Do good things and talk about them: A Theory of Academics Usage of Enterprise Social Networks for Impression Management Tactics

Research-in-Progress

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Abstract

Enterprise social networks provide benefits especially for knowledge-intensive work as they enable communication, collaboration and knowledge exchange. These platforms should therefore lead to increased adoption and use by knowledge-intensive workers such as consultants or indeed researchers. Our interest is in ascertaining whether scientific researchers use enterprise social networks as part of their work practices. This focus is motivated by an apparent schism between a need for researchers to exchange knowledge and profile themselves, and the aversion to sharing breakthrough ideas and joining in an ever-increasing publishing and marketing game. We draw on research on academic work practices and impression management to develop a model of academics' ESN usage for impression management tactics. We describe important constructs of our model, offer strategies for their operationalization and give an outlook to our ongoing empirical study of the use of an ESN platform by 20 schools across six faculties at an Australian university.

Keywords: Enterprise Social Networks, Impression Management, Use Behavior, Academic Work Practices, Knowledge Exchange

Introduction

One class of technology that has proliferated over recent years is known as social networking technologies (Kane et al. 2014). These technologies describe online platforms for users to profile themselves, interact with each other, exchange content and ideas, and maintain interpersonal relationships.

The allure of these technologies is often seen in an increased ability to foster knowledge exchange and collaboration within companies because of the possibilities these platforms provide through affordances such as network transparency, content flow and access, and relational ties (Boyd and Ellison 2007). The ability to share knowledge, as well as to interact and collaborate, is of interest especially to knowledge-intensive organizations (Riemer and Scifleet 2012). Thus, they are especially relevant for research institutions as a form of highly knowledge-intensive companies, whose main capital is intellectual matter, and most of their processes are concerned with exploration, discovery, accumulation, exploitation, and reselling of expertise (Maister 1993).

While studies exist about the use of social networking technology by consultancy firms (e.g., Riemer and Scifleet 2012) we are not aware of a study of academics' use of enterprise social networking technology specifically. This is surprising because (a) the allure of social networking technology to support cross-disciplinary, collaborative research is palpable to the growing demand for cross-disciplinary and collaborative academic inquiries (Cummings and Kiesler 2005), (b) academics are known to be early and intense adopters of other social technologies such as Twitter (Eysenbach 2011) or community-specific software such as ResearchGate or Academia.edu (Lin 2012), and (c) there is a growing amount of universities that are in fact actively employing enterprise social networking technologies such as Yammer, Jive or other software (e.g., Söderqvist 2013).

In our research, we set out to examine the use of enterprise social networking technology by scientific university staff as part of their academic work. In examining the type, variety and extent of use, we specifically focus on the role of impression management tactics. Impression management refers to the processes by which individuals attempt to control the impressions others form of them (Leary and Kowalski 1990). Our interest in impression management by academics and its influence on enterprise social networking technology use is motivated by (a) the growing evidence that impression management is a major motive for actively participating in social networking sites in general (Krämer and Winter 2008) and (b) the growing pressure of publications that increasingly requires scientists to maintain, build and grow profiles that allow for interaction, collaboration, and communication of research results (Lovasz-Bukvova 2011) as well as the need to not only publish but also to increase readership and citation impact of published papers (Eysenbach 2011).

Our research purposes to (1) offer a conceptualization of the relationship between impression management tactics and the use of enterprise social networking for knowledge gathering, socialization and contribution by academics, and (2) examine these relationships using data from enterprise social networking users in different schools and faculties within universities. We focus on academics usage of social networking platforms within their universities because (a) most research collaborations occur at an intra-university level (Morrison et al. 2003) and (b) ESN as a class of technology are organizationally-bounded and thereby different to open communities such as ResearchGate.net or Academia.edu.

In this manuscript, firstly, we discuss the development of the conceptual model that describes our emergent theory of enterprise social networking usage for impression management. Secondly, we provide details about construct operationalization and measurement and describe our proposed methodology for empirically testing our model in future research.

