Winter 12-31-2017

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Balancing the Social Media Seesaw in Public Sector: A Sociomaterial Perspective

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Abstract. The use of social media in the public sector changes the professionals' everyday work practice. This paper sheds light on the emerging challenges of using social media as a part of work, based on the analysis of three contexts within the public sector in Sweden and through the lens of sociomateriality and affordances. The approach is interpretive field studies with a narrative analysis, where we interpret and analyse key elements of the storylines, focusing on the transition to social media use among professionals (nurses, municipal communicators, and physicians) in the three contexts. Social media enables an open work environment where information is visible and potentially spreadable to an unknown audience. The process of interacting with an unknown audience and finding a professional tone is analysed here as context collapse. The unknown, and at times imagined complex audience, makes it hard to balance the seesaw between friendliness on the one hand and an authoritative tone on the other; a tonality which leaves most of the potential audience unreached. The interplay between social media and the professionals shapes the professionals' practice. We analyse this interplaying practice more specifically, as *sociomateriality in action*.

Keywords: social media, public sector, professionals, affordances, sociomateriality, sociomateriality in action.

1 Introduction

The rise of social media in the public sector has a transformational impact on the work practice of public-sector professionals. Social networking sites such as Facebook, Instagram and Twitter, social intranets and online discussion forums afford an open work environment where interaction behaviours and content are visible, spreadable, editable and lasting over time [1]. Being a professional in the public sector brings with it a long tradition of professionalism (whether as a public servant, nurse or physician), a strong loyalty to the profession and a mission of accountability and responsibility towards citizens and other stakeholders [2]. When social media is used in the public sector, professionalism is challenged, leaving the professionals with uncertainty as to how to perform their work tasks and mission [3]. The work practice becomes a balancing act of enabling possibilities for improved knowledge sharing and

interaction [1, 4], handling contradictions and congruencies that emerge from using social media in the workplace [5], and of upholding a public sector professional identity [6]. The work practice is constituted by an increased transparency of work activities, which means externalization of public sector internal knowledge with the aim to inform and educate stakeholders [7], for instance through online information concerning medical treatments or news about meetings at city hall. The work practice also means a higher level of engagement with stakeholders [7] through a friendly, dialogic relationship in online forums [8], and it opens up for new possibilities for collective action of stakeholders [8-10] such as collaboration around common activities e.g. patient peer support or citizen dialogue around reconstruction of public spaces. Hence, the transformation of work practice due to social media is related to changed interaction behaviours and relationship to the stakeholders (e.g. citizens and patients) and to other professionals [7, 11, 12], giving rise to opportunities for stakeholders to network and mobilize around collective activities [8-10], which the professionals have to take into account.

However, the use of social media pushes the boundaries of the profession and makes a new work practice start to emerge. The openness of information and interaction behaviours generates uncertainty as to where information is going to be spread and who is going to see it [3]. The professionals interact with an often large and more or less unknown audience [13]. They also experience hesitation regarding legitimacy when communication is adjusted to a more informal, friendly and constantly available approach, which does not always match the role of being responsible and trustworthy [6].

Hence, as social media increasingly becomes part of the public sector, working tasks and the role of being professional are under constant negotiation and transformation. The aim of this paper is to understand and explain the transformational process of the work practice of public sector professionals using social media at work by exploring emerging tussles and tensions. This is done through an interpretive field study with a narrative analysis, where we focus on professionals in the public sector and their social media use in three contexts in Sweden; nurses, municipal communicators, and resident physicians. The research question we seek an answer to is: *How do public sector professionals balance social media use and their professional role?*

Given the broad scope of Information Systems (IS) research, sociomaterial approaches have been suggested as a useful standpoint to provide guidance for theorizing on technological artifacts, and how people's work practices are afforded and inhibited by technology use in complex social practice [e.g. 14, 15]. Moreover, there is a lack of theorization of social media platforms for non-profit organizations such as governments [16]. Thus, besides the empirical research aim, in line with Treem & Leonardi [1], a secondary aim of this paper is to theorize social media use by professionals in the public sector from a sociomaterial and affordance perspective. By doing so we take into account the equal importance of technological mechanisms and social dimensions of use and focus on the entangled interplay between humans and technology.

