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Classifying emerging knowledge sharing practices and some insights into antecedents to social networking : A case in Insurance.

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Table 1 Content categories and frequency

Content	Frequency across users
Social Media Networking	16.7%
Weather	14%
Technology	10%
Fundraising	8.1%
Customer Journey & Feedback	7.9%
Supply Chain Initiatives, Processes & Schemes	7.36%
Supplier Processes-Services	7.1%
Claims Processes	6.4%
Miscellaneous	5.6%
Wider Industry Issues e.g Regulation	4.47%
Awards	4.4%
RSA & internal Processes	3.42%
Education & Training	3.1%
Politics	1%

Table 2 Topics and Intention matrix

Topic Categories	Intention Genres				
	A	B	C	D	E
1 : Wider Industry Issues Regulation	1	12	9	4	8
2 : Weather and Climate	2	21	17	47	20
3 : Technology	1	26	11	11	27
4 : Supply Chain Supplier Processes, Services	1	20	13	8	12
5 : Supply Chain Initiatives Process Scheme	0	10	12	16	18
6 : Social Media Networking	0	45	23	18	41
7 : Politics	0	3	1	0	4
8 : Miscellaneous	4	17	1	0	21
9 : Fundraising	1	10	22	10	19
10 : Education Training	1	8	4	3	8
11 : Customer Journey and Focus, Customer Feedback	3	7	5	25	20
12 : Claims Processes	1	15	2	15	16
13 : Awards	0	3	7	14	10
14 : RSA Processes	1	8	9	4	4
Total	**16**	**205**	**136**	**175**	**228**

Table 3. Counts and frequency of words/concepts linked to 4 overarching themes and 17 subthemes.

Theme	Counts	Frequency
1.Social /Work and non-work related (buyer and supplier) Fairs, Fundraising, holidays	16	7.8%
2. Supply chain performance (Supplier posts) Customer service including customer feedback (often preceded by adjectives like good, excellent, high, first class, unparalleled, great work, winner, fantastic job, prompt and concise, great feedback.	38	49%
Efficiency, lead time, cost management	9	4.4%
Performance recognition (via customer feedback) e.g.Recommendations, appreciation, thanks	28	13.6
Claims	13	6.34%
3. Supply chain (RSA posts)		
Awards	25	12.1%
Customer Care/Service expectations	34	16.6%
Customer Strategy	22	10.7%
KPI's	10	4.9%
Net Promoter Score (NPS)	16	7.8%
League tables	2	1%
Legislation (buyer and supplier)	3	1.46%
Surge	7	3.4%
Weather	28	13.6%
Claims	8	3.9%
4. User : self introduction and expertise (buyer and supplier)	1	0.5%

Table 4 Relationships between key themes

Co- related words **Supply chain performance**

Themes	**RSA Awards** nominations recognition, winners RSA endorsements RSA praise	**Net promoter Score** (NPS)	**RSA customer service strategy** (service our needs, our vision, goals, embracing our common cause) PL2020	**League tables**	**RSA customer care & expectations**	**KPI's**
Supplier Performance Customer service, customer focus, customer claim experience, high level of quality, consistent performance, Customer's needs, Customer obsession, Customer journey	16	8	11	0	25	1
Efficiency: lead times, cost management	3	0	0	2	0	2

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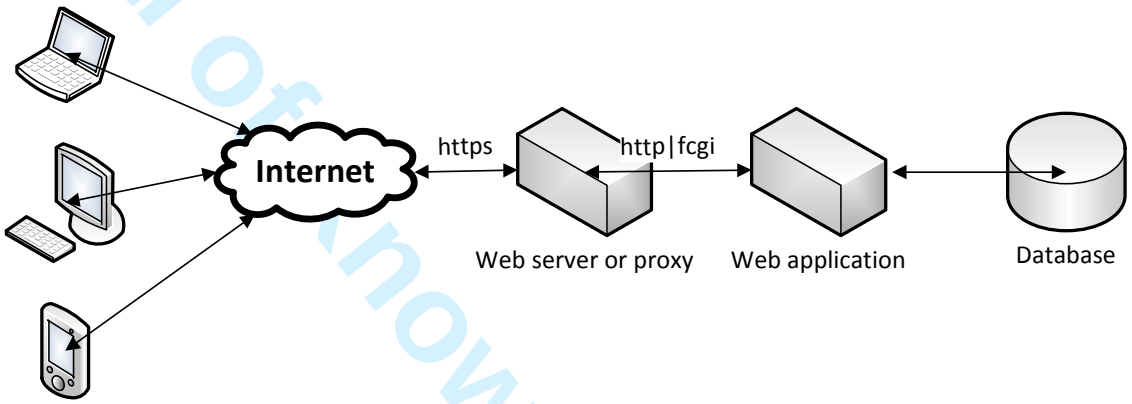

Figure 1 High level system architecture

Classifying emerging knowledge sharing practices and some insights into antecedents to social networking: A case in Insurance.

Fig 2 Intention orientated Classification scheme

Category A. Me: the author posted something about him/her-self. Including what he/she was doing in work/self introduction/ expertise

Category B. Questions', directed knowledge/info seeking: The author posted a comment or opinion on an issue seeking a response, followed by a 'what do people think?, or your views please?. Questions seeking a specific answer. Messages directed to a specific person(s) were placed in this category.

Category C. Updates and Notifications: the author posted news, events to share with others. Includes internal news and external news.

Category D. Shared Information: the author posts factual information on a particular process, survey, schemes, initiative, feedback, results of a survey that have been involved with, case study, report , URL's. No expectation of a reply.

Category E. Shared insights, past experiences, ideas, stories, advice, opinions etc. No reply expected, often expressed in the past tense.

Classifying emerging knowledge sharing practices and some insights into antecedents to social networking: A case in Insurance.

Purpose

The paper explores a case of early adoption in the use of social media tools for the purposes of knowledge and information sharing across a supply chain in the UK home insurance market.

Design Methodology

The methodology used includes genre and content analysis to analyse empirical data from blogs and posts via a customised social extranet (KNOWNET) involving 130 users over a 13 month period.

Findings

The results uncover a set of emerging practices which support both information and knowledge exchange, but which are in the main driven by organisational factors such as buyer power and supplier competitive influencing.

Originality/Value

This paper builds on current thinking in social media theory by providing a window into organisational and supply chain attributes that can explain social media adoption within the context of knowledge sharing supply chains. A systematic classification of user posts over an extended period enabled this work to illuminate not just emerging knowledge sharing practices across a buyer led supply chain, but also the effects of buyer power on users to an online community.

Implications for Theory

This study has contributed an overall conceptual understanding of reasons behind social media adoption, by identifying organisational attributes of buyer power and supplier influence as key antecedents to knowledge sharing within a supply chain.

Keywords: Social networking tools, Knowledge sharing, Supply chain dominance and influence, Insurance.

