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IMPACT OF SOCIAL MEDIA USAGE ON ORGANIZATIONS

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Abstract

Social media is a growing phenomenon and have the biggest impact on organizations' continual communication with customers and the public. It also plays increasingly important role as a marketing platform. Even though social media has been recognized as the most powerful medium in business practice, there is lack of understanding in terms of how social media benefits the organization. Therefore, this study using mixed method techniques such as website analysis, interviews and survey aims to investigate the various factors that influence the social media usage and its subsequent impact on organizations. Based on the qualitative findings and literature review, the TOE framework was identified as the appropriate model for this study.

Keywords: Social media, Social networking, Facebook, Social media impact

1. INTRODUCTION

The Internet has provided a new paradigm for communication and empowered millions of people to network socially beyond the confines of geographical proximity. Online social networking has moved from a niche phenomenon to mass adoption (Wang 2009). Social media includes various methods such as social networking, user-sponsored blogs, multimedia sites, company-sponsored websites, collaborative websites, podcasts, etc. From the business perspective for any business, effective networking is an essential component to success (Kelley 2010). Today's social media tools are bringing rapid change to organisational communication and public relations. These technologies have shifted the emphasis of internet services from being consumption-based towards becoming interactive and collaborative, creating new opportunities for interaction between organisations and publics (Henderson and Bowley 2010). Therefore considering the growing importance of social media as a strategic tool among organizations, this research aims to investigate the impact of social media usage on organizations.

Regardless of the existing hot debate on advantages and disadvantages of social media, investments in these technologies are growing high (Chivee et al. 2008). As many organizations are investing in these technologies, it is important to identify the factors that influence the successful usage of these technologies (Preece 2001, Hall and Graham 2004, Lin and Lee 2006). The primary issue with any strategic tool or technology is the degree that its usage benefits the user. Technologies in some cases have uncertain, little, or no impact on organizational performance (O'Sullivan 1998). Considering the new trend of social media, some researchers say corporate adoption of social media, while new, is already showing enormous benefits. Many process improvements may be found through efficient social networking programs and organizational connectivity (Chivee et al. 2008). But the impact of social media usage on organizational performance has not been empirically investigated. Therefore with the aim to fill up the above gaps, the current study investigates the factors that influence the organizational usage of social media and its subsequent impact on organizations. By using mixed method, this research aims to answer the following research questions:

R1: What is the most widely used social media tool among Malaysian organizations?

R2: What is the level of social media usage in Malaysian organizations?

R2: Why organizations use social media?

R3: What are the factors that influence social media usage?

R4: How social media usage benefits the organization?

2. LITERATURE REVIEW

Research on technology usage and adoption has a long research tradition in the area of information technology (e.g. Davis et al. 1989; Zmud, 1979, Senegal 2007). According to Molla and Licker (2005) and Tan et al. (2007), the literature on technology adoption by businesses suggests that most researches are based on the following frameworks such as the Diffusion of Innovation (DOI) (Rogers, 1995; Zhu and Kraemer, 2005), Technology Acceptance Model (TAM) (Davis, 1989), the Technology-Organisation-Environment Model (TOE) (Kuan and Chau, 2001; Tornatzky and Fleischer, 1990; Zhu and Kraemer, 2005), Institutional Theory (Chatterjee et al., 2002; Scott, 1995) and Resource-based Theory (Barney, 1991; Zhu and Kraemer, 2005).

These models have differences in term of their focus and are designed to examine different aspects of business technology adoption. Some models examine only the external environment of firms (Gibbs et al., 2003; Hempel and Kwong, 2001; Kshetri and Dholakia, 2002), while some focused on technological aspects (Claycomb et al., 2005; Tornatzky and Klein 1982; Bajaj and Nidumolu 1998; Igbaria et al., 1997). Many studies had been conducted to identify the various factors that influence the technology usage using the above mentioned models. For instance, Yi et al (2006) using the Technology acceptance model with the inclusion of individual difference variable analyzed the factors influencing information technology usage. Siritongthaworn et al. (2006) found that organization characteristic is the most important factor that influences the E-learning usage in universities. Furthermore, Bhattacharjee and Hikmet (2008), found two organizational support factors, namely infrastructure support and technical support plays a critical role in shaping user perceptions toward IT and their subsequent IT usage.