2 Unpacking Social Media

Research on the use of technology in the workplace tends to approach social media from an instrumental perspective, focusing on the use of specific technologies or tools or exploring issues related to social media and marketing or public relations management [1, 12]. We argue that it is important to recognize that these technologies, and the changes that come with them, cannot be understood in isolation. Therefore we look towards sociomateriality as a way to shed light on the holistic perspective of technology in practice. Sociomateriality is a post-humanistic reaction to the social constructivist view of the relation between technology and humans. In a social constructivist view, humans have a dominant role and technology is more or less black-boxed or its potential agency is ignored [17, 18]. Sociomateriality opens up for research and understanding of technology in detail without resorting to either a strict social constructivist view or a technological determinist perspective [18, 19]. A sociomaterial research perspective rather proposes a view of human and technology as an entangled relation and a process of mutual dependence [18, 19]. Sociomateriality has a strong emphasis on relationship and sets the interaction in focus, which implies that it is the interaction that forms the practice, and not the structures alone (hence norms and rules) [18]. Sociomateriality is thereby a perception that socially and technologically related aspects of interaction are equally important for the outcome of interaction and that the technology emerges, rather than it being a static artifact, in the activity or work [18]. Sociomateriality is a relational ontology, which is different from a substantial ontology, which dominates the Information Systems (IS) field [14]. A substantial ontology implies a view of humans and technology as separate entities that affect each other, while a relational ontology assumes that "the social and the material are inherently inseparable" [19: 456].

This article will take a sociomaterial view of the relation between humans and technology as a point of departure. More specifically a 'practice lens' is used for studying 'technology in use' in the public sector. The practice lens was developed by Orlikowski [20] as a modification of her earlier theories of the duality of technology where technology was understood as coming with a set of inscribed structures for users to appropriate. Instead, a practice lens is "emergent technology structures enacted in practice" [20]. Thus, structures such as experience, knowledge, meaning, habits, power relations, and norms are not fixed in the technology but are rather emerging in the actual use of technology. By studying how structures emerge in the 'technology-in-use' it is possible to see how structures are avoided or recreated, or how new structures are created in the situated context [21]. With this view of technology, it is the user of the technology who in the actual practice is part of the creation of the structures.

Materiality is a crucial concept within sociomateriality. Materiality is a concept that has changed over time and has developed through two generations [22]. The first generation of materiality took a macro perspective on materiality and saw technology as determining organizational structures. The second generation focused on how technology was used by humans to accomplish work and how technology could cause unpredictable outcomes. It was not the technology as such that caused the effects, but rather the technology when in use [23]. Emergence and unpredictability [24] became important aspects in studies of technology in organizations [22, 25] as well as

technology-in-use [20]. This was a new take since much of organizational research at this time was either focused on macro technologically deterministic approaches or social constructivist approaches where the technology was completely black-boxed [26].

As technology was more focused, researchers started to realize the need for a better understanding of the technical features and how they were forming the use. In other words, the technology needed to be unpacked [26]. Materiality started to be used as a concept that defines material and symbolic features of technological artifacts. Materiality is not synonymous with physicality, but instead, it is a matter of how technological functions are organized in different forms that are stable over time and in different contexts. Hence, materiality includes properties that are the same for all users, but can have a different meaning for different users [17]. For example, social media materiality such as liking, sharing and commenting, affords direct spread to a huge unknown audience. This property of spreadability is enacted differently by different users depending on a variety of aspects such as previous experience, motivation and strategy/aim [17].

