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CONTENT CLUTTER AND ENTERPRISE SOCIAL MEDIA: A CASE STUDY

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ABSTRACT

A single case study of the UK subsidiary of a multinational corporation (Colpal) that currently utilizes enterprise social media technology to share organisational knowledge has revealed an emergent theme. The relational and cognitive dimensions of social capital and organisational leadership were found to play important influencing roles for knowledge sharing within the organisation's virtual communities. However, a new theme emerged from the case suggesting that the affordance of persistence offered by social media technology can actually hinder knowledge sharing once content reaches a certain level. Labelled as content clutter, it concerns the phenomenon whereby the amount of knowledge content becomes sufficient to discourage future knowledge sharing. As an organisation's use of enterprise social media starts to mature, these findings serve as a starting point for future research concerned with how to effectively manage knowledge content in virtual communities in a way that encourages effective knowledge sharing.

KEYWORDS

Content Clutter, Knowledge Sharing, Virtual Communities, Social Capital, Enterprise Social Media

1. INTRODUCTION

In current organisations, the ability to handle knowledge effectively is often considered a source of competitive advantage (Argote & Ingram, 2000) and a critical success factor to organisational development, leading to better internal strategic alignment and enhanced decision making (Kearns & Lederer, 2003). The emergence of virtual communities is offering ways for employees to exchange knowledge within the firm. Social networking is a critical organisational routine that enables knowledge sharing and knowledge creation (Sun, 2010), and has helped redefine our perception of "community", lowering geographical and physical boundaries. This study concerns knowledge sharing within organisational virtual communities.

We take knowledge sharing to be the process of two or more individuals transferring and acquiring knowledge through communication (Ku & Fan, 2009). Shared knowledge can be explicit knowledge, which can be easily articulated, codified and transferred, allowing the knowledge receiver to understand the know-what and know-why of 'something' (Hsu, Ju, Yen, & Chang, 2007). The other form of knowledge is tacit which develops in the knowledge receiver innate know-how and including know how to interact with known-whom around 'something'. Unlike explicit knowledge, tacit knowledge isn't easily articulated and codified, making it much harder to be transferred (Nonaka & Takeuchi, 1995). Often the key to acquiring tacit knowledge has been through a shared experience of two or more participants (Lam, 2000). Since it is much harder to imitate or copy tacit knowledge, facilitating tacit knowledge transfer gives the organisation a sustainable competitive advantage in the longer term (Liedtka, 1999). In organisational virtual communities

an individual sharing a document with many people in exemplifies explicit knowledge sharing. Posting suggestions of how to approach a meeting where figures need to be explained exemplifies tacit knowledge sharing.

This study delineates the term virtual community as an “aggregation of individuals or business partners who interact around a shared interest, where the interaction is at least partially supported and/or mediated by technology mediation” (Porter, 2004, p1). Virtual communities are an informal platform to provide knowledge, support and friendship (Huang & Kuo, 2003). They allow participants to maintain existing social ties and seek new social ties as well. (Dabbish, Kraut, Fussell, & Kiesler, 2005).

Newly emerged social media technologies e.g. wikis, blogs and fora offer employees more simultaneous affordances compared with earlier tools, like email and instant messenger (Treem & Leonardi, 2012). Following the success of personal social media platforms many technology departments of larger organisations have implemented social media technologies for organisational use among their employees. Previous scholarship has examined factors that influence a person’s ability and/or desire to share information and knowledge within an organisational virtual community. Contextual variables, such as the social media technology, organisational support and championship, right through to individual variables like incentive systems, extrinsic and intrinsic motivation, social capital, identity & personal cognition have all been theorised to play a role in the level of knowledge sharing within an organisation (Lin, Hung, & Chen, 2009; Shen, Yu, & Khalifa, 2010). The evolving role of technology, social aspects, and organisational support on knowledge sharing have been the most researched.

The specific question of why employees are motivated to share organisational or shy away from sharing knowledge in their organisational virtual communities is the overarching question of this study. It attempts to provide an in-depth analysis of the key themes that influence knowledge sharing. Furthermore, it seeks to contribute by clarifying the relationship between the technology and social and organisational aspects of knowledge sharing within organisational virtual teams.

Approaching this question, we employ a case study in, a UK subsidiary of a multinational consumer products company, henceforth named as ‘Colpal’ who, through their enterprise social networks, currently utilise virtual communities to share knowledge within the organisation.

