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ABSTRACT

Although social network technologies have been the focus of many articles in the popular and business press, businesses remain unclear about their value. We use theory and data gathered from IT leaders to develop an initial model assessing the value of social network technologies in the business environment. Insights are given into when different features should be used to enhance existing business processes and to provide business value.

Keywords
Social networking, social network technology, business value

INTRODUCTION

Social network sites have become popular in recent years, especially with young people who adopt them to enhance their social interactions. The level of penetration in the college setting is exemplified by a recent study at the University of Illinois, Chicago which revealed that 88% of survey respondents in introductory courses at the university were users of social network sites such as Facebook, MySpace, and Xanga (Hargittai 2007). Because of these penetration levels into a critical market segment, many believe these sites are extremely valuable. For example, Microsoft paid $240M for a 1.6% ownership stake in Facebook – implying a total market value of $15 billion (Johnston 2007)!

In spite of that, there continues to be skepticism about whether social network technologies (SNTs) can provide any value in business settings. Some predict that value will emerge, and others predict the opposite (Cone 2007; Koch 2007). Despite the diversity of opinions on the topic, some businesses have already started implementations of social network technologies in the corporate setting. One example company is Wachovia, which plans to release its own social networking platform to over 110,000 employees (Cone 2007).

Academics have begun to look at social network technologies (SNTs), but have not done so from the perspective of business value. The growing body of literature on the value of IT provides guidance for constructing a framework for predicting and assessing the value of SNT implementations in a business context. Preliminary work we have performed with business practitioners provides support for this new framework.

DEFINING SOCIAL NETWORK TECHNOLOGIES

In order to guide business leaders in identifying opportunities for value creation through SNTs, it is important to first define them. Rheingold (2000) uses terms such as *virtual community* and *online community* to describe groups that participate in computer-mediated communication. These online communities have grown significantly in recent years, having been enabled through social network sites. Boyd and Ellison (2007) define a *social network site* as "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system." This definition focuses exclusively on the networking features of such sites, but the authors recognize that they

often include additional information exchange features such as blogging, wikis, and media sharing tools. An emerging class of infrastructure technologies, referred to as social networking suites or social network technologies (SNTs), provide an integrated tool set to develop and deploy social network sites. SNTs enable basic social networking, but most also include additional tools to support a wider range of social interactions and exchanges.

In order to support social networking within an organization, many companies are choosing to invest in SNTs to create their own, proprietary and private, social network sites, rather than using publically available, complimentary sites such as Facebook. Therefore, this study focuses on the business value of investments in social network technologies.

SOCIAL NETWORK TECHNOLOGIES IN THE ACADEMIC LITERATURE

Several dimensions of social network technologies have been studied in the academic literature. To understand network formation, research has explored how people met in an offline setting (Lampe et al 2006) and how network structure affects the propensity of groups to form online (Backstrom et al. 2006; Kumar et al. 2006). Once networks are formed, visualization methods have been used to illustrate relationships between members of social networks (Heer and Boyd 2005). Network behaviors have also been explored. For example, Aleman-Meza et al looked at identifying possible conflicts of interest using SNTs (2006), and Ellison et al consider how SNTs can be used to measure social capital (2007). Adamic explored whether social networking websites could be used for effective local network searches (2005) and Spertus et al consider facilitating search for communities within a SNT (2005). The research also recognizes that there are risks and deviant behavior associated with social networking. For example, privacy issues regarding SNTs have been explored (Gross et al. 2005). Identity sharing has been evaluated (Stutzman 2006).

Research in the use of SNTs as a business tool is just beginning to emerge. For example, Lea looked at SNTs to enhance business networks (2006) and De Paula observed SNTs being implemented to assist in the special education environments (2004). Specific business environments have been studied to explore SNTs in more explicitly defined domains. Barsky and Purdon encourage health librarians to try SNTs to enhance current knowledge stores and knowledge discovery (2006). Golbeck and Hendler looked at creating movie recommendations using SNTs (2006). Studies have also begun to demonstrate how data captured in SNTs can be mined to gain insights into marketing (Domingos 2005) and culture and taste (Liu et al 2006).

Measuring the Business Value of Information Technology

Having broadly defined what an SNT is and explained how it has been understood in academic literature, we turn our attention to how to measure the business value of SNTs. Practitioners have expressed both concrete ideas and uncertainty about the impacts of SNTs. The director of enterprise Web services for Wachovia suggests that the benefits of the company's social networking site implementation will include the ability to look up coworkers as well as the creation of an online encyclopedia of company information. However, he also states that the site will be used in ways that can't yet be imagined. The vagueness expressed in this statement reinforces ideas expressed by Hinchcliffe (2007) who believes that the ultimate value of social networking to businesses is still emerging.

