiding collaboration between the organizational members on the ESM platform are based on diverse social fabric configurations. Describing the different social dynamics that underline the collaborative initiatives allows for an understanding of how the interactions between the organizational members create different foundations for collaboration within the organization. Thus, the social fabric configuration highlights how collaboration on an ESM platform should not be treated as a set activity, but rather is subject to huge differentiation depending on the social fabric that forms as its base.

Through the social fabric framework, the different components of ESM, sociality and work come together, explaining the foundations for how social relationships form on ESM as well as providing an understanding of how these mediated relationships relate to work. In terms of the three domains, the integrated perspective involves the consideration of how the social fabric forms, but more importantly, transforms through the use of ESM. The different social fabric configurations display the way in which relationships form depending on the balance of the interactions along the social fabric threads. The social fabric can then also serve as a way of orienting the interactions of the ESM platform within the organization. Accordingly, working with the social dynamics of the organization on ESM can be based on knowledge about the existing social fabric configuration and perspectives on desired configurations. As part of the empirical work, the follow up sessions carried out at two of the case organizations revealed how the organizational members, when confronted with the social fabric configuration, started to discuss what actions and interactions they could take to enforce certain relationships. The IT manager at BetterHealth noted, *'so if I want to strengthen the informative relationship here then I should put more effort into praising people when they post information or news that I value...'* (ITM\_FollowUpMeeting\_BH). On a more general level, the social fabric configurations worked as a way for the organizational members to reflect on their actions on the Yammer platform in a way they had not previously considered. The discussions in the follow-up sessions made it clear how the language of the social fabric in terms of threads and patterns of relationships aided in the deciphering of

differences in perceptions of how and for what purpose the Yammer platform should be used within the organizations. Reflecting on this in relation to the initial interviews, the descriptions from the organizational members of how they would post and comments on the Yammer platform suddenly became more elaborate, using the terminology of the social fabric in terms of which relationships they valued and how this reflected in the actions and interactions. The social fabric configurations serve as a way of understanding existing social dynamics of the organization but can also provide a way of informing future activities on the platform.

In this section, I have introduced the social fabric framework as an integrated perspective for understanding the social dynamics of ESM at work. The findings presented have highlighted my perspectives on the three domains of ESM, sociality and work, and how these have informed the development of the social fabric framework. They also highlight how my main insights for understanding the social dynamics of ESM at work arose from the interaction between the three domains and the way that these were enacted in the practice on the ESM platform. The creation of an integrated view on ESM at work through the social fabric enables an understanding of ESM use in relation to the social dynamics of the organization. Configuring the different social fabrics of the case organizations gave valuable insight into the dynamic and diverse nature of the relationships that form on the ESM platform. In particular, the social fabric configurations showed how the relationships changed over time and were different across the three organizations and in the organizational practice of collaboration. Finally, the follow up meetings with the case organizations revealed how the social fabric framework enabled both insights into existing and current relationships but also supported the direction of future activities and interactions on the ESM platform.

## 5. Conclusion

This section summarizes the research by highlighting the insights gained into the social dynamics of ESM at work. As illustrated in the outline of my research process in section 3.7, the exploratory work of this thesis is characterized by different approaches and theoretical investigations. Writing up this thesis can then be considered a retrospective account and it is not until you have completed it that you see how it all fits together (Henfridsson 1999). The objective of the research was to investigate ESM at work by addressing the overall research question: *What are the social dynamics of enterprise social media in organizational work?*

Overall, my investigation has demonstrated how the social dynamics of ESM in organizations comprises the three domains of ESM, sociality and work, and I have introduced the social fabric framework as a way of explaining, interpreting and understanding the social dynamics of ESM at work. In order to elaborate on these contributions, I present rich insights gained through the research efforts. As outlined in section 3.6, such insights represent a way of concluding upon interpretive case study research, in which the broader implications of the research are presented (Walsham 1995). Summarizing the research in this manner enables me to both discuss and reflect upon the insights in terms of how they contribute to the existing knowledge base and practical understanding of the social dynamics of ESM at work. This concluding section is divided into three subsections. The first and second subsections describe the insights gained in relation to the implications for research and practice. The third subsection outlines limitations and prospects for further research.

### 5.1 Implications for Research

In the literature review, I investigated and evaluated existing perspectives on ESM in organizations. The existing perspectives of ESM as technology, work and social organization fueled the investigation of the social dynamics of ESM at work. In particular, this study of social dynamics of ESM at work builds upon the

entanglement between material and social elements involved in the use of ESM. The evaluation of affordance theory for studying the social and material entanglement of ESM in organizations revealed that we need to move beyond talking about specific users perceiving a set of opportunities of ESM technology towards thinking about the actions, abilities and the social environments that the technology is a part of. The research of this thesis extends this knowledge.

So, what does this research add to our knowledge about the social dynamics of ESM at work? First, the thesis contributes to existing perspectives on ESM in organizations by integrating the three domains of ESM, sociality and work for understanding the social dynamics of ESM at work. While the literature has so far treated these domains separately or in pairs, this research presents an integrated view. The social dynamics of ESM at work are outlined as a web of relationships between various organizational actors. The research shows how these relationships arise between the functionalities of the ESM technology, the sociality of the organizational members, and the work practices carried out in the organization. Second, the thesis contributes the social fabric framework as a way of demonstrating the social dynamics of ESM at work. The social fabric framework is an instrument that can reflect the social dynamics of organizational work in the context of ESM platforms. Mapping the social fabric in organizations provides valuable insight into the dynamic and diverse nature of the relationships that form on the ESM platform. Third, the thesis contributes a relational constructivist perspective to the study of the social dynamics of ESM at work. The relational focus adds a new dimension to the study of ESM in organizations by placing the relationships as the unit of analysis rather than the individual users or technologies. The relational approach allows the entanglement of the social and material by analyzing the relationships between actors rather than the actors themselves. Based on these overall contributions, I outline the specific insights gained on social dynamics of ESM at work with regard to the implications for research.

**Insight 1: To understand the prospects of ESM technologies and the role they play in organizations, we must move beyond studying the functionalities of those technologies towards understanding their social dynamics**

The investigation in this PhD thesis takes its point of departure in the ambition to move beyond technologically centered approaches to theorize about ESM. Reviewing the existing literature on ESM in organizations revealed how a considerable amount of the literature centers on the technological features and capabilities (e.g., boyd 2009; Erickson and Kellogg 2000; Grudin 2006; Thom-Santelli et al. 2008) or on the implications of ESM for work practices and processes (e.g., Danis and Singer 2008; Holtzblatt and Tierney 2011; Yardi et al. 2009). Critiques of ESM have highlighted how the technological features appear to create more resistance towards than adoption of the platforms (Gibbs et al. 2013). While ESM appears to provide opportunities for improving work in organizations the critiques have caused some discussion about the durability of ESM as an organizational platform for work (Gartner 2013). The findings of this study reveal that additional mechanisms, apart from the technological, are at play when ESM is adopted into an organization. Thus, gaining the benefit from ESM in organizations does not rely on the technological features alone but also requires attention to the social dynamics that ESM become a part of. The aim of this research was to extend the knowledge about ESM in organizations by focusing on the social dynamics, which the ESM technology becomes a part of in an organizational context. The technical features and functionalities of ESM bring organizational practices into the open through the transparency and visibility of the platform (Leonardi et al. 2013; Treem and Leonardi 2012). The ESM platform thus presents a unique opportunity for observing practices of organizational members, both in retrospect and as they are taking place. Consequently, the study of ESM lends itself to moving beyond descriptions of technical functionalities and characteristics and towards observing the practices that take place on the platform. In my empirical work, I observed the practices on and around the ESM platform and how use of the platform encouraged people to debate if telling a joke is appropriate or what they should share with their colleagues. These debates highlight how a process of reordering of the ‘social’ on ESM is taking place in the organizations. Understanding this social ordering and reordering comes with understanding the evolving social dynamics that emerge with the use of ESM.

Studying the social dynamics of ESM at work gave insight into the entangled entities of organizational members, the ESM technology and the different work practices. This demonstrated how the relationship between these are constantly constructed and reconstructed. The findings also revealed how the social dynamics of ESM at work will continue to evolve and change within the organization, which makes the study of them and their development even more important if we are to understand the ESM platform in an organizational context. The research adds to the literature by extending the view on functionalities and characteristics of ESM to consider and utilize the added opportunities of observing and working with the practices and interactions that take place on the platform. Moreover, highlighting the social dynamics offers a novel way of approaching the understanding of ESM through extending our knowledge of its use past opportunities for posting and commenting and towards the underlying relationships that form the basis of work on the ESM platform. In sum, this insight emphasizes that in order to obtain benefits from ESM in an organizational context we must understand the social dynamics that form and evolve on the platform.

### **Insight 2: The social fabric framework enables the study of social dynamics of ESM at work**

The findings show that organizational practices are constructed and reproduced by technology - in this case, the ESM platform. However, the findings also reveal how social relationships determine the technology's capacity to contribute to work. Although the socio-technical entanglement has been well studied in the organization and IS literature (Cecez-Kecmanovic et al. 2014; Leonardi and Barley 2010; Orlikowski 2007), the social fabric metaphor provides a useful framework for encompassing both the social and the technical aspects of the underlying systems of interest. The literature review reflected on the existing applications of affordance theory to demonstrate the entanglement between the social and material properties of ESM (Ellison et al. 2015; Fulk and Yuan 2013; Gibbs et al. 2013; Treem and Leonardi 2012). While these efforts generate insight into the perceived affordances of ESM, the review also implied how the study of ESM must move beyond talking about specific users utilizing a set of features of the ESM technology and towards thinking about outlining the actions, abilities and



the social environments that are a part of the interactions with the ESM technology (Faraj and Azad 2012). Existing studies of ESM have used concepts of social capital (Reimer et al. 2015) and social network analysis (Trier and Richter 2015) to describe the social environment of these platforms. While social capital deals with the value derived from social relationships and networks (Burt 2000; Burt 2001; Tymon and Stumpf 2003), social network analysis describe the information flows between various actors in a network structure (Trier and Richter 2015). Adding to these perspectives this research focus on describing the character of the social relationships through the outline of what makes up the social fabric of the organization on ESM. As demonstrated by combining the three domains of ESM, sociality and work, the activities of both the organizational members and the ESM platform were central in shaping the threads of the social fabric and unveiling the patterns of the social fabric that underline work on the ESM platform. This, in turn, reinforced the entangled relationships between the technical and social elements. Understanding the social dynamics of ESM at work requires attention to the relationships between actors of all kinds. Using the social fabric framework, these relationships can be revealed in interactions between actors and interpreted in different patterns to uncover the nature of the relationships on the ESM platform. Configuring the different social fabrics of the case organizations gave valuable insight into the dynamic and diverse nature of the relationships that form on the ESM platform. In particular, the social fabric configurations showed how the relationships changed over time and formed differently across the three organizations and in the organizational practice of collaboration. In sum, the social fabric framework highlights the underlying social dynamics of organizational work through observing and outlining the actions of the organizational members on the ESM platform, and consequently utilizing these to map the social environments that are a part of the interactions and relationships that form on the platform.

### **Insight 3: The relational view can allow novel ways of studying ESM in organizations**

To frame my research efforts, I have introduced the relational constructionist perspective as a way of moving beyond the study of single actors towards looking

at the relationships between multiple actors and how they form and develop. Recent literature highlights how the study of social networking in organizations through tools such as ESM requires attention to the deeper structures that underlie the workings of these networks (Trier and Richter 2015). To explore these deeper structures, the relational perspective allows for an equal consideration of any actor who enters into relation and underlines how it is not useful to separate the individual actors, but rather focus on their mutual existence as the point of analysis. For the investigation of ESM at work, the controversy analysis revealed how looking at interactions in the controversies provides insight into the relationships that describe the social dynamics of ESM at work. Through the analysis of the prevailing conflicts and disagreements, the four steps of the controversy analysis were instrumental in revealing the threads of the social fabric and the nature of social dynamics in each case organization. Observing the relation between actors through the controversy analysis provided a method of identifying and analyzing certain instantiations of the relation between actors. While the relational constructivist perspective is not a new perspective in research (Hosking 2011; Özbilgin 2006), its addition to the analysis of the social dynamics of ESM at work provided novel insight into how the relationships in these dynamics were formed and reformed on the ESM platform. In sum, this insight emphasizes how focusing on a relational perspective enable us to look beyond a fit between task and technology and towards describing the underlying social dynamics of technology use and organizational practice.

## **5.2 Implications for Practice**

As highlighted in the introduction, organizations have been struggling with how to understand and approach the use of ESM as part of work. While managers in most organizations understand the technical capabilities of ESM platforms, they are less aware of their social implications and how these may affect work in an organizational context. In organizations, the challenge is to create a supportive working environment that stimulates the development of skills and organizational arrangements in which work activities can flourish (Thomas and Bostrom 2008). Investing in IT-based tools for this purpose is necessary but inadequate; much more is needed in order to achieve joint coordinated efforts of individuals or

groups across certain boundaries. This study provides managers with a way of understanding ESM at work by moving beyond the technical capabilities and towards an integrated perspective in which ESM, sociality and work come together to explain the underlying social premise of the platform use in the organization. The social fabric framework can work as a strategic and operational instrument to identify social dynamics on the ESM platform through eliciting these dynamics and creating a visual representation of the social fabric that can be used for reflecting upon and engaging in collective dialogue about present and desired states. Based on this, I outline the specific insights gained on social dynamics of ESM at work with regard to the implications for practice.

#### **Insight 4: Organizations can utilize the social fabric framework to elicit the social dynamics of the organization's use of ESM**

The synthesis of the research reveals how the threads of the social fabric can provide rich insights into the interactions taking place on the ESM platform. While the organizations studied all highlighted the interactions between organizational members as important, explaining what these entail or how they formed and developed proved difficult. Revealing the threads of the social fabric thus serves as a way of making these interactions more tangible by viewing them in light of the different thread's characteristics. The elicitation of the interactions and the analysis of how these interactions form a certain pattern of relationship conveys how the entanglement between ESM, sociality and work creates a dynamic space for interaction which can facilitate both top-down, regulated and directive relationships on the one hand, as well as bottom-up, self-regulated and communitive relationships on the other. This indicates that working with the social fabric, as well as identifying and reflecting which patterns of relationships are favored, can help managers elicit the social dynamics of the organization on the ESM platform. The follow-up sessions at two of the case organizations revealed how the threads of the social fabric and the patterns provided the organizational members with a language for addressing the dynamics that took place. In particular, specifying the ratio of each thread manifestation led to insight into how interactions on the platform were dominated by a certain balance. Through these insights, presenting the nature of the interactions on the ESM platform became

more tangible for the organizational members, as they could use the terminology of the social fabric to pinpoint the characteristics of the activities on the ESM platform. The social fabric framework then works as a way of eliciting the interactions and patterns of relationships forming on the ESM platform but also evokes feedback and discussion among those who interpret what is going on, thus creating a common ground for the use of the technology in practice (Carlile 2004).

**Insight 5: Organizations can utilize the social fabric framework to create visual representations of the social dynamics of the organization's use of ESM**

Mapping the different social fabric configurations across the three case organizations revealed how the three case organizations have very different ways of interacting on the ESM platform. The visual configurations of the social fabric allows for a display of the patterns of relationships, as well as their development. This presents interesting implications for practice as the complex dynamics of the social environment on the ESM platform become manifested in a shape, providing insight into the evolving patterns of relationships on the ESM platform. Utilizing visual representations to explain organizational data can provide powerful and meaningful insights into complex phenomena (Meyer 1991). The social fabric makes it possible to create representations of the interactions and relationships that form on ESM, which are otherwise difficult to describe and capture. Further, the social fabric framework allow the visualization of the fluidity (Faraj et al. 2011) of the online ESM medium by creating a flexible structure for observing and visualizing interactions and patterns of relationships on the ESM platform as they evolve over time. In addition to highlighting the dominant patterns of the social fabric, the visual representations also revealed how the ESM platform should not be considered as being equivalent across different organizations. While the ESM platform Yammer is normally promoted as a technology which 'fits-all' (Yammer 2015), investigating the social dynamics on ESM demonstrates how the technology can encourage many different interactions and patterns of relationships. Pinpointing these different social dynamics of the same ESM platform across diverse organizations makes the social fabric configurations useful for discussing the exact application and future use of the technology within the organization (Leonhardt Kjærgaard and Jensen 2014). The navigation of the ESM

platform and its use in the organization is a matter of looking at how the technology is appropriated within the social fabric of the organization and working with specific initiatives based on this understanding.

**Insight 6: Organizations can utilize the social fabric as a means of reflecting upon and creating a collective dialogue about the present and future desired state.**

As highlighted in the introduction, a major challenge for organizations and for managers is to plan and work strategically with the use of ESM in the organization. To initiate this strategic thinking, managers can utilize the social fabric configurations as a springboard for a collective discussion about the prevailing work practices on the ESM platform. As part of my concluding work with the case organizations, the social fabric framework proved invaluable for allowing the organizations to gain insights into the social fabric of their ESM platform. The social fabric configurations in each of the case organizations gave insight into the behavior on the ESM platform and how this formed and reformed over time. Moreover, it highlighted how the social fabric underlying the practice of collaboration took different forms. The different social fabric configurations then revealed how the same ESM platform sparked different forms of interaction and patterns of relationships across each organization and specific work practices. The application of the social fabric framework highlights the importance of considering the interaction between organizations and technology in light of the specific contexts and technologies, rather than suggesting abstract and overall strategic initiatives that transcend all organizations (Orlikowski 1992). The reflection and dialogue encouraged by the social fabric framework can enable the creation of specialized strategies for ESM in the specific organizational context. Reporting back to the case organizations, the practical implications of this work have been revealed by the ability of the social fabric configurations to give the organizations a language for, and a way of, considering ESM at work. This has both offered insights into the current state of the organizations, as well as provided directions for future initiatives when it comes to ESM at work. Based on this, the social fabric framework becomes a way for organizations to capture the current

state of the social dynamics on the ESM platform as well as to utilize this to plan for future initiatives and ways of interacting on the platform.

### **5.3 Limitations and Future Research**

While the efforts of this research have encompassed multiple views, it has also helped to uncover aspects related to this research that could be studied further. I have realized that the work accomplished here is only the beginning and, while my work has provided me with answers, it has also inspired new questions. In the following, I reflect on opportunities for future research and address some limitations with regards to the thesis work itself.

#### ***5.3.1 Exploring the Social Fabric Further***

The development of the social fabric framework provided great insights into how the social dynamics on ESM formed in each of the case organizations. However, it also raised interesting questions with regards to how the social fabric framework could be used beyond the study of ESM. Presenting the ideas to colleagues and at conferences, a recurring question seemed to appear relating to how the social fabric of the organization looked before the introduction of ESM. While the ESM platform in this research served as a valuable way of gaining insights into the actual interactions and activities of the organizational members on the platform, and illustrating these through the social fabric, this question prompts the investigation of how to explore the social fabric in the organization as a whole. In this thesis, the social fabric framework was developed based on the interactions on and with the ESM platform, which provided insights into the dynamic threads of interaction that are a part of organizations. The findings gained by utilizing the social fabric framework to study the social dynamics of ESM revealed how these dynamics are evolving. Therefore, capturing the social fabric in organizations requires attention to these dynamics and how this social fabric develops over time. Describing the social fabric over time could provide very interesting insights into the development of the organizational social dynamics. Transferring the measurements used to map the social fabric on the ESM platform into questions for organizational members could represent a first step in developing an

instrument for mapping the social fabric of organizations. In addition, the identification of the social fabric of the organization as a whole could provide an interesting comparison for the social fabrics found on the digital media such as ESM to see how these do, or do not, resemble each other.

### ***5.3.2 Investigating Strategic Initiatives of the Social Fabric***

In this concluding section, I presented the possibilities of the social fabric for making strategic decisions about the ESM platform based on enforcing certain threads of the social fabric. While this suggestion builds on the follow-up sessions with the case organizations, further research is needed on how these strategic initiatives could actually work. This would include working with the social fabric configurations to identify where initiatives could be implemented to strengthen the types of relationship that organizations want the ESM platform to support. For example, strengthening the informative relationships would imply a focus on encouraging organizational members to share news in the general context and then encourage others to praise or acknowledge when this information was of value to them. Trying this as part of the organizational use of the ESM platform and observing the effects this might have on the platform interactions may well be valid. Again, the dynamics of the social fabric formation would have to be taken into consideration, and the observations would entail a long-term perspective to see how the social dynamics evolve over time. Studying the strategic possibilities for working with the social dynamics on the ESM platform could move us away from regulatory practices for these platforms, which appear to be unfit for ESM, and towards working with interactions between individuals to strengthen the use of the ESM platform.

### ***5.3.3 Social Dynamics of other Enterprise Social Media Platforms***

The ESM platform Yammer was the focus in my study of social dynamics of ESM at work. While this selection was based on a number of criteria (cf. section 3.2.1) there are many other ESM platforms, which are adopted in organizations. Consequently, further investigation of the social fabric framework in relation to

these platforms could be interesting. Investigating these additional platforms could provide insight into other mechanisms that are at play when considering the social dynamics of ESM in an organization. Applying the social fabric framework across additional ESM platforms can enable reflection on the abilities of the social fabric to describe the social dynamics on ESM in general. Further, the insights from applying the social fabric framework to the study of other ESM platforms can enable a depiction of what social dynamics these different ESM platforms encourage. On the Yammer platform, we saw traces of the directive and informative pattern across all of the organizations; it would be interesting, in relation to this, to see if other ESM platforms would place emphasis on a different type of relationships.

This cover chapter has provided a synthesis of my research efforts in the investigation of the social dynamics of ESM at work. Drawing the overall lines and contributions of this research has been based on the work of the four papers that follow this cover chapter. The papers provide further details of the work and offer the opportunity for a closer look at specific areas and cases. With this cover chapter I hope to have inspired the reader to engage with these papers and reflect on the research efforts as well as their contribution to knowledge concerning the social dynamics of ESM at work.



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# Appendix 1: Contact Email

## Danish Version (original)

Kære XXX,

21 jan. 2014

Jeg er ph.d. studerende på Copenhagen Business School og beskæftiger mig i min forskning med sociale medier og brug af disse internt i organisationer. Mere specifikt kigger jeg på den sociale dimension og hvordan denne udfolder sig på mediet. Jeg er på udkig efter en virksomhed hvor jeg kan undersøge hvordan dette sker i praksis.

Jeg er i den forbindelse faldet over en artikel i Computer World fra november 2013 hvor du beskriver brug af Yammer internt i jeres virksomhed. I artiklen beskriver du hvordan I hos >virksomheden< benytter Yammer internt til at skabe et godt arbejdsmiljø samt en 'familieånd'. Jeg synes at dette lyder utroligt spændende og det er netop en virksomhed med den type brug af Yammer som jeg gerne vil undersøge som en del af mit projekt. Derfor skriver jeg til dig for at høre om I kunne være interesseret i at være en del af mit projekt. I mit ph.d. projekt har jeg indtil videre udarbejdet et teoretisk rammeværk og skal nu påbegynde den næste fase som omhandler indsamling af empirisk data. Den type data det drejer sig om er hovedsageligt observationer af interaktionen på jeres Yammer platform samt interviews med brugere af platformen.

Som fuldtids ph.d. er jeg helt og aldeles støttet af mit institut og jeg har overstået mine undervisningspligt, jeg er derfor meget fleksible i forhold til hvornår og hvordan dataindsamlingen kan finde sted. Jeg vil selvfølgelig også rigtig gerne levere resultater tilbage til jeres virksomhed løbende samt i form af den endelige afhandling. Hvis dette har interesse eller I har yderligere spørgsmål så kontakt mig endelig på mail: [sd.itm@cbs.dk](mailto:sd.itm@cbs.dk).

Jeg takker for opmærksomheden og håber på at høre fra jer.  
Mange Hilsner, Signe Dyrby

## English version (translation)

Dear XXX,

21 Jan. 2014

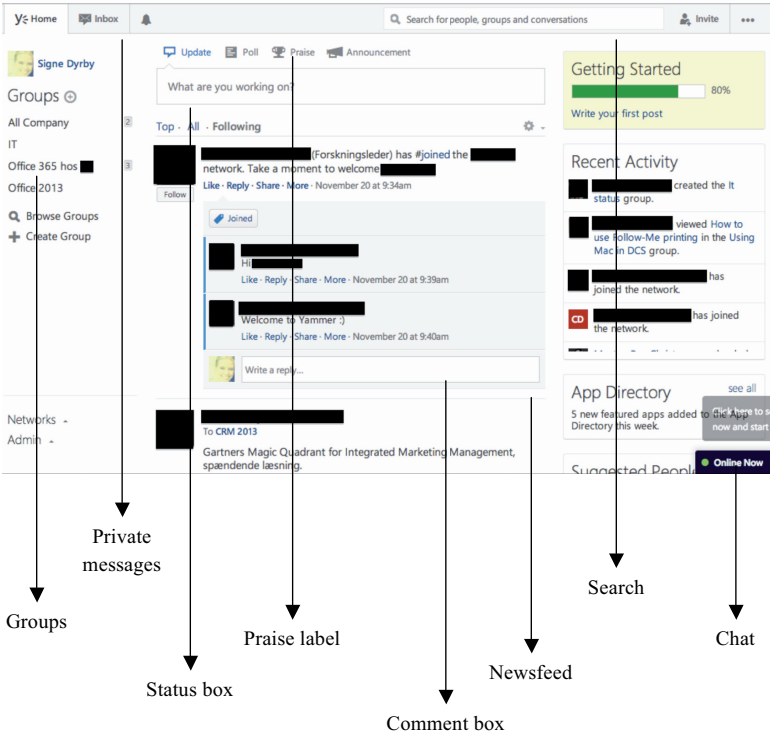
I am a PhD student at Copenhagen Business School and in my research I investigate social media use in organizations. More specifically I am looking into the social dimension of internal use of social media in organizations and how this develops and evolves. I am looking for a company where I can investigate how this happens in practice. In relation to this I came across an article in Computerworld where you describe how you use Yammer internally in your organization for creating a good working environment in you company. In the article you describe how you have used Yammer to promote a 'family spirit within the organization. This sounds very interesting to me and represents just the kind of Yammer use that I would like to investigate as part of my project. On the basis of this I am writing to you to ask if you would be interested in being a part of my project. My project work so far has been based on the development of a theoretical basis for the research and I am now entering the next phase dealing with collection of empirical data. The data I would like to collect involves observations of your Yammer platform as well as interviews with the users of the platform.

As a full-time PhD student I am funded completely by my university and I have fulfilled my teaching duties, which makes me very flexible in terms of when, and how the data collection can be carried out. As part of my research I look forward to reporting back to you with preliminary results as well as the final dissertation. I hope that this has caught your interest and if you have additional questions please contact me via email: [sd.itm@cbs.dk](mailto:sd.itm@cbs.dk).

I thank your for your attention and look forward to hearing back from you.  
Kind Regards, Signe Dyrby

# Appendix 2: Yammer Platform

## Profile Page



## Appendix 3: Observation Guide

In the outline ideas on what to look for and where to do it can work as a guide for how to carry out the observations. The different sources are inspired by the ethnographic and netnographic approaches (Kozinets 2010) that are outlined in section 3.4.1 and work as a guide for where to look and for what.

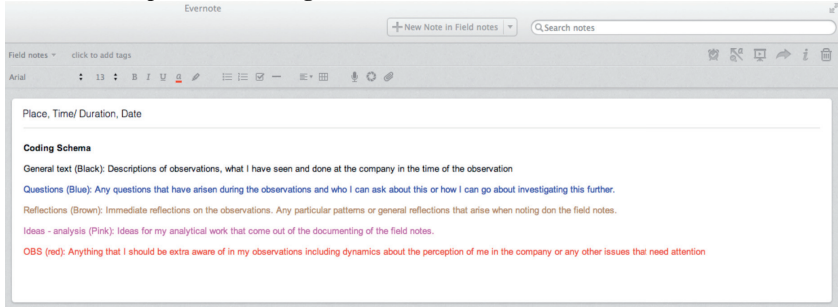
<b>Type</b>	<b>Place, people, method</b>
Daily interactions (online and offline, archival data)	Observations online and offline of employees. Online on Yammer platform via archiving actions and activity on the platform. Offline through observing the movements of people in the office.
Yammer activity (users, archival and elicited)	Log member activity and interactions. Follow a specific user and trace what he/she is doing, which groups they are in and how they are engaging with these different elements. Try to create small archived diaries that outline their Yammer activities. Use these as a basis for engaging in conversation with them either online or offline about certain aspects. Ask questions such as, what do you consider in the group engagements versus your own private posting? You are both a member of professional and social groups - how does this affect the way you interact with the members of each?
What sparks Yammer engagement (archival, field notes, elicited data types, online and offline)	Look for when people actually post on Yammer. Try to match the real time observations with the activities on the platform and see if there are any patterns for when the media is included in the interactions. These observations will have to combine online and offline and perhaps also include elements of elicited data collection where I engage to ask follow up questions (this will depends on whether it will be come too intrusive)
Timely activity on Yammer (archival)	Capture Yammer feed etc. via screenshots or using a video tool to map the interaction. For the process of observation as much Yammer data should be captured as possible. Be sure to investigate if it is possible for me to go back in the history of the different groups etc. to log the interactions. The logged data are stored in folders for each day and subfolders detailing what they re capturing. In the beginning analysis these data could be a good way to get a feeling of the different groups and their interactions.

Network overview of the user connections (archival)	Use the Yammer insights to create an overview of the network. The network overview can provide insight into which people to contact for interviews as well as which relations and associations are dominant in the network.
Participant-observation online at Yammer (elicited and field notes)	The participant observation online is expected to come following the first period of observations of the platform. In these I expect to start by engaging through adding likes and perhaps a comment or two to posts that exist on the medium. I will also, after obtaining an impression of the use of the chat function see if this might be a way of engaging people about their Yammer use. The barrier here will be to gain entrance into the daily interactions of the platform. I will try to engage through the @mention functionality as well and see if I might be able to become a part of some of the interactions that way. This might happen following an interview or a talk with someone where I can follow up online via the Yammer tool. I will ask if we should provide an introduction of me on the platform. According to the theory it can create further distance but I will make sure to also create a full profile of myself on the medium where I present my role and give something of 'me' in order to gain visibility on the medium. The observations made will be noted in the field note data as well to reflect and document the insights I have gained. With the small interviews that go on the medium I have an instant documentation of the interview.
Participant observation offline at case organization (elicited data and field notes)	The participant observation offline will be linked closely with being present at the company and being part of the daily interactions. In this observation form I will approach people as comes natural - by the coffee machine etc. as well as rely on my contact person to further create some introductions. The difficulty here will be to become part of the culture and the company to such an extent that I can have open conversations with people. I do not plan on recording these open talks but rather will reflect on them in my field notes. Again the notion of presentation of me will be something to address to see if people will engage with me quickly or if it takes more time. I will seek to introduce my self to as many as possible as quickly as possible.
Observe the culture of the company and the employees	What is the culture of the daily interactions - how is the tone and what do people engage about. How is this reflected both online and offline. Is it kept professional versus social and

(archival and field notes)	which actions are leading to which actions? How are the collectives formed both online and offline and how does this effect the interactions. What are the interactions about (what is the content) and what re the social forms that emerge (is it a culture of sharing, exchange, jokes) what are these core interaction patterns that can be observed both online and offline. In these observations look at what people talk about and what gets the conversation started. Where are the initial sparks of what happens and how are they formed online, offline and online/offline. This might be where some of the interesting comparisons can occur between what is forming the sociality.
Observe org. chart, praise and leader boards to see where the interaction is happening (online, archival)	Track how these are looking for the individual users and their relations to see how these mechanisms of the media enable/discourage social interaction or engagement. These could be interesting to have a look at as part of the archived data to see how they influence the interactions around a certain actor and how theses association mechanisms influence the position of the actor.
Observe the ticker activity feed to see what activities are taking place (archival, elicited)	This can help with discovering what is going on now and follow those activities through the online medium.

# Appendix 4: Field Notes

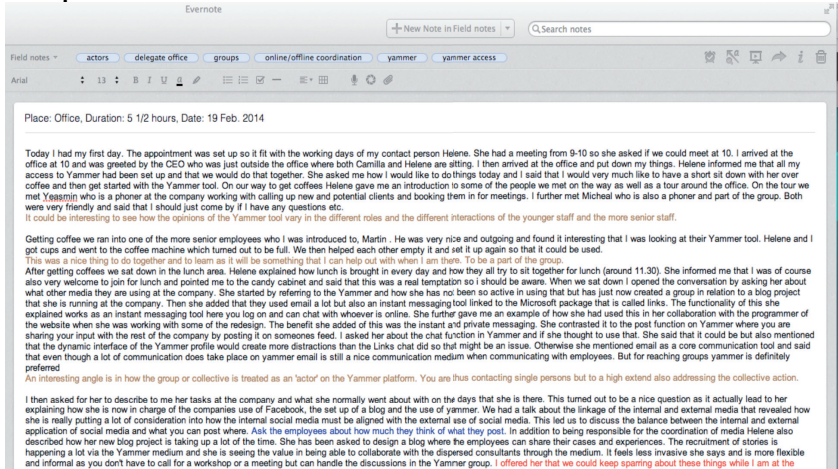
## EverNote Template and Coding Schema



The screenshot shows an EverNote interface with a note titled "Evernote". The note content includes a section for "Coding Schema" with the following items:

- Place, Time/ Duration, Date**
- Coding Schema**
- General text (Black):** Descriptions of observations, what I have seen and done at the company in the time of the observation
- Questions (Blue):** Any questions that have arisen during the observations and who I can ask about this or how I can go about investigating this further.
- Reflections (Brown):** Immediate reflections on the observations. Any particular patterns or general reflections that arise when noting down the field notes.
- Ideas - analysis (Pink):** Ideas for my analytical work that come out of the documenting of the field notes.
- OBS (red):** Anything that I should be extra aware of in my observations including dynamics about the perception of me in the company or any other issues that need attention

## Example: Field Notes from Office Observations



The screenshot shows an EverNote interface with a note titled "Evernote". The note content includes a section for "Place: Office, Duration: 5 1/2 hours, Date: 19 Feb. 2014" and the following text:

Today I had my first day. The appointment was set up so it fit with the working days of my contact person Helene. She had a meeting from 9-10 so she asked if we could meet at 10. I arrived at the office at 10 and was greeted by the CEO who was just outside the office where both Camille and Helene are sitting. I then arrived at the office and put down my things. Helene informed me that all my access to Yammer had been set up and that we would do that together. She asked me how I would like to do things today and I said that I would very much like to have a short sit down with her over coffee and then get started with the Yammer tool. On our way to get coffees Helene gave me an introduction to some of the people we met on the way as well as a tour around the office. On the tour we met Yasmine who is a phoner at the company working with calling up new and potential clients and booking them in for meetings. I further met Michael who is also a phoner and part of the group. Both were very friendly and said that I should just come by if I have any questions etc.

It could be interesting to see how the opinions of the Yammer tool vary in the different roles and the different interactions of the younger staff and the more senior staff.

Getting coffee we ran into one of the more senior employees who I was introduced to, Martin. He was very nice and outgoing and found it interesting that I was looking at their Yammer tool. Helene and I got cups and went to the coffee machine which turned out to be full. We then helped each other empty it and set it up again so that it could be used.

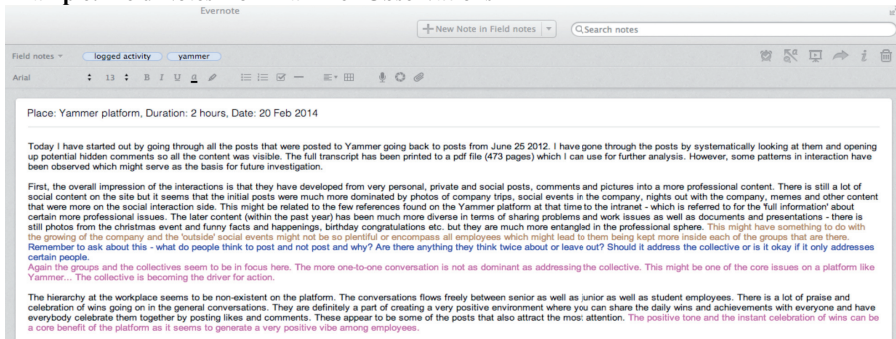
This was a nice thing to do together and to learn as it will be something that I can help out with when I am there. To be a part of the group.