2. LITERATURE REVIEW

We chose to focus on enterprise social media usage within a knowledge sharing context. Literature was collected to find major themes emerged. Social capital and organisational context were the main themes emerging. Social capital is important to knowledge sharing within virtual teams, evidenced by the research theorising social capital as an antecedent to knowledge sharing (Chai & Kim 2010); as a mediator to knowledge sharing (Ip & Wagner, 2008) and finally as a moderator to knowledge sharing (Fischer and Reuber 2011). Nahapiet & Ghoshal (1998) offered two characteristics of social capital. Firstly, it can’t be owned by any one individual or be easily traded among groups. Secondly, it facilitates the most efficient actions of individuals operating within a social structure. Nahapiet & Ghoshal (1998) distinguished three different dimensions of social capital.

In the first structural dimension, this is taken to mean the intensity of relationships that exists in a network and the configuration structure of the network itself. In the context of virtual communities, it is the familiarity that members in the community, traditional or virtual, feel towards one another (Yu, Lu, & Liu, 2010). Key to understanding this dimension is the level of ‘social ties’ that occur between individuals within a group. Frequency of interaction, is important for two reasons. Firstly, it means that both strong and weak ties can exist in the virtual world and be developed over time, just like offline relationships. Secondly, it opens up the idea of virtual communities acting as a more effective information ‘bridge’ between strongly tied and weakly tied virtual communities, allowing for information and knowledge to diffuse faster than ever before. Overall, this structural dimension is reinforced by the relational and cognitive elements.

Trust and its effect on knowledge sharing has been deeply researched in the literature. Hsu et al. (2007), found that trust is a multi-dimensional concept that develops in stages, from the basic level of information-based trust, right through to identification-based trust whereby both parties have fully internalised the other’s preferences, emerging from a history of interactions with one another (Rousseau, Sitkin, Burt, & Camerer, 1998). Being able to identify with other individuals breeds a mutual trust that is the key driver of knowledge

sharing within virtual communities (Hsu et al., 2007; Grabner-Krauter, 2009). Additionally, while elements of relational capital drive the frequency of knowledge sharing within virtual communities, it has also been shown to increase the quality of the knowledge exchange (Chiu et al., 2006).

The third cognitive dimension refers to shared visions, shared, and shared interpretations that occur between individuals and groups (Lesser & Storck, 2001). Nahapiet & Ghoshal (1998) explain that shared language is a sort of social lubricant that enhances the capability of different parties to merge knowledge during social exchange. In the context of virtual communities, it provides an avenue in which participants can understand each other and work together to continually build up their common vocabulary and communicate in the most efficient and effective manner within their own domains (Chiu et al., 2006). Expanding on the notion of shared vision, Tsai & Ghoshal (1998) explain it to be “a bonding mechanism that helps different parts of the organisation to integrate or combine resources” (p467). Additionally, shared language and vision have been shown to act as an initial substitute for trust, allowing for early interactions that lead onto more enhanced levels of trust (Grabner-Krauter, 2009)

Huy and Shipilov (2012) defined emotional capital as the “aggregate feelings of goodwill toward a company and the way it operates” (p74). The key pillars supporting emotional capital are alignment expectation between the organisation and individual, employee recognition of achievement, community attachment between employees and senior management based on shared values, interests, and fun. In their study, they found that those companies that exhibited higher levels of emotional capital, engaged more frequently in knowledge sharing on their enterprise social media platform than companies with low emotional capital. However, Nahapiet & Ghoshal (1998) suggested that the existence of social capital is not always a beneficial resource. Janis (1982) posited that strong ties can produce ‘collective blindness’ that might have damaging consequences.

Overall, having a high presence of social capital has been empirically demonstrated to facilitate better knowledge sharing in physical communities (Yli-Renko, Autio, & Sapienza, 2001) and later on within virtual ones (Chao-Min et al., 2006; Yao, Tsai, & Fang, 2015). However, they are highly interdependent. In isolation, while each of the dimensions on their own doesn’t always result in greater knowledge sharing, there is broad agreement that their combined affect does promote impacts on knowledge sharing within organisational virtual communities. It appears that social media technologies may act as a cognitive, structural and relational lubricant that help reinforce social capital.

The study of the organization’s role in the context of knowledge sharing has largely been shown in previous research to be both an antecedent and moderator to knowledge sharing within offline and virtual communities (Tong, Tak, & Wong, 2015). The organisational environment that surrounds virtual communities can be broken down to mean the economic environment, the management style, the political context and the culture of the organisation itself (Barrett, Cappleman, Shoib, and Walsham (2004). Status and power distance are also considered as key influencers to knowledge sharing within virtual teams (Bhagat, Kedia, Harveston, & Triandis, 2002). To address the intertwining elements of management style and political context, an attempt has been made to categorise these under the following headings of organisational support, leadership, network formality, and structure.

