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How corporate social responsibility activities influence employer reputation: The role of social media capability

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Abstract

This study analyzes the relation between the firm's corporate social responsibility (CSR) activities, employer reputation, and social media in the academic conversation on business value of technology. Motivated by the controversy over the function of social media in the firm's generation of value from CSR activities, this study hypothesizes that firms that perform CSR activities may become better employers and that this positive relationship may be stronger when firms leverage social media technologies. We explain this effect of social media by arguing that these social technologies enable *higher social visibility* and *exposure/credibility*. We tested our research model with data from 100 organizations in Spain. The results provided two key insights: 1) CSR activities enable firms to build greater employer reputation; and 2) social media capability amplifies the effect of CSR activities on employer reputation. This study contributes to Information Systems and Business Ethics research by arguing theoretically and demonstrating empirically that leveraging a technology such as social media generates business value through maximization of the positive impact of CSR activities on employer reputation of the firm.

Keywords: Corporate social responsibility activities, social media capability, employer reputation, business value of information technology.

1. Introduction

Corporate social responsibility (CSR) is increasingly important for firms (Hsu, 2012). Firms perform CSR activities to gain competitiveness, generating wealth (Garriga & Mele, 2004; Saeidi et al., 2015), responding to societal demands (Porter & Kramer, 2006), and supporting individuals and society. Many firms implement CSR activities deliberately to build and improve their corporate reputation in order to attract customers (Lai et al., 2010; McWilliams et al., 2006) and to build employer reputation to attract talent (Bhattacharya et al., 2008; Turban & Greening, 1997).

Employer reputation indicates the firm's image as an employer as perceived by potential applicants and current employees, specifically, the firm's reputation as a good place to work. The better the employer's reputation is, the greater the firm's ability to attract, recruit, and retain talent. Firms with poor talent management practices face serious risk of talent war and increased hiring cost, as extra cost becomes necessary to compensate for poor reputation and convince candidates to work for them despite the risk of problems (Burgess, 2016). For example, harsh criticism of Amazon's recent business practices has damaged its employer reputation. Amazon encouraged employees to criticize each other ruthlessly by sending information to their bosses, leading to sabotage among employees, overtime, stressful conditions, and high pressure. Bad employer reputation may have caused Amazon problems attracting talent, giving the company one of the highest turnover rates among Fortune 500 firms (Bhatnagar & Jaiswal, 2016). Auger et al. (2013) refer to this phenomenon as workplace reputation and examine its role in the war for talent. Although more scholars are studying employer reputation, very little is known about this corporate phenomenon, and even less in the field of Information Systems (IS). Some studies have begun to analyze the particularities of employer reputation. For example, Helm (2011) investigates how pride, job satisfaction, affective commitment, and perceived corporate reputation influence employees' awareness of their impact on employer reputation. Jones et al. (2014) study how involvement with the community and pro-environmental practices affect workplace attractiveness. Similarly, Iseke and Pull (2019) investigate whether women executives influence perceived employer attractiveness for female job seekers.

As to CSR activities, prior studies have concentrated primarily on how CSR activities relate to brand value and firm performance (Lee et al., 2012), and on the relation between CSR activities and corporate image (e.g., Lai et al., 2010; Stanaland et al., 2011). With a few exceptions (Dogl & Holtbrugge, 2014; Turban & Greening, 1997), few studies have been performed on the impact of CSR activities on employer reputation. Turban and Greening (1997) demonstrate that corporate social performance influences corporate reputation and the firm's attractiveness as an employer. Dogl and Holtbrugge (2014) reveal that corporate environmental responsibility activities influence the firm's environmental reputation as employer and employee commitment.

In the era of the digital revolution, firms utilize social media to transform and perform business activities (Aral et al., 2013; Benitez et al., 2018a). Specifically, firms leverage social media—both external (e.g., Facebook, Twitter) and internal (e.g., Facebook Workplace, Microsoft Yammer, DingTalk)—to acquire and share knowledge from the market/customers and employees (Kane, 2015; Song et al., 2019). This knowledge enables them to manage relationships with potential and current customers and other stakeholders to improve their online corporate reputation (Mandviwalla & Watson, 2014). Academic research echoes this importance of social media, focusing on three main areas (Braojos et al., 2015). The first is oriented to IT and business managers and describes behavioral patterns of social media usage in organizations (e.g., Culnan et al., 2010; Kiron et al., 2012). The second examines so-called social media marketing, that is, the firm's use of social media to run marketing activities (Goh et al., 2013; Rishika et al., 2013). The third line of research compares the effects of social media to those of conventional online media (e.g., web traffic, Google search) (Luo et al., 2013; Yu et al., 2013). For instance, Zhang's (2015) study of information disclosure investigates how companies disclose voluntary information on new social media as compared to traditional media or company websites. Research shows that social media are one of the most disruptive technologies that organizations use to transform business activities and create business value. Based on this research, we examine the possible role of social media in amplifying the impact of CSR activities on employer reputation.

How do social media affect the relation between CSR activities and corporate reputation? If wrongly leveraged, social media can be a double-edged sword. They may exert negative, positive, or no influence on the impact of CSR activities on firm reputation. Currently, they are often used to disclose sensitive information (e.g., financial information, environmental, and social policies), which may include misleading information (Delmas & Burbano, 2011). Customers and potential employees may be reluctant to believe what companies publish on social media (Zhang, 2015). In fact, some firms use social media to greenwash their social reputation, a technique that customers view as fake (Lyon & Montgomery, 2013). For example, hotels may use social media to greenwash their green initiatives to save water and avoid producing chemical waste by reusing towels while in fact masking their unique true intention, to save

costs. Similarly, General Electric's green campaign "Ecomagination" has been viewed as a social media-driven greenwashing campaign, since General Electric publicized its green initiatives at precisely the same time it was advocating against the EPA's new clean air requirement (Delmas & Burbano, 2011). Such phenomena have led customers to question whether firms' CSR activities reflect true engagement with society or are simply a façade. Since social media messages on CSR activities are subject to *greater exposure and social visibility*, firms that lack proficiency in using social media may find that the absence of CSR activities (e.g., Volkswagen and the Dieselgate scandal) or the presence of fake CSR activities has disastrous consequences for their reputation. One could argue, however, that social media exert little influence on CSR activities' impact on corporate reputation because many customers and potential employees do not read most messages published in external social media (Cervellon & Lirio, 2017; Fieseler et al., 2010).

When properly managed and leveraged, social media can enable firms to maximize the impact of CSR activities on corporate reputation, suggesting that social media can play a positive role in this equation. Thanks to dialogue and interactivity as a two-way communication channel with, as well as exposure to, the large audience that they enable, social media scanning and engagement of customers and potential employees provide additional *credibility* and *visibility* to the CSR activities that influence corporate reputation. The same may hold for the positive role social media play in the impact of CSR activities on employer reputation (a subdomain of corporate reputation). We believe that using social media makes communications more credible than purely company-controlled messages, as the firm exposes its messages to criticism (Eberle et al., 2013) and the firm's social media capability can manage such criticism appropriately. This study focuses on social media capability, that is, "*the firm's ability to leverage the social media platforms of Facebook, Twitter, and corporate blogs to execute business activities*" (Benitez et al., 2018a, p. 135). The key research question it attempts to answer is: Does social media capability amplify the impact of CSR activities on employer reputation? Our central thesis is that social media can amplify the positive impact of CSR activities on employer reputation if the firm is capable of leveraging the social media presence generated by the *greater visibility and credibility* of CSR

activities that these media enable. Figure 1 presents the theory proposed. We tested this theory on a sample of 100 firms from Spain, employing secondary data, and the empirical analysis supports our model.

This manuscript makes several contributions to the fields of IS and Business Ethics. Our study pioneers in theorizing how social media capability positively increases the impact of CSR activities on employer reputation. We theorize and demonstrate empirically how social media capability enables firms to generate business value by amplifying the positive effect of CSR activities on employer reputation. This is the primary contribution of our research to the IS research on business value of information technology (IT). Second, signaling theory suggests that firms signal their values and activities such as CSR activities to the talent market. Social identity theory suggests that talent use these signals to evaluate person-firm fit and their current/potential organizational affiliation. This study contributes to developing both theories by adding social media capability as a talent touchpoint capability that strengthens the firm's ability to amplify signals and their potential use to evaluate perceived organizational affiliation, which in turn affects employer reputation.

The rest of the paper is organized as follows. In section 2, we present the study's theoretical framework and conceptualization of the key concepts, and develop the hypotheses. The third section explains the research design. In section 4, we perform the empirical analysis and report the results. The final section presents the discussion and conclusions.

2. Theoretical framework, conceptualization of constructs, and development of hypotheses

2.1. Theoretical framework: Signaling theory and social identity theory

This study grounds the proposed research model in signaling theory and social identity theory. Signaling theory seeks to explain how individuals use signals to reduce the uncertainty associated with deciding or undertaking actions in an environment of asymmetric information (Connelly et al., 2011). Signaling often occurs in competitive environments where firms compete for resources such as talented employees (Dogl & Holtbrugge, 2014), as in the case of the war for talent in business analytics, a scarce resource on the market. According to signaling theory, since applicants and current employees usually have incomplete information about a firm, the only way of knowing and evaluating the firm is to interpret the signals the

firm transmits to the market about its strategic plan, vision, core values, and concept of workplace. Applicants thus consider observable actions to obtain information about unobservable attributes (Spence, 1974). As signals that companies provide to the talent market, CSR activities can affect employer reputation. Prior research has used signaling theory to explain the potential benefits firms can reap from adopting and engaging in socially responsible initiatives (Turban & Greening, 1997). We use signaling theory to explain theoretically the connection between CSR activities and employer reputation, and to justify how social media capability may enable firms to disclose this information and disseminate these signals.

