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Adoption of social networking sites: an exploratory adaptive structuration perspective for global organizations

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Abstract This research assesses the strategic adoption of social media by large global organizations. To contribute to a better understanding of the topic, this exploratory study analyzed social networking sites used by 72 large global companies, and conducted a survey and follow-up interviews with high-level managers from these companies. Our analysis of social networking sites identifies and characterizes the types of social media used, as well as the various organizational purposes for the use of social media. Our exploratory survey and interviews yielded a deeper level of understanding of the adoption of social networking sites by organizations. We employed *management fashion theory* and *adaptive structuration theory* to characterize the ways in which advanced information technology can bring about organizational change. Our findings indicate that there is an increased use of social media and social networking sites by organizations that results in the form of *passive* or *active*, *proactive* or *reactive*, and *tactical* or *strategic* uses.

Keywords Adaptive structuration theory · Exploratory research · Field study · Interviews · Management fashion theory · Organizational change · Social media · Social networks

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1 Introduction

Today's customers are using the "oh-so-social-Web" [6] to connect and share experiences and information on products and services, companies and brands. And as a result of the widespread growth of online social networking and user-generated content sites, a shift in the balance of power is occurring [6, 40, 43, 45, 57]. Consumers are no longer passive receivers of marketing messages; instead, they are using Facebook, MySpace, YouTube and Twitter to voice their opinions—both positive and negative. Moreover, consumers seek product and company information on social media sites because they find those sources to be more credible and relevant than information provided by marketers [6]. Clemons [11] describes the perpetually online youth of today who do not trust messages from companies but instead value the opinions and recommendations of their peers and the products of their own research even more.

This shift in power from organizations to consumers is explained by the informational and organizational characteristics of the Internet such that consumers now gain expert power from social media as they get more information on products or companies from many sources on the Internet [45]. Additionally, consumers share experiences with hundreds or thousands of other consumers who have personal experience with a company [13, 43], and these other users are seen as more credible than corporate marketers who are paid to promote the product [7]. As information on products and companies becomes more transparent through the use of social media, the concept of "information is power" is neutralized, as information is more readily available and shared [43, 45]. Everyone, not just the manufacturer or the marketer, can be an expert on a particular product or service or company. Additionally, by

using social media to aggregate opinions, consumers gain sanction power, described by Rezabakhsh et al. [45], p. 6 as "the consumer's ability to reward or punish a supplier."

Clemons [9] has offered additional evidence related to the shift in power from organizations to consumers. He refers to *consumer informedness* as the degree to which consumers know about products in the marketplace in terms of availability, attributes and price. His premise is that informedness changes consumer behavior and consequently empowers customers. Similarly, Parameswaran and Whinston [40] view customer empowerment as *collective bargaining power*, and suggest that organizations may choose to yield bargaining power to an online community in return for feedback that ultimately allows the organization to provide better value to its customers.

Two examples illustrate how this shift in power from organizations to consumers can force a company to rethink its corporate strategy. In 2007, the global confectionary company, Cadbury, acknowledged the power of social media when approximately 14,000 Facebook fans petitioned the company to relaunch a discontinued candy bar [44]. More recently, using the slogan, "Power to the People," Rock Art Brewery [47] used social media to rally consumer support for its product, Vermonster Beer. This occurred after Hansen Beverage Company, maker of Monster energy drinks, ordered Rock Art to stop using the Vermonster name. For this research, we will operationally define the *use of social networking site* as utilization by an organization to achieve some goal or purpose consistent with its mission. Rock Art owner, Matt Nadeau, used Facebook, Twitter, and his company Web site to conduct a social media event to urge consumers to boycott Hansen Beverage. After only 21 days, Nadeau claimed victory after receiving national media attention for using "the power of social net-working" [47] to call attention to his fight with Hansen Beverage. In the Vermonster case, social media were characterized as "tool[s] … that we have as Americans to fight against big power" [8].

Figure 1 characterizes the shift in power from organizations to consumers [40, 43, 45, 57] as a seesaw relationship in which social media act as the pivot component or fulcrum of a simple lever. In physics, a fulcrum serves to transmit and modify a force or motion. To depict the heavier weight of consumers, that box is bearing more of the weight in the seesaw. Rezabakhsh et al. [45] describe power as a relational concept such that one side having more power implies the other side has less.

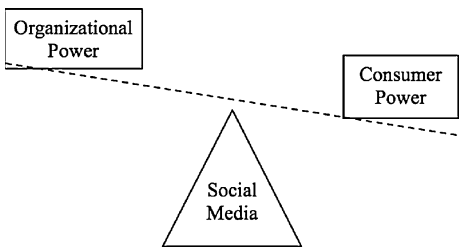

Fig. 1 Consumers gain expert power and sanction power by using social media

Given the adoption of social media by individual users and the ability to collect and share information and thus gain expert power and sanction power, the problem for organizations is how to manage social media to counterbalance the shift in power away from companies toward consumers. A recent call for papers and a completed special issue of the e-commerce research journal *Electronic Commerce Research and Applications* published in January–February 2010 suggest that there has been little research in the area of the adoption of social media or social networking sites by organizations. Following a call for research on the role of social networks in business [40], we will present an analysis of existing applications of social networking sites that leads to a survey of high-level managers at large global organizations and follow-up interviews to learn more about how organizations are leveraging social networking sites to generate business value. This article examines four research questions to which the exploratory study of firm-level adoption behavior from publicly-available data and interviews from high-level managerial informants from Fortune 500 companies can offer useful answers: (1) Why are organizations adopting social media? (2) Does adoption of social media differ by company or industry group? (3) Does adoption of social media differ by companies within industry group? (4) Does adoption of social media result in any kinds of recognizable organizational change?

2 Social media and organizations

Social media is a broad term that describes software tools that create user-generated content that can be shared [39]. *Social media technologies* include social network Web sites, blogs, and wikis, as well as online photo and video sharing sites, and RSS status updates sites.

2.1 Growth of social media

Nielsen [38] describes the growth in popularity of social networks as "the global consumer phenomenon." While Facebook now has 500 million users [41], proclaiming the 35-and-over age group to be the fastest growing demographic [16], Neilsen [38] reports that time spent on social network and blogging sites is growing at more than three times the rate of overall Internet growth.

There are a number of major players among the mainstream online social networks. This paper examines five

specific social network sites due to their global appeal and user numbers: Facebook, MySpace, LinkedIn, YouTube and Twitter. Nielsen [38] identifies Facebook, MySpace, and LinkedIn among the top five social networks in terms of global online reach. Its "top five" list also includes Orkut, the Google social network, and Classmates Online. However, those social networks are not included in this research because Orkut users are located primarily in India and Brazil (less than 3% are in the US), and Classmates is not a free service. Instead, we selected Facebook, MySpace, LinkedIn, YouTube and Twitter for this project because they serve different purposes and target different groups of global users and they are free sites. MySpace appeals to a mostly younger audience (the 24-and-under age group) that uses pseudonyms and character names to create highly personalized profile pages. Facebook appeals to users of all ages who use real names to create standardized profile pages. We selected LinkedIn because it is a career-oriented network for professionals who seek connections with other professionals; and YouTube because it is the world's most popular site for sharing and watching original video content. We selected Twitter, the micro-blogging status update site, for two reasons: its simplicity, since it requires nothing more than a cell phone, and its real-time broadcast platform, making it differ from other social networking sites. Our objective is to evaluate diverse social networking sites and these five sites offer such diversity.

2.1.1 MySpace

Created in 2004, MySpace attracted one million users in its first 60 days of operation. Currently it claims over 100 million active global users, 65% of whom come from the United States [37]. Neilsen [38] credits MySpace with achieving first-mover advantage when its rival Facebook first appeared on the scene. MySpace was acquired by Rupert Murdoch's News Corporation in 2005, an indication of the importance of social media to the traditional corporate media world.

2.1.2 Facebook

Also launched in 2004, Facebook is now the most well known of the social media Web sites. It describes itself as a "social utility that helps people communicate more efficiently with their friends, family and coworkers" [16]. In 5 years, Facebook saw epic growth, from one million active users in 2004 [16] to 500 million users in 2010 [41].

