MUCH ADO ABOUT NOTHING? TRACING THE PROGRESS OF INNOVATIONS BORNE ON ENTERPRISE SOCIAL NETWORK SITES

Research-in-Progress

Andrea Malsbender
University of Muenster
Leonardo Campus 3, 48149 Muenster,
Germany
andrea.malsbender@ercis.uni-
muenster.de

Jan Recker
Queensland University of Technology
2 George Street, Brisbane QLD 4000.
Australia
j.recker@qut.edu.au

Thomas Kohlborn
Queensland University of Technology
2 George Street, Brisbane QLD 4000,
Australia
t.kohlborn@qut.edu.au

Daniel Beverungen
University of Muenster
Leonardo Campus 3, 48149 Muenster,
Germany
daniel.beverungen@ercis.uni-
muenster.de

Satya Tanwer
Woolworths Limited
1 Woolworths Way, Bella Vista NSW 2153, Australia
STanwer@woolworths.com.au

Abstract

Enterprise social networks are organizationally bounded online platforms for users to interact with another and maintain interpersonal relationships. The allure of these technologies is often seen in intra-organizational communication, collaboration and innovation. How these technologies actually support organizational innovation efforts remains unclear. A specific challenge is whether digital content on these platforms converts to actual innovation development efforts. In this study we set out to examine innovation-centric content flows on enterprise social networking platforms, and advance a conceptual model that seeks to explain which innovation conveyed in the digital content will traverse from the digital platform into regular processes. We describe important constructs of our model and offer strategies for the operationalization of the constructs. We conclude with an outlook to our ongoing empirical study that will explore and validate the key propositions of our model, and we sketch some potential implications for industry and academia.

Keywords: Enterprise 2.0, Enterprise software/systems, Innovation

Introduction

Technology innovation is increasingly becoming the key source of competitive advantage for firms across industries (Francis & Bessant, 2005). Successful technology innovation can lead to new business creation, change existing business through the introduction of new business models, products or services or can change internal procedures and culture to yield higher degrees of efficiency (Chesbrough 2010). Correspondingly, there has been a growing awareness for the need to innovate in contemporary organizations (Nagji and Tuff 2012).

A key class of technology that has proliferated over recent years because of its allure to assist organizational innovation is known as social networking technologies (Kane et al. In Press). Social networking technologies describe online platforms that allow users to interact with one another and to maintain interpersonal relationships (Chen, 2013). Examples for such sites include Facebook, MySpace or Google+. Enterprise social networking sites describe social networking technologies that are bounded within a particular organization and thus allow individuals to (1) construct a (semi-) public profile within the organizationally bounded system, (2) articulate a list of other organizational staff with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the organization (Boyd & Ellison, 2007). Prominent enterprise social networking sites include Yammer, Chatforce, and the like.

Both enterprise social networking and more open social networking technologies have led to new routines in the organizational innovation process. The use of open social networking sites, for instance, has been linked to phenomena such as crowdsourcing (Doan et al. 2011) or open innovation (Westergren and Holmström 2012). Concerning enterprise social network technologies specifically, it has been argued that affordances relating to network transparency, content flow and access, and relational ties (Boyd and Ellison 2007) can allow members of an organization to connect, share, develop and morph innovation ideas independent of geographical, temporal, structural or organizational dispersion. Whether these affordances are realized for organizational innovation, however, remains to be seen.

Indeed, there is some evidence to suggest that innovation projects perusing social networking technologies do not necessarily succeed but rather face new and significant challenges. Similar to the case of Starbucks that struggles with its innovation crowdsourcing initiative (http://mystarbucksidea.force.com/) due to the challenge of managing the 150,000 captured ideas, many organizations struggle with screening and progressing ideas that have been proposed on online platforms (Toubia and Flores 2007). While most organizations peruse idea management to that end (Vandenbosch et al. 2006), from a broader perspective it is still unclear how and why ideas traverse through the innovation process, and which factor influence an idea's chance of becoming an implemented innovation. Since innovation research typically views ideas as 'plans to be implemented' (Rogers 2003), it is thus important to understand the factors that lead to the successful implementation of an idea as an innovation (Van de Ven 1995).