Social identity theory involves how individuals perceive their belonging to a particular group and act to favor this group, “*classifying themselves and others into several social categories (e.g., organizational membership, religious affiliation, gender, and age cohort)*” (Ashforth & Mael, 1989, p. 20). Organizational affiliation has been shown to be one of the most important membership groups for individuals, meaning that staying with a firm constitutes a public expression of one’s values. According to this theory, individuals choose activities congruent with their identities, supporting the firms that embody those identities (Ashforth & Mael, 1989; Helm, 2011). Specifically, current employees and potential talent with socially responsible values identify with companies that implement CSR activities. We use this theory to explain how the firm’s CSR activities affect employer reputation by aligning the company and individual values associated with CSR.

If we combine signaling theory and social identity theory, we can understand CSR activities as signals that firms send to the talent market to improve current employees’ and potential applicants’ identification of their CSR values, thus improving employer reputation. Social media capability can affect signaling of CSR activities and individuals’ identification with the company because these signals acquire greater visibility and exposure to current employees and potential applicants. These theories form the main theoretical grounding for this study’s primary argument.

2.2. Conceptualization of key concepts

The key concepts examined in this organization-level study are CSR activities, employer reputation, and

social media capability. CSR activities are social, environmental, ethical, and philanthropic activities performed voluntarily by the firm to meet the expectations of individuals and society (Lai et al., 2010; Shum & Yam, 2011). The societal rationale underlying why companies should implement CSR activities is that, since companies benefit from society, they should give something back, something other than provision of products, labor, and capital payment. CSR activities are a way for companies to build their identity and the image they wish their internal and external stakeholders to perceive (Bravo et al., 2011; Martinez et al., 2014). For instance, although Fortune considered Wal-Mart as the "*most admired company in America*" in 2003 and 2004, its reputation was damaged by its low score in the ethical dimension. To solve this problem, Wal-Mart developed a strategy based on CSR activities that combined social, political, and legal components to avoid jeopardizing its future growth and financial success (Hemphill, 2005). Overall, we believe that companies usually invest in CSR activities to improve corporate reputation.

Employer reputation refers to the firm's image as employer, as perceived by potential applicants and current employees, that is, to the firm's reputation as a (good) place to work. Employer reputation is the job seeker's perceived proficiency of the firm in advanced and superior human resources management practices (Benitez et al., 2018b; Stahl et al., 2012). Firms are aware that they must strengthen their employer reputation due to intense market competition to attract the most talented employees. For example, being ranked the best firm in which to work in Spain by *Actualidad Económica's* Great Place to Work 2017 will enable Mutua Madrileña (a leading insurance company in Spain) to attract the best employees in the short and middle term (Oleo et al., 2017).

Social media capability is the firm's ability to use and leverage social media to develop business activities (Benitez et al., 2018a). Drawing on Benitez et al. (2018a), this study focuses on the firm's proficiency in using and leveraging three external social media: Facebook, Twitter, and corporate blogs. Organizations' social media usage is top-of-mind for IT, business executives, and organizations. Although most companies worldwide try to learn, use, and exploit social media, firms' proficiency in using and leveraging social media varies greatly. Social media capability is the firm-level capability to lead, explore, and capitalize on external social media to develop business activities.

2.3. Hypothesis development

2.3.1. CSR activities and employer reputation

We hypothesize a positive relationship between CSR activities and employer reputation. The firm's CSR activities serve as a signal of job conditions at the firm (Turban & Greening, 1997). Current employees may use this signal when deciding to stay in a company. Similarly, potential applicants can reduce information asymmetry by using CSR signals to decide whether to apply for a job. As signals that companies provide to employees and the talent market (Spence, 1974), CSR activities may affect employer reputation (Aguilera et al., 2007).

CSR activities can improve employer reputation due to better firm-person fit, organizational identification, employee's self-concept, and self-esteem. We argue these relationships using the literature on social identity theory. Both firms and individuals seek good firm-person fit (Chatman, 1989). Firms with CSR activities will recruit and select potential candidates who share CSR values and help the company to implement these CSR activities. For example, Baylor University recruits and hires world-class faculty members that share the university's Christian and social values to help it to accomplish its Christian mission. Employees and potential talent with CSR values will select socially responsible companies (Jones et al., 2014), improving their organizational identification and in turn the employee's self-concept, and self-esteem (Ashforth & Mael, 1989; Williamson et al., 2010). This argument also applies to the Baylor example. Better firm-person fit, organizational identification, employee self-concept, and self-esteem lead to a better employer reputation (Deephouse & Jaskiewicz, 2013). Prior research supports some of these arguments. For example, Ng and Burke (2005) demonstrate that women and minorities find firms with diversity management practices (CSR activities) to be great places to work. Therefore, we hypothesize that:

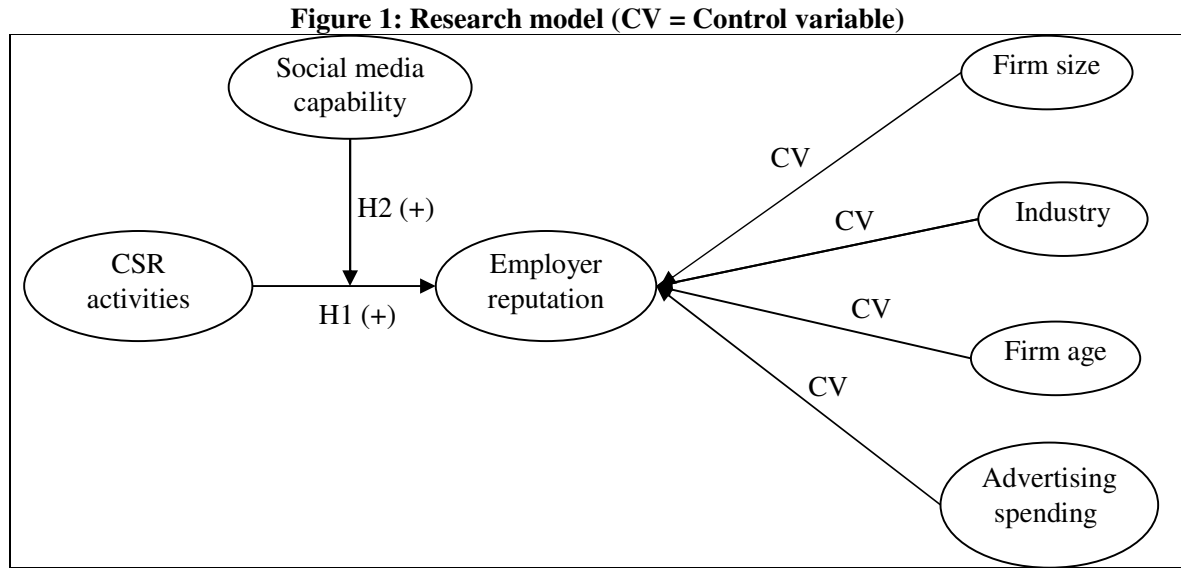
Hypothesis 1 (H1): A positive relationship exists between CSR activities and employer reputation.

2.3.2. The amplifier role of social media capability in the impact of CSR activities on employer reputation

This study hypothesizes that social media capability performs an amplifier role in the relationship between CSR activities and employer reputation. That is, the relationship between CSR activities and employer reputation may be stronger in the presence of social media capability. This is the key thesis our study aims to explain and test empirically. Social media capability may positively amplify the impact of CSR activities on employer reputation due to the *higher social visibility* and *greater exposure/credibility* of social media-enabled posts of the firm's CSR activities. The firm's proficiency in using, handling, and leveraging social media may allow the firm to give its CSR activities more *social visibility* to build stronger employer branding, thus maximizing business value from CSR activities. Posts on social media may amplify the CSR signals companies send to the talent market to improve their employer reputation (Balaji et al., 2016; Oh et al., 2017). In addition, we expect that social media positively amplify the impact of CSR signals on organizational affiliation (social identity) of employees and potential talent, thus improving employer reputation.

Moreover, social media may amplify the impact of CSR activities on employer reputation because the firm's posts on CSR activities will be more credible. Social media enable open dialogue, criticism, and interactivity in companies' communication with employees and potential applicants, generating greater credibility through the greater impression of trust (Eberle et al., 2013; Korschun & Du, 2013). For instance, Santander Group (a global leading bank) leverages Facebook to announce scholarships, sponsorship, funding, and job openings to university students (CSR activities). Based on the greater exposure/social visibility, credibility, and trust of these social media posts, Santander capitalizes better on CSR activities to build a good employer reputation. As we expect CSR activities and social media capability to interact to improve employer reputation, we hypothesize that:

Hypothesis 2 (H2): Social media capability positively amplifies the relationship between CSR activities and employer reputation.