After getting coffees we sat down in the lunch area. Helene explained how lunch is brought in every day and how they all try to sit together for lunch (around 11.30). She informed me that I was of course also very welcome to join for lunch and pointed me to the candy cabinet and said that this was a real temptation so I should be aware. When we sat down I opened the conversation by asking her about what other media they are using at the company. She started by referring to the Yammer and how she has not been so active in using that but has just now created a group in relation to a blog project that she is running at the company. Then she added that they used email a lot but also an instant messaging tool linked to the Microsoft package that is called Lync. The functionality of this she explained works as an instant messaging tool here you log on and can chat with whoever is online. She further gave me an example of how she had used this in her collaboration with the programmer of the website when she was working with some of the redesign. The benefit she added of this was the instant and private messaging. She contrasted it to the post function on Yammer where you are sharing your input with the rest of the company by posting it on someone's feed. I asked her about the chat function in Yammer and if she thought to use that. She said that it could be but also mentioned that the dynamic interface of the Yammer profile would create more distractions than the Lync chat did so that might be an issue. Otherwise she mentioned email as a core communication tool and said that even though a lot of communication does take place on yammer email is still a nice communication medium when communicating with employees. But for reaching groups yammer is definitely preferred.

An interesting angle is in how the group or collective is treated as an 'actor' on the Yammer platform. You are thus contacting single persons but to a high extend also addressing the collective action.

I then asked her to describe to me her tasks at the company and what she normally went about with on the days that she is there. This turned out to be a nice question as it actually lead to her explaining how she is now in charge of the companies use of Facebook, the set up of a blog and the use of yammer. We had a talk about the linkage of the internal and external media that revealed how she is really putting a lot of consideration into how the internal social media must be aligned with the external use of social media. This led us to discuss the balance between the internal and external application of social media and what you can post where. Ask the employees about how much they think of what they post. In addition to being responsible for the coordination of media Helene also described how her new blog project is taking up a lot of the time. She has been asked to design a blog where the employees can share their cases and experiences. The recruitment of stories is happening a lot via the Yammer medium and she is seeing the value in being able to collaborate with the dispersed consultants through the medium. It feels less invasive she says and is more flexible and informal as you don't have to call for a workshop or a meeting but can handle the discussions in the Yammer group. I offered her that we could keep speaking about these things while I am at the

## Example: Field Notes from Yammer Observations



The screenshot shows an Evernote interface with a field note titled "logged activity - yammer". The note contains three paragraphs of text. The first paragraph describes the author's process of reviewing Yammer posts from June 2012 and printing a transcript. The second paragraph discusses the shift from personal to professional content on the platform. The third paragraph notes the absence of workplace hierarchy on the platform.

Place: Yammer platform, Duration: 2 hours, Date: 20 Feb 2014

Today I have started out by going through all the posts that were posted to Yammer going back to posts from June 25 2012. I have gone through the posts by systematically looking at them and opening up potential hidden comments so all the content was visible. The full transcript has been printed to a pdf file (473 pages) which I can use for further analysis. However, some patterns in interaction have been observed which might serve as the basis for future investigation.

First, the overall impression of the interactions is that they have developed from very personal, private and social posts, comments and pictures into a more professional content. There is still a lot of social content on the site but it seems that the initial posts were much more dominated by photos of company trips, social events in the company, nights out with the company, memes and other content that were more on the social interaction side. This might be related to the few references found on the Yammer platform at that time to the intranet - which is referred to for the 'full information' about certain more professional issues. The later content (within the past year) has been much more diverse in terms of sharing problems and work issues as well as documents and presentations - there is still photos from the christmas event and funny facts and happenings, birthday congratulations etc. but they are much more entangled in the professional sphere. This might have something to do with the growing of the company and the 'outsider' social events might not be so plentiful or encompass all employees which might lead to them being kept more inside each of the groups that are there. Remember to ask about this - what do people think to post and not post and why? Are there anything they think twice about or leave out? Should it address the collective or is it okay if it only addresses certain people.

Again the groups and the collectives seem to be in focus here. The more one-to-one conversation is not as dominant as addressing the collective. This might be one of the core issues on a platform like Yammer... The collective is becoming the driver for action.

The hierarchy at the workplace seems to be non-existent on the platform. The conversations flows freely between senior as well as junior as well as student employees. There is a lot of praise and celebration of wins going on in the general conversations. They are definitely a part of creating a very positive environment where you can share the daily wins and achievements with everyone and have everybody celebrate them together by posting likes and comments. These appear to be some of the posts that also attract the most attention. The positive tone and the instant celebration of wins can be a core benefit of the platform as it seems to generate a very positive vibe among employees.



# Appendix 5: Interview Guide

## Danish Version (original)

Navn? Stilling? Tid i virksomheden?

Giv en kort beskrivelse af arbejdsopgaver.

Emne	Spørgsmål
<i>Hvad du synes</i>	Hvad er de vigtigste funktionalitet ved Yammer for dig i dit daglige arbejde? For hver spørg: <ul style="list-style-type: none"> <li>- Hvorfor er den funktionalitet vigtig for dig?</li> <li>- Hvorfor er det vigtigt for dig?</li> </ul>
	Hvilke andre medier bruger du ellers hver dag? (to til tre) <ul style="list-style-type: none"> <li>- Hvorfor bruger du disse medier? Og til hvad?</li> <li>- Hvorfor er disse medier vigtige for dig?</li> </ul> Hvad er forskellen mellem de medier og Yammer? Tag en og sammenlign... <ul style="list-style-type: none"> <li>- Hvornår vil du bruge Yammer og ikke de andre?</li> <li>- Hvorfor vil du bruge Yammer?</li> <li>- Hvorfor er det godt at bruge Yammer til dette formål?</li> </ul>
	Hvilke muligheder ser du ved at bruge Yammer? <ul style="list-style-type: none"> <li>- Hvorfor er det en mulighed?</li> <li>- Hvorfor er det vigtigt?</li> </ul> Hvilke udfordringer ser du ved at bruge Yammer? <ul style="list-style-type: none"> <li>- Hvorfor er dette en udfordring?</li> </ul>
<i>Hvad du gør</i>	Kan du dele et tidspunkt hvor du har valgt at bruge Yammer? <ul style="list-style-type: none"> <li>- Hvorfor valgte du Yammer?</li> <li>- Hvorfor var det vigtigt at bruge Yammer?</li> </ul>
	Kan du dele en god oplevelse du har haft med at bruge Yammer? <ul style="list-style-type: none"> <li>- Hvorfor var den god?</li> <li>- Hvilken rolle havde Yammer i at gøre oplevelsen god? Hvordan?</li> </ul>
	Kan du dele en mindre god oplevelse du har haft med at bruge Yammer? <ul style="list-style-type: none"> <li>- Hvorfor var den mindre god?</li> <li>- Hvilken rolle havde Yammer i at gøre oplevelsen mindre god? Hvordan?</li> </ul>
	Kan du beskrive et tidspunkt hvor du er blevet involveret i en

	<p>aktivitet/en samtale på Yammer?</p> <ul style="list-style-type: none"> <li>- Hvorfor blev du involveret?</li> <li>- Hvorfor var det vigtigt?</li> <li>- Hvilken rolle spillede Yammer i at få dig involveret?</li> </ul>
	<p>Kan du beskrive et tidspunkt hvor du har fået særlig værdi ud af Yammer? (professional/social)</p> <ul style="list-style-type: none"> <li>- Hvorfor gav det dig værdi?</li> <li>- Hvilken værdi gav det dig?</li> <li>- Hvorfor var det værdifuldt for dig?</li> </ul>
	<p>Kan du beskrive en situation hvor du ikke har fået værdi ud af at bruge Yammer?</p> <ul style="list-style-type: none"> <li>- Hvorfor gav det ingen værdi?</li> <li>- Hvorfor var det ikke værdifuldt for dig?</li> <li>- Hvorfor er det ikke værdifuldt?</li> </ul>
	<p>Hvornår har du været motiveret til at bruge Yammer?</p> <ul style="list-style-type: none"> <li>- Hvorfor blev du motiveret?</li> <li>- Hvordan blev du motiveret?</li> </ul>
	<p>Hvornår er du mest aktiv på Yammer?</p> <ul style="list-style-type: none"> <li>- Hvorfor er du mest aktiv der?</li> <li>- Hvad bestemmer om du er aktiv på Yammer? Hvorfor?</li> </ul>
	<p>Hvad fanger din opmærksomhed på Yammer?</p> <ul style="list-style-type: none"> <li>- Hvorfor fanger det din opmærksomhed?</li> <li>- Hvordan reagere du når noget fanger din opmærksomhed? Hvorfor reagerer du sådan?</li> </ul>
	<p>Hvad fanger ikke din opmærksomhed på Yammer? (hvis du lægger mærke til det)</p> <ul style="list-style-type: none"> <li>- Hvorfor fanger det ikke din opmærksomhed?</li> <li>- Hvordan påvirker det dig? (bliver du frustreret?) Hvorfor?</li> </ul>
<i>Hvordan du evaluerer</i>	<p>Har du oplevet nogen uenigheder omkring jeres brug af Yammer I Delegate?</p> <ul style="list-style-type: none"> <li>- Hvad handlede det om?</li> <li>- Hvordan opstod uenigheden?</li> </ul>
	<p>Synes du at i er enige om hvordan og til hvad man skal bruge Yammer?</p> <ul style="list-style-type: none"> <li>- Hvordan er i enige/uenige?</li> <li>- Hvad gør det klart at i er enige/uenige?</li> </ul>
	<p>Kan du dele nogle af de forventninger du har omkring hvad Yammer skal bruges til? Kender du til nogen af dine kollegers forventninger?</p>
	<p>Har du brugt 'praise' funktionen på Yammer?</p>

	<ul style="list-style-type: none"> <li>- Hvorfor/hvorfor ikke?</li> <li>- Hvad synes du om at 'praise' andre på Yammer?</li> </ul> <p>Nogen gange er der også nogen der får en opsang (f.eks. glemte at rydde op osv.) har du lagt mærke til nogen af dem?</p> <ul style="list-style-type: none"> <li>- Hvorfor/ hvorfor ikke?</li> </ul> <p>Hvad var din reaktion på dem?</p>
	<p>Opfatter du den information der deles på Yammer som relevant for dig?</p> <ul style="list-style-type: none"> <li>- Hvorfor/hvorfor ikke?</li> <li>- Hvad er vigtig information for dig?</li> <li>- Hvor får du din information fra til daglig (både Yammer og andet)</li> </ul>
	<p>Hvad synes du om 'all company' news feed på Yammer?</p> <ul style="list-style-type: none"> <li>- Tænker du over at al informationen bliver vist til alle?</li> <li>- Hvorfor?</li> <li>- I er også gode til at forme grupper på Yammer – tænker du over hvordan informationen er omdelt på disse? Hvorfor?</li> </ul>
	<p>Hvilke typer af indhold synes du er værdifulde på Yammer? (social/professional)</p> <ul style="list-style-type: none"> <li>- hvorfor?</li> <li>- Hvilken type indhold ligger du selv op? Hvorfor?</li> <li>- Hvilken type indhold tror du at dine kolleger sætter pris på? Hvorfor?</li> </ul>
<i>Hvordan det bliver en del af arbejdet (resultater)</i>	<p>Kan du beskrive tidspunkter hvor Yammer har gjort en forskel I dit arbejde?</p> <p>For hvert tidspunkt:</p> <ul style="list-style-type: none"> <li>- Hvorfor har det gjort en forskel?</li> <li>- Hvorfor var denne forskel vigtig?</li> <li>- Hvad var resultatet?</li> </ul>
	<p>Kan du beskrive situationer hvor Yammer har været en del af at nå et bestemt mål?</p> <p>For hver situation:</p> <ul style="list-style-type: none"> <li>- Hvad var Yammer's rolle?</li> <li>- Hvorfor var det vigtigt?</li> </ul>
	<p>Kan du komme I tanke om situationer hvor Yammer har været en del af dit samarbejde med andre?</p> <p>Beskriv for hver situation:</p> <ul style="list-style-type: none"> <li>- Hvilken rolle spillede Yammer? Hvad hjalp det dig med at opnå?</li> <li>- Hvorfor var det vigtigt? Hvad var vigtigt I netop denne</li> </ul>

	situation?
	Hvilken rolle har Yammer i dine interaktioner med kolleger? <ul style="list-style-type: none"> <li>- Hvorfor har den denne rolle?</li> <li>- Hvorfor er det vigtigt for dig?</li> <li>- Hvad havde du gjort hvis Yammer ikke havde været der?</li> </ul>
	Hvad synes du er hovedformålet med Yammer platformen hos jer? <ul style="list-style-type: none"> <li>- hvorfor?</li> </ul> Synes du at der burde være særlige retningslinjer for hvordan I skal bruge Yammer? <ul style="list-style-type: none"> <li>- Hvorfor?</li> <li>- Hvad skulle de være?</li> </ul>
	Hvordan ser du fremtiden for Yammer hos jer? <ul style="list-style-type: none"> <li>- Hvorfor ser du dette som fremtiden?</li> <li>- Tror du Yammer bliver mere eller mindre vigtigt? Hvorfor?</li> </ul>
Afsluttende	Har du nogen yderligere kommentarer?

### English Version (Translation)

Name? Position? Time in the company?

Give a brief description of your work?

Topic	Question
<i>What you think</i>	What are the most important functionalities of Yammer in your daily work? For each, ask: <ul style="list-style-type: none"> <li>- Why is this functionality important for you?</li> <li>- Why is it important for you to do that?</li> </ul>
	Which other media do you use at work every day? (name two to three) <ul style="list-style-type: none"> <li>- Why do you use these media? And for what?</li> <li>- Why are these media important to you?</li> </ul> What is the difference between these media and Yammer? Name one and compare... <ul style="list-style-type: none"> <li>- When will you use Yammer and not other media?</li> <li>- Why will you use Yammer?</li> <li>- Why do you prefer to use Yammer for this?</li> </ul>
	Which opportunities do you see with using Yammer? <ul style="list-style-type: none"> <li>- Why is that an opportunity?</li> <li>- Why is that important?</li> </ul>
	Which challenges do you see with using Yammer?

	<ul style="list-style-type: none"> <li>- Why is that a challenge?</li> </ul>
<i>What do you do</i>	<p>Can you share a specific example of a time when you have chosen to use Yammer?</p> <ul style="list-style-type: none"> <li>- Why did you choose Yammer?</li> <li>- Why was it important to use Yammer?</li> </ul>
	<p>Can you share a good experience you have had with using Yammer?</p> <ul style="list-style-type: none"> <li>- Why was this a nice experience?</li> <li>- Which role did Yammer play in making it a good experience and how?</li> </ul>
	<p>Can you share a not so good experience you have had with using Yammer?</p> <ul style="list-style-type: none"> <li>- Why was it not so good?</li> <li>- Which role did Yammer play in making the experience not so good and how?</li> </ul>
	<p>Can you describe a time when you have been involved in an activity/conversation through/on the Yammer platform?</p> <ul style="list-style-type: none"> <li>- Why did you get involved?</li> <li>- Why was that important?</li> <li>- Which role did Yammer play in getting you involved?</li> </ul>
	<p>Can you describe a time when you have gotten certain value out of using Yammer? (professional/personal)</p> <ul style="list-style-type: none"> <li>- Why did this give you value?</li> <li>- Which value did it give you?</li> <li>- Why was it valuable to you?</li> </ul>
	<p>Can you describe a situation where you did not get any value out of using Yammer?</p> <ul style="list-style-type: none"> <li>- Why didn't it give you value?</li> <li>- Why was it not valuable to you?</li> <li>- Why is that not valuable for you?</li> </ul>
	<p>When have you been motivated to use Yammer?</p> <ul style="list-style-type: none"> <li>- Why were you motivated?</li> <li>- How were you motivated?</li> </ul>
	<p>When are you most active on Yammer?</p> <ul style="list-style-type: none"> <li>- Why are you most active then?</li> <li>- What decides when you are active on Yammer? Why?</li> </ul>
	<p>What catches your attention on Yammer?</p> <ul style="list-style-type: none"> <li>- Why does that catch your attention?</li> <li>- How do you react when something catches your attention? Why do you react that way?</li> </ul>
	<p>What does not catch your attention on Yammer? (if you notice it)</p> <ul style="list-style-type: none"> <li>- Why doesn't it catch your attention?</li> </ul>

	<ul style="list-style-type: none"> <li>- How does this influence you? (do you become frustrated?) why?</li> </ul>
<i>How you evaluate</i>	<p>Have you experienced any disagreements about your use of Yammer in the organization?</p> <ul style="list-style-type: none"> <li>- What were they about?</li> <li>- How did the disagreement arise?</li> </ul>
	<p>Do you think that you agree in the organization about what to use Yammer for?</p> <ul style="list-style-type: none"> <li>- How do you agree/disagree?</li> <li>- What makes it evident that you agree/disagree?</li> </ul>
	<p>Can you share some of the expectations that you have with regards to what Yammer can be used for? Do you know any of your colleagues' expectations?</p>
	<p>Have you used 'praise' function on Yammer?</p> <ul style="list-style-type: none"> <li>- Why/why not?</li> <li>- What do you think about 'praising' others on Yammer?</li> </ul> <p>Sometimes people also get told off on the platform (when they haven't cleaned up etc.) have you noticed these?</p> <ul style="list-style-type: none"> <li>- Why/Why not?</li> <li>- What was your reaction to these?</li> </ul>
	<p>Do you consider the information that is shared on Yammer relevant to you?</p> <ul style="list-style-type: none"> <li>- Why/Why not?</li> <li>- What is important information for you?</li> <li>- How do you get your information on a daily basis? (Yammer, email, other?)</li> </ul>
	<p>What do you think about the 'All Company' newsfeed on Yammer?</p> <ul style="list-style-type: none"> <li>- Do you consider that the information on Yammer is shown to all?</li> <li>- Why?</li> <li>- You are good at forming groups on Yammer? Do you think about how the information is distributed on these? Why?</li> </ul>
	<p>Which types of content do you find valuable on Yammer? (professional/social)</p> <ul style="list-style-type: none"> <li>- Why?</li> <li>- Which type of content do you post? Why?</li> <li>- Which type of content do you think that your colleagues value? Why?</li> </ul>
	<i>How does it become part of your</i>

<i>work? (results)</i>	<ul style="list-style-type: none"> <li>- Why did it make a difference?</li> <li>- Why was this difference important?</li> <li>- What was the result?</li> </ul>
	<p>Can you describe situations where Yammer has been a part of achieving a certain goal?</p> <p>For each situation:</p> <ul style="list-style-type: none"> <li>- What was the role of Yammer?</li> <li>- Why was it important?</li> </ul>
	<p>Can you think of situations where Yammer has been a part of your collaboration with others?</p> <p>Describe for each situation:</p> <ul style="list-style-type: none"> <li>- Which role did Yammer play? What did it help achieve?</li> <li>- Why was it important? What was important in this particular situation?</li> </ul>
	<p>Which role does Yammer play in your interactions with your colleagues?</p> <ul style="list-style-type: none"> <li>- Why does it play this role?</li> <li>- Why is this important to you?</li> <li>- What would you have done if you had not had Yammer?</li> </ul>
	<p>What do you think is the main purpose of using the Yammer platform in your organization?</p> <ul style="list-style-type: none"> <li>- Why?</li> </ul> <p>Do you think that there should be particular guidelines for how you should use Yammer?</p> <ul style="list-style-type: none"> <li>- Why?</li> <li>- What should they be?</li> </ul>
	<p>How does the future of Yammer look like at your organization?</p> <ul style="list-style-type: none"> <li>- Why do you see this as the future?</li> <li>- Do you think Yammer will become more or less important? Why?</li> </ul>
<b>Rounding up</b>	Do you have any additional comments or input?

# Appendix 6: Developing a Social Fabric Framework

This appendix outlines the four-step process of developing a Social Fabric Framework (the appendix pertains to the method in paper 4).

## **Process overview**

1. Eliciting the prevalent social fabric threads through controversy analysis.
2. Identifying coexistence of the social fabric threads and developing a coexistence matrix.
3. Revealing patterns of social fabric threads based on the coexistence matrix.
4. Developing a social fabric framework

## **Step 1: Eliciting the prevalent social fabric threads through controversy analysis**

The prevalent social fabric threads are elicited through a controversy analysis by exploring situations in which organizational members disagree about the use of Yammer. This step involves a detailed documentation of each controversy. Documenting the controversies entails a description of how a local disagreement evokes a public debate, which reaches a settlement and results in a certain performed practice. Through this analysis, we uncovered five threads of the social fabric; Social - Professional Content Thread, Necessity - Frill Evaluation Thread, General - Specific Context Thread, News-Chatter Perception Thread, and Praise - Reprimand Giving Thread.



## Step 2: Identifying coexistence of the social fabric threads

The relationships between the social fabric threads is explored by looking for instances in which they are highly related to one another, using the following process:

1. Building on the performed practice revealed in the controversy analysis, a coding scheme is developed that shows the two inherent manifestations of each social fabric thread.

<b>Thread</b>	<b>Thread Manifestation</b>	<b>Description*</b>
<b>Professional – Social Content</b>	Professional content	Posts on work-related tasks and knowledge
	Social content	Posts on social events, humor, private pictures, and other social content
<b>Necessity – Frill Evaluation</b>	Necessity evaluation	Posts from management team sharing critical information and updates
	Frill evaluation	Posts and conversations initiated by individuals
<b>General - Specific Context</b>	General context	Posts addressing all members
	Specific context	Posts addressing one individual or interest group
<b>News – Chatter Perception</b>	News perception	Posts that are recognized by others through likes and/or comments
	Chatter perception	Posts that are not recognized by others
<b>Praise – Reprimands Giving</b>	Praise giving	Posts praising colleagues with or without the praise icon
	Reprimand giving	Post telling people off or criticizing

2. Using the coding scheme to identify thread manifestations in the data.
3. Extracting the data points show the number of times in which two thread manifestations coexist in the same data point.

4. Normalizing the raw data that was generated in #3 by using the following formula:

$$x(a, b_i) = \frac{\alpha_i b_i}{(\alpha_1 b_1 + \alpha_2 b_2 + \alpha_3 b_3 + \alpha_4 b_4)}$$

For example calculating the normalized coexistence number of *necessity evaluation* and *professional content*,

$$x(a, b_1) = \frac{\alpha_1 b_1}{(\alpha_1 b_1 + \alpha_2 b_2 + \alpha_1 b_2 + \alpha_2 b_1)}$$

$x(a_1 b_1)$  = The normalized coexistence number of necessity evaluation and professional content

$a_1$  = necessity evaluation

$a_2$  = frill evaluation

$b_1$  = professional content

$b_2$  = social content

$a_1 b_1$  = coexistence of necessity evaluation and professional content

$a_1 b_2$  = coexistence of necessity evaluation and social content

$a_2 b_1$  = coexistence of frill evaluation and professional content

$a_2 b_2$  = coexistence of frill evaluation and social content

The normalized coexistence matrix is displayed in Table 2 (and Table 12 in paper 4).

Code System	Professional content	Social content	Necessity evaluation	Frill evaluation	General context	Specific context	News perception	Chatter perception	Praise giving	Reprimand giving
Professional content			46/251 = <b>0.18</b>	8/251 = <b>0.03</b>	275/491 = <b>0.56</b>	142/491 = <b>0.29</b>	135/394 = <b>0.34</b>	167/394 = <b>0.42</b>	13/60 = <b>0.22</b>	10/60 = <b>0.17</b>
Social content			1/251 = <b>0.00</b>	196/251 = <b>0.78</b>	50/491 = <b>0.1</b>	24/491 = <b>0.05</b>	32/394 = <b>0.08</b>	60/394 = <b>0.15</b>	36/60 = <b>0.6</b>	1/60 = <b>0.02</b>
Necessity evaluation					57/250 = <b>0.23</b>	1/250 = <b>0.00</b>	1/156 = <b>0.00</b>	1/156 = <b>0.00</b>	0/29 = <b>0.00</b>	0/29 = <b>0.00</b>
Frill evaluation					48/250 = <b>0.19</b>	144/250 = <b>0.58</b>	45/156 = <b>0.29</b>	109/156 = <b>0.7</b>	29/29 = <b>1</b>	0/29 = <b>0.00</b>
General context							210/461 = <b>0.46</b>	75/461 = <b>0.16</b>	59/93 = <b>0.63</b>	9/93 = <b>0.01</b>
Specific context							38/461 = <b>0.08</b>	138/461 = <b>0.30</b>	24/93 = <b>0.26</b>	1/93 = <b>0.01</b>
News perception									30/43 = <b>0.7</b>	1/43 = <b>0.02</b>
Chatter perception									7/43 = <b>0.16</b>	5/43 = <b>0.12</b>
Praise giving										
Reprimand giving										

### Step 3: Revealing Patterns of Social Fabric Threads

Building on the coexistence matrix, each thread manifestation was mapped according to the two thread manifestations with which it had the highest level of coexistence. Table 3 outlines the systematic approach of mapping the social fabric thread manifestations in search for patterns.

Table 3: Mapping the Social Fabric Thread Manifestations	
Coexistence	Visual representation
<p>1. Professional Content has the highest level of coexistence with General Context (56%) and Chatter Perception (42%)</p>	<p>The graph shows Professional Content at the top. A line descends to Chatter Perception on the left, labeled with 0.42. Another line descends to General Context on the right, labeled with 0.56. The two lines meet at Professional Content, forming a peak.</p>
<p>2. General Context has the highest level of coexistence with Professional Content (56%) and Praise Giving (63%)</p>	<p>The graph shows General Context at the top. A line descends to Professional Content on the left, labeled with 0.56. Another line descends to Praise Giving on the right, labeled with 0.63. The two lines meet at General Context, forming a peak.</p>

Coexistence	Visual representation
<p>3. Praise Giving has the highest level of coexistence with General Context (63%) and Frill Evaluation (100%)</p>	<p>A radar chart with five axes: Professional Content, General Context, Praise Giving, Frill Evaluation, and Chatter Perception. The values are: Professional Content (0.63), General Context (0.63), Praise Giving (1.0), Frill Evaluation (1.0), and Chatter Perception (0.0).</p>
<p>4. Frill Evaluation has the highest level of coexistence with Praise Giving (100%) and Chatter Perception (70%)</p>	<p>A radar chart with five axes: Professional Content, General Context, Praise Giving, Frill Evaluation, and Chatter Perception. The values are: Professional Content (0.0), General Context (0.0), Praise Giving (1.0), Frill Evaluation (1.0), and Chatter Perception (0.7).</p>
<p>5. Chatter Perception has the highest level of coexistence with Frill Evaluation (70%) and Professional Content (42%)</p>	<p>A radar chart with five axes: Professional Content, General Context, Praise Giving, Frill Evaluation, and Chatter Perception. The values are: Professional Content (0.42), General Context (0.0), Praise Giving (0.0), Frill Evaluation (0.7), and Chatter Perception (1.0).</p>

Coexistence	Visual representation
<p>6. Necessity Evaluation has the highest level of coexistence with Professional Content (18%) and General Context (23%)</p>	<p>A radar chart with five axes: Necessity Evaluation (top), Professional Content (top-left), Chatter Perception (left), Frill Evaluation (bottom), and General Context (top-right). The chart shows a shaded area representing coexistence levels. The values for Professional Content and General Context are explicitly labeled as 0.18 and 0.23, respectively. The other axes (Chatter Perception, Frill Evaluation, and News Perception) are not highlighted.</p>
<p>7. News Perception has the highest level of coexistence with General Context (46%) and Praise Giving (70%)</p>	<p>A radar chart with five axes: Necessity Evaluation (top), Professional Content (top-left), Chatter Perception (left), Frill Evaluation (bottom), and General Context (top-right). The chart shows a shaded area representing coexistence levels. The values for General Context and Praise Giving are explicitly labeled as 0.46 and 0.7, respectively. The other axes (Necessity Evaluation, Professional Content, and Chatter Perception) are not highlighted.</p>
<p>8. Social Content has the highest level of coexistence with Praise Giving (60%) and Frill Evaluation (78%)</p>	<p>A radar chart with five axes: Necessity Evaluation (top), Professional Content (top-left), Chatter Perception (left), Frill Evaluation (bottom), and General Context (top-right). The chart shows a shaded area representing coexistence levels. The values for Praise Giving and Frill Evaluation are explicitly labeled as 0.6 and 0.78, respectively. The other axes (Necessity Evaluation, Professional Content, and General Context) are not highlighted.</p>

Coexistence	Visual representation
<p>9. Specific Context has the highest level of coexistence with Frill Evaluation (58%) and Chatter Perception (30%)</p>	<p>A radar chart with seven axes: Necessity Evaluation, Professional Content, General Context, News Perception, Praise Giving, Social Content, and Frill Evaluation. The axes are connected by lines. The values for Specific Context are: Necessity Evaluation (0.0), Professional Content (0.0), General Context (0.0), News Perception (0.0), Praise Giving (0.0), Social Content (0.0), and Frill Evaluation (0.58). A secondary set of values is shown: Chatter Perception (0.3), Frill Evaluation (0.58), and Social Content (0.0).</p>
<p>10. Reprimand Giving has the highest level of coexistence with Chatter Perception (12%) and Professional Content (17%)</p>	<p>A radar chart with seven axes: Necessity Evaluation, Professional Content, General Context, News Perception, Praise Giving, Social Content, and Frill Evaluation. The axes are connected by lines. The values for Reprimand Giving are: Necessity Evaluation (0.0), Professional Content (0.17), General Context (0.0), News Perception (0.0), Praise Giving (0.0), Social Content (0.0), and Frill Evaluation (0.0). A secondary set of values is shown: Reprimand Giving (0.17), Chatter Perception (0.12), and Professional Content (0.17).</p>
<p>Map of Social Fabric Threads outlining five triangular patterns.</p>	<p>A radar chart with seven axes: Necessity Evaluation, Professional Content, General Context, News Perception, Praise Giving, Social Content, and Frill Evaluation. The axes are connected by lines. The values for the five triangular patterns are:     <ul style="list-style-type: none"> <li>Triangle 1 (Professional Content, General Context, News Perception): 0.18, 0.23, 0.56</li> <li>Triangle 2 (General Context, News Perception, Praise Giving): 0.46, 0.63, 0.7</li> <li>Triangle 3 (News Perception, Praise Giving, Social Content): 0.63, 0.7, 0.6</li> <li>Triangle 4 (Praise Giving, Social Content, Frill Evaluation): 1, 0.6, 0.78</li> <li>Triangle 5 (Frill Evaluation, Social Content, Specific Context): 0.58, 0.78, 0.3</li> </ul>     A secondary set of values is shown: Reprimand Giving (0.17), Chatter Perception (0.12), Professional Content (0.17), Chatter Perception (0.42), Frill Evaluation (0.7), and Specific Context (0.3).</p>

#### Step 4: Developing a Social Fabric Framework

The five triangular patterns were investigated in the Yammer posts and comments to describe the unique nature of each of the emerging patterns. Table 4 provides an overview of the characteristics of the social fabric patterns as well as an example of their representation in the Yammer platform interactions. Section 4.4 in the article provides a description that labels and characterizes each pattern as well as an illustration thereof. Together the patterns comprise the social fabric framework (Figure 6 in the cover chapter).

<b>Table 4: Characteristics of Patterns</b>		
<b>Pattern</b>	<b>Characteristics</b>	<b>Examples of pattern in Yammer interaction</b>
<b>Directive:</b> Necessity evaluation Professional content General context	Organizational members post highly relevant professional content to everyone on Yammer, making it necessary to engage on the platform to stay updated.	CEO to ‘AllCompany’ <i>The new procedure for registering hours is posted here &gt;link to procedure&lt;. Please stay updated on this. Any changes or further updates should be added here.</i> <i>(Yammer post, January 19 2014)</i>
<b>Informative:</b> News perception General context Praise giving	Organizational members acknowledge information and each other through a praising behavior in the general context of the Yammer platform.	Senior Consultant KC to ‘AllCompany’: <i>Now we are upgraded to Dynamics CRM 2013 internally. It looks great and you can access it through iPad and so on :) If you have installed the Outlook CRM client today, you need a new version, which supports CRM 2013.</i> Programmer KLN, Sales employee YE, Senior Consultant AL and 2 others like this. CEO: <i>How do you get the new outlook client?</i> Senior Consultant STP to CEO: <i>&gt;link&lt;</i> Senior Consultant KC: <i>CRM 2013 also connects with</i>

		<p><i>Yammer, but it can be necessary to reset IE before it works properly.</i>  <i>Internet Options – Advanced – Reset.</i>  Senior Consultant AL:  <i>Top nice, when is our service and support module up and running and our own sales process as the CEO mentioned?</i>  Senior Consultant SP:  <i>Sounds great!</i>  Sales Manager MW:  <i>Good job. We use CRM everyday and it is the sales team’s primary tool. This update will really support our own sales process.</i>  (Yammer post, November 25 - 27 2013)</p>
<p><b>Communitive:</b>  Social content  Praise giving  Frill evaluation</p>	<p>Organizational members voluntarily engage on Yammer to post social content and praise each other for private and professional achievements.</p>	<p>Partner KO to ‘AllCompany’  <i>Thank you for today, as usual an excellent event. Well done HR Manager.</i>  Senior Consultant MB, Consultant AD, Senior Consultant STP, and 3 others like this.  Senior Consultant AL:  <i>&gt; Picture from the event&lt;</i>  Senior Consultant SN:  <i>I can join in with the rest of the happy people ☺ Great event! Thank you HR Manager CMW!</i>  Senior Consultant BSA:  <i>We had a lot of fun. Such a great event. Thanks again HR Manager.</i>  Partner HD:  <i>Yes, it was so nice ☺ thank you.</i>  (Yammer posts and comments, December 14-16 2013)</p>



<p><b>Distinctive:</b> Specific context Frill evaluation Chatter perception</p>	<p>Organizational members initiate conversations by addressing one or two other organizational members on the Yammer platform regarding specific issues.</p>	<p>Senior consultant RS to ‘Share Your Code’ and Junior consultant HF: <i>@Junior consultant HF concerning our talk about whether it makes sense to use Set (I used it a lot when I coded C++). I can direct you to refactoring of the DAXIF# web resource module (sync between local file system and CRM server solutions): //source and target: let s=(1;2;3;4;5) &gt;Set.ofList / let t = (2;3;4;5;9)&gt;Set.ofList. Clever right? And it doesn’t take up much space.</i> Junior consultant HF: <i>Ok. As far as I remember, the confusion more concerned the use of Map vs. Dictionary. I understood that you had the functions to convert between the two because you couldn’t use Dictionary in F# or in Map C#, but it looks like you can in both?</i> Senior consultant RS: <i>Yes, I have done a map2Dictionary and a dictionary2Map.</i> (Yammer post, January 19 2014)</p>
<p><b>Corrective:</b> Reprimand giving Chatter perception Professional content</p>	<p>Organizational members reprimand others on the Yammer platform concerning a professional issue, which is not commented on and is considered as chatter by those who are not involved.</p>	<p>Solution Provider PJ to ‘AllCompany’ <i>When you come to work at the office, could you please NOT pull out the cables from the docking station and if you do then remember to put them back when you are done. Then the rest of us won’t have to spend all of our time navigating the wire jungle before we can get to work.</i> (Yammer post, December 6 2013)</p>

# Appendix 7: Data Representation of Social Fabric Over Time

This appendix outlines the tally of social fabric thread manifestations in the three organizations as well as the calculation of the relative prevalence of the thread manifestations. The relative prevalence was established by calculating the ratio of the each complementary thread manifestations. For example, the professional-social orientation in the case company was expressed as the ratio between the raw count of the *professional content* manifestations and the raw count of the *social content* manifestations to the combined raw count of both professional content and social content manifestations. Calculation of the thread ratios displayed in the Table 1-3 according to the following formula:

$$\text{Thread ratio} = \frac{\text{Raw count of complementary thread manifestations}}{\text{Total count of thread manifestations for a thread}}$$

<b>Table 1: Top Consulting: Social Fabric Thread Ratio over Time</b>			
	<b>Time 1</b>	<b>Time 1+2</b>	<b>Time 1+2+3</b>
<b>Necessity</b>	9/86 = <b>0.1</b>	16/155 = <b>0.1</b>	22/199 = <b>0.11</b>
<b>Frill</b>	77/86 = <b>0.9</b>	139/155 = <b>0.9</b>	177/199 = <b>0.89</b>
<b>General</b>	193/199 = <b>0.97</b>	341/400 = <b>0.85</b>	466/640 = <b>0.73</b>
<b>Specific</b>	6/199 = <b>0.03</b>	59/400 = <b>0.15</b>	174/640 = <b>0.27</b>
<b>News</b>	118/184 = <b>0.64</b>	195/333 = <b>0.59</b>	250/469 = <b>0.53</b>
<b>Chatter</b>	66/184 = <b>0.36</b>	138/333 = <b>0.41</b>	219/469 = <b>0.47</b>
<b>Praise</b>	40/46 = <b>0.87</b>	72/81 = <b>0.89</b>	95/109 = <b>0.87</b>
<b>Reprimand</b>	6/46 = <b>0.13</b>	9/81 = <b>0.11</b>	14/109 = <b>0.13</b>
<b>Social</b>	108/217 = <b>0.5</b>	167/413 = <b>0.4</b>	233/634 = <b>0.37</b>
<b>Professional</b>	109/217 = <b>0.5</b>	246/413 = <b>0.6</b>	401/634 = <b>0.63</b>