Previous studies have also integrated theories to study technology usage. Nielson (2002) using resource based view theory and innovation theory developed an integrated model to study the internet banking adoption and its impact on customer relationship performance. Nguyen (2007) used Technology acceptance model along with the inclusion of strategic orientation factors such as market orientation and learning orientation to study the internet usage by internationalizing firms in transition markets. Drawing upon the resource based view of the firm and the technology, organization and environment framework, Mishra et al. (2007) developed an integrative model that examined the antecedents and consequences of Internet use in organizations. By integrating the DeLone and McLean IS success model with Technology acceptance model and also with the inclusion of factors such as organizational and end user traits, Stone et al. (2007) developed a framework to study the information technology usage and its impact on individual and firm marketing performance.

For the current study, after identifying the factors through qualitative interviews followed by extensive review of literature, the Technology, organization and environment (TOE) framework was identified as the appropriate framework. The TOE framework was developed by Tornatzky and Fleischer (1990) to evaluate technology adoption. This model is consistent with the theory of innovation diffusion in organizations by Rogers (1995) in which he emphasized technological characteristics, and both the internal and external characteristics of the organization, as drivers for technology diffusion (Zhu et al. 2006). The TOE model is an integrative schema incorporating characteristics of the technology, contingent organizational factors, and elements from the macro-environment (Tornatzky and Fleischer 1990; Tornatzky and Klein 1982; Li et al. 2010). Several studies that used the TOE have incorporated such variables as perceived benefits, top management commitment/support, organizational IS, external pressure, IS vendor support, and financial resources availability (IFinedo, 2011).

The TOE model covers three aspects of firm's characteristics that influence the process of adopting, implementing and using technological innovations (DiPietro et al.1990; Robertson, 2005; Tornatzky and Fleischer, 1990). The technological context describes both the internal and external technologies relevant to the firm. This includes existing technologies inside the firm, as well as the pool of available technologies in the market. Organizational context is typically defined in terms of several descriptive measures: firm size and scope; the centralization, formalization, and complexity of its managerial structure; the quality of its human resource; and the amount of slack resources available internally. Environment context is the arena in which a firm conducts its business – its industry, customers, competitors, access to resources supplied by others, and dealings with government (Tornatzky & Fleischer, 1990). The TOE theory has been used by a large number of studies to investigate the adoption of, for example, Electronic Data Interchange (EDI) (Kuan and Chau, 2001), open systems (Chau and Tam, 1997), and e-business (Zhu and Kraemer, 2005). The main contribution of TOE is that it encourages the researcher to take the broader context into account in which innovation takes place (Bose & Luo, 2011)

For the present study, through qualitative interviews various factors were identified. For technological context, relative advantage and compatibility of social media were identified as important variables that influence social media usage. Relative advantage is the degree to which an innovation is perceived as better than its precursor (Rogers 1983). The positive perceptions of the benefits of social media greatly influence the usage of social media in organizations. Compatibility is the degree to which an innovation is perceived as consistent with the existing values, needs and past experiences of the potential adopter (Rogers 1983). If the technology is compatible with existing work practices then it will be more effectively used by the organizations. For organization context, Top management support is an important factor in the adoption of new technologies and has been found to be positively related to adoption (Grover, 1993), (Premkumar and Robert, 1999). Top management commitment/support refers to the involvement, enthusiasm, motivation and encouragement provided by management towards the acceptance of IS innovations. (Thong et al., 1996, Chatterjee et al.,2002; Al-Qirim, 2007; Ramdani et al.,2009). When top managers in any organization understand the relevance of computer technology, they tend to play a crucial role in influencing other organizational members to accept it; furthermore, they also commit resources to its adoption and usage (Thong et al., 1996; Premkumar and Roberts, 1999). Similarly, the entrepreneurial orientation of the firm was also identified as an important variable; as more innovative, risk taking and proactive firms are tend to adopt new technologies more quickly and use them actively (Elliot and Boshoff, 2005).

Institutional pressure refers to the pressures that emanate from the institutional environments that can induce firms to adopt shared norms and routines (DiMaggio and Powell,1983). They categorized institutional pressures into normative, mimetic, and coercive pressures. The agents that may exert pressures include a firm's key customers, suppliers, competitors and government.(Ke et. al. 2009). Several studies have taken an institutional approach to study internet technologies adoption and usage (Purvis et al. 2001, Chatterjee et al. 2002, Teo et al. 2003, Ke et al. 2009, Liu et al. 2010). Similarly in the context of social media, firms are likely to be induced to use social media due to the external pressures exerted from competitors, trading partners and customers.

