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How do small firms learn to develop a social media competence?

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ABSTRACT

Social media can be leveraged to improve the firm's business activities to create value. Because small firms have a lower portfolio of financial resources to compete more effectively in the market, social media capabilities can become more important for small than large firms. However, prior research has failed in explaining the variables through which small firms can learn to adopt social media. Our study is a first effort to address this research gap. We propose a conceptual model in which social competitor pressure, IT infrastructure capability, two organizational capabilities (marketing management and innovation management) and firm size enable small firms to learn to develop a social media competence. The model is tested using the partial least squares-based structural equation modeling technique employing a unique secondary dataset on a sample composed of the 100 small U.S. firms included in the 2013 Forbes America's Best Small Companies ranking. The empirical analysis suggests that IT infrastructure capability, social competitor pressure, marketing management and innovation management are key mechanisms through which small firms learn to develop a social media competence. The empirical analysis also suggests that social media competence is more important for the smallest manufacturing firms even among a sample of small firms.

1. Introduction

Social media business practices (e.g., Facebook, Twitter, blogs, YouTube) are reaching a significant awareness nowadays among firms (Aral, Dellarocas, & Godes, 2013). About 80% firms listed in the Standard and Poor's 500 index use social media (Mahr & Lievens, 2012). More specifically, 53%, 46%, 20% and 11% of Fortune 500's firms leveraged Twitter, Facebook, blogs and forums respectively in their business activities (Culnan, McHugh, & Ubillaga, 2010). Social media can be leveraged to improve the firm's business activities to gain business value (Aral et al., 2013). At corporate level, social media enables the firm's proficiency to sense and seize business opportunities and the reconfiguration of business resources (Wagner & Wagner, 2013). At operational level, firms leverage social media to improve their relationships with customers (in terms of product, brand, engagement and firm), which increases the brand trust to lead to a greater customer loyalty and business value (Laroche, Habibi, & Richard, 2013; Trainor, Andzulis, Rapp, & Agnihotri, 2014).

Social media are a very recent phenomenon among firms and individuals at the real world and, consequently, the study of social media is in its initial stages. Our own comprehensive analysis on prior research on social media for business activities suggests that this research can be organized in three blocks of research. The first block of literature on social media is mainly oriented to information technology (IT) and business managers being its goal to describe the social media firms' behavior and provide suggestions for a successful implementation of social media at the real world (e.g., Culnan et al., 2010; Kiron, Palmer, Phillips, & Kruschwitz, 2012). A second block of research has empirically examined the effect of social media firm's usage on the execution of marketing activities (i.e., the so-labeled social media marketing). For example, Goh, Heng, & Lin (2013) study the relationship between customer and firm participation in social media and find that the indirect comments of informative and persuasive customers has a stronger effect on purchase than firm messages. Similarly, Rishika, Kumar, Janakiraman, and Bezawada (2013) find that customer participation in social media increases customers' shopping visits and customer profitability. Finally, although in a very limited way, we find a third block of empirical research that has compared the effects of social media versus online conventional media (e.g., web traffic, Google search) on the stock market performance (Luo, Zhang, & Duan, 2013; Yu, Duan, & Cao, 2013). However, additional research is needed to better understand how firms can leverage social media

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resources to create business value (Liu, Zhang, Liu, & Li, 2014). Table A1 (in the appendix) presents a summary of our comprehensive analysis of prior research on social media for business activities.

That being said, with two exceptions (Lee, Oh, & Kim, 2013; Sinclaire & Vogus, 2011) prior research has failed to explain the variables through which firms can learn to adopt social media practices. Sinclaire and Vogus (2011) found that large IT firms are more likely to adopt social media due to mimetic pressure and marketing arguments. In a similar way, Lee et al. (2013) find that corporate social responsibility is an antecedent of social media practices. Although the usage of social media is free for firms, it requires to investing and deploying indirectly other business resources. Also, a social media capability (i.e., firms' proficiency in using and leveraging social media for business activities) can vary among firms. Small firms have a lower portfolio of financial resources to compete more effectively in the market which suggest that social media capabilities can become more important/strategic for small than large firms. However, prior research has not paid attention to explain how small firms learn to develop social media capabilities. Our study is a first effort to address this research gap.