<b>Table 2: HighPower: Social Fabric Thread Ratio over Time</b>			
	<b>Time 1</b>	<b>Time 1+2</b>	<b>Time 1+2+3</b>
<b>Necessity</b>	13/32 = <b>0.41</b>	20/52 = <b>0.38</b>	52/99 = <b>0.53</b>
<b>Frill</b>	19/32 = <b>0.59</b>	32/52 = <b>0.62</b>	47/99 = <b>0.47</b>
<b>General</b>	75/81 = <b>0.93</b>	138/146 = <b>0.95</b>	217/227 = <b>0.96</b>
<b>Specific</b>	6/81 = <b>0.07</b>	8/146 = <b>0.05</b>	10/227 = <b>0.04</b>
<b>News</b>	18/35 = <b>0.51</b>	32/66 = <b>0.48</b>	46/88 = <b>0.52</b>
<b>Chatter</b>	17/35 = <b>0.49</b>	34/66 = <b>0.52</b>	42/88 = <b>0.48</b>
<b>Praise</b>	7/7 = <b>1</b>	11/13 = <b>0.85</b>	17/19 = <b>0.89</b>
<b>Reprimand</b>	0/7 = <b>0</b>	2/13 = <b>0.15</b>	2/19 = <b>0.11</b>
<b>Social</b>	7/77 = <b>0.09</b>	10/137 = <b>0.07</b>	11/216 = <b>0.05</b>
<b>Professional</b>	70/77 = <b>0.91</b>	127/137 = <b>0.93</b>	205/216 = <b>0.95</b>

<b>Table 3: BetterHealth: Social Fabric Thread Ratio over Time</b>			
	<b>Time 1</b>	<b>Time 1+2</b>	<b>Time 1+2+3</b>
<b>Necessity</b>	2/14 = <b>0.14</b>	4/19 = <b>0.21</b>	12/29 = <b>0.41</b>
<b>Frill</b>	12/14 = <b>0.86</b>	15/19 = <b>0.79</b>	17/29 = <b>0.59</b>
<b>General</b>	2/27 = <b>0.07</b>	2/47 = <b>0.04</b>	3/63 = <b>0.05</b>
<b>Specific</b>	25/27 = <b>0.93</b>	45/47 = <b>0.96</b>	60/63 = <b>0.95</b>
<b>News</b>	5/14 = <b>0.36</b>	9/24 = <b>0.38</b>	13/39 = <b>0.33</b>
<b>Chatter</b>	9/14 = <b>0.64</b>	15/24 = <b>0.62</b>	26/39 = <b>0.67</b>
<b>Praise</b>	0/0 = <b>0</b>	0/0 = <b>0</b>	0/0 = <b>0</b>
<b>Reprimand</b>	0/0 = <b>0</b>	0/0 = <b>0</b>	0/0 = <b>0</b>
<b>Social</b>	2/25 = <b>0.08</b>	4/45 = <b>0.09</b>	2/63 = <b>0.03</b>
<b>Professional</b>	23/25 = <b>0.92</b>	41/45 = <b>0.91</b>	61/63 = <b>0.97</b>

## Appendix 8: Data Representation of Social Fabric in Collaboration

This appendix outlines the tally of social fabric thread manifestations in the collaborative initiatives at the three organizations as well as the calculation of the relative prevalence of the thread manifestations. The relative prevalence was established by calculating the ratio of the each complementary thread manifestations. For example, the professional-social orientation in the case company was expressed as the ratio between the raw count of the *professional content* manifestations and the raw count of the *social content* manifestations to the combined raw count of both professional content and social content manifestations. Calculation of the thread ratios displayed in Table 1:

$$\text{Thread ratio} = \frac{\text{Raw count of complementary thread manifestations}}{\text{Total count of thread manifestations for a thread}}$$

<b>Table 1: Overview of Social Fabric Thread Ratio across Three Collaborative Initiatives</b>			
	<b>TopConsulting: Share Your Code</b>	<b>HighPower: DK_New System</b>	<b>BetterHealth: IT</b>
<b>Necessity</b>	2/42 = <b>0.05</b>	100/218 = <b>0.46</b>	28/47 = <b>0.6</b>
<b>Frill</b>	40/42 = <b>0.95</b>	118/218 = <b>0.54</b>	19/47 = <b>0.4</b>
<b>General</b>	27/47 = <b>0.57</b>	215/280 = <b>0.77</b>	58/77 = <b>0.75</b>
<b>Specific</b>	20/47 = <b>0.43</b>	65/280 = <b>0.23</b>	19/77 = <b>0.25</b>
<b>News</b>	26/40 = <b>0.65</b>	85/100 = <b>0.85</b>	12/59 = <b>0.20</b>
<b>Chatter</b>	14/40 = <b>0.35</b>	15/100 = <b>0.15</b>	47/59 = <b>0.80</b>
<b>Praise</b>	4/5 = <b>0.8</b>	13/15 = <b>0.87</b>	0/0 = <b>0</b>
<b>Reprimand</b>	1/5 = <b>0.2</b>	2/15 = <b>0.13</b>	0/0 = <b>0</b>
<b>Social</b>	16/55 = <b>0.29</b>	1/182 = <b>0.00</b>	11/80 = <b>0.14</b>
<b>Professional</b>	39/55 = <b>0.71</b>	181/182 = <b>1.00</b>	69/80 = <b>0.86</b>

# COLLECTION OF PAPERS

# PAPER 1

## **Dyrby, S. & Jensen, T.B. Strategic Use of Social Media in Political Campaigning: Perceived Affordances and Actual Use of Facebook.**

A version of the paper published as Jensen, T.B. & Dyrby, S. (2013). Exploring Affordances of Facebook as a Social Media Platform in Political Campaigning. *In Proceedings of the 21<sup>st</sup> European Conference on Information Systems - ECIS 2013. Best paper 1st runner up.* The paper included in this dissertation is an extended version of the ECIS paper.

# Strategic Use of Social Media in Political Campaigning: Perceived Affordances and Actual Use of Facebook

## Abstract

*This paper discusses the strategic use of social media in political campaigning by investigating the affordances that these technologies enable. A case study of political parties' use of Facebook in the Danish general election in 2011 shows that the medium is perceived to afford: facilitation of direct communication to promote political interests and enable dialogue, projection of an image of authenticity through informal media and enhancement of interaction and involvement through dynamic relationships with supporters. Comparing these opportunities to the actual use of Facebook indicates that while the majority of the intended affordances are acted out in practice certain are neglected by the parties and yet new types of affordances surface. Our findings contribute insights into the differences between perceived affordances and actual use, which prompts a discussion of what political parties should consider strategically when engaging in social media activities in campaigning.*

Keywords: Social Media, Perceived Affordances, Actual use, Online Political Campaign, Strategic Considerations

*“A major success factor for Obama’s victory was how Obama’s campaign used social media and technology as an integral part of its strategy”*

(The European Business Review 2009)

## 1. Introduction

The recent adoption of social media into almost every part of our lives reveals how these technologies afford behaviours that were difficult or even impossible to imagine only ten years ago. In the private sphere, social media have become the platform where people create, communicate and share information with friends and family. In the commercial sphere, more and more businesses are adjusting their branding and marketing approach as part of an overall social media strategy to be present where their customers are. In the public sphere, social media are transforming government practices by increasing their openness and transparency to engage with citizens in new ways and by encouraging citizen participation (Axelsson et al., 2010). Here, the right to access government information is considered essential in order to reflect democratic participation, to ensure trust in government agencies and to help citizens make informed decisions (Bertot et al., 2010). In short, social media technologies seem to be attributing value on a more strategic level in terms of reach, engagement, transparency and sharing of information.

Aligned with this societal trend, we have witnessed how also political parties in modern democracies have adopted social media, such as Facebook, Twitter, YouTube, blogs and MySpace, as part of their campaign strategy to leverage citizen involvement in order to influence the voting behaviour and mobilize candidates’ support groups (Parviainen et al. 2012; Vergeer, 2012). Some analysts have attributed the victory of President Obama in the US presidential campaign in 2008 to his online strategy (Tumasjan et al., 2011), and this trend was repeated in his re-election campaign in 2012 where a careful social media strategy was implemented to gain supporters. Similarly, we notice how social media platforms



became the driver for the British general election in 2010 proclaimed as “The First Social Media Election” in UK history (Arthur, 2010). Most recently, the use of social media has entered the scene of Danish politics where the political parties adopted social media as part of their campaign strategy in the 2011 general election. A questionnaire that we sent to Danish Facebook users (a total of 380 responses) as part of a pilot study showed that 52.3% of the respondents searched information and followed the parties’ campaigns on Facebook as either “Follower,” “Fan” or “Friend.” Among the respondents, 48.9% agreed that political parties should use social media, and 71.3% believed that political parties would gain votes by pursuing parts of their campaign on social media technologies such as Facebook.

What makes the use of social media for political campaigning particularly interesting is the considerable amount of user-generated content available, the two-way nature of communication, as well as the immediate feedback that politicians can get for their efforts. This development indicates that political parties can gain considerable benefits from using social media; yet, we know little about the strategic considerations and impact of its use. We may therefore question what drives the prioritization of social media in a political context (Robertson et al., 2010b) and what should be the strategic considerations behind such use. Consequently, our research interest lies in investigating the strategic use of social media in political campaigning. This interest is supported by the gap between, on the one hand, the increased attention of political parties to use social media in their campaign strategy and encourage citizen participation and involvement, and, on the other hand, the limited knowledge that we as scholars have regarding this phenomenon. Existing research on social media use for election campaigns fails to investigate what social media can bring or afford political parties in terms of strategic benefits. Important questions are how we can build on existing theories to better account for the strategic use of social media in political campaigning and what the implications of such use are. We argue that it is important to gain insight into this phenomenon, if we aspire to inform practice.

Towards this end, the purpose of this paper is to investigate the strategic use of social media in political campaigning by looking at the affordances (i.e.,

opportunities) that these technologies enable. To focus our investigation and narrow down its scope, we study the Danish general election in 2011, zooming in on one particular social media technology, namely, Facebook, as this was a common platform used by all parties during the campaign. We pursue three research questions: 1) *What do political parties perceive Facebook to afford in their campaign strategy?* 2) *How are these affordances reflected in the political parties' actual actions?* and 3) *Which strategic considerations can the link between perceived affordances and actual use add to the discussion of social media use in political campaigning?*

To address these three questions, we first searched the literature to explore the emerging body of research on the strategic use of social media and on the affordances of social media. Second, we conducted a qualitative case study of the seven Danish political parties' use of Facebook during the election campaign in 2011. We interviewed representatives from each party to investigate the perceived affordances of Facebook. We then compared this interview data to log data on the parties' Facebook page before, during and immediately after the election to investigate the actual use. Our findings reveal three groups of affordances from the political parties' point-of-view, explaining what they want to *facilitate*, *project*, and *enhance* through the use of Facebook. However, a closer look at the political parties' actual use of Facebook indicates that although the parties ascribe certain affordances to this social media technology, these are not reflected to a full extent in the way they develop and display their presence on the media. Furthermore, we see that unintended affordances surface through actual use. These insights are summarized into three categories; *intended/acted out*, *intended/not acted out* and *not intended/acted out*. Based on this knowledge, we are able to propose insights into the considerations that political parties should make towards the strategic use of social media in political campaigning.

The remainder of the paper is organized as follows. First, we outline the theoretical assumptions underlying our research questions. We then present our case setting and research design before we conduct the analysis of the perceived

affordances and actual use. Our findings prompt a discussion of what political parties should consider when encouraging citizen participation and involvement as part of their campaign strategy on Facebook in particular and social media in general.

## 2. Strategic Use, Affordance Theory and Social Media

### 2.1 Strategic use of social media

Strategic use of social media has become a widely discussed topic among scholars and practitioners alike. In research dealing with the diffusion and proliferation of social media technologies, a wide range of opportunities and challenges are identified for its utilization. For example, Kaplan and Haenlein (2010) address how organizations must incorporate strategic choices when it comes to selecting the social media technology or tool they want to work with as well as consider what this implies for the actual actions carried out. In the organizational context, the strategic use of social media creates the basis for certain procedures and guidelines that set the agenda for the use and application of the media (Wilson et al., 2011). Additionally, companies need to be aware of the risk attached to social media in terms of, e.g., reputation management (Aula, 2010). These studies highlight how the use of social media can bring with it a number of unintended consequences and that the actual use of social media should be carefully considered.

Another dominant area of the literature that has highlighted how social media can be considered strategically is that of marketing studies. The focus here is on working with social media as a tool for engaging with customers as well as encouraging them to engage among themselves (Mangold and Faulds, 2009). The strategic considerations surrounding social media are considered to be crucial as a result of the limited control that comes with opening up for customer-to-customer

interactions on social media (Mangold and Faulds, 2009). In this part of the literature, social media are considered to be advantageous in terms of customer engagement, thereby highlighting the empowerment of customers through the voice given to them on social media. Berthon et al. (2012) explain how strategizing about social media use in terms of this empowerment of the customers can prove to be very beneficial for promoting a brand and a company. The engagement with customers on social media appears to generate certain benefits; however, matching these perceived benefits with the actual use of social media remains a challenge, as highlighted by the literature in this field.

The literature on the strategic use of social media in a political context is still scarce. Few scholars have dealt with the strategic implications of adopting technologies and certain digital media into the campaign strategy. For example, Drezner and Farrell (2004) express the implications of the increased use of blogs among citizens to collectively shape the political agenda in regard to political campaign strategies. The authors point to how strategic considerations should be given to the blogs' ability to socially construct and shape the political debate. According to Howard (2005), digital media provide an increased strategic opportunity for mobilizing citizens, enabling them to become more politically expressive. Through this added opportunity, Howard (2005) notes that the strategy formation in campaigning must take into account this increased opportunity. The strategic use of social media is also linked to the growing transparency in government (Bertot et al., 2010). According to Bertot et al., (2010), the change in culture, in terms of openness and transparency in government and political information requires an adjustment in the strategic approach to political work.

In the existing research on the strategic use of social media, it is apparent that implications arise not only in terms of the organizations' strategic choice of social media and application, but also in terms of the operationalization of social media initiatives through actual use. The insights into the political context show how the strategic considerations of social media are starting to emerge, but they need further exploration in terms of how these strategies can be formed. In the frame of

this paper, we wish to explore how social media are helping political parties increase openness, engagement with citizens and transparency (Bertot et al., 2010), as well as to investigate how the political parties can work strategically with social media. To further our theoretical foundations, we next explore the affordance theory to investigate perceived opportunities of social media. We seek to theoretically enhance our understanding of the strategic use of social media in political campaigning by looking at the affordances that these technologies enable.

## **2.2 An affordance approach to social media**

The concept of affordances was first introduced by Gibson (1979) as a way to understand what possibilities an object offers for action, i.e., “what the object is good for.” The identification of affordances can be used to look into what might drive an individual to adopt and make use of an object (in this case, what might drive political parties to adopt social media). In Gibson’s (1979) view, the notion of affordances is also related to differences in perspectives, making it possible for an object to be assigned a variety of diverse affordances. These mechanisms provide an interesting basis for investigating the differences in adoption and use that individuals can infer into an object (Hutchby 2001). Consequently, we need to take into account not only the material properties of social media along with people’s abilities and predispositions to act on these properties but also the context within which they are used.

In his study of technology and human interaction, Norman (1999) adopts the concept of affordances to describe the relationship among humans and technology, and the implications for technology use. According to Norman (1999; 2002), affordances imply a range of possibilities for how an artefact may be used within a particular context. In this sense, it becomes important to recognize both an object’s intended uses (i.e., as intended by the designer) and the affordances perceived by the user (Sadler and Given, 2007). Gaver (1991) focuses on how affordances of technology enable a direct link between perception and action, pointing to affordance as a key concept in explaining interaction between technology and the surrounding world. The influence of interaction is also central

in Leonardi's (2010) adoption of the affordance approach to explain the way in which matter or material objects can be said to enable different affordances, according to the perspective in which they are seen. The rise of social and interactive technology puts increased attention on the interplay between humans and technology. One of the technologies that have taken part in shifting the boundaries of machine and human interaction is indeed social media. The adoption of social media has created new rules for how humans of all ages and with different technological abilities are interacting both with each other and with the technology (Shirky, 2008).

Treem and Leonardi (2012) investigate the use of social media in an organizational communication context. In their research, they take on an affordance approach to investigate what organizational literature says about the perceived use of social media, and they discover four consistent organizational affordances of social media: visibility, persistence, editability and association (Treem and Leonardi, 2012, p. 9). Treem and Leonardi (2012) further stress how the affordance approach helps us underline what kinds of behaviour social media afford, thereby creating an understanding of when, why and how social media are adopted. This provides useful insights for our investigation both in terms of affordance identification and how to study affordances methodologically.

The increasing adoption of social media in political campaigning activities makes it relevant to look into what it is that these media afford. On the one hand, we argue that, to a large extent, campaigning practices become shaped by the social media technologies that both political parties and the voting public draw upon. On the other hand, these technologies acquire their meaning and are appropriated in the specific context of use (Hutchby 2001). Accordingly, social media represent more than their material features, which means that we should consider the strategic implications in terms of the affordances that they represent to their users (Faraj and Azad 2012). Hutchby (2001) refers to Gibson when arguing that "... affordances are functional and relational aspects which frame, while not determining, the possibilities for agentic action in relation to an object" (p. 444).

Recalling Gibson's (1979) point on the ability of multiple affordances tied to the same object, we wish to investigate the affordances of social media, and explore the implications that the dynamic nature of the media have in relation to affordance perception and use. This is of key interest when relating affordances to the creation of strategic use of social media, since the way in which strategy makers and users perceive the media can have a huge impact on actual use.

### **2.3 Linking affordances with strategic use of social media**

Building on the affordance approach to discover the link between perceived affordances and actual use of social media adoption by political parties represents, in our view, a solid entry into deciphering strategic considerations of social media use. In the literature on strategic use of social media, the two issues of planning social media use and operationalizing it accordingly represent a challenge. Reflected in a political context, this becomes evident in the body of research that frames the increased citizen interaction and the need for strategies to allow political parties to work with, and embrace, this engagement. We envision that the affordance approach is useful in gaining insights into the underlying idea behind the adoption of social media into campaign strategy.

As argued in the theoretical outline of the strategic use of social media, the focus is on the actual actions that are carried out and what the consequences can be, both in terms of benefits and challenges. Our examination of the affordance theory reveals how the investigation of perceived affordances can spark interesting insights concerning the opportunities and expectations of the user. On this basis, we propose that by comparing the perceived affordances with the actual use it is possible to obtain a better understanding of how social media is both thought of and actually used. Further, reflection on the relation between these two can enable stronger strategic considerations to be made for further action.

Similarly, this approach entails a set of implications for how to actually go about investigating issues of perceived affordances and actual use of social media.

Returning to our political campaign context of the Danish 2011 general election and the use of Facebook, we next outline how our study was carried out.

## 3. Research Approach and Setting

### 3.1 Research setting

The research setting is based on the Danish political context, which functions within the frame of a parliamentary, representative democracy. This context is characterized by a high degree of party collectivism, dominating the political scene through the multi-party system found in the Danish government structure (Damgaard, 1980). Currently, eight parties<sup>4</sup> are represented in parliament, and on many issues the political parties tend to opt for co-operation. The dynamics at play in such a setting create an interesting domain for the investigation of political parties' use of social media.

The empirical material relies on a case study of seven political parties' strategic considerations of Facebook use during the Danish general election in 2011. On 26 August 2011 the current Prime Minister, Lars Løkke Rasmussen, called for election of the new parliament in Denmark. The election date was set to take place on 15 September 2011, allowing for three weeks of election campaign. The two main political wings within Danish politics were very close throughout the political campaign - promoting their political standpoints using different tactics for debates, public appearances and a variety of media as part of their campaign strategy (e.g., road trips, TV debates and radio broadcasts). In particular, Facebook was used by a variety of political parties; however, whereas all left wing parties adopted different social media technologies, only a few parties on the right wing were present on these platforms. One party, The Danish People's Party, chose not to be on Facebook for the 2011 general election.

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The seven political parties are: The Social Democratic Party (Socialdemokraterne), The Socialist People's Party (Socialistisk Folkeparti), Liberal Alliance (Liberal Alliance), The Conservative Party (Det Konservative Folkeparti), The Liberal Party (Venstre), The Social Liberal Party (Det Radikale Venstre), The Red-Green Alliance (Enhedslisten), and The Danish People's Party (Dansk Folkeparti).



After a thrilling election night and with a voting percentage of 87.74%, the results were in and led to a shift in power from right to left, giving the left wing a victory of 92 mandates against the right wing's 86 mandates. One of the big winners of the election votes was The Social Liberal Party and The Red-Green Alliance – parties that both advanced remarkably in their mandate count with eight mandates each. This was news that both parties gladly distributed on their popular Facebook pages.

### **3.2 Data collection**

For this study, we adopted a qualitative research approach, conducting in-depth interviews with a representative from each of the seven political parties that used Facebook as a social media technology to promote their political campaign for the Danish general election in 2011. The Danish People's Party was excluded from our study since it was not present on Facebook or other social media technologies.

Each interview lasted approximately 60-90 minutes, during which time we asked the political party representatives to define what they understood by social media in general and Facebook in particular (rather than providing our definition). We asked the questions: (a) What do you use Facebook for? (b) What do you consider as the main opportunities of Facebook use for political campaigning? (c) How do you engage with Facebook users? (d) How many resources do you use on this activity on a yearly basis? and (e) Why did you choose this particular social media technology? We also asked them to compare the use of Facebook with other media types such as TV and radio broadcasts, Twitter, and blogs in order for them to reflect on, and contrast, different sets of affordances. The inquiries into the other types of media use revealed that a shared focus across the parties was placed on their use of Facebook as a social media technology. This led us to put particular emphasis on this technology in our study. An outline of the details of the interview data is outlined in Table 1.

<b>Table 1. Overview of interview data</b>			
<b>Political party</b>	<b>Interviewee</b>	<b>When</b>	<b>Output (transcript)</b>
The Social Democratic Party	Web strategy responsible	July 2011	01:26:09 min
The Socialist People's Party	Web editor	July 2011	01:01:49 min
Liberal Alliance	Social media and communication responsible	July 2011	63:05 min
The Conservative Party	Organization consultant and social media responsible	August 2011	54:34 min
The Liberal Party	Campaign manager	August 2011	37:28 min
The Social Liberal Party	Web responsible	October 2011	1:10:23 min
The Red-Green Alliance	Press and communications responsible	November 2011	42:57 min

Since the findings from the interviews indicated that Facebook was the most prominent social media technology used by the political parties, we chose to focus our investigation on the actual use by registering the activities on the parties' Facebook pages. The registrations were made in relation to posts that included status updates and content from the parties as well as the comments made by the followers on Facebook. The registrations were conducted before, during and immediately after the election campaign by manually grabbing each of the posts and the comments that were added. We followed the parties' representation on Facebook – not the individual party member's Facebook account. We chose this strategy, as we were interested in studying how each party as a common unit was represented on this media technology. The registered posts are outlined in Table 2.

<b>Table 2. Overview of Facebook posts before, during and after the election</b>					
		<b>Before</b>	<b>During</b>	<b>After</b>	<b>Total</b>
The Social Democratic Party	Posts by party	7	23	3	33
	Comments	51	277	117	445
The Socialist People's Party	Posts by party	2	20	1	23
	Comments	43	218	49	310
Liberal Alliance	Posts by party	0	57	9	66
	Comments	0	1677	512	2189
The Conservative Party	Posts by party	1	24	1	26
	Comments	7	164	18	189
The Liberal Party	Posts by party	0	23	3	26
	Comments	0	321	79	400
The Social Liberal Party	Posts by party	8	35	5	48
	Comments	55	319	157	531
The Red-Green Alliance	Posts by party	0	22	8	30
	Comments	0	1033	854	1887
Total	Posts by parties	18	204	30	252
	Comments	156	4009	1786	5951

### **3.3 Data analysis**

The analysis of the interview data was based on an iterative process of working with the empirical material along with the affordance perspective to reveal insights. Our approach was grounded in principles drawn from qualitative data analysis, and involved making sense out of the interview data we collected (Cresswell, 2003). The data analysis followed four steps. First, each of the seven

interviews was transcribed verbatim based on the audio recording, which resulted in interview transcripts totalling a word count of 70,395. Second, we carefully read through all the interview data in order to obtain a general sense of the information and to understand the overall meaning of what the participants were saying. Third, we conducted a detailed data analysis by carrying out a coding process using the software, Atlas.ti. The coding process involved dividing the material into chunks and assigning meaning into those chunks (Rossman and Rallis, 1998). In particular, the coding was inspired by the affordance approach of Treem and Leonardi (2012). Here, we identified the main affordances relative to Facebook as a social media technology by pursuing the following question, “What does Facebook afford political parties the opportunity to do?” Lastly, the codes were merged into a number of overall categories describing the affordances. The categories formed the basis for interpretation and meaning creation of the affordance characteristics. An overview of these findings is provided in Table 3. Both authors coded the data to ensure that agreement was reached on the coding of the content.

To make a connection between the perceived affordances and the actual use of Facebook for the election campaign, we contrasted the discovered affordances from the interviews with the actual use patterns on the political parties’ Facebook pages. The method applied for this analysis took its starting point in the perceived affordances and their implications in order to see whether the affordances were actually being carried out. In the coding process, we pursued the following question, “What does Facebook afford political parties to actually do?” Observing the frequency of posting, status updates, and content from the political parties on their Facebook pages before, during and after the election indicated that the parties were more active during the election campaign period. Focus in the analysis was therefore placed on the data collected during the election campaign, since the political parties’ campaigning initiatives were concentrated around this period. The relationship between the perceived affordances and the actual use affordances is presented in Table 4.

## 4. Three Groups of Perceived Affordances

The data coding and analysis helped us identify what political parties perceived as main and linked affordances of Facebook use as part of their campaign strategy (see Table 3). The main affordances, indicated in CAPITAL letters in the table, refer to the overall opportunities of using Facebook. The linked affordances are indicated in *italics*, describing the underlying opportunities tied to the main affordances found in the interview data. Based on our analysis, we were able to group the codes into three categories of affordances obtained through Facebook use: 1) what political parties want to *facilitate*, 2) what political parties want to *project* and 3) what political parties want to *enhance*.

<b>Groups of affordance</b>	<b>Main and linked affordances</b>
What political parties want to facilitate	<p><b>DIRECT COMMUNICATION:</b> <i>promoting own truth, communication of important information, immediate communication</i></p> <p><b>PROMOTION OF POLITICAL MESSAGES:</b> <i>reaching the masses</i></p> <p><b>DIALOGUE:</b> <i>emotion</i></p> <p><b>CONTROL:</b> <i>editability</i></p>
What political parties want to project	<p><b>AUTHENTICITY:</b> <i>likable, positive behaviour</i></p> <p><b>INFORMALITY:</b> <i>informal tone, unconventionality</i></p> <p><b>PERSONALITY:</b> <i>presence, reliability</i></p>
What political parties want to enhance	<p><b>INTERACTION:</b> <i>dynamics, reaction</i></p> <p><b>INVOLVEMENT:</b> <i>trust, support, ambassadors</i></p>

The categorization of the affordances into the three groups of what the political parties want to *facilitate*, *project* and *enhance* enabled us to decipher the intended implications linked to the discovered affordances. The findings indicate that the affordances within each group are highly interrelated, but for analytical purposes, we have chosen to separate them. Next, we elaborate on the identified affordances.

#### **4.1 What political parties want to facilitate**

The first group of affordances is reflected in the actions that the political parties want to carry out through the use of Facebook. Focus is placed on the specific actions that the political parties want to *facilitate* through this social media technology.

We identified four main affordances within this group. The first is DIRECT COMMUNICATION, dealing with the way in which the political parties want to use the media as a communication channel of which they can be in charge. Here, the notions of *promoting own truth* and *communication of important information* describe what type of information Facebook potentially affords. These categories are reflected in the statement by one of the parties regarding the opportunity of social media:

*If I had a tax issue, a leasing issue or some other issue, I would quickly be able to communicate the most important information and facts to our supporters who would then quickly spread the message. This is what social media is great for.*  
(Web strategy responsible, The Social Democratic Party)

In this quote we see the reflection of the opportunity for the party to facilitate direct communication towards their supporters through the social media platform. The emphasis is put on the parties' own messages, where they can themselves choose the information and facts that are important to communicate. In addition, the media can afford them to share opinions and provide their own perspective of the story without the interference and interpretation by others. The quote also

indicates how Facebook can afford the opportunity of *immediate communication*, where the parties are able to respond quickly to critiques, main issues and opinions from opposing parties or critical voters.

The second main affordance in this group is PROMOTION OF POLITICAL MESSAGES, where the parties have the possibility of promoting their political ideas and thoughts, and supporters then have an opportunity to comment on them. As one party highlights: “*The purpose is basically to promote our own politics*” (Web editor, Socialist People’s Party). An affordance that can be linked to this is that of *reaching the masses*, with Facebook allowing for visits and revisits of posts and ideas, as indicated by a party representative:

*Facebook is so important exactly because Denmark is broadly represented on the media and we are able to reach more people within the network itself and build relations in a new way, reaching more people than just our own party members.* (Web responsible, The Social Liberal Party)

The third main affordance, DIALOGUE, relates to what the political parties wish Facebook to facilitate. Many of the parties reflect on how the increased opportunity to venture into dialogue with people via Facebook poses a wide range of opportunities but also some challenges. As one of the interviewees reflects:

*The advantage is that you can engage quickly in a dialogue and there is the opportunity to create a relation, you can comment and initiate a debate and this can create commitment by sharing your views in both a formal and informal way.* (Social media and communication responsible, The Conservative Party)

We also find the affordance of *emotion*, which is perceived as a connection made through dialogue, where the political parties have the opportunity to reveal emotions and contribute more informal thoughts on specific issues. The following example portrays a party representative commenting on the importance of showing emotion:

*I always encourage our politicians to say something personal. Our leader actually insisted on thanking her Facebook friends – she referred to them as friends rather than likers – since they had written to her concerning her father’s death on Facebook. She wanted to express her deep thanks and emotions about the support in this difficult time. You could read about it in the press on Sunday and then people showed their respect by posting on the wall. (Web strategy responsible, The Social Democratic Party)*

The final main affordance connected to “what we want to facilitate” is that of CONTROL:

*It is obvious that posts can appear that are so harsh and so irrelevant that they disturb more than they provide value. (Press and communications responsible, The Red-Green Alliance).*

The political parties express how control of the media can afford them the opportunity to manage what is made public. As one of the interviewee expresses, this is not without problems:

*It is my job to constantly operate on the border; that is, we do not tolerate criticism, we censor Facebook and I have had to take quite a lot of hits from the press for trying to make evident that political platforms require that you moderate them because otherwise you have some idiots who confuse the political debate and ruin the use of social media in Denmark. (Web strategy responsible, The Social Democratic Party)*

This opinion is supported by one of the other parties,

*The Internet opens up for people to write what ever they want and they tend to do that. That is why you have to go in and monitor if something is posted that is just not good and has to be deleted. That is why you have to create guidelines so it is*



*possible to determine when to go and edit the page by deleting posts so you have something to back it up with. (Social media responsible, The Conservative Party)*

A strong affordance tied to both of these quotes is that of *editability* and how the parties view their control over the Facebook page as a possible way of controlling what is posted and what is left out.

#### **4.2 What political parties want to project**

The second group of affordances is linked to what the political parties want Facebook to afford them to *project*. The affordances in this group are focused on the opportunity of projecting a strong sense of identity and image for the political parties.

In this group three main affordances emerge. The first is AUTHENTICITY of the political parties and what they believe in. The authentic ability is one that is tied to Facebook by the way the political parties will be able to show their opinion and express their beliefs. As the respondent from one of the parties noted:

*When we use Facebook it is important that it is authentic. That is why we in contrast to other parties don't force our politicians to be on Facebook. We have expressed that for 9 out of 10 it can be a good idea but we do have certain candidates where they just can't be bothered and do not see the purpose. Getting them on Facebook would not make sense. (Campaign manager, The Liberal Party)*

Tied to this are the affordances of *likability* and how the political parties aim for this through their authentic behaviour. It is apparent how the demonstration of the work that is done and manifestation of this via the social media enable an authentic display of the actions that the party is actually taking. The affordance of *positive behaviour* is found in the quote above and highlighted by another respondent:

*I always try to adopt a positive tone when I answer people and make use of smileys and frame it by referring to how I hope they understand what I am trying to say. (Web editor, The Socialists People’s Party).*

The political parties aim at projecting authenticity through their positive behaviour. This awareness means that they believe that they should not post negative statements about their opponents and that they should not eliminate posts that have a negative tone.

The second main affordance is that of INFORMALITY and the way in which Facebook can create the opportunity of an *informal tone* for the political parties. This informal tone appears to be perceived by the political parties in their use of certain language when conveying their messages on Facebook:

*We work a lot with our “own” language on social media because the relations that you establish here are relatively more informal compared to many other relations. It relates to seeing eye-to-eye with the voters and is about speaking the same language. (Web responsible, The Social Liberal Party)*

The implication of the change in language used on social media is further linked to the perceived affordance of *unconventionality*, where Facebook may afford different approaches, compared to traditional media for communication. In particular, one of the respondents expresses:

*It means that I can write in one style to some, but if I have to write something on our Facebook group, where it is completely different people, I just think they should have something more and something more exciting than our standard political declaration. (Web strategy responsible, The Social Democratic Party)*

The political parties want to project more unconventional messages than afforded by traditional press messages or other forms of campaign communication.

The third set of affordances relates to PERSONALITY, which is tied to what the political parties want to project by using Facebook. It is believed that this social media technology can afford political parties to project the affordance of *being present* for their Facebook users. This is shown by emphasis on connecting this personal attention to the Facebook presence, as one of the respondents expresses:

*If I have to give advice to our leader about what to write, then I would like it to be as personal as possible, I would like her to write 'I' and 'me' and 'I am happy about' and some emotions that give more insight than what you can read in the press.* (Web strategy responsible, The Social Democratic Party)

In the formulation of this personal link, the projection of personality through being present in a very private way is found as one of the main opportunities provided by Facebook. This is also tied to the affordance of *reliability*, as the political parties want to present a reliable outlet for their political views, which may be projected through associating political personalities to the different posts (as we will highlight in the second part of the analysis).

### **4.3 What political parties want to enhance**

The last group of affordances is linked to what the political parties would like the social media technology to afford them the opportunity to *enhance*. Within this group, two main affordances are apparent. First, the notion of INTERACTION is underlined as the political parties note how this is a strong driver for the use of Facebook:

*We aim for a lively interaction. Well you can say that of course we have to post something every day but we haven't set specific measures. However, we really want a lively interaction on our Facebook page.* (Social media and communication responsible, Liberal Alliance)

This affordance is tied to that of *dynamics*, which is expressed through the availability of responses and replies as posts on the media. The affordance of

*reaction* is also connected to that of interaction, as Facebook can afford the reactions from supporters who are following the political parties on their page.

The second main affordance is that of INVOLVEMENT. One representative argues:

*Sometimes when things are really heating up we often are or will get involved... We have had instances where our Prime Minister has gotten involved in debates that he hasn't started but where he makes an effort to get involved in the debate to encourage the dialogue and the people involved.* (Campaign manager, The Liberal Party)

Tied to Facebook affording the opportunity of enhancing involvement is *trust*, as is highlighted by one of the representatives:

*The social media require time and building relations. You need to be able to have a trustworthy conversation with people so they don't just feel that this is another outlet for publishing press releases.* (Web responsible, The Social Liberal Party)

This group has the affordances of *support* linked to it, as it is underlined as a main driver of the supporters choosing to involve themselves in Facebook activities. In addition, the involvement opportunity of the social media platform is also found in the reference to the identification of *ambassadors*:

*If I can get all our likers to understand where we are going and they post it onto their network, then I have in reality made them our ambassadors... If I can do this via our Facebook page then I have come a long way.* (Web strategy responsible, The Social Democratic Party)

In this way, Facebook also affords the creation of *ambassadors* to promote the political messages of the party.

## 5. Actual Use of Facebook

We have outlined above what the political parties perceived as affordances of using Facebook as a social media technology for election campaigns. Our observations of the parties' actual use of Facebook, however, indicate that in practice, it appears that the political parties adopt an ad hoc approach to Facebook. Our observations and registrations of the parties' actions on their Facebook page during the election thus reveal a somewhat different pattern of behaviour on the social media technology than the one identified through the affordance analysis. In order to explain this observed tendency, we conducted an investigation of whether the political parties actually facilitated, projected and enhanced the perceived affordances through their actual use of Facebook. Our analysis focuses on compiling the actions of all the parties to highlight main characteristics of their use. The actual use patterns are therefore derived from merging our findings across the parties' Facebook pages. An overview of the findings is provided in Table 4.