Paper Type: Research Paper

Introduction

Organizations have always considered knowledge sharing, as pivotal to competitive advantage (Taylor 2007; Tohidinia and Mosakhani 2010), and as such finding the right mechanisms for sharing knowledge across staff (and increasingly across supply chains) has been a major issue for both organisations and knowledge management research (Allen 2008). The importance of sharing knowledge across supply chains cannot be understated**.** Conducting business today often requires collaboration across multiple parties within a supply chain. The Insurance claims market is no exception, typically requiring the input, participation and decisions of many stakeholders at different stages of the claims process. However valuable unstructured knowledge from experiences, insights and ideas are often not directly part of this process. With the rise of social media tools, and the success of social networking via platforms such as linked In, Facebook and Twitter, several recent studies have suggested these technologies may provide new opportunities to facilitate both structured

and unstructured knowledge sharing (Panahi et al 2013). Recent evidence shows knowledge intensive companies' are beginning to consider web based 'social networking' as community-building platforms (Annabi et al 2012) primarily "behind the firewall" (Yardi et al 2008) and within the boundaries of an organization. This could provide opportunities for unstructured information and knowledge (people's experiences, ideas etc) to be utilised *to* potentially deliver a huge set of efficiencies and opportunities for rethinking core supply chain and operational processes amongst users(Wu 2008). Within insurance, typically, much buyer supplier 'claims' information is standardised explicit data distributed through automated systems. However, these systems do not allow for richer information and implicit knowledge gained from insights, experiences and stories, into the claims process easily. For example, a home insurance supply chain relying on a combination of end to end (offering different services) and horizontal suppliers (offering similar services) to fulfil service 'claims' contracts might use the knowledge network to develop and improve their own internal and the external supply chain efficiencies (which can impact on how they fulfil a claim) through for example sharing information and knowledge on customer service feedback, common IT issues, local regulation, or apprentice training. Typically this type of information and knowledge is not usually shared across this group, except possibly via face to face (F2F) supplier workshops. The KNOWNET platform therefore fulfils a complementary function to F2F supplier workshops in that it provides a facility for users to interact with the entire supply chain almost immediately and whenever required, together with a richer source of knowledge and information sharing that may contribute to improved customer service, relationship development, supply chain collaboration and performance.

However, the use of social media tools presents a new set of challenges to organizations that are not used to managing knowledge and information transfer in this way, and where lessons learnt from research endeavours into the use of social media in knowledge management are limited.

While the literature points to some early cases of the knowledge transfer potential of social tools in industrial contexts (predominantly social intranets), little is still known about drivers of use, the forms of use and likely potential of such platforms as a technology to group communication, knowledge sharing and information exchange, especially when extended across organisational boundaries to include supply chains. Indeed, very limited empirical research exists on the use of social tools for knowledge sharing across any external supply chain (Ngai et al 2015).

With the growing rise in adoption of collaborative social networking platforms, such as Yammer, and pressures on businesses to adopt these new technologies, this research paper seeks to present findings from an exploratory study of knowledge sharing practices adopted across a multi-level supply chain in the UK home insurance market. The study aims to contribute to an understanding of the emerging knowledge and information sharing practices and antecedents to usage of social media tools across a supply chain community. To this end, the research applied both content analysis (collected over an 8 week period) and genre analysis (collected over a 13 month period), to a series of online posts generated over a custom made social networking platform entitled KNOWNET. These methods were employed to gain insights into emerging knowledge sharing behaviours and practices in an insurance context at a community level, and interpret these results in the light of social media theories, and predominately intranet based studies that have explored knowledge sharing.

Social Media for knowledge and information sharing

There has been much debate on the definition of social media (Constantinides and Fountain 2008). However, despite this, the literature seems to generally agree that social media software are represented by a range of emerging tools (wikis, blogs etc) and platforms where users are able to share information and importantly collaborate and create networks of communities (Berners-Lee et al., 2006; McAfee, 2009). Given this, it appears that community driven and information-centric social media tools have tremendous potential for organisations to facilitate communities for information and knowledge exchange.

Social Media theory : key constructs in behavior

Social physiological drivers: Since knowledge sharing consists of social exchanges between individuals, interactions will inevitably be influenced by the relationships between individuals (Nahapiet & Ghoshal, 1998), with social capital known to play a major role in forming knowledge sharing intentions (Chang & Chuang, 2011; Chow & Chan, 2008; He et al 2009). Indeed, social factors including social influence, (Cheung & Lee 2010), social ties, reciprocity and trust, (Chai and Kim 2010; Chiu, Wang, Shih, and Fan 2011; Hau & Kim 2011) have all been shown to play a role in knowledge sharing intentions and behaviours. Of particular interest here is the concept of social power, which has received little attention in social capital literature (Ngai et 2015). Social power has been defined narrowly as a user's (e.g.blogger) capacity to influence as many audiences as possible (Wei (2009) and has been shown to have direct effects on intentions to behaviour in a supply chain context (Ke et al (2009).
Some high profile cases which have implemented social media tools as part of a knowledge management strategy include companies such as RPC (Janes et al 2014); Siemans (Muller & Stocker 2011), Deloitte (Riemer et al, 2012) Capgemini (Riemer et al 2011), and Vistaprint (Dolezalek, 2009) albeit internally. Many of these recent studies have employed small sample surveys to assess the role of social media tools and social capital influences in knowledge sharing behaviours. Interaction via tools such as blogs etc were found to play a role in building the shared context and social fabric acting as the glue upon which all other knowledge work was possible (Reimer et al 2012). The social aspects of social networking tools may arise from improved communications, and collaboration across staff (e.g.McAfee 2009, Richter & Riemer 2009) could contribute to relationship building (Gunther et al 2009), may facilitate a sense of community; (Jackson et al 2007); or enable a conversation medium for context building (Rosson 2009; Zhang et al 2010).

User factors: Individual factors such as a user's experience and ability to use IT, (Jarvenpaa & Staples 2000) personality traits (Correa et al 2010; Lu and Hsaio 2010, Zhong et al 2011), feature in many prominent works on social media engagement and appear to be frequent variables identified as antecedents or moderating/mediating factors in explaining engagement.
In a knowledge sharing context, only a few studies have empirically examined the role of individual personality or disposition, with mixed results. Wang & Noe (2010) examined the moderating role of exchange ideology that defines the relationships between what one gives and receives (information and knowledge wise) from an organization. Cabrera et al (2006) examined openness to experience and found it to be positively related to individual's self-report of knowledge exchange. Similarly, Constant et al (1994) found employees with a higher level of education and longer work experience were more likely to share their expertise and have positive attitudes toward sharing. In contrast, Wasko & Faraj (2005) found little evidence that self-rated expertise was related to knowledge sharing. The Technology acceptance model (TAM) (Davis 1989) and the theory of reasoned behaviour (Ajzen & Fishbein 1980) are often used to describe how individual behaviors are influenced by beliefs and attitudes, with a focus on user perception, user experience, and user personality expressing the attitudinal, behavioural and innate characteristics of social media users. For example, Hsu and Lin (2008) studied the role of TAM in users' attitude and intention to blog. Casaló et al. (2010) adopted TAM to investigate user's intention to use and make recommendations in an online community, and in a later study (Casaló et al (2011) employed TAM to examine user's intention to follow advice.

Organizational factors: Whereas individual and social factors can explain intentions to engage with social media, organizational factors such as 'customer and marketing orientation' also appear to explain social media usage behavior. Marketing variables for examples affect online posting behavior, which in turn influences customer choice of product and brand (Chen et al 2011). Mathwick (2002) identified online customers switching effort, continuity costs and contractual costs as a cause of customer's loyalty intentions. Online reviews on customer care experiences also influenced brand or company selection (Karakaya and Barnes 2010). Supporting evidence by McKinsey's 2015 indicated that in public-relations, customer-relationship-management(CRM), and marketing processes, companies are readily adopting social tools, however the use of social

technologies are least integrated into the work flow for operations processes, including Supply chain management, procurement and knowledge management.

