

Organizational support and Enterprise Web 2.0 adoption: a qualitative study

Completed Research Paper

Fayez Hussain Alqahtani
Computer Science Department
King Saud University (KSU)
Riyadh, Saudi Arabia
fhalqahtani@ksu.edu.sa

Jason Watson
Information Systems School
Queensland University of Technology
Brisbane, Australia
ja.watson@qut.edu.au

Helen Partridge
Information Systems School
Queensland University of Technology
Brisbane, Australia
h.partridge@qut.edu.au

Abstract

The emerging growth of Web 2.0 has been observed by users in the workplace, and has therefore encouraged organisations to introduce Web 2.0 technologies in their businesses. Although its adoption is beneficial, it could meet with employees' resistance due to some organisational factors. The successful implementation of Enterprise Web 2.0 is based on employee adoption of such social technology. Using a qualitative study, this research explores how organizational support can influence employees' adoption of Enterprise Web 2.0. The findings show that organisational support encourages and facilitates a smooth adoption. Such support can be provided by management and colleagues in several forms: developing a Web 2.0 strategy, providing required resources for such training, recognising and encouraging adopters, and involving managers in the adoption.

Keywords

Enterprise 2.0, Web 2.0, IT adoption, Organisational support, Qualitative study.

Introduction

The new emerging technology, labelled as Web 2.0, refers to online web-based software which allows people to share information and to collaborate over the internet (Wigand 2007). There are a number of examples of Web 2.0 technologies, such as wikis, blogs and micro-blogs, which offer a shift in the way in which people use the web. The emerging growth of such software has been observed by users in the workplace, and has therefore encouraged organisations to introduce Web 2.0 technologies in their businesses. McAfee, in 2006, coined the term 'Enterprise 2.0' to refer to the organisational implementation of Web 2.0 technologies (Brynjolfsson and McAfee 2007).

These technologies enhance employees' communication and collaboration and their ability to share knowledge. Consequently, through its implementation, enterprises increase their rate of innovation, boost returns and reduce costs (Bughin and Manyika 2007). Further, employees' adoption of this technology allows organisations to become more efficient. Consequently, previous literature (e.g. McAfee 2006; Parise et al. 2009) has reported that employees' resistance to adopt emerging technologies is a critical challenge facing the implementation of Enterprise Web 2.0.

Few studies, such as Dadashzadeh (2010) and Paroutis and Al Saleh (2009), have identified some organisational influences on the adoption of Enterprise Web 2.0. However, according to Dwivedi, Williams, Ramdani, Niranjana and Weerakkody (2011), commentators are still unclear about the adoption of such social technologies. Therefore, this research explores, in detail, how organizational support can influence employees' adoption of Enterprise Web 2.0. This research is significant as employees' adoption determines the success of Enterprise Web 2.0. As such technologies are community-based systems (Bradley 2007); and the more employees adopt Enterprise Web 2.0, the higher the chances for success of this IT system.

The remainder of this paper is organised as follows: the following section further discusses Enterprise Web 2.0 and its adoption. An overview of the research method, data collection and data analysis will then be presented. The fourth section presents the findings of the research and the final section concludes this paper, with a discussion of the findings.

Literature review

Enterprise Web 2.0 concept

Enterprise Web 2.0 helps businesses to achieve their objectives by enabling a number of capabilities (Alqahtani et al. 2010). In modern organizations, effective management of knowledge represents a curtail example of organisational capabilities. Enterprise Web 2.0 facilitate collaboration, communication and information flow in a bidirectional manner: an essential aspect of organisational knowledge management.

McAfee (2009) extended the definition of Enterprises Web 2.0 by breaking it down into the following concepts: 1) Social software: "enables people to rendezvous, connect, or collaborate through computer-mediated communication and to form an online community"; 2) Platforms: "digital environment in which contributions and interactions are visible to everyone and remain until the user deletes them"; 3) Emergent: "software is free-form and contains mechanisms that let the patterns and structure inherent in people's interactions become evident over time"; 4) Freeform: "software has many or all of the following characteristics: Its use is optional; it does not predefine workflows; it is indifferent to formal hierarchies; and it accepts many types of data" (p. 3).

In this paper the term Enterprise Web 2.0 will be used to refer to the use of such social software in organisations. Enterprise Web 2.0 technology could be used in several ways: to interface with customers, to interface with partners or suppliers, and for internal use among employees, and for collaboration and knowledge sharing (Corso et al. 2008). The focus of this paper is therefore employees' use of Enterprise Web 2.0 within organisations.

