

Association for Information Systems

AIS Electronic Library (AISeL)

ACIS 2013 Proceedings

Australasian (ACIS)

2013

Enterprise Social Networks: A Business Model Perspective

Paul Mathiesen

QUT, p.mathiesen@connect.qut.edu.au

Erwin Fielt

QUT, e.fielt@qut.edu.au

Follow this and additional works at: <https://aisel.aisnet.org/acis2013>

Recommended Citation

Mathiesen, Paul and Fielt, Erwin, "Enterprise Social Networks: A Business Model Perspective" (2013). *ACIS 2013 Proceedings*. 146.

<https://aisel.aisnet.org/acis2013/146>

This material is brought to you by the Australasian (ACIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in ACIS 2013 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.



Information Systems: Transforming the Future

**24th Australasian Conference on Information
Systems, 4-6 December 2013, Melbourne**

Proudly sponsored by



Enterprise Social Networks: A Business Model Perspective

Paul Mathiesen, Erwin Felt
School of Information Systems
Queensland University of Technology
Brisbane, Australia
Email: paul.mathiesen@qut.edu.au, e.felt@qut.edu.au

Abstract

Enterprise Social Networks continue to be adopted by organisations looking to increase collaboration between employees, customers and industry partners. Offering a varied range of features and functionality, this technology can be distinguished by the underlying business models that providers of this software deploy. This study identifies and describes the different business models through an analysis of leading Enterprise Social Networks: Yammer, Chatter, SharePoint, Connections, Jive, Facebook and Twitter. A key contribution of this research is the identification of consumer and corporate models as extreme approaches. These findings align well with research on the adoption of Enterprise Social Networks that has discussed bottom-up and top-down approaches. Of specific interest are hybrid models that wrap a corporate model within a consumer model and may, therefore, provide synergies on both models. From a broader perspective, this can be seen as the merging of the corporate and consumer markets for IT products and services.

Keywords

Enterprise Social Network, Business Model, Freemium, Social Software, Collaboration.

INTRODUCTION

An Enterprise Social Network (ESN) is of particular relevance in organisations where there is a strong knowledge transfer component, as an ESN can be utilised to “*put emphasis on social relationships, interactive communication and ad-hoc sharing*” (Riemer et al. 2012b). It has been predicted that up to 50% of large organisations will have some form of enterprise social network in place by 2016 (Perez 2013). It is also recognised that social network systems have moved beyond the realm of personal applications and are fast becoming fully integrated with organisational communication and collaboration practices (Koch et al. 2012). Benefits of inclusion of this social software range from employee rapport and relationship building (Dimicco et al. 2009) through to the capture of corporate knowledge and practices (Koch et al. 2012). The primary focus of earlier collaboration applications, such as corporate intranets or other digital repositories, was simply the capture and transfer of “*explicit knowledge in data and databases*” (Riemer et al. 2012b). Now, a key differentiation between these earlier collaboration applications and current ESN is that these “*newer approaches focus on the communicative aspects and take a knowledge-in-action perspective*” (Riemer et al. 2012b).

While research on ESNs is gaining traction (Leonardi et al. 2013; Richter et al. 2013a; Riemer and Scifleet 2012), these studies mostly focus on the user organization and only pay attention to the technology itself. In this paper we will address the provider side of ESNs and offer a more holistic perspective by addressing the customer-facing elements of the business model to understand how ESN providers create value for their customers. It is the business model that determines whether a technology can deliver value to the customer (Chesbrough and Rosenbloom 2002). Insights into the business models of leading ESNs can advance our understanding of ESNs beyond the range of features and functionality and may also contribute to explaining the success and failure of the adoption this technology. The business models of ESNs have received little attention so far in academic literature. There has been some attention to the business models of social media in general. As far as business models are discussed in relation to ESNs the focus has been on the impact on the business model of the user organization (e.g., the social enterprise), not on the business model of the ESN provider.

This paper is structured as follows. Firstly, it presents a brief overview of existing ESN literature and describes the business model concept in more detail. Then the research design is presented describing the overarching approach to this study. Then, seven leading ESN providers are presented as mini-cases. This is followed by an identification and discussion of different, archetypical ESN business models. The paper ends with concluding remarks presenting the overall findings and addressing some of the limitations and possibilities for future research.

LITERATURE REVIEW

In this section we will briefly review the current literature on ESNs and business models.

Enterprise Social Networks

Almost a decade ago, organisational grade social media, labelled by McAfee (2006) as Enterprise 2.0, pertained to those corporate level digital platforms used for collaboration between knowledge workers. In this early work, McAfee (2006) presents six core features of Enterprise 2.0 as keyword search; web page links; authorship; content tagging; page preference extensions; and content update signalling. Also discussed was the concept of a *network effect* whereby *“as more people engage in authoring, linking and tagging, the emergent structure becomes increasingly fine-grained”* (McAfee 2006, p26). In more recent years there has been considerable research into the use of social software in the corporate context. Studies have been conducted into various aspects of Enterprise 2.0 such as user blogging, content tagging and wiki development and microblogs (Jackson et al. 2007; Kim et al. 2008; Millen et al. 2006; Riemer et al. 2012a; Thom-Santelli et al. 2008; Zhang et al. 2010). Riemer et al. (2012b) have posited that a second wave of social technology has brought us *enterprise social networks* which present a truly interactive, collaborative digital space which puts *“emphasis on social relationships, communication, conversation and ad-hoc sharing”* (Riemer and Scifleet 2012, p3). Therefore, simply defined, an enterprise social network is *“the phenomenon of social networking in an enterprise context”* (Richter et al. 2011, p 91).

