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Toward a Social Media Usage Policy

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Abstract

Social media has become the archetype of technology underpinning communication and collaboration across all lifestyles, from the personal to the public. Despite its increasing deployment into corporate technology infrastructures, the encroachment of social media poses several doubts, including its business value, need for a social media strategy and its appropriate management. Although given a pressing need, there is a lack of clear guidance from IS literature around how to study these challenges, and ultimately to answer the question— is the use of social media a distraction at the work place? This research-in-progress paper lays the foundation to answer this specific question. Our work positions social media as a platform that can enable business and service value co-creation. We propose the Social Media -Beliefs, Action and Outcomes (SM-BAO) model, to help develop a framework that can inform social media use policy in the workplace.

Keywords

Social Media, Service Value Co-creation, Beliefs-Action-Outcomes.

INTRODUCTION

McAfee (2009) compares social media and Web2.0 proliferation of today to the late 1990s when many executives and managers were overwhelmed by the need to engage with the Internet, eBusiness and large-scale Enterprise Systems. Not surprisingly, the increasing use of social media, is creating a networked world of constant interaction that provides a plethora of opportunities for businesses (Majchrzak et al. 2009; Culnan et al. 2010). For both the businesses and its' employees, social media is reportedly used to meet service collaboration and communication needs, provide knowledge management capabilities (Majchrzak et al. 2009) and enhance customer centricity (Wagner and Majchrzak 2007). Accordingly, businesses in Australia are facing some remarkable changes in digital behaviour, particularly regarding the use of the web and social media applications. In 2009, it is estimated that of 711,000 Australian businesses, 86.8% has internet access and 36.3% with web presence (Australian Bureau of Statistics 2009). By September 2010, Sensis reported that “one in ten businesses that are online use social media for business purposes” (Sensis 2010 p21).

Despite widespread deployment of social media into corporate technology infrastructures and architectures, the encroachment of digital media use from the social space into work time continues to pose challenges to businesses (Culnan et al. 2010). We highlight three here. First, the business value and impact of social media is yet to be felt by many organizations (Andriole 2010). Managers are reportedly finding gaps between what is expected of the technologies and what is actually gained (Andriole 2010). Secondly, businesses must consider a social media strategy (or a lack of) (Wilson et al. 2011). Currently, the perspective of the Australian business, employee access to social media is almost taken for granted, with motivations for using the web ranging from subversiveness and self-indulgence to an absolute commercial necessity (Reid et al. 2010). Without a social media strategy, businesses and managers have little coordination and no effective way to share lessons learned (Wilson et al. 2011). The third challenge (or question) - driven by a growing demographic of employees using socially based technologies (Majchrzak et al. 2009) - is who should manage a business's social media strategy? Concluding from various sources of literature, a company's social media strategy is just as important as an internal employee policy regarding the appropriate stakeholder management of social media (Bottles and Sherlock 2011). It should also consider the contextual role of the IT user (See Lamb and Kling 2003) and the role of agency embedded in IT (See Aakhus et al. 2011).

This study adds to the growing discourse on social media use by proposing a research agenda and approach to study social media use in the workplace. In light of the above and the (three) challenges highlighted above, we

conceptualize social media as a service for businesses, and use service logic and value creation (See Prahalad and Ramaswamy 2004; Vargo et al. 2008) for the theoretical foundations to envisage the role of social media for generating business value with a focus on employee productivity. From this angle, we aim to study—Is the use of social media a distraction at the work place? Secondly, we propose the Social Media -Beliefs, Action and Outcomes (SM-BAO) conceptual framework, to support our ongoing study. We aim to use the SM-BAO model to frame and investigate how users in their respective workplaces appropriate and leverage social media. Despite a pressing need, there is a lack of guidance from IS literature around how employees use social media, and more importantly a framework that organisations can use to develop a policy for the use of social media in the work place. Our study lays the foundation that can enable the development of a policy framework that guides employee's use of social media at the workplace. The rest of the paper is organized as follows: First, we summarize the state and challenges of using social media in the workplace. Second, we discuss the theoretical foundations of treating social media as a platform for business and service value co-creation. Third, we present the SM-BAO model, a conceptual framework to define a research agenda and approach for ongoing work. We conclude this article with specific research questions and set the direction for future work.