2.1.3 LinkedIn

LinkedIn is the world's largest professional business network with 55 million members representing 170 industries in 200 countries [31]. Founded in 2003 as a professional contact network, LinkedIn formed a strategic alliance relationship with CNBC in 2005. LinkedIn provides both personal (free) accounts as well as business user (fee-based) accounts that include email and search functionality as well as expanded profile views [31]. Once used primarily by individuals to boost professional prospects and small companies to market products and services, LinkedIn has evolved to provide group capabilities and company profiles that can be "followed" by interested users. The site includes sponsored links managed by marketing and advertising specialists that target job seekers and hiring managers alike.

2.1.4 YouTube

Founded in 2005, YouTube is the world's largest online video community "where people watch hundreds of millions of videos each day and upload hundreds of thousands of videos daily" [62]. From its simple beginning, YouTube has emerged as a highly effective business tool for presentations, promotions, and product placement. Companies use YouTube to share videos of important meetings, introduce staff, post solutions to common problems, and provide customer support and product tours. Anyone with a basic account can upload a video. Viewers browse broad subject categories or channels that group videos by content providers (comedians, directors, gurus, musicians, nonprofits, partners and sponsors), or use keyword search to look for videos about a particular person or subject. Groups are organized by subject or theme, and contests and games are sponsored by YouTube members. Viewer functionality includes the ability to leave comments, add friends to a contact list, and share videos with groups. YouTube was acquired by Google in 2006.

2.1.5 Twitter

Twitter is an Internet messaging service that works over multiple networks and devices [55]. Starting out as an experiment in 2006, Twitter boasts: "Every day, millions of people use Twitter to create, discover and share ideas with others" [56]. According to SiteAnalytics.com [53], Twitter grew four-fold in 2009, with more than twenty million unique visitors in December 2009, up from approximately five million unique visitors in January 2009. In July 2010, more than 300,000 people a day signed up for Twitter [41]. The Twitter micro-blogging platform allows users to publish short messages (fewer than 140 characters) as well as befriend and monitor each other's messages and updates. At its start, Twitter was a communication platform for individuals and their personal social networks. However, companies were quick to discover how to use it for

promotion and marketing purposes. For example, Dell has used Twitter to push out offers to over 600,000 followers for returned, reconditioned and slightly damaged computers from its outlet store [21]. Mobile applications let users share images, video and audio, and the recent redesign of its Web site that includes embedded video aims to make it easier for users to navigate the site [33].

According to the Pew Research Center, in 2009, 46% of online American adults 18 or older and 65% of teens 12–17 years old used a social networking site [30]. In 2009, Facebook was the most popular social networking site for American adults 18 years and over.

2.2 Organizations and social media

Reporting on the use of Web 2.0 technologies including online social networks in 2007, McKinsey [34] indicates a high level of adoption by organizations (reaching adoption by nearly two-thirds of its respondents), although one-third of the respondents characterize Web 2.0 as "experimental." Ease of implementation and an increased ability to communicate with customers are identified as drivers of the development of these technologies. Noting that many organizations have rushed into using virtual communities without knowing how to use them successfully, Spaulding [54] applies a value-chain perspective to identify four organizational activities likely to be effective in the virtual environment (product development, marketing, sales, and support) and four requirements for success in virtual communities (a critical mass of users, an attitude of contribution, business needs that are matched by community needs, and dedicated organizational resources).

Characterizing social computing as a use of IT that extends beyond traditional organizational boundaries to overlap with other stakeholders, Parameswaran and Whinston [40] suggests there are strategic options for organizations to consider if they wish to embark on the use of social computing systems and virtual communities. Strategic options include choosing between acquiring or developing a social network, using product-based or interest-based groups, and deciding whether to own or sponsor a social community [40].

Wang [59], p. 336 reports on how business-to-business organizations are using e-commerce communities to facilitate knowledge management among companies having common interests through "a learning process [that] occurs through socialization." This research offers insights on how organizational-level online communities function within and across industries.

As organizations invest in online social networks, there are concerns about network growth and value. In research on achieving critical mass in social networks, Westland [61] describes network value in terms of connectedness. He suggests that developing a social network to a state of self-sustainment and growth requires accomplishing two tasks: managing invitations to join the network and increasing the likelihood that invitations will be accepted. According to Wang [58], social networks can promote connectedness by providing features that facilitate interactions among users. At the same time, interaction among users gives rise to concerns regarding trust and information privacy.

Trust and privacy are critical issues for virtual communities and online social networking sites [22, 33]. Recent research by Lu et al. [32] highlights the role of trust (i.e., trust in other members, trust in the community site vendor) in building a successful online community. Other research by Hoadley et al. [22] emphasizes the importance of the perception of privacy in online social networks, citing a protest by Facebook users over a perceived loss of control over private information. Although there are concerns about trust and privacy, many online social networks allow users to express personal preferences and form links (create connections) based on preferences that reflect attitudes, likes, and dislikes. Research by Hogg [23] discusses how the structure of an online social network allows an organization to exploit preferences for target marketing, although privacy issues may arise from using information in this way.

In summary, current research in this area reflects the stage of adoption in which organizations are working to identify uses, consider strategic options, and evaluate success factors for virtual communities and online social networks [40, 54], given issues regarding network growth and the value of online social networks [58, 61] and user concerns for trust and privacy [22, 23, 32].

2.3 Theoretical background

Three theories may be appropriate for exploring the adoption and diffusion of social networking technologies by organizations: management fashion, which relates to "waves of interest in management techniques" [2], p. 256; bandwagon diffusion [49], which relates to an increased adoption of an innovation as a result of adoption by others; and adaptive structuration theory [14], an approach to studying organizational change that results from the use of information technologies.

According to Abrahamson [2], p. 1, the adoption of certain management techniques and technologies are influenced and often driven by a process called *management fashion*, defined as "transitory collective beliefs that certain management techniques are at the forefront of management progress." *Fashion-setters*—those individuals who help define and promote the current fashion—are management consultants, management gurus, mass-media publications, and the popular press.

Management fashion theory describes how organizations follow innovation models promoted by fashion-setters, and suggests that levels of diffusion and adoption of new management techniques are not fully explained by rational arguments. Instead, management fashion maintains that other factors including stakeholder expectations and organizational need to be perceived as progressive affect the adoption of an innovation. Abrahamson [1] describes how uncertainty about the efficiency of an innovation can lead organizations to adopt an inefficient innovation or reject an efficient one. He further discusses how *symbolic efficiency* (i.e., adopting an innovation in order to appear innovative) may provide benefits such as attracting customers.

Management fashion theory explains how interest in particular IS topics occur in "waves." For example, Baskerville and Meyers [5] applied management fashion theory to IS research and practice by exploring the relationship between academic literature and practitioner literature for four IS innovations. This research concludes that IS academic literature appears to be both fashion and obsolete; that is, academic literature follows fashion because it parallels trends in practitioner literature. However, the IS research literature may also seem obsolete because academic interest in the fashion continues after the fashion dies [5].

There is often a direct relationship between the degree of fashion setting promotion and the adoption of a specific management fashion: as fashion setting declines, so does the use of the management technique or practice [2]. The popularity of quality circles is one example of this relationship, as they rose with management fashion and declined and became extinct as promotion declined [2]. Business process reengineering is another example of a management innovation that declined as promotion declined. On the other hand, management fashion frequently results in the diffusion and adoption of innovations that persist beyond the fashion stage and become institutionalized.

In research on the organizational consequences of IT fashion, Wang [60] links management fashion theory to information technology fashion that describes the search for and adoption of "the next big thing" in IT that promises improved performance or a competitive advantage. In this study, the author identifies eight information technology innovations and their fashion periods, and tracks those innovations within large corporations. Wang's [60] study demonstrates the significance of IT fashion by examining the effects in terms of organizational reputation and performance.

Rosenkopf and Abrahamson [49] describe a form of adoption called *bandwagon diffusion* in which information about the adoption of an innovation creates increased bandwagon pressure. This in turn creates greater adoption of the innovation. A bandwagon is a popular trend that attracts growing support. Social bandwagon pressures are influenced both by greater numbers of adopters and the reputation of adopters such that non-adopters may appear to be different or abnormal if they fail to adopt the innovation. Abrahamson and Rosenkopf [3] characterize bandwagon adoption in terms of institutional bandwagon pressure and competitive bandwagon pressure. Institutional bandwagon pressure occurs when the decision to adopt an innovation is driven by the fact that many other organizations have adopted the innovation, and non-adopters fear looking abnormal by comparison and therefore less legitimate to their stakeholders. Competitive bandwagon pressure occurs when the decision to adopt an innovation is driven by the fear of lost competitive advantage; additional pressure to adopt comes from the recognition of the risk associated with the failure to adopt an innovation that is successful.