Gap in the literature

A great deal of social media research, theories and constructs have emerged over the last decade, with a particular focus on the individual and social-physiological aspects explaining social media adoption. In contrast, research into organizational factors that determine social media usage remain limited. Indeed, outside of marketing or public relations spheres, there is very little research and empirical data on corporate use of social media generally, suggesting a gap in the literature in supply chains and procurement, processes, where a particularly high potential for companies to increase value from utilizing these technologies, exists (McKinsey 2015).

This research seeks to address this issue by conducting (and inferring) from content analysis on a sample of online posts to provide a window into organisational and supply chain attributes that can explain social media adoption within the context of knowledge and information sharing, and to conduct Genre analysis to identify emerging knowledge and information practices within the same context.

Knowledge and Information Sharing

It isn't easy to make a perfect distinction between information and knowledge, and therefore whether information or knowledge is being shared. This study follows the view that knowledge is *actionable information* (Tiwana 2000). In an organizational context, knowledge is produced when information is shared (Tsoukas 2009). It is humans that interpret information, and, depending on their capabilities and competencies, this information can become knowledge that makes (cognitive and behavioural) actions possible. Nonaka and Takeuchi (1995) drew a distinction between tacit and explicit knowledge, with tacit knowledge (constructed by people) being highly personal and hard to formalize, making it difficult to communicate or share. Subjective insights, intuitions, and hunches typically fall into this category of knowledge. Furthermore, tacit knowledge is deeply rooted in an individual's action and experience, as well as in the ideals, values, or emotions he or she embraces.

Explicit knowledge in contrast, is knowledge that has been codified formally using a system of symbols, or made tangible as a physical artefact, and can therefore be more easily shared. Knowledge sharing is ''the act of making knowledge available to others'' (Ipe and Wagner, 2008, p. 41). It is a voluntary, conscious act between two or more individuals resulting in joint ownership of the knowledge between the sender and the receiver (Davenport 1998; Ipe and Wagner, 2008).

Using social Networking Tools to share Knowledge.

In theory, and in practice, knowledge, both structured (e.g. via blogs, wikis) and unstructured (subjective insights, experiences, tips etc) can be shared using social tools (Stenmark 2000; Falconer 2006). This can generate new ideas via forums, brainstorming sessions, status updates, private chats etc that may lead to cognitive and behavioural actions that translate into work based changes (Zhao and Rosson 2009). Microblogs in particular have become a popular knowledge/information sharing tool, because they are "accessible and low-cost, both in terms of time and cognitive load" (Zhang et al., 2010, Panahi et al 2013). Their effectiveness exists because they allow users to 'keep a pulse on what is going on in others' minds and maybe useful in getting to know a colleague as a person and learn about his or her interests as well as work responsibilities Zhao & Rosson (2009), to provide users with information or engage in conversation (Ehrlich & Shami 2010), and to provide work-related status updates (Skeels and Grudin 2009; Zhao and Rosson 2009). Directed micro posts in particular can often spark a brief 'conversation' which has the characteristics of a threaded discussion or a private chat in a public space (Janes et al 2014) and can be used for publishing news about employee groups or business units which are features of intranet community forums" (Zhang et al., 2010, 13).

More directly, 'knowledge', can be shared when users ask questions and seek advice by actively and explicitly drawing on existing expertise when they have a query, problem or issue to solve *as well as*

asking 'how to' questions (Reimer and Richter 2010; Janes et al 2014). Additionally, social networking can enable effective communication (Riemer and Johnston 2011), mutual knowledge (Cramton 2001), or cognitive social capital (Nahapiet and Goshal 1998). A shared background can emerge that makes the world intelligible, and can provide the foundation for all other knowledge work to happen (Riemer and Johnston 2011), as well as a shared context to understand and interpret correctly other people's questions, problems, requests for ideas, and others' input (Riemer et al 2012). Social networking platforms can also enable coordination and alignment of immediate shared work and tasks across staff, providing a project manage role (Riemer and Richter (2010), as well as create unstructured storage space, where information (e.g reports, files, video's etc) can be accessed by a tagging and search function (Reimer et al 2012).

While the evidence suggests that knowledge can be shared via social networking tools, knowledge assets may not be as rich as a face to face encounters, and may need to be supported by various conversions such as from tacit to explicit knowledge (Panahi et al 2013; Nonaka et al 2000; Hildrum 2009; Lopez Nicolas and Soto Acosta 2010). Some early research suggests unstructured knowledge sharing via social tools is simply too limited, or impossible to achieve (Flannagin 2002; Hislop 2001).

Research Design

The aim of the study was to contribute to the growing social media literature via insights into behaviours/intentions to adopt social networking across a supply chain community for knowledge sharing purposes, as well as identify emerging knowledge sharing practices using these tools. To this end, a social networking platform KNOWNET was employed as a primary data collecting tool, designed to capture 'the collective wisdom of the supply chain', and become an 'omniscient' tool (Muller and Stocker 2011) for supply chain vendors and the insurer across geographical, and organizational boundaries. It's usability is simple and intuitive, the result of users and stakeholders requirements in the consultation phase of the research. Currently users participate on a purely voluntary basis, although to strengthen the knowledge sharing culture, active participation in the 'supply chain community' could be an integral part of working processes and business target agreements by participants. While the platform consisted of a message, blogging and wiki facility, only blogs and messages were used in Year 1, and this paper reports on emerging practices in these areas only.

The KNOWNET platform: High-level system architecture

KNOWNET is a browser-based platform, designed for the exchange of business related knowledge, experiences, insights, advice and best practices and which revolves around the concept of multiple Posts (streams), to which users can be added on a case by case basis. The high level system architecture is that of a typical ajax web application (Figure 1) – web client (browser) - web server – data base. For technical and security reasons, we have deployed the web server application behind a reverse proxy or as a fcgi process.

The database server is a separate, standalone server like mysql, postgres, mssql or an in process database like sqlite. For relatively light load (<1000 users, <50000 requests/day), sqlite is adequate, and simplifies deployment.

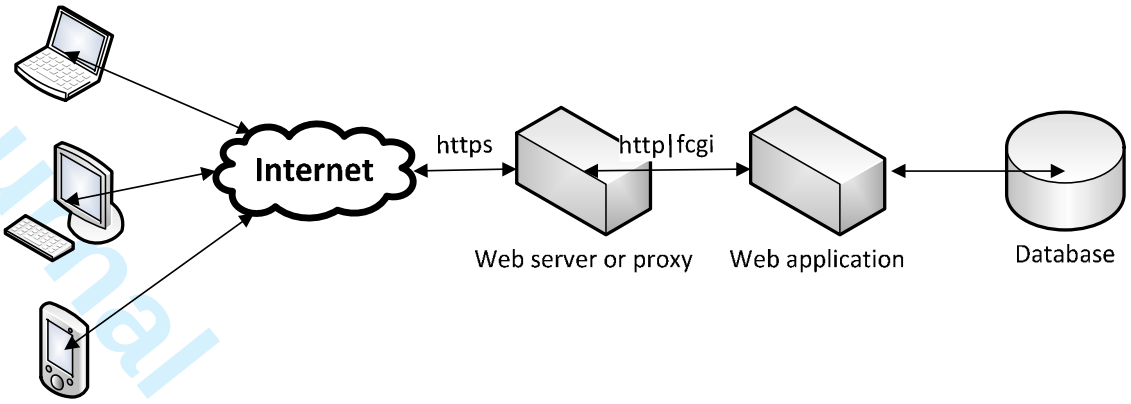

Figure 1 High level system architecture

The KNOWNET platform was hosted on RSA servers and launched on 22nd May 2013, after a period of marketing. The main network consisted of 130 people after 13 months, with an expectation of growth as vendors from other areas of insurance joined.