Background

Impression Management

Individuals often strive to create a particular image of themselves, in the workplace and elsewhere, in order to be treated or evaluated in a favorable way. In this context, impression management refers to "the process by which individuals attempt to control the impressions others form of them" (Leary and Kowalski 1990, p. 35). That is, it covers (a) peoples' attempts to manage impressions others form of them

(i.e., others-as-audience) and (b) all actions aimed at controlling their impressions of themselves (i.e., self-as-audience, see Schlenker 1985). Our focus lies on impression management for others-as-audience, to examine how academics convey a particular image of themselves perusing the affordances of enterprise social networks, and how these impression management tactics influence their use of enterprise social networks in turn. In line with the literature we therefore use the term impression management to refer to this concept.

In the IS literature, studies related to impression management are rather scarce. Research has primarily focused on individual beliefs towards improving the image (Moore and Benbasat 1991) or reputation (McLure-Wasko and Faraj 2005) of individuals within an organization. Often, these concepts have been examined in terms of their role as predictor variables in models explaining technology adoption decisions. However, these studies only show that beliefs towards status improvements influence the decision to use a particular technology but not how such beliefs and behaviors affect others in their use of the technology. More recently, studies have included additional aspects of self-identity as a personality trait to account for the fact that people want to feel different from others when adopting IT (Hong and Tam 2006). However, most studies focus on what the use of a technology may express or signal to others and how this relates to technology adoption decisions of individuals.

Our key assumption is that impressions can especially be created by using IS that allow for interaction – such as social networking platforms. This is because these technologies are designed for users to interact, and thus allow for impressions being formed – or indeed managed - as part of this interaction. This in turn also influences the behavior of other users that share the same technology, because the way a person acts or presents himself in a social network influences the way she is perceived by others (Krämer and Winter 2008). Moreover, psychological research suggests that extensive or too aggressive impression management may be perceived negatively by others (Bolino 2003).

Enterprise Social Network Usage

While prominent social networks such as Facebook or Twitter are open systems, enterprise social networking sites are organizationally bounded counterparts of these technologies that are implemented within the organization and, hence, cannot be reached by others (Turban et al. 2011). They describe organizational communication platforms in which employees 1) have uniquely identifiable (semi-) public profiles within the organizational boundary that consist of employee-supplied content, content provided by other employees, and/or system-level data; 2) can articulate connections with other organizational staff that can be viewed and traversed by others; and 3) can consume, produce, and/or interact with streams of user-generated content provided by their connections to other staff on the site (Ellison and Boyd 2013). Several studies show that these technologies have the potential to deliver significant organizational benefits. They are perceived to be more open and participative than traditional methods of communication (Denyer, Parry, and Flowers 2011) and are increasingly implemented in work organizations in order to promote communication among employees (Leonardi, Huysman, and Steinfield 2013). However, their introduction needs to be carefully aligned with cultural values of the organization (Koch, Leidner, and Gonzalez 2013), which may especially be an issue in the academic context, because this setting is often characterized as rather individualistic in nature (Fullwood, Rowley, and Delbridge 2013).

Existing research on enterprise social networking has focused on three key perspectives. First, within the stream of ESN adoption and use, studies often rely on technology acceptance theory (Davis 1989; Venkatesh, Morris, Davis, and Davis 2003) in order to explain the use behavior of individuals on the ESN sites. In doing so, the studies have a clear technical focus (e.g., Koo, Wati, and Jung 2011; Kugler, Smolnik, and Raeth 2013; Kwon and Wen 2010). In addition, research also focuses on linking ESN usage and individual values (Zhang, Qu, Cody, and Wu 2010).

A second research stream focuses on social behavior on ESN, particularly knowledge seeking and sharing. Distinct from the first stream, the focus lies not on explaining the technical platform use, but on exploring the individuals' rationales behind seeking and sharing knowledge on the platform. For instance, Kankanhalli, Tan, and Wei (2005b) identify different costs, extrinsic benefits and intrinsic benefits, which influence knowledge contribution to electronic repositories. Wasko and Faraj (2005) find that individuals contribute more to a network when they a) perceive that it enhances their professional reputation, b) enjoy helping others, c) are structurally embedded in the network, and d) when they have experience that

is worth sharing. Other studies focus on identity management (Ma and Agarwal 2007), knowledge validation processes (Durcikova and Gray 2009) or collaborative norms (Bock, Kankanhalli, and Sharma 2006) in explaining knowledge contribution. In addition, research specifically investigates knowledge seeking behavior (Bock et al. 2006; Kankanhalli, Tan, and Wei 2005a) and its relation to knowledge sharing (Phang, Kankanhalli, and Sabherwal 2009; Yan and Davison 2013).