Organizational reputation may affect the diffusion of an innovation through a trickle-up or trickle-down process [40]. Trickle-down diffusion occurs when innovation adoption by high-reputation individuals gives rise to adoption by low-reputation users. Trends in social computing reflect a shift in structure from top-down to bottom-up, and the adoption of social media by organizations is comparable to trickle-up adoption [49] in which adoption by low-reputation users triggers adoption by organizations likely to have name brand recognition or reputation.

Parameswaran and Whinston [40] were first to note a possible bandwagon effect in the organizational use of social media and social computing technologies. Evidence of management fashion promotion and bandwagon diffusion of social media is seen in the present deluge of advice on how to use social media to reach out to customers. As management fashion setters compete in a race to define which management techniques lead rational management progress [2], there is an increase in the number of social media marketing firms and the self-promotion activities of social media experts (e.g. authors, publishers, seminar organizers). A Google search for "social networking for business" that returns 72,800,000 results [19] illustrates the current competitive environment for "expert advice" on how to use social media for marketing, business, non-profits, etc. A similar search on Amazon returns hundreds of titles, including *The Social Media Bible: Tactics, Tools, and Strategies for Business Success*, and *Twitter Power: How to Dominate Your Market One Tweet at a Time* [4]. While management fashion and bandwagon theory inform our understanding of the wide-spread adoption of social networking sites by organizations, many of which do not know how to use them [38], these theories do not provide insight into the continued use of an innovation and how the use of that technology may result in

organizational change [3, 49]. In that case, adaptive structuration theory is more instructive for understanding the process by which organizations are adapting emerging social media tools as part of an organizational strategy which may be described as *technology-triggered organizational change* [14], p. 128.

Adaptive structuration theory (AST) suggests that social structures and interaction with a new technology create a technology-in-use that may be similar to or different from the way the technology was originally conceptualized by either the designer or the user [14]. It emphasizes the social aspect of advanced information technology such that the role and utility of the technology may emerge and evolve as groups use the technology. According to the theory, the *structures* (rules and functionalities) of advanced ITs may vary across *contexts* depending on the given work task and the organizational environment, and new structures emerge as a result of *interpersonal interaction with the technology* [14]. Adaptive structuration informs how group interaction in the use of advanced technology (social media) is a change process wherein variations in structural features of the technology result in variations in forms of social interaction and new sources of social structure.

Previous studies have used adaptive structuration theory to explore group support systems [20] and explain why some enterprise resource planning projects are unsuccessful [18]. Group support systems (GSS) combine communication and computer technologies to support meetings and group activities that may include decision-making, and the theory provides variables that are useful to describe GSS processes. In a GSS context, *structure* describes the group's style of interaction as well as features of the technology [14]. *Appropriation*—a key adaptive structuration concept, describes the ways in which structural features of a GSS are used in interaction, either *faithfully* as intended by the system designer, or *unfaithfully* in ways unintended by the system designer. Gopal et al. [20], p. 65 conclude that adaptive structuration theory aids in understanding "the complexities of interaction between technology, groups, and tasks" that result in variations in how GSS are used. In a different context, Furomo and Melcher [18] use adaptive structuration theory to analyze an enterprise resource planning implementation. In this study, changes in *task structure* (more difficult tasks requiring interaction across departments) are linked to problems rooted in *social structure* (user roles) such that the user roles that facilitated the previous system were not reinforced for the new system. This study highlights the importance of managing the process by which structures (rules and functionalities) are created so that appropriate structures are in place to support a new system.

In this study, we extend adaptive structuration theory to a new context: the adoption of new IT that span traditional organizational boundaries, and consider how this theory may be used to explain why social networking sites are successful in an environment that lacks formal organizational structure. By its nature, social networking technology provides a continuous feedback loop that results in new sources of structure (new tasks, new styles of interacting) that support new decision processes and outcomes in a sophisticated atmosphere with few, if any restrictions. We present a taxonomy for analyzing social network activities by organizations that characterizes their use as passive or active, proactive or reactive, tactical or strategic, to provide a better understanding of how this technology can be used. Additionally, we present a conceptual model to illustrate how the adoption of social networking technology affects both organizational power and consumer power, thereby advancing theoretical knowledge on the adoption of social networking technology.

3 A three-phase exploratory study

This exploratory study was carried out in three phases. In Phase One, we conducted content analysis of five popular social networking sites to explore both the level of adoption (in terms of the number of users) as well as the numerous ways in which social networking sites are being used by 72 large, global organizations. We then used the results of the content analysis to develop a survey in Phase Two that we administered to social media and communication managers of the same group of firms. We also conducted individual interviews in Phase Three with a smaller group of respondents at similar professional levels in a representative group of organizations whose identities we agreed to hold anonymous. The purpose of the interviews was to discover additional information about the uses of social networking innovations in the corporate setting.

Given the exploratory nature of this study and the lack of empirical research in this area, Robey [46] and Kaplan and Duchon [26] suggest a qualitative, interpretive method is justified. Additionally, numerous authors including Robey [46], Mingers [36], Eisenhardt [15] and Kaplan and Duchon [26] suggest a multi-stage multi-method research design using qualitative and quantitative methods can provide a richer understanding of information systems. Additionally, Landry and Banville [29], p. 78 claim "no single method can capture all the richness and complexity of a phenomenon." The design of our study follows Eisenhardt [15] who suggests that case studies typically combine data collection methods that include qualitative data that provides frequency counts, quantitative data from questionnaires, and qualitative data from interviews. The content analysis conducted in Phase One of the study combined with the survey of high-level managers

conducted in Phase Two attempt to answer our second and third research questions: Does adoption of social media differ by company or industry group? Does adoption of social media differ by companies within industry group? The survey of high-level managers conducted in Phase Two of the study combined with the follow-up interviews conducted in Phase Three attempt to answer the first and fourth research questions: Why are organizations adopting social media? Does adoption of social media result in any kinds of recognizable organizational change?

3.1 Phase one: Web site content analysis

In the first phase of this project, we gathered data from multiple Web sites to examine the adoption of social networking technology among the world's most highly valued organizations. The sample consisted of 72 of the top 100 "Best Global Brands" according to Interbrand [25]. A subset of the top 100 companies was selected to provide an overview of a range of industries. Based on Nielsen [38], Web site content analysis targeted specific emerging social networking media (Facebook, MySpace, LinkedIn, Twitter, YouTube) to determine how organizations are using the media. Content analysis is widely used in a variety of research disciplines [35] to explore a range of communication formats including newspaper and print media [48, 51], television [17] and online sources [27, 35, 42, 52]. Despite unique challenges of conducting content analysis of Web sites, McMillan [35] suggests it is an appropriate method to explore early stages of an emerging medium or use of a medium. Content analysis has been used in previous research to study the extent of promotional activities on the Web sites of Fortune 100 companies [42], the manner and style of communication on anti-branding (negative attention) Web sites [28], and the extent of visible assurance services (as symbols of trusted third parties) on Web sites of Fortune 1000 companies in B2C e-commerce [27].

The Web site data in this study represent a snap-shot of usage, from content analyses conducted from July 2009 to May 2010. Each company's corporate Web site was reviewed for inclusion of links to social networking sites, and each of the five social networking sites (listed above) were searched for pages implemented and managed by each organization. For this study, only those sites that were launched and maintained by the organization were reviewed; fan sites were not included in the analysis.

The data from this review are observations in the form of "first impression" comments to describe the ways in which organizations were using the social networking sites [50]. One researcher analyzed sites for 72 organizations listed in Appendix 1. A second researcher analyzed sites for a randomly selected 20% subset of these sites as a cross-check to ensure consistency of review. Both researchers recorded first impression phrases that were then evaluated manually to identify patterns of consistency and subsequently organized into eight broad categories. Employing qualitative content analysis procedures, descriptive codes were developed to characterize and represent the content of the social networking Web sites [12, 50]. The content analysis procedures used in this study are similar to those used in previous research in which coding schemes or content themes were developed through an iterative review process [17, 28, 35, 42] and cross-checking or cross-coding was used to evaluate intercoder reliability [35, 52]. Following Schultz [52], in this study the overall agreement between coders was calculated to be 93% using a simplified calculation for percentage agreement between coders called *Holsti's reliability* [24]. The sample observations and derived list of purposes are provided in Appendix 1.