**Table 4. Perceived affordances compared to actual use of Facebook by the political parties**

Perceived affordances		Actual use		
Groups of affordance	Main and linked affordances	Intended / acted out	Intended / not acted out	Not intended / acted out
Facilitated	<p><b>DIRECT COMMUNICATION:</b> <i>promoting own truth, communication of important information, immediate communication</i></p> <p><b>PROMOTION OF POLITICAL MESSAGES:</b> <i>reaching the masses, DIALOGUE: emotion CONTROL: editability</i></p>	<p><b>DIRECT COMMUNICATION:</b> <i>promoting own truth, immediate communication, communication of important information</i></p> <p><b>PROMOTION OF POLITICAL MESSAGES:</b> <i>reaching the masses, DIALOGUE: emotion CONTROL: editability</i></p>		<p><b>PROMOTION OF POLITICAL MESSAGES:</b> <i>linkability CONTROL: Guided interaction</i></p> <p><b>CALL TO ACTION:</b> <i>mobilizing volunteers</i></p> <p><b>INTERNATIONAL REACH:</b> <i>display of international support</i></p>
Projected	<p><b>AUTHENTICITY:</b> <i>likability, positive behaviour</i></p> <p><b>INFORMALITY:</b> <i>informal tone, unconventionality</i></p> <p><b>PERSONALITY:</b> <i>reliability, presence</i></p>	<p><b>AUTHENTICITY:</b> <i>behaviour</i></p> <p><b>INFORMALITY:</b> <i>informal tone</i></p> <p><b>PERSONALITY:</b> <i>presence</i></p>	<p><b>AUTHENTICITY:</b> <i>likability</i></p> <p><b>INFORMALITY:</b> <i>unconventionality</i></p> <p><b>PERSONALITY:</b> <i>reliability</i></p>	<p><b>INFORMALITY:</b> <i>arrogance</i></p> <p><b>EXCITEMENT:</b> <i>encouragement</i></p>
Enhanced	<p><b>INTERACTION:</b> <i>dynamics, reaction</i></p> <p><b>INVOLVEMENT:</b> <i>trust, support, ambassadors</i></p>	<p><b>INTERACTION:</b> <i>dynamics, reaction</i></p> <p><b>INVOLVEMENT:</b> <i>support, ambassadors</i></p>	<p><b>INVOLVEMENT:</b> <i>trust</i></p>	<p><b>SHARING OF MEDIA</b></p>

## 5.1 What is facilitated through actual use

The actual use of Facebook by the political parties during the election campaign reveals that what the parties intended to facilitate is, to some extent, represented by their actual use. The intended opportunities for DIRECT COMMUNICATION and PROMOTION OF POLITICAL MESSAGES are evident in all of the parties' actual use. In particular, DIRECT COMMUNICATION is linked to the affordance of *promoting own truth* discovered in actions carried out by all parties, as well as that of *immediate communication*, also identified among four out of seven parties' actions. DIRECT COMMUNICATION is found through the facilitation of *communication of important information*, as indicated in the intended affordances perceived by the political parties.

An attentive reader has responded positively to our latest ads by sending us a picture from Today's newspaper. With these ads we show how we intend to handle the campaign. Rather than bashing other opposing parties we want to give you our take on how we can create more jobs, greater education, better hospitals and so much more.

*Post: 13 September 2011, The Social Democratic Party's Facebook page*

In the actual use of Facebook, the political parties present important information through their posting of the most recent statistics or initiatives that are specific for their party. In the PROMOTION OF POLITICAL MESSAGES, the linked affordance of *reaching the masses* dominates all but one party's actions. The parties especially seem to make use of Facebook to reach a wide target group and to encourage spreading of the message through the extended networks of the target group members.

Spread the message! Support us in the election campaign and help make The Liberal Party known on the Internet. If you think that one of our political messages or beliefs are important please share them.

*Post: 26. August 2011 The Liberal Party's Facebook page*

We have received a message from the head of the party. We would like to encourage you to share this with your network!

*Post: 14. September 2011 The Conservative Party's Facebook page*

In the posts relating to the PROMOTION OF POLITICAL MESSAGES we observe a new tendency not accounted for in the perceived affordances dealing with the linkability that Facebook affords.

Are you also against paying for your visits to the doctor, then share this link with your friends! The Socialistic People's Party fight for a more equal society and that we will not achieve by taking away healthcare from the less fortunate.

*Post: 29 August 2011, The Socialistic People's Party's Facebook page*

Through this post, the political party encourages the sharing of the political message throughout the individual networks of the followers.

DIALOGUE as a main affordance for intended use is found in six out of seven parties' actual use. The dialogue encountered in the parties' Facebook pages is, to a high extent, reinforced by the supporters who engage in dialogue with each other as well as with the political party. This main affordance is supported by the linked affordance of *emotion* in three out of six cases where dialogue facilitates emotion, particularly from the supporters' side stemming from encouragement from the party.

The biggest thank you to all of you who have contributed to the Red-Green Alliance and have made this our best election ever. We will work very hard to live up to your expectations!

*Post: 16 September 2011, The Red-Green Alliance's Facebook page*

Finally, the intended affordance of CONTROL is visible in all seven parties' actions. Some exhibit it through the linked affordance of *editability* through interruption and notices of how posts have been removed, whereas others display it by guiding the users towards what they should post on the page. Especially the



latter reveals a new linked affordance in that the parties can facilitate *guided interaction*, which allows them to set the direction for the nature of the posts.

Today Denmark has woken up to a new government – and the strongest Red-Green Alliance Party ever. Tell us in a sentence or two what you would like for the future?

*Post: 16 September 2011, The Red-Green Alliance's Facebook page*

Other affordances emerge through the actual use dealing with what the political parties facilitate. In particular, this is evident in the political parties' use of Facebook to facilitate CALL TO ACTION messages among the supporters in terms of *mobilizing volunteers*. In a post from one of the parties at the beginning of the campaign, the party calls for supporters and help from the Facebook network. This is illustrated in the post below:

The election has started! Now it is time to get the posters up and distribute those folders and hard work is ahead. We must convince the Danes that they should choose the green path. Do you want to give us a helping hand in the campaign then contact us at [info@konservativ.dk](mailto:info@konservativ.dk). Then we will find you something to do. Good campaigning to you all!  
Best Regards The Conservative People's Party

*Post: 26. August 2011, The Conservative Party's Facebook page*

Further, the notion of facilitating INTERNATIONAL REACH is observed in two of the parties' ability to *display international support* from outside Denmark. In particular, this can be seen by the engagement of politicians on the Facebook page. For example, one of the parties posted the following message which gained over one hundred likes.

Ed Miliband writes a support message to our Prime Minister candidate on her personal Facebook page: 'All of us here at the UK Labour Party send our best wishes and support to our friend Helle for tomorrow's elections.'

*Post: 14. September 2011, The Social Democratic Party's Facebook page*

The display of international support can thus be easily highlighted through the posting of the message on the party's Facebook page, stressing how they have international reach and backing.

## 5.2 What is projected through actual use

With respect to what is projected, the main affordance of AUTHENTICITY is represented in the actual use by five of the seven parties. Especially AUTHENTICITY is found through the parties' projection of *positive behaviour* displayed by positive attitudes and use of approachable language and formulations. Two of the parties, however, do not exhibit this behaviour, as their immediate action is to position their opponents in a bad light. The linked affordance of *likability* related to AUTHENTICITY is not discovered in the actions of the political parties, as they do not focus on projecting particular likable perspectives or assumptions, focusing rather on delivering messages and information about their own advances.

Liberal Alliance is now facing a really great election where we will more than double the support from 2.8 % in 2007 to an entire 7.1% now. For those who have not voted already, remember to put your mark by 'I' for liberal influence and a blue government.

*Post: 15 September 2011, Liberal Alliance's Facebook page*

INFORMALITY is found in three of the seven parties' actions as they make use of the open forum on Facebook to communicate their messages in a more *informal tone* than those otherwise adopted in election campaign contexts. For the parties not acting out this affordance, the effect is a projection of a superior attitude towards supporters, that is, the parties can be said to project an unintended affordance through their use of a form of *arrogance* towards their supporters by raising themselves above the previous choices of the voting public. For example the post made by Liberal Alliance highlighted below sparked a range of comments from users expressing how they did not appreciate the judgemental tone that came across in this post.

Last night's football game ended 2-0 in favour of Denmark. Imagine if we were as good at politics!

*Post: 6 September 2011, Liberal Alliance's Facebook page*

Further, the intended linked affordance of *unconventionality* is not found among the political parties, as they all refrain from stepping outside the boundaries of their standard formulations and approaches to interaction.

The PERSONALITY affordance is present through the actions of six out of seven parties. These parties project their personality by linking not only to prominent party politicians but also by using the party's Facebook page to put focus on the parties' beliefs and values. Further, the affordance of *presence* is projected through all of the parties' actions in the engagement found on the parties' Facebook pages towards current issues and through the interaction among supporters on the page. The linked affordance of *reliability* is not discovered with regard to the PERSONALITY affordance, as the Facebook page displays many opinions and viewpoints that question the validity of statements on the political parties' pages. In turn, these comments and statements are not dealt with in the actions of the political parties, leading to further uncertainty about the reliability of the posts and messages.

Finally, an aspect not accounted for in the perceived affordances is the projection of EXCITEMENT through the *encouragement* of the supporters on the Facebook page. The political parties act this out when they post encouraging messages to their supporters, sharing the positive progress that the party is experiencing.

The election campaign has started and volunteers from the Socialist People's Party have worked very hard to make sure that we are well represented across the country. Well done!

*Post: 26. August 2011, The Socialist People's Party's Facebook page*

The affordance of encouragement attached to Facebook use is demonstrated throughout the campaign initiatives in line with the post shown above. The main

trend throughout the use of this is to generate excitement and encouragement for supporters of the party.

### 5.3 What is enhanced through actual use

n the final group of what is created through actual use, the main affordance of INTERACTION is apparent in six out of the seven parties' Facebook pages. The degree to which the parties take part in the interaction varies across parties; however, a high level of interaction is created among the supporters on the Facebook page. This is shown in the linked affordances of *dynamics* and *reaction* that the political parties, especially the supporters, display on the Facebook page. The interactions are sparked by the affordance of INVOLVEMENT, as six out of seven parties make use of the Facebook page to create a forum for the supporters to get involved.

New members are joining our party in large numbers. Welcome and thank you to Niels Due Jensen, member of the board of directors at Grundfos, and to everyone else who is taking responsibility for Denmark's future.

Do you also want to join? Become a member of the Social-Liberal Party here: <http://valg.radikale.dk/vaer-med/>

*Post: 13 September 2011, The Social-Liberal Party's Facebook page*

In creating INVOLVEMENT a result of this is found in the establishment of *ambassadors* and *support* among the Facebook users who often appear as defenders of the political parties' viewpoints and who act in support of the political causes being posted.

Vote for the Liberal Party! Denmark doesn't need more taxes for our businesses or of our income. Vote for the Liberal Part of Denmark!

*Post: 14 September 2011, User on The Liberal Party's Facebook page*

Denmark is ready for a new government. We need a government that will go the hard working way. The early retirement must remain. The unions must be put back into business. Stop the cut downs on education, And much more. The Danes are ready for a new way.

*Post: 26 August 2011, User on The Social Democratic Party's Facebook page*

The linked affordance of *trust* is not created through the political parties' use, as the lack of consistency of posts and responses often call for the supporters to inquire about the political parties' positions and views. As one user write on one of the parties Facebook page,

You could start by answering the questions we pose. I have repeatedly written to you with questions and have received no answer. Just this morning I posted some simple questions about some of your core political standpoints and opinions on the current point system debate without any reaction. This makes me wonder why I should put my vote on your party...

*Post: 15 September 2011, User on The Red-Green Alliance Facebook page*

In our investigation of what is created through actual use, we were able to identify one unintended affordance in the way that the political parties create an outlet for them to SHARE DIFFERENT TYPES OF MEDIA through the Facebook page, thereby giving them the opportunity to include film, posters and apps all in one place.

Since yesterday over 58,000 people have seen this clip on Facebook, where our leader is accusing the current Prime Minister for lack of political discussion. We think that this clip deserves another view. <Youtube clip>

*Post: 15. September 2011, The Red-Green Alliance's Facebook page*

It is apparent in this post that the sharing of different types of media allows for the opportunity to enhance certain successful points or debates made throughout the campaign.

## 6. Discussion and Concluding Remarks

### 6.1 Insights from the findings

Our findings showed that the use of Facebook in the Danish election campaign triggered new forms of public participation and debate, a situation that was far from reality just a decade ago (Vergeer, 2012). Facebook entails engagement and excitement and allows multiple points of view to be aired and shared, including viewpoints that may have a negative effect on the political parties concerned. In this sense, it seems that social media are revolutionizing political campaigning in particular and the public context in general by affording a multitude of different issues and interests to appear in the public debate, bringing into play multiple content sources. Our findings contribute three important insights about political parties' use of Facebook as a social media technology in their election campaign strategy:

First, our findings provide insights into political parties' perceptions of social media affordances rather than examining the perceptions of supporters/voters, as has been predominant in the existing literature (e.g., Robertson et al., 2010a; 2010b). In this way, our findings contribute with a shift in focus by positioning the political parties at the centre stage of analysis. Grounded in empirical data, our study conceptualizes what the political parties expect Facebook to afford in their campaign strategy. From a political party's point-of-view, Facebook is perceived to: 1) *facilitate* direct communication to promote political interests and enable dialogue, 2) *project* authenticity through informal media, as well as 3) *enhance* interaction and involvement through dynamic relationships with Facebook users. These insights indicate that political parties are not only considering the affordances that social media technologies can potentially bring but are also including social media as part of their strategizing efforts. By conceptualizing both main and linked affordances, other political parties – whether in a Danish or foreign context – may take these insights into consideration when defining and planning their own social media strategy.

Second, when we compare and evaluate the perceived affordances with the parties' actual use of Facebook, we conclude that the intended and perceived affordances are, to some extent, represented in the parties' actions. However, it becomes evident that some affordances are more present than are others and that the political parties vary in their use of, and emphasis on, the affordances. With this insight, our study contributes three new categories that link perceived affordances to actual use: *intended/acted out*, *intended/not acted out* and *not intended/acted out*. This difference across political parties' actual use of Facebook gives us an indication that the intentions for use are not enough to ensure that they are in fact acted upon. The difference between perceived affordances and actual use provide a basis for what the political parties should consider as part of their campaign strategy when engaging in social media activities. Potential voters feeling that they are not heard or recognized when political parties do not use social media technologies as intended or do not make use of all their potential may have a negative impact on the outcome of the election campaign. In fact, a recent study by Hong and Nadler (2012) concludes that a high level of social media activity by political candidates does not automatically result in huge effects in terms of public online attention.

Our findings show that a majority of parties does not fully engage with the users' posts and comments; only one of the political parties succeeded in providing its Facebook users with value added responses and successfully engaged them in the social media environment. This was achieved by being active, responding to questions, as well as engaging in debates and discussions. In fact, this particular party experienced a remarkable election, but we have no evidence that this outcome correlates with its social media use. The fact that all political parties are active on Facebook mainly during a limited time frame, i.e., during the election, makes us wonder whether they have seriously integrated social media in their strategizing efforts. Although it may not be surprising that parties are more active during elections, it is fair to assume that continuous interaction and engagement with potential supporters are important activities also in periods when there is no election campaign. This observation calls for future studies in this domain.

Third, our study offers a systematic approach for investigating the affordances of social media use. By extending the affordance approach suggested by Treem and Leonardi (2012), we have shown how other IS scholars can investigate the use of social media in diverse contexts by first outlining the perceived and intended affordances and then by comparing these affordances with the actual use. This has implications for companies and government agencies alike, as they may gain inspiration on how to integrate social media use in their strategy work. We have focused on the use of Facebook but encourage scholars to replicate similar studies for other types of social media and in other organizational contexts.

Based on these three insights, we can conclude that political parties should carefully consider what it requires to be present on a social media technology such as Facebook. This addresses the two first research questions of what Facebook is perceived to afford and how these affordances are reflected in the political parties' actual use. Next, we turn to the strategic considerations that can be made based on our approach of matching perceived affordances with actual use.

## **6.2 Strategic considerations**

As highlighted in our insights, strategic considerations should be made when venturing into social media use. This is supported by Merali et al. (2012) who argue that the increasingly dynamic, uncertain and turbulent environment of information systems creates new challenges in terms of strategizing. They discuss the importance of seeking new approaches in viewing both theory and practice when it comes to future strategic considerations of IS. This is also emphasized in the reflections and prospectives of the IS field in which the explorative aspects of strategizing are highlighted (Galliers et al. 2012). In particular, Krogh (2012) argues that we need more theoretical and empirical research on the use of social media in organizations towards providing a strategic research agenda. Similarly Kaplan and Haenlein (2010) maintain that the use of social media in any organizational context must incorporate strategic considerations. These arguments seem valid for political parties in election campaigns where the use of social media technologies necessarily must entail strategic considerations and, even more



importantly, development and implementation of guidelines and procedures for use. It is on this basis that we now turn to our third research question by discussing some overall strategic considerations that can be linked to the use of social media and more specifically to Facebook in political campaigning.

Planning the social media strategy: Adopting the affordance approach can support political parties not only in selecting which social media technologies to rely on but also in planning their use. This can be done through the perceived affordance method by asking “What is the specific social media technology good for?” (Gibson 1979). By doing so, the parties can better anticipate the value to be gained from the specific media type, thus minimizing unintended consequences, as pointed out by Aula (2010). For example, in the planning of social media use it appeared that a majority of the political parties mostly focused on the perceived affordances of Facebook as one single or stand-alone medium. Our research into the actual actions, however, shows that the multimedia functionality of Facebook adds value to the political campaigning (e.g., by giving the opportunity to include film, posters and apps in one place). The investigation of perceived affordances of various social media types can thus be argued to offer opportunities as a more central part of the campaign strategy. We believe that this mode of planning based on perceived affordances can prove very valuable in the design of strategic initiatives surrounding social media utilization. We further argue that exploring the different social media technologies through the three groups of affordances of *facilitating*, *projecting* and *enhancing* can create the foundation for social media selection by the political parties.

At the same time, our data showed that some of the political parties had difficulties in handling the limited control they had when engaging in campaigning activities on social media. Whereas previous literature highlights social media as part of strategic considerations in terms of engagement, empowerment of citizens and immediate feedback (Berthon et al., 2012; Mangold and Faulds, 2009), our study shows that issues of CONTROL in terms of *editability* and *guided action* are

delicate. We argue that this issue should be handled by carefully planning which control mechanisms to adopt in the online political dialogue.

Operationalizing expected opportunities into actual use: As the second strategic consideration, our analysis reveals implications related to matching the perceived affordances with the actual use. This supports Gaver's (1991) idea of linking perception and action. The two-step process of deciphering the expected opportunities and investigating the actual use points to issues in the operationalization process. Especially interesting are the findings that reveal a number of 'not intended but acted out' affordances of Facebook. Main affordances such as CALL TO ACTION, INTERNATIONAL REACH, EXCITEMENT, and SHARING OF MEDIA are acted out but not intended. Further, linked affordances such as *guided interaction*, *linkability*, *mobilizing volunteers*, and *display of international support* are reflected in the parties' posts on Facebook. These findings indicate the dynamic and unanticipated nature of social media and reveal how political parties must consider the implications of not knowing exactly for which purposes the medium will be used.

On the basis of our study, however, we argue that including this into the strategic considerations can help explore what the perceived affordances are presumed to entail. This is in line with the observation made in our literature review, where Wilson et al. (2011) refer to the need for specific guidelines and procedures in order to use social media strategically. Consequently, strategizing about the actual operationalization of the perceived affordances and expressing these across the political campaign can help in fully utilizing the opportunities of the media. According to Treem and Leonardi (2012) different opinions can exist about when, how and why to adopt social media. This enables us to reflect on how political parties should consider these questions in relation to adopting social media as part of their campaign strategies. Given our findings about the actual use patterns we suggest that members of each political party should engage in a dialogue about how to best translate assumptions and ideas about using Facebook and other social media technologies into actual actions.

Evaluation and continuous use: The considerations about the dynamics of the media and the constantly evolving nature that these technologies seem to adopt (Drezner and Farrell, 2004), provide the basis for the last strategic consideration involving the evaluation and continuous use of social media by the political parties. Our observations of the political parties' use of Facebook before, during and after the political campaign period reveal immense activity during the campaign period but a very limited engagement especially after the election. The minimal interaction found on all the political parties' Facebook pages after the election reveals a lack of consideration of the strategic use of the media for the future. A neglect of constant engagement with the followers of the Facebook page can result in issues arising that relate to perceived affordances such as AUTHENTICITY, INTERACTION and INVOLVEMENT that are very limited only to the campaign period, thus failing to continuously engage the followers.

We argue that political parties, by use of the approach of linking perceived affordances to actual use, should carry out an evaluation of the current use of social media, and consider if they wish to maintain continuous engagement through social media. Further, certain posts reflect some 'not intended,' more negative, outcomes such as *arrogance* and CONTROL. We suggest that political parties at certain points in time should evaluate implications for continuous use of the social media technology.

## 7. Further Research

Our study of the strategic use of social media in political campaigning has provided insights into the issues of perceived affordances, actual use patterns, and central strategic considerations linked to the use of Facebook in a Danish political campaign context.

While we have listed a number of important contributions, some limitations should be highlighted that can provide interesting starting points for further

research. First, we have chosen to limit the study to focus on Facebook. This limitation was made following the findings of the interviews where the political parties highlighted Facebook as the most used social media technology. However, recent studies on social media in relation to election campaigns (Tumansjan et al., 2011) reveal that other social media technologies, such as Twitter, are also having a huge impact on the campaign activities. In fact, a recent newspaper article on the Danish local election in 2013 indicates that a majority of politicians is using Facebook and Twitter. In this regard, it could be interesting to extend the study to other media types and explore the perceived affordances and actual use related to these in a political campaign context. This study does not provide a definition of social media as a concept, as we sought to explore the development of the affordances linked to the media based on the opportunities and use provided by the political parties. A consideration of other social media technologies could provide further evaluation of media description and help frame the understanding of social media in a strategic campaigning context.

Second, the focus on the political parties' Facebook pages reveals only one part of the overall political campaigning picture. Many political parties expressed that their candidates also used personal Facebook accounts during the campaign. We chose to focus on the political parties overall to generate insights at this level; however, an extension of the study to include personal Facebook accounts could prove interesting in order to compare initiatives. As highlighted in our review of the literature on strategic use of social media, individuals play a key role in the strategic application of social media (Aula, 2010; Mangold and Faulds, 2009). The interview and actual use data collected for this study show that political parties are drawing on key profiles of their parties in both their strategizing and operationalizing of the Facebook initiatives. Further research could investigate the personal political profiles as well to evaluate how these are framed according to perceived affordances and actual use.

Third, the findings from this study pertain to the context of political campaigning. Further research is needed to discuss in greater detail how the approach of

perceived affordances and actual use could generate different strategic considerations in other settings where social media platforms are gaining terrain. From a strategic perspective, the outline of the perceived affordances as part of a planning initiative and the monitoring of actual use as an operationalization of these provide an interesting approach to tackling the dynamic character of social media (Kaplan and Haenlein, 2010). As social media is gaining terrain in context of governments, companies and private interactions understanding the perceived opportunities and the actual use could provide us with insights into how we should approach and work with social media. Our study has shown that investigating perceived affordances and actual use could be a way to enable valuable insight into strategizing about social media.

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# PAPER 2

**Dyrby, S., Avital, M., & Jensen, T.B. The Effect of Enterprise Social Media on Organizational Work.**

*A version of the paper accepted for JAIS Theory Development Workshop at The International Conference on Information Systems – ICIS 2013. The paper included in this dissertation is an extended version of the JAIS Theory Development paper.*

# The Effect of Enterprise Social Media on Organizational Work

## Abstract

*Organizations are increasingly exploiting the possibilities of utilizing Enterprise Social Media (ESM) at work. The entanglement of technical features and social connectivity on ESM platforms demonstrate how establishing the effect of ESM on organizational work requires focus on both technical and social mechanisms. Existing literature has highlighted this entanglement by outlining the perceived affordances of ESM in organizations. However, limited focus has been given to the process of translating the perceived affordances of ESM into actions that influence organizational work. The theoretical investigation in this paper explores the effect of ESM on organizational work as dependent on the active actualization of ESM affordances through interactions on the ESM platform. The process of active actualization is considered as the point where a perceived affordance is manifested in a set of actions carried out by an individual or a group of individuals. Subsequently, we present a set of theoretical propositions and a model outlining how interaction on the ESM platform mediate the effect of perceived ESM affordances of distribution, association, amplification, contextualization and preservation on organizational work. Finally, implications for further testing of the theoretical model are reflected upon.*

**Keywords:** Enterprise Social Media (ESM), ESM Affordances, Interaction, Affordance Actualization, Organizational Work.

# 1. Introduction

Enterprise Social Media (ESM) are web-based platforms that allow workers to communicate with specific coworkers or broadcast messages to everyone within their organization (Leonardi et al., 2013). The interactions on the platform take place through posting, commenting, editing, and sorting text and files linked to the workers themselves or to their colleagues (Leonardi et al., 2013). In these efforts the increased visibility of conversations on the ESM platform allows for the identification of certain connections between co-workers as well as for transparency of their interactions (Leonardi et al., 2013; Treem & Leonardi, 2012). While the utilization of ESM in organizational work has represented opportunities of increased knowledge sharing (Ellison et al. 2014; Gibbs et al. 2014) and awareness (Leonardi et al., 2013; Treem & Leonardi 2012), recent studies also demonstrate challenges regarding loss of concentration (Gibbs et al. 2013) and information overload (Leftheriotis & Giannakos 2014; Majchrzak et al., 2013). As speculations about the use of ESM in organizational work are prominent in both research and practice, establishing how ESM affect organizational work is becoming increasingly important. In comparison to existing enterprise media, ESM emphasize visibility of social connections and networks as a part of organizational work and is emerging as a facilitator of interaction between organizational members (Riemer & Scifleet, 2012). Thus, the implications of ESM for organizational work may not be found in the technical functionalities alone but also in an increased social connectivity among organizational members. In this article we theorize about the relationship between ESM and organizational work and pursue the research question, *How do enterprise social media affect organizational work?*

Organizational work is inherently a social activity (Neff, 1977). In organizations, people come together and engage in collective practices for achieving certain objectives (Rice et al., 1985). Studies have shown how the performance of organizational members are related to their social connectivity within the organization (Castilla, 2005; Reagans & Zuckerman, 2001). Establishing social networks and connectivity among organizational members is highlighted as a

unique feature of ESM technology (Leonardi et al., 2013; Wasko et al., 2004). Assessing the effect of ESM on organizational work then involves considering the social connectivity that the platform supports. The technical capabilities of ESM in organizations create a flexible platform for organizational work through open and transparent communication maintained in a sustainable repository (Leonardi et al., 2013). However, the translation of the opportunities that the technical capabilities of the ESM platform provide into actual activities of work is important if ESM must support organizational practices. In this translation, the interactions encouraged by the increased connectivity between organizational members on the ESM platform are in focus. A mutual relationship appears to exist between interactions of individuals on the ESM platform and the material features of ESM; the material features of ESM allow interactions to happen easily and openly while simultaneously the interactions between individuals on the platform are what bring the functionalities of ESM to life. In existing literature on ESM in organizations, the entanglement between the social and the material has been addressed through the application of affordance theory (e.g., Ellison et al., 2014; Gibbs et al., 2013; Majchrzak et al., 2013; Treem & Leonardi, 2012; Vaast & Kaganer, 2013).

Affordance theory helps us describe the action possibilities that an artifact might have as perceived by an individual user (Gibson, 1977, 1986; Leonardi, 2013). As a relational concept, affordances highlight how an artifact possessing some intrinsic material properties can afford a variety of action and use possibilities depending on the abilities of a certain user or user group in a given environment (Hutchby, 2001; Markus & Silver, 2008). Research on affordances has focused to a large extent on the identification of affordances as possibilities for action; yet, little focus has been placed on the process by which these affordances become actualized and brought into action (Bernhard et al., 2013; Strong et al., 2014). Actualization of affordances is defined as the actions taken by actors as they take advantage of one or more perceived affordances to achieve immediate concrete outcomes in support of specific goals (Strong et al., 2014:70). Affordance actualization can be considered in two respects; as either actively actualized affordances, which refers to utilized and shaped affordances, or as passively actualized affordances, which refers to perceived affordances (Kytä, 2004). In this

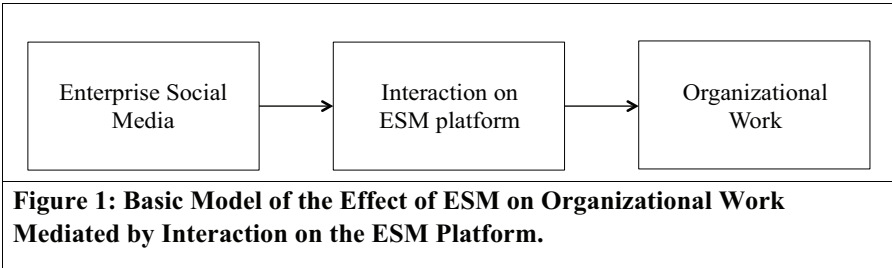
study, we refer to passively actualized affordances as perceived affordances and actively actualized affordances as actualized affordances. The existing literature on affordances of ESM (e.g., Ellison et al., 2014; Gibbs et al., 2013; Majchrzak et al., 2013; Treem & Leonardi 2012; Vaast & Kaganer 2013) has mainly explored the perceived affordances of ESM in an organizational work context. While these efforts have generated important insights into the opportunities of ESM in organizational work, exploring how these perceived affordances become manifested in actual actions can further our understanding of how ESM affect organizational work. In this study, we theorize about the effect of ESM on organizational work by focusing on the actualization of ESM affordances through interactions on the ESM platform.

The objective of this theoretical investigation is threefold. First, we want to identify affordances specifically related to the use of ESM in organizational work. Second, we want to investigate the effect of ESM on organizational work by considering interaction on the platform as a central component in translating perceived affordances of ESM into actions supporting organizational work. In this effort, we extend existing literature on affordances of ESM in organizations by outlining the process of affordance actualization through interaction on the ESM platform. Third, we want to generate theoretical propositions and present a model that can help further our understanding of the relationships between ESM, interactions on the ESM platform and organizational work.

In the following, we investigate existing literature on ESM and organizational work and present six theory-driven propositions and a model of how perceived ESM affordances are actualized and affect organizational work through interaction on the platform. Finally, we suggest future empirical testing of the model as well as discuss and conclude the findings by providing directions for further research within this area.

# 2. Theoretical Foundation

The theoretical foundation of this study is based on exploring the effect of ESM on organizational work. We argue that this effect is dependent on the actualization of ESM affordances through interaction on the ESM platform. Figure 1 outlines a basic model of the relationship under investigation.



In this basic model, interactions on the ESM platform serve as a way of explaining the relation between perceived ESM affordances and organizational work. To outline the theoretical foundations of this model, we first explore the link between ESM and organizational work. We then present five perceived affordances of ESM based on existing literature and look at how interactions on the ESM platform actualize those affordances. The theoretical perspectives allow the generation of six theoretical propositions explaining the relationship between ESM affordances, interaction on the platform and organizational work.

## 2.1 ESM and Organizational Work

Organizational work can be considered as a multivalent concept encompassing a variety of practices characterized in many different fashions such as clerical, artistic, managerial, craft, supervisory, production, professional, routine, knowledge, symbolic, emotional, informal, technical, individual, and collaborative work (Orlikowski et al., 1996). Common to these activities is the human ability to act and interact in a workflow of activities and processes within the organization

(Yu & Mylopoulos, 1993). In the process of work, the organization serves as a reference point in which individuals evaluate their interests and reflect upon their actions and commitments (Manning, 1982). Through these processes and activities, organizational work manifests itself as a social activity of people interacting and engaging with each other to reach a certain goal (Neff, 1977). Consequently, the network of interactions among organizational members is at the center of organizational work and what is created in the organization emerges out of organizational members engaging with each other (Gergen, 2009). In this sense, organizational work is not only driven by monetary or individual agendas, but also depends on the interactions and the connectivity between organizational members. Rice et al. (1985) define how “*organizational work refers to human activities, in the context of formal organizations, performed with the intention of producing something of acknowledged social value*” (1985:296-297). This definition highlights the importance of obtaining acknowledged social value of the activities performed by individuals in organizational work. Concerned with work, technology, and interaction in the organizational context, research within the field of workplace studies has also emphasized interactions as the foundation for organizational work (Dourish & Button, 1998; Jordan, 1996). Linking organizational work to the socio-technical interactions within the organization, these studies consider the way in which the visual, the vocal, and the material take part in the production and coordination of organizational activities (Heath et al., 2000). The interactions within the organization create the foundation for the activities, which take place, and can in turn both strengthen or inhibit the structures that underlie organizational work. Articulating these structures of work is then carried out in and through interaction (Corbin & Strauss, 1993). The social structures of interaction that underlie organizational work are important both as a mechanism for organizational activities and as a way for individuals to orient their practices toward obtaining socially recognized value (Corbin & Strauss, 1993). In a study of the link between performance of organizational members and their social connectivity, Castilla (2005) highlighted how the productivity of call center workers went up when they engaged in interactions and activities with their colleagues during work. This study joins others (e.g., Fischbach et al., 2009; Leiter & Maslach, 2001; Reagans & Zuckerman, 2001) in placing emphasis on the importance of social connections between organizational members and



demonstrates how strengthening these connections can increase work productivity. Investigating organizational work is then not just a matter of looking into organizational practices and their outcomes, but also of investigating the social interactions that enable and support this work.

Interactions between organizational members are a central mechanism for the ESM platform to work. It is through interactions that the organizational members engage and communicate with each other, as well as retain motivation for the continuous use of the platform (Fulk & Yuan, 2013). ESM platforms provide the basis for a robust communication system that allows the communication of messages to specific individuals, various interest groups, and the whole organization. While these functionalities create a flexible infrastructure for individuals to communicate and share information, the emphasis of ESM technologies on enriching and strengthening social ties and connections between employees is key (Ellison et al., 2014). The ESM platform provides the basis for the formation of relationships that enable individuals to come together across social and intra-organizational boundaries (Leonardi et al., 2013). Through the added opportunities for communication and ongoing dialogue between all members of the platform, ESM support relationships, conversations, and ad-hoc social sharing (Richter & Riemer, 2009; Riemer & Scifleet, 2012).

The usefulness of ESM platforms is based on connecting individuals in a network (Ellison et al., 2014), which implies the creation of different ties between the individuals on the platform of both a professional and a personal nature (Wu et al., 2010). The ESM platform relies on the establishment of connections between participants in order to build commitment and engagement (DiMicco et al., 2009). Through the creation of a network of ties, the ESM platform enable a sense of community among its members, allowing them to share information and make evident their presence (Lyons et al., 2012). Compared to other enterprise media, such as email and intranet, ESM promotes the transparency of individual ties making the connections between organizational members visible on the platform. In particular, these relationships are established and maintained through

interactions between the members of an ESM platform (Steinfeld et al., 2009). The interactions on ESM can take different forms and involve *conversational interaction* where individuals engage in interactions on a one-to-one basis through posting and commenting (Honey & Herring, 2009), *contextual interaction* where an individual addresses a broader context of a group or a certain topic, and *content interaction* in which the individual engages with content posted on the platform (Treem & Leonardi, 2012). Subsequently, the interactive nature of the platform creates a dynamic environment in which the visibility of interactions encourages continuous participation and a sense of an ongoing social engagement (Leonardi et al., 2013; Millen & Patterson, 2002). The connections between organizational members through the formation of ties of varying types and strengths within electronic networks form the basis of activities such as knowledge sharing and can result in emphasis on strong ties with the community as a whole rather than the establishment of interpersonal relationships (Wasko et al., 2004). Investigating the characteristics of the ESM platforms and the reliance of organizational work on interaction reveal how the effect of ESM on organizational work is tied to interactions between organizational members on the platform. Based on this, we develop our first proposition.

***Proposition 1:*** *An organizational member's extent of engagement in interactions on an ESM platform is positively related to his/her engagement in organizational work.*

In the literature, an example of the link between interactions on the ESM platform and organizational work is presented in the study of the Beehive platform at IBM (DiMicco et al., 2008). The study reports on the implementation and evaluation of the Beehive platform as a means for internal networking and communication. Evaluating the utility of this platform, one respondent noted, "*Beehive, by design, helps me connect to people personally, which helps me to like these people more, which makes me want to work with them*" (DiMicco et al., 2008:6). The connections established on the Beehive platform appeared to support the interest in working together. Subsequently, the personal connections between the coworkers on the Beehive platform supported their motivation for engaging with each other in work. Building on the same case, another study highlighted how interactions on the platform supported employees within an enterprise in

connecting and learning (DiMicco et al., 2009). The connections between people on the social networking site enabled sense-making between and of individuals about their capabilities and roles within the organization. Knowing about and connecting with coworkers then enforced the knowledge about potential collaboration partners and established the initial connection between workers who might not otherwise have encountered each other (DiMicco et al., 2009).

