Emerging Trends in Industrial Engineering • Selected Topics on Industrial Engineering by CEEPUS Incomings 2019/20

Danijela Lalić

Published on: Feb 18, 2020

DOI: 10.21428/92f19a8b.915cef2d

THE USAGE OF ENTERPRISE SOCIAL NETWORKS FOR PRODUCTIVITY IMPROVEMENT

Lalić, Danijela

University of Novi Sad, Faculty of Technical Sciences, Department of Industrial Engineering and Management, Dositeja Obradovica Square 6, 21 000 Novi Sad, Serbia

danijelalalic@uns.ac.rs

Keywords: enterprise social networks (ESN), internal social networks, social media, productivity improvement

ABSTRACT:

The concept of the Enterprise Social Networks (ESN) is relatively new phenomenon which has been present for nearly a decade in the research body of knowledge. In this paper, we provide a theoretical background and a review of relevant research on enterprise social media, focused on ESN concepts.

The purpose of this paper is to review research on the origins of enterprise social networks, to take stock of the current state of knowledge and to propose directions for future research. Conclusions suggest that successful implementation of ESNs is crucial for productivity improvement.

1. INTRODUCTION

Internet technologies represent a rapidly evolving set of ways to configure social and business life as well as the learning and communication landscape within the organization [1], [2]. Social media plays a key role in providing insights into people's activities, opinions and everyday lives [3]. These detailed user-generated information-online streams offer a unique opportunity for individuals to engage, communicate and socialize. The unequivocal rule of digital media culture, and especially of the segment which is supported by computer technology and the possibilities of Internet communication, present the foundation on which to articulate new approaches in the theoretical and empirical research worlds. Digital media and technology embody socio-cultural relationships that shape and structure our possibilities for social action, education, and the organization of the enterprise. The myriad ways that social lives and workplace can be organized through various types of media and communication forms present a challenge for researchers from multiple disciplines [4]. Especially in the information and knowledge industries where teams are often collaborating virtually, the need to support such communication processes between employees is emerging. The structure and dynamics of Enterprise Social Networks (ESN) on the Internet point to, expand on and transform the possibilities for social and business networking of people, implement these new technological solutions. ESNs and other similar virtual business communities comprise a native web applications

and social networking platforms that in addition to social and media context, aim at the most important communication and collaboration performance element: the interaction.

2. LITERATURE REVIEW

2.1. A Definition - enterprise social networks (ESN)

The emergence and the use of ESN in organizations has been developed according to development of social networking tools, interactive project management software, and online collaboration software, and they employed the use of publicly available social networking sites and internal, in-house systems and implementations of open source software, installed on a company's own servers or acquired as a cloud-based service. Recently, many enterprise software platforms are offering proprietary solutions that can be installed on company servers or hosted in the cloud. They consist of the full variety of social media features including blogs, wikis, microblogging platforms, social analytics, and other collaboration tools for uploading and sharing documents and resources.

[5] defined enterprise social media (ESM) as a web-based platform upon which social interaction occurs where anyone in the organization can participate at any time from any place, and that “allow workers to (1) communicate messages with specific coworkers or broadcast messages to everyone in the organization; (2) explicitly indicate or implicitly reveal particular coworkers as communication partners; (3) post, edit, and sort text and files linked to themselves or others; and (4) view the messages, connections, text, and files communicated, posted, edited and sorted by anyone else in the organization at any time of their choosing.” Moreover, [5] refer to two main affordances and characteristics that are unique to ESMs that they borrowed from [6]. The first affordance is visibility as ESM enables the possibility of making visible all communication within an organization. The second affordance is persistence and it refers to the fact that communication remains accessible in the same form as the original display, even after the users have finished their interaction [6], [7]. What this practically means is that the records of communication on ESN are available for a longer period of time and the ability to view past interactions affords users a chance to learn from the experiences of others in the enterprise and look at what has been previously successful. Examples of the positive impact of online social network site use can be found in the study of enterprise social network site used by [8] and in social media research by [9]. ESN use can help people who are normally less inclined to communicate to get connected with others [10]. Moreover, ESNs can have significant implications for communication in the workplace, influencing such organizational communication processes, information sharing and management, and employees' abilities to form professional relationships, and productivity improvement. We define ESN as a concept that refers to the application of Internet services and social media platforms for the interaction, internal communication, collaboration processes, relationship building and various multimedial content exchanges in the context of workplace communication. Enterprise Social Networks (ESN) present a set of tools and a way of

facilitating workplace communication and collaboration, engaging the employees and improving their performances and productivity.

2.2. An overview and origins - enterprise social networks (ESN)

The origins and the existence of current online social networks and enterprise social networks take place in the 60s and 70s in virtual communities formed around academic and governmental institutions - DARPA, Arpanet, Plato, etc. [11]. Virtual communities give people freedom in representing themselves, and this results in new possibilities for society, especially the person's ability to explore new roles in the ways that are safer, more interesting, and useful. Virtual communities as we know and use them today have different social and enterprise dynamics from back in the days of Arpanet and Plato. Those networks were used for basic information and documentation exchange, without personal and social discourse.