Treem & Leonardi [1] identify four affordances that characterize social media: visibility, persistence, editability, and association. Affordances are the relational aspect of the technology, i.e., what the technology enables when it is used in a certain context. People come to the technology with different experiences and goals which will have an impact on the use. Thus, affordances are not the technological functions but rather what they enable users to do. *Visibility* relates to the openness of information and behaviours such as (a) 'work behaviour', which can be sharing of information and conversations with other colleagues or stakeholders; (b) 'meta-knowledge', e.g. background information about people such as personal information about interests and activities; and (c) 'organizational activity streams', which is information related to status of ongoing work and how others think in relation to oneself (Treem & Leonardi, 2012: 150). *Persistence* is the affordance of enduring information and behaviours. The implications of persistence are that communication is not dependent on time or place. It can be continued at any time in any place. *Editability* allows information and behaviours to be searched, found and reviewed over time, and changed and moved into other contexts. It refers to the fact that information and behaviours can be composed and recomposed before they are communicated. *Association* refers to connections established between individuals and between individuals and content. When someone presses 'like' on Facebook an association between the specific content liked and the person liking it is established, as well as an association between the individual who posted the content and the 'liker'.

All these affordances of social media challenge the feeling of control of the conversation in social media. It is difficult to know what information and behaviours are visible to whom, how they continue to be reacted to or reviewed and reused. There is an uncertainty of the audience, their persona and their future potential interaction with the public sector in social media [13]. Hence, it is difficult to communicate to an unknown audience. It is also difficult to communicate to many audiences at the same time. The openness of information and behaviours in social media makes many different contexts collapse into one. Marwick and boyd [13] have studied how people on social media handle context collapse and describe how people create imagined

audiences whom they think about when they interact in social media. An imagined audience is an envisaged picture of who is listening, a self-created persona of the intended public and the participants of a particular social media conversation.

3 Method

The approach here is an interpretive field study, in accordance with Walsham [27, 28] and Klein & Myers [29]. More specifically, we have done three interpretive field studies with a narrative analysis [29]. We interpreted and analysed the key elements of the storylines by writing narratives, which were drawn from the empirical findings in each of the three contexts. This particular interpretive field study was thereby presented through realistic narrative stories, describing an external and objective reality of the social media seesaw related to the everyday work of the public sector professionals. The stories aim to provide the reader with an 'authoritative' description of the work practices. That means descriptions of the sociomaterial practice, and the technology in use alongside the professionals' perceptions of use. The narrative rhetoric aims to provide the reader with a shared framework of observations, interpretations, and reflections of the researchers [30].

The research approach was qualitative, where the empirical data was primarily based on interviews and observations from three field studies within different public sectors, focusing on the social media use of the professionals working in these organizations: cancer rehabilitation nurses, municipal communicators, and resident physicians. The three field studies were conducted in Sweden and were based on action research methods or case study methodology whereas this particular paper presents another analysis of the empirical material, from a different unit of analysis and thereby applies another methodological approach. The unit of analysis for this paper has been sociomaterial practice, aiming to look towards common tensions and tussles as well as possibilities and opportunities in the empirical material.

The contexts are to some extent different in the three studies when it comes to working tasks. However, the three contexts share the non-profit interest which characterizes the role of professionals in the public sector, such as being representative, accountable, and transparent. They also have in common that the professionals use social media for communication with stakeholders or internally with other professionals. Descriptions of the three contexts and empirical data gathered in each of them are given in Table 1. Our findings are only applicable to the public sector and are thereby not generalizable for working life in the private sector.

Table 1. Context descriptions and empirical data

Context descriptions	Empirical data
Context 1: Cancer rehabilitation nurses	2015-ongoing
The nurses are specialized oncology nurses working within a clinical practice at one of the largest hospitals in the	15 observation days at the clinic. 8 patient-nurse meetings.

