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Globalization in Marketing: An Empirical Analysis of Business Adoption and Use of Social Network Sites

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ABSTRACT

Although the internet is a widely used information technology exploited by businesses to communicate with consumers, the present research indicates that many organizations have not established a presence on social network sites (SNSs). Using contingency and organizational learning theories, this research establishes a theoretical foundation for understanding organizational adoption and use of SNSs as a standardization marketing strategy by some of the world's leading brands. This paper also utilizes the Business Social Network Site (BSNS) Index, a new metric for measuring the extent to which companies promote their use of SNSs on their own website, to test hypotheses predicting firm adoption and use of SNSs. In addition to the contribution of the BSNS Index, an initial understanding of actual adoption and use of SNS as a marketing strategy by large firms is established.

Keywords

Social network sites, adoption, contingency theory, organizational learning, BSNS Index

INTRODUCTION

In the months leading up to Super Bowl XLIV, Pepsi surprised many with the decision to exchange its annual Super Bowl advertisement (23 years running) for a greater online presence. Movements like this, away from more traditional forms of advertising, typically carry risk; however, decisions to continue marketing a brand based on historical precedent is also risk-laden (Vranica, 2009). Pepsi's recognition of the need to change its communication has led to the implementation of a strategy that specifically includes enhanced use of social media (Fightmaster, 2009). Marketing strategies that take advantage of social media necessarily include business adoption of computer-mediated communication (CMC).

One CMC type that is gaining prominence among businesses is social network sites (SNSs). Social network sites have been defined in the literature by boyd and Ellison (2008:11) as:

web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system.

This definition is the starting point for this research, the purpose of which is to empirically investigate leading firms' adoption and use of SNSs as a marketing strategy. Adoption and use of SNSs is measured by the Business Social Network Site (BSNS) Index, which is introduced by this research. This paper makes the argument that adoption, and subsequent use, of SNSs is a means of marketing standardization that is important to operating within the context of globalization.

Business adoption of SNSs is growing and revolutionizing the way companies communicate with consumers (Giles, 2010f), yet the patterns of adoption are unclear. Companies continue to experiment with purchased advertising on these sites (Giles, 2010f), yet less is known about actual firm adoption and use of SNSs. Although use of SNSs clearly grants companies access and exposure to consumers at a fraction of the cost of paid advertising on the sites, and is innately paired with the benefit of word-of-mouth marketing (Giles, 2010f), wide adoption of SNSs by organizations is not apparent.

Globalization as a context is important to understanding the value of SNSs to businesses. The concept of globalization is familiar and has generally been defined by Clark and Knowles (2003) as "the process by which economic, political, cultural, social and other relevant systems of nations are integrating into World Systems" (p. 368). The present research utilizes this definition and proposes the idea that integration of economic and social systems are being further accelerated by the World System of SNSs.

SNSs can be categorized as a World System because they are “channels capable of transmitting stimuli simultaneously to many locations at wide geographic distances” (Clark et al., 2003: 368). The connectivity inherent to SNSs allows social, cultural, and economic elements to accelerate globalization and the rate at which SNS adoption proceeds among individual and business users. In order for World Systems to function, they must be standardized. Levitt (1983) defines standardization in businesses by his description of the global corporation that “sells the same things in the same way everywhere” (p.93). Utilizing the World System classification in conjunction with the definition of standardization, SNSs can be understood as a standardized direct digital marketing outlet. This implies that, to the extent that the firms adopt and use SNSs as a promotion strategy, they are globalizing their marketing.

Direct digital marketing is inclusive of digital marketing methods that provide relevant communications targeted to specific audiences with an email address, mobile phone number or Web browser cookie¹; SNSs can be classified as such because they are based on users’ email address. Direct digital marketing not only represents scale of two-way promotion, but contrasts to mass media because it is bi-directional; it solicits a response from the intended target market and allows that audience to directly respond. Therefore, use of SNSs, as direct digital marketing, is different from television and internet banner advertising that target messages to audiences without soliciting a direct response.

First adopted by individual users, SNSs have infiltrated the domains of musicians, celebrities and, most recently, businesses. Organizations are using SNSs at varying levels and for a variety of reasons. In many cases, non-fee SNSs are the most attractive marketing alternative because of their affordance. For other companies, SNSs are media simply more conducive to communicating companies’ and brands’ (e.g. Pepsi’s) entire marketing campaigns that are difficult to relay in 30-second TV spots (Vranica, 2009). Further, firms are purely recognizing that SNSs are where consumers are spending increasing amounts of time (Giles, 2010b).

Fortunately, the literature on adoption of CMC continues to grow and with it the variety of studies on individual and group use of SNSs; however, a clear limit in the CMC research is the adoption of SNSs by organizations. The investigation of firm adoption of SNSs is an essential component to gaining a more complete understanding of the pace and trends of CMC use by organizations. This paper contributes to the literature by addressing a portion of this limitation through an empirical examination of firm adoption and use of SNSs by the 100 Best Global brands² and U.S. Fortune 500 companies.