Current research into the organisational use of ESN addresses a broad range of topics. For example, Brzozowski (2009) discusses how an ESN can address organisational issues which arise when seeking expertise from a collective knowledge base. That is, how social media may be associated with an internal professional directory to encourage participation and the searchability of corporate information. A focus on the performance impacts and associated benefits of organisational use of social media is presented by Jussila et al. (2011) where they view the increased opportunities for business-to-business innovation. Skopik et al. (2011) discuss the notion that collaboration via social networks in an organisational context support dynamic participant grouping with the result of enhanced information flow amongst these groups. They discuss the notion of ‘cross-enterprise collaboration’ scenarios and a way of seamlessly supporting this relationship across organisations. In addition to the above perspectives, the domain of ESN is becoming well understood with a broad range of research across areas such as participation mode (Buhse and Stamer 2008), and culture (Grace 2009). As evidence of the maturing research in this domain, (Riemer and Richter 2012) present a cross-case comparison of ESN case studies, deriving a catalogue of eleven enterprise social network use cases and group them in six benefit categories: socialising, organising, crowd-sourcing, information sharing, awareness creation, and learning & linkages. Richter et al. (2013a) discuss seven actions for social software usage: search, edit, rate, label, clarify, notify, and share.

Business Models

Every organization has a business model, whether that model is explicitly articulated or not (Chesbrough 2006; Teece 2010). A business model describes the value logic of an organization in terms of how it creates and captures customer value (e.g., Johnson 2010; Osterwalder and Pigneur 2010). Most recent definitions of business models are formulated around the value logic of the organization (and the business network) in terms of creating, delivering and capturing customer value (Chesbrough 2006; Johnson 2010; Osterwalder and Pigneur 2010; Teece 2010). Examples of business models often discussed are Apple’s seamless music experience with the iPod and iTunes, Skype’s freemium model for phone calls, and Google’s keyword advertising for search. When new technology is introduced in the market, a viable business model is needed to ensure that the innovation delivers value to the customer (Chesbrough and Rosenbloom 2002). New products and services based on information technology, such as social networks, have always been in search of viable business models and are also a strong driver of business model innovation (Bouwman and Felt 2008). One of factors driving the increased attention for business models is the growth of the Internet and e-commerce (Teece 2010). The accelerating growth of e-business has raised the interest in transforming traditional business models or developing new ones that better exploit the opportunities enabled by technological innovations (Pateli and Giaglis 2004). The business model concept is also prominently present in the discussion around mobile business (e.g., Bouwman et al. 2008) and software services (e.g., Cusumano 2008).

Business model frameworks describe the compositional elements that a business model is made-off. The elements are also referred to as, for example, building blocks (e.g., Osterwalder and Pigneur 2010), components (e.g., Pateli and Giaglis 2004), (key) questions (e.g., Morris et al. 2005), or functions (e.g., Chesbrough and Rosenbloom 2002). We describe the Business Model Canvas (Osterwalder and Pigneur 2010) in more detail, as this has become one of the most applied frameworks by both academics and practitioners. The Business Model

Canvas consists of nine 'building blocks:' (1) an organization serves one or several Customer Segments, (2) it seeks to solve customer problems and satisfy customer needs with Value Propositions, (3) Value Propositions are delivered to customers through communication, distribution, and sales Channels, (4) Customer Relationships are established and maintained with each Customer Segment, (5) Revenue Streams result from Value Propositions successfully offered to Customer Segments, (6) Key Resources are the assets required to offer and deliver the previously described elements..., (7) ...by performing a number of Key Activities, (8) some activities are outsourced and some resources are acquired outside the enterprise via Key Partnerships, and (9) the business model elements result in the Cost Structure.

RESEARCH DESIGN

As the topic of ESN business models has received limited attention so far, this study opted for an explorative, qualitative approach. To explore the business models of ESN providers, a multiple case study method (Yin 2009) was conducted. More specifically, a multiple mini-case study strategy was executed where the depth and richness within one case is limited, but where the number of different cases is relatively large (George and Bennett 2005). This helps establish a board view across different ESN providers. Moreover, as high-level information on the customer-facing elements of the business model should be mostly publically available and gaining access to ESN providers is difficult, data collection focussed on primary information available on the ESN providers' websites complemented with secondary information when required. This information was summarized and compared using the customer-facing elements of the Business model Canvas: (1) Customer Segments, (2) Value Propositions, (3) Channels, (4) Customer Relationships, and (5) Revenue Streams (Osterwalder and Pigneur 2010).