country. They meet patients that have undergone cancer treatment in the pelvic region and help them with their struggles, mainly related to urination and defecation control and frequency, as well as a range of sexual problems. This context focuses on the nurses' practice when designing and using various digital artifacts in collaboration with the patients, whereas in this paper the focus is the use of social media as a part of everyday work.	5 workshops with nurses and patients, some only with nurses, some mixed. 4 semi-structured interviews with the nurses.
Context 2: Municipal communicators:	2014-ongoing
The communicators are working in the central administration in four different small and medium-sized municipalities in Sweden. They have the responsibility to inform the public about the development and activities undertaken by the municipality. They plan the strategic communication with citizens and other stakeholders, conform the information and communication approach within the municipality, do research and publish municipal news and serve as media experts or coaches to the rest of the municipal administration departments and elected officials. Within the scope of the work, they need to evaluate and try new technologies for communication, one such communication technology being social media.	14 interviews with communicators and communication managers and 2 workshops with 26 participants from different municipalities.
Context 3: Resident physicians	2015-ongoing
The resident physicians practice as physicians but are also engaged in clinical training (min. 5 years) towards specialist competence. They represent a number of medical fields and work across departments and between professions. The empirical data is from a joint R&D project on the introduction of a new social intranet in the county council and an exploratory interview study on IT and workplace learning. In this article, the focus is on the physicians' experiences, attitudes and use of social media for everyday work purposes in terms of digital collaboration, communication, and knowledge sharing.	15 individual semi-structured interviews, 3 follow-up focus interviews (17 participants), 1 workshop and 3 working meetings (4-6 participants each time).

4 Findings and Analysis

In the following section, we present narrative stories that are snapshots from the professionals' work from a technological, practice, and professional perspective. The narrative findings are presented first in terms of the technology that is presented in each context. That is followed by a description of the practice perspective on social media, meaning that the findings and analysis therein represent struggles that the working practice is dealing with. Finally, we present the professional perspective, which includes struggles that are more on an individual level, where examples from

each context are drawn upon. The findings are presented with a mix of the three contexts in each empirical category. The order of the contexts within each empirical category is i) the cancer rehabilitation nurses; ii) the municipal communicators; and iii) the resident physicians.

4.1 Technological Perspective

The cancer rehabilitation clinic has a Facebook page where the nurses can post and the patients can interact with the nurses. The Facebook page has 254 followers who may be patients, next of kin, healthcare personnel or others. In addition to the Facebook page, the cancer rehabilitation clinic has an information portal where the patients can read about their symptoms as well as solutions to acute problems regarding their rehabilitation. At this website, there is also an anonymous Q&A function where the patients can post questions to the nurses, which the nurses answer. This function is however not a forum with threaded conversations; it only enables one answer per question.

In the context of municipality, managing social media is one among many other work tasks the communicators do such as working strategically with communication in the municipality, being a media expert and coach in the organization, doing research about what is going on in the municipality and managing the website. In this paper we focus on social media and more specifically Facebook, which is the main social media channel and the channel that has been used the longest in all the municipalities. The municipalities all have a central Facebook page each where the communicators post civic information and more promotional material and where citizens themselves can post topics or questions. The aim of the Facebook page is to increase transparency of municipal activity, promote the municipality and enable dialogue with citizens and other stakeholders.

The resident physicians work in hospital settings and at outpatient clinics in Western Sweden. The use of social media for work is not established and sometimes questioned, for patient work in particular, but also for administrative and knowledge work as well. The county council, however, has recognized a need among the employees to engage in social media for communication and interaction within the workplace. Thus, enterprise social media are provided for communication and collaborative work within or between workgroups or projects, where participants can co-create content and access different social media features, such as wikis, blogs, chat and discussion forums. The physicians also use private and commercial social media, such as Facebook, for everyday work purposes, to communicate with each other and seek advice or answers to clinical questions.

4.2 Practice Perspective

The nurses have had help with transitioning into using social media as a part of their everyday work practice. A communicator has been working with the nurses, helping them form a tonality that fits the clinical practice. The communicator is not a part of the clinical work but rather a helping hand as a part of the research project focusing

on digitalization in healthcare. As such, the communicator has been a part of the change process but is not a permanent part of the practice. The nurses are thereby slowly transitioning into having increased responsibility for the online communication. Erika, a nurse at the clinic, is highly professional in her everyday work but she has been trained in one-to-one communication, within the walls of a patient room at one of the region's largest hospitals. She is not used to communicating with an unknown audience. Her answers on the Q&A board change over time. A year after starting to answer, her answers on the Q&A board show that she has become more confident in her way of answering, her answers are more personal than they were a year ago, and she now signs her posts with her own name, which she did not do in the beginning. Due to the anonymity on the Q&A board, the nurse has to find a balance between helping the specific patient asking the question and generalizing so that the advice is helpful for others, who are readers of the Q&A board.