A third stream of research examines how communities develop on social networks and how and why members choose to contribute to or sustain these communities. These studies examine how users sharing a common interest use social networking platforms to engage and transfer information. They mainly focus on open-source communities (Zhang et al. 2013) but also target innovation markets (Morrison et al. 2000). It is established that achieving a critical mass is often key to muster the sustained participation of existing members (Ren et al. 2012).

All three streams of research are relevant to understanding ESN use by academics. First, technology adoption and use research is relevant because there has been an observable shift towards the use of electronic media in scientific communication across many academic fields (Kling and McKim 2000). Second, knowledge seeking and sharing is highly relevant in the academic context as scholars heavily rely on knowledge exchange and sharing in their daily work (Te'eni and Schwarz 2004). Third, research in the context of community development on social networks is relevant because (a) academics also form a community with common interests and shared practices and (b) effective collaboration and knowledge sharing by academics is also dependent on a critical mass of contributors.

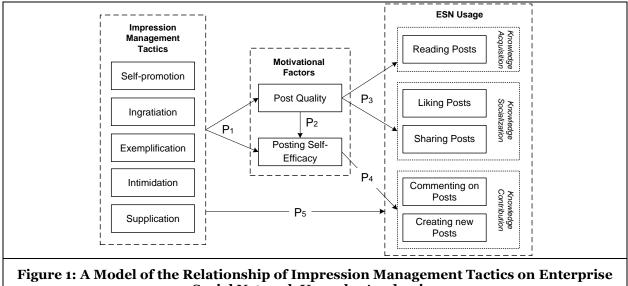
Academics and their Work Practices

We have two key reasons to focus our investigation on impression management and ESN use within the substantive context of academics and their work practices. First, research is knowledge-intensive work and increasingly requires collaboration, thereby potentially benefiting from ESN affordances (Rowley 2000). For instance, Oh, Choi, and Kim (2006) show that collaboration on paper publications has significantly increased over the years, and calls are made for higher education institutions to build. encourage, and cultivate research-knowledge sharing among academics (Ismail, Xu, Wood, and Welch 2013). However, even though work practices in academia are almost entirely knowledge-intensive, there is virtually no research on the use of ESN technology to assist that purpose. Second, the academic community is often associated with a predisposition towards impression management ("selling their individual work"). Studies characterize academic culture as individualistic in nature and to some extent even self-serving (Fullwood, Rowley, and Delbridge 2013). Recognition of the work is seen as primary reward mechanism for scholarly performance (Newman and Cooper 1993). Growing competition among researchers drives the need for recognition, regard and inclusion by respected people in the field (Anderson, Ronning, De Vries, and Martinson 2007). In addition, research points out that "working within the scientific community requires artful maneuvering and strategizing. While game-playing may be a distasteful reality for some scientists, it seems to be a source of perverse pleasure for others, those who cunningly orchestrate every professional move" (Anderson et al. 2007, p.446). In sum, these arguments suggest that high but varying levels of impression management are likely to be existent in academic environments. Through affordances of ESN technologies to create digital profiles and to control information about oneself, the work and achievements, one can therefore imagine that impression management and ESN usage are highly inter-dependent. Furthermore, academics reportedly already peruse web technologies such as blogs and tweets to create digital identities (Ewins 2005), often with a view to boost their research impact even though this may not eventuate (Haustein et al. 2014). Finally, there is some evidence to suggest that emerging digital platforms such as Wikis (Kane and Fichman 2009) or weblogs (Ebner and Maurer 2009) are altering traditional academic processes such as paper writing and reviewing. This suggests that ESN technologies, as a similar class of technology, can also have a profound impact on the way that academics engage in practices such as collaboration, ideation, study or writing.