The ESN providers were selected based on data from industry research on the ESN market and data on the use of ESNs in the corporate environment. According to the Altimeter Group (2012), an ESN can evolve from three differing scenarios. Firstly, the ESN can be deployed as a standalone solution (Yammer, Chatter, Google+) that can operate independently of other applications but typically can also be integrated via API's. Secondly, ESN is a feature of an existing collaboration platform which can be enabled (Jive, Telligent, Drupal). Thirdly, ESN functionality may be provisioned as an add-on to existing enterprise applications to provide a social layer (Lotus Notes and IBM Connections or Salesforce and Chatter). Gartner's Magic Quadrant for Social Software in the Workplace (Gartner 2012a), position the top five leading ESN applications to be Microsoft SharePoint, Jive, IBM Connections, Yammer, and Salesforce Chatter. In addition to these applications, Facebook and Twitter were also included due to the high penetration and value of this software within organisations (Archambault and Grudin 2012; Skeels and Grudin 2009; Zhang et al. 2010). Though it is recognised that Yammer is now a Microsoft product, it is still presented separately due to historically differing "*management and product development styles*" (Gartner 2012a, p20). Gartner's analysis of the domain presents applications that support internal interactions between employees and working teams, as well as external relationships and communities.

ENTERPRISE SOCIAL NETWORK PROVIDERS

Below the seven leading platforms that have been identified for discussion in this study are described in more detail and their customer facing business model elements are presented in Table 1.

1. Microsoft Yammer (<http://www.yammer.com/>)

The popular micro-blog platform Yammer was launched as an ESN in 2008 with rapid organisational uptake due in part to the offer of a free-to-use, basic version of the software, with limited functionality. Sometimes Yammer is referred to as 'the Facebook for Business.' The technology was acquired by Microsoft in 2012 at a reported cost of \$1.2 billion dollars, to bolster the enterprise social networking capability of SharePoint and the Office 365 cloud based product range (Bell 2012; Gartner 2012b). To gain a level of administrative control over the domain however, an organisation must sign up to be a paying customer. This option to upgrade, at a minimal cost per user, brings with it additional security and administrative functions suitable for most corporate IT blueprints. Designed for corporate collaboration, each member of a private Yammer network must sign in by their company email address.

2. Microsoft SharePoint (<http://office.microsoft.com/en-us/sharepoint/>)

Originally launched in 2001, SharePoint was initially just another document management system. Now as it is more closely integrated with other Microsoft Office products, such as the new Office 360, the collaboration platform provides true ESN capabilities. Microsoft SharePoint offers a varied licensing agreement with the option of paying for system capabilities, the deployment protocol and the system hosting location (online/on-

location)¹. Presenting both a free version and premium (paid) option, SharePoint supports the choice of on premise or cloud based service offering. That is, licensing depends upon “*what capabilities are used, how SharePoint is deployed, and where the system is hosted*” (Microsoft 2013). According to Pogrebivsky (2013), Microsoft relies upon “*partners and other third party application developers to build applications*” to enhance the SharePoint collaboration platform. In addition, in the latest version (SharePoint 2013), has introduced a new opt-in approach to licensing by using the cloud distribution model to add-to or extend upon core functionality (Pogrebivsky 2013). Microsoft manages this process via the Management Shared Services application to assign or delegate the license.

3. IBM Connections (<http://www-03.ibm.com/software/products/us/en/conn/>)

The social software platform IBM Connections offers three different deployment options, on-premises; cloud based; or a hybrid instance. Each of these instantiations operates on a on a pay-for-service basis. IBM Connections is an “*integrated social software platform for business, with profiles, blogs, Wikis, discussion forums, communities, ideation, rich media, micro-blogging, a wall-type feature*” (Kiron 2012). The expected full integration of this software with Microsoft Outlook, Office and Microsoft SharePoint will provide a true end-to-end social business solution.

4. Jive (<http://www.jivesoftware.com/>)

In contrast to the popular freemium approach to product distribution, in 2012 Jive software CEO Tony Zingale strongly opposed this business model and likened it to “*handing out drugs in a schoolyard*” (Carr 2012). Zingale believes that the freemium model for the enterprise is dead and that the metrics that matter are not user adoption rates but attributable revenue gains and cost reduction (Rosoff 2013). Another point of uniqueness is that Jive not only promotes business focused end-user functionality but also places emphasis on the IT concerns of product hosting, system integration and security features (O’Flaherty 2012). According to Digiredo², Jive has two business models. The first model (Clearspace), pertains to the internal organisational use of Jive, the second (ClearSpace Communities) is focused on the external use of this social media. Both follow ‘pay for feature’ business models, with Clearspace charging on a per user/year basis and Community based on CPU usage. Jive has also recently offered a 30 day trial ‘try before you buy’ model (Chui et al. 2012). Recent developments in the Jive product suite include the integration of its popular StreamOnce product with larger software-as-a-service vendors such as Microsoft, Salesforce, SAP and Google (King 2013).