Enterprise Web 2.0 benefits

Organisations gained number of benefits from deploying Enterprise Web 2.0 technologies (Onyechi and Abeysinghe 2009). These technologies allow employees to communicate better, collaborate and share knowledge. Consequently, enterprises increase the innovation rate, boost return and reduce costs (Bughin and Manyika 2007), as well as enhance work productivity (Onyechi and Abeysinghe 2009). Bughin (2008) demonstrated how Web 2.0 could improve work productivity and benefit organisations, by presenting some case examples. The first example is from an advertising agency called Omnicome. The agency boosted revenue from 25% to 30% by using collaborative tools between accounting and creative teams. P&G, a consumer goods company, reduced research and development (R&D) costs by more than 30% through harnessing cooperation with researchers on new products. P&G also doubled its innovation rate. Organisations which use Web 2.0 appear to be more efficient due to having better collaboration, sharing knowledge and fostering innovation (Newman and Thomas 2009).

Implementation challenges

Although Web 2.0 is an opportunity to make organisations more agile, efficient and productive, its implementation comes with challenges and concerns (Ali and Deans 2009). These concerns are organisational concerns such as the fear of losing control, difficulty measuring return on investment and security issues (Modiglian 2010; Onyechi and Abeysinghe 2009). Also, low adoption by employees is an enormous obstacle in Enterprise Web 2.0 projects (Corso et al. 2008; Onyechi and Abeysinghe 2009).

Forester reported that only 15% of people use Enterprise Web 2.0 technologies (Macmanus 2007). By interviewing a panel of Enterprise 2.0 early adopters, McAfee (2009) demonstrated how users or employees are the biggest barrier to the adoption of Web 2.0 within organisations. McAfee (2009, p.163) asked the panel: “if Enterprise 2.0 tools and approaches really are so beneficial and powerful, why haven’t they spread like wildfire?” The panel responses concluded that users are the “biggest barriers to faster and deeper adoption of Enterprise 2.0” (McAfee 2009, p.164). According to Corso et al. (2008), besides management support, the level of user involvement is a critical success factor in Enterprise 2.0 initiatives.

Adoption of Information Technology

While organisations decision to adopt and implement IT systems is another important research tradition, the focus of this research is on individual adoption of IT systems. In this context, adoption is the user’s intention to accept and use these systems. As the level of user acceptance in using IT systems plays an important role in the success of these systems, studying the factors that affect the acceptance of IT technology has been an important issue (Davis 1989). Consequently, several adoption models – such as the Technology Acceptance Model (TAM) (Davis 1989) and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al. 2003) – have been developed to show the variables that have an impact on IT adoption.

Web 2.0 shares some features with other IT systems including the use of computers and computer networks to store, retrieve and transmit information. Yet, Web 2.0 is not just another IT system. It is a participatory, transparent, freeform and social IT system whose use is voluntary within organisations. There is some doubt about what influences its adoption and how this influence occurs.

The Adoption of Web 2.0 within organisations

Many researchers have investigated and highlighted adoption issues which influence the use of Web 2.0 in virtual online communities. However, less attention has been paid to the investigation of the adoption of Web 2.0 within the organisational context. Enterprise Web 2.0 adoption has begun to receive researchers’ attention from industry (Bradley 2007; DiMicco et al. 2008), as well as from academia (Hester and Scott 2008; Paroutis and Al Saleh 2009).

Adopting and using information technology is subject to the resources being available to individuals (Taylor and Todd 1995). Thus, Web 2.0 adoption could be influenced by the facilitated conditions or resources available to employees, such as time (Jackson et al. 2007). The case study by Jackson et al. (2007) about the use of corporate blogs found that most respondents said there was no time to participate frequently. Furthermore, management support is an essential factor in the adoption process of Web 2.0 tools (Bradley 2007; Jackson et al. 2007; Paroutis and Al Saleh 2009). According to these studies, management support includes creating awareness about Web 2.0 and providing training for employees (Paroutis and Al Saleh 2009). Another kind of management or organisational support is applying a reward system to encourage individuals to participate (Bradley 2007). Jackson et al. (2007) found that employee perception about management not valuing their contributions hindered them from using Web 2.0. In addition, a recent study (Kuikka and Äkkinen 2011) found that there is a lack of resources provided for using Web 2.0, hence challenges exist to the adoption of these technologies. The study by Kuikka and Äkkinen (2011), listed: training on how to use Web 2.0, time required to use Web 2.0 and human resources assigned the role of Web 2.0.