Even with numerous and obvious benefits to business adoption of SNSs, the practice is not widespread among reputed firms, as this research shows. There are many companies that have not adopted SNSs or have adopted the service but are not actively using or promoting it. For this reason, the current research develops the BSNS Index to rate company and brand use of SNSs so that varying levels of SNS use can be compared across businesses and over time.

The present study progresses first by providing the adaptation for business use of boyd et al.’s (2008) SNS definition. Second, the applicable literature on SNSs, as well as that on organizational learning and contingency theories in relation to adoption of innovation and marketing standardization strategy is reviewed. Third, organizational learning and contingency theories are applied to the context of business SNS to draw hypotheses. The sample, data, methods, and results are presented, inclusive of the BSNS Index general description and explanation of use. Finally, limitations are addressed and areas for future research are suggested.

LITERATURE REVIEW

Social Network Sites

Social networks are not uniform in the way in which they distinguish business users from individual users. For this reason, the said comprehensive definition of SNSs from boyd et al.’s (2008) paper is adapted for the application to business users. The point of departure for this research is in the second component—“an articulated list of other users with whom users share a connection” (boyd et al. 2008:11). This component must be further delineated for this paper’s purpose so that the list of articulated users with whom a business shares a tie is one of users that initiated and/or approved the connection. (This contrasts to lists of people that businesses can follow without the individuals’ initiation or approval.) The definition extension of a SNS is necessary because the number of users who decide to join networks of businesses must be observable. The adapted SNS definition and research observations have been used in this research to identify the SNSs that are currently being adopted by businesses as part of their marketing strategies. The list of SNSs adopted by the sample businesses include: Facebook, MySpace, Twitter, and YouTube.

¹ http://www.marketingpower.com/_layouts/Dictionary.aspx?dLetter=D

² As ranked by Interbrand and published in BusinessWeek (2009).

Research on business and SNSs has thus far been largely focused on the controversy over time wasted by employees using SNSs at work (Giles, 2010g) and use of SNSs in employee recruiting and applicant screening (Giles, 2010e). More recently, researchers have begun investigating the role of business in SNS communities from an advertising perspective as well as that of individual users' influence on brands. Besides a growing interest in paid advertising on SNSs, businesses are adopting the SNS medium to promote their brands and access consumers. In addition, whether or not companies participate directly in SNSs, they are a predominant player as brands often appear as the subject of updates and content (e.g. shared links to commercial sites) on individual users' profiles (Giles, 2010d).

Trusov, Bucklin, and Pauwels (2009) found that membership growth for a single SNS more likely increases in response to word-of-mouth marketing than to traditional marketing outlets. The authors' research has significant implications for adoption of SNS, particularly when paired with network effects. Network effects are the exponential enhancement of the benefit to users of a product or service that is experienced as the number of product/service adopters increase (Giles, 2010c). These network effects not only impact word-of-mouth marketing toward SNS adoption, but also increase the reach of personal recommendations of products or services when posted to individuals' SNS profiles. The combination of network effects and trust in personal recommendations has contributed to the explosive growth in SNSs' membership and business exposure on these sites (Giles, 2010c, 2010d).

To take advantage of cost savings and audience access, many organizations are creating and maintaining 'pages' and 'profiles' on one or more SNSs, for their company and/or product brand(s); this is particularly true for small businesses (Giles, 2010a). Business accounts are treated differently among the SNSs. For example, Facebook's homepage directs business users to the single option to "create a page for a celebrity, band or business"³. MySpace, Twitter, and YouTube do not distinguish between individual and business user accounts; however, MySpace does offer different profile types for musicians, comedians, and filmmakers⁴.

To better understand firm use of SNSs as adding to the globalization of marketing, this paper incorporates organizational learning and contingency theories. The two theories work in concert because they both assume dynamic systems and can be related to performance and CMC adoption, essential to ensuring the success and survival of an organization.

Theoretical Background

Organizational Learning

Like firm website adoption, businesses may be deciding to use SNSs for different reasons. Organizational learning (OL) is critical in helping evaluate the adoption and use of SNSs. More specifically, strategic renewal is important to understanding the dynamic between adoption and non-adoption of SNSs by businesses.

Strategic renewal refers to the tension between the concepts of exploration and exploitation that firms experience (March, 1991). As identified by March, renewal occurs when firms explore and learn new ways of doing things while exploiting what they have learned in the past. Consequently, this forms the basis for the development of the 4I Framework of Organizational Learning (Crossan, Lane, and White, 1999).

The 4I Framework is based on four basic principles: (1) OL involves the tension between exploration and exploitation; (2) OL occurs at multiple levels including the individual, group, and organization; (3) the OL levels are connected by the processes of intuiting, interpreting, integrating, and institutionalizing (4Is); and (4) cognition affects action and vice versa. These four premises lead to a central proposition suggesting that the 4Is are related in what is known as the feed-forward and feedback processes across the three different levels (Crossan et al., 1999).