KNOWNET consisted of a main network and five groups, each adopting a moderator, responsible for monitoring content. Within 6 months, 2 groups had emerged, within 11 months a further 3 groups had emerged, with one group remaining private.

The research project was exploratory in nature and based on a qualitative case study of an insurance supply chain, with the main unit of analysis being 'users' online posts'. The study population is drawn from one of the largest insurers in the UK, together with almost its entire home supply chain vendor base.

Profile of participants

The Insurer RSA was the largest participant in the trial, with 55 senior and middle management personnel mainly from procurement and sourcing taking part. RSA are a global insurer and second-largest general insurer in the United Kingdom, employing around 19,000 employees across a number of locations (Horsham, Peterborough, Liverpool, London), including some 800 plus home workers making up around 15% of the UK workforce. Its developing culture to promote supply chain teamwork and the sharing of knowledge amongst its preferred suppliers and employees includes a strategy which encourages increasing social interaction among its home insurance supply base and sourcing/procurement teams. RSA's Home Insurance Supply chain management structure consisted of a Head of field operations, senior sourcing managers, supply chain managers, supply chain relationship managers, SRM principals, sourcing analysts and sourcing specialists.

On the supply side, RSA's customer claims would typically be serviced by small and medium UK vendors. Vendor participants included 75 users offering services in: alternative accommodation, drainage providers, loss assessors, furniture replacement, engineering and surveying consultants, claims management/handling services, locksmiths, glazing, security services, floor repair, restoration and inspection, subsidence, goods replacements etc. Many suppliers offered similar services creating a 'competitive' supply base. Participants included senior executives and managers, company directors, managing directors, operations directors, one chief operating officer and heads of operations. Most of the participants had jointly worked on claims fulfilment and knew each other well.

Methodology

Two methods, namely content and genre analysis are applied to uncover content, practices, structures and meaning from online posts. A combination of genre and content analyses and findings are presented in this section.

Genre Analysis and findings

Genre analysis has been applied in information systems research to investigate "the relationships between communication practices and technologies within organizations and to trace technology adoption and patterns of communication that emerge in the process" (Westman & Freund, 2010, p323). Genres can be defined as "socially recognized types of communicative actions that are habitually enacted by members of a community to realize particular social purposes" (Yates et al., 1999, 84). As such, by identifying a genre repertoire, it is possible to capture the essence of the communicative action of a social group in its context. In doing so, it is necessary to identify the multiple, interacting genres that are enacted by the group members. This research uses this approach and concentrates mainly on communicative purpose in identifying genres. An intention oriented classification scheme was designed around 5 key genres that emerged from posts over the 13 month period. The scheme was designed to show how, and why KNOWNET members were using the platform, and which genres were most prolific. Figure 2 provides an overview of the 5 different genres.

Fig 2 Intention orientated Classification scheme

Category A. Me: the author posted something about him/her-self. Including what he/she was doing in work/self introduction/ expertise

Category B. Questions', directed knowledge/info seeking: The author posted a comment or opinion on an issue seeking a response, followed by a 'what do people think?, or your views please?. Questions seeking a specific answer. Messages directed to a specific person(s) were placed in this category.

Category C. Updates and Notifications: the author posted news, events to share with others. Includes internal news and external news.

Category D. Shared Information: the author posts factual information on a particular process, survey, schemes, initiative, feedback, results of a survey that have been involved with, case study, report , URL's. No expectation of a reply.

Category E. Shared insights, past experiences, ideas, stories, advice, opinions etc. No reply expected, often expressed in the past tense.

Genre analysis: Case sampling, data coding and data analysis

Since the platform launch in May 2014 until June 2015, the data set included 760 references around a subject, with an average of 5.6 posts per subject. Each reference was assigned one general category best characterising the topic of conversation. In addition, the data was coded according to 5 key genres that emerged. The data was mainly coded by one researcher with a second acting as a discussant frequently reviewing the genre repertoire. Any deviations were discussed and after resolving conflicts by either adding a new genre, splitting an existing one or merging two genres, previously coded posts would be recoded. If messages fell into more than one category, priority rules to coding schema were used. Using this coding scheme, messages were coded independently by two researchers using the formula E>A>B>D>C. The Kappa coefficient was used to measure the agreement between the two raters who coded and rated the messages. This process was iterated until all posts were successfully coded and both researchers agreed on the outcome. A third coder randomly coded material, to ensure consistency of agreement on both the content of conversation and the genre per reference. As a result 14 single 'content' categories emerged. While most posts were coded as single instances of a genre, several messages contained more than one genre. Of the 760 references, 520 posts were part of conversations, while the rest were single posts without replies. The length of posts varied greatly from 2036 + characters to 166 characters, with over 85% of posts falling outside of the microblog category. There were no restrictions on message or response size. All posts were included in the genre analysis. The data set was imported to the qualitative analysis software Nvivo10 for text coding and qualitative analysis. Posts were cross referenced with the researcher categories that were established by hand. The process was very time consuming as the platform had generated circa 400 pages of posts and nearly 520 conversations.

Genre Repertoire: What are users sharing on the platform? (in order of popularity)

Category E: Discussion using opinions, perspectives, past experiences, advice, ideas and stories. This emerged as the largest genre category, accounting for 30% of all genre appearances. It captured all posts that initiate or are part of interactive discussions, in which users voice their own opinion or engage in clarifying various matters of interest, provide advice, recall a story or experience or present an idea.
e.g. Supplier 1: *Here at Company X we believe the next surge event is imminent, and the property insurance industry will get caught out again. Our latest article discusses how the property insurance industry needs to do more to maintain and develop its supply chain relationships during the good times, to be able to deal with the bad times more effectively.!'*

Supplier 2's response: *I love the case study. Definitely something I did not know about Company X. If anyone ever thought their SLAs were stringent, just imagine deglazing a huge store front in central London within 4 hours!*

RSA : *Great stuff - Do any of other suppliers have similar they could share?*

The evidence shows that supply chain users have embraced social networking tools to carry out open discussion. The extent to which the KNOWNET platform is used for sharing experiences and opinions is not surprising, given previous research (Reimer et al 2012). Moreover, opinions are typically voiced in reply to other people's posts, meaning communication on the platform across the supply chain is very interactive, resembling a discussion space more than a stream of single posts.

Category B: 26.9% of genre appearances showed users posting questions or sought other's opinions on specific issues. Messages within this category were usually not directed towards a specific person. Many posts would start or end with "What is your view?" Some posts were part of an ongoing discussion, contained opinion, but were distinguishable as they ended in a question or requested a viewpoint

'Big Data: Is anyone else as obsessed with this as we are? I think as suppliers we have a huge amount of data that we could maximise to help clients know their customer in terms of profiles, fraud analytics, postcode risk, product and average costs. A number of us will have claims data, retail data, and social media data that could really profile insurance customers. Trends and patterns detected and shared could really change the face of validation, processes, and cost in the insurance arena (well this is my humble opinion anyway).This could surely mean a true person-centric claims process that, with data sharing at its heart, could benefit the customer the client, and also the supplier through better collaboration. Any thoughts?'