Research method

A qualitative study was used to explore how organisational support influences employees to adopt Enterprise Web 2.0. The basis for using the qualitative approach in this study is because of its suitability for explorative research (Dudley 2010). Two data collection techniques were used sequentially in two phases: focus groups and interviews.

In the first phase, the researcher conducted two focus groups to explore potential organisational influences on the adoption. A focus group is a data collection technique used in qualitative research which involves a group interview (Morgan 1997). The first part of the focus groups was a general discussion to evaluate Enterprise Web 2.0 adoption. Then, the second part included a discussion about the number of

potential adoption influences. The interactive nature of the focus groups helped in verifying the Web 2.0 adoption influences relevant to the research context.

The second phase of the data collection included conducting a number of semi-structured interviews. The rationale for using individual interviews is to provide a rich and in-depth understanding of the research phenomenon (Bernard and Ryan 2010). The interviews revolved around questions pertaining to the current implementation of Enterprise Web 2.0, individuals' adoption behaviour and the related organisational reasons behind such behaviour. The interviews generated in-depth and contextually-based understandings of Enterprise Web 2.0 adoption.

Data Collection

The sampling method that was used in this study was snowball sampling, in which the researcher asks previous respondents to give referrals for other possible participants (Fink 2003). The nominated participants were assessed according to the following criteria: (1) they were working in (private, small, medium, large) organisations which had implemented Enterprise Web 2.0, and (2) they had already been introduced to Web 2.0.

There were seven participants in the first focus group and six participants in the second one. Additionally, eighteen participants were interviewed individually. Half of them were aged 20 – 29; four were aged 30-39 and the remaining four were aged 40-49. Six of the participants were working in large organisations, five were working in medium-size organisations, and the remaining six were working in small-size organisations. They held various positions. One was a general manager, three were middle managers and the remaining were operational staff.

Data Analysis

The interviews were recorded, transcribed, and then analysed using thematic analysis. Thematic analysis assisted the researcher in identifying, analysing and reporting patterns (themes) (Braun and Clark 2006). The data was analysed using a combination of deductive and inductive thematic analysis. This combination was necessary to obtain in-depth explanations about how the predefined adoption issues influence employees to adopt Enterprise Web 2.0. Also, the inductive approach allowed new themes to emerge from the data.

Findings

Organisational support

Employees' adoption of Web 2.0 to benefit enterprises and to provide business value needs organisational support. Organisational support encourages and facilitates its smooth adoption. Such support can be provided by management and colleagues in several forms: developing a Web 2.0 strategy, providing required resources for such training, recognising and encouraging adopters, and involving managers in the adoption. Therefore, the "Organisational Support" theme is divided into the following sub-themes: (1) Web 2.0 Strategy, (2) Training, (3) Gratitude or Recognition, and (4) Management Role. The following section explains the sub-themes, showing their individual influences on the adoption of Web 2.0.

Web 2.0 Strategy

Unlike online social network adoption, Enterprise 2.0 adoption requires an extra push through an official implementation by organisations. When Web 2.0 is endorsed and supported by management, employees are motivated to adopt it, as indicated by participants. For example:

"Last year the board and the senior leaders ... launched a couple of [Web 2.0] initiatives ... [such as] Ideas which was a way to give a voice to general employees ..., and there has been success in that regard" (In3).

Developing Web 2.0 strategies involves planning Web 2.0 implementation, securing resources and guiding the adoption. This prevents employees from perceiving Web 2.0 as “*an added thing to do*” (In1) or its being used by only a “*few people [who] are really passionate about it*” (In13).

Defining the objective of Web 2.0 implementation is essential when developing a Web 2.0 strategy. The interview participants noted that not all Web 2.0 technologies that are implemented have predefined objectives. For example, one participant said:

“The wiki was introduced as a mechanism to distribute reports, also knowledge share around those reports... but Yammer [micro-blogging] was started by some people, and I’m not sure of the motivation behind it” (In1).