Model Development

Given the absence of strong a priori theory, we sought to first develop a conceptual model that would help us to remain cognizant of extant literature and existing empirical results during our forthcoming empirical examination of academics' usage of enterprise social networking technologies and their impression management behaviors. Hence, our a priori conceptual framing serves three key purposes. First, it will help us to ensure that we remain theoretically aware during our collection and analysis of empirical data. Second, it will improve our ability to prompt informants and other data sources concerning some potentially relevant issues and themes for which they or we may have low salience or awareness during data collection. Third, it will sensitize us to the wide range of factors potentially impacting perceptions of impression management tactics as well as ESN usage variety. We can therefore rely on our model to allow us to evolve our understanding based on the ensuing empirical findings we will develop.

Our conceptual model structures three relevant categories of factors. First, we differentiate five **impression management tactics**, viz. self-promotion, ingratiation, exemplification, intimidation and supplication. Second, the research on knowledge seeking and contribution on online platforms suggest that extent of social networking use is often mediated by perceptions of content quality and self-efficacy as **motivational factors**. Third, research on knowledge management suggests that at least **three types of ESN use** can be distinguished, viz., technology use for knowledge acquisition, knowledge socialization and knowledge contribution. Figure 1 shows our view of the proposed conceptual model.



Social Network Usage by Academics

Impression Management Tactics

There have been several efforts in the literature to come up with a taxonomy of impression management tactics. Jones and Pittman (1982) conceptualize five major tactics: 1) Self-promotion, whereby individuals point out their abilities or accomplishments to be regarded as competent; 2) Ingratiation, referring to doing favors or flattering others to be viewed as likable; 3) Exemplification, whereby individuals go beyond their duties in order to be attributed with dedication; 4) Intimidation, where people show their power or potential to punish in order to be viewed as dangerous; and 5) Supplication, where individuals promote their weaknesses or shortcomings in order to elicit an attribution of being needy. Later studies built upon this taxonomy, developed items to measure the five tactics, and empirically validated the theoretical model (Bolino and Turnley 1999). We believe that the Jones & Pittman model is particular suitable for the academic context. First, with respect to self-promotion and exemplification, research points out that there is a high level of strategic behaviour in the scientific community, "the simplest form ... [being] reflected in a scientist's desire to 'look good,' that is, to have a good reputation" (Anderson et al. 2007, p.446). Second, it is shown that the productive scientist "emerges as a strongly motivated, dominant person who is not overly concerned with other persons' views" (Chambers 1964, p. 1204). Dominant behavior is often associated with intimidation tactics (Gardner and Martinko 1988). Third, with respect to ingratiation and supplication, game-playing and strategic influencing is identified as important factor for academic success (Anderson et al. 2007).

Motivational Factors

Motivation is defined as being "energized or activated toward an end" (Ryan and Deci 2000, p. 54) and is commonly differentiated into intrinsic motivation, i.e. doing something because it is inherently interesting or enjoyable, and extrinsic motivation, which refers to doing something because it leads to a particular outcome (Ryan and Deci 2000). While research on knowledge seeking and contribution has tested a plethora of different motivational factors, many of the studies find that perceived post (content) quality (extrinsic factor) (e.g., Bock et al. 2006) and the self-efficacy of the user (intrinsic factor) (e.g., Durcikova and Gray 2009; Kankanhalli et al. 2005b) are important mediating constructs.

Post quality. In the context of academic knowledge exchange it is observed that researchers often distance themselves from strategic behaviors that they observe in their colleagues and find it important that people do not pursue knowledge exchange in an egoistic way (Berthoin Antal and Richebe 2008). Generally, people who observe that they are manipulated react negatively to such impression management (Bolino 2003). Therefore, it is likely that academics will perceive strategic impression-centric posts, i.e. those they identify as being concerned with impression management, as of lower quality in terms of knowledge accuracy and preciseness. This effect would capture the perception of "boasting" and "ego-marketing" rather than the sharing of valuable knowledge. Also, we expect perceptions of supplication to have a negative effect on perceived post quality. The perception of need fulfillment by the posts is likely to decrease if many people pretend to know less than they do. In addition, impression management tactics are likely to have an effect on posting self-efficacy. Verbal persuasion is identified as one of the main sources of self-efficacy (Bandura 1977). In particular, compliments as part of ingratiation are found to positively influence self-efficacy (Bouffard-Bouchard 1990) while intimidation techniques are shown to negatively impact a group's problem solving efficacy (Alper, Tjosvold, and Law 2000). Based on these arguments, we suggest:

Proposition 1: The perceived levels of impression management tactics on the ESN will have an effect on perceived post quality and posting self-efficacy.