5. Salesforce Chatter (<http://www.salesforce.com/chatter/>)

The Salesforce Chatter product suite offers a growing range of functionality from activity streams and file sharing across devices, to new features such as ‘topic’ identification and workflow approvals (Chatter 2013). The product is offered in both a free version (with the purchase of 1 paid CRM licence) and a ‘pay for extra functionality’ version (Chatter Plus), with an enhanced level of privacy and data security. Available as part of the paid Salesforce application licences, Chatter can be deployed company-wide manually or on an invitation only basis.

6. Facebook (<http://www.facebook.com/>)

Though Facebook makes the claim that there is no business model in-place and they are “*building the plane in flight*” (Hall 2013), their original business model still applies, that being paid-for display advertisements (Research and Markets 2013). Facebook believes that key to its future survival is the mobile advertisement space which has contributed “30% of Facebook’s total ad revenue” in the first quarter of 2013 (Pepitone 2013). The challenge for Facebook now is to identify a business model which generates significantly greater revenue stream, and perhaps use of Facebook Connect (social graph) will provide this (Dixon 2012).

7. Twitter (<http://www.twitter.com/>)

Due to the rapid take-up & widespread success of Twitter, organisations also consider the use of microblogs for “*group communication and information sharing*” (Riemer et al. 2012a, p3). Twitter is primarily a standalone micro-blog (140 characters or less) but can also be integrated with other social media applications through the use of appropriate #hash-tags. The application is free to use and can be accessed across a wide range of devices

¹ SharePoint 2013 licensing: <http://office.microsoft.com/en-us/sharepoint/sharepoint-licensing-overview-collaboration-software-FX103789438.aspx>

² Digiredo: Checking out Jive Software: <http://www.digiredo.nl/checking-out-jive-software/>

include the latest mobile technologies. Twitter supports an open community approach to social networking where users are free to follow others within the network with minimal barriers to access.

We have described the characteristic of each ESN provider in terms of the customer-facing business model elements (Table 1). Some applications (Yammer; Chatter) are based on a micro-blog paradigm yet allow for integration with more traditional corporate IT applications. Other ESNs (Chatter; SharePoint) offer a basic free service with the ability to upgrade to a more feature rich instance on a paid basis. Some ESNs are relatively open for anyone to join (unless users choose to close their social network themselves), while others are more private requiring some level of authentication or authorisation (e.g., Yammer requires the use of a corporate email address).

Table 1: ESN providers described by customer-facing business model elements.

VENDOR	VALUE PROPOSITION		CUSTOMER	REVENUE MODEL	CHANNEL	RELATIONSHIP
	CORE	ENHANCED				
Microsoft Yammer	Microblog/ Activity Stream	Standalone or Integrated with Office 360	Employees	Free & Paid	Standalone or Integrated with Office 360 (Cloud based); Mobile	Private
SalesForce Chatter	Microblog/ Activity Stream	Standalone or Integrated with Salesforce.com	Employees; Community members	Free (with 1 paid CRM licence) & Paid	Onsite; Cloud; Mobile; Hybrid	Private
Microsoft SharePoint	Document collaboration platform	Can be integrated with Office 360 & NewsGator	Employees	Free & Paid	Onsite; Cloud; Mobile; Hybrid	Private
IBM Connections	Community-based Social network	Can be integrated with Lotus Notes	Employees; Community members	Paid	Onsite; Cloud; Mobile; Hybrid	Private
Jive	Collaboration platform	ESN can be enabled in Jive	Employees; Community members	Paid	Onsite & Cloud	Private
FaceBook	Community-based Social network	Can be integrated with other external applications	Community	Free	Cross platform	Open or Private
Twitter	Microblog	Can be integrated with other external applications	Community	Free	Cross platform	Open

THE BUSINESS MODELS OF ESN PROVIDERS

From the case descriptions and their customer-facing business model elements, it can be observed that there is an overarching differentiation between the business models of the leading software Vendors, allowing the above ESN to be grouped into three distinct archetypes (Table 2). Firstly, a purely *consumer model* (Facebook; Twitter) is typically free, (consumer) community driven, and provides access to either open or private networks. It is also integrated to a wider set of consumer application, for example, via using your account to sign in into other websites or having buttons on other websites linked to your account.

The second overarching approach to ESN business models is the *corporate model*, which can be considered as the more traditional, top-down, organisationally supported instance, strategically endorsed by senior management and IT departments. This second group of ESN typically includes applications such as IBM Connections and Microsoft SharePoint, as these applications are more tightly integrated with existing corporate technologies and organisational practices. The corporate business model ESN is primarily focused on the employee and is funded by a pay for service licensing model.

There is also a third *hybrid model* (Yammer, Jive), that being an ESN applying a corporately focused business model but wrapped in the packaging of a consumer model. This emerging category blends some of the immediate, community driven benefits of a bottom-up approach with a transition to a more robust, corporately appealing ESN instance. The development of the ESN market may lead to the evolution of this third paradigm as organisations continue to grapple with the opportunities and challenges that social software brings.

