

# Using Enterprise Social Media for Collaboration

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## Case Study Review

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The use of social media inside an organisation is receiving increased attention and many commentators are optimistic about its potential benefits. This paper contributes to understanding the nature of the phenomenon and evaluates Enterprise Social Media, using the lens of intellectual capital theory. A number of important advantages are apparent and it is clear that these increase as the organisation becomes more adept at developing associated culture and working practices.

## Introduction

Social media has “democratized” corporate communication (Kietzmann et al., 2011: p11) and has been adopted as an important channel for customer engagement in recent years (Barwise and Meehan, 2010). The channels are primarily used to communicate with consumers: Facebook brand pages; corporate Twitter feeds and blogs; LinkedIn groups; and even company-owned brand communities (e.g. the Harley Davidson Community). While there is still some debate on the extent to which social media marketing generates a return on investment (Hoffman & Fodor 2010), the opportunities to improve customer engagement are significant (Sashi 2012) and few CEOs will publicly deny the need for these channels to engage in dialogue with consumers. Conversely, the use of social media for internal communication, collaboration and sharing of ideas is not so universally accepted (West, 2013).

However, the adoption of ‘social’ software is seen as an opportunity to foster individual creativity and to collaboratively develop new ideas and solutions within internal communities (Haefliger et al. 2011). A new type of working environment (referred to as Enterprise 2.0) has been predicted for some years now (McAfee, 2006). The vision is for organisations to take advantage of the “technological and ideological foundations of Web 2.0” (Kaplan & Haenlein, 2010: p 60) to allow free and easy collaboration between employees. Compelling evidence is presented in case studies of firms such as IBM and Burberry that such collaboration leads to: enriched working environments; greater employee engagement and commitment; improved product and process innovation; and enhanced customer value (Bjelland and Wood, 2008; Gouillart, 2012).

There appears to be cause for optimism that ‘social’ software may be a catalyst to a wide range of workplace and economic benefits, but enterprise software implementations require great care and attention in order to avoid disappointment (Brown and Vessey, 2003). To this end, there has been a recent call for a theoretically rigorous review of the use of ‘social’ software in the collaborative creation of knowledge within a firm (von Krogh, 2012) in order to

identify a strategic, policy-oriented approach to the management of this relatively recent phenomenon.

Of particular relevance is the use of such software in organisations where knowledge is core to the organisation's proposition. Such firms, which are referred to as Knowledge Intensive Professional Services organisations, are "models of an increasingly knowledge-based economy" (von Nordenflycht, 2010: p155). In such firms, any systems that facilitate the co-creation of knowledge are potentially of particular value.

The focus of this paper is on the exploitation of social software at the enterprise level, which is made up of two parts: (1) the ability for employees to develop personal networks of colleagues (and perhaps partners or customers) using functionality that is akin to an internal social networking site; and (2) the inclusion of social or collaborative functions to formal knowledge management systems. In combination, and when used in an integrated fashion, these are referred to as Enterprise Social Media (ESM), which is the use of corporate social media networks within companies, or between companies and their partners and customers to facilitate internal business processes.

This then leads to the research question for this project: how are the potential benefits of ESM being realised in KIPS firms? This reflects a desire to contribute to practice by offering strategic recommendations for such firms in planning and implementing ESM or in fully exploiting existing ESM capability. Further, this leads to empirical evidence to support the notion that intellectual capital theory supports a policy-driven approach to the measurement of the return on such investments is possible through such analysis.

The paper describes two studies which were carried out in early 2014. The first is a secondary data analysis of a range of publicly available materials which outlines functions and benefits of ESM systems. The aim is to generate a broad understanding of the market and the ways in which ESM can drive economic value. Second, a series of interviews were carried out with managers of two large-scale KIPS organisations and analyses have been

summarised in short case studies outlining their use of ESM. The theoretical framework for both studies is intellectual capital.

Both studies broadly support the claim that the use of social software in a range of firms produces case-based evidence of significant benefit. However, in study two, while many benefits are apparent, it is also clear that the implementation of software is only the first step on the journey to full benefits realisation and that a number of organisational and even cultural shifts are necessary.

### **Theoretical Framework: Intellectual Capital**

Intellectual capital is recognised as a source of intangible capital, which helps to explain the difference in the market capitalisation of a firm compared to its book value (Feiwal, 1975, quoting John Kenneth Galbraith, 1959). It is defined as the “intellectual material – knowledge, information, intellectual property, experience – that can be put to use to create wealth” (Stewart, 1998: pX). For example, at the time of writing, the book value of Google Inc. is reported to be less than \$300 per share, each of which has a market value on the NASDAQ in excess of \$1,200 (S&P Capital IQ reported in Yahoo! Finance, 2014). According to intellectual capital theory (and ignoring any discounts for Google’s substantial cash holding), the difference between these values is said to be explained by the combined knowledge, experience and intellectual property that can be harnessed by the organisation to generate future profits for the shareholders.

Researchers interested in using intellectual capital to support strategic investments in KM have focussed on the formal capture of knowledge (human capital) and the measurement of its stores in formal systems, which are referred to as structural capital (Edvinsson & Malone, 1997; Stewart, 1998). However, there are three limitations to this perspective. The first is that while formal knowledge (such as client records) can easily be captured in such systems; tacit knowledge is more problematic as it relies on voluntarily sharing and it is possible for the employee to withhold it. Second, there is a growing recognition that knowledge is

collaboratively generated and relies on connections between colleagues and other partners (Nahapiet and Ghoshal, 1998).

