
Introduction

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1 Introduction

Social media has become increasingly pervasive and ubiquitous in everyday life. This is emblematic by the inclusion of the word 'tweet' in the Oxford English Dictionary (Phung, 2013). The organisational workforce is not only increasingly comfortable with social media, but has been open to innovative social media platforms when actively backed by management and supported by IT (Barker, 2008). A key reason for this buy-in of social media in organisations involves a perceived transparency that comes out of being able to 'see' the lives of others within their organisation. Specifically, in a large global organisation, interacting socially with other organisational members can foster community building (Wellman et al., 1996) and trust, an important antecedent for successful organisational collaboration. The computer supported collaborative work (CSCW) literature is now quite established in these areas. The use of social media, however, for collaboration is still developing.

There is much to be done in terms of theorising social media and organisations as well as empirically studying these technologies. For example, the question of whether Twitter can foster scientific collaboration continues to remain relatively unanswered and understudied. Alternatively, the use of social media in enterprise organisations has been studied in more detail, but remains without a fully mature theoretical and methodological grounding. Early scholarship investigating large organisations such as IBM made great strides in this direction.

However, there remains resistance to social media within some collaborative organisations. For example, microblogging may be seen to threaten face-to-face or e-mail based collaborative processes. Rather, microblogging should be seen as a space where potential collaborators can be found or ideas can be hashed out with large, sometimes latent collaborative networks. For example, I have been studying the structure of networks formed around trending topics on Twitter. I found that a recent network I had studied explained some unique dialogic trending topic formations. I discussed the case study via my blog and Twitter. I received a tweet from a French researcher who I was not following and who was not following me. He suggested another useful approach. Though the tweets were inherently brief, his collaborative contribution directly helped me produce a stronger piece of work.

However, barriers to social media and collaboration remain. For example, the AWWA Water Science and Research Division reported that Water Board committees

who are trying to increase collaboration while cutting costs have evaluated social media use, but found not only issues of copyright protection, but also that respondents reported a lack of technical knowledge (57%), prohibitive company policies (41%), and the amount of time needed to manage social media (28%) (AWWA Water Science and Research Division Information Management and Technology Research Committee, 2011). Case studies such as this are not uncommon and this trend highlights a continuing difficulty of deploying social media in collaborative organisational contexts. However, in the AWWA, their conclusion is to ultimately recommend social media for collaboration, as the technology helps address the fact that “Utilities today face tighter budgets and a greater need for collaboration than ever” (AWWA Water Science and Research Division Information Management and Technology Research Committee, 2011).

2 Mapping the field

Though social media and collaboration remains understudied overall, significant work has been done on social media, collaboration, and education. With the recent rise of massive open online courses (MOOCs), research has specifically investigated the efficacy of social media in fostering collaborative learning (Chao et al., 2011; Poellhuber et al., 2011). Indeed, Hargadon [cited in Chao et al., 2011] goes so far as to say social media will soon become an inextricable part of the learning process. Because many of today’s students are already ‘digital natives’ (Palfrey and Gasser, 2008), their resistance to social media in education is relatively limited compared to other demographics (Lee and McLoughlin, 2011). Chao et al. (2011) developed a virtual learning environment (VLE) which integrated Facebook and Twitter. Upon entering a physical classroom at their institution (which was part of the VLE project), students logged on via a linked Facebook, Twitter, or university account. The VLE automatically took attendance and presented the day’s slides. Students could then interact with other students via social media and help each other understand concepts they may not understand during the lecture itself. The idea here is that some students prefer collaborative learning to asking an instructor in a big lecture class [i.e., preferring to interact with peers rather than professor (Chao et al., 2011)]. The system even allows students to tweet or Facebook-update quiz scores (Chao et al., 2011). Students can also rank who took the best notes and post these ‘acknowledgments’ on Twitter (Chao et al., 2011).

