Innovation resistance and strategic implications of enterprise social media websites in Taiwan through knowledge sharing perspective

Peng-Ting Chen [a,*], Shu-Chen Kuo [b]

[a] Department of Biomedical Engineering, National Cheng Kung University, Tainan, Taiwan, ROC
[b] No.1, Sec. 1, Syuecheng Rd., Dashu Dist., Kaohsiung City 84001, Taiwan, ROC

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ABSTRACT

Virtual communities consist of social media users whose relationships are strengthened through information and knowledge transfers, as well as interactions among members. A new connection between customer feedback and brand modeling has been formed through social media. Therefore, this research aims to enhance effective management of enterprise social media platforms, as the key to prosperity in social media is built on the knowledge sharing behavior of users. The study employs the theory of innovation resistance and summarizes 27 factors of barriers encountered by users during the knowledge sharing process in enterprise social media. These factors are further categorized into seven dimensions of resistance, such as usage barriers, value barriers, physical risks, trust risks, security belief barriers, mutual benefit belief barriers, and image barriers. The validity of the scales is confirmed by using the corroboration process of factor analysis. The strategic implications of the barriers are explored, and recommendations to overcome those barriers are proposed as part of management of enterprise social media sites.

1. Introduction

The interactive features of the Internet and blogosphere have become staples in society. Two-thirds of the global Internet population has visited a social networking or blogging site, and the time spent on these sites is increasing at thrice the rate of the overall Internet growth (Briones et al., 2011). Web 2.0 and user-generated content collaborative technologies which transform the operation of the Internet from one- to two-directional mode enable the users to transmit information, resulting in increased popularity of social media.

Social media consists of an enormous number of users. In addition to the provision of proper two-directional communication channels, advantages such as low costs and low usage thresholds are also provided. Hence, social media gradually becomes an important medium for corporations to maintain relationships with customers and employees (Dunn, 2010). From an enterprise perspective, the difference between the traditional and social media management is that the usage of social media is paid via social currency; in other words, social media relies on long-term relationships. Enterprises can spend less to achieve the purposes of two-directional communications for consumers and market development through social media (Fischer and Reuber, 2011). In addition, social media constitutes a great source for big data, which can meet every information demand of both enterprises and consumers. Enterprises can use the big data to analyze consumer behaviors, social trends, or buying tendencies, whereas consumers can gather a great deal of information on social media platforms. However, if the company cannot effectively operate social media, then the negative messages shown on the platforms will have major impacts on the sales, reputation, and potentially the survival of the enterprise (Kietzmann et al., 2011). Additionally, Fischer and Reuber (2011)) pointed out that a company loses 30 customers for each significantly negative message on the company that circulates on the social media. Therefore, to identify effective management methods for social media is a crucial topic to explore (Kane et al., 2009). Current studies relevant to social media mainly focus on introducing the concepts of social media. Most researchers concentrate on the effective utilization of social media as a business marketing tool (Fischer and Reuber, 2011).

Internet users often form virtual communities via social media, and the relationships among community members are strengthened through information and knowledge transfers, as well as interactions. Koh and Kim (2004)) suggested that knowledge sharing constitutes the most vital part of social activities taking place in the virtual communities (Chiu et al., 2006). To succeed in an enterprise social platform, companies are supposed to determine users' motivation to actively engage in the generation and sharing process of their knowledge. However, Chang and Chuang (2011)) indicated that most users prefer not to share knowledge in the virtual communities while the reasons why users decide whether to actively participate in virtual knowledge-

sharing communities of practice or not are currently not well interpreted. Understanding why users are willing to use a social media platform is crucial; for example, one tends to be more interested in a site where their friends are also actively involved, and thus enterprises can strategically select a platform attracting these users. Furthermore, dillemas preventing users from sharing knowledge on enterprise social sites should also be identified thoroughly. The purpose of this research is to investigate users' motivations and barriers to knowledge sharing while they use social media, as well as propose strategies to keep the knowledge sharing process active; hence, the capability of social media management can be successfully manifested. The findings of this research aim to help enterprises employ social media as an effective means of communication with consumers and boost their business productivities through active interactions with users on the enterprise virtual communities once consumers are supported with the elimination of barriers to knowledge sharing process. In addition, social media is no longer an option for enterprises but a pre-requisite of success; analysis of social media which constitutes an enormous source for data from users thus becomes strategic.

Social media is an innovative medium of communication compared with the traditional face-to-face communication. Although previous studies have explored the knowledge sharing process of users from a positive psychological motivation viewpoint, the effects of media tools on users are often ignored. Current studies related to knowledge sharing behavior in the virtual community are also scarce. From the perspective of innovation resistance, discussions regarding the difficulties that users encounter utilize the innovative e-interface during the knowledge sharing process. Therefore, this study uses the theory of innovation resistance to explore the sources of resistance of users toward enterprise social media, to analyze the psychological barriers confronted by individuals in a virtual community during knowledge sharing process, and to identify the functional barriers as results of innovative social media.