The need to study OL at the three different levels (individual, group, and organizational) is an undisputed area of consensus (Crossan, Lane, White, & Djurfeldt, 1995). Crossan et al. (1999) distinguish between the feed-forward and feed-back processes associated with the levels of OL. The feed-forward process is directly related to the exploration occurring at the individual and group levels and its subsequent transfer to the organizational level. The feed-back process is directly related to the exploitation process occurring at the organizational level; that is, it deals with the manner in which institutionalization of learning affects the group and individual levels.

Learning happens at three levels that are interconnected by the implementation of the four processes that constitute the 4Is: intuiting, interpreting, integrating, and institutionalizing. The following are the definitions for the four processes as taken from Crossan et al. (1999):

³ <http://www.facebook.com/>

⁴ <http://signups.myspace.com/index.cfm?fuseaction=signup>

Intuiting: is preconscious recognition of the pattern and/or possibilities inherent in a personal stream of experience.

Interpreting: is the explaining, through words and/or actions, of an insight or idea to one's self and to others.

Integrating: is the process of developing shared understanding among individuals and of taking coordinated action through mutual adjustment.

Institutionalizing: is the process of ensuring that routinized actions occur.

While the four processes do not operate at every level, some processes overlap at single levels, causing a spillover effect. Intuiting is an individual process, while interpreting takes place at both the individual and group levels. Integrating occurs within groups and organizations but institutionalizing happens at the organizational level only. These four components are useful in understanding the dynamic process of OL and its application to SNS adoption by businesses.

Contingency Theory

Contingency theory dictates that proper organizational structure and processes will function as a fit with organizational context to impact performance (Tosi and Slocum, 1984). Drazin and Van de Ven (1985) identify multiple forms of fit that are encompassed by contingency theory, including selection, interaction and systems types; these fits range from less to more complex, respectively. Selection fit is an evaluation of the congruence between organizational context and structure while interaction fit explains the impact of the former fit on performance. The systems fit approach is the most complex of the three fit types as it simultaneously addresses multiple contingencies, context-structure alternatives, and performance criteria to holistically explain interdependency in organizations.

Selection fit is appropriate to studying congruence when company brands are considered the macro-level equivalent and product brands the micro-level equivalent in organization design; however interaction fit is necessary when studying the impact of the macro-micro congruence on performance. Selection fit contingency states that within organizations, macro-rules can be imposed on micro units without regard to the context of subunits or, conversely, can take subunit contextual factors into account. Therefore, selection fit incorporates the idea that structure process variables not determined at the macro-level are left to the subunits to decide. As a result, it is the interactions of these unique decision variables with the subunit contexts that are used to explain performance variation (Drazin et al., 1985), or interaction fit. The associations described here are applied in the present research, where the congruence between past performance, context (global environment), and structure (company- or product-brand) are used to explain SNS adoption.

Marketing Standardization

Standardization is an element of global marketing strategy (GMS) as defined by Zou and Cavusgil (2002) that has been widely studied because of its significant impact on performance. Standardization as applied to marketing is defined as a trend toward global commonality (Levitt, 1983). Marketing researchers distinguish standardization strategies among marketing program elements, which are inclusive of product, price, placement, and promotion (Jain, 1989). That the global environment demands organizations standardize one or more marketing program elements in order to improve performance (Levitt, 1983), is a relationship that has been supported by the principles of contingency theory (Theodosiou, et al., 2003). Contingency theory has been used to explain organizational decisions over the degree of standardization in management and marketing strategies in international environments (Hofer, 1975; Theodosiou and Leonidou, 2003; Tosi et al., 1984).

Much of this marketing research is devoted to testing the link between varying degrees of standardization and/or adaptation marketing strategies and performance (Katsikeas, Samiee and Theodosiou, 2006; Schilke, Reimann and Thomas, 2009; Theodosiou et al., 2003). Within the empirical and theoretical literature of this kind is often a suggested, yet untested, relationship that ties performance back to firm strategy (Jain, 1989; Morgan, Kaleka, and Katsikeas, 2004; Szymanski, Bharadwaj and Varadarajan, 1993). Lages, Jap and Griffith (2008) paper is one notable exception that tests the role of past performance on marketing program adaptation. We draw on this study to test the impact of past performance on marketing program standardization.

Literature Review Summary

In summary, contingency theory as defined by interaction fit dictates a distinction between macro- and micro-levels in an organization that can be likened to company and product brand levels appropriate for evaluating SNS adoption and use

throughout firms. In addition, OL theory relates past performance back to the decision of SNS adoption. These ideas are used in the next section to develop hypotheses predicting SNS adoption and use.

THEORY DEVELOPMENT

A Model of SNS Adoption and Use

Continuously changing environments, such as those impacted by globalization, demand that organizations manage the tension between institutionalized learning from the past and new learning that can incite transformation in the future. This tension in organizational learning has recently been challenged by the introduction of SNS services into the business environment. The integration of ideas from contingency and OL theories indicates that adoption and use of SNSs to market brands is a move toward standardization in marketing promotion that can be made at either the company- or product-brand level and is a decision based on the fit between a firm’s past performance and its current context. SNSs are a component of marketing promotion because they are a form of direct digital marketing.