This study characterises organizational support as the level of endorsement or formality an organisation gives to its virtual communities. Wenger, McDermott, and Snyder (2002) place this degree of formality on a continuum between the level of formality that makes the virtual community essentially ‘unrecognisable’ to the organisation and the level of endorsement on a virtual community being so great that it represents a fully institutionalised virtual community. In this scenario, the level of endorsement is also positively linked to the company resources dedicated to the virtual community. Romanelli and Tushman (1994) suggest that this level of resource must be sustained over time to ensure that the virtual community remains formal, characterising this as the level of ‘organisational slack’ a company has towards keeping a virtual community successful.

Another important organisational resource that drives knowledge sharing is the extent of leadership ‘embeddedness’ associated with such virtual communities (Majewski & Usoro, 2011). This was taken to mean the extent to which a person or a group of people motivate and inspire virtual members to engage in knowledge sharing (ibid.) At one end of the spectrum, usually where there is a high degree of formality, leadership roles are generally assigned by management (Gongla & Rizzuto, 2001; Lesser & Storck, 2001). At the other end of the spectrum where there is extremely low formality, leadership roles within the group are in a constant state of flux, emerging through the state of expertise of a given person or group (Lesser and Storck, 2001). While placed at either end of the spectrum isn’t necessarily an advantage or disadvantage,

when a virtual community grows in member size and importance. Linking back to the cognitive and relational dimensions of social capital, communities that operate good knowledge management in terms of keeping a common and consistent language (Tsai & Ghoshal, 1998), as well as ensuring that the information is kept up to date and relevant to people's jobs (M.-Hsu et al 2007), breeds more cognitive alignment and information based trust among participants, helping to contribute to higher rates of knowledge sharing.

Another organisational dynamic concerns the delicate balance of formal and informal mechanisms that support knowledge sharing within an organisational virtual community. Virtual communities that have organically evolved sometimes lack the formal mechanisms to manage the knowledge quality and may start to become unruly (McDermott and O'Dell, 2001). On the other hand, virtual communities that were created by the company's senior management team based on topics they deemed important may lack the informal mechanisms to sustain knowledge sharing in the first place (ibid.). Wherever the balance of formal and informal mechanisms may lie, having the capability in the organisation that allows leaders to strike such a balance to both motivate and manage knowledge sharing within virtual teams appears to be the key in driving knowledge sharing.

Finally, organisational structures have also been shown to have an impact on knowledge sharing within virtual communities. Nonaka and Takeuchi (1995) argue that flat, open, flexible, and decentralised structures best support the sharing of knowledge. Looking at the opposite end of organisational structure, those with a more centralised organisational structure inadvertently tend to create a non-participatory environment that discourages knowledge sharing. (Sivadas & Dwyer, 2000). Building on the notion of hierarchies, Tsai (2001 and 2002) sees these hierarchical structures create knowledge silos that have the potential to hamper knowledge sharing.

In an assessment of the key themes identified review that concern knowledge sharing within virtual communities, it is evident that the key influencers of knowledge sharing embody a dynamic interplay between more recent and continually evolving technological aspects and evolving social and organisational aspects.

Despite broad consensus in the literature that social media technology facilitates more socialisation and offers affordances that supersede more traditional CMC technologies, it can't generate and sustain knowledge sharing within virtual communities on its own. Similarly, while elements underpinning social capital like trust and shared language have been shown to drive more knowledge exchange in communities, both physical and virtual, outside the obvious need for a social media platform to exist within a virtual community, social media technologies have been shown to enhance the level of social capital, helping to have both a direct and indirect effect on knowledge sharing in such communities.

Whilst much recent scholarship has sought to test theories on social, organisational and technological aspects in relation to knowledge sharing in organisational virtual communities, the continuous and rapid evolution of technology, combined with its apparent mediating effect on the world in which it operates, calls for a fresh in-depth look to identify what themes are relevant today in a complex real-life organisational setting. By understanding if these major themes are still key influencers to knowledge sharing in an organisational setting and second, to uncover any other new contextual themes that may be worthy of future study.

3. RESEARCH QUESTIONS AND METHODOLOGY

The overall research question that this research addressed concerned the influencers to knowledge sharing within an organisational virtual communities.