3. Research methodology

3.1. Sample

We tested the theoretical model empirically using a sample composed of the 100 firms from Actualidad Economica's "Great Place to Work 2015" database. Actualidad Economica (<http://www.actualidadeconomica.com/>) is a top business magazine that provides several databases every year with information on "sales, innovation effort, employer brand value, and executive compensation for the most admired firms in Spain" (Benitez et al., 2018d, p. 512). These databases have been used in prior IS research (e.g., Benitez & Walczuch, 2012). Actualidad Economica's "Great Place to Work 2015" database (hereafter, the Actualidad Economica database) includes the 100 best firms in which to work in Spain in 2015, based on fine-grained evaluation conducted by independent human resources experts and consultants. This evaluation was based on a survey and multiple interviews that measured and evaluated compensation, talent management, work environment, training, and employee opinion for each firm. All firms included in the Actualidad Economica database were used in this study. The firms come from 19 different industries: food (14, 14%), IT (14, 14%), insurance (12, 12%), consulting (11, 11%), energy (9, 9%), finance (9, 9%), pharmaceuticals (6, 6%), tourism and transport (5, 5%), and others (11 industries) (20, 20%). The firms in the sample had more than 100 employees and had run the business for at least five

years in Spain. Our method of sample selection is sound. Prior IS research focuses on samples of firms included in reputable rankings like the one employed in the present study (Benitez & Walczuch, 2012; Bharadwaj, 2000; Joshi et al., 2010). We used convenience sampling due to the rich data available. The firms in the sample averaged 84164 employees [standard deviation (S.D.) = 111768.020]. As a context of study, Spain is particularly interesting because Spanish companies have a high maturity level and social media usage. In 2017, 49.6% Spanish firms used social media for business activities. Specifically, 94.4% firms used Facebook or LinkedIn, and 40.6% microblogs (e.g., Twitter) and corporate blogs (INE, 2017). Conversely, 83% of users in Spain interact with firms via social media (IAB Spain, 2017).

3.2. Data and measures

The dataset used in this study was captured from several databases. We first gathered data from the Actualidad Economica database. Once we obtained a list of firm names, we collected the rest of the data from the other databases. Next, we provide a fine-grained description of the data collection method and measures for each of the study variables.

3.2.1. Composite model

IS research includes complex research questions that can be answered by conceptualizing, operationalizing, and estimating constructs. Two main types of constructs exist: latent variables and artifacts (Benitez et al., forthcoming). Latent variables cannot be observed directly and must thus be inferred from observable variables through a measurement model (Borsboom et al., 2003). They can be operationalized as reflective and causal-formative (Henseler, 2017) and are usually used to operationalize behavioral concepts (individual behavior, attitude, and personality traits) (Henseler, 2015). In reflective measurement models, the latent variable reflects/causes the indicators. The causal-formative measurement model changes the direction of causality between the construct and the indicators. In contrast to the reflective measurement model, the causal-formative model's indicators cause the latent variable. Artifacts or design constructs refer to a combination of ingredients in which the indicators compose the construct (not cause the artifact) (Benitez et al., forthcoming; Henseler, 2015, 2017). Artifacts are usually considered as objects created by top managers that represent "*emergent, strong, complex, and man-made*

concepts” (Lokuge et al., 2019, p. 448). Composite modeling is the usual way to model artifacts (Benitez et al., forthcoming). This study assumes that all constructs included in the conceptual model are artifacts (composite constructs).

3.2.2. CSR activities

The CSR activities construct was measured as the natural logarithm of the firm’s score of CSR activities, with information collected from the “*Monitor Empresarial de Reputacion Corporativa*” (MERCO) database (<http://www.merco.info/es/>) in 2014. MERCO is one of the best-known databases and tools worldwide to evaluate the reputation of Spanish and Latin American firms based on a multi-source methodology composed of 5 evaluations and 12 information sources. This database assigns CSR activities scores from 1 to 10000 based on careful examination of CSR activities in the firm. The MERCO database adopts a multidimensional approach, constructing the CSR activities score from five dimensions: ethical commitment, transparency and good governance, employee relations, commitment to environmental and climate change, and community contribution. Our measure of CSR activities is consistent with that used by Lee et al. (2013) and Tang et al. (2018), which has seven domains: “*community, corporate governance, diversity, employee relations, environment, human rights, and product*” (Lee et al., 2013, p. 797). MERCO includes information from a large number of firm stakeholders (steering committees, financial analysts, non-governmental organization agents, union members, customer association members, business and IT professors, chief communication officers, and CSR experts). Our unique manipulation was to estimate the natural logarithm of the CSR activities score. The construct CSR activities refers to the social, environmental, ethical, and philanthropic activities performed voluntarily by the firm. We measure CSR activities through natural logarithm of each firm’s score for CSR activities from MERCO database. The MERCO database determines this score by evaluating employee relations (social activity), ethical commitment, transparency, and good governance (ethical activities), environmental and climate change

commitment (environmental activities), and community contribution (philanthropic activities) for each firm. Conceptualization and measurement of the construct CSR activities thus align well.¹

3.2.3. Employer reputation

Employer reputation is the key endogenous variable in the proposed model. It is a single-measure construct calculated as the natural logarithm of the firm's score for employer reputation, collected from the Actualidad Economica database in 2015. Because CSR activities can take time to affect employer reputation, we lagged the measure for CSR activities one year.² The Actualidad Economica database includes the 100 best firms in which to work in Spain in 2015, based on a fine-grained examination of overall employer reputation for each firm. The database assigns the firm an employer reputation score ranging from 0 to 1000, determined by examining compensation, talent management, work environment, training, and employee opinion. In our sample, the firm's employer reputation score ranged from 662 to 865. This methodology is one of the most accepted ways to measure employer branding among business executives in Spain. Our unique manipulation was to estimate the natural logarithm of the employer reputation score. Since our employer reputation score was constructed by ranking the firm's practices on compensation, talent management, work environment, training, and employee's opinion, we believe the measure represents conceptualization of employer reputation in a highly rational and appropriate way.³

3.2.4. Social media capability

Social media capability was operationalized as a composite second-order construct composed of three dimensions (Facebook capability, Twitter capability, and blog capability [Benitez et al., 2018a; Culnan et

¹ We also measured CSR activities through the environmental, social, and governance performance score (alternative measure) with information collected from the KLD database in 2014. We evaluated the relationship between the two measures (i.e., our original measure and the alternative measure). The results show that both measures correlate significantly ($\beta = 0.296$, $p_{\text{one-tailed}} < 0.010$), adding legitimacy to our original measure.

² We also controlled for endogeneity in the relationship between CSR activities and employer reputation, and between CSR activities and social media capability. Although we used CSR activities in 2013 as the instrument for CSR activities (measured in 2014), a series of Hausman tests did not show endogeneity problems either between CSR activities and employer reputation ($\chi^2 = 0.202$, d.f. = 1, $p = 0.653$) or between CSR activities and social media capability ($\chi^2 = 1.328$, d.f. = 1, $p = 0.249$). We thank anonymous Reviewer 1 for this suggestion.

³ We measured employer reputation with another alternative measure through employer reputation score in 2015, using information from the MERCO Talento database, and evaluated the relationship between the original and alternative measures. The results show that both measures correlate significantly ($\beta = 0.232$, $p_{\text{one-tailed}} < 0.001$), providing additional validity and consistency to our original measure.

al., 2010]) using data collected in 2015, and as composite at first-order level (Benitez et al., forthcoming; Henseler et al., 2016).

We measured social media capability based on the validated measurement scheme developed by Benitez et al. (2018a) and Braojos et al. (2019). We thus measured Facebook capability as a composite first-order construct built from number of events (both past and future), experience, and updates with data gathered from the Facebook profile of the firm. We measured Facebook experience by average number of months the firm had had presence on this social platform. Updates were measured with scores from “1: Low” to “5: High” level of content updating on the Facebook page, assigning the firm a value of 1 if it had commented on Facebook more than one month ago, 2 if in the last month, 3 if two weeks ago, 4 if in the last week, and 5 if in the last two days (Benitez et al., 2018a; Braojos et al., 2019).

We measured Twitter capability as a composite first-order construct through time spent posting tweets, experience, and updates using information collected from firm’s Twitter site and the Twopcharts database (<http://twopcharts.com/>). Time spent posting tweets was measured as the average number of hours the firm spent posting tweets. The other two indicators (i.e., experience and updates) were measured following the process used for the Facebook capability indicators on experience and updates (Benitez et al., 2018a). Blog capability is a composite first-order construct determined by firm’s experience and updates on its corporate blogs (Braojos et al., 2019). Blog experience and updates were assessed following the same process as Facebook and Twitter, using data gathered from the firm’s blog site(s).

Social media capability indicates the firm’s proficiency in selecting, using, and leveraging Facebook, Twitter, and corporate blogs to implement business activities (Benitez et al., 2018a; Braojos et al., 2019). Our measures of social media capability have been proposed and validated in prior IS research (Benitez et al., 2018a; Braojos et al., 2019), and are consistent with conceptualization of social media capability. Facebook, Twitter, and blogs are three very important external social media that companies use and leverage for implementing business initiatives (Culnan et al., 2010; Braojos et al., 2015). Similarly, at first-order construct level, we measured Facebook, Twitter, and blog capabilities through number of events, time invested in using social media, degree of experience, and firm’s update capabilities—all very

plausible ingredients of companies' Facebook, Twitter, and blog capabilities (Benitez et al., 2018a). Table 1 presents the conceptualization and measures of the constructs.

3.2.5. Control variables

We controlled for the following variables: firm size, industry, firm age, and advertising spending on employer reputation. Since larger firms are more likely to have more financial resources to invest in employer reputation activities (Fombrun & Shanley, 1990), employer reputation may depend on firm size. Because larger firms tend to be better known, their practices usually also have higher impact and spread faster in society. Thus, best-in-class human resources management practices tend to be more developed and to have a higher impact on employer reputation in large firms than in small ones. We therefore controlled for firm size in employer reputation, computing firm size as the natural logarithm of number of employees per firm (Benitez & Walczuch, 2012), using information collected in 2015 from the COMPUSTAT database.