Generally, SNSs are being integrated and institutionalized at the individual and group levels. This contrasts with the business context where SNSs are not in wide-use. Rather SNSs are an example of a disruptive impact of information systems on marketing when employed by firms as part of their promotion strategy. Moreover, the adoption of SNSs represents a standardized promotion strategy because the sites maintain a format that is identical (with the exception of language translation) and transferable across geographic borders. As such, tension between use of SNS and traditional marketing media is a likely result, particularly in relation to resource allocation. This is consistent with the view that firm adoption of SNSs is equivalent to developing a new competency and is an issue of strategic renewal as defined by Crossan et al. (1999). In addition, businesses must manage the interaction (fit) between their internal and external environments and their past performance to make CMC adoption decisions.

The model of business adoption and use of SNSs demonstrates the relationships predicted by contingency and OL theories. Marketing standardization is an outcome that takes the form of SNS adoption and use and is predicted by firm performance as well as the internal and external business environments. Firm performance is not only conceptualized as traditional financial measures of return on assets (ROA) and return on equity (ROE) but also as a measure of brand equity that indicates brands’ global reach. The model includes internal forces of company size (controlled for by sample selection) and brand management (at company- and product-brand levels) and the external force of globalization. Figure 1 illustrates these outlined constructs and associated variables used in this research to test the prediction of business adoption and use of SNSs.

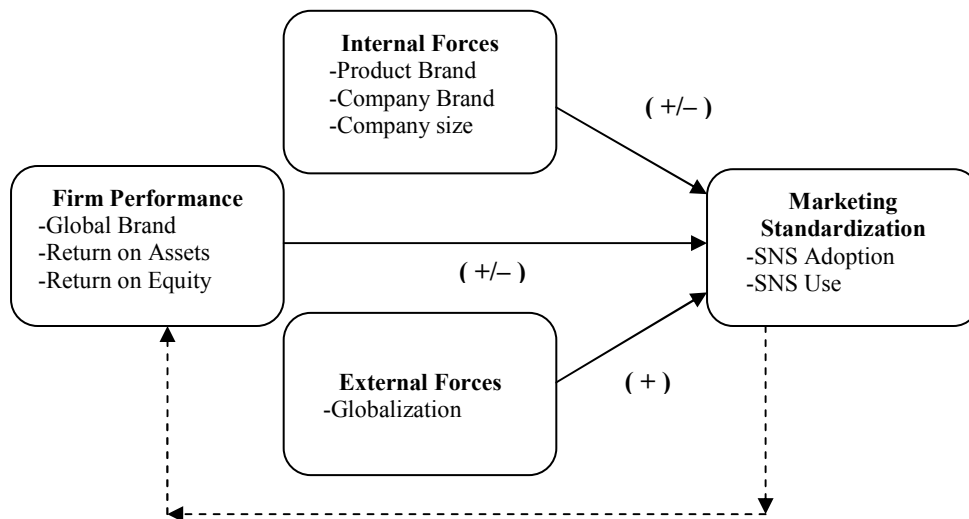


Figure 1. Model of Business Adoption and Use of Social Network Sites

Hypotheses

The prevalence of models that propose a relationship between performance and subsequent marketing standardization decisions suggest that organizational learning is particularly important to understanding exactly how performance relates back to standardization decisions and the adoption of CMC. By evaluating the impact of performance on promotion in the

form of adoption and use of SNSs, this research specifically tests the relationship from past performance to current standardization strategy.

Consistent with OL literature's suggestion that any form of learning must follow the three levels, from individual to group to organization, the SNS evolutionary cycle has moved from individual use to group use and finally to organizational use. This progression follows the basic premise of the 4Is Framework of OL. Taking this principle into account, brands operate at the micro-level and can be classified as a subcategory, or group, of a corporation that are more likely to adopt the use of SNSs than are (parent) companies. Further, contingency theory dictates that the position of a business as a company or brand interacts with its context to affect SNS adoption. Since the brands specific to this research are rated for global recognition, contingency theory predicts that a standardized approach can be more suitable to promoting a brand image worldwide. Based on this line of reasoning, the following three hypotheses are introduced.

Hypothesis 1: Brands ranked as a global brand will be more likely to adopt and use SNSs than non-ranked brands.

Hypothesis 2: Business adoption and use of SNSs is more likely for product brands than for company brands.

Hypothesis 3: Company brands ranked as a global brand are more likely to use SNSs than non-ranked company brands.

The more expertise a firm gains in an area, the higher the levels of institutionalization. This institutionalization creates a stagnant environment, perpetuating the inability to learn or incorporate innovations outside of the current area of expertise (Argyris, 1991). It is specifically this notion that leads to the assumption that the more established a firm is within its industry, the less likely it is to engage in the incorporation or use of disruptive innovation. Specifically with respect to the use of SNSs as a promotional marketing strategy, SNSs may be classified as innovative and disruptive marketing, and therefore discarded by some of the more established firms.