Sofia is a communicator in one of the municipalities, who is constantly online checking her social media feeds and she cannot understand how some fellow communicators can check out from the municipal Facebook page in the evening and weekends and return the day after or on Monday. According to Sofia, these people have not understood the essence of social media. We had an incident once in the municipality, she explains, with a politician who in the heat of the moment expressed negative thoughts about an extremist group on Twitter. He immediately admitted his mistake and deleted the post since he was expressing feelings about an issue that is politically correct to dislike, and since he apologized, he managed to turn his mistake into success instead. After the incident, trust in him increased. People liked that they were able to see him as a human, reacting strongly to things that are wrong. This turn, she says, from failure to success in social media is possible if the mistake is handled in the right way. That is, if you publicly apologize afterwards, stick to the same line of explanation and if the mistake is not related to issues such as sexism, racism or homophobia. What makes Facebook dangerous is that mistakes like this can be fatal. A mistake can lower the trust for the whole municipality and for the individual public servant or politician. A lot is at stake since a mistake can go viral. At an individual level, I can get fired if I make a mistake because I have lost people's trust, she says. It is important to keep in mind that the communicators always represent the municipality, even in private settings. That means I cannot post inappropriate things in my private feed that are not in line with values of public government. Facebook is unpredictable in the sense that you never know what the response to a post will be. A post that you do not think will get any attention can suddenly end up becoming viral.

Jenny is a resident physician halfway through her continuous clinical training towards specialist competence. She has a strong sense of responsibility to keep updated and participates in collegial discussions and exchange of experiences. In recent years Jenny has found social media to be a smooth and easy way to stay up to date on medical news. While she can see potential in using social media at work, Jenny is doubtful, for example, about using Facebook groups as a part of her professional work due to the legal and ethical aspects. She has suggested they should try using social media to get a quick answer to clinical questions, something similar to Facebook and WhatsApp, or similar technology that can be trusted for patient security issues. It would be better for the senior doctors as well, because they could mark themselves as online when available and would not be interrupted all the time. Jenny

finds it wasteful the way it is now when this kind of tacit knowledge is only used in a particular situation, whereas it would be a useful resource for other doctors in similar situations and for organizational learning. There is still a lot of scepticism towards social media in the medical profession. Jenny can see the older generation of doctors, in particular, who do not understand it and consider it a waste of time. She feels that it is hard when the responsibility is often imposed upon them as individual physicians, depending on people doing it out of interest and in addition to their regular duties.

4.3 Professional Perspective

The nurses are not used to having a voice on social media. The struggle of being a professional nurse online is an ongoing one. Erika gets a question through the Q&A function and struggles with the notion that she does not know who will be reading her replies. She writes an answer and posts it. The answer is rather clinical and straightforward. Depending on how the question is phrased, and how much detailed information it includes, she might be able to identify the patient as one of her patients if the question is rich in information about the patient's history. She struggles with how to answer those questions without giving away that she knows the patient. For that reason the way the answers to the questions are phrased is important. She is truly professional and thinks carefully about her words. The posts on Facebook are a way to drive traffic to the information portal. The posts are meant for a group of patients but the 'likers' of the Facebook page might also be next of kin or other healthcare personnel. The way the posts are written is therefore a balance between a caring and clinical tone. This means that the tone is both important in the Q&A form, which is visible to all visitors on the information portal, but the choice of words for the Facebook posts, that can be spread widely, has also become a part of her everyday work.