3.1.1 Social media use

Recall that we defined the *use of social networking sites* as putting a social networking site into service or employing a social networking site for a particular purpose. As shown in Fig. 2, 99% of the companies in the study are using LinkedIn, 97% are using Facebook, and 71% are using YouTube to communicate with customers or potential customers. Also 65% of the companies are using Twitter; 58% are using MySpace. These results reflect the broad level of adoption of social networking sites by large global companies.

As illustrated below in Fig. 3, our results show that 72% of the companies in the study are using four or five of the social networking sites evaluated here.

More specifically, 36% are using five social networking sites while 36% are using four social networking sites. These results reflect a relatively high level of adoption of social networking sites by large global companies. This finding is supported by research that concludes that there is a relationship between fashion setting promotion and the adoption of a management fashion [2]. Additionally, this

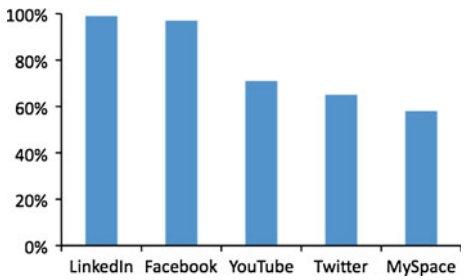

Fig. 2 Adoption of specific social networking sites by large global companies

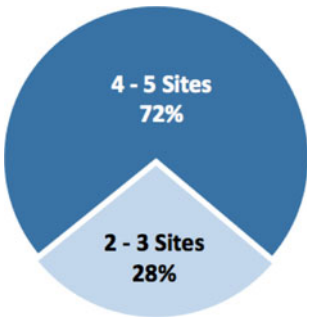

Fig. 3 Adoption of multiple social networking sites by large global companies

finding may reflect a tenet of management fashion theory that says factors, including stakeholder expectations and an organization's need to be perceived as progressive, affect the adoption of an innovation.

Additionally, the results show that the adoption of social networking sites varies by industry. Appendix 2 indicates that all five social networking sites evaluated in this study are being used by 57% of companies in the computer and information technology group. This reflects an even higher level of adoption of social networking sites by this industry group. As a comparison, adoption of all five social networking sites is only 10% in the financial services group and only 23% in the food, beverage and tobacco industry group. The adoption of social networking sites by the financial services group and the food, beverage and tobacco group may be characterized as relatively low.

Appendix 3 presents results on how social media are being used by 72 top companies in ten industry groups. Eight uses of social media were noted. Additionally, the use of social media may be characterized as passive or active, proactive or reactive, and tactical or strategic. The results of content analysis indicate the following uses:

- *To defend the company against attacks.* This use of social media is generally reactive.
- *To build brand loyalty.* This use of social media is generally proactive and aimed at building repeat customers.
- *To promote a company, product or brand.* This use of social media is generally proactive and tactical. An example of this is general advertising that presents product features and benefits.
- *For product improvement or product development.* This use of social media is generally strategic, aimed at soliciting input or feedback from customers or potential customers on new products or products that are under development.
- *To build external communities of followers.* These actions are generally proactive and strategic, aimed at linking to a group of customers who both purchase products and services and are willing to share product and service experiences with others.
- *To build internal communities of followers.* These actions are generally proactive and strategic, aimed at networking employees or other allied groups.
- *To promote a social cause.* These actions are generally proactive and strategic and reflect a company's interest in issues of concern to our society.
- *To educate customers on specific topics or technologies.* These actions are generally proactive and driven by company strategic decisions to facilitate new products and directions for the organization.

Each of the five social networking sites reviewed as part of this study has different capabilities, and global companies are using each in different ways. Twitter has the capability for posting short time-sequenced transient messages whereas Facebook has the capability to permanently hold a broad variety of information and various media and link people together. Companies are using Facebook primarily in an active way, to promote products, build external communities and build brand loyalty. On the other hand, most companies are using LinkedIn in a passive way, similar to the way in which an informational Web site is used—posting relatively static information to be viewed by interested parties with little ongoing input or dialogue by the company (similar to an online static directory listing). All but one of the companies listed in Appendix 2 maintain a presence on LinkedIn, providing basic company information such as location, number of employees, revenues, etc. A few of the companies are using LinkedIn for posting jobs, which represents an active use of social media.

Many of the companies reviewed in this study are using MySpace in a passive way to post advertisements, videos and other promotional materials as well as to serve as a portal for linking to company related Web sites through the use of sponsored links. A small number of companies, including BMW, Mercedes and Avon, are using MySpace to build external communities of fans and promote brand loyalty. Companies are using YouTube primarily to post video commercials, although several of the companies reviewed are using it to build external communities by setting up portals and libraries, and offering free music downloads. Many companies are getting indirect exposure on YouTube as other interested parties such as news services, retailers and independent bloggers are posting videos about the company. Companies use Twitter in an active promotional way to provide useful information such as news, product and special offer information, and links to other sites that offer more detailed company and product information.

As shown in Appendix 2, the use of social media varies within industry groups such that some companies present a

strategic approach to the use of social media, whereas other companies present a tactical or even reactionary approach. As an example, BMW in the automotive group is taking an integrated, strategic approach to the use of social media. In our review of the social network sites in this study, we noted that BMW presents a consistent message and approach across all social media, with a strong focus on building strong external networks of fans (customers or potential customers). The company does this through a variety of methods such as sponsorship of events, music downloads, previews of new products, and active engagement with fans. Other companies in the automotive group such as Mercedes Benz, Toyota, and Honda have similar threads of integration and consistency across the social networking sites reviewed, as do IBM and Microsoft in the computer and information technology group and Visa in the financial services group.

In contrast to a strategic use of social media, companies such as Coca-Cola, PepsiCo, L'Oreal, Bank of America and JPMorgan present a tactical, less integrated approach in their use of social networking sites. For example, Bank of America has posted commercials on Facebook and MySpace, providing little or no interaction with its fans. In a similar way, as shown in Appendix 2, the Coke and Pepsi brands use social media as another way to advertise their products. Consequently, they have posted many of their most popular ads on YouTube and MySpace, but have done little to establish two-way dialogue with fans or present a consistent message across the universe of social networks.

The Web content analysis results indicate that all of the companies in all industry groups (100%) surveyed for this study are using various social networking sites to promote their company and their products. Overall, 90% of them are using social network sites to build external communities, and 68% are using social networking sites to attempt to build brand loyalty. Among all of the companies, 18% are using social networking sites to build internal communities, 31% to educate customers, and 7% to defend their organization against attacks. Only five of the 72 companies reviewed are using social networking sites to defend their organizations, even though many companies are being attacked to varying degrees on the social networking sites that were reviewed. (See Fig. 4).

The data suggest a tentative conclusion that companies are primarily focusing on promotion and traditional advertising, and building external communities of fans who use word-of-mouth to spread the benefits of a specific brand or product to their friends. This use of social media is closely related to building brand loyalty, which is generally a proactive approach to customer engagement that aims to build repeat customers. Additionally, both promotion and advertising and building external communities of followers

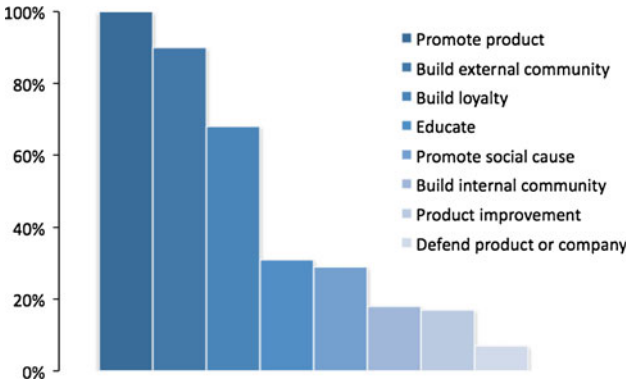

Fig. 4 How organizations use social networking sites

reflect a proactive approach by organizations to using social networking sites.