In order to identify the key influencers, respondents were asked to provide reasons as to why they were most active and least active within their current organisational virtual communities. We wanted to understand if themes from the literature resonate in the case and also sought to identify emergent themes from the case that could have implications for future research directions.

According to its 2014 Annual Report submitted to the Securities and Exchange Commission, Colpal is a \$17.3 billion US-based consumer products company serving people in more than 200 countries. The company enjoys market leading shares through its strong global brands in its core businesses – Oral Care,

Personal Care, Home Care and Pet Nutrition. According to its website, it has identified three key strategic pillars to help support sustainable growth in these core businesses: 'Innovation for Growth', 'Leading to Win' & 'Effectiveness and Efficiency'. The key pillar of 'Effectiveness and Efficiency' concerns the re-investment of savings generated through on-going efficiency programs. Reinvestment is focused on innovation and brand building, enabling technology and analytics, digital engagement and driving growth in emerging markets.

The company's virtual communities persist on platforms from a single provider. They have grown from the CMC provision and now include profiled, blogs, wikis, and fora. In order to answer the questions on why respondents were least active and most active, an e-mail survey was sent by the General Manager to all 103 UK employees of 'Colpal'. There was a final open ended question asking respondents to provide one or two suggestions on what Colpal could do to increase knowledge sharing within their social media platform. Each individual response was checked to ensure that all answers given by respondents were detailed enough to give an accurate picture of their views. The survey received a 97% response rate from employees with all questions eventually answered in a satisfactory manner.

Two weeks before the survey was issued, informal observation of employees within Colpal was recorded across six business meetings where it was anticipated that the internal social media platform would be used and/or discussed. Observation can be defined as "the systematic description of events, behaviours, and artefacts in the social setting chosen for study" (Marshall & Rossman, 1989), p79. During such meetings, observations from participants concerning the internal social media platform were jotted down on notes and categorised as potential issues or potential positives to knowledge sharing within Colpal. Other interesting observations that were considered important to answering the research question were also noted. The researcher was also a participant in these meetings. Before the commencement of each meeting, informed consent to collect notes was obtained from participants.

This additional data collection method was necessary for the following reasons. Firstly, it allowed the research to be conducted in the respondent's naturalistic settings, revealing both their positive and negative reactions to engaging in knowledge sharing within the enterprise social media platform. DeWalt and DeWalt (2010) suggested that participant observation be utilised as a way to increase the research validity. These observations were important as it revealed both verbal and non-verbal reactions to this social phenomena that might otherwise not have made it into participant's survey responses. To help reduce observer bias, a specific observer template was created to ensure consistent information capture across each meeting.

4. RESEARCH FINDINGS, ANALYSIS & DISCUSSION

The first aspect emerging from the data concerned the member expectation of knowledge sharing within the virtual communities. In virtual communities where employees were most active in knowledge sharing, there existed a high level of expectation that all members contribute knowledge in some way. Reasons for the high level of contribution expectation were varied, with some respondents saying that it was "just part of my job" or "it was part of a business process". In virtual communities where there was the least knowledge sharing, there existed relatively low levels of expectation to share. Reasons for low level expectation were also varied, with some respondents saying that "why should I contribute when no one else appears to be" or "it wasn't made clear that I needed to contribute anything". Observational field notes suggested in two meetings that social expectation played a role with one meeting showing a potential link between high expectation and high knowledge sharing and low expectation and low knowledge sharing

This notion of expectation alignment forms part of the relational dimension of social capital put forward by Nahapiet & Ghoshal (1998) which supported previous research (Chui et al, 2006 ;Tsai & Ghoshal, 1998) showing this to be one of the key ingredients to increased knowledge sharing.

The second social aspect emergent from the data is the concern of trust. Trust in this situation concerned the accuracy of content in each page and whether the information was relevant. In virtual communities where employees were most active in knowledge sharing, the trust in information content appeared high. In most instances, respondents gave the example of certain market share files that were only available through a particular virtual community page. They were known to be accurate and relevant to most people within the organisation.

Like expectations, the multifaceted nature of trust forms part of the relational dimension of social capital and its effects on knowledge sharing have been well documented (Chui et al., 2006; Tsai & Ghoshal, 1998; Rousseau et al. 1998). However, it was proposed by M.-Hsu et al (2007) that information based trust is the first level of trust and members must graduate through all the levels of trust to drive the most effective knowledge sharing. In the example regarding the market share reports, other than certain employees uploading and downloading the files, there were very little posted comments concerning the data. It is possible that in order to generate more commentary around such pages, additional levels of trust, might need to be achieved.