Posting self-efficacy. Posting self-efficacy refers to a specific form of self-efficacy, i.e. the perception of individuals about what they can do with the skills they possess (Bandura 1986). The concept is used extensively both in the context of technology adoption (computer self-efficacy) (Bennett and Perrewé 2002; Compeau and Higgins 1995; Marakas, Johnson, and Clay 2007), academic motivation and performance (Multon, Brown, and Lent 1991; Pajares 1996; Schunk 1991), and knowledge contribution to electronic repositories. In the latter context, Kankanhalli et al. (2005b) identify knowledge self-efficacy, i.e. the confidence in the ability to provide valuable knowledge that is useful for the organization, as major factor for knowledge contribution. Similarly, Bock, Zmud, Kim, and Lee (2005, p. 91) use the concept of 'sense of self-worth' to describe the "extent to which employees see themselves as providing value to their organizations through their knowledge sharing". Studies have found that the content quality has a significant impact on the posting self-efficacy of users. Durcikova and Gray (2009, p. 89) find that if individuals believe a repository contains high-quality knowledge, they are less likely to contribute because they "feel deterred from contributing, as anything they write would have to meet this high standard of quality". Thus, we propose:

Proposition 2: Perceived post quality will negatively influence posting self-efficacy.

Use of ESN

The key goal of our model is to offer an explanation for linkages between perceived impression management tactics visible on ESN and the actual usage of the platform by academics. To that end, we need to consider what ESN usage means. Most existing adoption studies see ESN usage as a one-dimensional construct, i.e., they propose measuring intention to use or actual usage of the platform. However, IS research has called for conceptualizing the generic use construct and for considering different dimensions of use (Burton-Jones and Straub 2006). Studies show that the nature of ESN usage may differ significantly among individuals. Some may only read posts ("lurk") while others may choose to actively contribute ("post") (Muller 2012). However, only considering reading and posting leaves out a third central behavioral element of social network use, that is, it does not consider social use elements such as liking and sharing existing posts (Hermida, Fletcher, Korell, and Logan 2012). Thus, we conceptualize our dependent factor along the three dimensions of organizational knowledge creation, i.e.

acquisition in the sense of seeking, that is, gathering knowledge from posts, contribution, that is, creating new knowledge through new posts and comments, and socialization, that is, liking and sharing knowledge in posts and comments. We define knowledge acquisition and contribution as per Yan and Davison (2013), and additionally define knowledge socialization as the interactive sharing of posts and comments because this process creates knowledge amongst the sharing individuals through shared experiences of the posts and comments (Nonaka 1994). Thus, we see knowledge socialization through ESN as the use of technical sharing functionality, i.e., the distribution of existing posts within the network.

The quality of the posts on an ESN may have different effects on the different usage dimensions within our model. On the one hand, with respect to knowledge acquisition, it is likely that a higher perceived quality of the posts will lead to more frequent reading on the platform. In this context, it is found that "when perceived output quality is high, people are likely to be motivated to seek knowledge from an EKR since the knowledge can enable them to accomplish their task more effectively" (Kankanhalli et al. 2005a, p.1158). Similarly, Bock et al. (2006) discovered a positive effect of seeker knowledge growth, i.e. the belief that knowledge in a repository may increase an individual's expertise, and knowledge seeking behavior. Thus, it can be expected that the higher the perceived post quality, the higher the extrinsic motivation for knowledge acquisition. Similarly, it can also be expected that higher quality of posts will lead to higher socialization because individuals are more likely to share existing posts of good quality with the community (Baek, Holton, Harp, and Yaschur 2011). In addition, posting self-efficacy is found to be an important antecedent of knowledge contribution (Durcikova and Gray 2009). Thus, we propose:

Proposition 3: Perceived post quality will have a positive influence on knowledge acquisition in terms of reading existing posts as well as on knowledge socialization in terms of liking and sharing existing posts on ESNs.