This framework of usage illustrates characteristics of social media described by adaptive structuration theory as capabilities that can be implemented in many different ways [14]. Bandwagon effects imply adoption of social media that initially lacks differentiation based on similar formats and similar usage of the media [49]; however the slight variation of usage described here demonstrates differences in the adoption and use of technology described by adaptive structuration theory [14].

3.2 Phase two: survey of high-level managers

In Phase Two of this project, we developed a survey instrument based on the derived list of purposes generated in Phase One of this study and measurement items synthesized from previous research on factors affecting Internet technology adoption [13]. An extensive search of corporate and social networking web sites resulted in valid names and email addresses for 54 top-level social media, marketing, or corporate communication managers employed by the 72 companies surveyed in Phase One. These managers were invited by email to complete the survey and provide input regarding the use of social networking sites by their organizations. The results are reported here, although the small number of participants limits analysis to descriptive statistics.

3.2.1 Survey results

Eight managers employed by the large global companies listed in Appendix 2 provided responses to survey questions listed in Appendix 4. The respondents were mostly senior-level managers (four respondents) responsible for corporate communications (four respondents). They represent four industry groups: computer and information technology; consumer electronics; apparel and fashion; and food, beverage and tobacco. Additionally, the respondent

managers represent companies that range in size based on revenue from less than US$5 billion up to US$100–149 billion, and number of employees from 5,001 to 10,000 up to more than 300,000.

The number of years using social networking sites varied across our sample from less than 1 year to greater than 6 years. One manager reported his company has used social networking sites for more than 6 years; three of the managers reported using social networking sites for two to 4 years; three reported using social networking sites for 1–2 years, and one reported usage of less than 1 year.

Regarding how the company uses social networking sites, all eight respondent managers agreed they use social networking sites to promote a product, service or brand. Seven out of eight indicated they use social networking sites to build external communities of followers and educate customers, while six reported they use social networking sites to provide customer service and get input to product and service improvements, development or design. Five reported they use social networking sites to provide technical support and build internal communities of employee; three managers reported they use social networking sites to promote a social cause.

Regarding why companies use social networking sites, all eight managers said they use these sites because their customers, competitors and suppliers are using them. Additionally, all eight of the managers said they use social networking sites to observe and collect information and to connect with the new generation of social media users. Seven reported they use social networking sites because they are cost effective. Seven reported they use social networking sites to provide content to communities. Six reported they use social networking sites to host or sponsor communities, and participate as members of online communities. Five reported they seed social networking communities with product advocates.

Regarding how their companies' use of social networking sites may have changed in the past 12 months, all eight of the managers reported they are using social networking sites in new ways and using additional social networking sites. Seven out of eight reported they have added staff dedicated to social networking sites and they have added budget or increased budget for social networking sites. Six reported they have hired a social media agency or a consultant. (See Fig. 5.) When asked about social media staff, three managers reported their company has ten or more staff members dedicated to social media.

Regarding the power of social media, the high-level managers we surveyed agreed that social networking sites give customers more influence over product and service advertising, design, promotion and support. Specifically, seven managers agreed that social media gives customers more influence over product design, six agreed that social media give customers more influence over product promotion, five agreed that social media gives customers more influence over advertising and product support. Further, the respondents agreed that their companies are likely to make changes in product and service advertising, promotion and support based on intelligence collected at social networking sites. (See Fig. 6.) Specifically, six managers said changes in product promotion would be made, five said changes in advertising and product support would be made, and four said changes in product design would be made based on intelligence collected at social networking sites. (See Fig. 7).

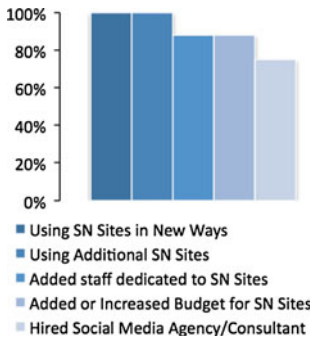

Fig. 5 Change in company use of social networking sites in the past 12 months

Although survey respondents represent four industry groups, the majority of high-level managers who provided information on their use of social networking sites represent computer and information technology organizations. The survey results reported here confirm the findings from Phase One (Web site content analysis) that show extensive use of social networking sites for product promotion and advertising and for developing external communities of followers. Additional usage of social networking sites

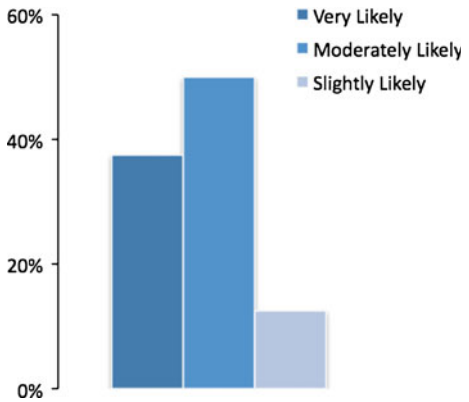

Fig. 6 Likely to change policies and practices based on social networking intelligence

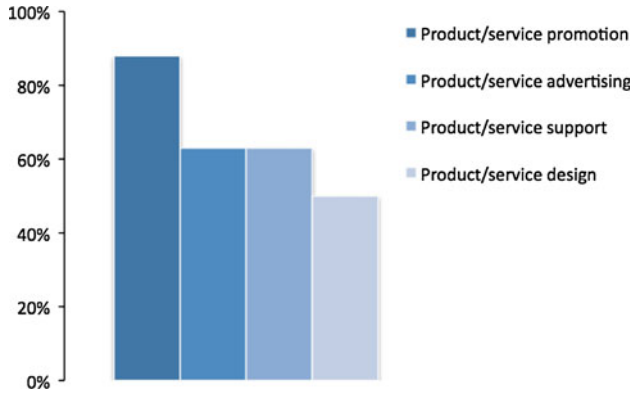

Fig. 7 Types of changes likely made based on social networking intelligence

identified by survey respondents but not identified explicitly in Phase One are customer service and technical support. All respondents reported using social networking sites because their stakeholders (customers, competitors, suppliers) are using them. All of them also reported using social networking sites both to observe and to connect with users.

It is useful to consider the organizational use of social networking sites from an adaptive structuration perspective because it explains the evolutionary "technology-in-use" changes that are described by our respondents. All eight managers reported using social networking sites in new ways and using additional social networking sites in the past 12 months; seven reported adding staff dedicated to social networking sites; six reported hiring social media agencies or consultants. The changes in use of social networking sites reported by these organizations may be described as "technology-triggered organizational change" [14]. Additionally, all respondents reported their organizations are likely (e.g., slightly, moderately, or very likely) to make changes in policies and practices based on intelligence collected from social networking sites. In this way, intelligence gathered on social networking sites serves as feedback to drive organizational change.

3.3 Follow-up interviews

Several managers agreed to follow-up interviews during which they provided additional comments on the organizational use of social networking sites. These managers were asked to comment on social media issues ranging from how and why they are using social networking sites, to whether their use may have changed in the past 12 months. Regarding how they are using social networking sites, several managers offered these comments, which we have anonymized based on prior agreement with our respondents in this research: *"To share company, product and issue-related news and information"* (Company A). *"To build brand affinity and create brand advocates"* (Company B). "*To provide customer service and/or technical support in a helpful responsive way as opposed to direct support, as we charge for that."* (Company C). Regarding why they are using social networking sites, one manager (Company D) offered that his company uses it *"to collect intelligence rather than information"* in that they do not retain personally identifiable information.

When asked how their company's use of social media has changed in the past 12 months, managers offered these comments: *"While some new hires may be correct, it's more about renewal of internal competencies and capabilities, looking at new ways to engage with online communities, meeting consumers and social networkers in their online worlds, and renewing our own use of these tools to make our work and customer interactions more effective and engaging"* (Company E). *"We created a core team dedicated to social media to enable more coordinated/strategic social media initiatives across the company"* (Company F).

Regarding consumer reliance on information from peers and the increasing use of social networks by consumers, one manager commented: *"Consumers will increasingly rely on networks of online friends (whom they have never met offline) for information and recommendations for certain types of purchase decisions"* (Company G). Finally, when asked about the perception of consumer trust in information from companies, one manager commented: *"Consumers want to trust the information from the company, but are skeptical"* (Company G).