In our research, we set out to examine the process by which innovative ideas that are created and shared on enterprise social networking sites progress, potentially, into actual innovation development and implementation projects. We study this process by examining the content and representation of the innovation idea, the digital content flow associated with that idea that is generated on the enterprise social networking site, and the relevant contributors in the social network that assembles around the idea. Our research purposes to (1) offer a conceptualization of the relationships between content characteristics, content flow and progress of innovation idea, and (2) examine these relationships using data from innovation efforts and enterprise social network use at a large Australian retailer. In this manuscript, firstly, we discuss the development of the conceptual model that describes the relevant content, content flow and user characteristics that relate to the development and progress of innovation ideas. Secondly, we provide details about construct operationalization and measurement and describe our proposed methodology for empirically testing our model in future research.

Background

Idea Generation and Innovation Processes. Innovation processes are generally distinguished into three main steps (e.g., Utterback 1971; Tushman 1977). For instance, Myers and Marquis (1969) present a three-step process for innovation: First, the idea development takes place, where a design concept with respect to new approaches to technical or marketing problems is generated. In the second step, problem solving, research and concept development is conducted on how to encounter the identified idea by technical efforts and how to realize the idea itself. The last step, implementation, deals with the production of a pilot of the idea and the realization in the organization.

In recent years, models of the idea-to-launch process have been further refined and expanded. The stage-gate process model (Cooper 2008), for instance, consists of five stages and five gates along with discovery and post-launch review. The basic idea of the stage-gate model is that innovation processes consist of discrete stages, in each of which a continuation decision is being made. Furthermore, in this model each stage consists of information gathering activities as well as an integrated analysis, such as the building of a business case.

Perusing the stage-gate model, our interest in the innovation process focuses on the idea generation phase and the immediate decisions around this phase, which corresponds to the stages 'Discovery', 'Scoping', and 'Building of a Business Case' as part of the stage-gate model (Cooper 2008). On the other hand, we exclude the stages 'Development', 'Testing and Validation', and 'Launch' (Cooper 2008), because these activities require work to be carried outside of an online platform (e.g., as part of new product development or as part of marketing activities).

Within the 'Discovery', 'Scoping', and 'Building of a Business Case' phases, innovation opportunities are identified, discussed and refined. In some cases these discussions lead to changes of the original into a new and/or different idea. After suitable preparation the generated concept of an idea is presented to decision makers who decide about continuation or discontinuance of the innovation effort. Our main contention is therefore that these stages can be borne and enacted on enterprise social networks as they serve as non-restricted employee idea systems (DiMicco et al. 2008). To understand how these processes unfold on ESN, however, we require an understanding of how content-centric communications occur on these platforms.

Communication on Enterprise Social Networks. Social networking sites describe a class of Web 2.0 technologies that allow for the creation and exchange of user generated content (Kaplan and Haenlein 2010). Aside from public social networking sites such as Facebook or LinkedIn, technologies are also available as enterprise social networking sites (ESN), which are constrained to members of a particular organization (Turban et al. 2011). Our interest in ESN concerns the affordances these technologies provide to the organizational innovation process. Two types of affordances are relevant: First, functional affordances of ESN technologies that can be leveraged to describe and share an innovative idea, which can then be discussed and communicated to fellow users, as well as collaboratively developed further on the platform (Turban et al. 2011). In theory, these affordances should allow for idea genesis and morphing, important stages in the innovation process (Gassmann 2006). Second, ESN technologies also offer social affordances such as relational ties and network transparency (Boyd and Ellison 2007). Innovation ideas shared and discussed on ESN can also more readily be brought to the attention of key decision-makers in the innovation process, such as lead users (von Hippel 1986), innovation process promoters or gatekeepers (Hauschildt and Schewe 2000).