Table 2: ESN Business Model Archetypes

BUSINESS MODEL PATTERN	VALUE PROPOSITION		CUSTOMER	REVENUE MODEL	CHANNEL	RELATION- SHIP	ESN EXAMPLE
	CORE	ENHANCED					
Consumer model	ESN	External integration	Community	Free	Cross Platform	Open or private	Facebook; Twitter
Corporate model	ESN	Internal integration	Employees	Licensing	Onsite; Cloud; Mobile; Hybrid	Private	Chatter; SharePoint; IBM Connections
Hybrid model	ESN	Internal integration	Community/employees	Freemium	Standalone or Integrated	Private	Yammer; Jive

From the above (Table 2) several ESN applications can be categorised as following a consumer based approach (consumer model and hybrid model) which are targeted at individuals in the broader community and whereby ESN adoption is more likely to occur at the individual employee level of the organisation. It could be viewed that the organisational adoption of ESN applications is sometimes driven more by opportunity or requirement than by an imposed management policy or corporately endorsed strategic directive. This is supported by the recognised transformation of these applications from personal use only to transformative enterprise-wide technology (Mergel et al. 2012). A distinction that can be made is the apparent ease of adoption of the consumer (bottom-up) type applications such as Yammer and the more corporate style products such as Microsoft SharePoint. The consumer applications, freemium or low-cost, are typically selected and deployed quickly, typically without the due diligence that may be necessary if the application becomes Enterprise-wide. Conversely, truly corporate ESN products often require the services of an Account Manager to support the integration of this software.

Riemer et al. (2012a) discuss the *bottom-up* emergence of an ESN (Yammer), reviewing the phases of the initial uptake of the software, and leading to the development of the Social Network Emergence Process (SNEP) model. Through their case study analysis of social software adoption, Richter et al. (2013b) contribute to the ongoing debate between the merits of top-down and bottom-up deployment of organisational social software, and the impact of this choice on the success of this implementation. Linked to this is the concept raised by Riemer et al. (2012a), that is the notion of *emergence* whereby a “community of users adopts a social media platform that is freely available on the Internet and incorporates it into their work practices”. This factor of emergence is important to this study as the bottom-up adoption and deployment of social media is often not part of corporate IT strategy (McAfee 2009) and may become ingrained before official endorsement (Riemer et al. 2012a). The bottom-up approach to software implementation also brings with it a paradigm shift for organisational communication (Richter 2012).

The bottom-up approach to social software adoption may bring with it issues of misalignment to strategic goals, lack of financial support and stakeholder buy-in, lending support to the argument for corporate deployment of ESN (Richter et al. 2013b). Moreover, other challenges for social software such as social engineering (Warren and Leitch 2006); employee productivity concerns (Ariyur 2008; Sharkey 2008) information quality (Ariyur 2008); and other legal, security and privacy risks (Hoover 2007; Steinhart 2009) cannot be ignored. On balance, through a strategic and managed approach to the right choice of ESN, an organisation may introduce significant benefits while maintaining confidence in corporate IT infrastructure. It is here where a corporate based approach (corporate model and hybrid model) may be preferred by organizations. So overall, the hybrid approach that wraps the corporate model in a consumer model seems a very promising approach for ESNs.

The benefits of the organisational implementation of ESN are well known (Brzozowski 2009; DiMicco et al. 2008; Muller et al. 2009; Turban et al. 2011), but an often overlooked factor when choosing between the various ESN on offer is to clearly establish what the Vendor’s business model is and its integration with the existing enterprise architecture. By establishing this understanding an organisation can make a fully informed decision and one which supports the ultimate IT strategy and objectives of the firm.

Looking at the bigger picture, we can position the differentiation between the consumer and corporate model for ESNs into the broader discussion of the 'consumerization of IT.' The consumerization of IT refers to the adoption of consumer devices and applications in the workforce (Harris et al. 2012). This causes not only challenges for the organizations using IT, but also for the IT providers where traditionally there often has been a clear separation between the corporate providers (enterprise solutions) and consumer providers (packaged mass-market software) (Hoch 2000). This raises the question whether the traditional corporate providers can make the transformation towards more consumer based approaches and if consumer providers are willing and able to also serve the corporate market.

CONCLUDING REMARKS

The selection of an appropriate enterprise social network remains an organisational challenge as new offerings are released to market and existing products frequently alter their business models. The question remains whether an organisation should promote a truly consumer driven, employee lead initiative or endorse a program of directed, top down deployment. This question is closely related to the business model of the ESN providers. This research suggests that there are three types of business models: a consumer model, a corporate model and a hybrid model that wraps a corporate model in a consumer model. We suggest that adopting a hybrid approach will provide the benefits of both models whereby choice of application is made initially on user value but transition can be made to a more corporate system.