Marketing researchers have used OL theory to suggest that increased learning is consistent with employing adaptation over standardized marketing strategies because adaptation involves changing home country marketing strategies to better fit the host country (Lages, et al., 2008). In contrast, this paper suggests that SNSs are a standardized form of direct digital marketing that contributes to marketing innovation so that higher levels of increased learning (i.e. SNS adoption) can actually be consistent with standardization. With this in mind, OL can predict that tension will arise over decisions of resource (e.g. management) allocation to either new and unproven forms of marketing or traditional marketing media; this may be particularly true in successful firms. Therefore, pairing this reasoning from OL with contingency theory that predicts matching organizational processes with the demands of the environmental context, the following two hypotheses are developed to predict adoption and use of SNSs as a function of ROA and ROE performance.

Hypothesis 4a: Firms with higher ROA will be less likely to adopt and use SNS.

Hypothesis 4b: Firms with higher ROE will be less likely to adopt and use SNS.

While OL dictates that performance should negatively impact adoption and use of SNSs, contingency theory predicts greater adoption and use for companies with a global orientation. Therefore, the global nature of companies is expected to trump the performance effect, as indicated in the final two hypotheses.

Hypothesis 5a: The interaction between global brand and ROA will positively impact adoption and use of SNSs.

Hypothesis 5b: The interaction between global brand and ROE will positively impact adoption and use of SNSs.

Hypotheses predicting business adoption and use of SNS were tested under the following methodology.

METHODOLOGY

The empirical nature of this research required the creation of the BSNS Index to measure the dependent variable, adoption and use of SNSs as an alternative marketing strategy. The Index was established based on primary data through archival analysis. The data was collected at two times by visiting business websites and recording the components of interest in order to calculate the organization's BSNS Index number. This primary data collection served as a means to verify actual SNS use among leading firms across multiple industries. Secondary sources were also used to collect financial data so business adoption and use of SNS could be understood as it is unfolding.

Sample

Since SNSs were developed for individual use and are free forms of marketing media, it is simple to suspect that small firms and those with fewer resources will more readily adopt the services. For this reason, large firms with substantial resources were chosen for investigation in order to understand what drives business adoption of SNSs when cost savings is not a primary motivation.

The sampling frame was 415 potential business users of SNS drawn from two lists—the 100 Best Global Brands of 2009 (BusinessWeek, 2009)⁵ based on brand equity and 2009 business-to-consumer (B2C) Fortune 500 firms (largest by revenue)⁶. The list of global brands was of primary interest because it ranks company brands and product brands together and is a strong indicator of the businesses' degree of internationalization. The sample of Fortune 500 companies was used to augment the global brands sample in order to statistically draw some comparisons to businesses of similar size and notoriety.

Large companies were studied to better understand the adoption of SNSs as a marketing strategy by firms that clearly have the resources to pursue more traditional and costly forms of marketing. This resource base was captured by selecting the sample from the specified lists that recognize businesses by their resources, either revenue or brand equity. The initial sample combined firm and product brands (rather than studying only the parent company brands) because businesses have the option of registering SNS accounts by company brand or product brand(s).

Specifically from the Fortune 500, only those companies that compete in B2C industries were included in the sampling frame. The reason for excluding business-to-business (B2B) companies is that SNSs were initially developed as a means of individual communication; group communication (e.g. that involving firms) is still in its infancy. Companies on the Fortune 500 list that appeared as one of 100 Best Global Brands (e.g., Visa) were eliminated from the Fortune 500 sampling frame in order to avoid duplicate observations; however, parent companies of brand names included on the global brand list were retained (e.g., Procter & Gamble, the parent company of Duracell).

Following sample size guidelines from Bartlett, Kotrlik and Higgins (2001), the two firm samples were determined based on formulas for continuous data using an alpha level of .05, a level of acceptable error of 3% and a maximum index value (in place of a maximum scale value) of 20. From a list of the final 315, B2C Fortune 500 companies, 89 were randomly chosen from the list to be included in the sample. Similarly, 55 brands were randomly chosen to be included in the sample of the 100 Best Global Brands. The combined sample of 144 firms was used to test the first two hypotheses.

For the remaining hypotheses that deal with the impact of financial performance on SNS adoption and use, a sample size of 128 was used. Fourteen observations (12 product brands and two companies) were dropped because (independent) financial data was not available as well as two brands that represented B2B companies from the global brands list.

Measurement

Construct Measurement

Following suggestions by Hult, Ketchen, Griffith, Chabowski, Hamman, Johnson, Dykes, Pollitte and Cavusgil (2008), this research seeks to capture the multi-faceted nature of performance by utilizing measures of ROA, ROE, and global brand rank to predict business adoption and use of SNSs. In this context, *global brand* refers to being recognized as one of the 100 Best Global Brands. Performance data from fiscal year 2008 was collected from COMPUSTAT and Capital IQ in order to test the relationship between performance and subsequent adoption/use behaviors in November of 2009.