We also controlled for industry on employer reputation, measured through a dummy variable where 0 corresponds to "Manufacturing firm", and 1 to "Service firm" (Liu et al., 2013), using data gathered from the firm's website. We controlled for firm age on employer reputation. Older firms have more experience designing, executing, and leveraging human resources management practices to build employer reputation than do younger firms, and time and experience can be critical in building trust and reliability among firms and their environment (Rhee & Valdez, 2009). Firm age was measured as the natural logarithm of the number of years the firm had operated in its industry in 2015 (Thornhill & Amit, 2003), using data collected from the SABI (<https://sabi.bvdinfo.com/>) database, which provides information on financial characteristics of Spanish and Portuguese firms (Benitez et al., 2018b, 2018c).

It is reasonable to think that firms that spend more money on advertising improve their employer reputation through better brand image and corporate reputation. We thus controlled for advertising spending on employer reputation, measured through expenditure per employee on advertising, using data gathered from SABI and COMPUSTAT databases (Benitez et al., 2018b).

Table 1: Construct conceptualization and measures

Construct name	Conceptualization	Measure	Source
CSR activities	CSR activities are social, environmental, ethical, and philanthropic activities that the firm performs voluntarily to meet the expectations of individuals and society (Lai et al., 2010; Shum & Yam, 2011)	Natural logarithm of the firm's score for CSR activities, based on ethical commitment, transparency and good governance, employee relations, environmental and climate change commitment, and community contribution	MERCO database
Employer reputation	Employer reputation is the firm's image as perceived by potential applicants and current employees (Benitez et al., 2018b; Stahl et al., 2012)	Natural logarithm of the firm's score for employer reputation, based on compensation, talent management, work environment, training, and employee opinion	Actualidad Economica database
Social media capability	Social media capability refers to the firm's ability to use and leverage social media to develop business activities (Benitez et al., 2018a)	Second-order construct composed by Facebook capability, Twitter capability, and blog capability	
Facebook capability	Facebook capability refers to the firm's ability to use and leverage Facebook to develop business activities (Benitez et al., 2018a)	Construct composed of number of events, experience, and updates	Firm's Facebook site
Twitter capability	Twitter capability refers to the firm's ability to use and leverage Twitter to develop business activities (Benitez et al., 2018a)	Construct composed of time spent posting tweets, experience, and updates	Firm's Twitter site and Twopcharts database
Blog capability	Blog capability refers to the firm's ability to use and leverage corporate blog(s) to develop business activities (Benitez et al., 2018a)	Construct composed of experience and updates	Corporate blog

4. Empirical analysis and results

To test the research model, we ran partial least squares (PLS) path modeling (Ringle et al., 2012) with the statistical software “*ADANCO 2.0. Professional*” for Windows (<http://www.composite-modeling.com>) (Henseler & Dijkstra, 2015). PLS is suitable in this research primarily for the following reasons. First, PLS is a “full-fledged” structural equation modeling (SEM) approach appropriate for testing exact model

fit in both confirmatory and explanatory research (Benitez et al., forthcoming; Hair et al., 2012; Henseler et al., 2016). Second, since all constructs were specified as composite, PLS is optimal in that it produces consistent estimations of composite models (Henseler et al., 2014; Rigdon et al., 2014). Third, PLS obtains more accurate results when evaluating complex models than do covariance-based SEM techniques (Ajamieh et al., 2016). Fourth, PLS performs component-based SEM, which does not require data to follow a multivariate normal distribution (Chin et al., 2003). Finally, PLS is a well-known method and has been used primarily in IS (Chen et al., 2015, 2017; Ringle et al., 2012). We ran a 5000-subsample bootstrap analysis to assess significance of the weights, loadings, and path coefficients (Hair et al., 2011).

A prior statistical power analysis confirmed that the proposed model has a maximum of seven predictors (number of links in the structural model proposed for employer reputation). Since we anticipate a large effect size ($f^2 = 0.350$), this model requires a minimum sample of 48 to obtain a power of 0.800 and a 0.05 alpha level (Cohen, 1988). As our sample is composed of 100 firms, the sample size was large enough to evaluate the proposed model, suggesting enough statistical power to identify the theorized effects (Benitez et al., forthcoming).

4.1. Measurement model evaluation

4.1.1. Confirmatory composite analysis

We ran a confirmatory composite analysis to test whether the composite structure measures at first- and second-order levels were statistically correct in terms of overall fit of the saturated model (Benitez et al., forthcoming). To do so, we evaluated the inconsistency between the two correlation matrixes, the empirical and the model-implied matrices at both first- and second-order levels (Benitez et al., forthcoming; Henseler, 2015). This examination evaluates the competence of the composite structure to detect possible model misspecification, such as incorrect assignment of indicators to constructs, or incorrect number of constructs (Henseler et al., 2014). We also evaluated the standardized root mean squared residual (SRMR), unweighted least squares distance (d_{ULS}), and geodesic distance (d_G) (Henseler et al., 2016). Table 2 presents the outcome of this analysis for the saturated model at first- and second-order level. The lower the SRMR is, the more accurate the fit between the proposed measurement model

and the data (Henseler & Dijkstra, 2015). Overall, for good fit of the proposed measurement model (saturated model) to the data, the SRMR should not exceed 0.080 (Henseler et al., 2014) and the SRMR, d_{ULS} and d_G (discrepancies) should not exceed the 95%-quantile of the bootstrap discrepancies (Henseler et al., 2016). The SRMR was 0.044 for the first-order constructs and 0.038 for the second-order construct—below the recommended threshold of 0.080 (Henseler et al., 2014). The SRMR, d_{ULS} , and d_G were also within the 95%-quantile of the bootstrap discrepancies (Benitez et al., forthcoming; Braojos et al., 2019; Henseler et al., 2016), indicating empirical support for the composite structure, and thus good general measurement properties for the proposed model. Table 3 shows the results for evaluation of the measurement model. We can now evaluate the measurement properties of the constructs included in the research model.

Table 2: Confirmatory composite analysis results

Discrepancy	First-order level			Second-order level		
	Value	HI ₉₅	Conclusion	Value	HI ₉₅	Conclusion
SRMR	0.044	0.220	Supported	0.038	0.045	Supported
d_{ULS}	0.106	2.667	Supported	0.014	0.020	Supported
d_G	0.068	14.075	Supported	0.005	0.008	Supported

4.1.2. Evaluation of measurement properties of the constructs

We assess content validity, multicollinearity, weights, loadings, and their level of significance for the constructs in the conceptual model (Ajamieh et al., 2016; Petter et al., 2007). Prior to data collection, we tested every variable in the model for content validity, leveraging measures validated in previous studies when possible (Pavlou & El Sawy, 2006). We ensured that our data did not suffer from multi-collinearity by evaluating the variance inflation factors (VIFs) at first- and second-order levels. The first-order VIFs ranged from 1.052 to 2.300, and the second-order VIFs from 1.130 to 1.526. All values are well below the accepted threshold of 10 (Benitez et al., 2018c; Petter et al., 2007), suggesting that our data do not suffer from multicollinearity. In any case, multicollinearity is not usually a problem when composite constructs are estimated in mode A, as in our study (Benitez et al., forthcoming).

Based on the strategy developed by Cenfetelli and Bassellier (2009) to validate composite constructs (executed in important subsequent IS research, e.g., Benitez et al. [2018c]), we tested the significance

level of weights and loadings for both indicators and dimensions. All indicator weights were significant (from 0.315^{***} to 0.579^{***}), as were all indicator loadings (from 0.278^{**} to 0.935^{***}), except the weight of one indicator of Facebook capability (number of events on Facebook: 0.079). Despite its nonsignificance, we kept this composite indicator because its loading was (0.278^{**}) (Cenfetelli & Bassellier, 2009). All dimension weights (from 0.294^{*} to 0.687^{***}) and dimension loadings (from 0.619^{***} to 0.847^{***}) were also significant, suggesting that our variables possess very good measurement properties.

4.2. Structural model evaluation

To evaluate the structural model, we assessed the beta coefficients and their significance level by executing a 5000-subsample bootstrap analysis. We also assessed the effect size (f^2) and R^2 values of the proposed relationships (Henseler et al., 2016), evaluating three models. To test the relationship between CSR activities and employer reputation (H1), we considered a baseline model that describes the direct effect on the relation between CSR activities and employer reputation. This baseline model also included the control variables but not the moderator variable (social media capability). Model 1 added social media capability to the baseline model, and Model 2 added the interaction effect to Model 1 to test the potential amplifier function of social media capability in the relationship between CSR activities and employer reputation (H2). The empirical analysis supported H1, suggesting that CSR activities enable employer reputation ($\beta = 0.348$, $p_{\text{one-tailed}} < 0.001$). We also found some support for H2, suggesting a stronger relationship when firms leverage social media for business goals ($\beta = 0.131$, $p_{\text{one-tailed}} < 0.10$).

Figure 2 depicts the results for Model 2, and Figure 3 the interaction effect graph. The latter shows how social media capability moderates the relationship between CSR activities and employer reputation. The steepest slope—that is, the strongest positive relationship between CSR activities and employer reputation—occurs when firms have higher social media capability. The flattest slope—the graph with the weakest positive relationship—occurs when firms have lower social media capability. Social media capability thus strengthens the relationship between CSR activities and employer reputation, supporting H2. The f^2 values of the hypotheses theorized were 0.147 for baseline model, 0.100 for Model 1, and 0.020 and 0.088 for Model 2. The R^2 value for employer reputation was 0.207 for the baseline model, 0.222 for

Model 1, and 0.238 for Model 2. Overall, the research model shows good structural results and all three models had very good model fit, suggesting that the proposed theory explains how part of the corporate world (employer reputation and social media capability) functions (Table 4).