In the context of the municipality, the old impression of the municipality as a bureaucratic institution is still there, and that impression might mean that people could stop talking to us, Sofia argues. The constant and ongoing communication with people is important so that citizens feel comfortable contacting the communicator if they want to post something on Facebook. According to Sofia, the communicator is representing the municipality and the Facebook page is the outward face to the people. It is therefore important to always respect everyone's questions and opinions by replying in a nice and friendly tone. It is also important not to let your feelings take over too much. Furthermore, social media is an instant technology and people are expecting an instant response. If we do not give them an instant response, we will give a very wrong impression of the municipality as not showing interest and respect for people. The voice of the municipality on Facebook should be like a friend's, Sofia says. She emphasizes the importance of acting as a friend by always sharing new and interesting stories or something that you can laugh at. A friend is always there for you with support and a friend speaks to you in a voice that is personal and friendly. The risk of being too friendly is that you will not be taken seriously. It is important to always find a balance between sticking to serious matters and a professional tone, but still invoke the feeling of being a friend whom the citizens want to continue listening to.

Jenny values social media and reads on a daily basis, yet she has chosen a passive role and does not interact or contribute to the discussions. She likes to engage in collegial discussions in the workplace, where she can often refer to something she read or saw in a post. But she does not feel comfortable with the openness and directness of social media. The risk of having misunderstood a topic or being questioned by peers and senior colleagues inhibits her. But then again, she has a lot of friends from medical school and colleagues that post work-related information. For example, a close friend got published in a top medical journal and shared the link and there was a ton of likes and comments, which is another situation, a situation where it felt completely right to join in the discussion. Jenny is extremely restrictive when it comes to patient cases and social media. She can see a great potential and opportunity to networking with specialists from all over the world, but she would never share or discuss medical questions related to her patients. Sometimes patients post medical questions, and one time a patient contacted her on her personal Facebook account on a personal matter and that made her feel uncomfortable. Jenny often struggles to find the right balance between her private and professional role in the context of social media.

5 Discussion

Being a professional in the public sector brings with it a long tradition and a mission of accountability and responsibility towards citizens and other stakeholders and a strong loyalty to the profession [2]. When social media becomes part of the work, everyday practice is pondered, negotiated and transformed through a balancing act of on the one hand maintaining a professional identity and on the other hand navigating social media affordances [1].

We have presented the technology, the practice and the professional perspective as different aspects in our findings above, but that is merely for analytical and descriptive purposes. We do however see these as entangled. Through our analysis, which will be further developed here in the discussion section, we have identified three themes characterizing the practice constituted by constantly balancing the social media seesaw of work. The themes are discussed below as: i) context collapse, which is discussed from a practice perspective; ii) tonality, which is discussed from a professional perspective; and iii) sociomateriality in action, which is a summary of the entangled affordances of social media in practice. Context collapse and tonality are categories that are close to practice whereas sociomateriality in action is on a higher level of abstraction. By doing this, we make an attempt to contribute to a holistic understanding of practicing social media in the public sector through the sociomaterial lens.

5.1 Context Collapse

Social media enables an open work environment where information is visible and potentially spreadable to an unknown audience. There is a lack of control however

with regard to visibility and spreadability of the content. The imagined audience and context collapse [13] primarily concern the change process from one-to-one communication with a known audience, to one-to-many communication in an unknown territory on the web. The struggle therefore also requires zooming in and zooming out on potential audiences and getting to know the audiences in order to cover and target these complex, unknown audiences.