Therefore I argue that a comprehensive conceptualisation of intellectual capital should include three parts: *human capital* represents the knowledge and experience held by individual employees; *social capital* is held in the relationships between people and facilitates collaborative working practices; and *structural capital* is formed by systems and processes that allow firms to convert these otherwise personal assets into firm-based resources.

### **The components of intellectual capital**

The following paragraphs provide short definitions of these three categories of intangible capital and their conceptual relationship is represented in figure one.

*Human capital* refers to the “economically productive human capabilities” (Behrman and Taubman, 1982, p. 474) that can be exploited for business value. It includes knowledge, experience and personality attributes, which allow an individual to perform the type of work that can add economic value (Simkovic, 2012). It has been recognized as a key component of the intangible assets of an organization (Nelson Richard and Winter Sidney, 1982). It must be considered a personal asset: essentially human capital goes home with the employees at the end of the day.

*Social capital* refers to the relationships between actors, particularly in this context, the incremental value of knowledge as it flows between employees, either individually or in the groups they belong to. Such relations are distinct from human and structural capital, and plays a central role in the creation of intellectual capital (Nahapiet and Ghoshal, 1998).

Where social capital exists, reciprocity is inferred (Lin, 2001) and encourages the voluntary sharing of valuable tacit knowledge.

*Structural capital* allows human capital and social capital to be converted from employees' personal assets to re-usable organisational assets (Edvinsson and Malone, 1997; Nahapiet and Ghoshal, 1998). Specifically, structural capital comprises a combination of

workprocesses, information technology, software, methodologies and procedures (Brooking, 1996).

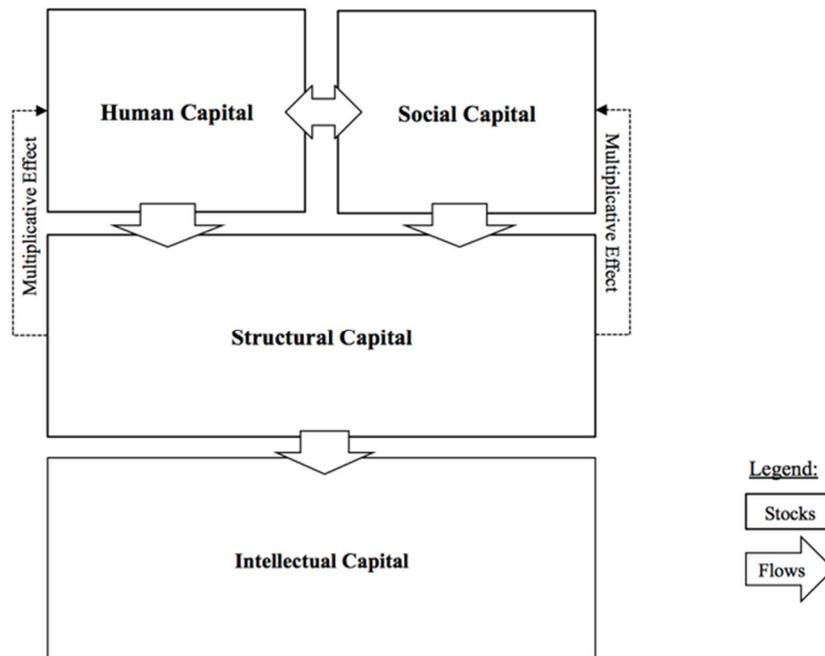


Figure 1: Relationship between intellectual capital components

There is a clear interaction between human and social capital in the collaborative creation of knowledge. Structural capital is accrued where this knowledge is captured, codified and made available for re-use by other members of the organisation. However, knowledge is a theoretically non-depreciable asset (Dean and Kretschmer, 2007), and on occasions where it is re-used on multiple occasions, the structural capital can be argued to have a multiplicative effect (Stewart, 1998).

ESM is designed to facilitate the collaborative creation of knowledge and itself forms a new form of structural capital. Therefore it can be theoretically argued to act as a mediator between the personal assets of human and social capital and intellectual capital, which can be classed as a corporate asset that justifies the difference between market and book value of a firm (Edvinsson & Malone, 1997). Figure one acts as a conceptual framework to support the evaluation of both the primary and secondary data in the present research.

## Study 1 - The role of ESM in the workplace (secondary data)

The need for collaboration tools, herein referred to as ESM, is driven by a number of related business trends: (1) a globally distributed workforce requires tools that support communication in ways that avoid spatial and temporal constraints (Sørensen, 2008); (2) if inter-office travel can be reduced, the firm's costs and carbon footprint are positively impacted; (3) rapid and flexible innovation of processes and products are key sources of competitive advantage (Chesbrough, 2003); and (4) increased specialisation, particularly of knowledge-based workers can lead to the development of information 'silos', which are counter-productive unless knowledge is shared.

According to one global technology analyst a comprehensive 'enterprise social platform' system includes ten key components: blog, wiki, profiles, microblogging, activity feeds, community capabilities, tagging, tag clouds, RSS and discussion threads (Forrester, 2011). These appear to be considered distinct from more formal KM systems (i.e. those that allow the collaborative creation, management and storage of documents), although the definition of ESM proposed in this paper intentionally includes both types of system.