The review of the literature on organizational work and ESM and the two examples demonstrate how connections with coworkers through interactions on the ESM platform can motivate the engagement in work and support the generation of a certain acknowledged social value from others. The importance of the interactions on ESM as a driver of organizational members' engagement on the platform and the reliance of organizational work on interaction between organizational members make it relevant to study the effect of ESM on organizational work in light of the interactional dynamics. In the following, we build on the literature on ESM affordances and extend existing perspectives by emphasizing the actualization of perceived ESM affordances into actions of organizational work.

## **2.2 Affordances of ESM in Organizations**

The concept of affordances has been widely adopted in both information systems (IS) and management literature as a bridging perspective between social and technical elements of information technology (IT) implementation and use. An affordance is an action possibility available to an actor in an environment (Gibson, 1986). Affordances exist in a relationship between actor and artifact as it depends on the action capabilities of the actor in the environment as well as the possible actions made available by the artifact (Hutchby, 2001). The affordances of an artifact can then change across different contexts, but the materiality of the artifact cannot (Hutchby, 2001). In this sense, an artifact possesses the same material features across contexts, but the affordances of an artifact create action possibilities that differ from individual to individual (Leonardi, 2011). In this paper, we draw on the perspective from Hutchby (2001) and emphasize three

characteristics of affordances. First, affordances are relational as they are not inherent to the artifact or the individual but rather arise in the relation between the two. Second, affordances are possibilities for action (Stoffregen, 2003) in the sense that an individual can realize or actualize the affordances. Finally, affordances can both enable and constrain action (Hutchby, 2001). What we highlight in this view is how affordances arise and provide possibilities for action that become realized into action.

Research on affordances has focused to a large extent on the identification of affordances as possibilities for action and placing little focus on the process by which these affordances become actualized and brought into action (Bernhard et al., 2013; Strong et al., 2014). Actualization of affordances is defined as “*the actions taken by actors as they take advantage of one or more affordances to achieve immediate concrete outcomes in support of organizational goals*” (Strong et al., 2014:70). Affordance actualization can be considered in two respects: as either passively actualized affordances, which refers to perceived affordances, or as actively actualized affordances, which refers to utilized and shaped affordances (Kyttä, 2004). In the process of actualization, the perceived affordances will always precede the active actualization of the affordances (Kyttä, 2004). In any situation, many possibilities for action exist, but the majority of them will not come to be actualized (Stoffregen, 2003). For the active actualization of an affordance to take place, the affordance must become real and manifested in the actions of the individual or the group of individuals involved with it (Turvey, 1992). In this paper, we refer to the passively actualized affordances as perceived affordances and the actively actualized affordances as actualized affordances. The process of actualization can be considered in two ways. The first is an individual level in which different actors take goal-oriented actions in a dynamic organizational context consisting of users and the system (Strong et al., 2014). The second is multilevel in which many individuals interact and take action to reach an overarching organizational goal (Strong et al., 2014). In this sense, the actualization of affordances involves individuals operating in a dynamic environment following certain goals that can either be individually created or collectively established. Understanding the actualization of ESM affordances in an

organizational context can then be considered in terms of how the perceived affordances become enacted in the environment on the ESM platform as organizational members strive to reach a certain goal. Based on this, we present an overview of perceived ESM affordances and a number of propositions describing how interaction on the ESM platform enables the actualization of these affordances into actions.

The emerging literature on ESM has employed the theory of affordances to identify how ESM afford individuals certain action possibilities in the context of organizational work (Majchrzak et al., 2013; Treem & Leonardi, 2012). Based on a review of the existing literature detailing ESM affordances, we present five affordances of ESM. Table 1 shows the ESM affordances and how they are reflected in the literature.

<b>Table 1: ESM Affordances</b>		
<b>ESM affordances</b>	<b>Description</b>	<b>ESM affordances in literature</b>
Distribution	ESM afford distribution of information and people through disseminating and making visible information and people on the online ESM platform.	Visibility affordance (Treem & Leonardi, 2012) Invisibility affordance (Gibbs et al., 2013) Information-based affordance (Pike et al., 2013) Sharing and control affordances (Gibbs et al., 2013)
Association	ESM afford association of information and people through connecting information and people to each other in a networked structure.	Association affordance (Treem & Leonardi, 2012) Interactivity affordance (Ellison et al., 2007; Fulk & Yuan, 2013) Engagement and disengagement affordances (Gibbs et al., 2013) Network informed associating (Majchrzak et al., 2013)

Amplification	ESM afford amplification of information and people through the reinforcement, reproduction and multiplication of information on the online ESM platform.	Meta-voicing affordances (Majchrzak et al., 2013) Replicability and scalability affordance (boyd, 2012)
Contextualization	ESM afford contextualization of information and people through the placement of information and people in contexts of certain situations on the online ESM platform.	Meta-knowledge affordance (Fulk & Yuan, 2013) Generative role-taking (Majchrzak et al., 2013) Editability (Treem & Leonardi, 2012)
Preservation	ESM afford preservation of information through creation of durable repositories transcending space and time.	Persistence affordance (Treem & Leonardi, 2012) Accessibility affordance (Pike et al., 2013) Triggered attending affordance (Majchrzak et al., 2013)

### ***2.2.1 Distribution Affordances***

ESM afford distribution of information and people through disseminating and making visible information and people on the ESM platform. The distribution affordance relies on the inherent properties of the ESM platform to disseminate information and individual presence across the organization through the online platform. In general ESM puts emphasis on information availability and sharing (Pike et al., 2013). The material properties of ESM promote the sharing of status

updates from individual organizational members and the push functions of activity information and updates to the entire platform create the basis for an ongoing stream of information about communication and contributions within the organization (DiMicco et al., 2009). The afforded distribution of information on the ESM platform also creates opportunities for sharing and control (Gibbs et al., 2013) where the individual must assess what is shared and how much control they have over the information once it is distributed on the ESM platform. The visibility of activities on the ESM platform makes information and knowledge, users and behavior, and communication known to all within the organization (Treem & Leonardi, 2012). The increased visibility of the distributed information is what sets ESM apart from previous computer-mediated communication media in organizations (Vaast & Kaganer, 2013). In a study of micro blogging in an IT company, Zhao and Rosson (2009) expressed how the platform afforded individuals the ability to obtain information about ongoing projects in the organization. While ESM create the opportunity for making information and the organizational members themselves visible, the platform also appears to provide the opportunity for invisibility (Holtzblatt & Tierney, 2011). This invisibility is apparent when an individual fails to distribute information on the ESM platform and thus becomes invisible in the online context. Invisibility emerges as a counter point to the visibility of individuals on the ESM platform and occurs when individuals want to go “off the radar” (Gibbs et al., 2013). The ESM platform encourages visibility; however, the invisibility accentuates the importance of an audience for the distributed information. While the perceived opportunity of distribution exists on the ESM platform, actualizing this opportunity relies on the availability of an audience on the platform that will interact and respond to the information. This provides the basis for the second proposition,

***Proposition 2:*** *An organizational member’s perception of distribution of information and people on an ESM platform is positively related to the extent of his/her engagement in interactions on the platform.*

In the literature, some examples supporting this proposition are evident. DiMicco et al. (2008) described the relation between social connections and the distribution of information as part of their study of the Beehive platform at IBM. In particular, one of their respondents noted, “*You have enough people from corporate (on the*

*platform) that you can put an idea out there. It may skip several levels. You don't know which executives might look. It might just be enough to spark interest in someone high enough to get something done. A very good forum [for this] I think"* (2008:7). In this example, the distribution of information about an idea on the Beehive platform was fueled by the possibility of interaction with senior organizational members. The relation between distribution of information on ESM and the interactions on the platform appeared related to considerations of visibility within the organization. In another example, Efimova and Grudin (2008) investigated internal bloggers at Microsoft and concluded that *"in employee weblogs, ideas that were previously unarticulated or hidden in personal archives become visible, interlinked, and searchable"* (2008:11). Here, the ESM platform allowed the audience of the messages to see, relate and discover the information shared (Efimova & Grudin, 2007). The link between the distribution of information and the possibility of interacting with others on the ESM platform was underlined by the considerations of audience in relation to the distribution of information on the ESM platform. Farzan et al. (2008) presented an experiment regarding incentives for Social Network Site (SNS) participation at IBM suggesting how many users formed their contributions in a way that would increase recognition from others. Similarly, interviews with organizational bloggers at IBM by Huh et al. (2007) indicated that participants often had an audience in mind when they shared knowledge, which influenced how they provided information they believed would appeal to potential viewers. Thom-Santelli et al. (2008) showed how users of a social tagging system at IBM actually anticipated that others would find the information and shaped the contributions accordingly.

The examples demonstrate how the distribution of information and people on the ESM platform is linked to interaction on the platform across levels of the organization as well as reaching a specific audience. In this way the perceived distribution affordances are actualized through interactions on the platform and reach a specific audience.



### ***2.2.2 Association Affordances***

ESM afford association of information and people through connecting information and people to each other in a networked structure. The association affordance refers to the increased opportunity of creating associations and sustaining relationships between both content and people on ESM (Treem & Leonardi, 2012). The afforded association on ESM is bound to the possibility of establishing links to others or to a piece of information beyond the intentions of the original communication action (Farzan et al., 2009). For example, a conversation between two individuals on the ESM platform that a third individual can associate with might cause that individual to join in the conversation. The associations rely on the interactivity between individuals on the ESM platform (Fulk & Yuan, 2013). Interactivity stems from the properties of ESM as a social networking technology in which users can create and maintain ties (Ellison et al., 2007). In the organizational context, the afforded association of ESM can bridge ties between employees across borders, time zones and business units or teams (DiMicco et al., 2008). The associations between people and content that ESM afford is also present in the opportunities to engage and disengage that are available on the ESM platform (Gibbs et al., 2013). In this sense, individuals on ESM can join in or leave the conversations when they want, based on their desire to engage or disengage. The ability of quick interaction and constant updates creates a wide number of association points on which individuals can engage but can also create constraints in the form of information and attention overload (Gibbs et al., 2013). Central to the afforded associations is the availability of other people or bits of information that can be associated with. Acting on the opportunity of association will then be related to the availability of someone or something to associate with. Based on this we present the third proposition,

***Proposition 3:*** *An organizational member's perception of association of information and people on an ESM platform is positively related to the extent of his/her engagement in interactions on the platform.*

In the study of social media tools at HP, one participant commented that employees viewed social media content in the company as “*a way to orient themselves in the organization*” (Brzozowski, 2009:7). In line with this, Jackson et al.'s (2007) investigation of bloggers at a large technology company found that

users viewed participation as a way to associate with others in the organization, become a part of a community, and build personal networks (2007:23). Describing how ESM in organizations sets itself apart from other technologies Treem and Leonardi (2012) explained how social media afforded individuals a way to make associations more explicit. One way in which this explicitness was achieved was through the signaling of relationships with others on the ESM platform. Investigating the tool Beehive at IBM, DiMicco et al. (2008) revealed how the participants used the site to connect with the “*weak ties*” in their network such as colleagues they did not know well or ones they had worked with previously but did not communicate with on a regular basis. Further, the insight from the study revealed stories of users meeting new employees through the platform and forming personal and business connections that in some cases led to significant business and personal interactions outside the platform (DiMicco et al., 2008). Overall, the findings from this study indicated that connecting beyond one’s own network was one of the key activities and motivations for using Beehive.

The examples demonstrate how the association of information and people is linked to interaction on the ESM platform through ESM indicating and making explicit the relationships. The process of actualizing association affordances can then be described as the goal of orienting oneself in the organization is reached through the utilization of association affordances in interactions on the ESM platform.

### ***2.2.3 Amplification Affordances***

ESM afford amplification of information and people through the reinforcement, reproduction and multiplication of information on the ESM platform. The amplification affordances build on the material property of the ESM platform as a channel for broadcasting information to a wide audience. In the networked public of an ESM platform the digital content and its ease of duplication creates opportunities for replicability and scalability of information (boyd, 2012). The ESM platform then give organizational members the ability to amplify local news at a corporate level (Zhang et al., 2010). The echo-chamber effect, which ESM can create within the organization, reinforces the distributed messages and maintains

them for future reference within the organization (Leonardi et al., 2013). The amplification of messages through ESM also emerge from opportunities of meta-voicing, which entails the individuals reacting to other's presence, profiles, content, and activities on the ESM platform (Majchrzak et al., 2013). Meta-voicing differs from that of voicing since part of the process is to add knowledge to existing content already on the social media platform, like re-tweeting, commenting on someone's post, liking a profile, etc. (Majchrzak et al., 2013). In this sense, ESM afford amplification of both content and of the individual who posted or commented on that content enforcing their position in the network. Actualizing opportunities of amplification on the ESM platform become dependent on the interactions of others with the content provided. Thus, the interactions that take place around a certain post will rely on others on the platform to interact with that post through comments in order for the amplification activity to take place. This allows us to formulate the fourth proposition,

***Proposition 4:*** *An organizational member's perception of amplification of information and people on an ESM platform is positively related to the extent of his/her engagement in interactions on the platform.*

As an example of this, Zhang et al. (2010) investigated the use of Yammer at a fortune 500 company and found that the interactions and the communal nature of the tool allow “*a place to publish their local news at the corporate level, which was close to impossible to do previously*” (2010:126). In this example, the amplification of information is tied to the possibilities of interactions between organizational members across the boundaries of the organization. Farrell et al. (2008) reviewed studies on internal blogs, wikis, social tagging and SNS at IBM and noted specifically how comments on blogs result in far-reaching organizational conversations and allowed contributions to be sustained by continuous interactions and communication. In their study of the Beehive platform at IBM, DiMicco et al. (2008) showed that employees used the site to reach out across teams and division boundaries to connect with people around similar interests (2008:9). The amplification of information through the interactions in the network emphasized how the interactions on the platform supported the broadcasting of messages to a wider audience. Farzan et al. (2009) implemented a rating system in IBM's SNS Beehive that allowed selected users to promote

content to others by applying a visible badge to content that indicated interest. This feature proved effective in getting workers to view more diverse sources of information. Interactions on the platform were in this case promoted by the amplification of content through badges, which encouraged people to engage with the content.

The examples demonstrate how the amplification of information and people is linked to the interaction on the ESM platform through the extended reach of the message when there are individuals in the network who can share and disseminate the content. The amplification affordances are then actualized through the continuous interest-based interactions on the ESM platform.

#### ***2.2.4 Contextualization Affordances***

ESM afford contextualization of information and people through the placement of information and people in contexts of certain situations on the ESM platform. The contextualization affordances focus on the contextual reference that the ESM platform offers through the material properties of profile creation and networked connections. ESM provide visibility of the information shared which makes it much easier for others, not part of the initial communication to see what was said and who said it (Leonardi et al., 2013). The material properties of ESM such as status updates enable individuals to understand the context of both people and content (Ellison et al., 2014). The meta-knowledge provided on ESM further allows for the continuous attachment of meaning and context to existing content on the platform (Fulk & Yuan, 2013). Often when sharing information on ESM, the contributors have an audience in mind and provide information that they believe will appeal to the potential viewers (Huh et al., 2007). Using meta-knowledge can then enable repositioning or reiteration of these messages in different contexts (Fulk & Yuan, 2013). Linked to this, ESM provide organizational members the opportunity to edit and shape the information on the platform (Treem & Leonardi, 2012). The afforded contextualization of ESM within the organization does not only include content but also positions individuals on the platform and within the organization. Using the ESM platform

to identify expertise at IBM revealed that individuals were more likely to contact people who were active on ESM as they signaled expertise and availability (Shami et al., 2009). In this sense, the contextualization also implies a generative role-taking (Majchrzak et al., 2013), which is based on the context in which the individual was acting on the ESM platform. The active behavior of contextualizing information or people on the ESM platform requires the situating of these in relation to existing interactions or expected interaction with others on the platform. Based on this the fifth proposition is generated,

***Proposition 5:*** *An organizational member's perception of contextualization of information and people on an ESM platform is positively related to the extent of his/her engagement in interactions on the platform.*

In the study of Beehive at IBM by DiMicco et al. (2008) one respondent noted that, *"Beehive is a way to have people know something about you, maybe remember something about you. In a company with 300,000 people, it is easy to get lost. If you want to advance, people need to know something about you. Obviously, you got to do your job and your manager has to agree you do a good job to advance, but it is all about networking. You never know where your next job will come from, and the more people you can connect with, the bigger set of opportunities for your next job."* (2008:6). DiMicco et al. (2008) highlighted how interacting with others on the Beehive platform was a way for employees to become part of a specific community of practice within the company. One respondent in the study even noted how he used the site *"for the future's sake"* (2008:6) because the relationships he was forming within this community would help him in his long-term goals. Contextualization of the individual organizational member through the interactions on the Beehive site then became a way to be noticed within the company. In the study of a wiki at a large communications technology company, Kosonen and Kianto (2009) demonstrated the contextualization of information on the ESM platform by noting how many employees liked the open communication on ESM as it eliminated decisions about who to include (2009:27). John and Seligmann (2006) discussed how collaborative tags may be used to identify experts in an organization and demonstrated how this information could be integrated into a communication system at the business communication company Avaya. Contextualization through tags then became a

way of emphasizing the key message of the information shared as well as enabling communications between employees.

In the examples, the interactions on ESM are part of the actualization of the afforded contextualization of both people and content by encouraging the individuals to position themselves and their content in the context of the ongoing interactions on the platform. The perceived contextualization affordances become actualized as the interactions on the ESM platform allow the individual to situate him/herself or the content they are sharing in the context of key interest areas.

### ***2.2.5 Preservation Affordances***

ESM afford preservation of information through creating durable repositories transcending space and time. The preservation affordance is based on the material property of recording and maintaining of information that is part of the ESM platform. ESM allow content previously created and published to remain accessible on the platform (Treem & Leonardi, 2012). The accessibility of information on ESM is made possible through the durable online repository that the platform provides (Pike et al., 2013). The availability of the information and content last beyond the time of the initial post and creates the opportunity of “triggered attending” for individuals (Majchrzak et al., 2013). As the conversations and information are preserved on the ESM platform, the individual can listen along to the conversations without taking active part in them while still maintaining the opportunity to join at any time (Hampton et al., 2011). The preservation on the ESM platform creates the possibility for content and the people who supplied it to become engaged in interactions on the platform independent of the time and place in which the post was originally generated. However, if no one interacts with the post the opportunity of preservation does not become visible, as the information will be idle on the platform. This generates the sixth proposition,

**Proposition 6:** *An organizational member's evaluation of preservation of information and people on an ESM platform is positively related to the extent of his/her engagement in interactions on the platform.*

In their review of social media use at IBM, Farrell et al. (2008) argued that the technologies could create a more “socially resilient enterprise” because “*tracking and recording various interactions allows the possibility of analyzing interactions over time to improve their effectiveness and efficiency*” (2008:3). The preservation of information then created the possibility of revisiting existing interactions for the purpose of gaining overview or additional insight into the conversations within the organization. Investigating the storing of information on social media at IBM, Mejova et al. (2011) examined instances of reuse in an internal file repository and found that employees were significantly more likely to reuse a presentation created by an employee that they had friended on the internal SNS tool. This example underlined the importance of the interaction on the ESM platform as a driver for considering and utilizing the information that is preserved on the platform. Studying the development of JPL Wired, a wiki tool, at NASA’s Jet Propulsion Laboratory (JPL), Rober and Cooper (2011) found that the tool was especially valuable for new employees as the preservation of information made it easy for new employees to familiarize themselves with the interactions going on within the organization. In their study of blog use at a large IT company, Jackson et al. (2007) found that the ESM platform served to sustain an idea of activities going on in the organization and that new workers used the social media to gain access to an established community of information and resources. Zhao and Rosson (2009) noted in their study of Twitter users at a large IT company that respondents felt that microblogging could assist in “keeping a pulse on what is going on in others’ minds” by providing access to streams of comments from individuals across the organization (2009:249).

The examples demonstrate how the preservation of information and people was linked to the interaction on the ESM platform as these served as a way for the preserved information to be generated and recognized. The preservation affordances are actualized as the goal of improving effectiveness and efficiency is reached when interactions on the ESM platform encourage individuals to reuse material and enter a community of resources and information.

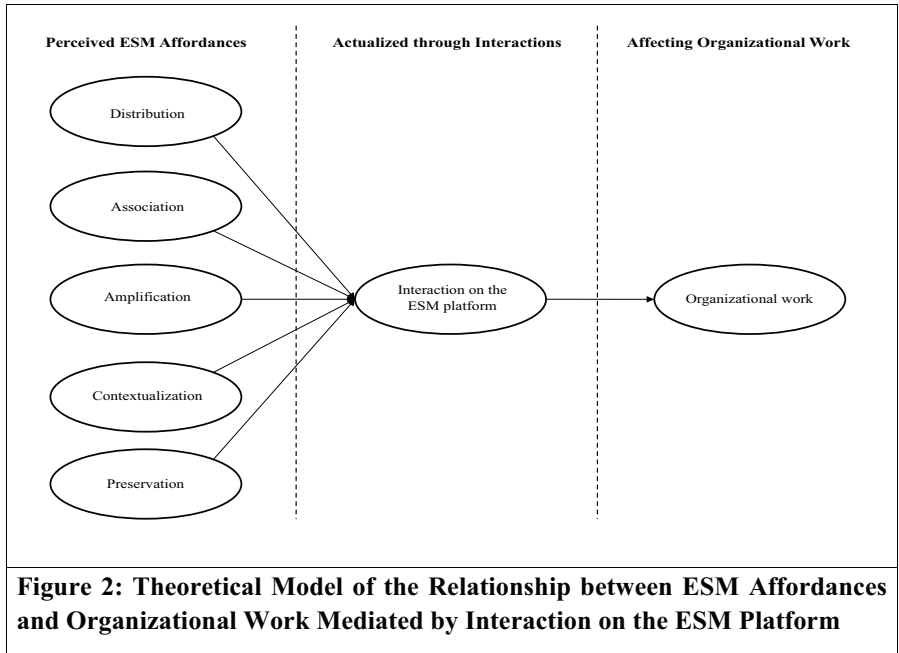
The five affordances highlight the central opportunities and constraints that scholars have attributed to ESM in an organizational context. The examples from the literature call attention to how the perceived affordances become enacted through the interactions on the ESM platform. Based on the six propositions, we now present a theoretical model outlining how interactions on the ESM platform mediate the effect of the perceived ESM affordances on organizational work.

### 3. Theoretical Model

The theoretical model is displayed in Figure 2 and outlines how *the perceived affordances of ESM affect organizational work when they are actualized through interaction on the ESM platform*. The objective of this theoretical model is not to propose the exact relation between ESM affordances and specific organizational work practices, but rather to focus on the mediating role of interaction on the ESM platform in the actualization process of the ESM affordances into actions that influence organizational work.

As described in the theoretical foundation, interaction on the ESM platform is manifested in posts, comments, and likes that organizational members perform on the ESM platform. The process of actualization emphasizes the actions taken, based on a perceived affordance which is enacted to reach a specific goal (Strong et al., 2014). The actualization of affordances implies that an affordance must first be perceived before it becomes actualized into action (Kyttä, 2004; Strong et al., 2014). Thus, for the actualization process to occur the organizational member must see the opportunities that are attached to the use of the ESM platform and then act upon them.





In the development of our propositions, we argue that the actualization process takes place as the interactions between organizational members on the ESM platform (i.e. posting, commenting and liking information and individuals) enables the perceived affordances of ESM to be utilized and shaped into actions. In line with our propositions, this implies that a positive relationship exist between the individuals' evaluation of the perceived affordance and the level of engagement in interactions on the ESM platform. The effect of ESM on organizational work then arises through interactions on the platform in which the perceived affordances of ESM become actualized into actions. We recognize that the affordance can be perceived through the individual perceptions of the action possibilities that the ESM provide, but we argue that in order for the goal of organizational work to be achieved, the affordance must be actualized into practice. The theoretical model outlines the detailed relationship between the different variables of our propositions. While we do not test the model as part of this theory development

paper, a few comments should be made with regard to the future testing of the proposed model and the theoretical propositions.

### **3.1 Dependent and Independent Variables**

The perceived affordances of ESM are based on the perceptions of the individual in terms of the action possibilities that the ESM platform provides for them. Relying on the affordance approach from Treem and Leonardi (2012), measuring these can entail asking the organizational members to reflect on what they perceive the ESM platform to give them the opportunity to do and to what degree. In particular, the measurement of the perceived affordances will refer to the five perceived affordances that were revealed in the review of the ESM affordance literature. In the design of the items for measuring the perceived affordances, the different perspectives found in the literature review can inform the creation of various items for each of the independent variables.

The dependent variable of organizational work refers in the model to a general concept of work in terms of the activities and practices performed by the organizational members when carrying out their job. As mentioned previously, the objective of this model is not to investigate the relationship between certain organizational practices and ESM affordances but rather to investigate the mediating role of interactions on the ESM platform in the effect of ESM on organizational work. However, a number of considerations must be given to how the variable of organizational work can be measured. In the theoretical foundations we introduced the perspective from Rice et al. (1985) on organizational work as human activities in an organizational context performed with the intention of producing something of acknowledged social value. Drawing on this, the measurement of work involves the reflection on the activities that organizational members perform with the intention of producing something of value in the context of the organization. This can be operationalized by asking organizational members to reflect on how the ESM platform has enabled them to produce value in the context of the organization. As the definition of organizational work describes, the value does not have to be monetary but must reflect something that

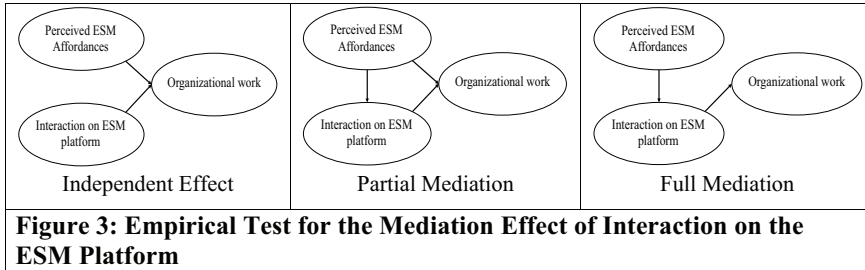
the organizational member believes will be acknowledged as value-adding in the context of the organization.

In addition to the variables and the items involved in testing the model, consideration must also be given to the inclusion of other factors influencing organizational work on the ESM platform. For example, this could be a factor of access, time, position, and technical familiarity, which could all influence the organizational work that is carried out on the platform.

### **3.2 Interaction on the ESM platform as a Mediator**

The mediating variable of interactions on the ESM platform is related to the post, comments and likes that the organizational members make on the ESM platform. The review of ESM literature revealed how interactions on the ESM platform consist of conversational interaction, contextual interaction, and content interaction (Honey & Herring, 2009; Treem & Leonardi, 2012). In this sense, operationalizing this variable will be a matter of inquiring into organizational members' engagement in the different types of interaction as well as their level of activity on the platform. This can be done through items addressing the organizational members' activity in terms of posting, commenting, and liking posts, as well as the importance of the response of others for their use of the ESM platform. Further, the interactions on the ESM platform must be evaluated as a mediating variable.

The nature of a mediator can be said to be the explanation of how and why an effect occurs (Baron & Kenny, 1986). In our model, we propose interaction on the ESM platform as a mediator of the effect of ESM on organizational work exactly based on the assumption that it can help us uncover how and why this effect



occurs. However, testing our theoretical model will involve an investigation of this mediating effect to determine whether there is an independent effect or a mediation effect as well as whether we can talk about partial or full mediation (Ho et al., 2001). Distinguishing these relationships will require empirically testing the model according to three effects. The empirical test is outlined in figure 3.

First, this will include the investigation of the independent effect of the five groups of perceived ESM affordances directly on organizational work. The next step will be to investigate the role of interaction on the ESM platform as a mediator in the model. Establishing the mediation effect requires the examination of whether the interaction has a partial or a full mediation effect. In our model, we assume a full mediation based on the centrality of interaction in the actualization of the perceived ESM affordances and as the basis for organizational work. In order to test this, the five groups of affordances and the interaction will be linked to each other as well as to organizational work to measure their relationship. Removing the link between the five groups of ESM affordances and organizational work will then allow us to compare the difference. Through this investigation, we will be able to outline the effect of interaction and ESM affordances on organizational work as well as determine how interaction on the ESM platform is a part of the relationship between ESM and organizational work.

## 4. Discussion and Concluding Remarks

We conducted a theoretical investigation of how ESM affect organizational work. The findings from this theoretical investigation makes three overall contributions. First, the paper summarizes the literature on ESM affordances and highlight how ESM afford distribution, association, amplification, contextualization, and preservation of information and people in organizations. Considering how these affordances are presented in the literature as perceived opportunities of using ESM, the various examples of ESM use highlight how these perceived affordances also become actualized through interactions on the ESM platform.

Second, our theoretical investigation places emphasis on interaction as a driver of organizational work and reveal how the technical features of the ESM platform come to life and can affect organizational work through interactions on the platform. By emphasizing the role of the interactions in the transformation of perceived opportunities of ESM into actions that support organizational work, the theory development paper adds to existing literature on affordances of ESM. Existing literature demonstrates how affordances of ESM have largely focused on the perceived affordances, which the ESM platform introduces for organizational members in the context of their work. Building on these insights, we propose that the effect of ESM on organizational work include consideration of these perceived affordances as well as consideration of how these affordances become actualized on the ESM platform. The process of affordance actualization can provide interesting insights into the translation of opportunities of information technology into action (Bernhard et al., 2013; Strong et al., 2014). We propose how the processes of actualization of perceived ESM affordances are tied to interaction on the ESM platform and that these interactions mediate the ESM affordances effect on organizational work.

Third, the creation of theoretical propositions and a model lays the groundwork for empirically testing the relationship between ESM affordances and organizational work at a larger scale. The research on ESM has to a high degree been carried out through qualitative investigations of this emerging phenomenon. To extend our knowledge about ESM, pointing toward more large-scale empirical investigations of this phenomena can enable further understanding of their wider implications for

organizations and organizational work (Leonardi et al., 2013). The theoretical propositions and the model presented in this paper builds on the existing literature on ESM affordances and offers a way of operationalizing an empirical test of how the known perceived affordances of ESM affect organizational work.

#### **4.1 Implications for Theory**

The affordance perspective provides insight into the ways in which ESM technology is perceived to enable and constrain a variety of activities. For example, the openness afforded by ESM has proved to both enable individuals to share and make information visible (Yardi et al., 2009; Treem & Leonardi, 2012) while also inhibiting individuals sharing of information due to concerns of disclosing unfinished material or ideas (Danis & Singer, 2008; Holtzblatt & Tierney, 2011; Majchrzak et al., 2013). In our study, we add to these perspectives by highlighting how the affordances of ESM should be considered in accordance to their nature as both perceived affordances and actualized affordances. We described how the perceived affordances will always precede the active actualization of the affordances (Kytta, 2004) and how, in any situation, many possibilities for action exist, but the majority of them will not come to be actualized (Stoffregen, 2003). For the active actualization of an affordance to take place, the affordance must become real and manifested in the actions of the individual or the group of individuals involved with it (Turvey, 1992).

The literature review on ESM affordances (boyd, 2012; Ellison et al., 2007; Fulk & Yuan, 2013; Gibbs et al., 2013; Leonardi et al., 2013; Majchrzak et al., 2013; Pike et al., 2013; Treem & Leonardi 2012) revealed five groups of perceived affordances that emerge in terms of distribution, association, amplification, contextualization, and preservation of information and people. Describing how these perceived affordances manifest themselves in the context of ESM use for organizational work revealed how the perceived affordances of ESM must be actively actualized (Strong et al., 2014) through interactions on the ESM platform in order to influence organizational work. This highlights the relational character of the ESM affordances and underlines the way in which social interactions on the ESM platform are central in the enactment of the perceived affordances into actual

actions. Affordances of ESM can then be understood on two levels; the perceived affordances and actualized affordances manifested through actual actions (Strong et al., 2014). In particular, this theory development paper opens up the process of actualization on ESM by focusing on interactions on the platform as a central part of the translation of perceived affordances into actual action. The findings highlight active actualization of the ESM affordances as important in determining which activities of work are carried out on the ESM platform. Understanding the affordances of ESM in organizational work thus involves a consideration of both perceived and actively actualized affordances.

The literature on social media has highlighted how the underlying algorithms and social data configurations that these platforms build on create new forms of community and sociality among its members (Bowker, 2005; Kallinikos & Tempini, 2014). The theoretical investigation in this paper adds to this perspective by accentuating how the use of ESM in organizations also requires attention to the interactions that the platform encourages. In the organizational context, the introduction of ESM accentuates the relationships between people, content and technology. These new dynamics require attention to the implications of the ESM for interactions between organizational members on the platforms as well as the meaning of this. In the development of our propositions, we introduce three different types of interaction—conversational, contextual, and content interaction—to highlight the different interactional mechanisms that are at work on an ESM platform. Evaluating and using ESM in an organizational context then requires attention to how these interactional mechanisms form and how they participate in translating the perceived affordances of the technology into actual actions.

#### **4.2 Implications for Practice**

In the current organizational environment, the adoption of ESM platforms is increasing, yet more organizations are also expressing difficulties with obtaining the desired benefits from the technology (Gartner, 2013). While the infrastructure of ESM provides a range of opportunities for organizations through the connected

and transparent platform, obtaining the benefits from these platforms appear challenging. In this theory development paper, we investigated the effect of ESM on organizational work with an emphasis on the process of affordance actualization through interaction on the ESM platform. Our propositions highlight the importance of not only considering the opportunities that ESM can introduce for organizational work, but also how these opportunities become manifested in activities supporting organizational work. This implies that initiatives that support the actualization of the perceived ESM affordances are crucial if the ESM platform is to play a role in organizational work. When adopting ESM, the organizational efforts must then include consideration of how to encourage interaction on the ESM platform in order to obtain the desired benefits of using the platform. While the model proposed still remains untested, the examples from other studies of ESM platforms in organizations highlight how the different affordances of ESM are to a large extent linked with the level of interaction on the platform. Thus, in order for organizational members to acknowledge the benefits of ESM and to use ESM to strengthen organizational work practices, they need to be engaged on the ESM platform.

Through our theoretical developments, we propose that organizations should devote more attention to nurturing the interactions on the ESM platform if they wish to obtain an effect of the platform on organizational work. While previous research has mainly focused on the outcomes of using ESM, the theoretical developments in this paper argue for consideration of interactions on ESM as a way of achieving the desired effects of ESM in organizations. The focus in the practical application of the ESM platform should then be moved from the desired effects and toward the current practices of interaction on the platform.

### **4.3 Future Research**

This paper has developed an initial model and a set of propositions outlining the effect of ESM on organizational work and, further, highlighted the role of interactions on the ESM platform as a mediator that translates the perceived ESM affordances into actions of organizational work. We expect the proposed model to



be tested using a sample of organizations that have adopted ESM platforms. We suggest that empirical evidence for the model can be gathered through employing survey instruments within these organizations to measure the relationship between the outlined variables. Further, the mediating role of interactions on the platform needs to be validated as to whether it represents a partial or full mediation (as presented in section 3.2).

The literature on ESM in organizations has focused on the perceived affordances of the technology in the organization in terms of the opportunities and constraints that these ESM technologies are presumed to have. However, adding to these studies with explanations of how these perceived affordances can be translated into action within the organization appear to represent a valid point of consideration when it comes to assessing the effect of ESM on organizational work. We therefore encourage future studies to look at where these opportunities of ESM become manifested in actions and activities in the organization, in order to obtain a fuller picture of the premise and consequences of ESM in the organization. In future studies of ESM in organizations, researchers must also be sensitive to other affordances that may arise and evaluate whether these fit into any of the five representative affordances in this study or should be considered in their own respect.

Future research should also take into account additional factors that may influence the effect of ESM on organizational work. For instance, it may be expected that the culture of an organization, its existing technical portfolio or the level of IT familiarity of its employees will have an impact on the use of the ESM technology. The environment of the organization will then play an active part in determining the premise of the ESM use and in such a way might also influence the perceived and actualized affordances that are attached to the technology.

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# PAPER 3

## **Dyrby, S. Reshaping Organizations: Enterprise Social Media and the Changing Social Order of Organizational Practice**

Paper accepted for The 30th European Group of Organizational Studies (EGOS) Colloquium 2014.