Table 3: Evaluation of measurement model at first- and second-order level

Construct/indicator	Mean	S.D.	VIF	Weight	Loading
CSR activities	8.519	0.322			
Employer reputation	6.609	0.059			
Social media capability (mode A)					
Facebook capability: Firm's Facebook activity in reference to (mode A):			1.395	0.339*	0.619***
Number of events	12.750	39.873	1.080	0.079	0.278**
Experience	50.036	19.027	2.300	0.527***	0.933***
Updates	4.409	1.048	2.183	0.527***	0.923***
Twitter capability: Firm's Twitter activity in reference to (mode A):			1.526	0.294*	0.708***
Time spent writing tweets	89.644	202.762	1.052	0.315***	0.491***
Experience	58.263	17.315	1.759	0.543***	0.893***
Updates	4.703	0.752	1.700	0.437***	0.825***
Blog capability: Firm's blog activity in reference to (mode A):			1.130	0.687***	0.847***
Experience	38.395	25.972	2.003	0.502***	0.912***
Updates	3.395	1.605	2.003	0.579***	0.935***
Firm size: Number of employees, measured in natural logarithm	10.669	1.302			
Industry: Manufacturing firm vs. service firm	0.630	0.485			
Firm age: Number of years operating the firm, measured in natural logarithm	3.682	0.730			
Advertising spending: Advertising expenditure per employee	0.384	0.690			

Figure 2: Tests on results of hypotheses

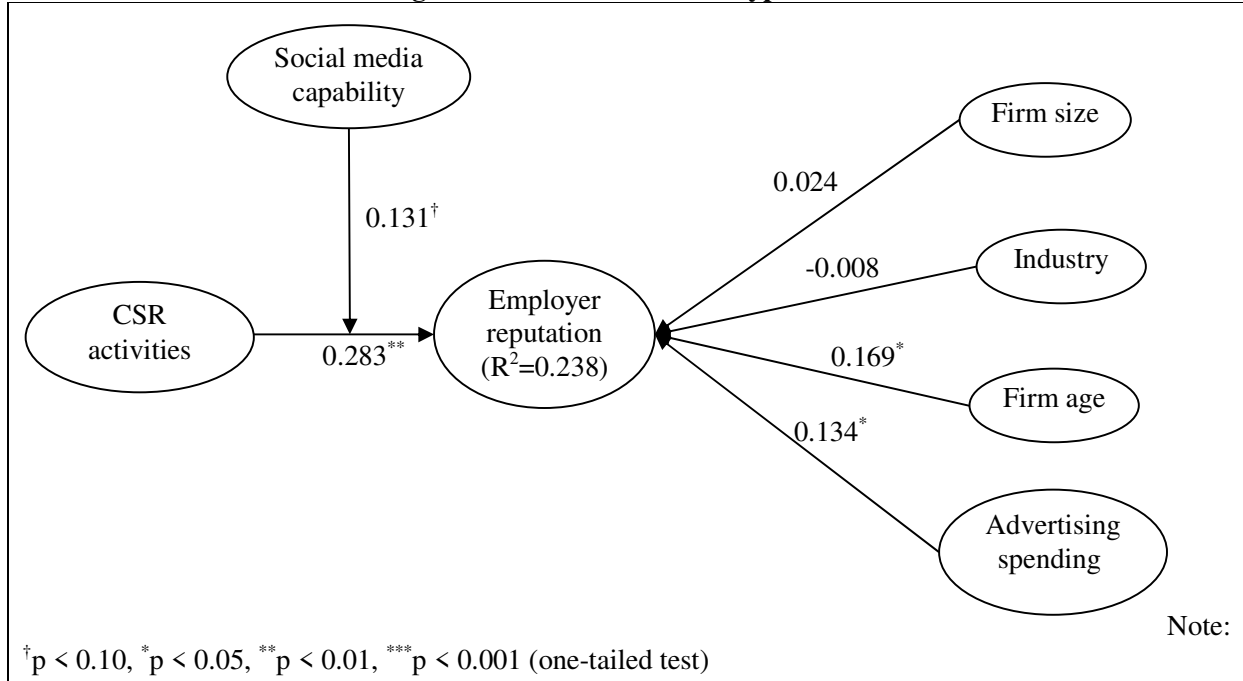
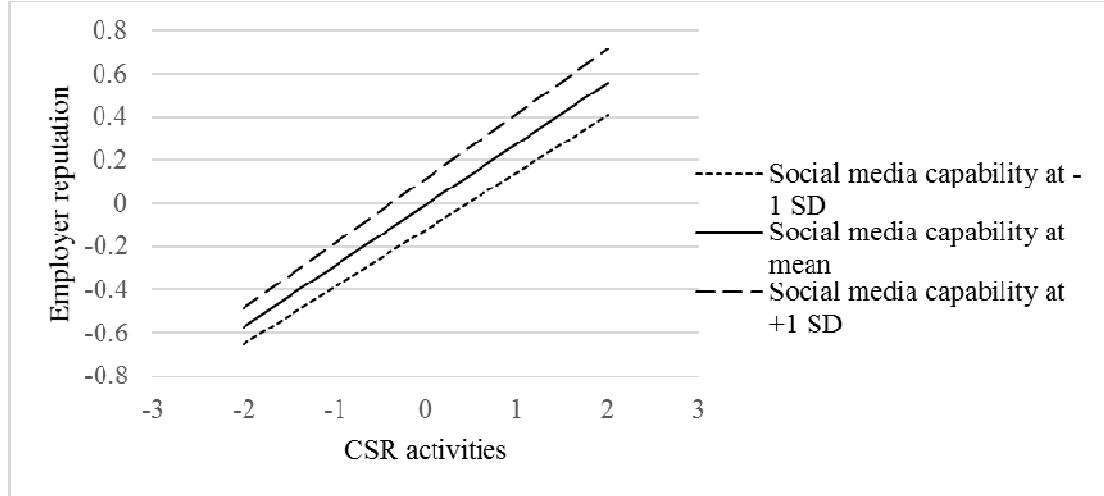


Table 4: Results of structural model evaluation

Beta coefficient	Baseline model		Model 1		Model 2	
CSR activities → Employer reputation (H1)	0.348***		0.302***		0.283**	
CSR activities * Social media capability → Employer reputation (H2)					0.131 [†]	
Social media capability → Employer reputation			0.137		0.119	
Firm size → Employer reputation (CV)	0.010		0.020		0.024	
Industry → Employer reputation (CV)	0.022		0.009		-0.008	
Firm age → Employer reputation (CV)	0.159*		0.172*		0.169*	
Advertising spending → Employer reputation (CV)	0.168*		0.147*		0.134*	
R ² employer reputation	0.207		0.222		0.238	
Discrepancy	Value	HI₉₅	Value	HI₉₅	Value	HI₉₅
SRMR	0.000	0.000	0.048	0.108	0.072	0.133
d_{ULS}	0.000	0.000	0.105	0.526	0.409	1.383
d_G	0.000	0.000	0.036	0.207	0.093	0.482
f²						
CSR activities → Employer reputation (H1)	0.147		0.100		0.088	
CSR activities * Social media capability → Employer reputation (H2)					0.020	
Social media capability → Employer reputation			0.020		0.015	
Firm size → Employer reputation (CV)	0.000		0.000		0.001	
Industry → Employer reputation (CV)	0.001		0.000		0.000	
Firm age → Employer reputation (CV)	0.028		0.034		0.033	
Advertising spending → Employer reputation (CV)	0.032		0.024		0.020	

Note: [†] p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001 (one-tailed test). CV = control variable

Figure 3: Interaction effect graph



Note: $\eta = \beta_0 + \beta_1 \cdot \varepsilon + \beta_2 \cdot \mu + \beta_3 \cdot \varepsilon \times \mu + \beta_4 \cdot \varepsilon + \beta_5 \cdot g + \beta_6 \cdot j + \beta_7 \cdot \vartheta$

$$\eta = -0.0043 + 0.2826 \cdot \varepsilon + 0.1190 \cdot \mu + 0.0172 \varepsilon \times \mu + 0.0240 \cdot \varepsilon - 0.0080 \cdot g + 0.1685 \cdot j + 0.1338 \cdot \vartheta$$

PLS path modeling provides the standardized path coefficient. We obtained β_3 by dividing its standardized path coefficient by its standard deviation (SD). We divided social media capability by taking its mean value and plus/minus its SD. We fixed the value of the control variables at the mean to prevent any variation in control variables from affecting the dependent variable (employer reputation).

4.3. Multi-group analysis: Firms with less- vs. more-developed social media capability

Since H2 was only supported at 0.10 level and was supported generally in the interaction effect graph, we perform an additional general multi-group analysis to re-test for potential differences (statistically significant) between firms with less- vs. more-developed social media capability. To divide the sample into these two groups, we calculated the mean value of the latent variable score for social media capability as benchmark.⁴ Firms with values below the mean were assigned to the group with less-developed social media capability, and firms above the mean to the high social media capability group. Analyzing whether the two groups were random samples from a common population indicates that these differences are statistically significant (Table 5), suggesting that the positive influence of CSR activities on employer reputation occurs only when the firm has high social media capability. For firms with low social media capability, the effect of CSR on employer reputation was not significant. This analysis supports H2.

⁴ This procedure for subsample analysis has been used extensively in prior IS research (e.g., Ray et al., 2005).

Overall, based on testing of H2, analysis of the interaction effect graph (Figure 3), and this multi-group analysis, we argue that the empirical analysis supports H2.