### Methodology

*Functionality Perspective:* A list of 77 vendors who appeared to compete in the ESM software market was collected from a range of analysts' reports and their websites were reviewed. As a result of acquisitions, mergers or incorrect initial classification, the list was reduced to 48 firms who appear to account for the vast majority of the ESM software market. Stated software functions were noted and coded as 'Embedded System Capability', reflecting the functionality advertised by the vendors. These were then categorised by: (1) their role in the direct management of knowledge; (2) their focus on networking and community; or (3) a systems perspective.

*Benefits Perspective:* A total of 29 publicly available case studies were collected (21 written by software vendors and 8 and by third party consultants). This data was supplemented with eight analysts' reports, which focused on evaluating the evidence of the benefits derived by

the users and their organisations. Potential biases were recognised in the commercial nature of these sources as they are intended to support the promotion of software or services sales. However, given the exploratory nature of this study in an otherwise under-researched area, it was appropriate to consider such evidence in the preparation of the primary data collection.

Table one presents a summary of the analysis of both sources (vendors' statements and public case studies). Evidence of embedded systems capability was inferred by software vendors identifying it as a capability of their systems in their functional overview. Some were directly evidenced (e.g. the presence of the ability for users to contribute to knowledge management through wikis) although others were inferred from mention of the outcome of a capability rather than a specific function (e.g. identifying useful colleagues by searching by expertise or interests indicates the presence of 'intelligent search', which is distinct from searching for content by tags or keywords). Intellectual capital theory was used as the lens through which to categorise the functions, focusing on whether they indicated: (1) the identification, capture and sharing of knowledge (human capital); (2) networking and group work capabilities (social capital); or (3) the systems and organisational focus necessary to make collaboratively developed knowledge available for reuse (structural capital).

The columns to the right focus on the evidence drawn from the publicly available materials that discuss the potential benefits of ESM. These are present in analyst whitepapers and relay stories of benefits experienced by vendors' customers as ESM software has been implemented. The case examples were analysed separately to the vendors' functional descriptions, but when comparing the two sources, it was possible to infer connections between them, using the intangible capitals as the anchor. For example, a number of the case studies referred to ways in which information has been made easier to access by users of the ESM software and others referred to increased employee satisfaction as a result of the perception of being part of a 'social' organisation, which was felt to be more transparent as a result of the more open communications noted in the use of the networking capabilities of ESM.

Analysis of ESM Software Vendors' Websites		Analysis of Vendors' Case Studies and Consultants' White Papers on ESM	
Embedded system capability:	Category:	Benefit category:	Example evidence of benefits:
<ul style="list-style-type: none"> <li>Corporate knowledge management (file sharing, document management)</li> <li>Content Search and discovery (keywords, tags)</li> <li>Wikis, blogs, microblogs</li> <li>Personal web spaces and virtual notebooks</li> <li>Management communication and dialogue (videos, Q&amp;A)</li> </ul>	Knowledge Management: creation, sharing, capture, codification  <b>Human Capital Focus</b>	Improved availability of information	<ul style="list-style-type: none"> <li>Employees voluntarily adding new information to stores and shared / discovered</li> <li>Information is re-used and re-purposed for incremental benefits</li> </ul>
		Development of communities of interest / practice	<ul style="list-style-type: none"> <li>Collaboration with like-minded specialists</li> <li>Helps to build inter-organisational trust</li> </ul>
		Creates a low-barrier for involvement with idea generation schemes	<ul style="list-style-type: none"> <li>Increased volume and rapidity of ideas for process and product innovations</li> <li>Customers can be included to enable crowdsourcing and open innovation</li> </ul>
		Development of groups and pages	<ul style="list-style-type: none"> <li>Leads to improved workflow</li> <li>Transparency and openness leads to reduced duplication of effort</li> </ul>
<ul style="list-style-type: none"> <li>Profiles (photo, role, bio)</li> <li>Collaborative workspaces</li> <li>Discussion forums</li> <li>Connect and/or follow colleagues</li> <li>Intelligent search based on expertise or interests</li> <li>Project and/or private groups</li> </ul>	Networking and communications  <b>Social Capital Focus</b>	'Social' virtual communications reduced the need to travel	<ul style="list-style-type: none"> <li>Social networks, video conferencing, shared workspaces reduced costs and downtime due to travel</li> <li>Increased adoption of mobile technologies</li> </ul>
		Executive sponsorship and 'presence'	<ul style="list-style-type: none"> <li>Employees enjoy being part of a 'social', transparent organisation</li> <li>Effectiveness of internal communications can be measured to improve future efforts</li> <li>Increased opportunities for direct dialogue across all levels of the hierarchy</li> </ul>
		Global community	<ul style="list-style-type: none"> <li>Cross-cultural understanding in global firms</li> <li>Employees can share informal or even personal information that builds a sense of belonging</li> <li>Connections lead to serendipitous discovery</li> <li>A 'stronger and more cohesive' culture</li> <li>Development of strong and weak tie networks leads to improved collaboration</li> <li>Lateral communication and reduced 'silos' transcending organisational and geographical boundaries</li> </ul>
<ul style="list-style-type: none"> <li>Device independence (desktop / mobile)</li> <li>Rollout / adoption</li> <li>Access and amend privileges</li> <li>Information QA (Policy and Community Based)</li> <li>Analysis (e.g. social listening, trends, network visualisation)</li> <li>Integration with other enterprise systems (CRM or ERP)</li> <li>Network visualisation</li> </ul>	Organisational Aspects  <b>Structural Capital Focus</b>	Developing structure and culture	<ul style="list-style-type: none"> <li>ESM flattens the organisation improving communication and speeding decision making</li> </ul>
		Adopted a portfolio approach to project management	<ul style="list-style-type: none"> <li>Decentralised decision-making increases sense of ownership and empowerment in project teams</li> </ul>
		Reduced costs of ICT	<ul style="list-style-type: none"> <li>Reduced reliance on email and improved shared document version control leads to reduced: (a) Costs for network traffic; (b) Inbox management time; (c) Management of versions</li> </ul>
		Integration with customer service and relationship systems	<ul style="list-style-type: none"> <li>Improved customer communication leads to increased satisfaction</li> <li>Improved responsiveness to customer needs leads to longer more fruitful relationships</li> <li>Easy access to customer details, history, preferences is widely available to employees</li> </ul>
		Improved marketing effectiveness	<ul style="list-style-type: none"> <li>Enhanced production of collateral improved turn-around, production costs and effectiveness</li> <li>Ability to extend the community to include customers allows improved communications or reduced cost for virtual product launches vs roadshows</li> <li>Evidence of a significant difference between 'community' vs 'non-community' customers</li> </ul>
		Employee on-boarding	<ul style="list-style-type: none"> <li>Improved effectiveness and speed of bringing new staff (particularly field staff, such as salespeople) to productive status</li> </ul>