Social media are used by business firms and governmental organizations as a communication tools. These entities actively make use of social media for advertising and marketing, communicating with customers, building relationship with customers, branding etc.,(Kim & Ko, 2011). In order to investigate the usage of social media in organizations we consider the informed and effective use of social media which is an important indication of technology success, which in turn have an impact on organizations (DeLone and McLean 2003). Social media impact refers to the actual benefits organizations receive from using social media. Previous studies have proved the positive impact of internet usage on organizations in various areas such as enhance CRM practices (O'Leary et al.2004), provide interactional and transactional benefits(Thao and Swierczek, 2007), improve export marketing performance (Lu and Julian, 2007), provide strategic benefits such as Cost reduction, revenue generation and managerial effectiveness (Teo and Choo, 2001), improves innovation (Anderson, 2001), Reduce marketing cost, improve customer relationships, improve company image and competitive position etc., (Molla and Heeks, 2007). Similarly through social media it is possible to perform integrated marketing activities with much less effort and cost than before. (Kim and Ko, 2011). Social media can have a dramatic impact on organizations in areas such as enhancing brand's reputation (Kim and Ko, 2010), improve value, relationship and brand equity (Kim and Ko, 2011), digital advertising and promotion, handle customer service issues, mine innovation ideas and building customer relations (Solis, 2010). For this study, through interviews it was found that the social media impact on organizations are indicated by various benefits such as cost reduction in terms of marketing, enhanced communication and customer service, improved customer relations and improved brand image. The remaining part of the paper discusses the research methodology used for this study.

3. RESEARCH METHODOLOGY

3.1 Research Design

This research uses mixed methods to study the organizational usage and the impact of social media on organizations. The reason for using mixed method design is that it allows for the presentation of larger spectrum of divergent views (Schulenburg, 2006) and also the mixed-method approach allows for stronger inferences based on the findings. The basic methodological principal of mixed-method research is that methods chosen ‘should be mixed in a way that has complementary strengths and non-overlapping weaknesses’ (Teddlie and Tashakkore, 2003, p.16). In our study the impact of social media on organizations were analyzed both qualitatively and quantitatively, thus this allows for stronger inferences when the results of both types of analyses that investigate the importance of various factors suggest similar findings.

The research uses sequential mixed design. Sequential mixed designs are designs in which at least two strands of the study occur chronologically. The conclusion based on the results of the first strand lead to the formulation of design components for the next strand. The final inferences are based on the results of both strands of the study. The second strand of the study is conducted either to confirm or disconfirm inferences from the first strand or to provide further explanation for its findings. (Tashakkori & Teddlie, 2003, p.715). Sequential mixed designs answer exploratory and confirmatory questions chronologically in a prespecified order. Therefore this study consists of three strands which include both qualitative and quantitative research methods. The flow of the research is as follows:

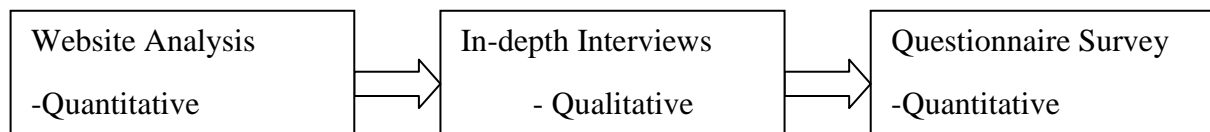


Figure 1. Sequential mixed design of the research

The first strand of the research is website/ social media page analysis, is where the organization’s website is browsed to find their social media presence and the main analysis took place in the social media page of the organization, where their presence, number of likes, followers and also the level of interaction were analyzed. The second strand of the research is the in-depth semi- structured interviews. This method was chosen due to various reasons, firstly organizational usage of social media is quite new and also there is lack of literature in the field of social media which calls for an exploratory research, which can be best achieved through qualitative methods. Secondly unlike any other internet based systems, the social media is more open and public; provide both positives and negatives, so factors that influence organizational usage of social media have to be investigated via in-depth discussions. Thirdly we are interested to identify how the usage benefits the organizations, as social media is still in its early stage, its impact measures can be identified only through in-depth discussion with the organization. Therefore the qualitative semi-structured interviews were chosen as part of the study. This method is commonest in qualitative work, where there is a desire to hear what informants have to say on the topics and areas identified by the researcher (Arksey and Knight, 1999, pg.7). The final strand of the research use quantitative method which is the questionnaire survey. Based on the factors identified from the qualitative interviews and after reviewing the relevant literature, the research framework for the study was identified and the hypotheses were formulated and tested.