In both the cancer rehabilitation case and the municipality case, social media is used for new purposes, to reach out to a larger group of patients or citizens and to enable dialogue between professionals and stakeholders. This is different from the nurse-patient meeting at the clinic or in the e-mail conversation between municipality administration and citizens, where the aim is to address a specific person and facilitate that particular person's needs. This change thereby means interacting with the group through one-to-many communication while taking into account comforting the individual patient while also taking a broader perspective because the audience also includes next of kin and other healthcare professionals. In the municipality case the communicators talk to a large, heterogeneous group of citizens. Often, the group is unspecified and unknown, which makes it difficult to be friendly and relevant and to predict the reaction and the following spread of the posts. In a similar manner, social media enables one-to-many communication for the resident physicians and allows for new ways of collaborating with internal communication, where discussions can take place in an open space rather than in closed forums with peers and colleagues at the clinic. This increases the inter-connectedness and sharing of information and conversations among the professionals [1, 31] and creates interaction spaces between the professionals and the patients or citizens. According to Treem & Leonardi [1], the notion of visibility is tied to how much effort people put into finding information. This is as in the case of the resident physicians where social media at work and professional peer-to-peer forums make visible communications about work behaviour and meta-knowledge ('who knows what' and 'who knows whom') that has previously been invisible and hard to access [4].

What is interesting in our three contexts, is that there is a struggle when it comes to both internal and external communication. In the context with the cancer rehabilitation nurses and the municipal communicators the struggle concerns external communication. However, in the case of resident physicians, the struggle mainly concerns internal communication. This means that within the public sector, there is a struggle with context collapse both when it comes to internal communication with known peers as well as with external communication with an unknown audience through social media.

When many contexts collapse into one, as they tend to do when communication takes place in a space of complex unknown audiences, the professionals start to ponder the quality of the work, ask how it will be examined by the audience, and reflect on how the communication style matches their professional identity. The resistance to being friendly on the municipal Facebook page can be explained from the struggle with the collapsed context. In the municipality case, the struggle with context collapse is about targeting people's feelings, i.e., talk about things that people can relate to and that are close to their everyday life, hence they try to imagine an audience [13].

5.2 Tonality

The visibility, editability, persistence and association of content means that the work may be spread, examined, questioned and discussed in public [1]. When the professionals start thinking more about how the quality of the work will be examined and how it matches their professional identity, they start negotiating their own professional identity [3].

Social media is mainly used in the private domain, meaning that the professionals have used social media for their own private use, before using it as a part of their profession. The tonality is thereby easily inherited from the private use. By tonality we mean the choice of communication approach as well as the formulation of specific words or emojis in a specific post, when interacting with each other or the stakeholders through social media [32, 33]. When social media becomes a part of everyday work, there is a struggle with finding the right tone when writing the posts. A friendly dialogue between government or hospitals and its stakeholders is a way to gain knowledge about the stakeholders to increase relevance in the development of services, such as care. It also increases transparency of public sector activities [8] and can be a driving force in collective action [9].

In the case of cancer rehabilitation, the effort of making the audience comfortable with sensitive subjects requires a high level of caring skills reflected in the tonality, but to adjust to the more privately associated forum such as the Q&A, requires the tonality to be personal. In a similar way, the municipal communicator adjusts to a personal and friendly tonality. A friendly tonality may decrease the distance between the professionals (such as the nurses and communicators) and the patients and citizens and enable deliberation regardless of topic and timing. In contrast to the cancer nurse and communicators, the resident physicians use social media for inter-professional communication, which means that the audience, in that case, is their colleagues and co-workers. While in that specific context the audience is often known, still there is a struggle of finding the right way of communicating and the resident physicians tend to hold back in discussions due to how public it is. While social media provide opportunities to discuss and exchange experiences in professional networks, there is a fear of being misunderstood or questioned by more senior colleagues. The informal tonality on social media further contrasts with the traditionally more hierarchical structures in healthcare.

The friendly tonality challenges the public sector professional identity of being accountable, responsible and transparent. Developing a friendly tonality that triggers people to participate in dialogue or in collective activities is an ongoing process of fine-tuning the balancing of the seesaw. Even though the professionals' practice expands towards a more confident approach, the struggle continues and some days they may feel completely in control while on other days they feel a lack of control.

The friendly communication practice changes the relationship between the professionals and their audience [8]. This changing relationship is important for the professionals to be relevant and responsive. The feedback they gain from being friendly can be used to develop the practice further. The friendly tonality is fed into the practice in an iterative manner. Hence, social interaction becomes material in an entangled continuous process. Consequently, the unknown and at times imagined complex audience, makes it hard to tilt on the seesaw between friendliness on the one

hand and an authoritative, bureaucratic tone on the other, a tonality which leaves most of the potential audience unreached.