However, most organisational settings are very different from VLEs. The natural question that arises is that collaboration in organisational settings does not just involve ‘digital natives’ or younger individuals as a general organisational demographic. Studies of distance learning students have seen up to a third of respondents over 33 years old (Poellhuber and Anderson, 2011). Poellhuber and Anderson (2011) found that 38.4% of their respondents were interested in collaborating with peers via social media. What is most striking is that older students (across gender) were most interested in social media-based collaborative learning despite having lower levels of social media experience than younger students. This highlights that social media adoption within collaborative settings may not conform to traditional ‘fits’, norms and beliefs.

3 Social media and organisations

In some ways, social media and organisations seem an unlikely fit. News reports abound with cases of employees posting unsuitable material on social media about their organisations, leading to, for example, employees losing their jobs and of organisations coming under harsh scrutiny for firing employees because of social media activity (Greenhouse, 2010; O'Brien, 2011). The legal consequences, of course, vary internationally (Teitel, 2012). Unsurprisingly, many managers have reservations on the utility of social media to their organisations and to organisational innovation. Though it is not uncommon for organisations to block social media use, studies in this area report that doing so inhibits innovation, knowledge sharing, and productivity (Hemsley and Mason, 2012). Indeed, formal organisations present an interesting environment for social media to flourish. For example, social media intranets, unlike some social media public platforms, enable users to let go of anonymity and, as such, these forms of social media can offer individuals in the organisation an opportunity to get to know one another better and to connect individuals with relevant areas of expertise together (Brzozowski, 2009).

HP, for example, implemented WaterCooler, their own enterprise social media which was beta tested across their company (Brzozowski, 2009). Like IBM's earlier enterprise social media, beehive (Steinfeld et al., 2009), WaterCooler was built around employee profiles. The platform also incorporated tagging people, organisational groups, and a news feed. WaterCooler implemented Twitter-like microblogging for idea generation and to promote innovation and customer service strategies. This was also used to share current physical location, which was seen as increasing accessibility to valuable human resources. Social media platforms such as WaterCooler are being deployed in enterprise organisational settings for several reasons. First, large organisations (especially global ones) are highly distributed and often excessively hierarchical. Sharing knowledge can be seriously inhibited due to the fact most individuals in the organisation do not know how to find people with the necessary knowledge or expertise (Lam, 1997). Therefore, projects involving new forms of collaborative knowledge may be less successful. Second, some organisations which were initially hesitant to social media due to news reports discovered that firewalled intranet versions could leverage the technology to promote innovation, while minimising external exposure and resultant risk (Brzozowski et al., 2009). These technologies include full-blown platforms like WaterCooler, but also experimental wikis, blogs, and forums. Like Wikipedia, a set of organisational wikis can make knowledge sharing much more transparent and accessible within large, distributed, global organisations. Third, social media such as blogs can foster a sense of community in large organisations and can be a motivator for participating in these platforms (Brzozowski et al., 2009). Additionally, in the case of WaterCooler, for example, the tweet-like microblogging was thought to lead to "more team cohesion and lead to faster problem solving" (Brzozowski, 2009). That being said, it should be noted that a major hindrance is the fact that individual employees may not see the value of engaging with social media platforms as their managers may not be on the platform and including their contributions as part of their manager's formal evaluations of them (Brzozowski, 2009). Additionally, as discussed in the context of Twitter, some have argued that rather than being democratising, social media can lead to elitism or information overload (Meraz, 2009). In the context of organisations, it may 'empower' many individuals to have a

voice, but this could also lead to high levels of noise, rather than clear forms of innovation and collaboration.

4 The papers in this issue

Interdisciplinary studies often benefit from the application of a variety of methodological approaches. The collection, utilisation, and hybridisation of methodologies from various disciplines studying organisations is important to successfully understanding collaborative organisations and social media. The study and understanding of the use and functions of social media technologies on the structure and performance of collaborative organisations draws from a wide variety of fields including information systems, sociology, psychology, management studies, and communication. Within these fields, a diverse array of methods has been used to study social media and collaboration in organisations. The papers in this issue not only represent a diverse array of disciplines and methods, but present state-of-the-art empirical findings on the study of organisational dynamics and social media. The papers in this issue help map the field, theoretically frame it, and introduce successful qualitative and quantitative methods for studying collaborative social media and organisations.