# Reshaping Organizations: Enterprise Social Media and the Changing Social Order of Organizational Practice

## Abstract

*Information technology has long been a part of organizational practices and implementing new technologies often introduce new ways of working. Recently Enterprise Social Media (ESM) has entered the organizational scene introducing new ways of communicating, connecting and sharing knowledge. This paper explores the use of Foucault's dispositif analysis as an approach to analyzing and understanding the influence of Enterprise Social Media on the social order that guides practices of knowledge management in organizations. The dispositif analysis is used to investigate the historical developments surrounding the implementation of an enterprise social media technology for the practice of knowledge management in an organization. In the analysis two dispositifs are revealed, a dispositif of hierarchy and a dispositif of network. A discussion of the dispositif analysis as a method including its opportunities and limitations are presented. The analysis of historically formed dispositifs add to our way of understanding the way in which ESM introduce certain changes to the social order of organizational practices.*

**Keywords:** Enterprise Social Media, Knowledge Management, Organization, Dispositif analysis.

# 1. Introduction

The reshaping capabilities of technology on organizational practices are not a new phenomenon. Attributed influence in organizational areas such as culture (Leidner and Kayworth 2006), performance (Melville et al. 2004), learning (Alavi 1994; Attewell 1992), and change (Markus and Robey, 1988) technology has proven to be an important part of shaping organizations. Thus, understanding technology's influence on organizations has been a prominent topic within many fields such as organizational studies, information systems, and management. Studies dealing with technology in organizations have faced many challenges including approaches to describing technology (Orlikowski and Iacono, 2001) as well as how to approach the analysis of the influence of technology on organizations (Orlikowski and Baroudi, 1991).

With the recent advances in technology and especially the move towards use of more social technologies such as social media within organizations understanding these technologies are becoming key for organization (Leonardi et al. 2013). Today, social media has become a phenomenon transcending private, public and commercial spheres. The changes brought on by social media has been described in many aspects demonstrating how the media are giving people a voice in the world and allowing interactions to emerge (Kaplan and Haenlein, 2010). In organizations, social media, referred to as Enterprise Social Media (ESM), have been afforded a great deal. ESM are providing new opportunities form social connection and interaction between organizational members and changing organizational dynamics accordingly (Leonardi et al. 2012; Treem and Leonardi 2012). Especially, ESM are providing an infrastructure that support knowledge sharing between organizational members (Majchrzak et al. 2013). An interesting perspective for research resides in how we can work with describing the changes that enterprise social technologies brings to these particular practices in organizations. While existing studies have looked at the technological functionalities that ESM add to these practices investigating the changes the technology brings to the underlying social aspects of work remains unexplored.

Foucault (1977) approaches the description of changes in society by looking into the past in order to say something about the future. Through concepts of discourse and power Foucault puts forward the historical perspective as a way for us to investigate emerging social orders and the way they change (Falzon 1998). An overlooked concept in the use of Foucault's analysis is that of *dispositif* (Peltonen 2004). In the use of *dispositif*, Foucault (1976) introduces a frame for us to make use of history and describe discursive and non-discursive elements of the changes occurring. This paper seeks to add to ways of exploring social technology in organizations by making use of Foucault's *dispositif* analysis to study the influence of ESM in organizations. The following research question is pursued, *What describes the social order that guides practices of knowledge management on enterprise social media?*

The investigation is based on a case study of a company implementing an ESM platform for knowledge sharing and management. The study describes the adoption of ESM in light of the history of previous knowledge management initiatives in the case organization. Using Foucault's *dispositif* analysis the descriptions of past and present practices involving knowledge creation and sharing demonstrate how a new social order emerge with the adoption of ESM.

Next the theoretical foundation of the study is outlined and the research setting and premise is explained. The analysis is presented through providing a historical account of the organizational use of technology for knowledge sharing practices followed by the presentation of two dominating *dispositifs* of hierarchy and network. The findings are discussed and concluded upon with reflections for further applications of the *dispositif* analysis.

## 2. Theoretical Foundation

The theoretical foundation outlines existing perspectives on information technology and organizational practices and describes ESM and its implications for practices of knowledge management in organizations. Further, Foucault's concept of *dispositif* and the *dispositif* analysis is presented as a way of studying the implications of ESM in organizations.

### 2.1 Enterprise Social Media Technology and Knowledge Management

In organizations the influences of technology are found in both large-scale operations and every day practices. The duality that exist between technology and practices present a constant and ongoing development of the organization (Orlikowski and Robey, 1991). Consequently, the interplay between the two becomes important when considering the shaping and reshaping of the organization. Linked to organizational practices of collaboration (Smith and McKeen, 2011), learning (Robey et al., 2000), productivity (Black and Lynch, 2001), performance (Brynjolfsson and Hitt, 2000) and innovation (Nambisan et al., 1999) information technology has been established as a key component in organizations. One of the central elements highlighted in these studies is the enhanced knowledge sharing and creation that information technology provides organizational members.

Information technology support practices of knowledge sharing between different communities of practice and breaks down barriers for information and knowledge allowing access to what was not otherwise accessible to the members of the organization (Pan and Leidner 2003). The impact of information technologies in organizations has led to much research into knowledge management systems treating knowledge as a valuable resource within the organization (Alavi and Leidner, 2001). Establishing successful technologies for the handling of organizational practices of knowledge creation and knowledge management requires the balance between the organizational culture, techniques and

technologies (Bhatt, 2001). In the development of new virtual technologies for knowledge management the understanding of what binds these practices together and how it is shaping the organization becomes even more important. The combination of virtual work practices involving knowledge creation and sharing with information technologies is then not to be taken lightly as it can have consequences for the success of work within the organization (Griffith et al., 2003). Recently, ESM technologies have entered the organizational scene and presented new opportunities virtual work in the organization.

ESM denotes the adoption of the popular social media technologies into organizational practices (Leonardi et al., 2013). Placing social media at the top of executives lists Kaplan and Haenlein (2010) present describe social media as a collection of internet-based applications that build on Web 2.0 and allow users to exchange user generated content. Boyd and Ellison (2007) define social media as a web-based service that allow users to perform actions of creating profiles, articulating a list of users who they want to connect with and give users the ability to view and investigate this list through an online system. The open nature of the social media is highlighted through the increased connectedness and transparency between the parties communicating on the media. ESM, relate to the capabilities attached to social media and are referred to as second-generation knowledge management systems designed to encourage the development of communities of practice and to stimulate the 'knowing experience' rather than merely transferring knowledge (Brivot 2011). Through the added opportunities for communication and ongoing dialogue between all members of the platform, ESM put emphasis on social relationships, communication, conversation and ad-hoc social sharing (Reimer and Scifleet 2012).

ESM are unique in their ability to communicate messages both to specific individuals and broadly to everyone in the organization. ESM outline four main affordances that can be linked to social media in an organizational communication context of visibility, editability, persistence and association (Treem and Leonardi, 2012:9). The open display of particular co-workers as communication partners,

and the posting, editing, and sorting of text and files, while preserving all the interactions in the digital medium, enable broad communication (Leonardi et al., 2013). This increased visibility appears to be exactly where ESM are making a big impact on organizations. While media such as email, chat, and telephone conversations are preserved between the invited members, the interactions on the enterprise social media are at most times shared across the entire organization, allowing everyone to see and follow what is going on (Cross et al. 2003). Previously, many organizational interactions have been invisible, but they are now performed in the open, adding a new layer of visibility and transparency.

The characteristics, both social and technical, of ESM indicate how the introduction of them into organizations can introduce changes in the organizational practices. In order to look into these the concept of *dispositif* from Foucault (1977) is investigated as an approach for describing the changes that the social technologies bring to the social order of the organization.

## **2.2 Foucault's Dispositif**

In scholarly interpretations of Foucault's writing his concept of discourse has often dominated the description of the contribution made. Some scholars (Peltonen, 2004; Pløger, 2008; Raffnsøe et al., 2008) describe how discourse appears only to make up part of the way Foucault describes and presents the social world to us. Foucault's literature also introduces the wider concept of the *dispositif* (Pløger, 2008; Raffnsøe et al., 2008). The *dispositif* includes discourses, institutions, architecture etc. and center on understanding practice and the relation between practices more than solely focusing on single discursive elements. It is in the relation between the different elements of the *dispositifs* and the uncovering of the patterns between them that we can be able to understand the world.

The *dispositif* is thought to present an overall pattern in social action that demonstrates how a certain thing has worked or continues to work predisposing to social interactions (Raffnsøe et al., 2008). It is in the look into social relations and



interactions between individuals as well as a description of these relationships that we can start to make out these patterns of social actions. Foucault (1980) refers to the dispositif itself as a system of relationships that can be established between elements of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measure, scientific statements, philosophical, moral and philanthropic propositions. Foucault (1977) presents how the deciphering of these relationships is centered on a presentation of the before and after to present the dispositifs that are a part of this transition. In *Discipline and Punish* (1977), Foucault shows how the move in punishment form the body to the soul causes new dispositifs to emerge both in terms of discourse describing punishment, institutions of prison and actions of justice. The change from one order to another can thus enable the development of new dispositifs that have their major function in a given historical context (Foucault, 1980). In *A history of Sexuality* (1976) Foucault provides an analysis of the change between two dispositifs. The dispositif of alliance determined by a system of marriage and development of kinship ties and the dispositif of sexuality determined by more mobile systems and contingent power relations (Peltonen, 2004). In this, Foucault (1976) demonstrates how dispositifs include both discursive and non-discursive elements and that the focus is on the relation between the two. The dispositif can be something we act through in the form of a certain logic that assigns what can be done and provide certain guidelines. It is in these guidelines that the dispositif is tied to the creation of a normative logic that can take part in reorganizing social interactions in a given context. The concept of social context is not tied to any specific form but can for example be in the form of an organization or collective that the dispositif is influenced by and can influence norm creation and formulation (Peltonen 2004).

### ***2.2.1 Dispositif Analysis***

The goal of the dispositif analysis is to grasp the overall social relations that link together elements making up the dispositif (Foucault, 1980). In a sense it can be described as the investigation of a social order while it is being created (Reffsnøe et al., 2008). The dispositif analysis often investigates certain phenomena that are undergoing a change in history for example punishment, discipline or sexuality. Based in the investigation of this phenomenon the analysis highlights and displays the social connection and normative behavior that surrounds it. The aim of the

dispositif analysis is to describe and form a body of knowledge, techniques and scientific discourses that make up a certain practice in a given context. For example, in Foucault's (1977) text on the birth of the prison the objective is to outline the dispositifs that give the power to punish then and now. Investigating the past and historical occurrences can foster a presentation and unveiling of the present (Foucault, 1977). In this framing of the analysis it is possible to decipher how the historical look into the past in terms of certain elements can reveal a presentation of what makes up the former and present dispositifs surrounding a given phenomena. One central thing that dominates the analysis from Foucault (1977) is the creation of a binary relationship between concepts within the dispositifs. It is in the presentation of these opposing values tied to the objects through the dispositif that underline the distinctions in the social orders created.

The dispositif analysis emphasize six central elements that help describe the state of the dispositif. First, *objects* are at the center of Foucault's (1977) analysis. In the investigation of these objects Foucault (1977) looks for and compares the meaning that they are ascribed within the frame of the different historical contexts and perspectives. Objects can be observed through the meaning creations of them by people. In the presentation of the body Foucault (1977) underlines how the binary relationship observed in the changing dispositifs describes either the body as one or the body as parts. It is thus possible to observe a distinction between the different representations of the object. Second, the framing *discourses* are a part of the elements that make up the dispositif. The discourses are often described through the creation of certain way of acting that characterize the dispositif (Foucault, 1977). In particular the framing discourses become an important element in the relationships through their role in coding and decoding of norms and objects within the dispositif. Third, *norms* make up key elements of the dispositifs composition in the way in which the behavior and mentality of society is connected to normative formations (Foucault, 1977). The norms are often found in the identification of opposing values identifiable within each dispositif. Fourth, *signal and symbols* used by individuals to express the norms and beliefs manifestation in the practices of the collective group, Fifth, *rules* become exemplified in the change in policies and components that make up the systems

within each *dispositif*. In particular Foucault (1977) shows how they are often found in the creation of set models and rules that are designed to provide solutions. However, they can often also represent certain problems through their assignment of particular rules and set ways for things to occur. The creation of these policies is tied strongly to the relationships forming the *dispositif* as they often prescribe certain boundaries or approaches that must be kept. Finally, networks of *power* present an important element in the composition of the *dispositif* and they often underline the relationship structure between the different elements.

The theoretical background demonstrates an interest in uncovering approaches for how we can describe the influence of ESM as a technology in organizations. *Dispositif* analysis can serve as an approach for the description of what influence the ESM may have on the social order of the organization.

### 3. Research Setting and Premise

The data for this study is gathered in a Danish IT consultancy company, utilizing the ESM platform Yammer. The company currently has 41 employees and specializes in consultancy services within Microsoft SharePoint solutions, assisting large international companies. Most employees are based in client offices and work from there on a daily basis. Following a period of extensive growth in number of employees Yammer was adopted as a tool for internal communication and knowledge sharing in the summer of 2012 at the initiative of the new CEO. Until then the company had relied on communication sources such as email and the company intranet.

The data collection is based in the gathering of information about the previous knowledge management initiatives at the company as well as the process of implementation and adoption of ESM into the practices of the employees. The case material includes, interviews with employees that have undergone the transition from one system to the other, field observations made on site at the

company and online as well as logged data from the Yammer platform. Further, the outline of the initiative and process as described by the person in charge of the implementation of the ESM platform is also made use of. The history serving as the basis for the investigation in this paper is thus based on the compilation of the different sources into making up the story. It is recognized that this might be a limitation as the history might entail certain elements not disclosed in the chosen methods. Table 1 provides an overview of the data collected.

<b>Table 1: Overview of Data Collection</b>	
<b>Source</b>	<b>Data collected</b>
Yammer log data	1,997 Yammer posts and their comments
Field observations	163 hours on site (over 3 months), ongoing engagement and observation online on Yammer platform
Interviews	10 interviews with employees lasting between 40-50 minutes (CEO, HR manager, sales people, project managers, consultants, and student worker)

The organization has previously explored many initiatives for knowledge management in order to enable their employees to work together and share and create knowledge. In the company knowledge management is described as the creation and sharing of information among employees. In this process special focus is put on enabling communication between employees to facilitate knowledge creation and to allow for the created knowledge to be stored and shared internally in the organization. The knowledge that the organization is aiming to create, involves development of client solutions and ideas as well as optimization of work processes and systems. Within the case several impacts following the adoption of ESM for knowledge management has already been noted in terms of change in reach, influence and connection frequency between the employees at the company. The company objective with the addition of social media as a tool is to enhance the connection between the employees especially the ones that are spatially dispersed.

### **3.1 Data Analysis**

On the basis of this selected works from Foucault will be focused on throughout this paper. It is recognized that his work extends beyond these selected works however the objective of this paper is not to investigate Foucault's writings in full detail but to explore the use of his dispositif analysis to provide insight in regard to the empirical case implications in particular. The purpose of Foucault's (1977) dispositif analysis is to look into the process of a historical change. The historical account is described on the basis of central activities or events that take place in regards to the use of knowledge management technologies and approaches. In accordance with Foucault (1977) the story is presented in stages that all describe a certain part of the story.

The historical account in this study is based on the technologies used and adopted for knowledge sharing and creation within the company. The account describes the different technologies and the surrounding effects of these within the organization ending with the adoption of the ESM platform Yammer into the organizational knowledge sharing practices. The story is treated as a narrative (Czarniawska, 1997) outlining the company initiative to adopt a new ESM technology including their experiences with past technologies. The organization has previously relied on an intranet in the form of a bulletin board as well as email, phone and scheduled in-house meeting. All employees have access to the platform including top management. The use of the social media technology have quickly come to replace certain meetings, which were instead facilitated on the social media platform in either open public groups or private invite-only groups. Foucault's (1977) dispositif analysis is used to describe the social history pertaining to knowledge management practices in the organization.

## **4. The Historical Account**

The purpose, in line with Foucault's (1977) dispositif analysis is to look into the history and describe what makes the power to create and share knowledge

available in the organization. In the case organization knowledge management is described as the creation and sharing of knowledge among employees. Central to these actions are the communicative and social practices that enable communication and information sharing among the employees at the organization. The historical account provided in the following is divided into three main periods of time to describe the different practices and initiatives surrounding knowledge management in the organization. The three parts are the beginning, the transition and the new.

#### **4.1 The Beginning**

In the early days of the case organization the internal communication was centered round a meeting culture with a following dissemination of the core ideas and input arrived at within the meeting. The structure of the organization was based on a one location based group of employees that were often placed in the same location and facing each other on a face-to-face basis almost everyday either in the office or at the client locations. The communicative practices involved the use of phone and internal mail as well as emails passing back and forth between the employees. In the message transfer the format would dominantly assume a one-to-one message or the delivery of a one-to-many message often in a standardized format. Most of the knowledge creating initiatives was found in the structure of meetings set up between selected groups of employees that through scheduling and organization could meet up. After the meeting had taken place the findings or conclusions reached at the meeting would be distributed to the other employees within the organization through an email. The channels of communication were based on the delivery of messages from the sender to either one receiver or to a group of receivers. Especially in the communication of one message to many a form of standardization of the message format and style was required. The more one-to-one based interactions were often kept private and were contained to take place wither in separate offices, meetings rooms around the coffee machine etc. The place of these interactions was not always know and often involved a selected number of individuals coming together on either a set or more ad hoc basis. The knowledge created via these encounters were often kept between the involved parties or simply discarded as the individuals carried on with their day. The

creation of knowledge was also found mostly among the employees on the same project, as the ability to get into contact with people in proximity either physically or via phone and email would occur easier within these workgroups.

In the sharing and distribution of knowledge the company would rely on certain communicative sources for the information, this could for example be the office manager or the CEO. The knowledge sharing would take place from employee to employee and rarely reach the whole company as the information for all of the company was often passed on to one of the intermediary channels, such as the CEO or office manager for them to distribute. In this way the format for knowledge sharing assumed a formal nature, as the sender of the knowledge would be centered at the core of the organization. The status of this was not determined by formal policies but rather resided in the organizations 'unwritten model' for knowledge dissemination. In this way the employees would approach some of the central organs in the organization with the knowledge they wish to disseminate. This process also implied a number of processes to refine and make clear the knowledge and information shared, as it would have to pass through a number of hands before being disseminated.

## **4.2 The Transition**

The change that followed in the organization came with the introduction of an intranet to use for delivery of information and one-way communication in the form of online posting of messages to the whole company. An online message site working as the front page of the employee intranet served as an electronic bulletin board. The messages on this online platform were dominated by the one-to-many format previously found in the centralized and standardized messages distributed via email or internal mail. Through the posting of one message on the online format it was possible to reach the entire organization. The first intranet platform did not support engagement from employees on the basis of the posted messages. This led the organization to develop their own system in the form of a discussion forum that would facilitate a platform for the employees to post messages to each other. This initiative was created to facilitate additional

knowledge creation and sharing by allowing the responses and opinions of the employees to be distributed via the online platform. The interactions generated on this discussion forum were mostly dominated by messages of a formal nature serving a purpose of informing about events, current projects and so forth. The engagement of the employees was then not happening through active discussions and debate but served an information delivery purpose. The creation of knowledge within the company still mostly took place in the meeting rooms and offices of the individual and sometimes the results of these meetings would make it to the online discussion forum or the intranet news. In the sharing of knowledge through the online intranet the knowledge would often be posted on the platform but without any reaction following. Thus, the sharing of knowledge did not seem to facilitate or inspire any additional knowledge creation within the company.

In the set up of the online intranet and the discussion forum increased focus was put on the need for set rules and policies for what could be posted onto the public forum. The creation of a set of guidelines was initiated and provided as the basis for what employees could post on the discussion forum. The intranet however was kept to contain posts from centrally positioned individuals within the organization. Thus, the employees were not themselves able to post onto the online bulletin board. In the attempts to facilitate more interaction surrounding the messages posted on the online platform the organization adopted a new SharePoint system opening up for the ability for all employees to comment on the messages displayed. This created a bit more interaction from some employees who would comment. However, after receiving some initial attention most of the employees returned to past behaviors of creating and sharing their knowledge and opinions with the employees that were closest to them. In addition it appeared that most employees would rather share their knowledge via the old email system as this enabled them with a quick response and allowed them to express themselves more informally.

### **4.3 The New**

The implemented initiatives within the organization meant additional demands from the employees through a need for support of more communication and



collaborative opportunities. This led to the adoption of the ESM platform Yammer into the internal communication of the organization. Growing in size and geographically dispersed employees the Yammer tool was adopted with the intention of promoting some of the same opportunities for communication and collaboration as found in face-to-face interactions. The objective with the implementation of the Yammer platform is to extend face-to-face interaction to the digital world. The online platform could simultaneously provide a platform on which communication could take on a many-to-many form in that all employees regardless of position and project could post and respond to each other. The networks established on the Yammer platform take on both formal and informal tones and allow for both work and interest groups to collaborate on the platform. Through the adoption of the Yammer tool into the organization a shift was noticed in the increased focus on the power of 'knowing people' and how this is now directly tied to knowledge development within the company. Changes in the norms for how you position yourself in the company became visible on the Yammer platform in the leveling of organizational positions and hierarchy as all employees are encouraged as equal contributors on the media.

As with the introduction of the intranet and the discussion forum issues about setting up new regulations and policies were raised in relation to the ESM platform. The increased public availability and open generation of knowledge brought some to suggest a need for set policies. However, these suggestions were opposed from management with the argument that they would inhibit the communication and knowledge sharing taking place in the company. The network creation on Yammer was dominated by a less formal structure as all employees were linked and could engage in conversation with each other for example for the purpose of knowledge creation and sharing. Especially in the knowledge creation process a lot of the developed initiatives are already shared and made publicly available through its development via the online platform. The online platform is providing a repository for the storage of all the knowledge created on there.

## 5.Exploring Two Dominating Dispositifs

The historical account of the initiatives surrounding the use of information technology for knowledge sharing and creation in the company revealed a number of elements and relationships changing in the social order of the organization. In particular, two corpuses of elements appear to dominate the changing perspective when exploring the historical change in the organization. The two can be framed as a dispositif of hierarchy and a dispositif of network an overview of the two dispositifs are displayed in Table 2. Looking at these closer shows how they work predisposing on the practices of knowledge management in the organization.

<b>Knowledge management influenced by...</b>	<b>Dispositif of hierarchy</b>	<b>Dispositif of Network</b>
<b>Object</b>	Email and Intranet (Sharepoint)	ESM platform Yammer
<b>Discourse</b>	One-to-one Closed (invisible)	Many-to-many Open (visible)
<b>Norms (behavior and mentality)</b>	Meeting → Dissemination Formal communication	Dissemination → Meeting Informal contributions
<b>Signal and symbols</b>	Scheduling of meetings Standardized format Proximity (physical or email)	Knowing people in the network Equal contributions Digital awareness
<b>Rules</b>	Certified contributions Established procedures	Ad-hoc contributions Self-managed procedures
<b>Power</b>	Co-presence Inclusion based on position	Online –presence Inclusion based on interest and knowledge

## 5.1 Dispositif of Hierarchy

Describing the dispositif of hierarchy reveals how knowledge management is influenced by a number of elements according to Foucault's dispositif analysis. The discourse within the dispositif of hierarchy display how social interactions work on a one-to-one communication basis. It is characterized by face-to-face interactions and reliant on a spatially connected relation between the individuals. The social interaction occurs through the connection between two individuals that are present and or connected at the same time. The framing discourses are private and need not involve more than two people. The discourse is then established by the two individuals engaging with each other and will evolve on the basis of their interaction. The story reveals how the knowledge sharing discourses under the dispositif of hierarchy often takes place in closed meetings. The following norms of behavior and the mentality are then subject to a culture of formal meetings, which sometimes lead to information subsequently, disseminated through a formal channel throughout the organization. The standardized format of information distributions serves as a signal for informing about a meeting placing the scheduling of meetings as a signal of knowledge management within the organization. Within the meeting format the physical proximity serves as a catalyst for the sharing and generation of information within the dispositif of hierarchy. In combination the scheduling of meetings, standardized format and the proximity works as signals of the hierarchical structure, which the dispositif enforces.

The narrative also emphasizes the generation of established rules for the use of the intranet and the appointment of certain individuals in the organization as distributors of knowledge on the intranet. The certified contributors such as the office manager and the CEO curate the possible contributions before they enter the intranet. Networks of power are kept in the relation found in co-presence and established over time in the same place. The power relation does not appear to shift between the two individuals engaged in the one-to-one relation but rather remains as described before the interaction. In the hierarchy dispositif the established norms and policies guiding the relation between individuals is related to creation of networks of power.

The dispositif of hierarchy works predisposing on the initiatives of knowledge management through providing knowledge creation in a closed one-to-one connection. It does not limit or determine it but creates the basis for the development of new knowledge through private conversation. The owners of the knowledge created become clear and without question as the individuals involved in the development and creation of the knowledge is limited. The predisposition that the dispositif of hierarchy creates for knowledge management is found in the assigning of set power structures creating a set structure for the knowledge creation and sharing to take place in.

## **5.2 Dispositif of Network**

In the dispositif of network, the discourses form on a many-to-many communication basis. The organizational members can communicate through posting and commenting directly to each other on the platform. The open and visible display of the interactions on the Yammer platform provides connectivity and transparency in support of the communications between organizational members on the platform. In comparison to the dispositif of hierarchy the dissemination of information on the Yammer platform is influenced by a behavior of sharing information and then if there is a shared interest arranging a meeting or establishing a group where all that are interested can join in. The many informal contributions generate a lot of information sharing on the platform, which is at times picked up and developed into a knowledge sharing and creating conversation on the platform. Rather than the scheduling of meetings with known organizational members the dispositif of hierarchy on the Yammer platform encourages how knowing people serves as a symbol for engagement in knowledge management within the organization. It is characterized by networks of individuals all relating to and communicating with each other. The role of the individual in the network dispositif is found in the diverse amount of roles, which they can adopt according to the network that they engage in. The equal contributions from many different organizational members emphasize the open structure and signal the informal contributions that are encouraged under the dispositif of network. In addition, a digital awareness emerges as the organizational members do not have to signal their inclusion by being physically there but can appear visible in the

organization through the digital Yammer platform. Policies within the network dispositif play a prominent role in order to create boundaries for the framing discourse governing the interactions. The discourse and the policies display a relationship where the facilitation of discourse should not be hindered by the policies but they should in turn be formed to follow set policies. In the network dispositif the policies can in fact be generated from the network of relations as the individuals can voice their set of norms onto the whole network. The power structure of the network is thus more based on knowledge and interest rather than focused on who has been attributed more formal power.

The dispositif of network works predisposing on knowledge sharing through the generation of a broad interaction between individuals. The networked structures underlying the interactions of the many-to-many communication allow for knowledge to be generated between diverse groups of people. Framing the discourses according to set policies that are generated through the many-to-many interactions works predisposing on the norms of knowledge creation and sharing. The co-creation among the many-to-many interacting individuals facilitates a dynamic setting and re-setting of the rules for knowledge creation and sharing.

The two dispositifs outline some core opposing values in terms of their relation and description of both the discourses, the norms of behavior and mentality, the signal and symbols applied, the establishment of rules, and the networks of power. Through the outline and understanding of the two dispositifs as well as how they work predisposing on the phenomena of knowledge sharing in the organization has enabled a description of the new order governing the organization.

## 6 Discussion and Concluding Remarks

This paper investigated dispositif analysis as an approach to describing the social order of organization brought forward by the introduction of enterprise social media into organizations. From the investigation three main insights were gained

about the social order that emerge when ESM is introduced in organizations. The three contributions are outlined and discussed in the following.

First, the application of the dispositif analysis for describing the influence of ESM on the organization in light of the historical account generated interesting insight into both functionalities of the technology and the surrounding organizational practices. Taking into account the historical transformation enables the understanding of the reshaping that the organization is undergoing through the emergence of the new dispositif of network. The historical sociology from Foucault both in terms of his discourse and dispositif analysis creates a lens that allows for the telling of the full story (Howarth, 2000). Through the dispositif analysis it became clear that providing the historical perspectives leads with it some implications for what is included in this history. As the story is told, the sources that inform it are selected and thus can frame the history towards a certain direction. In the analysis outlined in this paper some questions arise in accordance to: what are the implications for taking this approach? And how can we approach the story telling? Foucault's (1977) *Discipline and Punish* selects certain historical examples described from other scholars in order to describe his historical reflection. In the approach to the dispositif analysis the deciphering of where the historical reflection should come from is an element, which is not clear. Reflecting on this in the analysis carried out it can have certain implications whether the history is drawn from the employees, the organizational administration, other studies etc. Therefore this can represent an issue when applying the analysis.

Second, the untangling of the Foucault's dispositif analysis enable an understanding of how this analysis can aid in description of changes in what works predisposing on the social action and interaction of individuals. Using the historical reflection on how the social order forms and reforms surrounding in light of certain dispositifs gave insight into how this approach can help outline the different constellations and dominating perceptions that guide the understanding of the social order. In the uncovering of what dispositif analysis entails and how it should be approached issues arose as to what exactly describes the dispositif.

Peltonen (2004) note how a clear description of the dispositif is hard to decipher even from Foucault himself. The difficulties in deciphering the form and composition of the dispositif create a set of questions through the use of it for analysis. While the vagueness can aid in seeking the boundaries of the phenomena under investigation it can also lead to confusion. The focus is on social relations and relationships and describing the boundaries of these can be difficult and can outline why it can be difficult to distinguish these in the dispositif analysis (McHoul and Grace, 1993).

Third, the investigation gave insight into the two dominating dispositifs of hierarchy and network. The two dispositifs show how a new approach to social action and interaction emerges from the introduction of the ESM. In accordance with the dispositif analysis this does not mean that one dispositif 'wins' over another (Pløger, 2008) but rather that a transition is happening where the other dispositif will also come to play a part. In this sense the dispositif analysis help describe how the dynamics of the organization changes according to the introduction of the enterprise social media technology but does not force a complete disregard of previous workings. Although this appears as a strength of the approach it is also cause for some concern about how we treat instances when the two dispositifs overlap and come into conflict with each other for example in the application of both the older types of media such as email and phone and the new enterprise social media. This could present the basis of interesting studies looking at what exactly happens when these conflicts between dispositifs arise as well as how they are reconciled.

In the investigation of dispositif analysis as an approach to describing the changes in the social order of the organization some interesting insights were gained. It appears that the dispositif analysis can allow for a broad spectrum of concepts to look at the change of the social order of the organization. Comparing the existing social order with the new can provide us with the ability to place our analysis in the overall context of the organizational history and there through become able to compare and contrast past and current social orders.

The brief case example highlighted how it can be possible to distinguish between different influences of technology through the description of the opposing dispositifs. However, it is recognized that many other factors also play a role in these changing dispositifs, it is argued that technology will play an increasing part of the organizational formation and development in the future (Knorr Cetina, 1996). Thus, it is important that we investigate approaches to describe the influences of technology on organizations.

In the historical perspective taken affords the establishment of a great overview of the situation and the implications of the developments. The historical sociology from Foucault both in terms of his discourse and dispositif analysis creates a lens that allows for the telling of the full story (Howarth, 2000). Through the dispositif analysis carried out it became clear that providing the historical perspectives leads with it some implications for what is included in this history. As the story is told, the sources that inform it are selected and thus can frame the history towards a certain direction. Although the illustration of an organizational story used for this study is limited it did provide some general insight into the patterns of the changing dispositifs. For further research multiple perspectives of employees, managers and other stakeholders will be addressed in order to enable the creation of a broader perspective on the study.



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# PAPER 4

**Dyrby, S., Jensen, T.B., & Avital, M. Weaving Enterprise Social Media into the Social Fabric of the Organization.**

A version of the paper published as Dyrby, S., Jensen, T.B., & Avital, M. (2014). Enterprise Social Media at Work: Weaving the Social Fabric of Collaboration. *Proceedings of the 35th International Conference on Information Systems. ICIS 2014.*) The paper included in this dissertation is an extended version of the ICIS paper,.

# Weaving Enterprise Social Media into the Social Fabric of Organizations

## Abstract

*Although Enterprise Social Media (ESM) platforms have become the golden standard for nurturing collaboration in organizations, embedding these systems in the social fabric of organizations remains a recurring challenge. Moreover, the proliferation of ESM in organizations generates an ever-growing record that accentuates the web of relationships among organizational members, thus providing an opportunity to re-examine the social nature of work. Subsequently, in this study we introduce the social fabric as a theoretical frame that can be used to describe and explain how relationships are shaped and reshaped on ESM by the prevailing beliefs and practices, as well as the technological milieu. We conducted an in-depth qualitative study of three case organizations that adopted the ESM platform, Yammer. In one case organization, we investigated through a 'controversy analysis' what characterizes a social fabric and identified its distinct patterns. We then used the identified patterns not only to examine the social fabric in two additional case organizations but also to explain the different outcomes of two collaborative initiatives on their respective ESM platforms. The study provides three key contributions to IS research. First, we offer a social fabric framework as an instrument to diagnose and reflect on the social making of organizations. Second, we demonstrate how the social fabric framework can be applied to explore and explain idiosyncrasies of organizational work. Third, we articulate the controversy analysis approach to reveal the embedded beliefs and practices in organizations. The development and application of the social fabric framework reframes the ontological underpinnings of organizational work mediated by ESM.*

Keywords: Enterprise Social Media, Social Fabric, Controversy Analysis, Online Collaboration, Organizational Work

# 1. Introduction

Social interactions between organizational members are the foundation of organizational work. The implementation of Enterprise Social Media (ESM) in organizations accentuates the relationships between organizational members and provides an opportunity to re-examine the social nature of work. ESM platforms, such as Yammer, Jive, and Tibbr, are the organizational variants of the prevalent social media platforms that serve the general population at large. ESM platforms have become widely adopted in organizations to support cross-boundary collaboration (Gibbs et al. 2014), serendipitous exchange (Brzozowski 2009), and knowledge sharing (Ellison et al. 2015). In the corporate headquarters, ESM platforms have come to be the golden standard for nurturing communities of practice and the overall relationships among individuals in organizational settings (Kane 2015; Schrage 2013).

The prevalence of ESM in organizations merits an investigation into how it alters the social interactions that form the relationships between individuals on these platforms. Previous research has established that ESM reframes the nature of work in organizations and the way in which organizational members interact. For example, the open and perpetual display of messages between all members on ESM has shed light on this transparent, ad-hoc knowledge sharing and the social relationships that influence organizational practices (Richter and Riemer 2009; Riemer and Scifleet 2012). While conversations on media such as email, chat, and telephone are confined to the invited members, the interactions on ESM platforms are at most times shared across large groups or the entire organization, allowing everyone to see and follow what is going on (Leonardi et al. 2013). Overall, organizational interactions on ESM are performed in the open, adding a new layer of visibility and transparency to organizational communication (Treem and Leonardi 2012).

Although it is evident that ESM platforms change the nature of social interactions in organizations, little is known about how ESM technologies shape and are shaped by those interactions within organizational contexts. Consequently, we can benefit from a structured approach to describe the dynamic characteristics of social interactions and relationships on ESM platforms, as well as to theorize

about how the social making of the organization on these platforms influences the various aspects of work and organizational life. Subsequently, we build on the concept of social fabric to examine the social interactions and relationships on ESM platforms. Social fabric has been used in various disciplines, including economics (Hayden 1986; 2006), sociology (Broadbent 1986; Short 1984), human ecology (Henderson 1995; Pflieger et al. 2008), as well as organization and management studies (Baldwin et al. 1997; Van Maanen and Schein 1979) to explain the relationships between individuals, groups, technology, and institutions forming a coherent whole.

In this study, we utilize social fabric to explore patterns of relationships between organizational members on ESM platforms and to explain how these patterns serve as the basis for collaboration. We focus on collaboration as a particular instance of organizational work because ESM is often presented as a technology that can strengthen this fundamental attribute of work in organizations (Leonardi et al. 2013). We pursue two research questions: 1) *What characterizes a social fabric on enterprise social media?* and 2) *How can social fabric explain collaboration on enterprise social media?*

To address these research questions, we conducted an in-depth qualitative study of three case organizations using the ESM platform, Yammer. We observed how the ESM technology has become part-and-parcel of a social fabric that upholds the workings and the *in situ* dynamic practices of organizational members. We explored and described how the social fabric can be elicited and mapped through an analysis of the ongoing interactions among organizational members on the ESM platform. Based on our empirical findings, we developed a framework highlighting five patterns of relationships that characterize the social fabric and examined how these relationships are manifested in collaborative initiatives on the ESM platform. Revealing the social fabric configurations that emerged in collaborative initiatives on the ESM platform provided insight into the social interactions and relationships that can substantiate theorizing about the social fabric of organizations.

The rest of the paper is organized as follows: we outline the theoretical foundations of the study. We then present the methodological assumptions and the approach to data collection and analysis. The subsequent analysis is divided into



two parts that address each of the research questions. We first elicit the threads of the social fabric and then map how these threads weave together into a framework that characterizes the social fabric on the ESM platform in one of the case organizations. We build on this social fabric framework to analyze collaborative initiatives on ESM in two additional case organizations and then explain the social fabric configurations that are related to collaboration on ESM. Finally, we conclude by discussing the implications of our study and providing suggestions for future research.