Table 1 – Secondary data analysis of ESM software capabilities and benefits

### Discussion

The items shown in bold were highlighted by the vast majority of the vendors ( $\geq 92\%$ ) as being incorporated in their solutions. This tends to support the notion that ESM comprises both social networking and knowledge management capabilities. Further, integration with other enterprise systems (e.g. Enterprise Resource Planning or Customer Relationship Management) was mentioned by over half of the vendors (58%). As both ERP and CRM systems form critical repositories of a firm's knowledge base, this appears to be an area of development. The software vendors also tended to focus on the functions rather than the management processes that are necessary to ensure greater benefits. However, the role of information quality assurance, community moderation and policy support was more evident in the qualitative review of the analyst papers reviewed, so resources are available to support a strategic implementation.

While all of the vendors refer to their systems' ability for users to create profiles which offer colleagues visibility of their profession and, optionally, personal information, only 69% of them described the nature of the connections that can be made. While the ability to connect with colleagues was originally assumed to be a core component of the social networking elements of ESM, this may not be the case: some may provide static profiles (much like a corporate directory). Of course, it could be that the ability to connect can be inferred and is therefore not worthy of mention, but if not, this would be an inhibitor of the benefits available through Web 2.0.

Turning to the publicly available vendor case studies and consultancy white papers, there is evidence to suggest that many organisations enjoy a number of benefits from the use of ESM, which is outlined in the following sections. Four themes emerge from the analysis of these sources which are discussed in the following paragraphs.

First, the ability to create a flexible organisational structure, allowing employees to collaborate freely: examples such as transparent processes, flattened structures and lateral communications are stated to lead to benefits such as improved workflow and speedier

decision making. These examples support the vendors' claims of increased operational effectiveness as a result of the use of ESM.

Access to information is the second theme: the ability for staff to review document stores, wikis and user-generated 'how to' videos are examples of one dimension which can be described as the combination of human and structural capital. Another dimension is the ability for staff to search for colleagues by expertise or interests, to ask a question via the open forum about a topic of interest or to ask a colleague for a digital introduction to another in his or her network. This represents how structural capital (in the form of an internal social network) can both foster and capture the social capital that exists as colleagues engage in a reciprocal process of collaboration. In particular for KIPS organisations, enhanced access to information leads to the potential of increased customer value (e.g. faster solutions to problems).

The third theme is supported by evidence of reduced costs as a result of the implementation of ESM. These examples are distinct from those that were coded as improved effectiveness as they refer to direct reduction in costs. They include reduced costs in managing network traffic and staff time in managing inbox. Another example cited the improved 'on-boarding' of staff, which offer the benefits of reduced costs as employees join the organisation but also a quicker route to effectiveness offers operational, and potentially customer value.

Many of the cases cite examples of improved employee engagement and trust, which describe 'soft' benefits such as extended tenure, greater satisfaction and motivation. While extended tenure can easily be measured in reduced costs to employ replacement staff, the others can lead also lead to operational and client-facing benefits.

Finally, the ease with which the functions and examples of benefits conform to the categorisation as facilitators of human, social or structural capital foci, suggests that intellectual capital is an appropriate theoretical perspective with which to analyse ESM

### **Formative conclusion**

A synthesis of key themes of intellectual capital theory was proposed in figure one that suggested that individuals' personal knowledge (human capital) is enhanced when combined in a collaborative fashion with that of others in their networks. Such interactions lead to a strengthening of workplace relationships between individuals and teams. This leads to the creation of social capital. Many of the benefits cited in the case studies (e.g. (1) employees voluntarily adding new information to stores ready to be shared / discovered; (2) and the development of inter-organisational trust) indicate support for this proposition.

Further, figure one reflected extant KM theory that the formal capture, codification and sharing of knowledge (structural capital) acts as the mediator between human capital as a personal asset and intellectual capital as a corporate one. This proposition is evidenced in the case studies (e.g. Information is re-used and re-purposed for incremental benefits). An extension to structural capital theory is that ESM offers an opportunity to mirror this effect with social capital was also suggested. Modest evidence of this effect is indicated in the case studies (e.g. organisational flattening and company-wide connections improved the speed and quality of decision making). However, the presence of software functions such as corporate network visualisation and reporting on discussion threads provide capability to analyse the flow and content of inter-organisational communications present opportunities for organisational development and process improvement that are apparently not currently being exploited by the vendors' clients.