Follow-up interviews confirm the findings of our survey of high-level social media, marketing, and communication managers, and provide additional insight regarding how and why organizations are using social media, and how their use of social networking sites is changing. Respondents confirm their organizations are using social media to share information, build brand loyalty, provide customer service and technical support, and collect intelligence. In other words, they use social networking sites to communicate with customers and observe their behavior. Additionally, they report efforts to create internal teams dedicated to social media in order to engage with online customers in their online world.

4 Theory extension

The growth in popularity of social networking sites, as evidenced by 500 million Facebook users [41] and a reported 95 million tweets a day [55], has resulted in a high level of adoption of social media by organizations. Two primary drivers of this technology are ease of implementation and an

increased ability to communicate with customers. However, other motivations for organization to implement social networking sites include increased *consumer informedness* [9] and increased consumer reliance on peer information deemed to be more credible than organizational information [6].

Figure 8 presents a conceptual model hypothesizing the adoption of social media to be a dynamic relationship in which an increased adoption of social media by individual users (which increases consumer power) results in the increased adoption of social media by organizations in order to counterbalance consumer power gained through the collective use of social media and take advantage of information. The use of social media technology facilitates consumer communication so that individual expert power is increased, and the aggregation of individual expert power results in sanction power.

Adaptive structuration theory is used in previous research to describe group support systems [20] and enterprise resource planning systems [18] that are developed by organizations to improve tasks and processes. Adaptive structuration theory considers how a system changes, how use of a system changes, and how an organization changes as a results of using the system. However, social media were not developed for business use; rather they were developed for individual users. Adaptive structuration helps us understand how a user-defined, user-driven technology has been adopted by organizations. Figure 8 illustrates social media as a dynamic system in which information technology facilitates communication. Originally a communication tool for individual users (Fig. 8, Boxes B and C), companies are now adopting this technology for organizational purposes (Fig. 8, Box A). As a result of increased use of social media by consumers, *new structures* (rules and functionality) of social media have emerged and the *utility* of the technology has changed to include organizational purposes. Additionally, organizational power (Fig. 8, Box A) is impacted by management fashion pressure [2], as well as bandwagon pressure [3], as more organizations adopt social media in an effort to maintain reputation and power.

As social media technology provides for increased consumer communication through user-generated content, the concept of "information is power" results in a shift of power away from organizations to consumers, who perceive they have more power as a result of aggregate opinion. This occurs through uses that we have identified in this study, and through other new uses that have not yet been unidentified. At the same time, as the organizational use of social media technology increases, social media technology provides organizations with increased communication capabilities to create a balance in the flow of power. The results of our study that are detailed below provide support for the model presented in Fig. 8 and answer the research questions posed in Sect. 1.

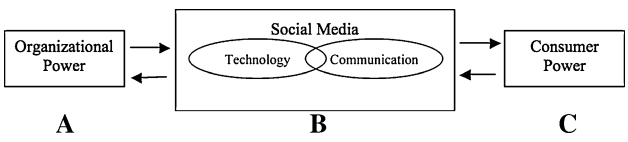

Fig. 8 Conceptual model: the impact of social media on organizational and consumer power

4.1 Why are companies adopting social media?

The widespread adoption of social media by Internet users and the transformative nature of social media have resulted in a shift of power or at least a re-balancing of power away from organizations to consumers. As a result, there is an increased use of social media by organizations: there is both passive and active use, proactive and reactive use, and tactical and strategic use of social media. Management fashion may account for the passive use of social media such that some companies use social media simply because it is popular and everyone else is doing it.

From our survey of high-level managers, the respondents indicated that they used social networking sites because consumer use of social networking sites give consumers more power over advertising, design, product promotion and support, and they are likely to change these components of their product or service offering based on data gathered from social networking sites. The survey results also confirmed that the high-level manager respondents are compelled to use social networking sites because their customers, competitors and suppliers are using them, suggesting that management fashion may be playing a role in their decision to use such sites. They also report they use social networking sites to gain access to the younger and more social networking-active generation of consumers who use social networking sites at an ever increasing rate. Reacting to data from the social networking sites was an additional reason that the high-level managers gave for using and monitoring social networking sites, suggesting that the consumer is perceived to have power over the companies through the social networking sites.

4.2 Does adoption of social media differ by company or industry group?

The results of this study show that some industry groups take a strategic approach to the use of social media, whereas other industry groups take a tactical approach to using social media. Additionally, some companies are

using social media in a passive way (by posting ads) while other companies are using the same social media in an active way (to engage customers, build brand loyalty, and build external communities).

4.3 Does adoption of social media differ by organizations within industry groups?

The results of this study show that use of social media differs across organizations within an industry group. For example, Visa is taking a strategic approach to using social media, while Bank of America is taking a tactical approach to using social media.

4.4 Does adoption of social media result in any kinds of recognizable organizational change?

As the use of social media increases and evolves, changes are being made in the media itself. For example, Twitter recently added both search capability by subject as well as the ability to search categories by subject and people. Facebook has added additional structure so that pages can contain more varied types of information and searches can be refined, and LinkedIn has added the capability to search by company as well as by industry. Additionally, ownership of social media is shifting from entrepreneurs to corporations as exemplified by MySpace and YouTube.

This research notes that one use of social media by consumers is the exchange of experiences, opinions, and information (positive and negative) about various products, services, and companies by consumers. Until the advent of the Internet and social media, most organizational promotion activity had been one-way, passive communication (from the company to the consumer), with little individual consumer feedback, limited opportunity for consumer-to-consumer communication, and limited opportunity for consumer group action to influence a company to change objectionable actions. One preliminary finding of this study provides evidence to suggest that the traditional one-way individual consumer model of brand communication is changing as a result of social media. The combination of technology and communication provides consumers with the means not only to acquire and exchange information, thereby acquiring expert power, but also to aggregate common views and influence organizational actions and reactions thus acquiring and exerting sanction power.

When our high-level managers were asked about adoption of social networking sites and changes both in their organizations and the use of such sites, they responded that within the past 12 months they began using social networking sites in new ways; began using additional social networking sites; and added staff and budget for the explicit purpose of supporting organizational social networking sites. These responses suggest that the adoption of social networking sites has changed both the social networking technology through new usage of previously adopted social networking sites as well as organization structure by the addition of social networking staff. Moreover, the different patterns of appropriation that have been observed support the tenets of adaptive structuration theory regarding decisions that groups make regarding the use of structures that are provided by the technology.

Figure 9 presents a model illustrating the uses of social media that were identified in Phase One of this study. Recall that Web site content analysis identified eight uses of social networking sites: to defend the company against attacks; to promote the company, brand, or product; to build brand loyalty; for product improvement or product development; to build external communities of followers; to build internal communities of followers; to promote a social cause; and to educate customers on specific topics or technologies. Each of these uses may be classified as passive or active, proactive or reactive, and tactical or strategic.

Management fashion [1] and bandwagon diffusion [49] explain how organizations have adopted social networking sites in passive, reactive, or tactical roles. As more customers adopt social media and as organizations learn of other organizations' adoption of social media technology, there is additional pressure for adoption accompanied by uncertainty of how to use the technology [34]. On the other hand, adaptive structuration theory [14] explains how organizations have adopted and adapted a consumer-driven technology for active, proactive and strategic roles. Companies are adding tasks and making changes to their organizational structure to take advantage of the information available in social networking systems and to protect themselves against loss of power.

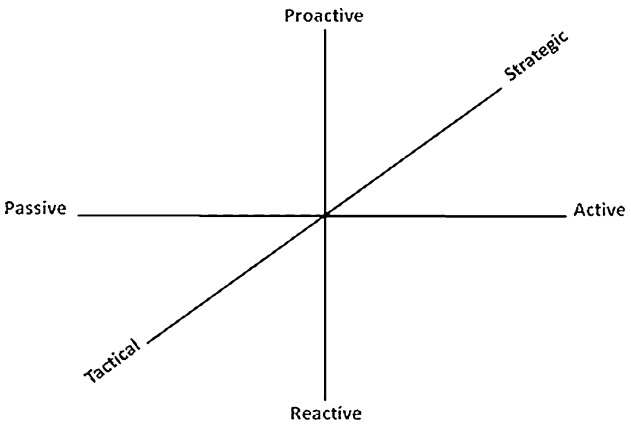

Fig. 9 Classifications of Uses of Social Networking Sites

This classification model is useful for analyzing and understanding the adoption of social networking sites by individual organizations and by industry groups. For example, the results of this study show that the use of social media varies within industry groups such that some companies present a strategic approach whereas other companies present a tactical approach to the use of social networking sites. This classification model can be used to contrast specific uses of social media, such as promoting a company or brand versus defending a company or brand. It can also be used to contrast how specific social media sites, including Facebook and Twitter, are used by organizations for different purposes.