Table 5: Multi-group analysis

Coefficient	Firms with less-developed social media capability (n = 56)	Firms with more-developed social media capability (n = 44)	Are there statistically significant differences among the beta coefficients?
CSR activities → Employer reputation (H1)	0.017	0.451***	Yes (p < 0.05)
Firm size → Employer reputation (control variable)	0.181 [†]	-0.121	Yes (p < 0.10)
Industry → Employer reputation (CV)	-0.195 [†]	0.156	Yes (p < 0.05)
Firm age → Employer reputation (CV)	0.235*	0.103	No (not significant)
Advertising spending → Employer reputation (CV)	-0.078	0.297*	Yes (p < 0.05)

4.4. Post-hoc comparative analysis: Social media vs. advertising spending

Drawing on Mithas et al. (2012), we conducted a post-hoc analysis to compare the amplifier role of social media capability (Model 2) to the potential moderating role of advertising spending (advertising spending model in Table 6) in the relation between CSR activities and employer reputation. This analysis enabled us to compare the role of new communication media (social media) to traditional media (advertising). Model 2 controlled for advertising spending in employer reputation. The advertising spending model controlled for social media capability in employer reputation. The beta coefficient of the interaction term CSR * Advertising spending was 0.018 and its f^2 0.000, indicating that advertising spending does not amplify the effect of CSR activities on employer reputation. As theorized, social media capability amplifies this relationship. These findings constitute the paper's key theoretical contribution and empirical evidence.

4.5. Robustness test

Our findings may be biased by the time chosen to measure the study constructs (Braojos et al., 2019). To test the robustness of time selection, we estimated an additional model (see Figure 2 and Table 4). Since we measured employer reputation through a construct composed of the natural logarithm of the firm's score for employer reputation in 2015, 2016, 2017, and 2018, we collected information from the

Actualidad Economica database during these years. This robustness test confirms that the empirical analysis supports our theory. We also repeated the comparative sub-group analysis from subsection 4.4. (social media vs. advertising spending) with a composite for employer reputation for the years 2015-2018. The difference between the beta coefficient for firms with less-developed social media capability ($\beta = -0.072$, $p_{\text{one-tailed}} > 0.10$) and the beta coefficient for firms with more-developed social media capability ($\beta = 0.403$, $p_{\text{one-tailed}} < 0.01$) is statistically significant. The results of these additional analyses are almost identical to the results obtained in the base analyses (Figure 2 and Table 4, Table 6), adding robustness to the empirical analysis and indicating that time selection bias is not a concern in our research.

Table 6: Post-hoc comparative analysis

Beta coefficient	Model 2		Advertising spending model	
CSR activities → Employer reputation (H1)	0.283 ^{***}		0.303 ^{**}	
CSR activities * Social media capability → Employer reputation (H2)	0.131 [†]			
CSR activities * Advertising spending → Employer reputation			0.018	
Social media capability → Employer reputation	0.119		0.137	
Firm size → Employer reputation (control variable)	0.024		0.021	
Industry → Employer reputation (control variable)	-0.008		0.008	
Firm age → Employer reputation (control variable)	0.169 [*]		0.172 [*]	
Advertising spending → Employer reputation (control variable)	0.134 [*]		0.133	
R ² employer reputation	0.238		0.222	
f ² interaction effect	0.020		0.000	
Discrepancy	Value	HI₉₅	Value	HI₉₅
SRMR	0.073	0.133	0.045	0.107
d_{ULS}	0.355	1.164	0.113	0.630
d_G	0.070	0.366	0.047	1.277

5. Discussion and conclusions

How do social media affect the relationship between CSR activities and employer reputation? Social media can be a double-edged sword if wrongly leveraged. They may exert negative, positive, or no influence on the impact of CSR activities on the firm's reputation. Motivated by controversy over the role of social media in the firm's value generation from CSR activities, this study hypothesized that firms that perform CSR activities can improve their employer reputation, and that this positive relationship may be stronger when firms leverage social media. We confirmed our conceptual model on a sample of large firms. The empirical analysis suggests that CSR activities enable firms to build greater employer

reputation. CSR includes social, environmental, and ethical activities that job seekers perceive as a signal of better employer reputation and core values that fit well with job seekers' and current employees' values, building affiliation to the organization and social identity. Potential applicants thus perceive socially responsible firms as more attractive to work for and choose these firms over others. Similarly, current employees feel more identified with socially responsible companies and perceive them as better workplaces.⁵ The business value of employer reputation is very high because it reduces talent hiring and retention costs.

We also found that social media capability behaves as an amplifier in this equation, strengthening the impact of CSR activities on employer reputation when the firm is proficient in using social media to accomplish business goals (social media capability). The firm can use social media to increase *social visibility* and *credibility* of its CSR activities in the market and improve its employer reputation. Social media capability can thus create business value for firms. Although social media capability amplifies the relationship between CSR activities and employer reputation, advertising spending does not. IT-enabled channels such as social media make reaching customers and potential employees faster, cheaper, and more interactive, forging stronger ties with these groups (Mithas et al., 2012). Such faster, cheaper, stronger engagement with customers and potential applicants gives the firm's CSR activities and employer reputation higher *visibility* and *credibility*, an effect unlikely with traditional advertising spending. Social media capability is thus a more efficient tool than advertising to capitalize on the firm's investment in CSR activities.

This study makes four contributions to IS and Business Ethics. First, very few studies (Dogl &

⁵ One may question the usage, application, and demonstration of social identity theory in the context of this study whether the people involved in answering questions on employer reputation were not all believers of CSR. To address this concern, we measure the firm's CSR score (ranging from 0 to 50) with information collected from the Actualidad Economica database (i.e., a different database than the one we use to measure CSR activities) in 2015, 2016, and 2017. As the firm's employer reputation includes the opinion of current and future employees, we use the above mentioned firm's CSR score in 2015 as a proxy of the degree of belief in CSR (i.e., score equal or higher to 30 out of 50) of the current employees, and we use the firm's CSR score in 2016 and 2017 as a proxy of the degree of belief in CSR of the current and future employees of the companies included in the sample. Based on these scores/proxies, we can conclude that for the firms of the sample, 100% of the current employees were believers of CSR activities in 2015, and 100% of the current/future employees were believers of CSR activities in 2016 and 2017. In this sense, we believe the usage and application of the social identity theory seems rational in this context. We thank anonymous Reviewer 1 for this suggestion.

Holtbrugge, 2014; Turban & Greening, 1997) analyze the impact of CSR on employer reputation. Our study provides new empirical evidence that better employer reputation derives from the firm's investment in CSR activities. Our study extends research on CSR activities and employer reputation (employee perspective), where understanding lags behind that of CSR's impact on brand equity/corporate reputation (customer perspective). This contribution advances knowledge in Business Ethics.

Second, we study CSR activities and employer reputation in an IS context, a field in which this topic remains underdeveloped. Our study pioneers in theorizing how social media capability positively increases the impact of CSR activities on employer reputation. The topic and problem are fresh, novel, and relevant to the IS community. To the extent of our knowledge, research on the firm's use of social media platforms to accomplish business goals (beyond marketing purposes) is in its infancy (Aral et al., 2013; Braojos et al., 2019; Song et al., 2019). It lacks theoretical and empirical studies explaining how social media capability enables firms to generate business value (social business value). Our study sheds light on this gap by theoretically explaining and empirically demonstrating how social media capability generates the firm's business value by amplifying the positive effect of CSR activities on employer reputation. Social media capability provides a more visible, trustworthy, and far-reaching (open) platform to enable CSR activities to impact employer reputation more strongly. Social media generate talent touchpoint capability used by firms to engage potential talent and by current employees to build and enhance employer reputation. Social media capability thus maximizes the role of CSR activities in building employer reputation. This conclusion is the primary contribution of our research and its first contribution to IS.

Third, signaling theory suggests that firms signal their core values, strategic plan, and business activities such as CSR activities to the talent market. Social identity theory suggests that current employees and potential applicants use these signals to evaluate person-firm fit and their current/potential organizational affiliation. This study contributes to developing both theories by adding social media capability as a capability that strengthens the firm's ability to amplify signals and their potential use to evaluate perceived organizational affiliation, which in turn affects employer reputation. This contribution advances the conversation on the business value of technology and constitutes the paper's second

contribution to IS.

CSR activities include social, environmental, and ethical activities. Our review of the IS literature shows that prior IS research on the impact of IT on environmental sustainability focuses on the following lines of research: 1) the role of IT as the problem and solution for environmental sustainability, and IT's impact on the firm's environmental management activities (e.g., Benitez & Walczuch, 2012; Melville, 2010; Wang et al., 2015; Watson et al., 2010); 2) study of the influence of green IT practices on the firm's environmental performance and financial performance (Hanelt et al., 2017; Teo et al., 2017; Khuntia et al., 2018). Drawing on this prior IS research, we find that social media capability (potentially an IT capability) amplifies the impact of CSR activities on employer reputation. We thus advance IS research on the impact of IT on social and environmental activities by explaining how IT capabilities help firms to capitalize on investments in CSR activities to create business value (in terms of employer reputation). This is the paper's third contribution to IS research.

This study has some limitations, which can generate further research opportunities. First, since the concept of complementary capabilities is often framed in a particular context, we cannot conclude that this complementary relationship will be optimal under all contingencies (Flynn & Flynn, 2004). Future IS research should explore whether our theory is supported in other European countries. Second, although this paper focuses on the most commonly used external social media sites (Benitez et al., 2018a; Culnan et al., 2010), firms use other external (e.g., LinkedIn) and internal social media platforms (e.g., Microsoft Yammer) to execute and disseminate their business activities. Future research could extend the firm's social media portfolio to LinkedIn and internal social media platforms. Third, although the sample size had sufficient statistical power to test the effects studied (Benitez et al., forthcoming), we recognize that is relatively small. Further IS research should repeat our study with a larger sample.