Category C**:** Updates and Notifications represented 17.8% of genre appearances and subsume genres that reflect the intention to provide others with supply chain related updates regarding events, status updates in schemes, winners of awards, praise. Some updates simply posted external news or updates in operational processes and systems.

'This new system functionality acts as a communication tool for the trade network, it flags delays in order to notify customers or quickly make alternative arrangements, it provides instant information for instant authorisations increasing first time fix opportunities and dramatically speeds up payment processes'.'All in all it simplifies the claim journey creating an efficient process that benefits the customer journey greatly. This is contributing to a large reduction in complaints and an ever improving Net Promoter Score.'

In the main, Category C was dominated by the buyer RSA for notifications on awards, Net promoter scores and reinforcing customer service strategy.

'We are delighted to announce the winner of the January award is Company U for demonstrating

'Customer Obsession'. Company U were chosen for their strong customer feedback supported by excellent NPS of 63

Winner : Company Z with consistent performance against KPIs. A consistently high level of quality and customer service maintained. Minimal adverse feedback from customers, claims teams or Company W on Company Z's jobs. If any issues do arise, Company Z have acted on this feedback openly, quickly and efficiently. Very highly thought of by our buildings validation team. Willingness to adapt and assist RSA is demonstrated at all times – occasions where they have been used to resolve major complaints not involving them initially, and each time they have resolved the issues quickly, efficiently and with minimum fuss. They have adapted to an increased allocation – 30% to 50% - with no adverse impact on performance, KPIs or customer. In all interactions with Company Z, they have demonstrated a refreshing openness, honesty and willingness to work for and with RSA to service our needs and our customer's needs to the highest standard.

Supplier *'I am a firm believer that all the people in your business need to "buy in" to what you are trying to do to ensure the customer journey is as good as can be'.*

Category D**.** 23% of genre appearances captured posts with shared information (or structured knowledge) relating to a particular process, survey, results, case study report, links to webpages, feedback, company promotional information or supplier schemes. No expectation of a reply was made.

Supplier 1 *'I recently met Company P to understand if there was anything they could add to the way we work and improve the customer journey. I don't know if anyone else has met them but wondered if anybody had any views. Sharing images is definitely a good idea and I thought perhaps SCMT could be enhanced to support the sharing of images between suppliers who are working on the same claim.*

Supplier 2's reply
'I think photo sharing is a fantastic point to make. We are working with clients to look at how we streamline this to reduce visits and touch points. This is particularly relevant for claims that have both building and contents, as you can easily send out a surveyor, a builder, a carpet assessor, a B&W engineer etc - all taking photos of pretty much the same thing! We are looking at "first on the scene" type scenarios, where the first person out collates the necessary photos'.

Sharing structured information or knowledge contains almost a quarter of all genre appearances and reflects communication that is intended to direct other users towards factual information, particular processes or industry related content (e.g. on regulation). Resources refer to files (e.g. photos, cases) and URLs (e.g. a link to a Wiki), which are shared with or without a user's request. In addition, it demonstrates the users eagerness to update on ongoing schemes (e.g. supplier schemes), or report customer feedback to the user base.

Category A captured information relating specifically to the author, including what he/she had been doing in work/or self introduction and expertise in a particular field. This category generated significantly less traffic than other genres with only 2.1% of the total references. This is possibly because suppliers have already established a relationship with each other via RSA led workshops and meetings, and may suggest social networking is not really used for personal promotion.

What are users sharing information and knowledge on?
The majority of threads show conversations built around 14 key themes, including direct work and indirectly work related topics (Table 1). Popular topics included weather (in the context of home insurance), and 'the customer journey'. Non work related topics included fundraising, social media, politics and technology, demonstrating engagement with the platform for socialising as well.

Table 1

By combining the 5 genres (A-E) against the 14 key themes of conversation, a matrix showing the most prolific subject areas can be constructed (Table 2).

Table 2

Content analysis and findings

Content analysis was developed primarily to explore meanings underlying physical messages, and can identify the intentions of an individual, or group, as well as describe attitudinal and behavioural responses to communications (Berelson 1952). It has been defined as a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding (Krippendorff 1980). Holsti (1969) offers a broader definition as, "any technique for making inferences by objectively and systematically identifying specified characteristics of messages" (p. 14). Qualitative content analysis goes beyond merely counting words or extracting objective content from texts to examine meanings, themes and patterns that may be manifest or latent in a particular text. It allows the researcher to understand social reality in a subjective but scientific manner (Zhang and Wildemuth 2009). As such it is particularly useful in order to reveal people's information related behaviours and thoughts within the supply chain as they engage in knowledge sharing activity, and present reasons for social media usage.

Sample

An 8 week sample of 132 posted messages across all genres was collected between Feb 1st 2015- 30th April 2015 (the quietist period (June-Sept) and busiest periods (Oct-Jan) for the RSA supply chain (agreed by participants as being representative of the average level of communication). In the first instance, all 132 messages (post and replies) were scrutinized by 2 researchers to identify common/recurring words, see Table 3. These words were scrutinized in all their contexts, using a 'key word in context' function. The context categories where recurring patterns of words and concepts appeared, showed trends in 'Customer Journey & Customer Feedback', 'Supplier Processes-Services'; 'Supply Chain Initiatives, Processes & Schemes' and 'Awards', making up a total of 30.1% of areas of communication via posts, over the 13 months of the trial.

Table 3

To interpret the posts, a frequency analysis was conducted to determine how often concepts and words appeared. After agreeing the context, words and concepts were then coded into one of 4 overarching themes and 17 subthemes ranging from communication which reflected 'social' usage to 'supplier performance'(vendors) to 'supply chain performance' (RSA) and 'personal usage'. Determining the level of implication of a (sub) theme (performance, efficiency, service, social etc) allowed the author to code words that were associated with themes in the literature. Coding error was minimized by using two separate researches to code the material, identify and agree the context and then compare. Where discrepancies arose, the researchers met to discuss the interpretation. Content analysis was supported by NVivo10, allowing data to be organized, managed, and coded in a more efficient manner.

The categories showing the highest levels of recurring words/concepts appeared in areas of supply chain performance (supplier posts) with a 49% frequency within one theme alone. Within RSA posts, the biggest sub-theme was 'customer care/service expectations' scoring 16.6%.

Table 3 shows RSA and vendors have distinct motivational differences for posting, indicating that user groups adopt social media tools to meet a range of objectives, both social and organisational. Whereas suppliers were focused on disseminating 'positive messages about customer feedback, RSA was focused on reinforcing customer service strategy, customer service expectations and publicly reward supplier performance in these areas, as well as to provide alerts on 'Weather related notifications' (13.6 %).

By combining RSA customer care/service expectations and RSA strategy (totalling 27% frequency), the findings suggest RSA shares information/knowledge in various forms (notifications, discussion and shared information) to reinforce their customer centric strategy, and service expectations/examples of customer care in line with their customer service strategy.

Other prominent sub-themes: Net Promoter Score (7.8% frequency), reflecting customer loyalty, and 'Awards for customer obsession' (12.1% frequency) suggest the buyer is using social media to continuously 'communicate, reinforce and reward customer loyalty' in this crucial operational objective.
Whereas all interaction was friendly, for the theme 'Social', words and concepts relating to 'Social events' were counted, with relatively few occurrences at just over 7.8% and user expertise in a particular area came in at 0.5% frequency.