5 Conclusion

Adaptive structuration theory has been used to study group support systems and enterprise systems (especially internal organizational systems) while social networking systems are external systems that span the domain of external stakeholders. We used adaptive structuration theory to interpret the results of this exploratory study on the adoption and use of social networking sites by large organizations. We suggest that it is the low level of restrictiveness and the low level of sophistication of social media systems (especially the structure of advanced ITs), in combination with the open environment (the other source of structure) that provide the capability for new social media structures to emerge. The open environment empowers users to innovate in new ways. Compared to traditional group decision support systems, social networking media provide "unstructured" structure with ad hoc group decision processes, impromptu or provisional leadership, and information sharing efficiency that represent "new forms of group behavior and cooperation" [10]. The use of social media in general and social networking sites in particular is a process of discovery that results in new forms of social structure, and new and different ways of doing business.

Given the predictive ability of adaptive structuration theory, we expected to identify both trends across industries and organizational change that result from the adoption of social media. Preliminary findings show some companies to be more focused and organized across a number of social media suggesting an underlying organizational strategy, while others show a more reactive, less consistent and less integrated use. Some companies see social media as a strategic tool, whereas others are jumping on the bandwagon as suggested by management fashion theory. We suggest that the innovative appropriations of social media by the companies surveyed in this study provide evidence of both the stage of adoption as well as the current view of social media. Additionally, the existence of executive-level and full-time social media staff provides evidence of organizational change that has occurred as a result of using social media.

This study extends adaptive structuration theory to a new context: the adoption of new ITs that span traditional organizational boundaries. Additionally, this research provides a contribution to theory by offering a classification model that is useful for analyzing and understanding the adoption of social networking sites among organizations by considering their use as active or passive, proactive or reactive, and tactical or strategic. Future research could use this classification model to analyze differences in the adoption of social media by business-to-business versus business-to-consumer organizations as well as differences in adoption by small organizations versus large organizations.

This study is one of the first to address the strategic adoption of social media by organizations. Consequently, the study has a number of limitations. Social media are being adopted by both large and small companies, and one limitation of this study is that we surveyed only very large organizations, specifically 72 top global companies as identified by Interbrand [25]. Additionally, Web site content analysis was conducted primarily by one researcher with a cross-check provided by another researcher. The purpose of this analysis was to record first impression phrases that were evaluated to identify patterns and create broad categories that characterize and represent the use of the social networking Web sites. The small sample of survey respondents is another limitation of this research that may limit generalizability of the results. However, given the exploratory nature of this research, the findings offer insight into how and why top global companies are adopting social media, and how social media and organizations may be changing as a result of such adoption.

Acknowledgments The authors thank the special editors, Rob Kauffman and Angsana Techatassanasoontorn, and the four anonymous reviewers who provided many constructive comments and suggestions.

Appendix 1

See Table 1.

Table 1 Observations of usage of social networking sites and derived purpose

Observations	Purpose
Posts video defending against fake ads	Defending brand
Tweets defending brand	
Posts comments defending brand	
Has community group listing on corporate Web site	Build brand loyalty
Has company sponsored social media site	
Social networking site provides sponsored links for product sellers	
Contest for best company video, etc.	
Uses banner ads on social networking sites	Promote product or brand
Has company sponsored social networking site	
Speeches posted, links to presentations	
Links to online store	
Product updates	
Product discussions	
Educate on use of products	
Sponsored links for product promotion	
Posts top news stories about company	
Gift card giveaways	
Offer coupons	
Poll to vote on favorite product	
Forums used	Product improvement
Solicits input for new products	
Solicits input for product improvement	
Corporate Web site has links to Facebook, Twitter, etc.	Build external community
Has Facebook page	
Uses forums	
Social networking site has company sponsored link	
Forum to ask questions and get answers from corporate staff	
Stated strategy, "build external community"	
Has internal groups for employees, suppliers	Build internal community
Links to charities	Promote social cause
Page for donations	
Promotes special events such as Earth Day	
Promotes recycling	
Publicizes how and where company donates money	
Supports center for the arts	
On use of products	Educate
On imitation products	
On general topics such as energy, small business ownership	
Videos on product technology	
Tweets on childhood obesity	
Tutorials on product use	
Promotion on healthy eating	
Provide virtual community to learn how to manage money	

Appendix 2

See Table 2.

Table 2 Social networking sites used by company and industry group

Company	IND	Social media in use				
		FB	MS	T	L	Y
Accenture	Computer and information technology	✔	✔	✔	✔	✔
Adobe		✔	✔	✔	✔	✔
Apple		✔	✔	✔	✔	✔
Cisco		✔		✔	✔	✔
Dell		✔		✔	✔	✔
Google		✔	✔	✔	✔	✔
HP		✔	✔		✔	✔
IBM		✔	✔	✔	✔	✔
Intel		✔	✔	✔	✔	✔
Microsoft		✔	✔	✔	✔	✔
Oracle		✔			✔	✔
SAP		✔	✔		✔	✔
Sony		✔	✔	✔	✔	✔
Xerox		✔		✔	✔	✔
Group percentage		100%	71%	79%	100%	93%
BMW	Automotive	✔	✔	✔	✔	✔
Ford		✔		✔	✔	✔
Honda		✔	✔	✔	✔	✔
Mercedes Benz		✔	✔	✔	✔	✔
Toyota		✔	✔		✔	✔
Volkswagen		✔		✔	✔	✔
Group percentage		100%	67%	83%	100%	100%
Budweiser	Food, beverage & tobacco	✔	✔		✔	✔
Coke		✔	✔		✔	✔
Danone		✔			✔	
Heinz		✔			✔	
Kellogg's		✔			✔	
KFC		✔	✔	✔	✔	✔
Marlboro			✔	✔	✔	✔
McDonalds		✔			✔	
Nestle		✔		✔	✔	✔
Pepsi		✔	✔	✔	✔	✔
Pizza Hut		✔	✔	✔	✔	✔
Subway		✔		✔	✔	✔
Wrigley		✔		✔	✔	✔
Group percentage		92%	46%	54%	100%	69%
Avon	Personal care	✔		✔	✔	
Colgate		✔	✔	✔	✔	✔
Gillette		✔	✔	✔	✔	✔
L'Oreal		✔	✔		✔	✔
Johnson & Johnson		✔			✔	✔
Lancome		✔	✔	✔	✔	✔
Nivea		✔	✔	✔	✔	✔

Table 2 continued

Company	IND	Social media in use				
		FB	MS	T	L	Y
Group percentage		100%	71%	71%	100%	86%
American Express	Financial services	✔	✔	✔	✔	✔
AXA					✔	✔
Bank of America		✔	✔		✔	✔
Citibank		✔			✔	
Goldman Sachs		✔	✔		✔	
HSBC		✔		✔	✔	✔
JP Morgan		✔	✔		✔	
Morgan Stanley		✔	✔		✔	
Visa		✔			✔	
Wells Fargo		✔	✔		✔	✔
Group percentage		90%	60%	20%	100%	50%
Canon	Consumer electronics	✔	✔		✔	
Nokia		✔	✔	✔	✔	✔
Royal Philips		✔		✔	✔	✔
Samsung		✔		✔	✔	✔
Siemens		✔		✔	✔	✔
Group percentage		100%	40%	80%	100%	80%
Chanel	Apparel & fashion	✔			✔	✔
Gucci		✔	✔	✔	✔	✔
H&M		✔	✔			✔
Louis Vuitton		✔		✔	✔	✔
Nike		✔	✔	✔	✔	✔
Puma		✔	✔	✔	✔	
Zara		✔			✔	
Group percentage		100%	57%	57%	86%	71%
Disney	Arts & entertainment	✔	✔	✔	✔	✔
MTV		✔	✔	✔	✔	✔
Nintendo		✔	✔	✔	✔	✔
Group percentage		100%	100%	100%	100%	100%
Amazon	Online retail	✔		✔	✔	
eBay		✔	✔	✔	✔	
Group percentage		100%	50%	100%	100%	0%
Facebook	Other	✔		✔	✔	✔
GE					✔	✔
Ikea		✔		✔	✔	✔
Thomson-Reuters		✔		✔	✔	✔
UPS		✔	✔	✔	✔	✔
Group percentage		80%	20%	80%	100%	100%
Overall percentage		97%	58%	65%	99%	71%

FB Facebook, *MS* MySpace, *T* Twitter, *L* LinkedIn, *Y* YouTube

Appendix 3

See Table 3.