Although in In1’s company the wiki was adopted more successfully than the micro-blogging platform, in another company the opposite happened. The cause of wiki failure in this company is that “*Wiki was never really thought of to be included in the company and only a handful of employees started to look into it but ... it did drop off*” (In5).

Another important element in the strategy is Web 2.0 policy, a set of principles that guide adopting Web 2.0 according to organisational perspectives. In general, the interview participants value Web 2.0 policy, because it “*gives people guidelines on how to use social media tools, what you can share, what you should not share*” (In14). Web 2.0 policy influences the adoption directly, by for example, making employees comfortable with adopting Web 2.0; however, it also influence adoption in relation to Web 2.0 content, as shown by In1:

“What people put up there will be honest and truthful and professional and abide by the corporate policy on that which sits above our wiki” (In1).

The three identified policy components - “Web 2.0 mandatory levels”, “Web 2.0 eligible users” and “Web 2.0 social use” - further explain how Web 2.0 policy could influence adopting Web 2.0.

The phrase “Web 2.0 mandatory levels” refers to whether adopting Web 2.0 will be obligatory or optional. Having employees who “*don’t want things like this to be forced upon [them]*” (In5), may negatively affect the quality of adoption in terms of how frequent, active or collaborative the adoption is. It may also reduce the benefits of adopting Web 2.0.: “*if [Web 2.0] is just going to be something I force myself to do, it has no benefit*” (In3). However, in other cases Web 2.0 is left “*for people to contribute when they needed to*” (In6), and because it “*hasn’t been enforced ... adoption hasn’t been tight*” (In2). Therefore, “*Employees still need to feel that it has some sort of support*” (In3), but without enforcement.

Moreover, as noted by a few participants, some organisations identify “Web 2.0 eligible users”. So there is a restriction on who uses some Web 2.0 tools, such as blogs. For example one participant, when asked about his adoption of corporate blogging, responded: “*there is no blog [for anyone], it’s just certain people who have [it]*” (In14). Consequently, employees believe that Web 2.0 is less relevant, as noted here: “*I’m not a CFO so it’s not intended for me*” (In8).

Lastly, Web 2.0 has a social nature that facilitates employees’ connections and communication. Therefore, employees are concerned about “Web 2.0 social use” and what is acceptable; and Web 2.0 policy “*gives people guidelines on how to use social media tools*” (In14).

The last essential point in a Web 2.0 strategy is the stewardship of Web 2.0 adoption. Due to the challenges of Web 2.0 adoption (introduced earlier), almost half the participants noted that Web 2.0 champions should steward this adoption:

“putting in, defining and making transparent a champion individual or individuals to really promote the use of the Web2.0” (In1).

Stewardship is the role of employees “*who can see the value of it ... talk about how wonderful it is*” (In17) and who “*look after the platform both from a technology and people change perspective*” (In16). This role should be continued in order to sustain employees’ motivation. As one of the participants said, “*When we had a Web 2.0 champion, we had quite a good adoption; as soon as we stopped that being a person’s role, [some web 2.0] died*” (In1).

In summary, a Web 2.0 strategy is critical in the adoption process. Having Web 2.0 strategies means an official endorsement of Web 2.0 as well as management support; this guarantees planning Web 2.0 implementation, securing resources and guiding the adoption. This in turn encourages adopting Web 2.0. A Web 2.0 strategy influences its adoption directly or indirectly via other adoption issues such as “Usefulness” and “Web 2.0 content”. Discussions concerning Web 2.0 strategy identified issues for consideration, both in the early stage and continuously, to encourage and sustain employees’ adoption of Web 2.0.

Training

Training includes any formal or informal way of teaching employees the concepts of Web 2.0 technologies and the practical skills to use them. In this study, training was not found to be a critical adoption issue but it could motivate some employees in some cases.

Most participants do not need training to use Web 2.0: “*training ... doesn’t motivate me at all*” (In13) is one example of a participant response regarding the need for training to motivate Web 2.0 adoption. Yet they indicated that some colleagues need Web 2.0 training, as one participant stated:

“No matter how intuitive and easy to use and all the rest of it, some people still struggle with new things and need someone just holding their hand for the first time or second time” (In1).

As presented under Web 2.0 technological attributes, Web 2.0 tools vary in their ease of use, and wiki technology is the most difficult Web 2.0 technology to use. Therefore, providing training on how to use wiki would motivate its adoption. Also, training for older employees is a necessity, as one participant has noted:

“In this [organisation] again quite old employees ... you do need to train those people to get them comfortable and that’s what we did with Yammer” (In17).