The goal of this research is to examine how small firms learn to develop social media capabilities. We look for the specific mechanisms through which firms can develop their social media capabilities before competitors do. Drawn from the Sinclaire and Vogus's (2011) work, the institutional theory (Liang, Saraf, Hu, & Xue, 2007; Mignerat & Rivard, 2009), the theory of organizational capabilities (Teece, 2007), the IT-enabled organizational capabilities perspective (Benitez-Amado & Walczuch, 2012) and the organizational learning framework (Argote & Miron-Spektor, 2011), we propose a conceptual model in which social competitor pressure, IT infrastructure capability and two organizational capabilities (marketing management and innovation management) enable small firms to learn to develop of a social media competence (i.e., the firm's proficiency in using and leveraging Facebook, Twitter and blog capabilities). The model is tested using the partial least squares (PLS)-based structural equation modeling (SEM) technique employing a unique secondary dataset in a sample composed of the 100 small firms included in the 2013 Forbes America's Best Small Companies ranking.

The paper is organized as follows. Next, we introduce the theories and perspectives in which the proposed is based and present the hypotheses development. Sections 3 and 4 show the research method (sample, data and measures), and the empirical analysis and results. After that, the discussion of the results and final conclusions are presented. The manuscript finishes with a valuable appendix with our comprehensive analysis of prior research on social media for business activities and our additional empirical analyses.

2. Theory and hypotheses

2.1. The institutional theory, the organizational capabilities-based theory, the IT-enabled organizational capabilities perspective and the organizational learning framework

According to the institutional theory, the organizational behavior can be explained by two types of institutional pressure: Coercive and competitor pressure (DiMaggio & Powell, 1983). Coercive pressure refers to the political influence exerted on the firm by the national and regional governments. Competitor pressure refers to influence exerted on the firm by the industry rules and values, and the key competitors (Zhu & Kraemer, 2005). Thus, firms adapt their behavior to respond to the institutional pressure and look for environmental legitimacy to be accepted and survive in the long run (Liang et al., 2007). This study focuses on social competitor pressure that refers to the pressure exerted by competitors on the firm to adopt social media. We use the institutional theory to conceptualize social competitor pressure and to link social competitor pressure to the development of a social media competence.

The organizational capabilities-based theory suggests that firms design their strategies based on their organizational capabilities, which explains the difference in competitiveness among firms (Grant, 1996). Prior research on organizational capabilities has distinguished three types of organizational capabilities: Dynamic, operational and dual-purpose capabilities (Helfat & Winter, 2011). Dynamic capabilities refer to the firm's proficiency in building, integrating and reconfiguring its resource base in response to changes in the business environment (Teece, 2007). Operational routines are patterns of activities/processes that a firm performs at the operations level. Better execution of similar operational routines leads to superior firm performance (Peng, Schroeder, & Shah, 2008). Operational capabilities are the firm's proficiency in using a collection of interrelated operational routines to solve operational problems and implement the operations strategy (Benitez-Amado, Llorens-Montes, & Fernandez-Perez, 2013; in press; Wu, Melnyk, & Flynn, 2010). Dual-purpose capabilities refer to those organizational capabilities that can be developed and exploited at both corporate and operational level, that is, they are dynamic as well as operational capabilities (Helfat & Winter, 2011).

The theory of organizational capabilities provides a useful theoretical framework to conceptualize IT infrastructure capability, marketing management, innovation management, social media competence and to link IT infrastructure capability, marketing management and innovation management to the development of a social media competence.

The IT enabled-organizational capabilities perspective has argued that organizational capabilities are key mechanisms through which IT helps firms to create value. Some examples of these capabilities are organizational learning, knowledge management, new product development, supply chain management or business flexibility (Lopez-Nicolas & Soto-Acosta, 2010; Ranganathan, Teo, & Dhaliwal, 2011; Tanriverdi, 2005; Tippins & Sohi, 2003). This study builds on the literature on IT-enabled organizational capabilities to conceptualize and link theoretically IT infrastructure capability and social media competence.

Organizational learning is the firm's dynamic process of creating knowledge through the interaction of its individuals and groups in order to pursue organizational renewal. The process of learning is composed of four sub-processes: Intuiting (process of discerning and creating something new/new knowledge), interpreting (process of explaining and codifying the new knowledge), integrating (process of sharing and transferring knowledge to organizational members) and institutionalizing (process of embedding the new knowledge into the firm through rules, routines, procedures and products). The organizational learning process is also influenced by the business environment and the degree of experience of the firm (Argote & Miron-Spektor, 2011; Crossan, Maurer, & White, 2011; Real, Roldan, & Leal, 2014). Organizational learning enables the combination of the firm's resource transforming them into organizational capabilities, thus increasing the firm's competitiveness (Lado, Boyd, & Wright, 1992). We use the organizational learning framework to explain how IT infrastructure capability, marketing management and innovation management enable small firms to learn to develop a social media competence.

Fig. 1 presents our conceptual model.

2.2. Social competitor pressure and social media competence

Social competitor pressure refers to the influence exerted on the firm by the industry rules and values, and the key competitors