## 2. Theoretical Foundation

To address the two underlying research questions, we conducted a review of the emerging literature on ESM technologies to understand their effect on work and their overall role in organizations. Given the nascent nature of the phenomenon, we broaden the scope of the review and include literature on online collaborative tools that can highlight the way in which ESM technology alters the relationships between people and consequently the nature of organizational work. We then introduce the social fabric metaphor and explain its utility in investigating the prevailing beliefs and practices that form the relationships between organizational members on ESM platforms.

### **2.1 Enterprise Social Media as Online Collaborative Tools**

As a subset of online collaborative tools, ESM platforms offer new ways for organizational members to connect, interact, and communicate with each other (Leonardi et al. 2013; Treem and Leonardi 2012), thereby facilitating more effective teamwork and coordination (Turel and Zhang 2011). Combining features of microblogging, social tagging, and networking (Leonardi et al. 2013), ESM platforms are characterized by their open infrastructure and egalitarian nature (Gibbs et al. 2014). ESM technologies are distinguished by the increased transparency of the communicative and collaborative processes that take place on the platform (Riemer and Scifleet 2012) and by making activities visible that were

previously invisible within the organization (Leonardi et al. 2013; Majchrzak 2009; Treem and Leonardi 2012).

The emphasis of ESM technologies is on user participation, knowledge sharing, and communication of both formal and informal information (Holtzblatt et al. 2010; IP and Wagner 2008; Rober and Cooper 2011). When sharing information on an ESM platform, individuals are able to post, edit, and sort text and files at all times (Holtzblatt et al. 2010; Leonardi et al. 2013). The ongoing information exchange in the form of posts and comments among co-workers, as well as the increased visibility of activities on ESM, builds up closer relationships between organizational members (Treem and Leonardi 2012). Consequently, ESM bolster networks of weak and strong ties between individuals, empowering communities of practice on the platform (Fulk and Yuan 2013; Majchrzak et al. 2013).

Successful implementation of an ESM platform breeds an online community that provides ample *in situ* opportunities for re-evaluating the way in which individuals relate to one another and work together (Palloff and Pratt 1999). The literature on online communities demonstrates how virtual platforms create online spaces for individuals to connect and collaborate across boundaries (Squire and Johnson 2000; Wasko and Faraj 2005). However, the mere provision and availability of online collaborative tools such as ESM do not guarantee collaboration between individuals (Johnson 2001). Rather, the emergence of communities of practice on these designated platforms relies on the social interactions and relationships in which individuals learn by participating in activities (Johnson 2001; Wenger 1996, 2000).

The existing literature provides partial answers to ‘how’ and ‘why’ individuals engage with, and contribute to, online communities. For example, we know that self-interest (e.g., Hippel and Krogh 2003; Lakhani and Hippel 2003) identity-based attachment, and identification with others (e.g., Blanchard and Markus 2004; Ren et al. 2012), ideology (Stewart and Gosain 2006), as well as social capital (e.g., Nambisan and Baron 2010; Wasko and Faraj 2005) can motivate online participation. The literature also emphasizes the size of the community (Butler 2001), conditions of membership (Ransbotham and Kane 2011), and critical mass (Blanchard and Markus 2004; Peddibhotla and Subramani 2007) as important factors, also taking into consideration the governance of online

communities in terms of roles and authority (e.g., Fleming and Waguespack 2007; Murray and O'Mahony 2007; O'Mahony and Ferraro 2007).

While the bulk of the literature is focused on the individual, structural, and governance mechanisms that drive and motivate participation in online communities, recent studies highlight the dynamic nature of the interactions and relationships that dominate these communities (Faraj and Johnson 2011; Faraj et al. 2011). Accordingly, the social dynamics on ESM platforms resemble the social dynamics in online communities of practice (Johnson 2001; Wenger 1996, 2000). In particular, online communities are portrayed as fluid organizational objects that are simultaneously transforming while still retaining their recognizable shape (Faraj et al. 2011, p. 1225). The fluidity of an online community is concerned with the interactive dynamics between people, resources and technology that are involved in collaborative work (Faraj et al. 2011). The fluid nature of ESM provides an ever-growing repository of communications within the organization that is recorded and made available by the platform. While asynchronous, text-based electronic communication is generally characterized by low media richness (Sproull and Kiesler 1986), the nature of the online platforms enables users to adapt the technology in unexpected ways to support their interaction (Desanctis and Poole 1994; Faraj and Johnson 2011; Yates et al. 1999).

The literature on online collaborative tools, including ESM technologies, underscores two important aspects with regard to the study of collaboration on ESM platforms. First, the visibility of activities afforded by ESM platforms provides an opportunity for investigating the social interactions and relationships that drive collaboration on those platforms. Second, the fluid nature of ESM platforms and their dynamic capabilities provides an opportunity to understand how organizational members engage with ESM, as well as to highlight changes in the social making of organizational work over time. Subsequently, we build on the social fabric metaphor in order to explore patterns of relationships between organizational members on ESM platforms and to explain how these patterns serve as the basis for collaboration.

## 2.2 A Social Fabric Metaphor to Describe the Dynamics of Enterprise Social Media

The social fabric is a metaphor for the social making of a collective. In this section, we explore the application and operationalization of the social fabric metaphor in various disciplines in search of the building blocks that we can apply to construct a characterization of the social making of organizations in the context of ESM platforms.

### 2.2.1 Social Fabric Metaphor

The social fabric metaphor has been applied in various disciplines, including economics, sociology, human ecology and urban studies, as well as organization and management studies, to describe the social system of relationships between individuals, groups, and institutions forming a coherent whole (Table 1).

<b>Table 1: Application of the Social Fabric Metaphor Across Disciplines</b>		
<b>Description</b>	<b>Discipline</b>	<b>Reference</b>
Social fabric is used to articulate the <b>change</b> in an array of social attributes that shape the behavior of people in a given economic system, in an attempt to evaluate the economic impact of nonmaterial social resources and social policies.	Economics	Bodin and Prell 2011; Hayden 1986; Hayden 2006; Gill 1996; Natarajan et al. 2009
Social fabric is used to represent a variety of <b>relationships</b> in social life ranging from interpersonal to institutional ties that together form networks of relationships.	Sociology	Alario and Freudenburg 2003; Broadbent 1986; Short 1984
Social fabric is used to portray social life as an integral part of the <b>entangled material-immaterial</b> elements that form and shape urban environments.	Human ecology and urban studies	Corcoran et al. 2007; Henderson 1995; Pflieger et al. 2008

Social fabric is used to depict group cohesion and connectivity as the degree of conformity of individuals to the prevailing <b>organizational practices</b> .	Organization and management	Baldwin et al. 1997; Moolenaar and Sleegers 2012; John Van Maanen 1979; Wenger 1996; Zammuto et al. 2007
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In economics, a social fabric matrix has been used to delineate social structure and to articulate social change by outlining the relationship between cultural values, social beliefs, institutions, attitudes, technology, and ecological systems (Hayden 1986, 2006; Natarajan et al. 2009). Building on the presumption that the flow of goods, service, information, and people relies on the governing norms and social principles (Natarajan et al. 2009), economists construct a social fabric matrix that works as a systematic approach for comparing and contrasting how different social elements in society influence each other, and thereby the overall structure of the social system (Hayden 1986, 2006). A social fabric matrix portrays the influences that shape the behavior of people in a given economic system, and is used subsequently to evaluate the economic impact of social resources and policies (Bodin and Prell 2011; Gill 1996). Considering our underlying interest in the social making of organizations, we build on this conceptualization to highlight the fluid nature and impact of social interactions and relationships that form on ESM platforms.

In sociology, the social fabric is a broad and central concept that can be applied to institutional systems and networks, as well as to interpersonal processes and relationships (Short 1984). The social fabric is used to portray the network of relational ties that underlies any social group, thus providing the foundation of society and social movements (Broadbent 1986; Short 1984). Accordingly, the social fabric encompasses the macro and micro relationships in a social system. Sociologists trace the relational ties to draw relationship networks of social groups in order to delineate social structures and to study social transformation (Alario and Freudenburg 2003). Given our interest in the social making of organizations, we build on this conceptualization to articulate the nature of interactions between social groups and to reflect upon interpersonal processes and relationships.

In human ecology and urban studies, the social fabric sustains people's ability to live and work together effectively (Henderson 1995). The urban infrastructure comprises not only buildings, roads, and various services, but also social institutions, communities, and everyday social life; all are bounded together inseparably to form a city (Corcoran et al. 2007). Human ecology and urban studies highlight the entangled interrelations between the material and immaterial in a social milieu (Pflieger et al. 2008). We build on this conceptualization to highlight that the study of social interactions and relationships on ESM should encompass both humans and the respective technological environment, that is, the ESM platform itself.

In the organization and management literature, social fabric has been used to convey the extent of organizational social cohesion, which portrays the degree of conformity of individuals to the norms of the collective (Van Maanen and Schein 1979). A strong social fabric conveys high social cohesion that results in the development of wider social relationships and consequently more sharing and cross-fertilization (Moolenaar and Slegers 2012; Wenger 1996). The increasing adoption of technology into organizational work practices has made IT a part of the fabric of organization (Zammuto et al. 2007). We take this a step further, highlighting that the social interactions and relationships on ESM platforms are forged and bolstered by the beliefs and practices of the organizational member.

Drawing on the existing literature, we use social fabric to delineate and explain the relationship between the various elements of a dynamic social system (Gill 1996; Hayden 1986, 2006; Natarajan et al. 2009), with a focus on the social interactions (Alario and Freudenburg 2003; Broadbent 1986; Short 1984) that are enabled by ESM platforms (Corcoran et al. 2007; Henderson 1995; Pflieger et al. 2008) and that reflect and are reflected in the prevailing beliefs and practices in a collective (Van Maanen and Schein 1979; Moolenaar and Slegers 2012; Wenger 1996; Zammuto et al. 2007).

We treat the social fabric as a metaphor of sociality and use the attributes of a fabric (Lakoff and Johnson 2003) to accentuate how threads of interactions between people make up the social fabric of an organization. In a metaphorical sense, the social fabric of a collective comprises threads of relationships that weave together to form a cohesive social whole. Within the boundaries of this

study, we define the social fabric as a metaphor that describes the threads of relationships between people in a collective. The social fabric is shaped and reshaped by the prevailing beliefs and practices in a collective as well as its technological milieu. The social fabric can be observed in the flow of behaviors and narratives expressed and experienced by individuals in a collective.

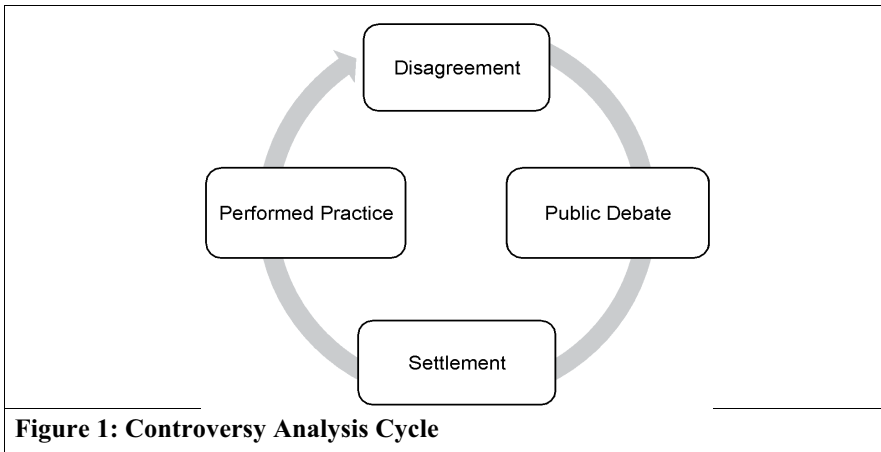
### **2.2.2 Revealing the Social Fabric**

Revealing the social fabric entails the investigation of the prevailing beliefs and practices that shape and reshape relationships between people in the collective on the ESM platform. As an online community, ESM is characterized by fluidity and the flow of resources and people interacting and forming relationships on a moment-to-moment basis (Faraj et al. 2011; Mol and Law 1994). Consequently, relationships on ESM are not something which can be predefined or solidified, but rather should be considered in terms of their fluid character and momentary existence.

In order to observe and describe such fluid dynamics, we need to investigate the instances in which interactions become explicit (Venturini 2010). One approach to observing beliefs and practices as they surface in an organizational context is to look for controversies among organizational members. Controversies are a normal and inevitable part of the social world. It is through disagreements and debate that opinions are made explicit and meaning is constructed (Latour 1988, 2005). We can therefore investigate controversies by exploring situations in which the nature of interactions and opinions are made explicit. In particular, we look for controversies by identifying situations in which organizational members disagree. The disagreements can be subtle and do not have to reach a state of open fights, but they are often examples of mundane disagreements among colleagues who come together in the creation of a shared universe (Venturini 2010).

The life cycle of a controversy starts when individuals realize that they cannot ignore the emerging disagreement, and they end when some form of agreement is reached among the involved parties (Venturini 2010). Based on this theoretical insight, we designed a circular process of controversy analysis in which a 'local disagreement' evokes a 'public debate' that at one point reaches a 'settlement' and eventually becomes manifested in the 'performed practice' of the organization (see Figure 1). The circular pattern portrays the life-cycle of a controversy and

highlights that a given performed practice prevails only until it is questioned and evokes a new disagreement (Latour 2005). Analyzing controversies provides an opportunity to reveal aspects of the situated prevailing beliefs and practices that shed light on the social making of the organization. In other words, the instances of controversy reflect the threads of the social fabric of the organization, as we describe later.



### 3. Research Design

In view of the challenge to investigate the social making of organizations as it is reflected in ESM platforms, the study builds on a qualitative approach, which is appropriate for understanding dynamic social processes (Maitlis 2005) and idiosyncratic activities (Pettigrew 1992). The research process was divided into two phases that address the research questions. In the first phase, we investigated what characterizes the social fabric on an ESM platform in one case organization, and in the second phase, we investigated how social fabric can explain collaboration on ESM in two additional case organizations.



### 3.1 Research Context

The study was carried out in three case organizations that use the same ESM technology, Yammer. We investigated the use of Yammer in an IT consultancy company (TopConsulting), an industrial power and automation company (HighPower), and a non-profit research organization (BetterHealth)<sup>5</sup>. While we opted to control variation due to technology by keeping the ESM platforms identical, we sought diversity in other dimensions to ensure a richer data set. Consequently, we selected the three organizations based on the following five criteria: 1) identical ESM platform (each of the case organizations has adopted Yammer into its daily work practices), 2) sector diversity (the case organizations represent three different sectors), 3) duration of ESM use (the case organizations are at different stages of ESM use), 4) size of organization (the case organizations represent a small, a medium-sized, and a large. organization), and 5) full access (all case organizations granted full access to the system logs and allowed close scrutiny of their work practices).

The first phase of the research was conducted in the Danish IT consultancy company, TopConsulting. The objective of this phase was to develop a framework to characterize the social fabric of the company as reflected on their ESM platform. TopConsulting specializes in consultancy services within Microsoft Solutions Framework and works with large international companies. Most of the 43 employees work from their clients' offices on a daily basis. Yammer was adopted as a tool for internal communication and collaboration in the summer of 2012 at the initiative of the newly appointed CEO. Until then, the company had relied on communication sources such as email, instant messaging, and the company intranet.

Through its affiliation with Microsoft, the company not only uses Yammer for its own internal communication but also sells the tool to its clients. The company has placed Yammer as a mandatory and central communication channel in the organization and has encouraged employees to join and engage on the media as part of their daily work. In 2013, the company received the 'Great Place To Work'

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<sup>5</sup> The three company names used in this paper are fictitious.

award (GreatPlaceToWork 2013) for best workplace, and the CEO attributed the success in part to the Yammer platform and the social interactions that it facilitated.

In the second phase of the research, we applied the social fabric framework that was developed in the first phase to explain how social fabric can explain collaboration on ESM in the two additional case organizations, HighPower and BetterHealth.

HighPower is a multinational corporation that manufactures industrial electric power and automation equipment, with approximately 130,000 employees worldwide. We gained access to the Danish branch of the company that has about 600 employees. Most of the employees in the Danish branch are located in three main offices across the country. Yammer was adopted as part of a company-wide upgrade to the Office 365 software in September 2013. The company had previously used Lotus Notes as a communication tool and Yammer was introduced as a supporting technology for the implementation of the new Office 365 system. Since its introduction, the application of Yammer has been extended across a few departments in HighPower and is now used to support a number of projects and workgroups.

BetterHealth is a non-profit, research-based organization that operates within the domains of healthcare research, preventive medicine, and patient support. The organization consists of a large number of scientific researchers, including doctors, chemists, and biologists, as well as administrative and business divisions. It also includes a large number of volunteer workers. The IT department launched Yammer in November 2013 with the long-term vision to nurture knowledge sharing among research staff and volunteers as well as to improve the organizational-wide coordination of work. In the short-term, the IT department uses Yammer to manage projects and to become familiar with the technology prior to introducing it to the entire organization. An overview of the three case organizations is shown in Table 2:

	<b>TopConsulting</b>	<b>HighPower</b>	<b>BetterHealth</b>
<b>Business Area</b>	IT Consultancy for Microsoft Solutions	Power and automation technology	Healthcare research and development
<b>Organization Type</b>	Consulting	Manufacturing	Applied research
<b>Number of Employees</b>	43 employees	600 employees (local), 130,000 employees (global)	300 employees and about 40,000 volunteers
<b>Yammer Implementation</b>	July 2012	September 2013	November 2013

Yammer is an ESM technology that provides employees the opportunity to connect with each other, share information across teams, coordinate work, and organize projects (Yammer 2015). The Yammer platform bolsters the web of relationships among the employees of an organization by adding social networking functionalities to the routine communication flows in the organization. For example, it provides an AllCompany news feed, where organizational members post and comment on a variety of topics. In addition, the platform promotes the creation of discussion groups that are designed for addressing specific topics and interests. Users can set up and join groups, and they can follow other users or groups based on specific interests. They can also create a personal profile on Yammer and subsequently receive a personalized news feed.

### **3.2 Data Collection**

We initiated a meeting with the persons responsible for the Yammer adoption in each of the case organizations. At the meeting, we asked questions about the motivation for implementing Yammer, the company strategy with regard to promoting Yammer use, and their overall experiences with the technology. We explained that our research is geared to gaining insights into how organizations can generate value by incorporating Yammer into their work practices. Once

access was gained, we signed a confidentiality contract and presented a detailed plan for data collection and dissemination of the findings.

In both research phases, we used three main data collection methods, as follows: interviews, mining of posts and comments, and observations. The triangulation of the three data collection methods provided a richer picture of the revealed controversies and added another layer of validity to the findings. We conducted *interviews* with organizational members in each case organization to gain insights into the way they make sense of and reflect upon their activities and interactions with colleagues on Yammer. Inspired by the controversy analysis approach (Latour 1988, 2005; Venturini 2010), the interviews were designed to explore points of contention and disagreement situations in which the interactions and opinions were made explicit in the ESM communication threads.

We started by interviewing the participants who were most active on the Yammer platform within each of the case organizations. In-depth interviews were conducted for a duration of twenty minutes to one hour. The interviews were carried out on-site at the three case organizations by one of the researchers. As the interviews progressed, so did our knowledge about which organizational members to approach with regard to the information we sought. The interview protocol was designed to elicit relevant personal stories and insights about Yammer and its consequences for the social making and work practices in the organization. We asked organizational members to share their positive and negative experiences with Yammer. For example, we asked the interviewees to describe an episode in which Yammer had enabled them to connect with their colleagues and we followed up with ‘how’ and ‘why’ questions. We also asked interviewees to talk about the core functionalities of Yammer, and to reflect on how and why they were important or inconsequential to them.

The interview protocol was subject to modifications over the course of the study as we learned more about the Yammer-related practices. We also used the interview sessions to inquire about overall dispositions to online behaviors. For example, we asked about their motivation for posting information on Yammer, reasons for praising or reprimanding a colleague online, situations in which they would comment on a post, etc. The interviews were recorded and transcribed verbatim to enable detailed coding and analysis.

In addition to conducting interviews, we logged all *posts/comments* on Yammer in each case organization that dated back to the time of its implementation; totals of posts and comments are provided in Table 3. We exported the data into an Excel spreadsheet and organized it by content, author, and date/time of the post. The Excel spreadsheet gave an overview of the aggregated raw data; however, in order to preserve the context of each post, we also extracted entire threads of posts including comments in PDF file format, representing the conversations and interactions exactly as they were displayed on the Yammer platform. The PDF files served to elicit and map the threads of the social fabric in TopConsulting that were used to answer the first research question. The Excel spreadsheet served to code and unveil the patterns of the social fabric associated with collaboration in HighPower and BetterHealth, which were used to answer our second research question.

Online and on-site *observations* within the three case organizations provided another source of data. The observations were inspired by netnographic and ethnographic approaches (Kozinets 2010) and were conducted in acknowledgement of the unique features of computer-mediated technology when observing everyday activities in organizations. At TopConsulting and BetterHealth, we obtained a personal login to the Yammer platform that enabled us to track and participate in live online conversations. We used the Yammer profile to announce our presence on the platform to the organizational members. At HighPower, we did not obtain a personal login to Yammer; instead, we received extractions of Yammer data in PDF files on a recurring basis. The online observations gave us an opportunity to experience firsthand how organizational communication and social interactions unfolded in the three case organizations.

On-site observations consisted of engaging with organizational members over lunch, at company events, and as a part of the everyday work activities. At these occasions, organizational members would discuss and reflect upon their daily use of Yammer. Immediately following each observation session, we made extensive field notes to document what had been observed and to detail any interpretations or questions that had arisen from the observation (Schultze 2000). Table 3 summarizes the data sources.

<b>Table 3: Summary of Data Sources</b>			
	<b>Phase 1</b>	<b>Phase 2</b>	
<b>Data Sources</b>	<b>TopConsulting</b>	<b>HighPower</b>	<b>BetterHealth</b>
Interviews (20-60 minutes)	<i>24 interviews:</i> 1 CEO 1 Managing Partner 1 HR Manager 8 Solution Providers 7 Senior Consultants 3 Consultants 2 Sales Employees 1 Marketing Assistant	<i>4 interviews:</i> 1 Project Manager (2) 1 Communications Manager 1 IT manager	<i>10 interviews:</i> 1 IT Manager 4 System Administrators 3 IT Support agents 1 Administrator 1 Developer
Posts/comme nts captured from the Yammer platforms	July 2012 to May 2014: 1,997 posts 2,696 comments	September 2013 to July 2014: 559 posts 602 comments	November 2013 to July 2014: 153 posts 124 comments
Observations online/on-site	165 hours on-site 198 hours on Yammer	10 hours on-site 3 hours on Yammer	18 hours on-site 26 hours on Yammer

### 3.3 Data Analysis

The study was grounded in qualitative data analysis that involves organizing the data, coding it, developing a description and clusters of data, deciding on how to represent the data, as well as interpreting and validating the findings (Creswell 2012). The data analysis was carried out in a twofold process that corresponded with the two phases of research. An overview of the two phases is provided in Table 4.

<b>Table 4: Summary of the Data Analysis</b>		
<b>Data Analysis Phase</b>	<b>Approach</b>	<b>Output</b>
<p><b>Phase 1:</b> The Social Fabric Framework</p> <p>RQ: <i>What characterizes a social fabric on enterprise social media?</i></p>	<p>Step 1: Eliciting the prevalent social fabric threads through a controversy analysis.</p> <p>Step 2: Identifying coexistence of the social fabric threads and developing a coexistence matrix.</p> <p>Step 3: Revealing patterns of social fabric threads based on the coexistence matrix.</p> <p>Step 4: Developing a social fabric framework.</p>	<p>Detailed accounts of the controversies pertaining to the use of Yammer in TopConsulting, resulting in the prevailing threads that make up the social fabric framework.</p>
<p><b>Phase 2:</b> Social Fabric Patterns of Collaboration</p> <p>RQ: <i>How can social fabric explain collaboration on enterprise social media?</i></p>	<p>Step 1: Identifying a collaborative initiative on the Yammer platform in two additional case organizations.</p> <p>Step 2: Visualizing the social fabric configuration of each collaborative initiative based on the social fabric framework.</p> <p>Step 3: Comparing the resulted social fabric configurations and their implications for collaboration.</p>	<p>The social fabric associated with collaboration on Yammer in HighPower and BetterHealth.</p>

The analysis in the **first phase** was designed to answer the research question: *What characterizes a social fabric on enterprise social media?* To address this question, we followed a four-step approach. In the *first step*, we elicited the prevalent social fabric threads through a controversy analysis. The operational objective of the analysis was to identify and scrutinize instances of disagreement and negotiation on Yammer among the employees of TopConsulting. Each instance of disagreement provided an opportunity to reveal an aspect of the situated prevailing beliefs and practices that furthered our understanding of the social making of the organization. In other words, the instances of disagreement

reflected the threads of the social fabric of the organization. The data analysis was conducted by organizing and reviewing the field notes, the interview transcripts, and extracted Yammer posts in order to obtain a general sense of what the participants were saying and doing. We then used the MAXQDA software to perform a detailed coding of the data to reveal specific disagreements regarding Yammer among the employees of TopConsulting. The controversy analysis served to elicit the threads of the social fabric, as presented below. In the *second step*, we explored the relationships between the social fabric threads and looked for instances in which they were highly related to one another. Accordingly, we coded the social fabric threads in posts and comments on Yammer and developed a coexistence matrix that presented the number of times in which two threads were manifested in the same data point. In the *third step*, we arranged the social fabric threads according to their level of coexistence and delineated highly related social threads into patterns of the social fabric (as described in detail in 4.3 and Cover Chapter Appendix 6). In the *fourth step*, we searched for instances of the social fabric patterns in the data and used these examples to describe the unique nature of each of the emerging patterns. The resulting set of patterns reflected the nature of the relationships among the organizational members on Yammer and provided a framework for representing the social fabric. The social fabric framework generation is illustrated further in section 4.

The analysis in the **second phase** of the research was designed to address the second research question: *How can social fabric explain collaboration on enterprise social media?* Here, we utilized the developed social fabric framework to analyze the underlying dynamics of collaborative initiatives on Yammer in the two additional case organizations, HighPower and BetterHealth. We explored the applicability of the social fabric framework outside the organization in which it was developed in order to enhance the validity of the analysis in this phase. We initiated a three-step approach to answer the second research question. In the *first step*, we identified one collaborative initiative on the Yammer platform in each of the two additional case organizations, and collected posts and comments going back in time to when the collaboration was initiated. The post and comments were organized in an Excel spreadsheet to gain an overview of the formulated purpose, the number of participants, the content, and the outcome of each collaborative initiative. In the *second step*, we used the developed social fabric framework to



identify and code the social thread orientation of each post or comment in the respective collaborative initiatives. The iterative coding process resulted in a visual representation of the social fabric (as delineated by the social fabric threads) in each of the collaborative initiatives. In the *third step*, we used the visual representations to compare configurations of the social fabric associated with the two collaborative initiatives and to theorize about the underlying dynamics of collaboration on Yammer. The analysis of how social fabric can be used to explain collaboration is illustrated further in section 5.

## 4. The Social Fabric Framework

To outline the social fabric framework, we present our analysis according to the four-step approach of phase 1. First, we elicit the prevalent social fabric threads through a controversy analysis. Second, we identify coexistence of the social fabric threads and develop a coexistence matrix. Third, we reveal patterns of social fabric threads based on the coexistence matrix. Fourth, we investigate the nature of the social fabric patterns to develop a social fabric framework.

### 4.1 Eliciting the Threads of the Social Fabric

We identified five prevalent controversies concerning the use of Yammer in TopConsulting: 1) Disagreeing on the appropriateness of social content on Yammer, 2) Disagreeing on the need to use Yammer, 3) Disagreeing on the inclination to share with everyone on Yammer, 4) Disagreeing on the relevance of certain content on Yammer, and 5) Disagreeing on the appropriateness of negative feedback on Yammer. Next, we illustrate the nature of each controversy by providing examples from TopConsulting (an overview of the five controversies is shown in Table 10).

#### ***4.1.1 Professional – Social Content Thread***

The Professional-Social Content thread stems from a disagreement about the appropriateness of social content on Yammer. In TopConsulting, some organizational members believe that Yammer is best suited for sharing socially-oriented content such as jokes and pictures from social events, while others prefer professionally-oriented content such as official documents, memoranda, and other work-related posts. We elicited the Professional-Social Content thread through a controversy analysis, as illustrated in Table 5.

The local disagreement was spurred by senior consultant RS<sup>6</sup> and sales employee YE, who expressed opposing views on what type of content would be appropriate on the Yammer platform. The confusion about what type of content to share was underscored by the tension between the perception of Yammer as a ‘social’ platform in which all types of content is welcome, and its design as a professional knowledge base for sharing information that can benefit coworkers (Yammer 2015). The different views evoked a public debate during a lunch break about the appropriateness of mixing professional and social content, and whether the social content should be moved to a dedicated Yammer group. The discussion was settled with a shared feeling that in spite of the professional orientation of the platform, isolating the social content would “take away what’s good about the platform.”

Subsequently, the consensus was reflected in the performed practice in which both types of content are welcome on the Yammer platform and the approval of socially-oriented content in spite of the vocal objections. The analysis of this controversy revealed the Professional-Social Content thread that highlights how the social interactions on Yammer depend on striking a balance between professionally-oriented and socially-oriented content

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<sup>6</sup> The abbreviations reflect the initials of the organizational member.

**Table 5: Debating Professional and Social Content on the Yammer Platform**

<p><b>Disagreement</b></p>	<p>Disagreeing on the appropriateness of social content on Yammer</p>
<p><b>Public Debate</b></p> <p>— Agree          - - - Disagree          □ Core Statement/          Observation</p>	<p>Senior Consultant RS: “All that social stuff, the jokes and the like, I could be without. I focus on the coding and the topics that are interesting to me... I have actually thought of unfollowing a lot of the people whom I am currently following, just because I don’t want to read what they post” (Interview, March 12 2014).</p> <p>Sales employee YE: “When they write all of those codes then I just get confused. I don’t read all of that. I am more interested in what is people are doing and if there are any social activities that I should be updated on” (Interview, March 12 2014).</p> <p>Senior Consultant RS: “I mean, posts that give insight into new codes or technical advances are what is important – not jokes or other personal updates” (Interview, March 12 2014).</p> <p>Yammer platform encourages users to report on their work by asking them to share ‘what are you working on’ in their status bar. (Yammer homepage 2015).</p> <p>Yammer platform is branded as a social platform (Yammer homepage 2015).</p> <p>One day over lunch at the TopConsulting office, a solution provider suggested that perhaps all “jokes and fun stuff” should be posted in a dedicated group (Field notes, March 19 2014).</p> <p>The suggestion of moving jokes into a dedicated group was turned down by the people at the table, who noted that this would not be an improvement and that it would “take away what is good about the Yammer platform” (Field notes, March 19 2014).</p>
<p><b>Settlement</b></p>	<p>Acceptance of social content on the Yammer platform.</p>
<p><b>Performed Practice</b></p>	<p>The content posted on the Yammer platform are of both a professional and social nature.</p>

#### ***4.1.2 Necessity – Frill Evaluation Thread***

The Necessity-Frill Evaluation thread arises from a disagreement about the need to use Yammer. In TopConsulting, the management team positions Yammer as the main communication channel and expects employees to engage with it on a daily basis. Yet, some employees disregard this expectation and rarely use Yammer because they consider it as a non-essential add-on technology among many other technologies in the company. We elicited the Necessity-Frill Evaluation thread through a controversy analysis, as illustrated in Table 6.

The local disagreement emerged from divergent perceptions about the necessity of using Yammer. Whereas the HR manager expected that the messages shared on Yammer would be read by everyone, the consultant's behavior revealed that not everybody in the company checked Yammer on a regular basis.

The different dispositions toward the use of Yammer evoked a public debate that was fueled by the management's decision to constitute Yammer as the main communication channel even though some organizational members preferred receiving information via email. The debate was not settled with new formal rules and it was left to the individual to decide how and if he or she wants to engage on the platform. However, the performed practice reflected a status quo in which Yammer remained the de facto channel for communication from the management team, and individuals had to engage with Yammer in order to stay informed. The analysis of this controversy uncovered the Necessity-Frill Evaluation thread that highlights how the extent of the social interactions on the platform is dependent on the evaluation of the Yammer platform as a necessity or as a frill.

**Table 6: Debating Necessity and Frill Evaluation on the Yammer Platform**

<p><b>Disagreement</b></p>	<p>Disagreeing on the required need to use Yammer</p>
<p><b>Public Debate</b></p> <p>— Agree          - - - Disagree  <input type="checkbox"/> Core Statement/          Observation</p>	<p>One of the consultants at TopConsulting came to the office in February to pick up his Christmas present. He was a few months late picking it up and said that this was because he had not received any notice that he should do so (Field notes, February 19 2014).</p> <p>HR manager: <i>"The management team has decided to direct as much communication as possible through Yammer. It is a key communication tool for us"</i> (Interview, 12 March 2014).</p> <p>The HR manager explained that, <i>"the announcement about the Christmas presents was made in December on the Yammer platform and then again in a reminder in January"</i> (Field notes, February 19 2014).</p> <p>Yammer platform creates a network for distributing messages across the organization (Yammer homepage 2015).</p> <p>Yammer platform connects distributed employees through the online platform (Yammer homepage 2015).</p> <p>The HR manager added that the consultant who had just picked up his present was one of those organizational members who were very seldom at the office, which made it even more important for him to engage on Yammer (Field notes, February 19 2014).</p> <p>It became clear that the consultant and the HR manager had very different expectations about the use of Yammer (Field notes, February 19 2014).</p> <p>The HR manager commented sarcastically, <i>"he probably doesn't have time in his busy workday to check Yammer. This might be the issue ... not even the promise of gifts can get him on Yammer [laughter]"</i> (Field notes, February 19 2014).</p> <p>When the group of consultants were reminded to check Yammer for information, it created a debate about why they couldn't just get an email, as they preferred not having to log on to Yammer (Field notes, February 26 2014).</p> <p>Senior Consultant SP: <i>"I have turned off the Yammer notifications. They come up all the time and often with a lot of unnecessary information"</i> (Interview, September 26 2014).</p>
<p><b>Settlement</b></p>	<p>Engaging with Yammer remains optional, but important information is distributed solely on Yammer.</p>
<p><b>Performed Practice</b></p>	<p>Engaging with Yammer is de facto a necessity for staying informed.</p>

### ***4.1.3 General – Specific Context Thread***

The General-Specific Context thread stems from a disagreement about the inclination to share with everyone on the Yammer platform. While some organizational members share much information indiscriminately with the entire organization on the Yammer platform, others question if the information shared should be addressed to everyone or be targeted to specific recipients. We elicited the General-Specific Context thread through a controversy analysis, as illustrated in Table 7.

The local disagreement arose from the posts and comments concerning buying and selling products on the Yammer platform, which made some less-interested individuals question the appropriateness of these specific conversations on the general platform. The amplification and ongoing dissemination of posts on the Yammer platform ignited a public debate between those who deemed it appropriate to address the selling and buying exchange to everyone in the organization and those who thought it should be placed in a designated group. A settlement was reached by moving specific conversations of limited interest from the general context into specific groups on Yammer. Subsequently, the performed practice prescribed using Yammer as a public space as well as a place to form special interest groups. The analysis of this controversy revealed the General-Specific Context thread that highlights how the social interactions depend on whether the exchange addresses the general audience or a specific interest group on the platform.

<b>Table 7: Debating General and Specific Context on the Yammer Platform</b>	
<b>Disagreement</b>	Disagreeing on the inclination to share with everyone.
<p><b>Public Debate</b></p> <p>— Agree  - - - Disagree  □ Core Statement/  Observation</p>	<p>CEO: <i>"I need an iPad – who has one for sale?"</i> (Yammer post, March 10 2014).</p> <p>Senior consultant SP: <i>"Now that the CEO has introduced the topic, would anyone happen to have a Mac computer (mini, MacBook or the like) that they want to sell?"</i> (Yammer post, March 10 2014).</p> <p>The buy and sale comments received a lot of attention and led to a number of bids and offerings of additional products by other organizational members (Field notes, March 10 2014).</p> <p>Senior consultant MB: <i>"Maybe we should establish a 'fleamarket' group for buying and selling?"</i> (Yammer post, March 11 2014).</p> <p>The 'fleamarket' group was established and the sales posts in the AllCompany newsfeed on Yammer have diminished (Field notes, March 10 2014).</p> <p>Yammer platform enables quick dissemination of information on any topic to the entire organization (Yammer homepage 2015).</p> <p>Infrastructure architect HD: <i>"I guess I would prefer that conversations that are very specific, like with the iPad case that the CEO started and which then turned into a whole set of comments that aren't really relevant to everyone, are placed in a group."</i> (Interview, March 14 2014).</p>
<b>Settlement</b>	Specific conversations of limited interest are moved from the general context into specific groups on Yammer.
<b>Performed Practice</b>	Specific interest groups are set up for topics of limited interest.