In summary, providing training could motivate the adoption of Web 2.0 in situations where Web 2.0 is a complex tool to use or when there is a group of older employees who are not familiar with Web 2.0. Therefore, organisations should consider providing as much training as employees require.

Gratitude or Recognition

Gratitude or recognition refers to intangible rewards such as colleagues’ and managers’ appreciation for Web 2.0 active users. According to the study participants, gratitude and recognition motivate continuing the active adoption of Web 2.0.

Whilst many participants hold negative attitudes towards incentives, such as “*I don’t think [incentives] would necessarily be a good thing*” (In11), they expect “*some acknowledgement ... [as] Web 2.0 technology would demonstrate that they are proactive and support the firm*” (In1). It is considered that “*colleague appreciation*” (In3) and “*firm recognition for employees’ ideas*” (In18) are important forms of gratitude which motivate the active adoption of Web 2.0, as noted:

“I think being able to acknowledge someone for contributing on Web 2.0 or for outstanding achievement is part of the reason why some people use it” (In4).

In contrast, “*When someone continually contributes content to a wiki or a blog and no comments are made or the individual isn’t mentioned then the contributions will stop*” (In6).

In summary, employees who are active adopters of Web 2.0 like to be seen as important members within their organisation and to be valued for their contributions on Web 2.0. For this reason, gratitude and recognition are very important motivating issues encouraging those proactive employees to continue using Web 2.0 actively.

Management Role

Management is a critical part of Web 2.0 initiatives. As the interview participants noted, managers influence the adoption of Web 2.0 in two ways: motivating and hindering. Firstly, managers support Web 2.0 adoption by engaging with employees about it, as suggested: *“If managers have conversations with employees on Web 2.0 and breaking down that organisation structure enhances employees’ adoption”* (In17). In addition, managers support Web 2.0 adoption by leading in using such technology, as noted:

When managers themselves adopt Web 2.0, this is [considered] a strong signal to the employees. So as employees see their managers endorse it and are serious and that will influence employees’ adoption of web 2.0 (In13).

However, many participants reported managers’ concerns about Web 2.0, such as *“[employees] spending all their time socialising”* (In16) or *“misusing Web 2.0 and mucking around”* (In17). Consequently, there is a lack of management support of Web 2.0, which hinders its adoption, such as what happened to a micro-blogging platform, which *“died because it’s not [supported] by the company”* (In13).

Discussion and Conclusion

There are number of Web 2.0 implementation hurdles that have been found in this study such as the lack of employees’ awareness and abilities, the lack of a supportive culture, as well as the intensive time needed to achieve Web 2.0 maturity, which affects its usefulness. These findings are supported by Paroutis and Al Saleh (2009) who found that lack of awareness is a barrier affecting employees’ willingness to contribute their knowledge on Web 2.0. Additionally, Wilensky and Redmiles (2008) pointed out organisations’ lack of culture to support Web 2.0 adoption. Therefore, this study suggests that to overcome these hurdles, organisations need to support Web 2.0. Web 2.0 organisational support includes developing a Web 2.0 strategy, providing training where necessary, recognising Web 2.0 adopters, and involving management.

The current study suggests that developing a Web 2.0 strategy is the first important action in Web 2.0 implementation. If the strategy is considered early, it ensures implementing Web 2.0 that is relevant, useful and adoptable. This study identifies four Web 2.0 strategy components that, when considered, facilitate its adoption: the official implementation of Web 2.0, predefining the objective of Web 2.0, stewardship of Web 2.0 adoption, and having a Web 2.0 policy. These strategic components should be considered both in the early stages and in an ongoing way, to encourage and sustain employees’ adoption of Web 2.0. The current study suggests that developing a Web 2.0 strategy is the first important action in Web 2.0 implementation. If the strategy is considered early, it ensures implementing Web 2.0 that is relevant, useful and adoptable. Four Web 2.0 strategy components were found: 1) the official implementation of Web 2.0, 2) predefining the objective of Web 2.0, 3) stewardship of Web 2.0 adoption, and 4) having a Web 2.0 policy.