Proposition 4: Posting self-efficacy will have a positive effect on knowledge contribution in terms of commenting on existing posts and creating new posts on ESNs.

In addition to the mediated effects of impression management on ESN usage, reinforcement theory also suggests direct effects of the different tactics. It states that an individual's behavior is shaped by potential rewards or positive consequences as well as by the absence of potential punishments or negative consequences (Skinner 1953). Thus, we expect that ESN use will directly depend on the perceived level of impression management tactics used by others on the platform. For instance, people will likely see ingratiation as positive and intimidation as negative consequences of using ESN and adapt their usage behavior accordingly. Therefore, we propose as a proposition to explore empirically:

Proposition 5: The perceived levels of impression management tactics on the platform will have a direct effect on ESN usage.

Research Design and Method

Study Design

To examine the proposed conceptual model, access is required to a case site that is (a) situated within the research sector, (b) where academic staff members or other research-active staff are active users of an enterprise social networking site, and ideally (c) where enterprise social networking use is encouraged for purposes of collaboration, communication or other forms of academic interaction (to increase likelihood of varied and extensive technology use). We have access to academic ESN users at a university site which meets these criteria. The chosen university adopted the ESN software Yammer in 2008 and has, at the time of writing, around 2800 active registered users across six faculties. Every school and every faculty has a dedicated group in which academics employed in the respective unit are registered.

In this case setting, we are pursuing a sequential mixed-method study (Tashakkori et al. 2012) that consists of several data collection and analysis strategies for purposes of completeness and expansion (Venkatesh et al. 2013). The planned design, which we started to execute, is as follows.

First, we performed qualitative interviews conducted with university staff to generate impressions and evidence for reasons for their (non-) use of ESN. These interviews revealed impression management tactics to be an important factor influencing use or non-use, respectively, which is why opted the theory development reported in this paper to focus on these elements in particular.

Second, we are executing a survey through which we collect data on perceived impression management tactics and motivational factors relevant to academic ESN users from 20 schools across six faculties at the case university. The data collection in the survey was staged such that we could evaluate measurement validity of our instrument first and then examine the structural model suggested by our theoretical argumentation.

Third, over a period of three months, we will extract individual usage data from the ESN platform in terms of postings, comments, shares and likes of content. We will code postings, comments, shares and likes as per our ESN usage categories in the research model. Second, we will apply content analysis methods as supported by text mining tools (e.g., Evangelopoulos et al. 2012; Indulska et al. 2012) to the content of the posted, shared and commented messages to obtain a both more objective and contextually richer understanding of the ESN activities by academics. We expect that this qualitative analysis will provide data both to examine the proposed model and to generate novel findings about academics' usage of digital platforms, in turn potentially leading to revised or new research questions and theory grounded in the data. Additionally, we plan to complement this data collection with additional qualitative interviews with university staff particularly focused on impression management tactics. This way, we will be able to adapt the theoretical perspective and constructs on impression management to the academic realm, if necessary. Finally, we are exploring whether we can identify lead users as well as lead non-users of ESN at the case university who agree to provide qualitative data through diary journals (e.g., Schultze and Leidner 2002; Czarniawska-Joerges 2007), which would provide us with field notes of those naturally occurring ESN usage episodes that we may have missed otherwise and whose meaning we can then explore through follow-up interviews.

Operationalization of constructs

Table 1 provides an overview of relevant factors and constructs of our research model in relation to relevant literature. The corresponding measurement instrument, as currently defined based on our pre-tests is available for inspection at <u>http://tinyurl.com/ESNimpression</u>.