## Study 2 - ESM Case Studies (primary data)

### Background and methodology

The focus of the study is on the collaborative creation and sharing of knowledge; as such our research sample has been drawn from organisations where knowledge is a core asset.

Knowledge Intensive Professional Services (KIPS) organisations are categorised by the presence of: knowledge intensity; low capital intensity; and professionalised workforce (von Nordenflycht, 2010).

The two case studies are based on primary data collected in January and February 2014:

Case Study one describes the use of ESM in a large public body that advises governments, organisations and the public and Case Study two provides an overview of ESM in the UK arm of a global services company. Data was collected in a series of interviews with senior managers, systems experts and users of a range of software and services which form the basis of their ESM systems.

Table two provides a comparison table between the nature of the organisations and their use of ESM.

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	Case Study 1 – Public Body	Case Study 2 – Professional Services
<b>Company Size &amp; Structure</b>	14,000 employees – 120 offices in 6 regions and six directorates. Many employees working remotely.	14,500 employees and members based across the UK. Many employees working remotely and in client offices.
<b>Role</b>	Advises government, public and private organisations and members of the public providing specialist information based on research and analysis.	Offers audit, tax, consulting and corporate finance advice to many firms in the UK and is part of a global network of professional services organisations.
<b>Culture</b>	Moved away from direct government control. Executive are keen to move to a flexible structure that supports innovation, but the organisation is conservative and hierarchical where HQ largely drives policy.	The firm fosters a collaborative culture and prides itself on its innovation and client focus. Naturally the organisation is risk averse and governance is strong. The partnership structure provides clear structures for advancement and the rewards are high.
<b>Collaboration tools</b>	<ul style="list-style-type: none"> <li>• Intranet based 'communities of practice'.</li> <li>• Wikis (knowledge is collaboratively created but discussion is not visible to users).</li> <li>• Internal social networking site.</li> <li>• Document management system.</li> </ul>	<ul style="list-style-type: none"> <li>• Profile and expertise management system.</li> <li>• Internal social networking site.</li> <li>• Document management system.</li> <li>• Intranet.</li> </ul>
<b>Levels of integration between collaboration tools</b>	Low – users have become adept at integrating at a content level (e.g. by the use of hyperlinks) between systems.	Advanced.
<b>Adoption of 'social network' functions</b>	Approximately 30%.	Approximately 50%.
<b>Key use cases</b>	<ul style="list-style-type: none"> <li>• Staff can ask general questions to enlist the help of colleagues to pass along information.</li> <li>• Improves teams' ability to collaborate online without being restricted by time or location.</li> <li>• Events and projects can be promoted in a non-intrusive way.</li> <li>• Groups can be set up to help manage horizontal skills, which are of benefit to many different departments.</li> <li>• Team-based private groups can create collaborative working spaces.</li> <li>• Email discussions can be moved to the ESM systems meaning that the thread of conversation is easy to follow or pick up part way through.</li> <li>• Complementary role between intranet (formal) and SNS (informal).</li> </ul>	<ul style="list-style-type: none"> <li>• Management of private groups is sophisticated, allowing sensitive information to be shared in a controlled and secure fashion.</li> <li>• Certain practices and client teams use the tool as a core method of communication, largely replacing email for this purpose.</li> <li>• "Shout outs" are used extensively to garner the collective experience relating to a new client engagement or question.</li> <li>• Profiles, which include experience, contact details and areas of interest, are available for employees to interrogate, allowing employees to develop useful networks.</li> <li>• One particular group (Executive Assistants) has adopted the system widely to provide new staff members to get up to speed with their new roles quickly and effectively.</li> <li>• Informal groups are supported and range from special interests (e.g. the running club to LGBT support networks).</li> <li>• Collaborative development of formal documentation for both internal and client-facing purposes.</li> </ul>

Table 2: Case Study High Level Comparison

### Case Study 1 - Public Body

The public body has used the principles of knowledge sharing for over a decade and has been successful in establishing a number of intranet-based communities of practice. Later they implemented wiki technology, allowing users to create knowledge-banks, which can be contributed to by colleagues. They also make extensive use of a collaborative document management system which has been more recently supplemented by an internal networking capability. This decision was taken by a member of their Digital Services Board and implemented with the support of an innovation specialist in the organisation's IT team. While a number of different options were considered, these were not evaluated against formal 'customer requirements' or with a particular project brief. Instead, the network was initiated and promoted in an underground fashion with support. QR codes were posted in stairwells with only a hashtag and the name of the software and the team used guerrilla-marketing tactics to support the underground feel of the ISNS: *"it promoted a bit of freedom, a little bit of rebellion...we broke all the IT rules"* (R11). Adoption was relatively slow until approximately 500 when a tipping point appears to have been reached, and within a relatively short period of time, a further 4,500 users signed up. The system has to date not been adopted as a formal IT system. This appears to reflect adoption patterns in a number of businesses; indeed it seems to have been the strategy of a number of vendors to allow the 'organic' adoption of an internal network which is delineated by the use of the organisations email domain. Once the network is established, a degree of viral propagation could be relied upon to spread adoption among colleagues.