First, this study suggests that if Web 2.0 is not endorsed by management, it will be perceived as an overhead and thus not adopted by employees. Like any other form of IT, Web 2.0 needs to be official, endorsed and planned by management (Dadashzadeh 2010). Second, it has been found that predefining a Web 2.0 objective and its rationale in advance assists its successful adoption. This helps employees in adopting Web 2.0 and aligning it with organisational objectives, hence sustaining the adoption and making the Web 2.0 implementation more successful. Third, with Enterprise Web 2.0 being a new concept and practice, its adoption is a challenge. Consequently, the current study indicates that continuous support by Web 2.0 champions enhances Web 2.0 adoption and sustains it. This confirms the findings by Jackson, Cole, Lazar and Morell (2009) that noted that the rate of Web 2.0 adoption within large companies has increased due to Web 2.0 coaches’ support. Fourth, the current study also suggests, organisations should have a policy concerning Web 2.0 and its adoption (Martin, Reddington, Kneafsey, and Sloman 2009). This research shows how Web 2.0 policy influences employees’ adoption of Web 2.0

by guiding them: for example, making them aware of what acceptable use is and what it is not. As a result, employees become comfortable while using it.

Training is another form of organisational support. The current study identified training as an adoption issue, but not a critical one because the complexity of Web 2.0 tools varies and there are intuitive Web 2.0 tools that do not require specific training for most employees. It was also noted that only some employees, such as older employees, need training on how to use Web 2.0 tools such as wikis – the most difficult Web 2.0 tool. So providing training could motivate the adoption of Web 2.0 when a complex tool is used or when there is a group of older employees who are not familiar with it. This finding differs slightly from Paroutis and Al Saleh's (2009) finding which indicates that training is an important element influencing employees' participation in Web 2.0. Their study was conducted in a technology-oriented company in which about two thirds of the population were not "tech savvy"; this might have caused this slight difference in the results.

Another form of necessary organisational support is gratitude and recognition. Rewarding employees for their participation on Web 2.0 increases their adoption of such tools as also found by Carbone et al. (2012). The research study differentiates between tangible and intangible rewards. It indicates that there is a negative attitude towards using tangible incentives as a motivator. In contrast, the study by Carbone and colleagues (2012), conducted in a bank, indicated that employee participation in the innovation system (Web 2.0 technology) was high due to the economic reward the bank gave to the best ideas. This different result might be related to the context of the finance industry where employees' ideas are evaluated for real implementation to gain direct financial benefit; therefore employees are seen to be motivated by tangible rewards. Yet, the finding of Paroutis and Al Saleh's (2009) study supports the current research findings.

Management is another form of organisational support. This study found that the role of management in Web 2.0 implementation is an important adoption issue as also indicated by Schöndienst, Krasnova, Günther and Riehle (2011). The current study indicates that management involvement, as well as empowering employees, motivates employee adoption of Web 2.0 and vice versa. This is consistent with Paroutis and Al Saleh (2009) who found that management support, such as promoting Web 2.0 benefits and providing the necessary training, is a key factor that determines employee use of Web 2.0 to share knowledge. Further, the researcher adds that managers leading by example in adopting Web 2.0 and engaging as well as encouraging others motivate employees' adoption. Yet this study reports a lack of management support due to their concern about Web 2.0; hence employees are discouraged from adopting Web 2.0. Obtaining management commitment, therefore, is critical to the successful implementation of Web 2.0 within organisations. This commitment enhances Web 2.0 adoption as employees need to see the alignment of such technology with management attitude.

REFERENCES

- Alqahtani, F. H., Zakaria, M. H., & Watson, J. A. 2010. "Web 2.0 Applications in Enterprises and Education". Paper presented at the 2010 International Conference on e-Commerce, e-Administration, e-Society, e-Education, and e-Technology, Macau, China.
- Bernard, H. R., and Ryan, G. W. 2010. *Analyzing qualitative data: Systematic approaches*. Los Angeles: SAGE.
- Bradley, A. 2007. *How to apply the plant seeds framework for enhanced enterprise web 2.0 adoption*. Gartner Inc.
- Braun, V., and Clarke, V. 2006. "Using thematic analysis in psychology," *Qualitative Research in Psychology*, (3:2).
- Brynjolfsson, E., and McAfee, A. P. 2007. "The future of the Web," *MIT Sloan management review*, (48:3), pp49.
- Chai, S. 2009. *Three essays on behavioral aspects of information systems: Issues of information assurance and online privacy*. Unpublished Ph.D., New York : State University of New York at Buffalo.
- Cook, N. 2008. *Enterprise 2.0: How social software will change the future of work*. London: Gower Publishing.