5.3 Sociomateriality in Action

In line with Treem & Leonardi [1] our focus of attention has been on the sociomaterial practices that various features of social media afford, aiming to develop an understanding of the interplay between technology and practice while avoiding focusing on one aspect over the other. As social media becomes part of everyday practice, the transition towards using social media as a part of everyday work changes professional work and what work means in terms of being a professional. To meet the identified need for deeper understanding of the impact of social media for professional work in the public sector, we propose a model for understanding sociomateriality in action, which takes into consideration the technology and the public sector profession and the relationship between them (Figure. 1).

If the audience is not touched by the professionals' posts on Facebook, the response from the audience may fail to appear. And when the audience stops responding, i.e., liking, sharing and commenting, they will also stop seeing future posts from the professionals. The mechanisms of Facebook are about users sharing data, meaning to share personal data about themselves and behavioural data such as likes, shares, and comments, and content data such as texts, pictures, and videos [34]. The Facebook mechanisms afford and require interaction, so that posts continue being visible. Facebook is thereby a strong agent in the social media practice of the professionals. Even if each specific post has its specific audience, the professionals have to take into account the overall audience as well and strategically target different imagined audiences over time, so that the Facebook mechanisms keep feeding their communication to all of their audience, not merely a targeted group. The interplay between Facebook and the professionals shapes the professionals' practice, which constitutes the interplay between humans and technology [17-19, 35]. More specifically, the professionals' practice is what we would like to call *sociomateriality in action.*
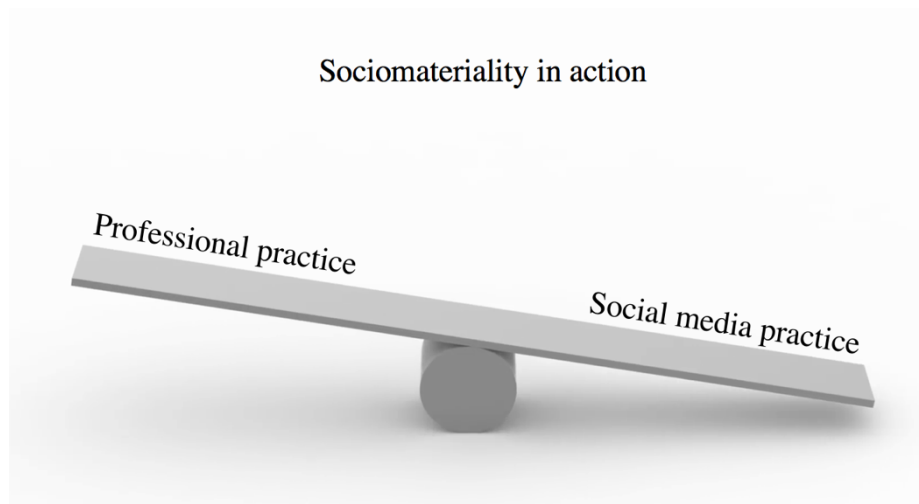
Fig. 1. A sociomaterial seesaw.

6　Conclusion

Through comparing three interpretive field studies with a narrative analysis we have shed light on the interplay between technological mechanisms and professionals' striving to uphold a professional identity, in the practice of social media in the public sector. Our findings illustrate how professionals in the public sector balance professional practice and social media practice. We shed light on the context collapse that happens when going from one-to-one communication with a specific person to one-to-many communication with an unknown audience. The findings also take into account the tonality, which is important when communicating in social media which includes balancing between friendliness and upholding and maintaining a professional identity.

The interplay between Facebook and the professionals shapes the professionals' practice. This interplay consists of finding a balance between the professional practice and the social media practice, which we illustrate in a sociomaterial seesaw and which constitutes *sociomateriality in action*.

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