As the directors watched the network grow, there was a natural concern about the extent to which it would be used for non-work related discussions vs collaborative working, although this has not been noted as an issue: *"it might even [be] 90%:10% work to social chatting."* (R3). Arguably, each offers its own benefits: the former can contribute to staff feeling a part of a greater community leading to greater loyalty and less attrition: *"...helping staff feel more embedded into an organisation, and I think that's important for this organisation at the moment."* (R3). It is also seen as an 'ice-breaker' that encourages people to engage in discussions that may otherwise not happen: *"...it's a good way to get to know people on a*

*slightly more chatty, slightly more informal basis...having interacted with someone on [via ESM] you're more likely to pick up the phone or contact them to talk about something in depth." (R2).*

The 'All Company' feed is used for general updates and discussions. This leads to a sense of community, although for specific information, groups are considered more beneficial.

One of the key benefits for collaborative working is the ability to find appropriate colleagues with key knowledge, expertise or access to information. The questions can be presented to the 'entire company' group, theoretically accessing 5,000 users and:

*"...generally within, well, even an hour, you'll have someone who knows or who can tell you...posting guidance or videos. That happens a lot." (R3).*

*"..as a whole [it] is quite good for sharing lessons and what's gone well and what hasn't" (R2)*

One area where the public body is very advanced in their use of ESM is in the willingness to embrace external partners and they are running pilots to allow them to use the tool to engage with their internal teams to help with planning for incident response, engagement with emergency services and local councils. As the new structure is developed where increasingly services will be taken over by the third sector, the need to have effective communication pathways with the organisation's partners offers the potential for significant benefit. However, it should be noted that this vision is inhibited by the inability of their software provider to allow third parties to access more formal resources such as shared document files.

Executive involvement in the use of ESM is varied and this is reflected in the adoption of the system within different directorates. One Executive was used as an exemplar of good practice by a number of the respondents, using ESM regularly to share information, engage with colleagues and develop a community around the services her directorate provides for the organisation. Given that her role is in leading the governance of information within the

organisation, her adoption is especially encouraging for the advocates of the system. However, other directors were reported to be “*quite dismissive*” of the social aspects of ESM, preferring a “*more process driven approach*”.

The Chief Executive is keen to encourage an innovative, collaborative culture in the organisation and has supported the initiative, holding regular “Chats with the Chief” via the networking parts of the system, where, for specific periods of time on semi-regular intervals, he is available to respond to questions. However, there is a sense that the formality of the staging of these events inhibits the value in comparison with his being present and visible in the network on more frequent occasions where direct communication between him and staff who would otherwise not be able to engage was more natural. This would appear to be where the true ‘flattening’ capability of ESM is available.

#### **Formative conclusion of single case**

One of the respondents summed up the vision for ESM in this organisation: “*So there’s a three circle Venn diagram then if you like with: conversation, content and workflow and business processes and you know some of the real sweet spots for organisations are going to be in the middle bit, which might be quite small but very powerful.*” (R11) This is highly resonant with the conceptual model shown in figure one and this respondent’s Venn diagram is an alternative visualisation of the same idea: that social capital (conversation); human capital (content); and structural capital (workflow) combine to form the overall benefit of ESM. The case outlines evidence of improved communication, where enhanced knowledge creation and sharing result. Being a non-profit, they naturally tend to consider benefits in terms of improved delivery capability and cost savings and there is some evidence of both (e.g. access to cross-departmental modelling information and improved in-box management).

### Case Study 2 - Global Professional Services Firm

This firm's collaboration team forms an integral part of their internal 'agency' structure offering services to client teams across the four disciplines. A range of software supports their collaboration services: formal knowledge management, staff profile and directory services, intranet and 'social' software including an internal social networking tool.

Knowledge management has been a formal part of their infrastructure for over a decade, but in common with the institution in Case 1 and many other organisations, the adoption of 'social' software was the result of an 'underground' movement: *"I happened to be out in India and some of my American colleagues were talking about social software so I joined it about a year before anyone in the UK had even heard of it...it was just word of mouth for quite some time...[but later]...was considered something of value"* (R7). In this case, the firm's digital team became early adopters to support their own internal processes and as a test-environment to help them advise their clients. Early use was *"experimental"* (R6) and evaluation focused on emergent properties, with an iterative learning approach to developing strategies for its use.

As the viral spread of the internal social network developed, a tipping point was reached early in 2012 and the system was adopted into their globally supported architecture, accompanied by a more formal global roll-out, although involvement was still voluntary and the social network did not replace any existing systems. From an internal communication perspective, it is still considered as one of a number of ways to inform staff of events, policies and important news.

The organisation places considerable emphasis on the importance of the collaboration team in supporting working practices at all levels throughout the organisation, suggesting that the 'social' system has become integral to the firm's strategy and a source of competitive advantage. Further, there is no doubt that the organisational use of the software is advanced when compared to the public body and the software vendors' own case studies.

There are some cultural aspects to the adoption of the software, although given the nature of the two organisations they are from very different perspectives. This firm has a highly commercial orientation; the competition for senior positions is very stiff and the rewards for advancement are substantial. Staff members' digital footprints can easily shape the perception of those around them and there is evidence to suggest that associates take cues from the existing partners on appropriate behaviour in all aspects. This includes the adoption and frequency of use of the 'social' software: where senior members of a client team or practice endorse the use of the more social elements of the collaboration team's armoury, adoption and use is heightened. This is further enhanced where those senior supporters of collaborative technology are present within the network and engage in its discourse.

