A Review of Social Media Use in Enterprises

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P16. A Review of Social Media Use in Enterprises

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Abstract  
Social media use in organizations is proliferating and it has been proved to have huge transformative impact on organizations and on individuals. This paper provides a review of researches involving social media use in enterprises. Definition and content of enterprise social media are identified. The necessary complimentary organizational tasks in using social media technologies are discussed. Theoretical and practical implications are addressed.

Keyword  
Enterprise social media; Use; Task

1. Introduction  
In the last decade, social media technologies (SMT) such as Twitter, Facebook, and Wikis, have become ubiquitous in our daily life, which fundamentally change the way we communicate, collaborate, consume and create. Despite the popular adoption of SMT, their application for organizational purposes, including marketing and knowledge management, has only just begun (Kane et al., 2014); even in the early stage of adoption, SMT have made a significant impact on business, both within and outside the firm boundaries (Aral et al., 2013). It is important to understand their use in organization, the potential impacts on organizational activities, and the managerial implications and to provide guidance for practitioners on the adoption of social media application. This paper aims to conduct a literature review on researches that have been done involving enterprise social media adoption. In addition to the anticipated practical implications, this review can also have theoretical meanings for organizing the literature and summarizing the experiences and achievements of former researches. Overall, the main research questions are:
2. What are enterprise social media?

Despite its rapid proliferation, there is no consensus on definition and content of enterprise social media. Numerous similar terms such as social network service, social network site, social media networks, or online social networks exist, which are often used synonymously (Berger et al., 2014). The technologies are evolving rapidly, introducing new features and often blurring the distinctions among different social media technologies. So it is difficult to articulate clearly which technologies are “social media” and which are not (Kane et al., 2014). After comparing the main similar concepts and corresponding content, this paper adopts the term of social media with Kaplan and Haenlein’s (2009) definition: A group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content.

Reasons for this term adoption are: first, its definition is accompanied with a relatively explicit identification of content; second, the applications involve the Blogs, Social networking sites, Virtual social worlds, Collaborative projects (e.g. Wikipedia), which are almost found to be used in enterprises; thirdly, it has been used in a lot of researches (Kaplan, 2012; Mangold & Faulds, 2009; Kane et al., 2014).

In the context of enterprise, “enterprise social media” and “enterprise social networking” are often used. “Enterprise social media” is chosen here. It is broader than “enterprise social networking”, including external and internal use of applications. The latter included different meanings and scopes in various researches (McAfee, 2009; Stocker et al., 2012; Riemer & Scifleet, 2012; Kosonen et al. (2007), Efimova & Grudin, 2007; Hasan & Pfaff, 2006; Watson & Harper, 2008; Turban et al., 2011; Majchrzak et al., 2009). Moreover, in papers published on top IS journals, User Generated Content is often mentioned and it is a significant feature of social media. (Chau & Xu, 2012; Dewan & Ramaprasad, 2014; Xu & Zhang, 2013; Wu & Gaytán, 2013; Kaplan, 2012; Mangold & Faulds, 2009). Here the first question is answered.

RQ 1. What are enterprise social media?

This paper defines enterprise social media as the use of social media applications in the context of enterprises. We also identify the content of enterprise social media so as to visually understand the definition.

Enterprise social media include:
- Public social sites (e.g., Facebook, LinkedIn, and Twitter), blogs, forums;
- Visual world (e.g., Second Life);
- Enterprise-owned social networks (e.g., Starbucks’ mystarbucksidea.com);
• Wikis;
• Enterprise professional social system for the exclusive use of employees (e.g., Yammer, Communote, or Jive);
• Content communities (e.g., YouTube, podcasting);
• Social bookmarking tools;
• Instant messaging (e.g., E-mail, Instant message services).