Interestingly, while Chiu et al (2006) showed a significant positive relationship between social capital and knowledge sharing, the study also tested social capital's effect on knowledge quality and found that, contrary to their expectations, increased levels of social capital generally had no relationship to knowledge quality. There doesn't appear to be any studies that test the direct relationship between knowledge quality and knowledge sharing. Findings from the Colpal case suggest that a useful future area of inquiry would be to understand what relationship, if any, exists between the level of knowledge quality and the level of knowledge sharing in a virtual community. Furthermore, it would be also useful to understand at what point the level of knowledge sharing within a virtual community starts to dilute knowledge quality.

The third social aspect emerging from the data concerned the domain's metadata structures. In virtual communities where employees were most active in knowledge sharing, the metadata appeared to be structured in such a way that made content posted within these communities easy to find or easy to share for members. This intuitiveness of metadata structure was generally not present in communities where members engaged in lower levels of knowledge sharing. Furthermore, in communities where knowledge sharing seemed high, field notes from observational data noted that, out of six observed meetings, three meetings observed occurrences where problematic metadata structures were inhibiting the efficiency or finding content that was relevant to a meeting. It could be argued that metadata is a type of shared language that forms part of a cognitive interplay among virtual team members, enabling more efficient knowledge transfer. This notion of shared language is called out by Nahapiet & Ghoshal (1998), forming a component of the cognitive dimension of social capital. Evidence of shared language, in addition to other elements of cognitive capital it must be noted, act as an enabler to knowledge sharing with virtual communities is also evident in previous research by Chui et al (2006).

4.2 Organisational Themes and the Emergence of Content Clutter

The study emerged findings consonant with the concepts in the literature concerning management support, strategic leadership and envisioning, awareness of and responsibility for communication via virtual communities. At the same time elements of structural capital as an influencer to knowledge sharing in virtual communities were made reference to in the survey data but not the observational data.

However, one theme emerging from this case that didn't appear as a major theme in the literature review concerned the influence of content clutter on knowledge sharing within virtual teams. In virtual communities where employees were least active in knowledge sharing, information clutter appeared to be a key influencing factor. Not to be confused with content quality, meaning the quality of each individual piece of content within a virtual community, content clutter concerns the frequency of content, large and small, that sits within the community. It is suggested from the data that the high frequency of content on some virtual communities made it harder to find information that was relevant for employees to do their job. However, in the communities where employees said they were most active, references were made to content quality but not necessarily to the frequency of content in each community. A possible explanation for this may be the employee's interpretation of 'quality' as it could have also been taken to mean the ideal level of content frequency. Another possible explanation was that some of these most active communities contain a smaller number of participants which may have resulted in naturally smaller levels of content to begin with.

Interestingly, a secondary review of the literature focusing on this notion of content clutter revealed a paper by Yardi, Golder, and Brzozowski (2009) who explained through their study of corporate blogging that the more information that was added to a virtual community, the harder it became to find any specific piece of information. Here, the specific affordance of persistence (Treem & Leonardi, 2012) offered by social media may start to become a hindrance to knowledge sharing once the frequency of content reaches a certain point.

5. CONCLUSIONS

Whilst there is a question arising out of the suitability of social media tools over more traditional CMC tools, the biggest revelation emergent from the study is that the persistence of such technology, can actually hinder knowledge sharing. Described as content clutter and supported by previous research (Yardi et al., 2009), this emergent theme may have turned an initial strength of social media technology into a possible weakness, suggesting that as the frequency of information content of a virtual community reaches a saturation point, whereby the organisation and search for specific knowledge starts to become confusing and cumbersome. This emergent theme from the case highlights a potentially new issue in knowledge sharing suggesting that too much knowledge sharing could start to diminish the sharing.

Moreover, the influencers of knowledge sharing in virtual communities found in this case have helped identify potential shortfalls in organisational strategy concerning virtual communities. With many organisations recognising organisational knowledge as a key intangible resource that holds a potential key to competitive advantage (Grant, 1996), this will help business leaders within the organisation refine their strategies in the hope of making organisational social media the main medium of tacit and explicit knowledge exchange.

The emergence of content clutter as a potential future research topic warrants further qualitative and quantitative inquiry, especially in the context of how it interacts with other possible variables that impact knowledge sharing in organisational virtual communities.

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