In order to understand how SNTs can add value to a business, it is useful to take a step back and look at how IT is more broadly conceptualized to add value in the business environment.
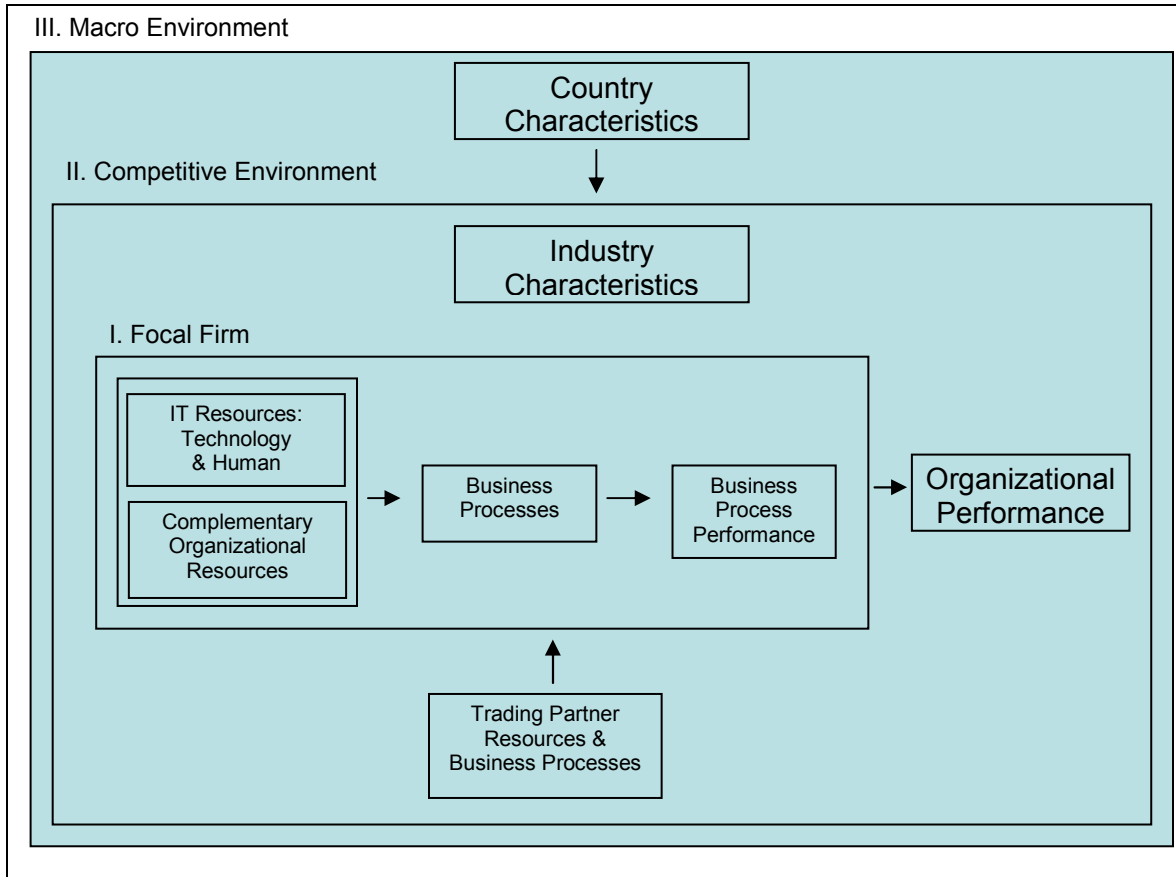
Figure 1: Business Value Model, Melville et al.

Melville et al. conducted an extensive literature review through which they proposed a general business value model of IT (**Error! Reference source not found.**) (Melville 2004). A predominant viewpoint of the research on the Value from IT is that on the firm level, information technology indirectly affects Organizational Performance, such as increasing sales or reducing costs. Although a direct link from IT investments to organizational performance would be an ideal outcome of the research, scholars recognize that organizational performance can be affected by numerous factors including governmental regulation, competitors, and business processes within the organization itself. The model highlights difficulties that can come into play when measuring the IT impact. An IT impact that results in improving or even retarding the performance of a business process can be completely lost when taking aggregate measures of organizational performance such as sales or cost because of the presence of other mitigating factors, such as industry impacts, regulations, or changes to resource costs as affected by partners.