- Corso, M., Martini, A., and Pesoli, A. 2008. "Enterprise 2.0: What models are emerging? The results from a 70 case-based research," *International Journal of Knowledge and Learning* (4:6), pp 595-612.
- DiMicco, J., Millen, D. R., Geyer, W., Dugan, C., Brownholtz, B., and Muller, M. 2008. "Motivations for social networking at work". Paper presented at the Proceedings of the ACM 2008 conference on Computer supported cooperative work.
- Dudley, J. R. 2010. *Research methods for social work: Being producers and consumers of research (2 ed.)*. Boston: Allyn & Bacon.
- Dwivedi, Y. W., Michael, R., B., Niranjana, S., and Weerakkody, V. 2011. "Understanding factors for successful adoption of web 2.0 applications". Paper presented at the ECIS Helsinki, Finland.
- Fink, A. 2003. *How to sample in surveys (2nd ed.)*. Thousand Oaks, Calif.: Sage Publications.
- Hester, A. J., and Scott, J. E. 2008. "A conceptual model of wiki technology diffusion". Paper presented at the Hawaii International Conference on System Sciences, Manoa, Hawaii.
- Hoegg, R., Meckel, M., Stanoevska-Slabeva, K., and Martignoni, R. 2006. "Overview of business models for Web 2.0 communities". Paper presented at the GeNeNe, Dresden, Germany.
- Hsu, C.-L., and Lin, J. C.-C. 2008. "Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation," *Information & Management* (45:1), pp 65-74.
- Jackson, A., Yates, J., and Orlikowski, W. 2007. "Corporate blogging: Building community through persistent digital talk". Paper presented at the The 40th Hawaii International Conference on System Sciences, Big Island, Hawaii.
- Kosalge, P., and Tole, O. 2010. "Web 2.0 and business: Early results on perceptions of web 2.0 and factors influencing its adoption". Paper presented at the AMCIS 2010, Lima, Peru.
- Levy, M. 2009. "Web 2.0 implications on knowledge management," *Journal of Knowledge Management* (13:1), pp 120-134.
- McAfee, A. 2009. *Enterprise 2.0 : New collaborative tools for your organization's toughest challenges*. Boston: Harvard Business School Press.
- McAfee, A. P. 2006. "Enterprise 2.0: The dawn of emergent collaboration," *Engineering Management Review* (34:3), pp 38-38.
- Millen, D. R., Feinberg, J., and Kerr, B. 2006. "Dogear: Social bookmarking in the enterprise". Paper presented at the SIGCHI Conference on Human Factors in Computing Systems 2006, Montréal, Canada.
- Morgan, D. L. 1997. *Focus groups as qualitative research (2nd ed.)*. Thousand Oaks, Calif: Sage Publications.
- Newman, A., and Thomas, J. 2009. *Enterprise 2.0 implementation*. New York: McGraw-Hill Osborne Media.
- Parise, S., Guinan, P., Iyer, B., Cuomo, D., and Donaldson, B. 2009. "Harnessing unstructured knowledge: The business value of social bookmarking at mitre," *Journal of Information Technology Case and Application Research* (11:2), pp 72.
- Paroutis, S., and Al Saleh, A. 2009. "Determinants of knowledge sharing using web 2.0 technologies," *Journal of Knowledge Management* (13:4), pp 52-63.
- Rogers, E. M. 1995. *Diffusion of innovations (4th ed.)*. New York: Free Press.
- Shumarova, E., and Swatman, P. A. 2008. "Informal ecollaboration channels: Shedding light on shadow CIT". Paper presented at the 21st Bled eConference Collaboration: Overcoming Boundaries Through Multi-Channel Interaction.
- Tørning, K. 2008. "Position paper: Adapting web 2.0 to corporate reality". Paper presented at the ACM conference on Computer Supported Cooperative Work. San Diego, CA, USA.
- Van Zyl, A. S. 2009. "The impact of social networking 2.0 on organizations," *The Electronic Library* (27:6), pp 906-918.
- Wigand, R. T. 2007. "Web 2.0 disruptive technology or is everything miscellaneous," In *Information management: Setting the scene (perspectives on information management, H. Ard & D. Erik (eds.), Elsevier*.