To develop an understanding of how and when functional and social affordances of ESN technologies contribute to organizational innovation, we need to understand how communication activities on ESN enable the development of online social structures (Butler 2001) and how these structures develop and progress innovation. When compared to traditional modes of communication (such as face-to-face or in physical meetings), several key properties of technology-enablement emerge relevant to this study. First, communication on ESN technologies provides the option to reach a wider audience well beyond the ego-network of individuals. In innovation efforts, this is important because it allows innovators to communicate their ideas to wider part of the organization, independent from the strength of relational ties. In particular, idea dissemination is not bound by the number of strong and weak ties (Granovetter 1983), but by the size of the overall network. Thereby, domain experts can be reached, who can progress the development of an idea, as well as senior management, who possess the power and authority to

allocate resources for the idea development. Second, ESN technologies enable communications to be both richer (in terms of media richness of the content being discussed) and poorer (in terms of mimic and gestural impressions) than traditional one-on-one communications (Daft and Lengel 1984). In turn, an innovation idea can be presented using a breadth of formats and styles (e.g., as a video, including hyperlinked documentation etc.) but may also suffer from a lack of additional information such as emotive connection to the idea owner or changes to inter-personal communication styles and preferences (Ellison, Steinfield, & Lampe, 2011). Third, communication on ESN technologies provides advantages in the sense of asychnronicity (communication can happen across time and space) as well as in traceability (communications leave a digital footprint) (van Zyl 2009). Therefore, discussions and conversations within ESN can develop and evolve over an extended period of time. Asynchonicity and traceability also allows for searching and browsing functionality – the ability to locate prior communications in which relevant contributors of interest were involved (Ellison and Boyd 2013).

Model Development

Our first attempt at reaching an understanding of the factors that influence an idea's traversal through the innovation process was to develop a conceptual framework that structures relevant categories of factors and in turn assists the development of novel substantive theory. Against the backdrop of the literature discussed above, we believe that three central categories are relevant to developing an understanding of how innovation ideas progress on enterprise social networking sites. First, the literature on innovation and innovation management suggests that innovations start with the development and presentation of an idea. Therefore, we need to examine how the **content** of that idea is described within ESN. Second, the research on technology-enabled communication and networking suggests that the type and format of communication that is created about the content of an idea will influence the **content flow**. Third, the same research also suggests that technology-enabled communication is dependent on the position of the users engaging in the communication within the social structure of the organization as well as the social network within the technology. Therefore, we need to examine relevant **user characteristics**.

Figure 1 shows our view of the proposed conceptual model. The central thesis of our model is that the progress of an innovation idea borne on an ESN is dependent on (a) the characteristics of the content of the idea and its presentation, (b) the content flow that is generated, and (c) the characteristics of contributors to the generation of the content and the content flow. We explore these three key categories of factors, as well as the dependent variable, in turn.

Figure 1: A Model of the Progress of Innovation Ideas through ESN
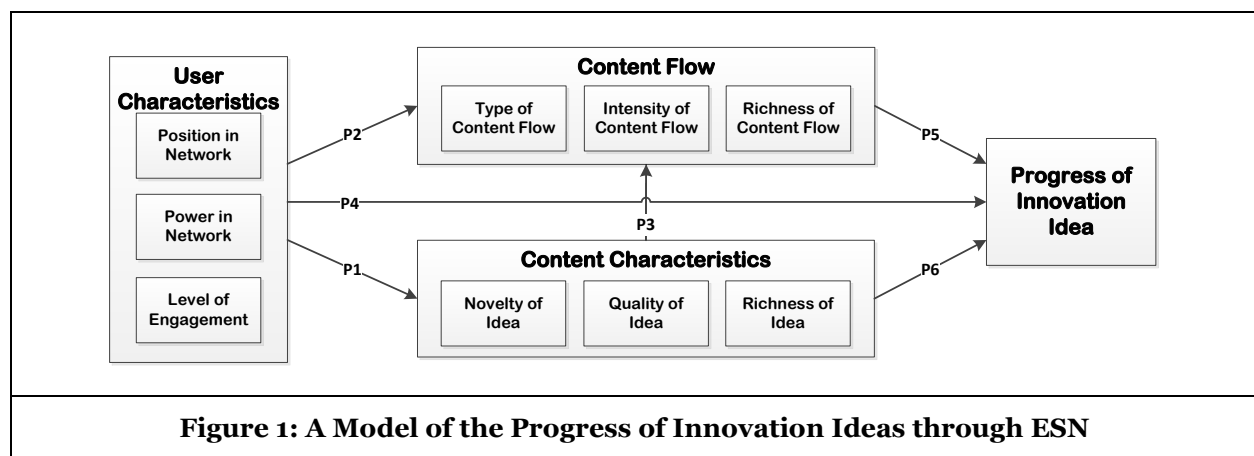
User Characteristics