The internal forces are operationalized as product brand or company brand (structure). Estimations include a performance dummy variable that takes a value of one for global brands and a zero for companies not rated as a top global brand. Finally, globalization is assumed as an inescapable external force, as indicated by Levitt (1983).

BSNS Index Development

In order to evaluate business usage of SNSs, the BSNS Index was developed. Index scores were derived by weighting and aggregating five major components of business exposure that the promotion and use of SNSs embody: number of social network sites used, position of SNS links, prominence of SNS links, following on SNSs, and share content link. After

⁵ In order for a brand to be evaluated as one of the 100 Best Global Brands, it “must derive at least a third of its earnings from outside its home country, be recognizable beyond its base of customers, and have publicly available marketing and financial data” (BusinessWeek, 2009, p. 50).

⁶ <http://money.cnn.com/magazines/fortune/fortune500/2009/performers/industries/fastgrowers/>

establishing these criteria, company and product brand websites were visited and evaluated based on the five aforementioned components⁷. These components were chosen specifically with business websites in mind and are each described below.

In order to arrive at the BSNS index numbers for the brands of interest, the authors created a database containing scores for each of the five components. One researcher evaluated the website, taking the components into consideration. The other researcher was dedicated to coding the information and recording it in the database. Each researcher was dedicated to the same task over the various data collection periods in order to maintain consistency. In cases where scoring of a component became unclear, both researchers considered the component until consensus was achieved.

The first element, the *number of social network sites* used, was evaluated based on the number of SNS links promoted on the company- or product-brand website. SNSs in use by companies but not actively promoted on their business website were not included. The reason for this distinction was to understand not simply registration of SNSs but adoption and prominent use of the services. Since use of SNSs represents substantial brand exposure possibilities, each SNS was doubly weighted but considered equally (e.g. Facebook and Twitter contributed equally to overall Index scores), particularly because each site offers compounding exposure effects and the popularity of the various sites is difficult to predict over time.

Prominence component is the second component in the BSNS Index. Prominence refers to the immediacy with which the researcher could get to the SNS link(s). This was calculated based on the number of webpages the researcher had to navigate through in order to arrive at the page containing the SNS links.

The *position* of the SNS link(s) was the third component in the BSNS Index. Position refers to the spatial positioning of the SNS links on a firm's webpage and was scored based on one of three positions on the webpage. The first position is at or toward the top of the page. The second position was visible but not in the top portion of the page. The third and final position was one that required the researchers to scroll down the webpage⁸.

Following is the fourth component in the BSNS Index. Following refers to the average change over time in the actual number of individuals following the brand across the SNSs that make up the first component of the Index (number of social networking sites promoted on the website). Following was tabulated based on the number of friends, followers, etc. displayed on the various firm SNS pages. The scoring for this component was based comparatively on the change in following of the other SNS adopters in the sample. Brand following on SNSs is considered an important proxy for business adoption of SNSs because it is likely correlated with the degree to which the businesses promote their presence on SNSs. Following is also the component that is critical to marketing and brand managers who should be interested in the exposure the use of SNS brings.

Share link is the fifth and final component of the BSNS Index. It refers to the option for individuals to share content from a business website by re-posting it to their own profile on one or more SNSs. Share content link was recorded and scored dichotomously (yes/no).

From the BSNS Index, SNS adoption was evaluated by a dichotomous variable that takes the value of one if the Index score is greater than or equal to 1, and zero otherwise. SNS use is measured by the actual BSNS Index number. Logistic and ordinary least squares regression models were used to evaluate SNS adoption and use.

RESULTS

Only 24 of the 144 brands (16.67% percent) evaluated in the present research had adopted SNSs as a marketing strategy by the end of 2009. Further, evaluation of SNSs use as measured by the BSNS Index indicates the average promotion of SNS presence is 1.5 on a scale of 20. The following is a breakdown of SNS popularity among businesses: Facebook (15 users), Twitter (12 users), YouTube (10 users), and Myspace (3 users). Seven of the eighteen firms that use SNSs have three out of the four sites under observation; six firms use one SNS; three firms use two SNSs; and only two firms use all four of the sites.

The results of simple regression analyses for SNS adoption and use as a function of global brand recognition only are presented in Table 1. In support of H1, the coefficient for global brand is positive and significant in both models (at a *p-value* of .05 for adoption and .10 for use) and explains 3% of the variance in adoption and 2% of the variance in use.

⁷For those sampled brands that had different websites for multiple geographic regions or countries, the U.S. websites were evaluated.