CHALLENGES OF USING SOCIAL MEDIA IN AUSTRALIAN BUSINESSES

Definitions and Terminology

Before we discuss the challenges of using social media in businesses, given the generic nature of the term “social media” – we define it to set the scope of our research work. Social media-as defined by (Kaplan and Haenlein 2010 p61) and used herein- is “*a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user generated content*”. Social media is an example of Web 2.0 use in the external sphere where Web 2.0 facilitates the interaction of the company with its customers (Pole et al. 2011). As Murugesan (2007) suggests, the focus (of social media) is on acquiring new customers, improving customer service, developing products, allowing customers to interact with one another, and improve marketing. We refer social media in this study to include social networking websites (Kim et al. 2010) such as Facebook, Twitter and Myspace etc. We found a growing number of studies starting to profile social media users, with several suggesting that Facebook is the largest (Arthur and Kiss 2010) most regularly accessed amongst a predominantly younger age groups [25-34 years old (Dwivedi et al. 2006) and 18-28 years old (Ebermann et al. 2006)]. Social networking sites allow for social networking, media sharing, experience comparison, collective creation and potentially mass collaboration (Kim et al. 2010), leading McAfee (2009, p15) to call for the term ‘*collaborative*’ to replace ‘*social*’. In summary, the definition of social media still creates confusion among managers and academic researchers alike (Kaplan and Haenlein 2010). However, as large numbers of varying social networking websites are themselves in a state of constant evolution, this naturally drives a clearer definition.

By May 2011, Sensis reported that some 14% of small businesses, 25% of medium businesses and 50% of large businesses in Australia currently claim to have a social media presence (Sensis 2011). According to another Sensis report (Sensis 2010), 35% of all small and medium businesses allow their employees to use social networking sites such as Facebook, Myspace etc. while at work. However, 90% of small businesses and 82% of medium business do not use social media for business purposes. As we draw details from the Sensis reports (Sensis 2010; Sensis 2011) and corroborating literature, we find three pertinent issues—value of social media, social media strategy and manager of social media strategy— of social media usage facing Australian businesses.

Business Value of Social Media

From popular press, some managers regard the use of social media as time wasting, productivity-draining or not work-related in any way (McAfee 2009). CEOs show scepticism towards social media use yet express the potential of social media for collaboration (Schaarschmidt et al. 2011). Similarly, businesses fail to fully exploit the capabilities of social media platforms to fully engage their customers (Culnan et al. 2010). Research into the value of social networking technologies for organizations is naturally scarce but increasing as their use becomes embedded in the lifestyle of its members (Mason and Rennie 2008). The advantages of building community online through the use of social networking tools such as portals, blogging, wikis, e-portfolios and Facebook are being recognised by organisations such as IBM, Sun Microsystems and Kraft (Jue et al. 2010).

To gain business value, Culnan et al. (2010) suggest that organizations need to first incorporate community building. Wasko and Faraj (2000) research into online communities of practice found that members are keen to engage, share knowledge and to act ‘*pro-socially*’ (p.169). These communities or groups would choose to identify themselves via theming mechanisms when retrieving and producing information. Exchanging information may be on a person-to-person basis, but the expectation of reciprocity or ‘*returning the favour*’, lies in expectations from the collective community with which participants identified (Kollock and Smith 1999). The outcomes of not engaging with the new perspectives offered results in declining social capital, a weakening of

ties within a community, a lack of personal connection and ultimately to disengagement (Ellison et al. 2007). Furthermore, Ellison et al. (2007) found that students use Facebook either to maintain existing relationships or to nurture and strengthen newer, tentative acquaintanceships that might otherwise wither through lack of face to face contact. In summary, using a range of social media such as Facebook, Twitter and blogs can potentially enhance face-to-face engagement. Furthermore, Culnan (2010) explains that for firms to assess if the objectives for their social media applications are being realized and to measure the value from these investments, they must identify qualitative and quantitative metrics.