Innovation resistance theory is best used to explore the reasons why new products or services are not being accepted (Ram, 1987). The importance of such theory is increasingly reinforced by relative research. Innovation resistance theory is applied to explain the dilemma encountered by the market today because of the high failure rates in new products and services (Kleijnen et al., 2009; Ram, 1987; Ram and Sheth, 1989; Sheth, 1981). Compared to the concept that consumers are more inclined to changes with the diffusion of innovation, scholars believe that resistance to change should be considered a normal reaction from the consumers (Ram, 1987; Ram and Sheth, 1989; Sheth, 1981; Szmigin and Foxall, 1998). Rhoda (Rhoda, 2010) believed that to explore the intentions of consumer to use a product or service from the rejection perspective is more appropriate when the types of innovative information technology products or services are explored. Hence, this study incorporates the innovation resistance theory, compiles the resistance factors encountered by users during the knowledge sharing process on enterprise social media, and quantitatively identifies the relationships between the factors, as well as understanding the sources of the problems.

The remainder of this paper is organized as follows: Section 2 reviews the literature that summarized the major obstacles encountered by users while conducting knowledge sharing in the enterprise social media. Section 3 explains the research methods, whereas the empirical analyses and strategic implications are discussed in detail in Section 4. Finally, Section 5 concludes the study and provides the recommendations.

2. Literature review

2.1. Social media

Social media is the hottest media tools today (Shon, 2014). Kaplan and Haenlein (2010) pointed out that 75% of the Internet users were already utilizing social media in as early as 2008. Several preceding

computer technologies, including Multi-user Dongeon (MUD), Bulletin Board System (BBS), Usenet and Internet Relay Chat (IRC), are among the earliest and closest to the concept of social media. However, the developments of Web 2.0 and user generated content have shown obvious differences in the formats in which virtual contents are being shared today. Popular social networking websites such as LinkedIn (2003), Facebook (2004), and Twitter (2006) are evolutions of broadband Internet and interactive technologies, and the phrase "social media" instantly became widespread. The size and importance of various social media increase exponentially, and owning a second identity becomes the biggest psychological change for users in the virtual world.

Community media include a wide range of public forums, such as blogs, business discussion forums, chat rooms, e-mails, consumer product review sites and forums, general Internet discussions, mobile blogs, and social networking sites (Mangold and Faulds, 2009). Kaplan and Haenlein (2010)) also further classified social media by utilizing studies related to media and theories of social evolution.

Social media can be viewed as the platform driven by the user-generated contents based on Internet usage (Xiang and Gretzel, 2010; Zhou and Wang, 2014). The media transforms the transmission of information from the traditional one-way to a faster and interactive two-way process, and is mainly used for communication (Weinberg and Pehlivan, 2011) (Table 1). To maintain its cohesiveness, social media not only allows the one-to-many or many-to-many interactive communication, but can also link to other websites easily and quickly. In addition, social media has historically been a great source for big data as it is believed to provide users with credible, valuable, and timely information. Neilson Company reported that people make more use of social media than any other selections of sites, with an average of 121.18 min per day in 2012, which rose by >37% compared to the previous year. Malita (2011)) pointed out that social media is essentially a network medium that provides a way to enable users to converse, participate, share, and establish network contacts. The medium is also an Internet technology, which enables people to share ideas, knowledge, experience and perspectives. These forms of sharing include texts, images, audios, and videos. Users are able to interactively communicate with one another through different forms of websites (e.g., blogs, message boards, online audios, etc.). For all abovementioned reasons, participants of social network groups consider social media as the first stop to gather information and prepare opinions.

Characteristics of social media include boundariless, open architecture, transparent process, breaking away from classifications, emphasis on interaction, and real-time operations (Dutta, 2010). The four powerful capabilities include promoting rich relationships, allowing rapid mobilization, improvements in knowledge creation, as well as integrating and improving the outcomes of information filtration (Kane et al., 2009). Dunn (Dunn, 2010) indicated that the latest trends in society can be easily observed through social media. Social media enables the managers to quickly and simultaneously contact colleagues, employees, customers, and the general public, as well as provide real-time messages and receive feedbacks to further enhance their relationships. If the enterprise can effectively utilize social media, then they will be able to host two-way communications, respond to the market quickly

Table 1
Media process elements (Weinberg and Pehlivan, 2011).

	Traditional	Social
Media	Television, radio, print, billboard, and so on.	Social networks, blogs, microblogs, communities, and so on.
Spend	Cash, cost	Social currency, trustworthiness, authenticity, transparency, investment
Delivery	Direct from marketer, unedited	From source, delivered by volition of, and in words selected by source
Objectives	Awareness, knowledge, recall, purchase, and so on.	Conversation, sharing, collaboration, engagement, evangelism, and so on.