The results of this study provide two critical lessons for executives. First, CSR activities enable firms to enhance their reputation as employers to attract and retain talent. Managers should understand that CSR activities serve as signals to the talent market, as a source of information for potential talent and current employees. This information affects the firm's ability to attract and retain talent, thus reducing the cost of

hiring and retaining talent. Second, the firm's usage, presence, and leveraging of social media gives its CSR activities more *social visibility* and *credibility*, and higher visibility results in stronger employer branding, maximizing the business value obtained from CSR activities. Moreover, perceived interactivity on social media strengthens behavior towards firms and increases these messages' credibility. Because such messages open the firm to potential criticism, they create a greater impression of trust (Eberle et al., 2013). Applicants and current employees feel prouder working for a socially responsible firm (Jones et al., 2014) that communicates through social media, enabling more socially embedded and open dialogue. Investments in social media are more profitable than advertising spending to enhance employer reputation from CSR activities. These implications of our study can help IT and business managers to understand how investments in social media and CSR activities generate business value.

To conclude, this study theorized that the firm's involvement in socially responsible activities increases its probability of being perceived as a better employer and that this relationship is stronger when the firm leverages social media technologies. We can explain this strengthening role of social media through the greater *social visibility* and *exposure/credibility* these technologies facilitate, and empirical analysis of a sample of Spanish firms supports our theory. This paper contributes to IS research by theorizing and empirically demonstrating that ability to use social media generates business value by maximizing the positive impact of CSR activities on the firm's employer reputation. Social media are one critical ingredient of the firm's digital resource portfolio in the era of digital business transformation. Digital technology matters. Quo Vadis?

6. References

- Ajamieh, A., Benitez, J., Braojos, J., & Gelhard, C. (2016). IT infrastructure and competitive aggressiveness in explaining and predicting performance. *Journal of Business Research*, 69(10), 4667-4674.
- Aguilera, R., Rupp, D., Williams, C., & Ganapathi, J. (2007). Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations. *Academy of Management Review* 32(3), 836-863.
- Aral, S., Dellarocas, C., & Godes, D. (2013). Social media and business transformation: A framework for research. *Information Systems Research*, 54(1), 3-13.
- Ashforth, B., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14(1), 20-39.
- Auger, P., Devinney, T., Dowling, G., Eckert, C., & Lin, N. (2013) How much does a company's reputation matter in recruiting? *MIT Sloan Management Review*, 4(3), 79-88.

- Balaji, M., Khong, K., & Chong, A. (2016). Determinants of negative word-of-mouth communication using social networking sites. *Information & Management*, 53(4), 528-540.
- Benitez, J. & Walczuch, R. (2012). Information technology, the organizational capability of proactive corporate environmental strategy and firm performance: A resource-based analysis. *European Journal of Information Systems*, 21(6), 664-679.
- Benitez, J., Castillo, A., Llorens, J., & Braojos, J. (2018a). IT-enabled knowledge ambidexterity and innovation performance in small US firms: The moderator role of social media capability. *Information & Management*, 55(1), 131-143.
- Benitez, J., Chen, Y., Teo, T., & Ajamieh, A. (2018b). Evolution of the impact of e-business technology on operational competence and firm profitability: A panel data investigation. *Information & Management*, 55(1), 120-130.
- Benitez, J., Ray, G., & Henseler, J. (2018c). Impact of information technology infrastructure flexibility on mergers and acquisitions. *MIS Quarterly*, 42(1), 25-43.
- Benitez, J., Llorens, J., & Braojos, J. (2018d). How information technology influences opportunity exploration and exploitation firm's capabilities. *Information & Management*, 55(4), 508-523.
- Benitez, J., Henseler, J., Castillo, A., & Schuberth, F. (forthcoming). How to perform and report an impactful analysis using partial least squares? Guidelines for confirmatory and explanatory IS research. *Information & Management*, in press, 1-16.
- Bharadwaj, A. (2000). A resource-based perspective on information technology and firm performance: An empirical investigation. *MIS Quarterly*, 24(1), 169-196.
- Bhatnagar, J., & Jaiswal, S. (2016). Amazon as an employer. *Richard Ivey School of Business Case* (W16106), 1-5.
- Bhattacharya, C., Sen, S., & Korschun, D. (2008). Using corporate social responsibility to win the war for talent. *MIT Sloan Management Review*, 49(2), 37-44.
- Braojos, J., Benitez, J., & Llorens, J. (2015). How do small firms learn to develop a social media competence? *International Journal of Information Management*, 35(4), 443-458.
- Braojos, J., Benitez, J., & Llorens, J. (2019). How do social commerce-IT capabilities influence firm performance? Theory and empirical evidence. *Information & Management*, 56(2), 155-171.
- Borsboom, D., Mellenbergh, G., & Van Heerden, J. (2003). The theoretical status of latent variables. *Psychological Review*, 110(2), 203-219.
- Bravo, R., Matute, J., & Pina, J. (2011). Corporate social responsibility as a vehicle to reveal the corporate identity: A study focused on the websites of Spanish financial entities. *Journal of Business Ethics*, 107(2), 129-146.
- Burgess, W. (2016). A bad reputation costs a company at least 10% more per hire. *Harvard Business School Case*, (H02R7F), 1-6.
- Cenfetelli, R., & Bassellier, G. (2009). Interpretation of formative measurement in Information Systems research. *MIS Quarterly*, 33(4), 689-707.
- Cervellon, M., & Lirio, P. (2017). When employees don't "like" their employers on social media. *MIT Sloan Management Review*, 58(2), 63-70.
- Chatman, J. (1989). Improving interactional organizational research: A model of person-organization fit. *Academy of Management Review*, 14(3), 333-349.
- Chen, Y., Wang, Y., Nevo, S., Benitez, J., & Kou, G. (2015). IT capabilities and product innovation performance: The roles of corporate entrepreneurship and competitive intensity. *Information & Management*, 52(6), 643-657.
- Chen, Y., Wang, Y., Nevo, S., Benitez, J., & Kou, G. (2017). Improving strategic flexibility with information technologies: Insights for firm performance in an emerging economy. *Journal of Information Technology*, 32(1), 10-25.
- Chin, W., Marcolin, B., & Newsted, P. (2003). A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic mail adoption study. *Information Systems Research*, 14(2), 189-217.
- Cohen, J. (1988). Statistical power analysis for Behavioral Sciences (2nd edition). Hillsdale, New Jersey,

USA: Erlbaum.

- Connelly, B., Certo, S., Ireland, R., & Reutzel, C. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39-67.
- Culnan, M., McHugh, P., & Zubillaga, J. (2010). How large U.S. companies can use Twitter and other social media to gain business value. *MIS Quarterly Executive*, 9(4), 243-259.
- Deephouse, D., & Jaskiewicz, P. (2013). Do family firms have better reputations than non-family firms? An integration of socioemotional wealth and social identity theories. *Journal of Management Studies*, 50(3), 337-360.
- Delmas, M., & Burbano, V. (2011). The drivers of greenwashing. *California Management Review*, 54(1), 64-87.
- Dogl, C., & Holtbrugge, D. (2014). Corporate environmental responsibility, employer reputation and employee commitment: An empirical study in developed and emerging economies. *International Journal of Human Resource Management*, 25(12), 1739-1762.
- Eberle, D., Berens, G., & Li, T. (2013). The impact of interactive corporate social responsibility communication on corporate reputation. *Journal of Business Ethics*, 118(4), 731-746.
- Fieseler, C., Fleck, M., & Meckel, M. (2010). Corporate social responsibility in the blogosphere. *Journal of Business Ethics*, 91(4), 599-614.
- Flynn, B., & Flynn, J. (2004). An exploratory study of the nature of cumulative capabilities. *Journal of Operations Management*, 22(5), 439-457.
- Fombrun, C., & Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. *Academy of Management Journal*, 3(2), 233-258.
- Garriga, E., & Mele, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics*, 53(1/2), 51-71.
- Goh, K., Heng, C., & Lin, Z. (2013). Social media brand community and consumer behavior: Quantifying the relative impact of user- and marketer-generated content. *Information Systems Research*, 24(1), 88-107.
- Hair, J., Ringle, C., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152.
- Hair, J., Sarstedt, M., Ringle, C., & Mena, J. (2012). An assessment of the use of partial least squares structural equation modeling in Marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414-433.
- Hanelt, A., Busse, S., & Kolbe, L. (2017). Driving business transformation toward sustainability: Exploring the impact of supporting IS on the performance contribution of eco-innovations. *Information Systems Journal*, 27(4), 463-502.
- Helm, S. (2011). Employee's awareness of their impact on corporate reputation. *Journal of Business Research*, 64(7), 657-663.
- Hemphill, T. (2005). Rejuvenating Wal-Mart's reputation. *Business Horizons*, 48(1), 11-21.
- Henseler, J., Dijkstra, T., Sarstedt, M., Ringle, C., Diamantopoulos, A., Straub, D., Ketchen, D., Hair, J., Hult, G., & Calatone, R. (2014). Common beliefs and reality about PLS: Comments on Ronkko and Evermann 2013. *Organizational Research Methods*, 17(2), 182-209.
- Henseler, J. (2017). Bridging Design and Behavioral research with variance-based structural equation modeling. *Journal of Advertising*, 46(1), 178-192.
- Henseler, J. (2015). Is the whole more than the sum of its parts? On the interplay of Marketing and Design research. Enschede, The Netherlands: University of Twente, 1-40.
- Henseler, J., & Dijkstra, T. (2015). ADANCO 2.0 Professional. Kleve, Germany: Composite Modeling, <http://www.compositemodeling.com>.
- Henseler, J., Hubona, G., & Ray, P. (2016). Using PLS path modeling in New Technology research: Updated guidelines. *Industrial Management & Data Systems*, 116(1), 1-23.
- Hsu, K. (2012). The advertising effects of corporate social responsibility on corporate reputation and brand equity: Evidence from the life insurance industry in Taiwan. *Journal of Business Ethics*, 109(2), 198-201.