Strategy for Social Media Use

Businesses should have a social media strategy (Wilson et al. 2011). Although some businesses start out with clear strategy and lose focus as the effort expands, but without a social media strategy, businesses and managers have little coordination and no effective way to share lessons learned (Wilson et al. 2011). On the other hand, McAfee (2009) reported that inflexible policies discourage the innovative use of social media technologies. On this note, policies specifically designed for social media use need to be based on an understanding that the use of the applications cannot be rigidly controlled, but that such policies be adapted to protect the interests of the business and its employees (Gilchrist 2007; Heikal and Jo 2011). Understanding how company strategies are evolving to use existing social media not only will be of use today but also should guide managers as they adapt to platforms developed in the years to come (Wilson et al. 2011). Therefore, Wilson (2011) suggest that social media strategies should be temporal in nature to/and allow the businesses to progress from one to another.

While 94 per cent of Australian SMEs reported that they were online, only 17 per cent of those reported that they had some form of strategy for their businesses digital activities. For most SMEs that did have a digital business strategy, it was most likely to be focused on internet and websites, with only 36 per cent including a mobile component and 33 per cent including a social media component (Sensis 2010). Furthermore, over four in ten SMEs with a digital business strategy have had it for less than a year, and over three in four had developed their strategy in-house. In another report, around 20 per cent of all Australian businesses do not have a strategy to drive social media traffic. Currently, we found that from the perspective of the Australian business, employee access to social media is almost taken for granted, with motivations for using the web ranging from subversiveness and self-indulgence to an absolute commercial necessity (Reid et al. 2010).

The Social Media Manager

Bottles and Sherlock (2011) suggests that there are no social media experts but it is crucial to find a social media manager to lead the effective and appropriate use of social media. Bottles and Sherlock (2011) highlights that an organization can eliminate potential obstacles by keeping responsibility for the (social media) strategy independent of any one department, as employees are going to be using social media as part of their jobs. According to Bottles and Sherlock (2011), the social media manager should not be in the IT department as social media aren't primarily technical matters, and social media may eventually take 50 percent or more of your social media manager's time. Bottles and Sherlock (2011 p71) suggests that the marketing department may have a person best qualified as a social media manager who *"is going to be out there on the front lines every day showing people who you are"*. However, Bottles and Sherlock (2011) suggests that S/he *must not* stay in the marketing department and should begin reporting directly to senior management. Somewhat contrary to Bottles and Sherlock (2011), the responsibilities of social media strategy in Australia falls largely in the hands of the owners (for small firms) and the marketing department (for medium and large firms).

Lamb and Kling (2003) suggests how researchers often marginalize the ICT *user*. Lamb and Kling (2003) cites better management practice to consider the role of *social actor*- as an organization member representing the interests of the firm or department (as well as his/her own interests) rather than as just a user. The scope and scale of the social space of people's interactions with social media and with other people, groups, and organizations is still largely a black-box. The challenge for business's is to balance employee access to particular technologies against ensuring that such media are not abused or institutionalized, thereby undermining employee performance.

The Need for a Social Media Research Agenda

The emergence of social media has introduced a vibrant new research context. But methodologically, researchers' ability to make causal claims (about social media) is limited by a lack of experimental or longitudinal studies, *"scholars still have a limited understanding of who is and who is not using these sites, and for what purposes, especially outside the U.S."* (Boyd and Ellison 2008 p224). Given the potential challenges of social media use for Australian businesses highlighted in the previous section, a research agenda must consider the business value for, the digital strategy of the business and the management structure of social media. IS researchers have paid considerable attention to how new tools such as ERP and the Internet can revolutionize business practices. On the other hand, we find that social media has yet received much theoretical treatment.