⁸ Link position was evaluated based on a screen resolution of 1280 x 800.

$$SNS \text{ Adoption} = 1/1 + e^{\beta_0 + \beta_1 \text{global brand} + \varepsilon}$$

$$SNS \text{ Use} = \beta_0 + \beta_1 \text{global brand} + \varepsilon$$

| | Adoption | | Use | |
|--------------|----------|--------|---------|--------|
| | β | Sig. | β | Sig. |
| global brand | 0.919 | 0.043* | 1.217 | 0.084† |

Note: † < .10, *p < .05

Table 1. Global Brand as a Predictor of SNS Adoption and Use

H2 was tested by re-running the original regression equations that use global brand as the only predictor of SNS adoption and use after dropping all product brands from the sample. The once significant results for global brand predicting adoption and use became non-significant in these equations in support of H2, that SNS adoption and use is more likely for product brands than for company brands.

H3 was tested using a Welch two-sample t-test for SNS use. Results indicate that there is no significant difference between SNS use of company brands ranked as global brands and those non-ranked company brands. As such, H3 is not supported; however, rejection of H3 lends additional support to H2.

To test H4a and H4b, that ROA and ROE, respectively, will negatively impact SNS adoption and use, adoption and use were regressed on global brand and performance in four separate models (two each utilizing ROA and ROE) using the reduced sample of 128 firms. As mentioned above, the sample was reduced to company brands so that financial performance could be incorporated as a predictor of SNS adoption and use. The four analyses returned non-significant results for performance and global brand in each model. Given the lack of significance for ROA and ROE performance variables, H4a and H4b are not supported. Although not significant, the independent variables generally behave in the direction predicted by the hypotheses. Performance relates negatively to adoption and use, with the exception of the model utilizing ROA performance to predict use. Findings also indicate that global brand recognition always has a positive impact on SNS adoption and use. Interestingly, the addition of performance to the regression models has the effect of making global brand non-significant in all four models. This indicates that inclusion of product brands in the initial sample is likely driving the significant results for global brand and further supports H2.

While performance and global brand are not significant in explaining SNS adoption and use, the interaction term between ROA performance and global brand is significant in both adoption and use models. The interaction term is significant at a *p-value* of .05 for adoption and .10 for use and the models explain 5.8% of the variance in adoption and 2.2% of the variance in use. These results support H5a, which states that the interaction between performance, as measured by ROA and global brand, will positively influence SNS adoption and use. Results do not support H5b, that the interaction between performance, as measured by ROE and global brand, will positively influence SNS adoption and use. This is interesting because it indicates that global brand is more significant in predicting SNS adoption than use, particularly when paired with ROA performance compared ROE performance. In conjunction with ROE performance, global brand is not significant, nor is the interaction term between global brand and ROE.

$$SNS \text{ Adoption} = 1/1 + e^{\beta_0 + \beta_1 ROA + \beta_2 \text{global brand} + \beta_3 ROA * \text{global brand} + \varepsilon}$$

$$SNS \text{ Use} = \beta_0 + \beta_1 ROA + \beta_2 \text{global brand} + \beta_3 ROA * \text{global brand} + \varepsilon$$

$$SNS \text{ Adoption} = 1/1 + e^{\beta_0 + \beta_1 ROE + \beta_2 \text{global brand} + \beta_3 ROE * \text{global brand} + \varepsilon}$$

$$SNS \text{ Use} = \beta_0 + \beta_1 ROE + \beta_2 \text{global brand} + \beta_3 ROE * \text{global brand} + \varepsilon$$

| | Adoption | | Use | |
|--------------------|----------|--------|---------|--------|
| | β | Sig. | β | Sig. |
| ROA | -2.851 | 0.190 | -1.486 | 0.631 |
| global brand | -0.213 | 0.780 | -0.602 | 0.504 |
| ROA x global brand | 12.197 | 0.035* | 13.149 | 0.108† |

Note: † < .10, *p < .05

Table 2. ROA Performance, Global Brand, and the interaction as Predictors of SNS Adoption and Use

| | Adoption | | Use | |
|--------------------|----------|-------|---------|-------|
| | β | Sig. | β | Sig. |
| ROE | -0.187 | 0.117 | -0.033 | 0.856 |
| global brand | 0.702 | 0.612 | 0.195 | 0.814 |
| ROE x global brand | 0.028 | 0.982 | 0.415 | 0.817 |

Note: † < .10, *p < .05

Table 3. ROE Performance, Global Brand, and the interaction as Predictors of SNS Adoption and Use

DISCUSSION

Categorization as a global brand is significant in explaining adoption and use of SNSs when company and product brands are considered together. One explanation for global brands being more receptive to SNSs than the non-global brands is that the 100 Best Global Brands list includes several product brands, whereas the Fortune 500 companies only represent company brands. Given this, it is not possible to interpret with any certainty if it is global brand rank that is contributing to SNS adoption and use or the difference between company- and product-brand management more generally. In an attempt to partial out these two separate effects, all product brands were dropped from the initial sample so the impact of being a global brand could be reevaluated based on company brands and financial data.

The subsequent analyses do not point to clear relationships between performance and SNS adoption or use. In contrast, the relationship of global brand recognition to adoption and use indicates globally positioned companies are beginning to experiment with direct digital marketing standardization in their promotion strategies. Particularly because product brands represent a small proportion of the original sample (8.3%), it seems there is a strong impact of product brand management driving SNS adoption and use when compared to company brand management.