The study uses purposive sampling, where the researcher selects certain units or cases “based on specific purpose rather than randomly” (Tashakkori and Teddlie, 2003, p.173). For the website analysis 860 public listed companies listed in the main market of Kuala Lumpur stock exchange was selected. Even though social media can be adopted by all size of organization, the continual usage will be more prominent in large organizations due to the resource available to them. For qualitative part, under the purposive sampling method, the intensity sampling technique was used to select the organizations that are using social media effectively. Intensity sampling involves selecting very informative cases that represent a phenomenon of interest intensively (Teddlie and Tashakkori, 2009, pg.175). Six companies that are using social media interactively were interviewed.

4. RESULTS

4.1 Website Analysis

As part of the research, website analysis was conducted on Malaysian public listed companies; the list of companies was received from Kuala Lumpur stock exchange. There are 860 companies that are listed in the Main Market which is the combination of first and second board. The analysis was conducted on these 860 company’s websites. Among the 860 websites, we were not able to use 43 companies websites due to the reasons such as link broken, website under construction etc., Among 817 companies, 347 companies have a face book page. These 347 companies are from various industries such as consumer products, construction, finance, plantation, trading/service, property, technology, industrial products, REITS and infrastructure projects.

The level of interaction on the companies face book site showed that 235 face book accounts just exist without any information or interaction, 36 companies had a very interactive face book page and finally 76 companies face book page showed one way communication, where the company used the face book account only for advertising their product and introducing new promotions to the customers. Among 817 companies, only 42 companies had their presence on Twitter site. Apart from face book and twitter, 81 companies had posted their corporate videos on Youtube, 10 companies had photos posted in Flickr, 34 companies had their own corporate blog and 70 companies had the RSS feed on their website. During the analysis, apart from these famous tools, we also looked for the presence of other social media sites and also whether they have their own social media site. It was found that 8 companies had their presence on other social media sites and 16 companies had developed their own social networking site or tools to communicate with the customers. From the website analysis, it was found that facebook is the most widely used social media tool among Malaysian public organizations.

4.2 Qualitative Analysis

In order to identify the factors that influence the social media usage and its impact on organizations, the qualitative method was used. Six organizations were selected from the 36 organization that are using social media effectively. Semi-structured face-face interviews were conducted. A general interview guide was used where the topics and issues are specified in advance, in outline form; the sequence and wording of questions were altered during the course of the interview. On average, interviews lasted approximately an hour and were recorded and later transcribed. In most companies the social media comes under either marketing or corporate communication department, except one organization which had its own social media department. For two companies, the Senior Manager along with the Social Media Executive was interviewed. For the others the senior managers were

interviewed. The data collection took place from October 2011 to February 2012. The organizations interviewed are from five different industries i.e. Consumer products, Telecommunication, Airlines, Manufacturing and Finance.

After the interview the data were transcribed followed by the process of unitizing and categorizing to make sense of the data. Unitizing is the coding operation where information is isolated from the text. Thus, the unit of analysis is the interview segment which ranges in length from few words to several paragraphs. The process of categorizing involves taking the information units (segments) derived from the unitizing phase and organizing them into categories on the basis of similarity in meaning. (Schulenberg, 2006). For the creation of categories, the constant comparison method was used, which entails a continual revision, modification and amendment to the category until all new units can be placed into an appropriate category and the inclusion of additional units does not expand existing categories or create new ones – that is, empirical indicators from the data are compared for similarities and differences and grouped accordingly.(Schulenberg, 2006). This process is also referred to as open coding whereby all the interview transcripts are reviewed in their entirety for descriptive categories (Glaser and Strauss, 1967). Through the analysis the various factors that influence the social media use, various usage of social media and performance impacts of social media were identified.

| Themes | Factors |
|--------------------------------------|--|
| Purpose of Social media usage | Branding, Advertising & Promotion, Information search about competitors and customers , Building customer relationship, Customer service |
| Factors influence social media usage | Top management support, Relative advantage, Compatibility, Entrepreneurial orientation and Institutional pressure |
| Social media impact on organization | Enhance customer service, Relationship building, Cost reduction (marketing, communication, customer service), Improved brand visibility, company image and competitive position. |