#### ***4.1.4 News – Chatter Perception Thread***

The News-Chatter Perception thread stems from a disagreement about the relevance of certain content on the Yammer platform. In TopConsulting, some organizational members perceive the ongoing sharing of updates and activities on Yammer as relevant news, while for others the continuous stream of information is largely considered as irrelevant chatter. We elicited the News-Chatter Perception thread through a controversy analysis, as illustrated in Table 8.

By design, the Yammer platform facilitates the distribution and sharing of grassroots, generated information, which naturally is more relevant to some and less to others. The local disagreement emerged from this inherent property of the information shared on Yammer. The HR manager would update Yammer with the latest news to keep people informed. However, whereas the sales manager referred to the Yammer newsfeed as the “company newspaper” and valued all the shared information on the platform, the two senior consultants were aggravated by the continuous stream of irrelevant information.

The different perceptions evoked a public debate about effective communication and information overload. A settlement was reached by acknowledging that the perception of what is news and what is chatter is subjective and contextual. Subsequently, the performed practice prescribed that individuals were expected to filter and consume information on Yammer according to what was relevant to them. The analysis of this controversy revealed the News – Chatter Perception thread that highlights how relevance is in the eye of the beholder and consequently, how social interactions on Yammer are driven by personal dispositions toward the news feeds.



**Table 8: Debating News and Chatter Perception on the Yammer Platform**

<b>Disagreement</b>	Disagreeing on the relevance of certain content on Yammer
<p>— Agree</p> <p>- - - Disagree</p> <p>□ Core Statement/ Observation</p>	<p>Sales manager SPE: <i>"I think of Yammer as my company newspaper and read it to keep up with what is going on – I like to get as much information as possible"</i> (Interview, March 12 2014).</p> <p>Senior consultant MP: <i>"Sometimes what you want to know or should know drowns in all the other information"</i> (Interview, September 26 2014).</p> <p>Senior consultant SP: <i>"I only value a small amount of the information on Yammer and do not care for the rest; sometimes I miss important information because it gets lost in all the other information"</i> (Interview, September 26 2014).</p> <p>HR manager: <i>"I always post the latest news on Yammer. It is good to keep people in the loop"</i> (Interview, September 26 2014).</p> <p>The Yammer platform lists posts chronologically in the news feed. A post is moved to the top of the newsfeed when it gets comments or likes (Yammer homepage 2015).</p> <p>Senior Consultant RS: <i>"Well, we have debated how too much information can easily turn into noise . That is why I try to filter for my own interest; I think other people do the same"</i> (Interview, September 26 2014).</p> <p>A discussion about Yammer at a <i>Company Day</i> showed that some employees thought that there was too much irrelevant information on Yammer (Field notes, May 14 2014).</p>
<b>Settlement</b>	The perception of what is news and what is chatter on Yammer is subjective.
<b>Performed Practice</b>	Individuals filter and consume information on Yammer according to what is relevant to them.

#### ***4.1.5 Praise – Reprimand Giving Thread***

The Praise-Reprimand Giving thread stems from a disagreement about the nature of feedback on the Yammer platform. Whereas the praising functionality available on Yammer is generally appreciated, some organizational members also use the platform to reprimand colleagues. We elicited the Praise-Reprimand Giving thread through a controversy analysis, as illustrated in Table 9.

The local disagreement was spurred by the difference in how organizational members used the Yammer platform to provide feedback and voice their dispositions toward others. The Yammer platform encouraged praising behavior through its embedded praise function (Yammer 2015); however, some organizational members also took the initiative to reprimand colleagues through posts on the platform. This evoked a public debate between some individuals who enjoyed being able to ‘vent’ on Yammer, and others who deemed it inappropriate to tell people off in public. The settlement at TopConsulting was a compromise where praise was opted for and reprimand was tolerated. The performed practice on the Yammer platform endorsed positive deviance when relating publicly to others’ behavior, while also tolerating the reprimands that occurred on the platform. The analysis of this controversy revealed the Praise – Reprimands Giving thread that highlights how the social interactions on Yammer depend on striking an appropriate balance between praise and reprimand behavior.

<b>Table 9: Debating Praise and Reprimand Giving on the Yammer Platform</b>	
<b>Disagreement</b>	Disagreeing on the appropriateness of negative feedback on Yammer
<p>— Agree</p> <p>--- Disagree</p> <p>□ Core Statement/Observation</p>	<p>HR manager to AllCompany: <i>"A reminder to all – especially now with the Christmas lunch coming up. REMEMBER: Big bladder little hose – please step one step closer to the toilet. Not that nice having to wipe up a big lake in the bathroom :-(" (Yammer post, November 30 2012).</i></p> <p>Senior consultant BHA: <i>"I have praised someone and this was really nice. It is a good way to show what a colleague has done and then to have people recognize his or her achievement"</i> (Interview, March 1 2014).</p> <p>The HR manager mentioned how she liked that you could 'vent' about these things on Yammer (Field notes, 15 March 2014).</p> <p>The Yammer platform provides a praise label that can be used to publically recognize the achievements of employees but it does not provide a functionality for reprimanding people (Field notes, 24 February 2015).</p> <p>Consultant ML: <i>"I don't think it is appropriate to post if you have a problem with someone or something on Yammer. At least not directed at a specific person – maybe you could do it on general terms."</i> (Interview, 26 September 2014).</p> <p>Solution provider GS: <i>"It is important that we strike a balance between praising and telling people off on Yammer; we need both."</i> (Interview, 10 October 2014).</p> <p>Senior Consultant BHS: <i>"Recently we have discussed if it is appropriate that some use Yammer to complain about others' behavior, for example if the office is untidy. We haven't reached an agreement but I think the general opinion is that we should keep that kind of remarks off the platform."</i> (Interview, 10 October 2014).</p>
<b>Settlement</b>	A balance between praise and reprimand is established, favoring praise but tolerating reprimand.
<b>Performed Practice</b>	Praise is used more frequently than reprimand on the Yammer platform.

Overall, the controversy analysis uncovers five threads of the social fabric that characterize the prevailing beliefs and practices of interactions between organizational members on the ESM platform. Table 10 summarizes the threads.

<b>Threads of Social Fabric</b>	<b>Professional – Social Content</b>	<b>Necessity – Frill Evaluation</b>	<b>General – Specific Context</b>	<b>News – Chatter Perception</b>	<b>Praise – Reprimands Giving</b>
<b>Disagreement</b>	Disagreeing on the appropriateness of social content on Yammer.	Disagreeing on the required need to use Yammer.	Disagreeing on the inclination to share with everyone on Yammer.	Disagreeing on the relevance of certain content on Yammer.	Disagreeing on the nature of feedback on Yammer.
<b>Public Debate</b>	Debating the mixing of professional and social content on Yammer.	Debating the positioning of Yammer as the central communication channel.	Debating who to address on Yammer with what information.	Debating effective communication and information overload on Yammer.	Debating the legitimacy of reprimanding on Yammer.
<b>Settlement</b>	Accepting social content on the Yammer platform.	Engaging with Yammer remains ‘formally’ optional.	Moving conversations of limited interest from the general context into specific groups.	Recognizing news and chatter perceptions as subjective and contextual.	Favoring positive deviance in feedback giving on Yammer.
<b>Performed Practice</b>	The content posted on Yammer is of both a professional and social nature.	Management communicates solely on Yammer, turning it into a necessity for staying informed.	Special interest groups are established on Yammer.	Individuals filter and consume information on Yammer according to what is relevant to them.	Praise is used more frequently than reprimands on the Yammer platform.

## 4.2 Identifying Coexistence of Social Fabric Threads

Eliciting the five threads of the social fabric (Phase 1/Step 1 provides insights into the beliefs and practices that shape and reshape the interactions on the Yammer platform. Next, we explored the relationships between the social fabric threads and looked for instances in which they were highly related to one another (Phase 1/Step 2). Accordingly, we coded the social fabric threads in posts and comments on Yammer and developed a matrix that presents the number of times in which the threads coexist in the same data point. To start off this process, we developed a coding scheme that is based on the two inherent manifestations of each social fabric thread, as outlined in Table 11.

<b>Thread</b>	<b>Thread Manifestation</b>	<b>Description*</b>
<b>Professional – Social Content</b>	Professional content	Posts on work-related tasks and knowledge
	Social content	Posts on social events, humor, private pictures, and other social content
<b>Necessity – Frill Evaluation</b>	Necessity evaluation	Posts from management team sharing critical information and updates
	Frill evaluation	Posts and conversations initiated by individuals
<b>General - Specific Context</b>	General context	Posts addressing all members
	Specific context	Posts addressing one individual or interest group
<b>News – Chatter Perception</b>	News perception	Posts that are recognized by others through likes and/or comments
	Chatter perception	Posts that are not recognized by others
<b>Praise – Reprimands Giving</b>	Praise giving	Posts praising colleagues with or without the praise icon
	Reprimand giving	Post telling people off or criticizing
*The descriptions are based on the performed practice revealed in the controversy analysis.		

The systematic coding of the posts and comments on the Yammer platform displayed how more than one social fabric thread would often be associated with the same data point. For example, the post from Senior Consultant RS to the

AllCompany newsfeed on the Yammer platform: *'praised' consultant MH for taking the course CRM\_2013* (Yammer post, 13 October 2013) was coded as 'praise giving' as well as 'general context' to represent how the praise addressed the general context of the AllCompany newsfeed.

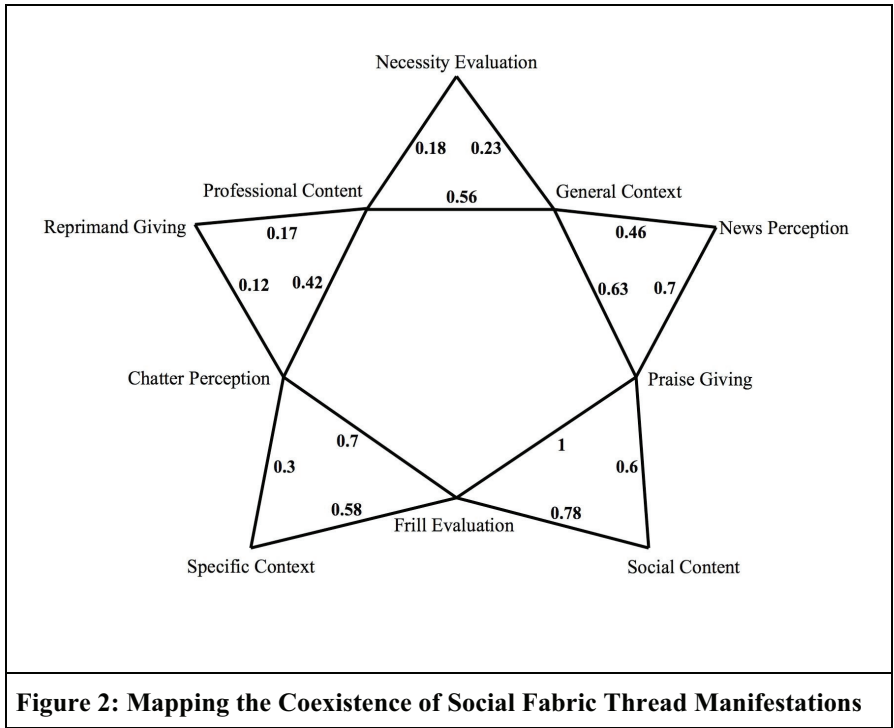
Subsequently, we developed a coexistence matrix that shows the number of times in which two thread manifestations overlap in the same data point, and we demonstrated that some threads manifestations coexist to a higher degree than others. A matrix of the normalized coexistence numbers is displayed in Table 12 and further explained in the next section (see also Cover Chapter Appendix 6).

**Table 12: Normalized Coexistence Matrix of Social Fabric Thread Manifestations**

Code System	Professional content	Social content	Necessity evaluation	Frill evaluation	General context	Specific context	News perception	Chatter perception	Praise giving	Reprimand giving
Professional content			46/251 = <b>0.18</b>	8/251 = <b>0.03</b>	275/491 = <b>0.56</b>	142/491 = <b>0.29</b>	135/394 = <b>0.34</b>	167/394 = <b>0.42</b>	13/60 = <b>0.22</b>	10/60 = <b>0.17</b>
Social content			1/251 = <b>0.00</b>	196/251 = <b>0.78</b>	50/491 = <b>0.1</b>	24/491 = <b>0.05</b>	32/394 = <b>0.08</b>	60/394 = <b>0.15</b>	36/60 = <b>0.6</b>	1/60 = <b>0.02</b>
Necessity evaluation					57/250 = <b>0.23</b>	1/250 = <b>0.00</b>	1/156 = <b>0.00</b>	1/156 = <b>0.00</b>	0/29 = <b>0.00</b>	0/29 = <b>0.00</b>
Frill evaluation					48/250 = <b>0.19</b>	144/250 = <b>0.58</b>	45/156 = <b>0.29</b>	109/156 = <b>0.7</b>	29/29 = <b>1</b>	0/29 = <b>0.00</b>
General context							210/461 = <b>0.46</b>	75/461 = <b>0.16</b>	59/93 = <b>0.63</b>	9/93 = <b>0.01</b>
Specific context							38/461 = <b>0.08</b>	138/461 = <b>0.30</b>	24/93 = <b>0.26</b>	1/93 = <b>0.01</b>
News perception									30/43 = <b>0.7</b>	1/43 = <b>0.02</b>
Chatter perception									7/43 = <b>0.16</b>	5/43 = <b>0.12</b>
Praise giving										
Reprimand giving										

### 4.3 Revealing Patterns of Social Fabric Threads

Generating the coexistence matrix provides insights into how some thread manifestations are more related than are others (as described in Cover Chapter Appendix 6). We mapped each thread manifestation together with the two thread manifestations with which it had the highest level of coexistence (Phase 1/ Step 3) in order to explore further the relationships between highly related instances of coexistence. Accordingly, we developed a visual representation that revealed five triangular patterns, as outlined in Figure 2.



#### 4.4 Developing a Social Fabric Framework

We examined further the five triangular patterns of the social fabric that were identified in the data to describe the unique nature of each of the emerging patterns, as reflected in the post and comments on the Yammer platform (Phase 1/ Step 4). The analysis of the five patterns resulted in a framework for representing the social fabric. Next, we present the analysis of each pattern and give it a descriptive label.

##### 4.4.1 The Directive Pattern

The pattern consisting of *professional content*, *necessity evaluation*, and *general context* creates relationships of a *directive* nature that are characterized by the necessity of engaging with the Yammer platform to stay informed about

professional content disseminated in a general context. In directive relationships, focus is on the dissemination of professional content on the platform, and it is expected that this content will reach the entire group of participants. An example of the directive pattern is illustrated in this post on the Yammer platform:

CEO to ‘AllCompany’

*The new procedure for registering your hours is posted here >link to procedure<. Please stay updated on this. Any changes or further updates should be added here.*

(Yammer post, January 19 2014)

The delivery of this message on the Yammer platform enables the CEO to direct a message of a professional nature about the new procedure in the general context of the Yammer AllCompany newsfeed and underscores the necessity for checking Yammer to stay updated on this information. Directing messages to the entire group is enabled by Yammer acting as an intermediary receiver and transmitter of the information. The delivery of professional information in the general context and the necessity of using Yammer to stay updated creates a directive relationship among the organizational members.

#### ***4.4.2 The Informative Pattern***

The pattern consisting of *general context*, *news perception*, and *praise giving* creates relationships of an *informative* nature that are characterized by organizational members’ perception of the information shared on the Yammer platform as news that deserve their attention. The informative relationship is dependent on the supportive engagement of organizational members commenting on, praising, or ‘liking’ the information distributed in the general context. While the Yammer platform makes the information available for all members, it is up to the individual to engage and acknowledge the value of the information. The following post from the Yammer platform highlights the nature of this pattern:

Senior Consultant KC to ‘AllCompany’:

*Now we are upgraded to Dynamics CRM 2013 internally. It looks great and you can access it through iPad and so on :) If you have installed the*



*Outlook CRM client today, you need a new version, which supports CRM 2013.*

Programmer KLN, Sales employee YE, Senior Consultant AL and 2 others like this.

CEO:

*How do you get the new outlook client?*

Senior Consultant STP to CEO:

*>link<*

Senior Consultant KC:

*CRM 2013 also connects with Yammer, but it can be necessary to reset IE before it works properly. Internet Options – Advanced – Reset.*

Senior Consultant AL:

*Top nice, when is our service and support module up and running and our own sales process as the CEO mentioned?*

Senior Consultant SP:

*Sounds great!*

Sales Manager MW:

*Good job. We use CRM everyday and it is the sales team's primary tool. This update will really support our own sales process.*

(Yammer post, November 25 - 27 2013)

The example shows that senior consultant KC communicates the information in the general context of the AllCompany newsfeed on Yammer and that the information is perceived as news by a number of organizational members who show that they value it by liking and commenting on the post. The distribution of information and the recognition of its value in the general context of the Yammer platform create an informative relationship among the organizational members.

#### 4.4.3 The Communitive Pattern

The pattern composed of *praise giving*, *social content* and *frill evaluation* creates relationships of a *communitive*<sup>7</sup> nature that are characterized by organizational members' spontaneous sharing as well as valuing social content on the Yammer platform. The entanglement of Yammer in the community life is visible when relationships between organizational members include sharing of private experiences, pictures, jokes, praises, and likes on the platform. The following example from the Yammer platform concerning a social event highlights the nature of this pattern:

Partner KO to 'AllCompany'

*Thank you for today, as usual an excellent event. Well done HR Manager.*

Senior Consultant MB, Consultant AD, Senior Consultant STP, and 3 others like this.

Senior Consultant AL:

*> Picture from the event<*

Senior Consultant SN:

*I can join in with the rest of the happy people! Great event! Thank you HR Manager CMW!*

Senior Consultant BSA:

*We had a lot of fun. Such a great event. Thanks again HR Manager.*

Partner HD:

*Yes, it was so nice thank you.*

(Yammer posts and comments, December 14-16 2013)

The example shows that the communitive relationship is of a social nature and that it is anchored in a sense of community which is created when organizational

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<sup>7</sup> Communitive: part of or belonging to a community

members recognize and appreciate the shared content through commending the posts. The voluntary distribution of social content and the following praise giving create a communitive relationship among the organizational members.

#### **4.4.4 The Distinctive Pattern**

The pattern composed of *frill evaluation*, *specific context*, and *chatter perception* creates relationships of a *distinctive* nature that are characterized by interactions among a limited number of organizational members. This pattern indicates how the platform creates a space for organizational members to communicate with each other on specific topics. Consequently, the distinctive relationships motivate members to engage with specific posts in some instances, whereas in other situations the members ignore the vast amount of information being shared. The following example from the Yammer platform highlights the nature of this pattern:

Senior consultant RS to ‘Share Your Code’ and Junior consultant HF:

*@Junior consultant HF concerning our talk about whether it makes sense to use Set (I used it a lot when I coded C++). I can direct you to re-factoring of the DAXIF# web resource module (sync between local file system and CRM server solutions): //source and target: let s=(1;2;3;4;5) >Set.ofList / let t = (2;3;4;5;9)>Set.ofList.*

*Clever right? And it doesn't take up much space.*

Junior consultant HF:

*Ok. As far as I remember, the confusion more concerned the use of Map vs. Dictionary. I understood that you had the functions to convert between the two because you couldn't use Dictionary in F# or in Map C#, but it looks like you can in both?*

Senior consultant RS:

*Yes, I have done a map2Dictionary and a dictionary2Map.*

(Yammer post, January 19 2014)

The example shows that in the distinctive relationship, organizational members engage with each other in a specific context, often referring to or tagging a person directly in the post or comments made on Yammer. The conversation can be

perceived as chatter for those organizational members not directly involved. The use of Yammer to initiate conversations with specific organizational members creates a distinctive relationship.

#### **4.4.5 The Corrective Pattern**

Finally, the pattern consisting of *chatter perception*, *reprimand giving* and *professional content* creates relationships of a *corrective* nature that are characterized by organizational members telling others off on the Yammer platform; yet, the reprimanding behavior is generally not commented on and is largely ignored as chatter. An example of corrective behavior is this post in the Yammer platform:

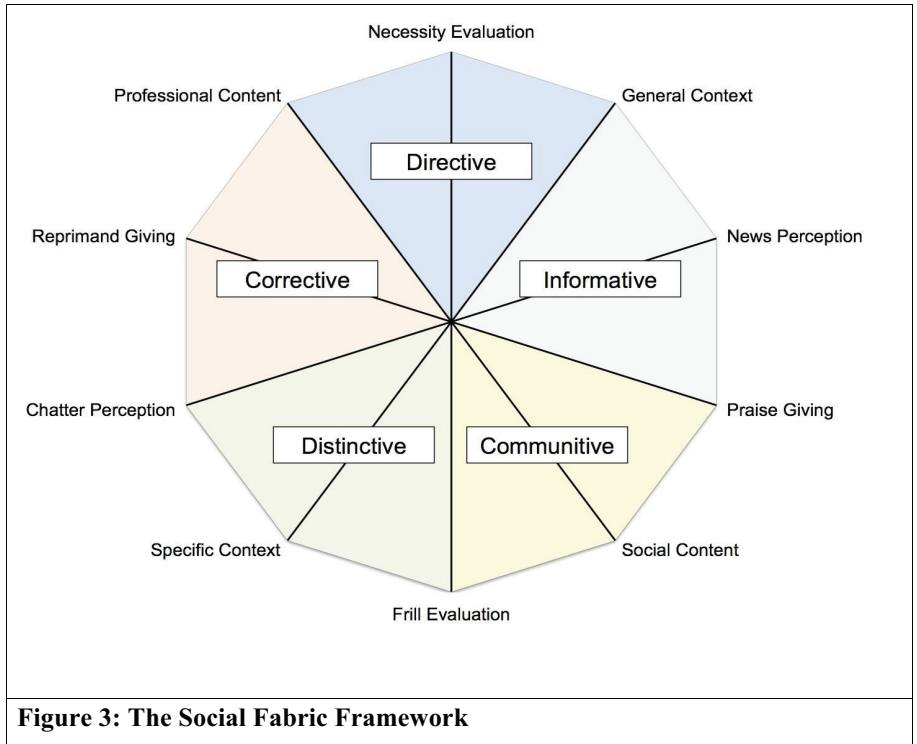
Solution Provider PJ to ‘AllCompany’

*When you come to work at the office, could you please NOT pull out the cables from the docking station and if you do then remember to put them back when you are done. Then the rest of us won't have to spend all of our time navigating the wire jungle before we can get to work.*

(Yammer post and comment, December 6 2013)

The example shows that the solution provider tries to correct the behavior of other organizational members when communicating his dissatisfaction with the way in which his colleagues are re-arranging the wires at the office. The reprimanding behavior concerning a professional issue which is not commented on creates a corrective relationship on the Yammer platform.

In summary, the analysis of the five triangular patterns of the social fabric characterized the distinct nature of each pattern and provided further insight into the relationships among them. Subsequently, the social fabric framework in Figure 3 portrays the five patterns of relationships that characterize the social fabric on ESM, thereby answering our first research question.



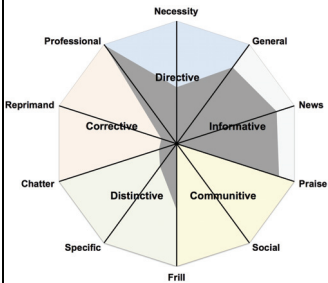
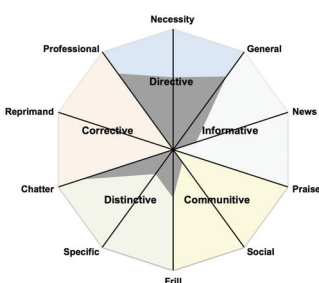
## 5. Social Fabric of Collaboration

We developed the social fabric framework as an instrument that can reflect the social making of organizational work in the context of ESM platforms. Next, we use the social fabric framework to explore systematically the social making of collaboration as a particular instance of organizational work and to address the second research question: *How can social fabric explain collaboration on enterprise social media?* Hence, we juxtaposed collaborative initiatives on the Yammer platform in the two cases of HighPower and BetterHealth by creating

visual representations of their respective social fabric configurations and by reflecting on their implications for collaboration.

To visualize the social fabric in the collaborative initiatives, we followed the three-step approach of phase 2. We identified one longstanding collaborative initiative in each of the case organizations, and collected posts and comments going back in time to when the collaboration was initiated on the Yammer platform (Phase 2/Step 1). We then used the developed social fabric framework to identify and code the social thread orientation of each post or comment in the respective collaborative initiative (Phase 2/Step 2). We used the coding scheme in Table 11 to associate social fabric thread manifestations with the posts and/or comments. Based on this we calculated the relative prevalence of each thread manifestation and used this ratio to generate a visual representation of the social fabric associated with each collaborative initiative (see also Cover Chapter appendix 8, Table 2). The visual representations were used to compare the social fabric configurations and to theorize about the underlying dynamics of collaboration on Yammer (Phase 2/Step 3). Table 13 shows a comparison of the two collaborative initiatives.

**Table 13: Juxtaposing the Social Fabric Associated with Two Collaborative Initiatives on Yammer**

	<b>HighPower</b>	<b>BetterHealth</b>
<b>Collaborative Initiative Characteristics</b>	<p><i>Formulated purpose:</i> forum where organizational members can collaborate on solving specific problems related to the deployment of Office 365.</p> <p><i>Large scale:</i> 120 users of the new system.</p> <p><i>Project-based:</i> until implementation is complete.</p> <p><i>Dispersed group:</i> located in offices across Denmark.</p>	<p><i>Unformulated purpose:</i> forum where organizational members can collaborate on solving ongoing technical problems.</p> <p><i>Small scale:</i> 16 members of the IT group.</p> <p><i>On-going:</i> indefinite.</p> <p><i>Close proximity:</i> located in the same office.</p>
<b>Social Fabric Configuration Associated with the Collaborative Initiative*</b>	 <p style="text-align: center;"><u>Directive – Informative Configuration</u></p>	 <p style="text-align: center;"><u>Directive – Distinctive Configuration</u></p>
* See data in Appendix 2.		

Comparing the social fabric configuration in the two collaborative initiatives on the Yammer platforms at HighPower and BetterHealth provides insight into the nature of the underlying relationships that influence collaboration on the platform.

Next, we introduce the two collaborative initiatives, the social fabric configuration associated with them, and their implications for collaboration.

### **5.1 Introducing the Two Collaborative Initiatives in HighPower and BetterHealth**

The purpose of the collaboration at HighPower was to create a forum where organizational members can collaborate on solving specific problems related to the deployment of Office 365. The collaboration involved 120 users that were dispersed over different locations. The collaboration at HighPower proved to be highly successful in engaging and connecting the dispersed employees and, even when the implementation was completed, the Yammer group remained in use as a repository of information. In comparison, the collaboration at BetterHealth proved to be less successful in engaging organizational members on the platform. The purpose of the initiative was to enable organizational members in the IT department to collaborate on solving ongoing technical problems. The forum had 16 members that were co-located in the same building. The initiative in BetterHealth failed to attract the expected attention and resulted in limited engagement.

### **5.2 The Social Fabric of Collaboration in HighPower and BetterHealth**

In HighPower, the visual representation showed that the social fabric was forged by two main patterns of relationships; the *directive* and *informative*. The *directive* pattern emerged from the distribution of highly relevant professionally-oriented content in a general context. In particular, the high number of posts from the administrator about progress on the system implementation reinforced the directive pattern. The social fabric also revealed an *informative* pattern that emerged from the information that was acknowledged as news. Specifically, the members praised the posts that shared Office 365 tips and tricks. The social fabric also showed traces of a *distinctive* pattern in the collaboration. These occurred when one member posted a very specific question aimed at one or two specific members. Lastly, a mild manifestation of the *corrective* pattern emerged when



reprimands surfaced with regard to questions being asked that had already been answered.

The social fabric at BetterHealth was also forged by the *directive* pattern; however, in this initiative, it was coupled with a *distinctive* pattern of relationships, creating some challenges for the collaboration. The *directive* pattern emerged when the IT manager encouraged the members to read and take note of the updates and articles he posted. The *distinctive* pattern surfaced when two members would engage in brief conversations referring to activities that had taken place outside the platform specific to their own experience and work. This pattern was reinforced by the close physical proximity of the organizational members involved in the collaboration. They would engage in offline discussions and then post related comments and updates in the Yammer group.

The social fabric configuration of both a directive and a distinctive pattern at BetterHealth revealed a discrepancy between the IT manager's perception of the platform as a formal communication channel to the entire group and the organizational members who treated the platform as a space for one-on-one engagement and collaboration. The configuration of the *directive* and the *distinctive* patterns in BetterHealth underscored different perceptions of Yammer and hindered the collaboration.

### **5.3 Implications of the Social Fabric for Collaboration in HighPower and BetterHealth**

Comparing the two different collaborative initiatives and their corresponding social fabric revealed insights into the dynamics of relationships on the Yammer platform. The analysis showed that different configurations of the social fabric either support or present challenges for the collaboration on Yammer. At HighPower, the dynamics between the directive pattern involving the distribution of messages to the general context, and the informative pattern that emerged when group members openly appreciated this information strengthened the collaborative initiative on the Yammer platform. In contrast, the social fabric at BetterHealth demonstrated that the directive pattern involving the wide dissemination of highly relevant professional content was in conflict with the distinctive pattern in which a

limited number of group members initiated specific conversations. Comparing the social fabric associated with the two collaborative initiatives, we observe how both are forged by a directive pattern; however, the outcome of the collaboration appears to be dependent on the configuration of the dominant patterns. Hence, the social fabric framework provides a structured approach to explore the social making of the organization and to explain the nature of organizational work on ESM and its idiosyncrasies.

## 6. Discussion

In this paper, we develop and present the social fabric framework as a structured approach to describe the social making of organizational work in the context of ESM platforms. Subsequently, this study contributes to the body of knowledge on ESM and collaboration by highlighting how social relationships can serve as a surrogate for the extent and nature of collaboration on ESM platforms. In particular, the study makes three key contributions as follows.

First, the study offers the social fabric framework as a way of characterizing the dynamic relationships among organizational members on ESM platforms and providing a rendition thereof. We argue that in order to understand the prospects of ESM and the role that they play in organizations, we must move beyond studying the functionalities of these technologies towards understanding the social interactions and relationships that bring life to these platforms and serve as their *raison d'être*. This is supported by earlier studies that emphasize the dynamics and fluidity of online communities (Faraj et al. 2011; Ma and Agarwal 2007), suggesting that relationships between members online enable the development of communities of practice that underlie organizational work (Faraj et al. 2011; Johnson 2001; Wenger 1996, 2000).

To make these relationships explicit in the context of ESM, we introduced and defined social fabric as a metaphor that describes the threads of relationships between people in a collective. The social fabric is shaped and reshaped by the prevailing beliefs and practices in a collective as well as its technological milieu. Subsequently, the suggested social fabric framework provides a way to

systematically identify and characterize the underlying configurations of social fabric patterns within and across organizations.

Second, the configurations of the social fabric outline the unique nature of collaboration on ESM platforms and provide a language to make sense of their respective underpinnings. We argue that the social fabric framework can be used to systematically explore the social making of collaboration as well as other particular instances of organizational work. This premise is in line with previous studies that accentuate how the implementation of ESM platforms provides an opportunity to re-examine the nature of organizational work and call for further investigation of its particular mechanics (Leonardi et al. 2013; Majchrzak et al. 2013; Treem and Leonardi 2012).

We provided insights into the foundation of collaborative practices on ESM platforms and demonstrated that the social fabric is contextual and unique in every collective. Hence, the explicit representation of the social fabric provides a language for articulating the dynamics of work and collaboration, which can serve as the basis for a continuous dialogue about how to maintain and develop joint initiatives on ESM platforms. In essence, the social fabric framework illustrates how organizational work is, to a large degree, a symphony of relationships that are enacted and performed by the organizational members.

Third, the study demonstrates the analytical potential of the controversy analysis approach as a method that can be used to elicit and investigate the beliefs and practices that are embedded in the social fabric of an organization. We argue that given the fluidity and implicit nature of the beliefs and practices, we need a procedure that can elicit moments or instances in which they become explicit. Previous studies have suggested that examining controversies is a way of making explicit the opinions and meanings that underlie interactions in a social world (Latour 1988, 2005). A controversy starts with a disagreement and ends when some form of agreement is reached among the involved parties (Venturini 2010).

To investigate controversies, we built on the controversy perspective and designed a circular process of controversy analysis in which a 'local disagreement' evokes a 'public debate', which at one point reaches a 'settlement' that eventually becomes manifested in the 'performed practice' of the organization. Thus, the controversy analysis serves as a structured inquiry process for revealing the social fabric

threads that underscore the social making of collectives and the foundation of organizational work.

## **6.1 Implications for Practice**

Capitalizing on online collaborative tools to create a supportive work environment that stimulates the development of skills and organizational arrangements in which collaborative activities can flourish remains a key challenge in many organizations (Thomas and Bostrom 2008). While managers appreciate the technical capabilities of ESM platforms, they are less aware of the effect of the technology on the dynamics of work and meeting the objectives of the organization. Investing in online collaborative tools to nurture the work environment is insufficient; however, more than merely technical infrastructure is needed to cultivate a fruitful joint coordinated effort of individuals or groups. This study provides managers with a framework for diagnosing the social milieu of their organization and making sense thereof.

The findings demonstrate that if managers want to use ESM platforms to support work and generate organizational value, they would benefit from making the social fabric in their organization explicit. Moreover, managers can use the social fabric framework and the five exemplary patterns as a springboard for a collective dialogue about the prevailing work practices and the organizational culture, as well as a basis for organizational development and change.

The study surfaced a recurring motif with regard to the governance of the ESM platform in the organization. A prevalent debate in all the case organizations dealt with the question of whether or not to establish a formal code of conduct on the Yammer platform. The study exhibits that the ESM platform enabled the creation of top-down, regulated, and directive relationships, on the one hand, as well as bottom-up, self-regulated, and distinctive relationships, on the other hand. This indicates that strict regulation is likely to be counterproductive, and striking a proper balance between general and specific context or between professional and social content is best left to the tacit hand of the social processes among the organizational members. The power of ESM platforms is based on how well they become embedded within the organization's social fabric.

## 6.2 Limitations and Future Research

We have studied the social making of organizations on ESM platforms through the development and application of a social fabric framework. The study has a number of limitations that pave the way for further research. First, the study is centered on the use of the particular ESM technology Yammer in the three case organizations. While we intentionally opted to control variation by keeping the ESM platforms identical in the selected case organizations, we believe that it would be beneficial to investigate the use of the social fabric framework in the context of other ESM platforms, such as Jive and Tibbr. Studying these platforms could provide additional insight into the social fabric framework's applicability and validity.

Second, we use the social fabric to explain the underlying dynamics of collaboration as an instance of organizational work on the ESM platform. However, other facets of organizational life could be explored, such as the role of the social fabric in knowledge generation and sharing, coordination, and performance of groups and individuals on ESM. Future studies could also include other types of organizations in terms of size, industry, and structure, as well as other cultural settings. Broadening the scope may reveal new configurations of social fabric that influence organizational practices.

Further, the second phase of the analysis revealed how different configurations of the social fabric emerged in the two collaborative initiatives. Reflecting on the characteristics of the different collaborative initiatives, it appears that controlling for other factors, such as the size of the group, location, and the stage of adoption of the ESM platform, could provide further insights into the social fabric formation. For example, HighPower that had used the Yammer tool the longest appeared to have a different social fabric compared to BetterHealth that had only limited experience with the use of the platform. Future studies could include investigations of the social fabric at different stages and scales of the ESM platform use.

Third, our study was conducted after the implementation of the ESM platform in the three case organizations. Further insight about the nature of the social fabric may be gained in a study of the early introduction of ESM and how it affects the

prevailing beliefs and work practices, let alone its influence on the social making of the organization.

## 7. Concluding Remarks

Although ESM platforms have become the golden standard for nurturing collaboration in organizations, the recurring challenges in embedding these systems in the fabric of organizations suggest that ‘something is rotten in the state of Denmark.’ Contrary to the common presumption that understanding the technical capabilities of ESM platforms is the key for their successful implementation, we argue that accounting for the situated social idiosyncrasies of the people who use the system should be the point of departure for embedding these systems in organizations in support of vigorous exchange and sustainable collaboration.

Subsequently, this study has unraveled the inherent dialectic relationship between the technological and social facets of ESM platforms. We developed and presented the social fabric framework as an instrument that can reflect the social making of organizational work in general and then demonstrated how it can be applied to describe the nature of collaboration in the context of ESM. In particular, the study investigated the characteristics of social fabric on ESM and identified five dominant threads that make up the social fabric in the case organizations, as well as their corresponding patterns of relationships.

Further applications of the social fabric framework can prove useful in the study of other IS related phenomena, such as system design and development, user involvement and systems implementation, business-IT alignment, IT-enabled organizational change, mergers and acquisitions, and other research areas that deal with social aspects of organizations. We hope that the development and application of the social fabric framework will provide a springboard to rejuvenating our ontological view on the nature of the social making of organizational work mediated by technology.

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