Position in Network. Users of an ESN for innovation management comprise originators of an idea and contributors to an idea. A user's formal position in an organization's hierarchy impacts innovation processes since individuals with lower positions lack the legitimacy and resources to conduct divergent organizational change (Battilana 2006). Depending on their hierarchical position in an organization opinions of users are apprehended as more or less important by others which in consequence lead to a

higher or lower motivation for contributing to a discussion on an idea. Other employees need to be inspired by business leaders to innovate and to promote the innovation capability of the firm (Velasco et al. In Press). Depending on this position, organizational leaders can be identified, which are seen as powerful source of influence on the commitment of employees (Jong and Hartog 2007). In case of a leadership, which can be assessed by a high degree of influential power to employees (Burns 1978; Bass 1985), an initial post from an individual in the position of influence (i.e. managers) serves as key motivator for other employees to participate in discussions (Brzozowski et al. 2009). Therefore, if leaders in ESN support or 'stimulate' innovative ideas, it is more likely that the innovation will reach a higher stage of progress in the organization.

Power in Network. The user's power in enterprise social networks can vary to the power implicitly suggested by their formal position in the organization. In the context of enterprise social networks, we define power as the ability to attract, influence and retain other users using their social ties (French and Raven 1959; Ransbotham and Kane 2011). Social ties are represented by connections between actors whereby these connections can vary regarding the type of relationship (Arazy et al. 2011) and/or the level of strength (Granovetter 1973; 1992). Generally, social media platforms support different types of ties like proximities (groups or locations), relationships (friends), interactions (messages, conversations) and/or flows (trends or shares) each open to interpretation as different types of connections between affected actors (Kane et al. In Press). The strength of a tie is defined as a "combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie." (Granovetter 1973).

Level of Engagement. The level of engagement in an ESN has high impact on the organization's success in developing innovation strategies as users express their commitment by participating in these networks (Knox 2002). In analogy to Kahn (1990) we define level of engagement as the extent to which users employ and express themselves physically, cognitively, and emotionally in the innovation process by proposing new ideas and/or participating in the development of new ideas by contributing to existing ideas. Generally, the more users participate on a social media platform by sharing posts and comments, the more likely it is that they will keep on contributing (Brzozowski et al. 2009). While some users tend to be passive members, by just observing or not participating, in these networks, others take part as active members and contribute regularly (Ransbotham and Kane 2011), in turn suggesting higher levels of engagement. In case, users who participate in a discussion on an innovation idea have a high level of engagement factor, they will be more likely to contribute also to further discussions and will be more likely to react on feedback in terms of other's views and comments. In doing so, the idea will progress instead of being forgotten after presented on the social network. We, thus, posit that the higher the degree of user engagement in the content flow of a proposed idea, the more likely it is that an innovative idea reaches a higher level of progress. Conversely, the lower the level of engagement of participating users is, the more likely it is that the idea will not be progressed (respectively will be forgotten) and will not be implemented in the organization.

Content Characteristics

Novelty and Quality of an Idea. Our model suggests that creative ideas lead to a richer and intensified content flow on ESN and are more likely to be converted into action. Since a creative idea is "a quality idea that is also novel" (Dean et al. 2006), we identify an idea's quality and novelty as relevant characterizations of an idea as content. According to Dean et al. (2006), the quality of an idea has three properties. First, it must be relevant in terms of being an applicable and effective solution to a particular problem. Second, a quality idea must be workable such that it can be implemented into the organization and would be accepted by the required stakeholders. Third, it must be specific enough in terms of clarity and completeness, and make the implications of implementing the idea explicit.

Whereas a high-quality idea does not need to be rare or uncommon, but can also be a standard solution for a well-known problem, but in order to be novel, an idea needs to satisfy the requirements of originality and paradigm-relatedness (Dean et al. 2006). An original idea is a rare or uncommon solution to a problem, depending on the perception of the idea rater or against the backdrop of a general population of ideas. Paradigm-relatedness is conceptualized as introducing new elements into the problem context, altering the relationships between the elements of a problem, or both (Nagasundaram and Bostrom 1994).