There are several limitations to this study. Because of the explorative nature of the research and the use of mini-cases, the current results should be seen as preliminary findings that require further research. In addition, looking retrospectively at business models may not always be best way to derive future strategies. Moreover, due to the quickly evolving nature of this domain it is difficult to conclusively determine the future of the ESN business models. This also requires an ongoing study of the field till developments more or less stabilise. Other areas for future research are full business model studies that look beyond the customer-facing elements that we focussed upon. Also research into the possible combination of different applications and their business models may show opportunities to benefit from both the consumer model and the corporate model.

REFERENCES

- Archambault, A., and Grudin, J. 2012. "A Longitudinal Study of Facebook, LinkedIn, & Twitter Use" in: *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. Austin, Texas, USA: ACM, pp. 2741-2750.
- Ariyur, K. 2008. "The Wikinomics Playbook: Mass Collaboration in Action." Butterworth-Heinemann.
- Bell, G. 2012. "Enterprise 2.0: Bringing Social Media inside Your Organization: An Interview with Monika Wencek, Senior Customer Success Manager at Yammer" *Human Resource Management International Digest* (20:6), pp. 47 - 49.
- Bouwman, H., De Vos, H., and Haaker, T. (eds.). 2008. *Mobile Service Innovation and Business Models*. Heidelberg, Germany: Springer.
- Bouwman, H., and Fielt, E. 2008. "Service Innovation and Business Models" in *Mobile Service Innovation and Business Models*, H. Bouwman, H. de Vos and T. Haaker (eds.). Heidelberg, Germany: Springer, pp. 9-30.
- Brzozowski, M.J. 2009. "Watercooler: Exploring an Organization through Enterprise Social Media" in: *Proceedings of the ACM 2009 international conference on Supporting group work*. Sanibel Island, Florida, USA: ACM, pp. 219-228.
- Buhse, W., and Stamer, S. 2008. *Enterprise 2.0: The Art of Letting Go*. iUniverse.
- Carr, D.F. 2012. "Jive CEO: Social Tools Are Essential, Not Extras" *Informationweek - Online*, Retrieved 19 May, 2013, from <http://search.proquest.com/docview/919737195?accountid=13380>
- Chatter. 2013. "So Long, Silos" Retrieved 20 May, 2013, from <http://www.salesforce.com/chatter/features>
- Chesbrough, H. 2006. *Open Business Models: How to Thrive in the New Innovation Landscape*. Boston, MA: Harvard Business School Press.
- Chesbrough, H. 2010. "Business Model Innovation: Opportunities and Barriers" *Long Range Planning* (43:2-3), pp. 354-363.

- Chesbrough, H., and Rosenbloom, R.S. 2002. "The Role of the Business Model in Capturing Value from Innovation: Evidence from Xerox Corporation's Technology Spin-Off Companies" *Industrial and Corporate Change* (11:3), pp. 529-555.
- Chui, M., Manyika, J., Bughin, J., Dobbs, R., Roxburgh, C., Sarrazin, H., Sands, G., and Westergren, M. 2012. "The Social Economy: Unlocking Value and Productivity through Social Technologies".
- Cusumano, M.A. 2008. "The Changing Software Business: Moving from Products to Services," *IEEE Computer* (41:1), pp. 20-27.
- DiMicco, J., Millen, D.R., Geyer, W., Dugan, C., Brownholtz, B., and Muller, M. 2008. "Motivations for Social Networking at Work" in: *Proceedings of the 2008 ACM conference on Computer supported cooperative work*. San Diego, CA, USA: ACM, pp. 711-720.
- DiMicco, J.M., Geyer, W., Millen, D.R., Dugan, C., and Brownholtz, B. 2009. "People Sensemaking and Relationship Building on an Enterprise Social Network Site" *System Sciences, 2009. HICSS '09. 42nd Hawaii International Conference*, pp. 1-10.
- Dixon, C. 2012. "Facebook's Business Model" Retrieved 1 June, 2013, from <http://cdixon.org/2012/05/15/facebooks-business-model>
- Gartner. 2012a. "Magic Quadrant for Social Software in the Workplace" *Gartner* (ID:G00236025).
- Gartner. 2012b. "Yammer to Give Microsoft Needed Dynamism in Enterprise Social Networking" *Gartner* (ID Number: G00236397).
- George, A., and Bennett, A. 2005. "Case Studies and Theory Development in the Social Sciences" *Cambridge, MA: MIT Press*.
- Grace, T. 2009. "Wikis as a Knowledge Management Tool" *Journal of Knowledge Management* (13:9), pp. 64-74.
- Hall, M. 2013. "'We're Building the Plane in Flight': Facebook's Business Model" *The Sydney Morning Herald*. Retrieved 30 May, 2013, from <http://www.smh.com.au/it-pro/business-it/were-building-the-plane-in-flight-facebooks-business-model-20130306-2fkrh.html>
- Harris, J., Ives, B., and Junglas, I. 2012. "It Consumerization: When Gadgets Turn into Enterprise It Tools" *MIS Quarterly Executive* (11:3), pp. 99-111.
- Hoch, D.J. 2000. *Secrets of Software Success: Management Insights from 100 Software Firms around the World*. Harvard Business Press.
- Hoover, J.N. 2007. "Web 2.0 Tools in Business: Proceed with Caution -- 'Enterprise 2.0' Must Overcome Concerns About Security and Roi to Gain a Foothold in Business" *Bank Systems & Technology* (44:4), Apr 2007, p. 41.
- Jackson, A., Yates, J., and Orlikowski, W. 2007. "Corporate Blogging: Building Community through Persistent Digital Talk" *System Sciences, 2007. HICSS 2007. 40th Annual Hawaii International Conference*, pp. 80-80.
- Johnson, M.W. 2010. *Seizing the White Space: Business Model Innovation for Growth and Renewal*. Boston, MA: Harvard Business Press.
- Jussila, J., Karkkainen, H., and Leino, M. 2011. "Benefits of Social Media in Business-to-Business Customer Interface in Innovation" in: *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments*. Tampere, Finland: ACM, pp. 167-174.
- Kim, S.T., Lee, C.K., and Hwang, T. 2008. "Investigating the Influence of Employee Blogging on It Workers & Organisational Citizenship Behaviour" *International Journal of Information Technology and Management* (7:2), pp. 178-189.
- King, R. 2013. "Jive Streamonce Aims to Connect Microsoft, Salesforce, Google Apps" *ZDNet*. Retrived 30 May, 2013, from <http://www.zdnet.com/jive-streamonce-aims-to-connect-microsoft-salesforce-google-apps-7000015367>
- Kiron, D. 2012. "How IBM Builds Vibrant Social Communities" *MIT Sloan Management Review* (54:1), pp. 1-6.