Table 3 Use of social networking sites by company and industry group

Company	IND	Use of social media							
		D	BL	P	PI	BE	BI	SC	E
Accenture	Computer & information technology			✔		✔	✔		✔
Adobe			✔	✔		✔			✔
Apple			✔	✔		✔			✔
Cisco				✔		✔		✔	✔
Dell			✔	✔		✔		✔	✔
Google			✔	✔	✔	✔	✔	✔	✔
HP			✔	✔	✔	✔	✔	✔	✔
IBM		✔		✔			✔		
Intel			✔	✔	✔	✔	✔	✔	
Microsoft		✔	✔	✔	✔	✔			
Oracle				✔		✔			✔
SAP				✔		✔	✔		✔
Sony			✔	✔		✔		✔	✔
Xerox			✔	✔		✔		✔	
Group percentage		14%	64%	100%	29%	93%	43%	50%	71%
BMW	Automotive		✔	✔		✔		✔	✔
Ford			✔	✔		✔			
Honda			✔	✔	✔	✔		✔	✔
Mercedes Benz			✔	✔	✔	✔			
Toyota		✔	✔	✔	✔	✔	✔		
Volkswagen			✔	✔		✔			
Group percentage		17%	100%	100%	50%	100%	17%	33%	33%
Budweiser	Food, beverage & tobacco		✔	✔		✔			
Coke			✔	✔		✔			
Danone				✔		✔			
Heinz			✔	✔		✔			
Kellogg's			✔	✔		✔		✔	✔
KFC			✔	✔		✔		✔	
Marlboro				✔					
McDonalds			✔	✔		✔	✔	✔	
Nescafe			✔	✔		✔		✔	
Pepsi			✔	✔		✔		✔	
Pizza Hut			✔	✔	✔	✔	✔		
Subway			✔	✔		✔		✔	
Wrigley				✔		✔			
Group percentage		0%	77%	100%	8%	92%	15%	46%	8%
Avon	Personal care		✔	✔	✔	✔	✔	✔	
Colgate			✔	✔	✔	✔			
Gillette				✔					
L'Oreal				✔		✔			
Johnson & Johnson				✔		✔			✔
Lancome			✔	✔		✔			
Nivea			✔	✔		✔			

Table 3 continued

Company	IND	Use of social media							
		D	BL	P	PI	BE	BI	SC	E
Group percentage		0%	57%	100%	29%	86%	14%	14%	14%
American Express	Financial services	✔	✔	✔		✔			
AXA				✔					✔
Bank of America				✔					
Citibank				✔					
Goldman Sachs				✔		✔			
HSBC				✔		✔			
JP Morgan				✔					
Morgan Stanley				✔		✔			
Visa			✔	✔		✔			✔
Wells Fargo			✔	✔		✔			
Group percentage		10%	30%	100%	0%	60%	0%	0%	20%
Canon	Consumer electronics			✔		✔			
Nokia			✔	✔		✔		✔	✔
Philips Electronics			✔	✔		✔			
Samsung				✔		✔			
Siemens				✔		✔		✔	✔
Group percentage		0%	40%	100%	0%	100%	0%	40%	40%
Chanel	Apparel & fashion		✔	✔		✔			
Gucci			✔	✔	✔	✔	✔		✔
H&M				✔		✔			
Louis Vuitton			✔	✔		✔			✔
Nike			✔	✔		✔			
Puma			✔	✔		✔		✔	
Zara			✔	✔		✔			
Group percentage		0%	86%	100%	14%	100%	14%	14%	29%
Disney	Arts & entertainment		✔	✔		✔			
MTV			✔	✔		✔			
Nintendo		✔	✔	✔	✔	✔			
Group percentage		33%	100%	100%	33%	100%	0%	0%	0%
Amazon	Online retail		✔	✔		✔			
eBay			✔	✔		✔		✔	
Group percentage		0%	100%	100%	0%	100%	0%	50%	0%
Facebook	Other		✔	✔		✔		✔	✔
GE				✔		✔			
Ikea			✔	✔		✔			✔
Thomson Reuters			✔	✔		✔	✔		
UPS			✔	✔		✔	✔		
Group percentage		0%	80%	100%	0%	100%	40%	20%	40%
Overall percentage		7%	68%	100%	17%	90%	18%	29%	31%

D Defend brand or company against attacks, *BL* Build brand loyalty, *P* Promote product or brand, *PI* Product improvement, *BE* Build external community, *BI* Build internal community, *SC* Promote social cause, *E* Educate

Appendix 4: Adoption of social networking sites

1. Which industry sector best describes your company?
2. Total company revenue (sales) in fiscal 2009?
3. Total number of employees (company-wide) in 2009?
4. In your company's management structure, what is your management level?

5. What is your functional area of responsibility?
6. About how long has your company used social networking sites (e.g., Facebook, MySpace, YouTube, etc.) for marketing, advertising, or any other particular purpose?

   a. More than 6 years
   b. 5–6 years
   c. 3–4 years
   d. 1–2 years
   e. Less than 1 year
   f. Not currently using

7. Does your company have staff members dedicated to providing social media (SM) services or gathering information from and/or analyzing social networking sites? (For example, SM content developer, SM site analyst, SM technical support, SM manager.)

   a. 10 or more staff members
   b. 5–9 staff members
   c. 2–4 staff members
   d. 1 staff member
   e. We do not have staff dedicated only to social media/socian networking sites
   f. We retain consultants for this purpose

8. Which of the following social networking sites is your company using now or have used in the past? (Use Now; Used in Past, Not Using Now; Never Used; Not Sure)

   a. Facebook
   b. LinkedIn
   c. MySpace
   d. Twitter
   e. YouTube
   f. Flickr
   g. Bebo
   h. Buzznet
   i. PartnerUp
   j. Plaxo
   k. StumbleUpon
   l. Yammer

9. Are there other social networking sites that your company is using now? List below.
10. How does your company use social networking sites? (No, Yes, Not Sure)

    a. To provide customer service
    b. To provide technical support
    c. To promote a product/service or brand
    d. To get input to produce/service improvement, development, design
    e. To build external communities of interest
    f. To build internal communities of employees
    g. To educate customers on specific topics or technologies
    h. To promote a social cause
    i. Other (please specify)

11. WHY does your company use social networking sites? (No, Yes, Not Sure)

    a. Because it is cost effective
    b. Because our customers/competitors/suppliers are using social networking sites
    c. To observe and collect information
    d. To host or sponsor communities (create/manage Web sites and advertising)
    e. To provide content to communities (music, information, entertainment)
    f. To participate as members of online communities
    g. To seed communities with product advocates
    h. To connect with the new generation of social media users

12. Has your company's use of social networking sites changed in the past 12 months? (No, Yes, Not Sure)

    a. Using social networking sites in new ways
    b. Using additional social networking sites
    c. Added staff dedicated to social networking sites
    d. Added budget or increased budget for social networking sites
    e. Hired a social media agency or consultant
    f. Other

13. How likely is your company to re-evaluate and/or change a company policy or business practice based on consumer actions taken on social networking sites?

    a. Not at all likely
    b. Slightly likely
    c. Moderately likely
    d. Very likely
    e. Completely likely

These questions use a 5-point Likert-type scale from Strongly Disagree to Strongly Agree:

14. Social networking sites give customers MORE INFLUENCE over:

    a. Product/service advertising
    b. Product/service design
    c. Produce/service promotion
    d. Product/service pricing
    e. Product/service support

15. Our company is LIKELY TO MAKE CHANGES in the following based on information collected at social networking sites:

    a. Product/service advertising
    b. Product/service design
    c. Produce/service promotion
    d. Product/service pricing

e. Product/service support

16. The use of social networking sites can help increase revenues and reduce costs in:

a. Customer service
b. Product/service advertising
c. Product/service design
d. Produce/service promotion
e. Product/service support

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