Thus, to better understand the value of IT, this general model characterizes IT as an input to Business Processes, and the effect of IT can be measured as changes in Business Process Performance.   To apply this model, the researcher must analyze the domain and develop a causal path from IT, through its process-level impacts to organizational performance. As Hubbard (2007) recognizes, this analysis will result in a much clearer view of how IT can provide a return on investment. This could be developed from empirical outcomes of pilot projects, similar to other project justification processes such as Desmarais, Leclair, Fiset, and Talbi (Desmarais et al. 1997), or could be the result of "thought experiments" to understand the impact of IT.

A growing body of recent literature builds on this model by looking at different processes that can be improved by IT in various contexts. These studies have demonstrated value from IT in improving both internal business processes, and those that span organizations. Research demonstrating the value of IT for internal process improvement in specific industries has been performed in healthcare (Brown 2005), law enforcement (Gottschalk 2006) and the hotel, travel, service, and housing industries (Lin et al 2007). A growing body of literature is emerging that provides evidence that IT can enhance customer-facing processes. For example, Jayachandran et al surveyed many industries and found that relational information processes

were improved through CRM technologies (2005), and Sheng promotes the idea that Mobile Technologies supports business processes such as sales and marketing, internal communication, and knowledge sharing (2005). Bardhan looked at IT in the manufacturing sector and argued that it improved outsourcing processes (2006). Some technologies have been shown to provide value by enhancing both internal and external processes. Quan considered automobile, network products, PC manufacturing, and real estate management in China and stated that collaboration tools, knowledge management tools, and workflow tools improved both internal and external business processes (2005). Similarly, Chang found that internal and external business process improvements resulted from various types of ERP implementations (2006), and Weitzel argues that financial chain processes can be improved in many industries through the application of IT, again comprising both internal and external uses (2006).

Although this literature focuses on well-defined IT applications with direct impact on business processes, the value of implementing more social technologies that potentially have a more indirect impact on traditional processes and outcomes has not been evaluated. As discussed above, organizations are adopting these technologies without clearly understanding how they will provide value. Therefore, we propose building upon the academic findings, to better understand how the individual features of SNTs impact both internal and external business processes.

Social network technologies can be implemented to provide overall firm value, but management must understand the complete nature of the relationship between the IT investment and the performance outcomes. To illustrate this point with an example, management may wish to create a customer-focused social networking site to interact with customers. Although the overall performance objective from this implementation could be to increase firm profitability, the intermediate effects of the technologies could be seen in a wide range of ways ranging from using the site to more effectively gather product feature preferences to more efficiently providing customer support for past sales. Considering the impact of customer contributed product knowledge, the SNT could have multiple process-level impacts including:

- Reducing costs for product development,
- Providing management with better information for sales forecasting resulting in reduced inventory and increased sales,
- Increasing customer loyalty and repeat purchases which simultaneously increases revenue while reducing customer acquisition costs.

A research study of customer-related SNTs should, therefore, include measures of which business processes are being supported by the network platform, the outcomes of those processes as measured at the process level itself, and overall organizational performance measures. In this example it is likely inappropriate to asses the value of IT just by firm profits in terms of increased sales volume or reduced costs, because the value added to the business process can be lost when using aggregate measures.

In addition to a firm communicating with its customers and affecting its internal and external processes through its use of SNTs, a firm can communicate and exchange information with its suppliers through the use of SNTs. Suppliers may regularly communicate with a focal firm in order to improve the quality of supplies, negotiate services, better understand the firm needs, co-create products, or reduce packaging and transportation costs. Each of these processes could be positively impacted by the addition of technologies aimed at enhancing knowledge sharing on both products and people. Common SNTs such as wikis or rich personnel profile information could streamline communication and reduce coordination costs for both companies. The resulting improvements may happen at either the focal firm or the trading partner or both. In either case, the changes in overall performance are most appropriately measurable at the process impact level.