This data was further analysed to examine potential connections between 'high frequency' categories, and conclusions were validated against data collected at meetings, secondments and workshops with key RSA staff and suppliers. Proximity analysis was carried out on the highest scoring themes to identify any co-occurrence of explicit concepts. In this procedure, online posts were broken down into sentences of text, or a string of words and scanned across to check for co-occurrence of concepts (Krippendorf 2004). The result displayed in Table 4, is the concept matrix, where a group of interrelated, co-occurring concepts, might suggest a certain overall meaning.
A number of co-occurring words/concepts appeared across 'Supplier performance' and the following themes: NPS, Awards, RSA strategy, League tables and KPI's, either within the same sentence or the same paragraph, or as a reply or part of a thread.

Table 4

The table reveals a strong skewed relationship between concepts of 'Supplier performance' (in customer service, customer focus, customer journey); and RSA customer service strategy and Awards/NPS. RSA-led goals, objectives or strategy are communicated and endorsed via awards, NPS, league tables and KPI's. The strength of this relationship suggests the buyer uses a range of social media tools (Genres C, D and E) to constantly link and publicly reinforce its objectives of 'customer obsession' against 'vendors performance'. This is conceivable given the highly competitive, low margin consumer centric nature of the industry.

For the sub theme of 'Efficiency' (a Supplier Performance theme), there was no relationship with RSA strategy, and a weak relationship with RSA awards and league tables, suggesting 'customer service' takes priority as an operational objective over vendor efficiency performance.
If we extrapolate these findings across social media usage over a 13 month period, it appears the KNOWNET social network is used primarily for distinct organizational reasons by both buyer and vendors rather than for socio psychological factors or user factors.

Additionally, a supplier's extensive reporting of positive customer feedback (both within genre and content analysis) may suggest they use all formats (except Category A, and to a lesser extent C) to 'competitively influence' other vendors offering similar services and/or to influence the Principal by showcasing their customer care capabilities.

Discussion

Genre classification, together with content analysis suggests the KNOWNET platform is used to support the creation of new knowledge or use of existing knowledge via a range of emerging practices, but for distinctly different reasons by users to a supply chain.

'Organisational power and influence' is particularly strong in explaining why and how users may adopt social media tools across a supply chain. The nature of the UK insurance claims market is such that much power is located with the policy holder. This is reflected in the insurer's 'customer obsession' strategy. The upstream supply chain will bid for repair work with the insurer who is able to select which supplier to use for repairs(it can decide to have a multitude, or just a few preferred suppliers or in-source the process). This creates a buyer dominant structure, or 'dominant player power' (Ke et al 2009). Vendors in contrast must compete against one another in many areas of repair, and therefore do not hold power over any other supplier in the chain. Their efforts to show off 'their capabilities' to the buyer (insurer) with the intention of winning bids, can be interpreted as 'competitive influencing'

With regards to emerging practices, the platform was predominately used as an *open discussion medium.* This is consistent with findings from intranet based knowledge sharing systems (Riemer et al 2012; Reimer et al 2011) highlighting the conversational nature of posts. In contrast to many intranet platforms, most posts were long messages rather than micro blogs. On content, work and non-work related topics were discussed, suggesting knowledge sharing was used to inform, and influence users as well as to develop and build social capital across users. Direct work related topics appeared less popular, and it is likely as users become more familiar and confident in posting, work related matters will increase. It is also likely that the competition amongst competing suppliers may inhibit more 'sensitive' work related material being posted. The popularity of the platform as a discussion forum suggests the RSA supply base uses a less immediate means for this purpose (Chai and Kim 2010; Chiu et al 2011; Hau & Kim 2011) and an interactive platform effectively fills this requirement.

Answer seeking was primarily about non-work related areas such as Social media networking and general technology. On content, Zhang et al (2010), and Reimer and Richter (2010) show some similarities to this case, although a classification slightly different from the KNOWNET case is used. In contrast to the Deloitte network (Reimer et al 2012), actively asking questions on the platform was the second most common communication practice accounting for 26.9% of all posts, while a striking 35.4% of questions directed towards the use of social media tools, as users sought to share their learn and understand its potential (Davenport 2012). This finding corresponds with Zhang et al's 2010 study showing 21% of conversation seeking included Yammer related topics as users discuss, negotiate and use it in the workplace.

Sharing factual information/knowledge was overwhelmingly about sharing supply chain information on claims related topics such as weather, customer journey, customer feedback, and vendor performance (NPS scores). To supplement this, over 70 uploads of files, best practice case studies were made. Much of this structured material was used as a starting point for discussion(Janes et al 2014).

Notifications and updates were mainly buyer led illustrating the requirement for an effective and instantaneous broadcasting facility to a dispersed supply base, but also an effective device for influencing the supply base and reinforcing the buyer's customer centric strategy via ongoing notification of rewards, league tables, and NPS scores. The use of buyer led updates and notifications highlights the power or dominant role the Principal plays within this supply chain (Ke et al 2009).

Providing a repository of new informational input via links, reports (downloads). The large number of links, and file downloads that were posted and uploaded suggests users required a repository of information that could be easily and quickly accessed (Janes et al 2014). This contrasts sharply with previous studies (Reimer et al 2011) showing little evidence of using downloaded information for later reference in intranets.

Reporting customer feedback. Suppliers readily publicly reported aspects of good practices via case studies and positive customer feedback letters, in response to the Principal's continual references to customer care, service strategy and awards, and other competitors' showcasing. This reactionary

behaviour is an indication of the dominant player power to influence its supply base (Wei 2009; Koo et al, 2011, Wang and Lin 2011), but also a route to competitive positioning.

And for building a shared context via interaction through conversations, discussions and sharing updates, and enabling people get to know each other, learn what is, and interpreting correctly other people's questions, problems, requests for ideas, and others' input.

Overall, posts were positive, informal and chatty offering varying degrees of detail and substance. The level of resistance to reveal details around some work related issues and processes reveal the platform is still regarded with some suspicion and that some vendors will hinder information and knowledge exchange as they fear a loss of competitive advantage. It is likely as the network evolves and users become more familiar and confident in posting, non-propriety knowledge and information sharing will increase. This contrasts with findings from internal networks that show the development of an open and shared context was uppermost in the users mind (Reimer & Richter 2010). It also illustrates the importance of context in social media networks, and the relationship between users (diverse competitive supplier base in this case) as being crucial in the evolution of practices that will emerge across these platforms. The social aspect to behaviour (either via non work or work related topics) suggests users have historical social ties, and use the network to reinforce social (work) ties, in line with social capital theory (Shieu et 2010).

The findings did not produce evidence of :
1.Task problem solving across users(Zhao and Rosson 2009)
2.Activity and awareness related posts to enable task co-ordination. (Riemer and Richter (2010)
3.Project management of shared work (Riemer and Richter (2010)

The findings suggest social media extranets can effectively open up new channels for information and knowledge sharing across a diverse user base within a supply chain. The engagement with the platform, suggests there is a need and requirement for knowledge sharing, outside of the traditional routes in this sector. Furthermore, the findings illustrate social media platforms are appropriated by their users in emergent ways, and determining the way a social networking extranet is used will not necessarily lead to desired results. This is consistent with the general observation that Social Media platforms have 'an openness of use' (Riemer and Richter 2010).