Table 1. Construct Operationalization			
Category	Construct	Definition	References
Impression Management Tactics	Self-promotion	The extent to which individuals point out their abilities or accomplishments on the enterprise social network to be regarded as competent.	(Bolino and Turnley 1999; Jones
	Ingratiation	The extent to which individuals do favors or flatter others on the enterprise social network to be viewed as likable.	and Pittman 1982)
	Exemplification	The extent to which individuals go beyond their duties on an enterprise social network in order to be attributed with dedication.	
	Intimidation	The extent to which individuals show their power or potential to punish others on the enterprise social network in order to be viewed as dangerous.	
	Supplication	The extent to which individuals promote their weaknesses or shortcomings on the enterprise social network in order to elicit an attribution of being needy.	
Motivation	Post quality	The extent to which an individual believes that posts on the enterprise social network provide precise, accurate and informative content that meets his or her knowledge needs.	(Durcikova and Gray 2009)
	Posting self- efficacy	The confidence in one's ability to provide postings on the enterprise social network that are valuable to the group.	(Kankanhalli et al. 2005a)
Enterprise Social	Knowledge acquisition	The extent of retrieving content from the enterprise social network for reuse by reading existing posts.	(Kankanhalli et al. 2005a)
Network usage	Knowledge socialization	The extent to which individuals create a shared experience of content on an enterprise social network by liking or sharing existing posts.	(Nonaka 1994)
	Knowledge contribution	The extent to which individuals voluntarily contribute new content to an enterprise social network by commenting on existing posts or creating new posts.	(Yan and Davison 2013)

Expected Contributions and Limitations

We expect our research to make several significant contributions for academia and industry. From an academic perspective, first, we further develop the concept of impression management in IS research. Our empirical study will evaluate construct validity and also provide first evidence about nomological validity of impression management in the context of ESN use. Second, we further our understanding of the use of affordances provided by ESN technology about organizational knowledge processes (Nonaka 1994), and the extent to which motivational factors related to content and self-efficacy beliefs determine different modes and variance of ESN use. Third, we break down social networking use into three distinct constructs, which will contribute to future theory development in this area. Fourth, we will provide the first cross-sectional study of the use of ESN technologies by academics as an important community of knowledge-intensive workers. Finally, our extensive data collection will allow us to develop and validate an extensive measurement instrument that can serve as a springboard for future work in areas such as organizational knowledge processes, online communities as well as enterprise social networking. Finally, a potential area of implications that stems from this work is the question whether academic practices in digital environments differ from traditional practices, as well as the question of how technologies such as ESN could be designed or appropriated to improve these practices. For instance, prior research has started to examine wikis as a platform for review processes (Kane and Fichman 2009); and it may well be that academic reviewing may be conducted differently in the future on digital platforms such as ESN (or open communities such as researchgate.net or academia.edu).

Our research has also implications for managers trying to foster communication and collaboration in virtual workspaces. First, our research may be used to guide policy development, to foster positive ramifications of impression management on ESN and to mitigate or minimize potential adverse effects. Second, our empirical findings around knowledge acquisition, socialization, and contribution may also be useful to organizations as an assessment instrument to gauge usage of ESN platforms and to improve on benefit realization from these platforms.

Our study will be subject to at least three main limitations that will open avenues for future research. First, we have opted to focus on one particular set of antecedents to ESN use for knowledge creation: impression management tactics. Thereby, the focus of our study is on understanding the relevance of these factors for ESN use rather than building a comprehensive explanation of all potential determinants of this usage. We recognize there are other attributes that will determine use behaviour (such as those discussed in the literature review above) which are not in the scope of our study. However, by focusing on antecedents related to impression management, our model may be integrated with validated or emerging conceptual models of ESN use in the future. Second, we deliberately chose a specific substantive context to study ESN use, academics and their work practices. We did so because academic work is a particular knowledge-intensive practice that has largely been ignored but which will yield insights potentially transferable to other knowledge-intensive industries such as consultancy or organizational R&D. Thus, future research could focus on validating the model for other knowledge-intensive industries. In addition, it would be interesting to investigate into objective impression management (e.g. determined by a text mining approach) and its relationship to both the perceived measure as used in our study as well as the use of ESN. Third, we conceptualize ESN use in terms of three dimensions, knowledge acquisition, contribution and socialization. An interesting emerging question is whether these forms of usage can actually lead to effective use (Burton-Jones and Grange 2013) of ESN by academics, and indeed whether ESN can make academic work practices in general more effective or efficient. Whilst this is not the focus of our work, we identify it as an important research question to address in the future.

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