For example, Alex Primo and Gabriela Zago, in their article 'The organisation (re)invented by its blogs', provide a strong example of a theoretical frame to understand the activities of an organisational blog through the lens of actor-network theory (ANT) and the Montreal School theory of communications. Their work defines the 'blog genre matrix', a taxonomy for the classification of blogs based on authorship, intended audience, and context. Focusing specifically on the use of blogs in large organisational environments, they explore the function and activity of these blogs as an actant of organisational change. Steve Jones and Zachary Benjamin, in 'Framing ICT usage in the real estate industry', focus on reviewing the literature and using qualitative interviews to explore how social media and 'Web 2.0' have reshaped the organisational landscape of the real estate industry. They examine how various types of social media are remaking/reshaping the real estate industry through an analysis of literature as well as a qualitative analysis of interviews with members of the real estate community (particularly the National Association of Realtors), they explore trends in how the use of technology and particularly social media have reshaped the real estate industry, and the role of the realtors themselves. Jing Wang and John M. Carroll, in 'Microblogging practices of virtual organisations: commonalities and contrasts', develop a coding frame to qualitatively explore the types of communications used by organisations on Twitter. They explore the microblogging practices of two types of virtual organisation/communities using a sample of tweets from each community. Wang and Carroll compare the practices associated with each organisation through the development and application of a coding frame to the sampled tweets to understand the micro-blogging practices utilised.

Xue Zhang, Peter A. Gloor and Francesca Grippa, in 'Measuring creative performance of teams through dynamic semantic social network analysis', develop robust, hybrid methods, by utilising methods from social network analysis (SNA), content analysis, sentiment analysis, as well as recent theory in the study of creativity and group activity. They develop methods to explore 'creativity' and 'performance' of collaborative teams. Their framework for the analysis of email communications between members of collaborative teams is highly innovative. Using SNA techniques, content

analysis, sentiment analysis, and quantitative methods Zhang, Gloor, and Grippa are able to evaluate the performance of such teams. The model is used to help investigate a number of key hypotheses drawn from literature about the performance and creativity of collaborative team efforts. The insights gained from these analyses suggest ways in which the structure, membership, and activity of such teams might be optimised to create situations which allow for peak performance. Dhiraj Murthy and Macgill Eldredge, in 'Building trust in virtual organisations: a case study of trust and gender in a scientific virtual organisation breeding environment', combine emergent coding of scraped social media with social network analysis. They extend models of swift trust to collaborative social media and virtual organisations. Murthy and Eldredge provide innovative methods to not only understand how trust 'language' is used, but also to understand how types of trust can be developed from social media to build empathy within a virtual organisation, which helps build successful collaboration. They are also specifically interested in the sentiment of social media interactions and connect this with how social media successfully fosters scientific collaboration in virtual organisations.

This special issue of the *International Journal of Organisational Design and Engineering* brings together a unique collection of papers which map and comment on the field of collaborative social media and organisations. The issue contributes to literature in this area by exploring the utility of using sentiment analysis, content analysis, and social network analysis, particularly exemplified by 'Measuring creative performance of teams through dynamic semantic social network analysis' and 'Building trust in virtual organisations: a case study of trust and gender in a scientific virtual organisation breeding environment'. The issue also provides theoretically-grounded frameworks to better classify and understand social media. Specifically, the genre matrix in 'The organisation (re)invented by its blogs' can be applied to understanding various types of social media as organisationally reflective (c.f. the virtual organisation of 'Building trust in virtual organisations') or organisationally informative (c.f. the real estate organisation in 'Framing ICT usage in the real estate industry'). The issue also specifically explores the differences in 'forced' organisational collaboration versus voluntary collaboration (the latter emblematic of open-source software). The issue covers a broad terrain ranging from analyses of efficiency and creativity to innovation and knowledge organisations. Ultimately, this collection provides a critical starting point for better understanding collaborative social media and organisations, an area that is fundamentally important to organisational design, but severely under-researched.

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