Online social networks can be characterized as a global virtual community, as perceived by Rheingold's Well - the first global online community with the social dynamics [11]. Therefore, these virtual spaces nowadays we call social networks represent the web site or a platform that connects a group of people in one place, with the aim of communication, exchange of the opinions, ideas, making new friends, business and other contacts, activism on the web for a common goal, participation, collaboration, etc.

The social paradigm of the information revolution and Web 2.0, that contributed to the development of online social media, proliferates through humans interacting via computer technology processes, through everyday communication, education, business, intertwining new technologies, science, and working environments.

Sites such as Facebook, LinkedIn, YouTube, Instagram, and Twitter attract millions of users worldwide, becoming their everyday means for communication practices. As a consequence, these platforms are popular throughout the world as dominant social media services for communication, especially among adolescents and young people, but also among adults of all ages including seniors.

Parallel with social networks, social media services and online collaboration platforms are increasingly implemented in work organizations as tools for communication among employees. In the current Information-Communications Technology (ICTs) paradigm it is important that we develop an understanding of how they enable and constrain the communicative activities through which work is accomplished because it is these very communication dynamics that constitute and perpetuate organizations. Scholarly work on enterprise social networks is relatively limited, the first publication on social network sites (SNS) date back in 2007 [12]. They stated that the new wave of social network sites began when Ryze.com was launched in 2001 to help people leverage their business networks.

ESNs are relatively new phenomena in the research body of knowledge, and their dynamics and benefits are not yet fully explored. Scientific studies on organizational practice of ESNs are still developing [13] and there is a need for theoretical and practical explorations.

Moreover, due to the rapid rise of the social web and Internet users [14] the need for investigation of the Internet and social media usage for work purposes has emerged. [15] confirms that in spite of the rapid uptake of corporate social media technologies, very little is known about the uses and effects of social media on enterprises. Social network software developed for the company, usually called Enterprise Social Network, is an Internet-based service, which allows individuals to create and maintain online public or semi-public profiles and foster connections with other members of that organization.

According to [16] ESN sites represent social network sites that encourage employees to share both professional and personal information with each other on the corporate intranet. ESN sites are often built with commercial tools and customized for the specific company, and they share a core, most commonly used set of features that can also be found on external, well known SNSs [16]:

- Employees can create customized online profiles with diverse content
- Users can connect with other colleagues on the internal web site.
- Users can share various content, which can include status updates, photos and videos [17], lists [18], documents and blogs [19].

According to [20] ESNs are web-based platforms that allow coworkers to communicate with specific colleagues or broadcast messages to everyone in the organization; to explicitly indicate or implicitly reveal particular coworkers as communication partners; to post, edit, and sort text and files linked to themselves or others; and view the messages, connections, text, and files communicated, posted, edited and sorted by anyone else in the organization at any time of their choosing. Above-mentioned leads to collaboration improvement, better networking, innovation and creativeness improvement. Moreover, ESNs enhance productivity and organizational performance.

Enterprise social networks have been deployed within many organizations worldwide to facilitate communication processes such as collaboration, participation and engagement among employees [21]. ESN are inspired by well-known social networking websites, but the difference is that they run on the host organization's servers, protected by firewalls and restricted to use just by employees [17].

Numerous companies are launching internal deployments of social network sites because they want to encourage their employees to share both professional and personal information with each other on the corporate intranet [18]. On the other hand, many organizations are struggling to realize the benefits of this emerging workplace engaging communication and social platform due to many factors. [22] suggest that these factors are: technological (such as platform and content quality), organizational

(e.g. community management), social (e.g. interaction), individual (literacy and self-efficacy) and task factors (i.e. integration to business processes).

[5] described multiple social media features that every ESN platform contains, such as status updates, activity streams, micro-blogging, groups and communities, integrated instant messaging, content management systems, to-do lists, filtering of information, enterprise search, and ratings, as well as social network features such as profiles and the ability to connect with, follow, like or praise someone. The uniqueness of the ESN lies behind its affordances of visibility and persistence and editability of content. Additional benefits, [23] have shown that ESN use and participation improves team performance and individual employee work performance. Also, some research [24] has stated that ESN affordances facilitate knowledge sharing and information dissemination practices within an organization. [24] developed and demonstrated a novel use case-based approach, a framework that covers seven important actions for collaboration (search, edit, rate, label, clarify, notify, and share) and the two dimensions - usage and business value. They provided the practical benefit with a real-world example from the service industry; the case-based approach was successfully applied and led to improved decision support for different stakeholder groups including system administrators and executive management.

3. CONCLUSION

ESNs are a relatively new phenomenon in the research body of knowledge, and their dynamics and benefits are not fully yet explored. The scholarly work on the enterprise social networks is relatively limited. In spite of rapid uptake of corporate social media technologies, very little is known about the uses and effects of ESN on enterprises. Although the external social networks are more popular and widely distributed, internal networks are more appropriate for the communication and connection between the employees in the organization.