Furthermore, we still find little discussion¹ on whether or how social media can influence the way we practice our own craft as academicians and our core practices of research, reviewing, and teaching (Kane and Fichman 2009)- a similar condition to the meaning behind the proverb '*shoemakers' children often go barefoot*'.

Researchers achieve rigor by appropriately applying existing theories, frameworks and instantiations to develop/build phase of a research study. This is the foundation of the *IS research cycle* (Hevner and March 2003). As highlighted earlier, Culnan et al. (2010) explains that to gain business value, businesses need to first incorporate community building as part of the implementation of social media. We use this as an appropriate starting point to choose our theoretical lens with which to analyse social media use and frame the research. For this, we investigate social media use and development from a service (Vargo and Lusch 2008) and value co-creation (Vargo et al. 2008) logic. From here, Hevner and March (2003) suggests researchers should continue with the analysis, construction, deployment, use, evaluation, evolution, and management of technologies in organizational settings. For this, we use a Beliefs-Action-Outcomes model (Melville 2010) to frame our ongoing research and research questions on social media use, development, value and leverage.

THEORETICAL LENS: CONCEPTUALIZING SOCIAL MEDIA AS A SERVICE

According to Vargo et al. (2008), *service* is the application of competencies (knowledge and/or skills) by one entity for the benefit of another. IS has always had a service role as users seek IS and the IS departments to sort, summarize and present data in a meaningful way for decision making (Pitt et al. 1995). Moreover, "*when programs are connected to the Internet, applications are no longer software artifacts, they are ongoing services*" (Musser and O'Reilly 2006 p5). Users turn to social media in the same way as they have the same service characteristics typical of an IS, as users customized and personal interactions with them. Therefore, it is fair to say that social media, when adopted by firms and their employees, should recognize that they will have a service role. However, service role rarely appears in the vocabulary of social media development and lifecycle. In fact, despite great current interest in social media (Aakhus et al. 2011), there is a somewhat expectant lack of theoretical treatment of the so-called social media.

Value Co-Creation in A Social Media Enabled Community

Abe (2005) describes services as essentially "*value jointly created through the interaction of providers and clients*" (p. 13). Similarly, there is emerging discourse around *value co-creation* at the nexus of service - as a perspective for understanding economic phenomena (Payne et al. 2008; Vargo et al. 2008). Applying a service-dominant logic (See Vargo et al. 2008), co-creation focuses on an experience environment in which consumers can have active dialogue, experience a variety of services and co-construct personalised experiences. In other words, co-creation centers on participants, processes and resources that interact to create value in service systems (Vargo et al. 2008). In the ensuing discussions, we use *network effect* and literature capturing *value co-creation* to theorize how businesses can seek business value from social media use.

Payne et al. (2008) highlighted the importance of electronic infrastructure citing technological breakthroughs as co-creation opportunities. When looking at social media, these predominantly web-based sites and other applications of the like are reshaping online communication and collaboration patterns and subsequently the way information is consumed and produced. The lines between information producers and consumers are blurred even more by open-editing services such Wikipedia, where content can be edited anonymously and agreed by consensus² by its registered users (Majchrzak et al. 2009). Therefore, social media as an archetype of innovation serving as a platform for value co-creation is perceptible. Payne et al. (2008) add that the types of opportunities for co-creation and hence the infrastructure, depend largely on the nature of the businesses' industry. This is echoed by Prahalad and Ramasamy (2004), who highlight the importance of investing in new infrastructure capabilities that are centred on creating markets as a space for potential co-creation experiences.