Implications for Theory

This study contributes to existing theory on social media in the following way. First, it identifies organisational attributes of buyer power and supplier influence as key antecedents to sharing knowledge across supply networks. Secondly, it stresses the importance and role of supply chain power as a tool to promote higher levels of performance (Maloni & Benton 2000) in customer service for example, using whatever means is available – in this case social media tools. Thirdly, the study has contributed to the growing literature on social networking across organisations by identifying diverse communication formats (genres) that have emerged and highlighting their specific use within a skewed power relationship. Finally data from a competitive supply base are collected and analysed, an endeavour that has been missing in much empirical literature on knowledge sharing in supply chains to date.

Implications for practice

From a practical viewpoint, the paper suggests social media mechanisms are important to maintain ongoing and develop social (work) relationships, and users can learn from each other through such interaction. From a 'dominant player perspective', social media tools are an effective broadcasting conduit for reinforcing key corporate strategy to a dispersed group. The findings indicate that the use of 'buyer power' communicated via social media can have a significant influence on a vendor's customer service efforts and its competitive efforts within the supply chain.

Limitations of the research

Many studies have examined the effects of organizational culture, interpersonal trust, and organisational structure amongst other factors as mediators to knowledge sharing behaviour/intentions. A limitation of this research is the lack of focus on these variables on behaviours, which may be addressed and overcome by future research.

Conclusion and further Research

This paper has analysed communication, information and knowledge sharing across an Insurance social supplier platform. This forms part of a project that sought to develop an innovative social media framework, to support knowledge sharing across a principal and preferred vendors within a multi-level supply chain. The research has utilised large datasets produced over an extended time period, as well as used inferences from a representative sample, to deliver new insights into the potential of social media technology in cross organisational knowledge networking in Insurance supply chains. Additionally, insights into usage behaviours of social media tools through content analysis, and genre analysis, suggests emerging knowledge sharing practices across a supply chain network are appropriated by their users in emergent ways dependent on the context of use, and which can spur certain behaviours. This study represents one of the first empirical works exploring social media interaction in a commercial insurance supply chain, and as such more work in this growing area is needed.

References

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behaviour.* Englewood Cliffs, NJ: Prentice-Hall.

Allen, J.P. (2008), ''How Web 2.0 communities solve the knowledge sharing problem'', *IEEE International Symposium on Technology and Society, Fredericton*. 26-28 June.

Annabi, H.; McGann, S.T.; Pels, S.; Arnold, P.; Rivinus, C. (2012),Guidelines to Align Communities of Practice with Business Objectives: An Application of Social Media (HICSS), 2012 45th Hawaii International Conference on System Science

Berelson B, 1952 *Content analysis in communication research*. New York, NY, US: Free Press (1952). 220 pp.

Berners-Lee, T, Hendler J.& Lassila O (2006), "The semantic web", *Scientific American* 284, pp. 34-43.

Bock & Kim (2002) Behavioral intention Formation In Knowledge Sharing *MIS Quarterly* 29(1) pp. 87-111/March 2005

Cabrera A Collins and J Salgaso(2006) Determinants of individual engagement in knowledge sharing The *International Journal of Human Resource Management* 17(2), Issue 2, 2006

Casaló, L. Flavián, C., & Guinalíu, M. (2010). Determinants of the intention to participate in firm-hosted online travel communities and effects on consumer behavioural intentions. *Tourism Management*, 31(6), 898–911.

Casaló, L. Carlos, F., & Guinalíu, M. (2011). Understanding the intention to follow the advice obtained in an online travel community. *Computers in Human Behaviour*, 2792, 622–633.

Chai, S., & Kim, M. (2010). What makes bloggers share knowledge? An investigation on the role of trust. *International Journal of Information Management*, 30(5),408–415.

Chang, H. & Chuang, S. (2011). Social capital and individual motivations on knowledge sharing: Participant involvement as a moderator. *Information & Management*, 48(1), 9–18.

Chen, Y., Fay, S., & Wang, Q. (2011). The role of marketing in social media: How online consumer reviews evolve. *Journal of Interactive Marketing*, 25(2), 85–94.

Cheung, C. M. K., & Lee, M. K. O. (2010). A theoretical model of intentional social action in online social networks. *Decision Support Systems*, 49(1), 24–30.

Chiu, C. Wang, E,. Shih, F, & Fan J. (2011). Understanding knowledge sharing in virtual communities: An integration of expectancy disconfirmation and justice theories. *Online Information Review,* 35(1), 134–153.

Chow W & L Chan, 2008; Social network, social trust and shared goals in organizational knowledge sharing *Information & Management,* 45(7) November 2008, Pages 458–465

Constant, D., Kiesler, S., & Sproull, L. (1994). What's Mine Is Ours, or Is It? A Study of Attitudes about Information Sharing. *Information Systems Research*, 5, 400-421.

Constantinides E and S Fountain 2008; Web 2.0: Conceptual foundations and marketing issues. *Journal of Direct, Data and Digital Marketing Practice* (2008) 9, 231–244.

Correa, T., Hinsley, A., & de Zuniga, H. (2010). Who interacts on the Web? The intersection of users' personality and social media use. *Computers in Human Behaviour*, 26(2), 247–253.

Cramton, C. D. (2001) The mutual knowledge problem and its consequences for dispersed collaboration, *Organization Science 12*(3), 346-372.