Table 1. Factors identified through interviews

In order to reduce the complexity of the research, the factors that are suggested by all the six companies or at least five companies are included for further analysis. After identifying these factors, as mentioned earlier a thorough review of literature was conducted to identify the appropriate theories and framework that can be used to conduct the quantitative study. The technology, organization and environment framework along with the identified system usage and social media impact factors will be used for the upcoming quantitative study. Therefore, based on the interviews and literature review, the following framework is proposed:

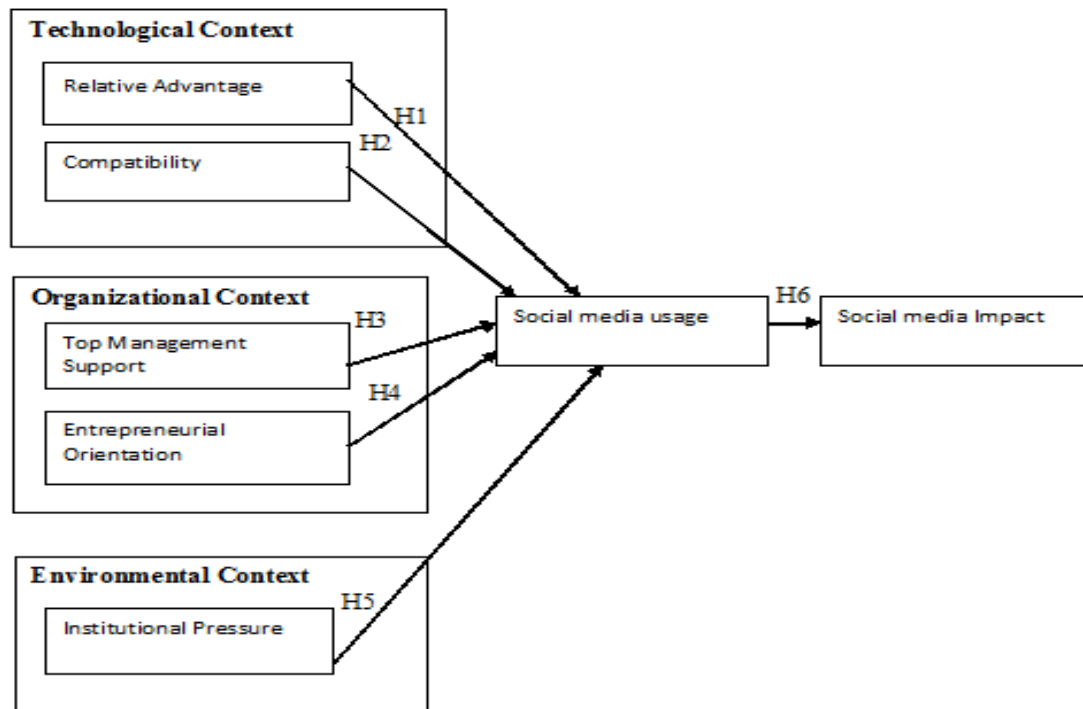


Figure 2. The Research model

The Hypotheses for this study are formulated as follows:

- H1: Relative advantage of social media has a positive influence on social media usage.
- H2: Compatibility of social media has a positive influence on social media usage.
- H3: Top management support has a positive impact on social media usage.
- H4: Entrepreneurial Orientation of an organization has a positive effect on social media usage.
- H5: Institutional pressures positively influence the social media usage.
- H6: Social media usage has a positive effect on the social media impact on organizations.

In order to test the above hypotheses, a questionnaire survey method will be used to collect the data and the respondents for the study are the Senior Managers of marketing or corporate communication department of Malaysian organizations that are using social media. The measures for the constructs are adapted from previous literature and also some are derived from the interviews. This study provides various contributions. Social media is considered as a hot topic (Levy 2007, Liebowitz and Liebowitz, 2008), but organizational usage of social media is still in its growing stage and the research related to it are very little. Therefore, this study contributes to the body of knowledge in both theory development and for IS practitioners. Also, this study seeks to be a helpful tool and provide guidelines for comparative as well as for further studies in the social media field. Moreover floating in the hot debate of positives and negatives of social media, most of the organizations are in a confused state whether to use them or not. Therefore this study will provide a clear idea whether social media are of real importance, have they benefited the organizations are not. Knowing this the organization who had not adopted the technology can actually plan for their successful adoption. Lessons learned from others' experiences can provide valuable insights for entrants planning future deployments for their organizations.

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