When managing co-creation of value Payne et al. (2008) and Vargo et al. (2008) highlights another theme— it is a process. However, a process model (See Sabherwal and Robey 1995; Tsohou et al. 2008) that attempts to explain the occurrence of social media value co-creation is still elusive. We can base the recognition of infrastructure capabilities of social media and the understanding of network effect in multi-sided platforms (Eisenmann et al. 2006; Boudreau and Hagiu 2008) to create a theoretical conceptualization of *how* social media are potentially leveraged. Firstly, economists refer to the business landscape of tying together of two distinct but interdependent groups (of users) in a network as *two-sided markets* or two-sided *networks* (Rochet and Tirole 2003; Jullien 2005). This earlier, representative stream of research calls the phenomena of how groups are attracted to each other as the *network effect*. In a two-sided network, products and services that bring together groups of user are platforms (good examples from social media platforms being LinkedIn and Facebook), and

¹ A search through Senior Scholars "*basket of eight*" IS journals using ISI Web of Knowledge was conducted using keywords "*social media and social networking*", and thereafter "*social media and australia*".

² Statement of ownership: cited on Wikipedia at http://en.wikipedia.org/wiki/Wikipedia:Ownership_of_articles

platform providers facilitate the exchanges through a network (Eisenmann et al. 2006). When networks grow in size and value to the extent that it attracts more groups of users, opportunities for platforms grow (Hagiu 2007). At the most fundamental level platforms can help their subscribers: “*reduce search costs, incurred by the platforms’ multiple subscribers before transacting, and reducing shared cost, incurred during the transactions themselves*” (Hagiu 2007, p5).

Furthermore, unlike the rigid models of early generation web, the ease of use offered by current generation social media sites enables bi-directional and yet asynchronous near real-time conversation. Specifically, the cost of interaction is very low for both parties. In effect, the infrastructure enables service value co-creation. A recent example of both service provision and co-creation can be found in how Twitter was used to inform and interact with customers when the Chile Ash Cloud resulted in the grounding of flights in Australia in June 2011 (Vasa 2011). Interestingly, airline service staff were able to provide information updates much more rapidly on Social media rather than their traditional web sites most likely to the significantly higher overhead placed on updating corporate websites. This phenomenon has also been shown recently in disaster response (Sakaki et al. 2010), as well as to assist with early detection of trends (Savage 2011) in a range of area including politics, flu outbreaks and electricity outages.

THE BELIEFS-ACTION-OUTCOME (BAO) FRAMEWORK

In the previous sections we showed that social media can be seen as a service – in that the networks can be used to benefit others within and external to an organization. Given the value that social media can add, we return to the core issue raised at the start of this work: What is the policy framework that an organization should use to govern the use of social media in the work place? More importantly, how should they educate their employees on engaging via the use of social media for service delivery and value co-creation? The examination of prior literature (Coleman 1986, Melville 2010) reveals that actions of an individual which eventually deliver a service, or value co-creation are guided by both internal and external influences and in particular their beliefs. Hence, in order to put our own research approach on a strong footing we adapt the Beliefs-Action-Outcomes (BAO) framework (Melville 2010) to develop a conceptual framework to capture the issues surrounding social media (Boyd and Ellison 2008), the evolution of service economies (Kellerman 1985), the awareness of socio-technical systems (Orlikowski and Scott 2008) and value co-creation (Vargo et al. 2008).

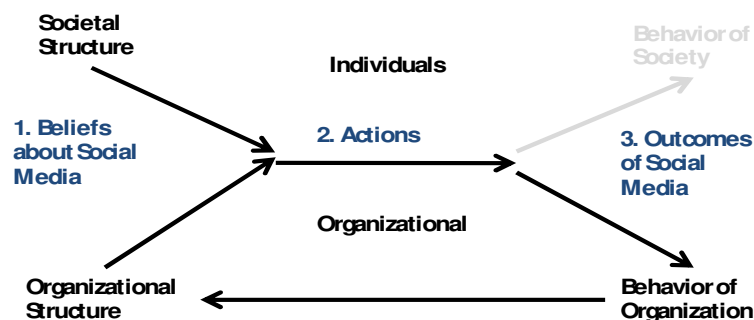


Figure 1: Social Media Belief-Action-Outcome (SM-BAO) Framework (adapted from Melville 2010)