Davenport T and L. Prusak. *Working Knowledge: How Organizations Manage What They Know*. Harvard Business School Press, Boston, 1998.
Davenport, T. (2012). Social media engages employees. *Financial Times*, 9 April. Accessed 14 August 2012
Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
Dolezalek (2009) Case study: VISTAPRINT's Wiki Way. *Training Magazine,* Issue 9, pp. 42-44.
Janes S, Dotsika F & K Patrick (2014) 'Implementing a social intranet in a professional services environment through Web 2.0 technologies' *The Learning organization, 21(1)*
Ehrlich K & N Shami (2010) 'Microblogging Inside and Outside the Workplace' *Proceedings of the Fourth International AAAI Conference on Weblogs and Social Media*
Falconer L. (2006), ''Organizational learning, tacit information, and e-learning: a review'', *The Learning Organization*, 13(2) pp. 140-151.
Flanagin, A.J. (2002), ''The elusive benefits of the technological support of knowledge management'', *Management Communication Quarterly,* 16(2) pp. 242-248.
Gunther O Krasnova H, Riehle D and V Schoendienst (2009) Modelling Microblogging Adoption in the Enterprise' *AMCIS 2009 Proceedings*
Hau, Y. and Kim, Y.(2011). Why would online gamers share their innovation-conducive knowledge in the online game user community? Integrating individual motivations and social capital perspectives. *Computers in Human Behaviour*, 27(2), 956–970.
He W, Qiao Q, & K Wei, 2009. Social relationship and its role in knowledge management systems usage *Information & Management*;46(3) April 2009, Pages 175–180
Hildrum, J.M. (2009), ''Sharing tacit knowledge online: a case study of e-learning in Cisco's network of system integrator partner firms'', *Industry & Innovation*, 16(2), pp. 197-218.
Hislop, D. (2001), 'Mission impossible? Communicating and sharing knowledge via information' *Journal of Information Technology*, 2002
Holsti, O.R. (1969) *Content analysis for the social sciences and humanities,* Addison-Wesley Pub. Co.
Hsu, C. & Lin, J. (2008). Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation. *Information &Management*, 45(1), 65–74.
Ip, K. and Wagner, C. (2008). Weblogging: A study of social computing and its impact on organizations. *Decision Support Systems* (45:2), 242-250.
Jackson, A., Yates, J. and Orlikowski, W., Corporate Blogging: Building community through persistent digital talk. In *Proc HICSS'07* (2007), 80.
Jarvenpaa & Staples (2000) The use of collaborative electronic media for information sharing: an exploratory study of determinants' .*The Journal of Strategic Information Systems*, 9 (2–3), September 2000, pp 129–154
Karakaya, F., & Barnes, N. G. (2010) Impact of online reviews of customer care experience on brand or company selection. *Journal of Consumer Marketing*, 27(5),447–457.
Ke W, H Liu ; KWei, J Gud, H Chen (2009) How do mediated and non-mediated power affect electronic supply chain management system adoption? The mediating effects of trust and institutional pressures *Decision Support Systems* 46 (2009) 839–851
Kelman H, Social Influence and linkages between the individual and the social system: further thoughts on the processes of compliance, identification, and internalization, in: J.T. Tedeschi (Ed.), *Perspectives on Social Power,* Aldine, Chicago, IL, 1974, pp. 125–171.
Krippendorff, K. (2004). 'Conceptual Foundation', in: *Content Analysis: An Introduction to Its Methodology*, 2nd edit., Thousand Oaks, CA: Sage, pp. 18-43.
Lopez-Nicolas, C. and Soto-Acosta, P. (2010), ''Analyzing ICT adoption and use effects on knowledge creation: an empirical investigation in SMEs'', *International Journal of Information Management*, 30 (6), pp. 521-528.
Lu, H. & Hsiao, K. (2010). The influence of extro/introversion on the intention to pay for social networking sites. *Information & Management*, 47(3),150–157.
Maloni M and W. Benton(2000)'Power influences in the supply chain' *Journal of Business Logistics*, 21 (1) (2000), pp. 42–73
Mathwick, C. (2002). Understanding the online consumer: A typology of online relational norms and behavior. *Journal of Interactive Marketing*, 16(1),40–55.
McAfee, A & Sjoman, A. (2006). Wikis at Dresdner Kleinwort Wasserstein (Case No. 606074). Boston: *Harvard Business School Case Studies*.
McAfee, A. (2009). *Enterprise 2.0: New Collaborative Tools for Your Organization's Toughest Challenges*. McGraw-Hill Professional, Boston.
McKinsey & Company: Bughin J, M Chui, and M Harrysson(2015)Transforming the business through social tools.

Müller J and A Stocker (2011) Enterprise Microblogging for Advanced Knowledge Sharing: The References@BT Case Study' *Journal of Universal Computer Science,* 17(4)pp 532-547.
Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage' *Academy of Management Review*, 23(2), 242–266.
Ngai, E.W. Spencer S.C. Tao, Karen K.L. Moon(2015) Social media research: Theories, constructs, and conceptual frameworks' *International Journal of Information Management*35 (2015) 33–44
Nonaka, I. and Takeuchi, K. (1995) *The Knowledge Creating Company* (Oxford University Press, Oxford).
Nonaka, I., Toyama, R. & Konno, N. (2000). "SECI, Ba and Leadership A Unified Model of Dynamic Knowledge Creation, "*Long Range Planning*, 33, pp5-34.
Panahi S, Watson J and H Partridge (2013) 'Towards tacit knowledge sharing over social web tools ' *Journal of Knowledge Management*, 17(3) pp379-397
Richter, A. & Riemer, K. (2009): Corporate Social Networking Sites – Modes of Use and Appropriation through Co-Evolution. In: *Proceedings of the 20th Australasian Conference on Information Systems. Melbourne: Monash University*.
Riemer K., Overfeld P., Scifleet P., & Richter A. (2012) Oh, SNEP! The Dynamics of Social Network Emergence - the case of Capgemini Yammer, *Business Information Systems Working Paper, Sydney, Australia,* http://ses.library.usyd.edu.au/handle/2123/8049.
Riemer K., Richter A., Diederich S., & Scifleet P. (2011) Tweet Talking - Exploring The Nature Of Microblogging at Capgemini Yammer, *Business Information Systems Working Paper, Sydney, Australia*, http://ses.library.usyd.edu.au/handle/2123/7226.
Riemer, K & Richter, A 2010, 'Tweet Inside: Microblogging in a Corporate Context', *Proceedings of the 23rd Bled eConference*, *Bled, Slovenia*, pp. 1-17.
Riemer, K., & Johnston, R. (2011) 'Artefact or Equipment. Rethinking the Core of IS using Heidegger's ways of being', *International Conference on Information Systems, Shanghai*, Dec 4-7.
Skeels M & J Grudin (2009) 'When social networks cross boundaries: a case study of workplace use of Face book and Linked in' *Proceedings of the ACM 2009 International conference on Supporting group work* pp95-014
Stenmark, D. (2000) 'Leveraging tacit organizational knowledge', *Journal of Management Information Systems*, 17(3), pp. 9-24.
Taylor H (2007), Tacit knowledge: conceptualisations and operationalisations,' *International Journal of knowledge Management,* 3(3) pp60-73
Tiwana, A (2000) 'Peer-to-peer valuation as a mechanism for reinforcing active learning in virtual communities: actualizing social exchange theory System Sciences': *Proceedings of the 33rd Annual Hawaii International Conference, Maui,* 2000
Tohidinia, Z. and Mosakhani, M. (2010), "Knowledge sharing behaviour and its predictors", *Industrial Management and data.*
Tsoukas, H. (2009). A dialogical approach to the creation of new knowledge in organizations. *Organization Science,* 2009 - pubsonline.informs.org
Wang S & R Noe (2010) Knowledge sharing: A review and directions for future research' *Human Resource Management Review* 20(2) June 2010, pp 115–131
Wasko M and S Faraj (2005) Why Should I Share? Examining Social Capital and Knowledge Contribution in Electronic Networks of Practice *MIS Quarterly* 29(1) Mar., 2005, pp. 35-57
Westman, S & Freund, L (2010), 'Information interaction in 140 characters or less: genres on twitter' *Proceedings of the 3rd symposium on Information interaction in context*, *New Brunswick, USA*
Wu C (2008) 'Knowledge Creation in a supply chain' *Supply chain Management: an International Journal* 13(3) pp241-250
Yardi S, S Golder and M Brzozowksi (2008) The pulse of the corporate blogosphere' in *Conf supplement of CSCW 2008 ACM* November pp 8- 12
Yates, J, Orlikowski, W & Okamura, K 1999, 'Explicit and Implicit Structuring of Genres in Electronic Communication: Reinforcement and Change of Social Interaction' *Organization science*, 10 (1) pp. 83–103.
Zhang Y and B. Wildemuth(2009) Qualitative Analysis of Content, in B. Wildemuth (Ed.), *Applications of Social Research Methods to Questions in Information*
Zhang, J, Qu, Y,Cody, J & Wu, Y 2010, 'A Case Study of Microblogging in the Enterprise: Use, Value, and Related Issues' *Proceedings of the 28th international conference on Human factors in computing systems*, *Atlanta, USA*, pp. 123-132.
Zhao, D. & Rosson, M. (2009). How and Why People Twitter: The Role that Microblogging Plays in In-formal Communication at Work. *In Proceedings GROUP'09, Sanibel.*
Zhong B., Hardin M., & Sun T. (2011)'Less effortful thinking leads to more social networking? The associations between the use of social network sites and personality traits'. *Computers in Human Behaviour*, 27(3), 1265–1271.