Richness of Representing an Idea. We posit that the richness with which creative ideas are communicated to others on ESN, determine elaborate discussions on the platform and its likelihood to be converted into innovations. This argument builds on decades on research on media richness and media synchronicity (Dennis 2008). Against the backdrop of an abundance of info types for analyzing textual properties (Abbasi et al. 2008), we identify the richness of representing the idea as an important property. By this we refer to the degree to which a post makes use of the opportunities to represent text on ESN, such as by including videos, URLs, likes or other electronic content, that is bounded by the richness of ESN as a medium for communication (Daft and Lengel 1986). As "rich representations can better convey information, especially nonverbal messages [...]" (Lim and Benbasat 2000) we assume that the more an idea is supported by rich media in its presentation, the easier it is for other users to understand. Thereby, attachments support the description of the idea by adding further information in an understandable way. With respect to the dimensions of content and user characteristics, we state the following proposition:

Proposition 1: The content characteristics will depend on the user's (originator or contributor) power, position and level of engagement on the ESN.

Content Flow

Type of Content Flow. Content flow in ESN can be interpreted as part of interaction processes of groups. In particular, they can be analyzed regarding their affiliation to one specific group of interaction. Based on the classification suggested by Bales (1950), we argue problem-solving or task-accomplishing groups on ESN are faced with two distinct, but related, sets of concerns: expressive concerns (whether they participate positively (i.e. agreement) or negatively (disagreement)) and instrumental concerns (whether they participate in an active (i.e. advise) or passive (i.e. question) way). As the type of content, both, from an instrumental and from an expressive point of view, has high implications on the type of the whole content flow and on the stimulus to participate, we assume that positively expressive and actively instrumental participation in a content flow leads to a higher likelihood of innovation progress.

Intensity of Content Flow. The intensity of a content flow can be assessed based on its density and level of participation. As dense patterns of messages (i.e., high frequency of postings) require rapid and continuous processing by group members (Jones et al. 2004), we posit that groups of contributors responding to similar messages are more likely to end in active participation, and generate simpler responses, if processing the content gets too time consuming and complicated. ESN, as facilitating a social structure, provides value for individual members, if there is a sufficiently large membership size of the group (Butler 2001). In general, the more members are connected through a social structure, the larger the group's and audience's aggregated knowledge, which is important to achieve a wide dissemination of announcements and increase visibility as well as awareness. However, as the membership size increases benefits decrease due to increased difficulties in making interpersonal relationships and increased coordination efforts (Ransbotham et al. 2012). Consequently, it is important for a social structure to find the optimal balance between having a critical mass of participants (Oliver and Marwell 2001) to share knowledge and engage in communication, but not too intensively in order to not increase coordination efforts (Jones et al. 2004).

Richness of Content Flow. Richness of content flow signifies the level of detail with which feedback is given to an innovation idea. Therefore, richness of content flow points at the ability of information on an ESN to change understanding about an innovation idea within a time interval, whereas the intensity of content flow refers to the amount of information exchanged on an ESN in general (Daft and Lengel 1986). Given text and additional multimedia additives during a content flow, detailed description can be enriched by the use of videos, links, and further informative material (Daft and Lengel 1986) for this purpose. By enriching a contribution with further attachments the contributor spells out, that s/he has considered contributing with additional information (criticism, annotations, further refinement, etc.) to the presented idea. Furthermore, by adding "likes" to an idea, support of the idea and of the person posting this idea is expressed implicitly (Koroleva et al. 2011). Therefore, we propose that the richness of presentation by contributing to an idea has a positive impact on the progress of innovation. With respect to the three factors described above, we develop the following propositions:

Proposition 2: The content flow will depend on the user's (originator or contributor) power, position, and level of engagement on the ESN.

Proposition 3: The content flow will depend on the novelty, quality, and richness of the content presenting the innovative idea on the ESN.