- Koch, H., Gonzalez, E., and Leidner, D. 2012. "Bridging the Work/Social Divide: The Emotional Response to Organizational Social Networking Sites" *European Journal of Information Systems* (21:6), pp. 699-717.
- Leonardi, P.M., Huysman, M., and Steinfield, C. 2013. "Enterprise Social Media: Definition, History, and Prospects for the Study of Social Technologies in Organizations" *Journal of Computer-Mediated Communication* (19:1).
- McAfee, A. 2006. "Enterprise 2.0: The Dawn of Emergent Collaboration" *MIT Sloan Management Review* (47:3), pp. 19-28.
- McAfee, A. 2009. "Enterprise 2.0—New Collaborative Tools for Your Organization's Toughest Challenges".
- Mergel, I., Mugar, G., and Jarrahi, M.H. 2012. "Forming and Norming Social Media Adoption in the Corporate Sector" in: *Proceedings of the 2012 iConference*. Toronto, Ontario, Canada: ACM, pp. 152-159.
- Microsoft. 2013. "Sharepoint 2013 Licensing". Retrieved 30 May, 2013, from <http://Office.Microsoft.Com/En-Au/Sharepoint/Sharepoint-Licensing-Overview-Collaboration-Software-Fx103789438.AspX>
- Millen, D.R., Feinberg, J., and Kerr, B. 2006. "Dogear: Social Bookmarking in the Enterprise" in: *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. Montreal, Quebec, Canada: ACM, pp. 111-120.
- Morris, M., Schindehutte, M., and Allen, J. 2005. "The Entrepreneur's Business Model: Toward a Unified Perspective" *Journal of Business Research* (58:6), pp. 726-735.
- Muller, M., Freyne, J., Dugan, C., Millen, D., and Thom-Santelli, J. 2009. "Return on Contribution (Roc): A Metric for Enterprise Social Software" in *Ecscw 2009*, I. Wagner, H. Tellioğlu, E. Balka, C. Simone and L. Ciolfi (eds.). Springer London, pp. 143-150.
- O'Flaherty, K. 2012. "Jive Still Move to a Popular Beat" *CIO Magazine*. Retrieved 30 May, 2013, from <http://www.cio.co.uk/insight/enterprise-apps/jive-still-move-popular-beat>
- Osterwalder, A., and Pigneur, Y. 2010. *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*. (self-published).
- Pateli, A.G., and Giaglis, G.M. 2004. "A Research Framework for Analysing Ebusiness Models" *European Journal of Information Systems* (13:4), pp. 302-314.
- Pepitone, J. 2013. "Facebook Sales Jump 38%, with Mobile Boost" *CNNMoney*. Retrieved 30 May, 2013, from <http://money.cnn.com/2013/05/01/technology/social/facebook-earnings/index.html>
- Perez, J. 2013. "Jive Software Adds Integration Tool for Its Enterprise Social Platform" *PCWorld*. Retrieved 30 May, 2013, from <http://www.pcworld.com/article/2038939/jive-software-adds-integration-tool-for-its-enterprise-social-platform.html>
- Pogrebivsky, S. 2013. "A New Business Model for Sharepoint 2013" *CMSWire*. Retrieved 30 May, 2013, from http://www.cmswire.com/cms/information-management/a-new-business-model-for-sharepoint-2013-019182.php?utm_source=MainRSSFeed&utm_medium=Web&utm_campaign=RSS-News
- Research and Markets. 2013. "Facebook: The Future of Its Ad-Supported Business Model" Retrieved 30 May, 2013, from <http://finance.yahoo.com/news/research-markets-facebook-future-ad-162500648.html>
- Richter, A., Behrendt, S., Koch, M. 2012. "Aperto: A Framework for Selection, Introduction, and Optimization of Corporate Social Software" *Sprouts: Working Papers on Information Systems*, 12(1).
- Richter, A., Heidemann, J., Klier, M., and Behrendt, S. 2013a. "Success Measurement of Enterprise Social Networks" *Wirtschaftsinformatik*, p. 20.
- Richter, A., Stocker, A., Müller, S., and Avram, G. 2013b. "Knowledge Management Goals Revisited: A Cross-Sectional Analysis of Social Software Adoption in Corporate Environments" *VINE* (43:2), pp. 132-148.
- Richter, D., Riemer, K., and vom Brocke, J. 2011. "Internet Social Networking" *Business & Information Systems Engineering* (3:2), 2011/04/01, pp. 89-101.
- Riemer, K., Overfeld, P., Scifleet, P., and Richter, A. 2012a. "Oh, SNEP! The Dynamics of Social Network Emergence - the Case of Capgemini Yammer" *University of Sydney, Business Information Systems Working Paper*, Sydney, Australia.