3. Methods
This paper aims to investigate the social media use in enterprises and the complimentary organizational tasks. Furthermore, it has the goal of providing a research framework for IS researchers. A two-stage resource searching strategy was adopted. First, we searched the major academic and practitioner journals in social media related areas (IS, Organization Behavior, and Marketing) in the Jstor and Inform databases using the keywords enterprise social media, enterprise social network, social media, social network, online community, social network site, Enterprise 2.0, and Web 2.0. Journals searched included MIS Quarterly, European Journal of Information Systems, Information and Organization, Information System Management, Journal of Information Technology, Harvard Business Review, Sloan Management Review, Organization Science, and Marketing science. Considering that enterprise social media is a relatively new phenomenon, and OSN’s (Online Social Network) development into a global phenomenon started in about 2003 (Berger et al., 2014), we chose a timeframe from 2000 to date for our literature search. The journals’ tables of content are also scanned to pinpoint other articles not caught in databases. Furthermore, selected conference proceedings including HICSS (Hawaii International Conference on System Sciences) and ACIS (International Association for Computer and Information Science) are examined. In the next phase: 1) we checked the reference lists of the articles obtained through the initial search to uncover additional studies; 2) we searched Google Scholar using the same key words to find more articles as a supplement; 3) we use Google Scholar and aforementioned databases to identify articles citing the focal articles determined in the previous stages to further explore valuable papers. In total, this search yielded 59 papers, and after preliminary review, 15 papers were found to be written from the perspective of consumers or public organizations and were excluded. Thus, this research identified a total of 44 papers (34 empirical and 10 conceptual).

4. Findings

RQ 2. What tasks can enterprise social media accomplish?
We first analyzed the 34 empirical articles for the use of social media and for what they were used for. Conceptual papers were not included in this section because we need empirical evidence of social media use and the organizational tasks. Among these articles, 11 reported the enterprise internal use of social media (10 for employees, and 1 for executives), 20 reported the external use of social media (19 for consumers, and 1 for third-parties), and 3 addressed both internal and external use of enterprise social media. It is consistent with the
conclusion that researchers prefer to investigate the external use of enterprise social media, especially marketing use. Interestingly, among 14 articles published in 5 top journals of information systems (MISQ, EJIS, Information and Organization, Information System Management, and Journal of Information Technology), 10 of them focused on internal use of enterprise social media. Task is defined here as what the social media applications are used for. We adapted the task classification identified by Turban, Bolloju, & Liang (2011) based on analysis of more than 100 real-world enterprise social networking applications. Six categories of tasks are incorporated:

- Information dissemination and sharing;
- Communication;
- Collaboration and innovation;
- Training and learning;
- Knowledge management;
- Management activities and problem solving.

Based on the descriptions of the six categories (Turban et al., 2011), we reviewed the use of social media applications in these articles and categorized into different tasks. For “management activities and problem solving” category, we changed the words “problem solving” to “decision making”, due to its high frequency of occurrences during review (Lau et al., 2012; Xu & Zhang, 2013; Wu & Gaytán, 2013; Godes & Silva, 2012; Ghose et al., 2012; Netzer et al., 2012; Goel & Goldstein, 2013).

We summarize the applications and their corresponding tasks in table 1. We can see that social media technologies are most used for collaboration & innovation and communication in enterprises, externally and internally (Wu & Gaytán, 2013; Shen et al., 2010; Zhang & Venkatesh, 2013; Harris & Rae, 2009; Skeels & Grudin, 2009; Dellarocas, 2005; Leidner et al., 2010; Koch et al., 2012; Kugler & Smolnki, 2013). Individual-level and organization-level benefits are generated from these applications (Koch et al., 2012). Training & learning and Information dissemination & sharing are also important tasks enterprises seek to accomplish using social media applications (Dewan & Ramaprasad, 2014; Lans et al., 2010; Gopinath et al., 2014; Harden, 2012; De & Viaene, 2012).

In addition, table 1 shows that there is an uneven distribution of social media applications to different tasks. For example, content communities (e.g., YouTube, Flickr, Instagram) are sparsely used. And the results also demonstrate that some applications are more likely to be adopted for a specific task. For example, many enterprises prefer to use forums to facilitate information exchange with consumers. So why do enterprises choose some particular social media instead of others for a specific task? How to determine which one is the best suitable application to achieve organizational goal? Few empirical articles give this answer. And here is the third question of this paper.
We also look over the 10 conceptual papers here to find implications for the fit issue of social media applications and tasks. Wager (2004) compared the functions of discussion forums, weblogs, and wikis in supporting knowledge management, and concluded that different community types were best supported by different technologies. Skeels & Grudin (2009) found that the use of social networking sites correlated with users’ age. For instance:

<table>
<thead>
<tr>
<th>Task</th>
<th>Public social sites/Blogs/Fo-</th>
<th>Enterprise-owned social networks</th>
<th>Visual world</th>
<th>Wikis</th>
<th>Enterprise professional social systems</th>
<th>Social bookmarking</th>
<th>Instant messaging</th>
<th>Content communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information dissemination and sharing</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Communication</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Collaboration and innovation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Training and learning</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge management</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management activities and decision making</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Distribution of Social Media Technology Use
LinkedIn was perfect to target young professionals. And Joos (2008) analyzed the features of blogs, wikis, podcasting, and instant messaging to identify their strengths in enterprises’ hiring and recruiting programs. Tjan (2001) stated that business investment in enterprise social media often failed due to three reasons: let a thousand flowers bloom (spread investments too wide and thin), bet it all (devote all money and time to a single high-stakes initiative), and trend-surf (follow the crowd toward the next big thing). Enterprises should invest discriminately and accordingly in social media. In this review, only three papers put forward tools for the application-task fit analysis. Fit-viability model (FVM) was proposed (Tjan, 2001; Liang et al., 2007; Turban et al., 2011). In this model, the first step was to identify needs and expectations of the companies and analyze the features of social media to determine the fit, and the second step was to analyze economic, IT infrastructure, and organization factors to examine the viability of this technology-task match.

RQ 4. Is there any research gaps in enterprise social media studies?
Aral et al. (2013) proposed a framework for social media research. According to them, the social media landscape can be conceptualized as an intersection of activities that producers and users of social media can undertake and the level of analysis at which these activities can be investigated (Aral et al., 2013). Activities were categorized into four areas: design and features, strategy and tactics, management and organization, and measurement and value. And the levels of analysis include: users and society, platforms and intermediaries, and firms and industries.

Adapted from the framework for social media research proposed by Aral et al. (2013), we develop a framework for enterprise social media research in this study (See table 3). Accordingly, we define four areas of activities:

- **Design and features** describes how users and organizations use specific Enterprise social media (ESM) features, and how organizations design these features to achieve organizational goals;
- **Strategy and tactics** describes how users and organizations determine and use strategies/tactics to achieve individual or organizational goals;
- **Management and organization** describes how users self-organized in online community and how community affect their use; and how organizations manage challenges and other issues during ESM implementation process;
- **Measurement and value** describes how users and organizations create and measure value from ESM usage.

As for the levels of analysis, this paper mainly focuses on the perspectives of stakeholders (e.g. consumers, employees, third-party) and organizations. So the individual level and organizational level were adopted. The framework and key research questions at each intersection are demonstrated in table 3.

Through a thorough review, we examined the areas every article addressed and placed the papers within this research framework to identify the possible research gap. Table 3 presents
the results. Of all parts of our framework, we feel that management and organization is one of the most underresearched areas. It is an important research area given that the new features of social media, like online community, have largely transformed users’ behavior and have brought new challenges to enterprises. In addition, strategy and tactics individuals could adopt to help increase individual and organizational benefits are also underresearched. We noticed that the research gaps determined in this study are consistent with the ones in the aforementioned study of Aral et al. (2013). Last but not least, we need to pay more attention to measurement and value. Researchers have widely investigated the benefits and value of using enterprise social media, but few addressed how to measure the value of social media. Kumar et al. (2013) proposed a model to measure social media return on investment (ROI) and Zhang et al. (2012) developed a vector autoregressive (VAR) model to measure the financial values of the user-generated-content and shed light on quantification the revenue contributions of marketing newsletter campaigns. More specific researches are needed.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Design and features</th>
<th>Strategy and tactics</th>
<th>Management and organization</th>
<th>Measurement and value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users and society</td>
<td>How do users interact with ESM features?</td>
<td>How can users optimize their use of ESM?</td>
<td>How do users organize within ESM communities? What are the effects of community on user contribution and satisfaction?</td>
<td>What are the benefits and costs of ESM for users? How to measure?</td>
</tr>
<tr>
<td>Firms and industries</td>
<td>How should firms interact with ESM features to maximize their benefit? What design features should firms consider in ESM adoption?</td>
<td>What strategies should firms choose to achieve organizational goal?</td>
<td>What challenges will firms face in ESM adoption? How should firms predict and manage challenges in ESM adoption?</td>
<td>How do ESM create value for firms? How to measure the value? What industry-wide efficiencies have been (can be) attained via ESM?</td>
</tr>
</tbody>
</table>

Table 2: Framework for enterprise social media research

5. Conclusion

In conclusion, we identify the definition and content of enterprise social media; discuss the issue of application-task fit; and determine the gaps in enterprise social media research. It is our hope that this paper could foster many more researches into enterprise social media terrain.
Findings of this study are also subject to limitations. First, although we made a relatively broad search, the number of sources is indeed limited. Secondly, there is an uncertainty that all relevant key words were adopted to search for articles. Additional search terms might have discovered more related articles. Thirdly, we included academic and practical articles at the same time; the result may be more accurate if they are examined separately in future.

**Reference**


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