Theoretical and Empirical Implications

SNSs are web-based services with tremendous implications for multiple areas of research. This study contributes to the literature by using a contingency model and organizational learning to theoretically and empirically bridge research from the areas of CMC, SNSs, and international marketing. A second contribution is a general theoretical model that can be used to empirically test various relationships that relate performance and business environments to SNS adoption and use. Lastly, the empirical analysis in this research provides weak support for the impact of performance on future strategy decisions, a relationship assumed, but not always tested, in OL and contingency models presented in prior literature.

Practical Implications

The empirical results of this research provide a foundation for understanding large firms’ current adoption of SNSs as an alternative marketing strategy. The study’s focus on adoption of SNS services by businesses brings to light several practical implications. The first is that an understanding of early firm SNS adoption is a primary antecedent to determining the application needs of current and future business users of these sites. A second implication is the importance of organizations establishing and managing their presence on social media in order to either meet competition or establish a competitive advantage. A final practicality of this research is the contribution of the BSNS Index that is useful for comparing the prominence of SNS use among brands and companies.

Empirically, this research has tremendous implications for firms attempting to stay abreast of the latest trends or attempting to predict the next major direct digital marketing outlet. In many ways, the Fortune 500 companies are traditionally conservative so that their adoption and use of SNSs lends a degree of credibility to social media. This paper provides insight that demonstrates broader levels of SNS acceptance, particularly among more mainstream audiences.

Limitations

The infancy of research on business use of SNSs means there is little archival data associated with the topic. This study was thus constrained by modest sample size due to the time-consuming nature of data collection required to evaluate business adoption and use of SNSs. A second limitation is that, above and beyond what the BSNS Index captures, there are many other ways businesses are promoting their presence on SNSs. Some of the new and inventive ways that companies are letting consumers know about their presence on SNSs that were observed by the authors during the course of this research are: “Tweet-to-win” contests, email discount promotions (e.g. Join Us On Facebook for a discount), “Find Us On Facebook”/“Follow Us On Twitter” reminders printed on shopping bags, in-store poster campaigns and promos, and YouTube channel promotions included in television advertising. Measuring the countless ways businesses are promoting their presence on SNSs is a daunting task; the effort with the current research was to evaluate businesses’ websites with the assumption that outside promotions will be accompanied with SNS links on their websites and growth in their SNS following.

Future Research

In relation to the analysis, this study only begins to capture effects of performance on adoption by using past financial performance. Other methods (e.g., structural equation modeling) should be used in the future to more fully investigate the performance context, structure fit, and their combined impact on business adoption of SNSs. For example, future research can further distinguish between the differences in adoption of SNSs driven by the necessity of promoting a global brand and/or simply operating at a company brand or product brand level. Lastly, there is a host of other variables that can predict SNS adoption by businesses that are not accounted for in this research. Evaluation of adoption based on other predictor variables is clearly an area for future research.

Given the hesitation of many firms to initially establish a web presence with the advent of the internet, the literature on corporate website adoption may foreshadow the potential importance of SNSs adoption. Parallels of business SNS adoption to that of corporate website adoption provide many avenues for future research. Drawing from Beatty, Shim, and Jones (2001) research on corporate website adoption, SNS adoption can likely be understood by studying the perceived complexity and benefit of SNSs, top management support for SNSs use, and the compatibility of the sites with organizational culture. Other potential explanatory variables not included in the present research include national culture, target market demographics, and industry effects.

As globalization proceeds, the push for standardization in brand promotion will continue. Such a trend will have considerable implications for the use of SNSs in promoting particular company and product brands. Finally, the feedback loop included in this paper’s conceptual model was not tested in this research. Particularly in relation to global brand rank, empirical tests should be conducted that measure the impact SNS use is having on brand image and firm reputation. To this end, qualitative research with individual SNS users and firm management is encouraged. Such efforts will not only generate lists of the variables necessary to understanding the propensity of businesses to adopt and use SNSs, but can also distinguish the differences between businesses that are early and late adopters. The likelihood that consumers will choose to interact with businesses on SNSs is also important to understand since firms adopt the services for that purpose.

CONCLUSION

This research is not meant to capture the totality of factors that impact business adoption and use SNSs. Rather, this paper seeks to establish a general understanding of the degree of adoption and use of SNS among large companies using primary (observable) data. Since lagged performance has been suggested in much of the international marketing research as an important determinant of subsequent global marketing strategy, this research begins by testing this relationship.

The establishment of the BSNS Index creates an opportunity to build a database of information for use in addressing limitations and areas for future research. Continuing research is essential since the results of this study illustrate companies’ varying levels of organizational learning in the face of disruptive innovation such as SNSs. Although the future of SNSs in business remains uncertain, it is likely that, with time, subsequent research will reveal emergent adoption and use patterns as well as the consequence of these behaviors. In the meantime, whether companies at the macro level adopt SNSs more or less than brands will likely depend on the success experienced with the sites at the brand level.

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