In this paper, we have given a theoretical overview of the ESN and we offered our definition of ESN based on previous theories and the qualitative research we conducted. Today, the ESNs represent the Internet-based services and applications of the Social Web that in addition to social and media context are aiming at the most important communication performance: interaction and engagement. ESNs enable improved communication and collaboration among co-workers and give employees a sense of online community, social interaction and employee engagement, that leads to productivity improvement.

This paper contributes both to ESNs theoretical elaborations. The study highlights that ESNs become popular because there is high need to support collaboration, communication, and information exchange between employees. Thus, it deserves the same theoretical and practical attention as other more established concepts within the organization. We also find that ESN are more established in

practice than in theoretical research; many ESN practitioners and communication departments lack the necessary expertise to conduct the research and evaluation, for future strategic planning, decision making processes, and communication activities in the enterprise. Therefore, both in theory and practice, in academic setting and business enterprise communication, there is the need for further theoretical exploration and empirical measurements and evaluation methodology. We hope that the joint efforts of academics and ESN professionals will improve the dynamics in future theoretical research and practical implications of these online platforms.

4. REFERENCES

1. Lalić, D. (2010). *Socijalne mreže u funkciji unapređenja internih odnosa s javnošću*. (Ph.D. thesis), University of Novi Sad, Novi Sad, 21.06.2010.
2. Pavlović, J., Lalić, D., & Đurašković, D. (2014). Communication by Non-governmental Organizations via the Facebook Social Network. *Engineering Economics*, 25(2), pp. 186-193. ISSN 1392-2785.
3. Kelleher, T., & Sweetser, K. (2012). Social media adoption among university communicators. *Journal of Public Relations Research*, 24(2), 105-122.
4. Radovanović, D., Hogan, B., & Lalić, D. (2015). Overcoming digital divides in higher education: Digital literacy beyond Facebook. *New media & society*, 17(10), 1733-1749.
5. Leonardi, P. M., Huysman, M., & Steinfield, C. (2013). Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-Mediated Communication*, 19(1), 1-19.
6. Bregman, A., & Haythornthwaite, C. (2003). Radicals of presentation: Visibility, relation, and co-presence in persistent conversation. *New Media & Society*, 5(1), 117-140.
7. Steinfield, C., DiMicco, J. M., Ellison, N. B., & Lampe, C. (2009, June). Bowling online: social networking and social capital within the organization. In *Proceedings of the fourth international conference on Communities and technologies* (pp. 245-254). ACM.
8. Lampe, C. A., Ellison, N., & Steinfield, C. (2007, April). A familiar face (book): profile elements as signals in an online social network. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (pp. 435-444). ACM.
9. Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of computer-mediated Communication*, 13(1), 210-230.
10. Saffer, A. J. (2016). A message-focused measurement of the communication dimension of social capital: Revealing shared meaning in a network of relationships. *Journal of Public Relations Research*, 28(3-4), 170-192.
11. Rheingold, H. (1994). *The Virtual Community: Homesteading on The Electronic*. New York: HarperPerennial.
12. Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230.

13. Rheingold, H. (1994). *The Virtual Community: Homesteading on The Electronic*. New York: HarperPerennial.
14. Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230.
15. Stenmark, D., and Zaffar, F. (2014) Consultant Strategies and Technological Affordances: Managing Organisational Social Media. In Proceedings of the 20th Americas Conference on Information Systems Savannah, Georgia.
16. Jarrahi, M. H., & Sawyer, S. (2012, February). Social networking technologies and organizational knowledge sharing as a sociotechnical ecology. In *Proceedings of the ACM 2012 conference on computer supported cooperative work companion* (pp. 99-102). ACM.
17. Jarrahi, M. H. (2011, February). Social networking, social network technologies, and the enterprise. In *Proceedings of the 2011 iConference* (pp. 688-690). ACM.
18. Brandel, M. (2008). What brain drain. *Computerworld*, 42(17), 28-30.
19. Thom-Santelli, J., & Millen, D. R. (2009, April). Learning by seeing: photo viewing in the workplace. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 2081-2090). ACM.
20. Geyer, W., Dugan, C., Millen, D. R., Muller, M., & Freyne, J. (2008). Recommending topics for self-descriptions in online user profiles. In *Proceedings of the 2008 ACM conference on Recommender systems* (pp. 59-66). ACM.
21. Jackson, A., Yates, J., & Orlikowski, W. (2007, January). Corporate Blogging: Building community through persistent digital talk. In *System Sciences, 2007. HICSS 2007. 40th Annual Hawaii International Conference on* (pp. 80-80). IEEE.
22. Leonardi, P. M. (2014). Social media, knowledge sharing, and innovation: Toward a theory of communication visibility. *Information systems research*, 25(4), 796-816.
23. Drakos, N., Mann, J., and Gotta, M. (2014). Magic Quadrant for Social Software in the Workplace. Available at: <http://www.gartner.com/technology/reprints.do?id=1-20TBOV4&ct=140903&st=sb>
24. Leonardi, P. M., Huysman, M., & Steinfield, C. (2013). Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-Mediated Communication*, 19(1), 1-19.