Progress of Innovation Idea

Progress of Innovation. Our model purports to explain how ideas proposed and discussed on ESN evolve. We conceptualize this variable as the *Progress of the Innovation Idea*. In essence, this concept examines the metamorphosis of an innovation idea into an innovation project. Therefore, different stages or process steps need to be differentiated that together conceptualize the lifecycle of an innovation idea. To describe the progression of this lifecycle, models such as the stage-gate model (Cooper 1990; 2008) can be used to identify activities that characterize the different states (or stages) that an idea progresses through on the way to its implementation as a product, service or process (Cooper and Kleinschmidt 2001). The first stage in this process relates to the 'Discovery' of the idea, followed by a 'Preliminary Investigation' or 'Scoping'. The next stage focuses on 'Detailed Investigation' or 'Building of a Business Case', prior to the 'Development', 'Testing and Validation', 'Full Production', and 'Post Launch Review'. Each stage is associated with a gate, which represents a decision to be made about the progression of the idea to the next stage. To identify the relevant factors influencing this progress, we propose the following:

Proposition 4: The progress of an innovation idea will depend on the user's (originator or contributor) power, position, and level of engagement on the ESN.

Proposition 5: The progress of an innovation idea will depend on the intensity, type, and richness of the content flow of an idea presented on the ESN.

Proposition 6: The progress of an innovation idea will depend on the novelty, quality, and richness of a content presenting the innovative idea on the ESN.

Research Design and Methods

Study Design

To examine the proposed research model, access is required to an organizational site where (a) innovation is a strategic imperative across all levels of the organization, that is, where employees are actively and consistently encouraged to contribute to innovation (Velasco et al. In Press), (b) innovation processes exist that guide development of products, services, or processes from an initial idea, and (c) ESN technologies are in use, preferably specifically to support the innovation purpose. We have access to a global top 20 retail organization (Deloitte 2013), which meets these criteria. Retail organizations, in general, are under imminent pressure to innovate, due to the potential of information technologies to disrupt the bricks and mortar business model (Lewis and Dart 2010). The case organization has established innovation management structures and processes and the organization is also an active user of an ESN technology. Over 14,000 users are active on the platform, having contributed over 50,000 posts in over 500 topic groups since July 2011. Importantly, the case organization set up a dedicated topical group (labelled "Innovation Crew – Ideas & Learning") on its ESN platform, specifically created to share and discuss matters of innovation. Within that group, 489 posts and comments were made by 97 active users during November 2011 till March 2013. This group is accessed by a total of 857 registered users, and is open for access to all ESN users within the network.

In this case setting, we are designing a mixed-method strategy to test our research model. Mixed-method strategies are particularly suitable to our study because by using qualitative interviews regarding the progress of an innovation idea explanations and detailed descriptions by the innovators about how and why the idea reached this stage enrich the findings of the quantitative data and thereby complete the results. In particular, we proceed as follows. First, we have extracted data about the content flow on the ESN platform for a period of 16 months (July 2011-March 2013). This data includes the postID, threadID, groupID and groupName, senderID, -Type, -Name, message, Url, attachments as well as creation- and deletionDate. Second, we will code this data as per our research model. Specifically, we will code ideas for their richness, novelty and quality and each content flow for its type and richness. Third, we will collect and classify data about the hierarchical position in the network for the user, based on the structure of the

organisation. Fourth, to assess the dependent variable, progress of innovation idea, a survey will be conducted asking ESN users to classify the level of success for their posted innovative idea. Additionally, after having a classification of innovative ideas with regards to their level of implementation in the organisation, interviews will be conducted to reason each progression and to identify additional contextualized information.

Suggested Construct Operationalization

Table 1 provides an overview of relevant factors and constructs of our research model in relation to relevant literature.