While the collaboration team is rigorous in collecting anecdotal evidence of the benefits of the software, their analysis stops short of trying to place a value on the return on investment in the tools. *"I don't think you can quantify it in that way...it's about the value of the conversation"* (R6) instead they focus on the 'softer' benefits, using engagement in the network as a loose proxy for staff's engagement with the firm: *"our focus has been on the stories and case studies...for tangible evidence of where a benefit has been derived"* (R9).

However, they are very clear that increased engagement leads to lower attrition rates, which is an important factor in a business whose source of competitive advantage is derived from the availability of skilled, motivated and experienced staff.

As adoption of the network increased and as a result the levels of discussion increased, this became a reason for the late-majority adopters to reject its regular use as the noise to signal ratio was considered too high. Subsequently, the collaboration team advocate initial use of one or two special-interest groups where: (a) the level of discussion is often felt to be more easily manageable; and (b) the discourse is focused on an area of interest to the reader.

### **Formative conclusion of single case**

There is a clear sense that ESM has become a key constituent of the firm's collaboration strategy. Where teams or practices adopt the collaboration systems, there is evidence of significant benefit (e.g. on-boarding in EAs' private group or the customer insight practice who use ESM as a primary communication hub). Both these examples provide evidence of the co-creation of knowledge that is a combination of human and social capital. While the benefits of the systems are expressed qualitatively in the form of case studies, they are collated from evidence that is visible within the system itself through hashtags or simply by following discourse in groups and the organisation is therefore comfortable with the robustness of the evidence.

### **Discussion and Thematic Analysis**

Each organisation operates in different sectors and inevitably the nature of the organisations leads to very divergent cultures and expectations of staff. However, beyond the obvious commercial focus, the common ground is more striking than the differences: (1) the drive for innovation (in both process and service design) is critical to the organisations at a strategic level; (2) there is a sense of common purpose in both organisations, with teams demonstrating significant interest in contributing to the organisation achieving its goals; (3) their staff members are dispersed widely across the UK with many of them spending long periods of time 'in the field' delivering services to clients; (4) the expertise and knowledge of staff members forms the core of their proposition, leading to a potentially unequal balance of power between highly qualified staff and the organisation; (5) there is a strong sense of structure and hierarchy in both organisations, one coming from government background and the other operating a partnership structure; and, finally (6) there is a need to balance the governance structures with a desire to allow employees to communicate in a natural, "human" way.

It is true to say that the services firm in Case Study 2 is more advanced in its journey towards achieving its collaboration aims (e.g. greater user adoption, maturity of support processes, more sophisticated use of private groups). However, the organisation in Case Study 1 has

significant expertise in managing discourse and communities: although they appear to utilise their skills in editing content in the intranet-based communities of practice more effectively than they do in their ESM currently. This will almost certainly evolve as staff members become more adapted to the differences in the platforms and learn to apply their expertise.

Despite the potential to generate measureable outcomes from the use of ESM (in the form of customer value or new products), repeatedly, respondents in both organisations indicated that the 'softer' benefits were of primary focus. Employee engagement in natural communications with colleagues was suggested to strengthen the psychological contract between staff and employer leading to perceived improvements in satisfaction, loyalty and even performance. Expert staff are difficult and costly to replace, so reduced levels of attrition could easily be tracked and the benefits measured. However, no evidence emerged of this level of scrutiny of the benefits case being required or warranted: the use of internal case studies or stories of benefits was sufficient to make judgements on the value of the software.

In both cases, the 'social' network is used as one of the methods for making announcements to staff. Neither has yet found a single, effective method to ensure all staff members are made aware of important news, but the internal-Facebook functionality is seen as a supplement to email, posters or intranet announcements to staff, offering the ability to report on the number of people who have 'seen' the message in their stream. However, given the voluntary 'sign-up' protocol in both organisations, the network cannot reach all members of staff with less than 50% of the total employees in both cases being regular users.

According to users in both organisations, one of the most popular features of ESM is the ability to make a 'shout out', which refers to staff being able to post a message into either a group or public board to ask questions of their colleagues. An example of this is the case of a consultant being asked a question by a client where he had had no personal experience, but was aware that the firm had significant expertise outside of his immediate network. In another example, a statistical modeller needed an answer to a highly technical question but

the other modellers in her immediate team were not aware of the answer, although the organisation had many other statistical modellers in other teams. In both cases, questions were posted to specific groups in the ESM, a number of colleagues were very responsive and the questions were answered quickly and efficiently. Interestingly, this is a benefit that is seen to be very significant by more junior members of staff who may not have developed the personal connections necessary to get a quick answer. More senior staff have both the networks to have questions answered more quickly and the clout to encourage people to respond. That said, in some examples, these included cases where senior people responded pointing the enquirer in the direction of right source (although the responses tended to say who they should speak to, where perhaps a network introduction may have been more useful).

The public case studies refer to the ability of ESM to 'flatten' an organisation and speed up effective decision making. This is partially evident in both cases, although the flattening may have limited reach: within teams, wider practices or divisions and specialist or project groups, there is an indication that communication is improved both vertically and laterally (both cases offer examples of enhanced communication between senior and more junior team members and across organisational silos). The benefits cited are again qualitative (e.g. reduced duplication of effort, quicker access to formal information and informal advice, shared experiences), but it is easy to infer a tangible benefit based on reduced costs from this anecdotal evidence.