Adapting Coleman’s (1986) model of social and individual relations, Melville (2010) developed the BAO framework to develop a series of research questions on IS innovation for environmental sustainability. Differing from the original Coleman model and central to the revised BAO model is the inclusion of the social and organizational contexts. Although the BAO model was designed to demonstrate the critical role that IS can play in shaping sustainable practices in organizations, we find that it provides the foundation for our conceptual model towards better understanding social media service value in business’s. The BAO model is appropriate for three further reasons: First, the model underscores the mediating role of individuals in linking macro-level variables such as social structure and the behaviour of the social system. Second, the BAO framework provides a way of framing research questions intersecting social media, service economies, socio-technical systems and the concept of value co-creation. Third, the BAO model lays the foundation for designing an operating model (Ross et al. 2006, p197) with processes (including the procedures, tasks, mechanisms, activities and interactions) that support the co-creation of value for social media policy institutionalisation.

In our revised SM-BAO model (Figure 1), we purport that 1) Beliefs of social media are shaped by social and organizational structure, 2) beliefs affect individual action, and 3) individual actions may improve organizational and individual performance outcomes. Regarding outcomes, improved performances (e.g. financial) do not necessarily mean the institutionalisation and legitimisation of internal employee policies and external strategies (e.g. customer engagement), but rather a balance should be sought. The arrows in the model represent influence rather than causality. The terminology of the revised SM-BAO model is summarized in Table 11.

Table 1: Terminology of SM-BAO framework (adapted from Melville, 2010)

Constructs	Belief	Action	Outcome
Sub-Constructs	<p>1a. Societal Structure: Cultural patterns that define expectations of stakeholders</p> <p>1b. Organizational Structure: Roles and responsibilities of stakeholders as defined by the organization (Kane et al. 2009)</p>	<p>2. Action: Micro and macro actions by the organizational stakeholders on social media toward creating service value (Bottles and Sherlock 2011)</p>	<p>3a. Behaviour of individuals: functioning and performance of individuals</p> <p>3b. Behaviour of organization: functioning and performance of organization (Culnan et al. 2010; Wilson et al. 2011)</p>

* Co-actions describe actions of communities or group of individuals (adapted from (Prahalad and Ramaswamy 2004)

ONGOING WORK: THE SM-BAO RESEARCH AGENDA

The conceptual foundation provided by SM-BOA is a starting point for framing the research agenda. However, where should we initially focus? What is the approach that we should use in order to arrive at a sound policy framework? The BOA model provides us a broad approach to study in particular it considers that actions are driven by beliefs and how the agent (employee) interprets the environment. Additionally, there is an implication within the model that we should start by focusing on the Beliefs first. However, studies of behavior (Kahneman and Tversky 1979) show three themes that influence how a decision is made before eventually leading to actions; (i) *Heuristics* – People often make decisions based on approximate rules of thumb, rather than strict logic and are influenced by cognitive bias which may lead to herding mentality (ii) *Framing* - Decisions are highly depended on the frame of reference used, and (iii) *Inefficiency* – decisions involve to some extent misjudging the expectation. Briefly, people are not perfect decision makers and the choices that motivate their actions may not be fully consistent. Given this situation, we contend that the best starting place is to first understand how employee use social media first- that is, we must focus on the “*Actions*” component from the SM-BAO model rather than the beliefs. Based on these observations we can then guide the research agenda towards building a policy framework based on empirical evidence. We discuss the key aspects of the agenda and three specific research questions- *R1*, *R2* and *R3*- of our main research focus.