Table 1. Construct Operationalization			
Factor	Construct	Definition	Reference
User Characteristics	Position in network	The position in the network is defined as the hierarchical level in the organization the idea owner or contributor holds. Thereby, unclassified is the lowest and chief executive officer the highest level.	(Jong and Hartog 2007; Battilana 2006)
	Power in network	A user's power in the network is defined as the ability to attract, influence and retain others using social ties. It can be identified by the centrality of the user and the strength of social ties.	(Granovetter 1973; Freeman 1979)
	Level of engagement	The level of engagement is the degree to which an idea owner or contributor proposes new ideas and commentates on existing ideas in the social media innovation group.	(Knox 2002; Brzozowski et al. 2009)
Content Characteristics	Novelty of Idea	The novelty of the idea is the "degree to which an idea is original and modifies a paradigm." Thereby, the least novel idea is the common one, and, conversely, the most novel idea is totally unique.	(Dean et al. 2006)
	Quality of Idea	The quality of the idea is the degree to which an idea is workable (acceptable and implementable), relevant (applicable and effective), and specified (implicational explicit, complete and clear).	(Dean et al. 2006)
	Richness of Idea	The richness of an idea is the degree to which the representation includes various media types (i.e. graphics or videos). Thereby, text is a lean representation and multimedia considered to be a rich representation. Richness is measured by the type and amount of additional attachments.	(Daft and Lengel 1986; Lim and Benbasat 2000; Jones et al. 2004)
Content Flow	Type of Content Flow	The type of content flow is defined as the way the content is presented regarding instrumental (active and passive) and expressive (positive or negative) classification schemes.	(Bales 1950)
	Intensity of Content Flow	The intensity of participation is defined as the number of participants and the number of comments in a content flow.	(Ransbotham et al. 2012)
	Richness of Content Flow	The richness of the content flow is the degree to which the flow includes various media types (i.e. graphics or videos). Thereby, text is a lean representation and multimedia considered to be a rich representation. It is measured by the type and the amount of additional attachments.	(Daft and Lengel 1986; Lim and Benbasat 2000; Jones et al. 2004)
Progress of Innovation Idea	Progress of Innovation	The stage of innovation is defined as the reached level of progress regarding implementation in an organization. It varies from no activities conducted after presentation on social media to fulfilled implementation of innovation in organization and post implementation review.	(Cooper and Kleinschmidt 2001)

Expected Contributions and Limitations

We expect our research to make significant contribution to theory, by integrating theories about ESN technologies with success factor models about innovation management and practice, by providing managers with insights about the influencing factors of innovation success and the governance of ESN technologies. First, our research identifies how ESN can best be used to foster innovation management in a corporate environment. More specifically, we identify how the representation of ideas, the social order of users, and the resulting conversation streams are geared to convert ideas on ESN into innovations. Linking these findings to the success or failure of the resulting innovation processes is expected to shed light on the business value of ESN for enabling innovation processes, which can assist in ESN adoption as well as maintenance decisions. Second, we contribute insights on how the functional and social

affordances of ESN can be enacted in corporate innovation processes to foster innovation success. With respect to functional affordances, our results will elicit how virtual teams disseminate and share, communicate, and collaboratively develop ideas based on appropriating the communication, collaboration, and coordination features offered by ESN. With respect to social affordances, our study will identify the role of ESN as a network of persons that represents a social order that complements the 'offline social order' in a company. Both of these orders might impact on innovation success. We envisage empirical results to be available for discussion at the conference.

This study will be subject to at least three main limitations that will open avenues for future research. First, our research strategy utilizes content analysis together with survey data. While mixed method strategies can typically mitigate some of the limitations inherent in each individual research method (Gable 1994), several of the conclusions can be biased by measurement and response bias (in the survey) as well as subjective interpretation bias (in the content analysis). Second, we have opted to conceptualize the innovation process outcome in very simple terms: how far does an idea shared on ESN make it in the innovation development process? We recognize there are other attributes to characterize a successful outcome, for example, ideas developed and/or implemented can be examined in terms of usefulness, business value, or even disruption potential. Our conceptualization of relevant factors was bounded by our focus on the variance in progression; however, several arguments can be made how user, content, and content flow characteristics determined the perceived value or success of an idea. Third, our model identifies a set of content, content flow, and user factors that impact on the process and progress of an idea. As such, the boundary conditions of our proposed model do not span into macro and micro level organizational, cultural or economic pressures. For example, one may expect that employee communication on ESN may be influenced by perceptions of social norms (Thompson et al. 1991) or subjective influence (Mathieson 1991). Similarly, some organizations or industries are said to be more amenable to innovation than others, which may influence the sheer generation or indeed the leverage of ideas. While these factors outside our model draw attention to the limitations of our theory, they also allow us to focus specifically on one key element of organizational innovation – the enablement through social technologies and the impact thereof.

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