However, while there is evidence in both cases that the executive teams are supporters of ESM in their organisations, there is less evidence of day-to-day presence and involvement across the board. In both cases the CEOs hold regular Q&A sessions using the ESM platforms, but these are one-off (albeit regular) events which are time-boxed and where (in at least one case) there is a feeling among participants that the positive questions are prioritised for responses. There is a trend towards 'flattening' organisational hierarchies (Rajan and Wulf, 2006) and one of the principles of the 'social' enterprise is that communication is structured such that any employee could theoretically 'connect' with the CEO and engage him or her in discussion. This scenario, of course, is not new and the junior staff member could

easily drop the CEO an email, but the direct contact is more fitting with the phenomenon of being able to 'speak social' (Gouillart, 2012 referring to Burberry) and infers a cultural shift that fully exploits the opportunity to flatten and streamline communications. In neither case was there a sense that this was current or even near-future reality, although whether this is desirable in such organisations remains an unanswered question.

Another key principle of ESM is the ability to establish networks to include external partners, organisations in the supply chain or clients. In both cases, while the desire is evident to achieve this, the vision of integrated networks has not been realised to date. In case one this has been partially implemented and examples exist where social equivalents of 'extranets' have been set up to include delivery partners from the third sector to collaborate in jointly delivering customer service: external partners can collaborate with experts in the organisation by participating in open discussions, co-creating solutions to situations and this may lead to future opportunities for open innovation facilitated by ESM. However, the full realisation of the vision has been hampered by a lack of software level integration between the 'social' network and the more formal collaborative document creation and management software. In case study two, while closer links between consulting teams and their clients is seen to be desirable by both parties, there are significant barriers regarding governance and information sharing that present unacceptable risks to that firm at this stage.

In case two, in a number of cases were cited where ESM makes an important contribution to the process of on-boarding new staff: FAQ's; who's who; access to procedures; and introductions to colleagues can all be included in groups that are designed for specific job-roles or families (this is already established within the Executive Assistants' group in this firm and the head of the collaboration group has a vision to extend this). Improved access to information has the obvious benefit of bringing new staff up-to-speed more quickly and improving their 'time to productivity', but in the case of new consultants coming into perhaps their first global organisation, the ability for a firm to quickly harness a relationship with new employees is thought by this global services firm to offer significant potential benefits that will last well into the consultants' careers.

In both cases there was strong evidence that ESM significantly extended employees' ability to collaborate free from temporal and spatial constraints. The adoption of suitable technology (smartphones, tablets) to create an integrated experience between desk based and mobile use encourages more frequent use. As well as allowing users to maximise down- and travel-time, the combination of 'social' communications and mobile technologies is theorised to contribute to improved productivity and effectiveness. In both cases, there was evidence that this benefit is being realised, with field staff having the opportunity to manage communications with office-based colleagues at times to suit their sometimes different working patterns. Both cases are UK focused, but it is easy to infer that these benefits would be further enhanced in a global context where the addition of time-zone challenges applies.

Finally, the ability to be able to collaborate on the development of materials in a central store reduces the need to transmit multiple versions of large documents via email or for collaborative discussions to generate long-email trails that can cause confusion and frustration. The reduction of network load and email traffic may offer some cost reduction benefits, but a more significant win in this area is in the reduced overhead for people to manage over-crowded inboxes.

## Conclusions

There are a number of key conclusions from the analysis of both the secondary and primary data in studies one and two.

The key aim of ESM is to offer a more 'natural' way for colleagues to communicate. Through a range of systems (most notably, collaborative document management systems and social-networking functions), the two firms have achieved this. Compelling internal "*stories and case studies*" are used internally to highlight the value this brings. The use of these systems enhances employees' ability to develop both human and social capital and there is evidence that their interaction enhances the creation of knowledge within the firms. While neither organisation sees the value in tracking hard metrics of return on investment, the presence of these is inferred through case studies and anecdotal substantiation of enhanced productivity,

efficiencies and cost savings. Such evidence is collected from the systems themselves (e.g. #benefits as used in the public body to highlight cases where the users have felt that the system has generated value).

Moreover, there is a theme that engagement in the network acts as an indicator of the strength of the relationship between the staff and the organisation, which leads to benefits for the employee that can be observed by greater satisfaction, increased loyalty and longer tenure. So, while the social capital exists at a micro level between the employees in the network, the existence of increased levels of social capital can infer greater organisational trust. This is consistent with the macro-view of social capital argued by (Putnam 1995).

However, systems support for the creation and management of both human and social capital has limitations from an organisation perspective. Human capital is restricted in its use (e.g. bound to its owner); it may be deliberately withheld from formal systems of capture; and goes home with the employee. In order for the full value to be derived, it must somehow be recorded, codified, stored and made available for re-use (Nonaka, 1994): this is the basis of the multiplicative effect as argued earlier. A comprehensive ESM system allows a firm to capture a great deal of information that can help in the conversion of human and social capital to intellectual capital.

Two theoretical propositions were outlined in figure one at the start of this paper: (1) that employees' human and social capital can be exploited by them to collaboratively create knowledge; and (2) that structural capital converts and has the potential to multiply these personal assets in the form of intellectual capital, which has been established as an intangible form of capital that explains the delta between a firm's book and market value. This paper provides evidence in support of these notions.

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