- IAB Spain (2017). Estudio anual de las redes sociales 2017, *IAB Spain Report*, 1-65.
- INE (2017). Encuesta sobre el uso de tecnologías de la información y las comunicaciones (TIC) y del comercio electrónico en las empresas, http://www.ine.es/prensa/tic_e_2016_2017.pdf, 1-12.
- Iseke, A., & Pull, K. (2019). Female executives and perceived employer attractiveness: On the potentially adverse signal of having a female CHRO rather than a female CFO. *Journal of Business Ethics*, 156(4), 1113-1133.
- Jones, D., Willness, C., & Madey, S. (2014). Why are job seekers attracted by corporate social performance? Experimental and field tests of three signal-based mechanisms. *Academy of Management Journal*, 57(2), 383-404.
- Joshi, K., Chi, L., Datta, A., & Han, S. (2010). Changing the competitive landscape: Continuous innovation through IT-enabled knowledge capabilities. *Information Systems Research*, 21(3), 472-495.
- Kane, G. (2015). Enterprise social media: Current capabilities and future possibilities. *MIS Quarterly Executive*, 14(1), 1-16.
- Khuntia, J., Saldanha, T., Mithas, S., & Sambamurthy, V. (2018). Information technology and sustainability: Evidence from an emerging economy. *Production and Operations Management*, 27(4), 756-773.
- Kiron, D., Palmer, D., Phillips, A., & Kruschwitz, N. (2012). What managers really think about social business. *MIT Sloan Management Review*, 53(4), 51-60.
- Korschun, D., & Du, S. (2013). How virtual corporate social responsibility dialogs generate value: A framework and propositions. *Journal of Business Research*, 66(9), 1494-1504.
- Lai, C., Chiu, C., Yang, C., & Pai, D. (2010). The effects of corporate social responsibility on brand performance: The mediating effect of industrial brand equity and corporate reputation. *Journal of Business Ethics*, 95(3), 457-469.
- Lee, E., Park, S., Rapert, M., & Newman, C. (2012). Does perceived consumer fit matter in corporate social responsibility issues? *Journal of Business Research*, 65(11), 1558-1568.
- Lee, K., Oh, W., & Kim, N. (2013). Social media for socially responsible firms: Analysis of Fortune 500's Twitter profiles and their CSR/CSIR ratings. *Journal of Business Ethics*, 118(4), 791-806.
- Liu, H., Ke, W., Wei, K., & Hua, Z. (2013). The impact of IT capabilities on firm performance: The mediating roles of absorptive capacity and supply chain agility. *Decision Support Systems*, 54(3), 1452-1462.
- Lokuge, S., Sedera, D., Grover, V., & Dongming, X. (2019). Organizational readiness for digital innovation: Development and empirical calibration of a construct. *Information & Management*, 56(3), 445-461.
- Luo, X., Zhang, J., & Duan, W. (2013). Social media and firm equity value. *Information Systems Research*, 24(1), 146-163.
- Lyon, P., & Montgomery, A. (2013). Tweetjacket: The impact of social media on corporate greenwash. *Journal of Business Ethics*, 118(4), 747-757.
- Mandviwalla, M., & Watson, R. (2014). Generating capital from social media. *MIS Quarterly Executive*, 13(2), 97-113.
- Martinez, P., Perez, A., & Del Bosque, I. (2014). Exploring the role of CSR in the organizational identity of hospitality companies: A case from the Spanish tourism industry. *Journal of Business Ethics*, 124(1), 47-66.
- McWilliams, A., Siegel, D., & Wright, P. (2006). Corporate social responsibility: Strategic implications. *Journal of Management Studies*, 26(1), 1-18.
- Melville, N. (2010). Information systems innovation for environmental sustainability. *MIS Quarterly*, 34(1), 1-21.
- Mithas, S., Tafti, A., Bardhan, I., & Goh, J. (2012). Information technology and firm profitability: Mechanisms and empirical evidence. *MIS Quarterly*, 36(1), 205-224.
- Ng, S., & Burke, R. (2005). Person-organization fit and the war for talent: Does diversity management make a difference? *International Journal of Human Resource Management*, 16(7), 1195-1210.
- Oh, C., Rouman, Y., Nwankpa, J., & Hu, H. (2017). Beyond likes and tweets: Consumer engagement

- behavior and movie box office in social media. *Information & Management*, 54(1), 25-37.
- Oleo, F., Sanchez, S., & Ors, M. (2017). Las mejores empresas para trabajar. *Actualidad Economica*, <http://www.expansion.com/actualidadeconomica/analisis/2017/09/06/59b01a4f468aeb25a8b45e0.htm>
- Pavlou, P., & El Sawy, O. (2006). From IT leveraging competence to competitive advantage in turbulent environments: The case of new product development. *Information Systems Research*, 17(3), 198-227.
- Petter, S., Straub, D., & Rai, A. (2007). Specifying formative constructs in Information Systems research. *MIS Quarterly*, 31(4), 623-656.
- Porter, M., & Kramer, M. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78-92.
- Ray, G., Muhanna, W., & Barney, J. (2005). Information technology and the performance of the customer service processes: A resource-based analysis. *MIS Quarterly*, 29(4), 625-652.
- Rhee, M., & Valdez, M. (2009). Contextual factors surrounding reputational damage with potential implications for reputation repair. *Academy of Management Review*, 34(1), 146-168.
- Rigdon, E., Becker, J., Rai, A., Ringle, C., Diamantopoulos, A., Karahanna, E., Straub, D., & Dijkstra, T. (2014). Conflating antecedents and formative indicators: A comment on Aguirre-Urreta and Marakas. *Information Systems Research*, 25(4), 780-784.
- Rishika, R., Kumar, A., Janakiraman, R., & Bezawada, R. (2013). The effect of customers' social media participation on customer visit frequency and profitability: An empirical investigation. *Information Systems Research*, 54(1), 108-127.
- Ringle, C., Sarstedt, M., & Straub, D. (2012). A critical look at the use of PLS-SEM in MIS Quarterly. *MIS Quarterly*, 36(1), iii-xiv.
- Riordan, C., Gatewood, R., & Bill, J. (1997). Corporate image: Employee reactions and implications for managing corporate social performance. *Journal of Business Ethics*, 16(4), 401-412.
- Saeidi, S., Sofian, S., Saeidi, P., Saeidi, S., & Saeidi, S. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, 68(2), 341-350.
- Shum, P., & Yam, S. (2011). Ethics and law: Guiding the invisible hand to correct corporate social responsibility externalities. *Journal of Business Ethics*, 98(4), 549-571.
- Spence, A. (1974). Market signaling: Informational transfer in hiring and related screening processes. Cambridge, Massachusetts, USA: Harvard University Press.
- Stahl, G., Bjorkman, I., Farndale, E., Morris, S., Paauwe, J., Stiles, P., Trevor, J., & Wright, P. (2012). Six principles of effective global talent management. *MIT Sloan Management Review*, 53(2), 25-42.
- Stanaland, A., Lwin, M., & Murphy, P. (2011). Consumer perceptions of the antecedents and consequences of corporate social responsibility. *Journal Business Ethics*, 102(1), 47-55.
- Song, Q., Wang, Y., Chen, Y., Benitez, J., & Hu, J. (2019). Impact of the usage of social media in the workplace on team and employee performance. *Information & Management*, 56(8), 1-20.
- Tang, Y., Mack, D., & Chen, G. (2018). The differential effects of CEO narcissism and hubris on corporate social responsibility. *Strategic Management Journal*, 39(5), 1370-1387.
- Teo, T., Nishant, R., & Goh, M. (2017). Do shareholders value green information technology announcements? *Journal of the Association for Information Systems*, 18(8), 542-576.
- Thornhill, S., & Amit, R. (2003). Learning about failure: Bankruptcy, firm age, and the resource-based view. *Organization Science*, 14(5), 497-509.
- Turban, D., & Greening, D. (1997). Corporate social performance and organizational attractiveness to prospective employees. *Academy of Management Journal*, 40(3), 658-673.
- Wang, Y., Chen, Y., & Benitez, J. (2015). How information technology influences environmental performance: Empirical evidence from China. *International Journal of Information Management*, 35(2), 160-170.
- Watson, R., Boudreau, M., & Chen, A. (2010). Information systems and environmentally sustainable development: Energy informatics and new directions for the IS community. *MIS Quarterly*, 34(1), 23-38.

- Williamson, I., King, J., Lepak, D., & Sarama, A. (2010). Firm reputation, recruitment websites, and attracting applicants. *Human Resource Management*, 49(4), 669-687.
- Yu, Y., Duan, W., & Cao, Q. (2013). The impact of social and conventional media on firm equity value: A sentiment analysis approach. *Decision Support Systems*, 55(4), 919-926.
- Zhang, J. (2015). Voluntary information disclosure on social media. *Decision Support Systems*, 73(1), 28-36.