- Riemer, K., and Richter, A. 2012. "Social-Emergent Enterprise Social Networking Use Cases: A Multi Case Study Comparison". *University of Sydney, Business Information Systems* (2012).
- Riemer, K., and Scifleet, P. 2012. "Enterprise Social Networking in Knowledge-Intensive Work Practices : A Case Study in a Professional Service Firm" in *ACIS 2012 : Location, location, location : Proceedings of the 23rd Australasian Conference on Information Systems 2012, ACIS, [Geelong, Vic.]*, pp. 1-12.
- Riemer, K., Scifleet, P., and Reddig, R. 2012b. "Powercrowd: Enterprise Social Networking in Professional Service Work: A Case Study of Yammer at Deloitte Australia".
- Rosoff, M. 2013. "Jive Ceo: Freemium in the Enterprise Is Dead, and Email Is Next," *CITE World*. Retrieved 30 May, 2013 from <http://www.citeworld.com/social/21325/jive-ceo-freemium-enterprise-dead-and-email-dying?sf8840405=1>
- Sharkey, C. 2008. "Here Comes Everybody: The Power of Organising without Organisations" *London: Allen Lane*.
- Skeels, M.M., and Grudin, J. 2009. "When Social Networks Cross Boundaries: A Case Study of Workplace Use of Facebook and LinkedIn" in: *Proceedings of the ACM 2009 international conference on Supporting group work*. Sanibel Island, Florida, USA: ACM, pp. 95-104.
- Skopik, F., Schall, D., and Dustdar, S. 2011. "Managing Social Overlay Networks in Semantic Open Enterprise Systems" in: *Proceedings of the International Conference on Web Intelligence, Mining and Semantics*. Sogndal, Norway: ACM, pp. 1-12.
- Steinhart, M. 2009. "Web 2.0: Worth the Risk" *Secure Computing*.
- Teece, D.J. 2010. "Business Models, Business Strategy and Innovation" *Long Range Planning* (43:2-3), pp. 172-194.
- Thom-Santelli, J., Muller, M.J., and Millen, D.R. 2008. "Social Tagging Roles: Publishers, Evangelists, Leaders" in: *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. Florence, Italy: ACM, pp. 1041-1044.
- Turban, E., Bolloju, N., and Liang, T.-P. 2011. "Enterprise Social Networking: Opportunities, Adoption, and Risk Mitigation" *Journal of Organizational Computing and Electronic Commerce* (21:3), 2011/07/01, pp. 202-220.
- Warren, M.J., and Leitch, S. 2006. "Social Engineering and Its Impact Via the Internet" *Australian Information Security Management Conference*, p. 85.
- Yin, R.K. 2009. "Case Study Research: Design and Methods" *Sage Publications Inc*.
- Zhang, J., Qu, Y., Cody, J., and Wu, Y. 2010. "A Case Study of Micro-Blogging in the Enterprise: Use, Value, and Related Issues" *Proceedings of the 28th international conference on Human factors in computing systems*.
- Zott, C., Amit, R., and Massa, L. 2011. "The Business Model: Recent Developments and Future Research", *Journal of Management* (37:4), pp. 1019-1042.

ACKNOWLEDGEMENTS

This research was carried out as part of the activities of, and funded by, the Smart Services Cooperative Research Centre (CRC) through the Australian Government's CRC Programme (Department of Innovation, Industry, Science and Research).

COPYRIGHT

Paul Mathiesen and Erwin Felt © 2013. The authors assign to ACIS and educational and non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to ACIS to publish this document in full in the Conference Papers and Proceedings. Those documents may be published on the World Wide Web, CD-ROM, in printed form, and on mirror sites on the World Wide Web. Any other usage is prohibited without the express permission of the authors.