Social Media and Metric for Action

Melville (2010) refers action in the BAO model to use of IS for environmental sustainability. In this ongoing research, we refer action in the SM-BAO framework to that of technology (social media) use for business value. Use of technology is an important theme of IS research for decades. Straub, Limayem, and Karahanna (1995) conceptualize use as “*the utilization of information technology, by groups or organizations*” (p. 1328). Use plays a mediating (or independent variable) role in the DeLone and McLean IS Success Model (DeLone and McLean 1992). On the other hand, there is growing discourse in our field of the inadequacy of using solely quantitative measures of use such as frequency and duration. Burton-Jones and Straub (2006) reported a set of rich measures of use (exploitive use) yields almost three times the variance explained by a lean measure. Whilst measures of *frequency of social media use* in general are adequate for ‘*mandatory use*’, while for ‘*value-adding*’ use, measures that capture *depth / extent of social media use*³ are more appropriate.

Action that we undertake can be investigated by taking into consideration time, or purely from a categorical perspective. That is, (i) we can analyse the *type of actions* by classifying the action into one or more categories, and, (ii) We can analyse actions in general as well as the type of actions *temporally* (for example, over a fortnight). Data collected from both perspectives can be used to then create a model of how employees use social media. Analysing the type of action provides us with insight into the “*what*” employees are doing when they engage using social media. This dimension will offer us a deep and rich insight to help us eventually build a model of behaviour. However, given the rather novel and early stage of the technology adoption we contend that an initial analysis should focus on investigating if employees are even using social media, and if so how often – that is, the temporal aspects. With reference to Table 2 we recommend on top of solely quantitative measures, to consider measures of value-adding use that captures the additional (none-core, non-automated and/or non-compulsory) use by the user conducted to enhance the output or impact.

R1: *What is the current type and level of use within an organisation? What types of use are acceptable and what are the appropriate thresholds that determine acceptable level of use?*

³ Also including thoroughness of use.

SM-BAO Research Agenda			
Stage 1: Temporal Analysis of Social Media Use			
Stage 2: Analysis of Type of Social Media Use			
Stage 3: Define and Validate a behavioural model			
Stage 4: Using the behaviour model to develop a policy and test it			
Stage 5: Develop a policy framework for social media use marketing value			
Construct	Sub-Constructs	Example Qualitative and Quantitative Metric	Sources
Actions	(3) Macro Action	At organizational level, what is the <i>volume</i> of usage in a given time period? (Amplitude) At organizational level, what is the <i>frequency</i> of use in a given time period? (Periodicity) At organizational level, what is the <i>consistency</i> of use in a given time period? (Dispersion)	(removed for review)
	(4) Micro Action	At individual level, what is the <i>duration</i> of usage in a given time period? (Amplitude) At individual level, what is the <i>frequency</i> of use in a given time period? (Periodicity) At individual level, what is the <i>consistency</i> of use in a given time period? (Dispersion)	(Adams et al. 1992; Straub 1995)
Outcome	(5) Organizational Value	What are the <i>financial benefits</i> following investment in social media? (e.g., cost reduction, cost avoidance) Has organizational <i>effectiveness</i> improved? (e.g., improved service time, product or service quality, or customer satisfaction or retention) Has the <i>IT systems</i> been affected by social media use? (e.g., measures related to IT performance or information security)	(Culnan et al. 2010)
	(6) Individual Value	Are personnel happy with the use of social media? (e.g., employee <i>satisfaction</i>) Has personnel <i>productivity</i> improved? (e.g., improved service time, service quality)	(Culnan et al. 2010)
Beliefs	(1) Organization	Who has <i>ownership</i> of the content? (e.g. content currency and accuracy) What is the social media <i>policy</i> ? (Does the firm have publicly available social media policies for its employees and customers?)	(Bottles and Sherlock 2011; Wilson et al. 2011)
	(2) Societal	What would be the <i>perceived</i> usefulness of social media in organizations? Is social media <i>easy</i> to use? What <i>perceived effects</i> do social media have on organizational change?	(Venkatesh et al. 2003)

Table 2: Empirical Research Agenda and Metric of SM-BAO framework

Social Media and Business Value

Perceived value is the consumers' overall assessment of the utility of a product based on perceptions of "what is received and what is given" (Zeithaml 1988 p14). If production and consumption of service occur simultaneously, they become difficult to compare/assess before purchase (Abe 2005). In terms of social media, this is the case. Value creation by social media is a complex process consisting of a myriad of employees, clients and even providers, and thus they are especially difficult to compare. For this study, we purport the measure of business value to evaluating the extent of impacts on the organization.

Adapting Senn (1982), social media's impact could be assessed by looking at the performance (effectiveness and efficiency) and the effect that the applications of the social have within an organisation. The performance assessment helps to determine whether to readjust or to put in more resources to improve the performance of the system. On the other hand, impact at individual level can determine overall net benefits of an IS (DeLone and McLean 1992). Social media value can be measured by the *performance* of individuals as they could be an indication that it has improved the user's decision-making productivity, produced a change in user activity, or has changed the decision maker's perception of the importance or usefulness of the information system. Another example of another model to capture value is that of Wang and Fesenmaier (2004), where their model captures (1) the influences that affect participation, (2) the socio-needs of participants and (3) the conceptual boundaries. Its four dimensions—*Functional, Social, Hedonic and Psychological*—represent a complete and pedagogical evaluation of the value of initiatives that promote community engagement. Adding to the metric in Table 2, there are more questions left unanswered about the true value of social media: Does use of the SM improve trust, loyalty, responsiveness, innovation so the organisation is as porous, transparent and authentic as possible? Can SM become a tool for motivation, connection, and community building within an organisation?

R2: *How and for whom does social media create value?*

Social Media and Adapting Beliefs

More and more organizations are claiming that social media is rapidly changing their business landscape in terms of providing new opportunities to improve internal operations and to collaborate in new ways with their customers, business partners, and suppliers (Boyd and Ellison 2008; Culnan et al. 2010). It is suggested that with the right interaction, changed business processes (either system or business) become more *institutionalised* over time, where the practices are drawn on, adapted, and reinforced by users in ongoing interactions (Orlikowski 1992). Referring to Figure 1, the SM-BOA model at this stage suggests a directed linear flow as it ignores temporality. In practice there are bound to be feedback loops (behavior of organization→organizational structure) that influence different aspects. That is, individual agents are likely to reflect on the outcomes triggering some behavioral adjustment, and potentially may even alter their beliefs. We believe this is particularly so, as contemporary IS become more prevalent in the workplace and the society; the subsequent use of these systems are near mandatory rather than optional. These are evident in theoretical concepts such as *appropriation moves*, *structuration* (DeSanctis and Poole 1994) and *enactment* in describing IS adoption in organizations.

R3: *As behavioural and culture changes is institutionalized into the organization, does it guides (social media) policy and methodologies for customer service, human resources and marketing.*

CONCLUSION

Social media has developed rapidly and is challenging many models of social interaction. Today, businesses are using social media to recruit skilled employees, collect information on consumers, and build communities of interest. However, as we demonstrated, the value of innovation is still largely anecdotal. This is largely due to the lack of theoretical treatment of the phenomena and a rigorous research agenda to study it. This study attempts to address some of the myths of lost business value, productivity and risky behaviour in workplaces, driven by the onslaught of Web 2.0 and particularly social media. We are of the view that the negative connotations associated with the use of social media in the workplace have been overblown. The discourse in this paper attempts to fill the knowledge void of how socio-technical aspects of emerging web-based technologies affect their use.

For this, we first treat social media as a service. We describe social media as a platform to facilitate the interaction of providers and clients to create business value. Thereafter, we introduce the SM-BAO research model to guide our ongoing empirical investigation into social media use in Australian businesses. Rather than beliefs, we argue that a richer model of behaviour is needed to fully understand the range of actions that employees will undertake. From the SM-BAO model, we propose a multi-staged research approach, where each stage informs and guides further stages. The MS-BAO model lays the foundation for ongoing use policy research.

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