Given these perspectives on previous research on the value of IT and the potential affects of SNTs, a simplified model can be used to conceptualize how to determine the value of social network technology investments (Figure 2**)**. Because SNTs are an emerging category of software, early studies of these investments must specify what features beyond the basic networking features are included in their implementations (such as blogs, wikis or recommendation features). The SNT features implemented can directly impact business processes, and those business processes affect organizational performance. In addition to affecting internal processes, they also impact processes that directly involve trading partners or customers. This model is not meant to imply that a SNT affects all three types of processes simultaneously, but rather it explains that any one feature of a social network platform could affect one or more types of processes. It should also be noted that the value of an SNT investment may be captured by the customer or business partner and not by the supplying company

The following sections provide more detailed definitions SNT features, the potential business processes they may impact, the process improvements predicted, and how those process level outcomes can influence firm performance.
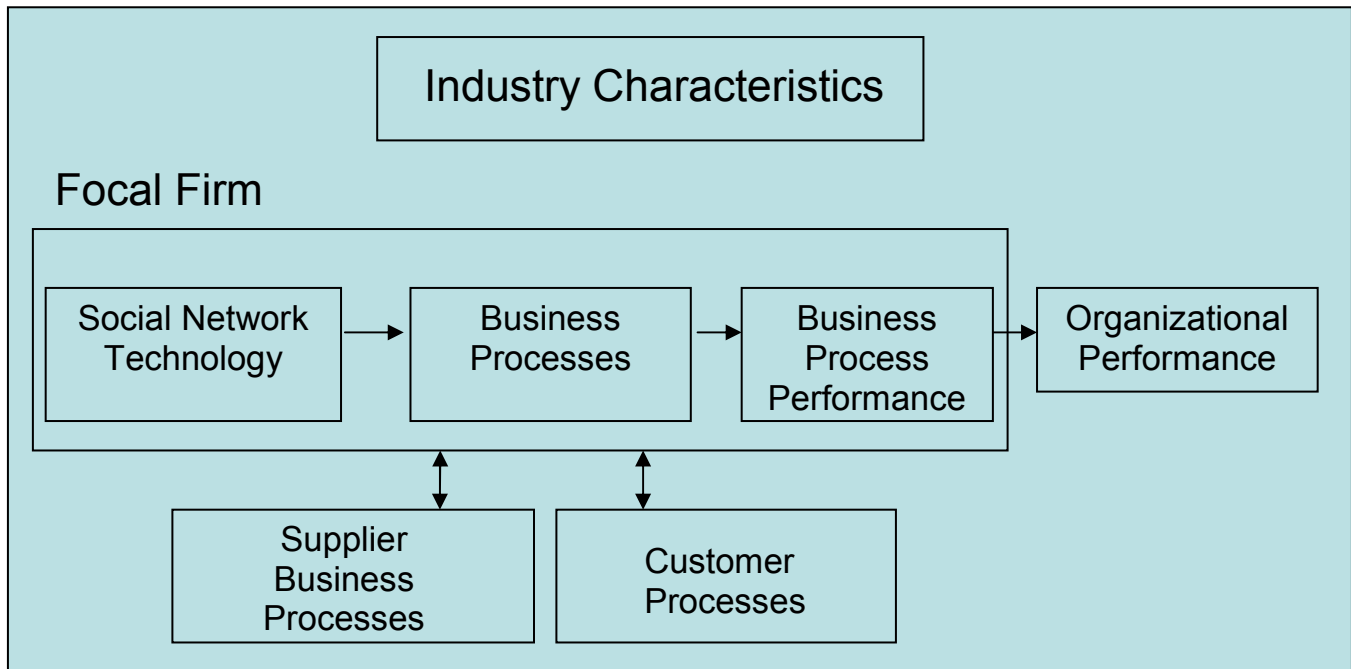
Competitive Environment

Figure 2: Business Value Model of Social Networking

KEY FEATURE SET FOR SOCIAL NETWORKING TECHNOLOGIES THAT SUPPORT BUSINESS PROCESSES

Unlike personal social networking which is enabled through the public network sites, businesses adopting social network technologies often implement "white label" social networking platforms which can be re-branded for their organizations. These application platforms provide a range of social capabilities, and the market for such solutions is predicted to grow from $46.5M in 2006 to $438.3 by 2009 (Happe 2007). There are currently dozens of organizations competing to become the industry standard. Although they are evolving, they currently offer a wide range of features and it is not yet clear which features will provide the most value to organizations adopting them. However, to develop a rich framework for evaluating the business value of SNTs, it is important to specify the range of capabilities which may be imbedded in SNTs and the potential business process impacts that each may make. The following discussion builds upon categorizations that are publically available with insights gained from two interactions between the authors and industry groups: one with the American Accounting Association, and the second with an ad hoc group of IT leaders.

As stated earlier, Boyd and Ellison (2007) recognized that social network sites often incorporate additional features beyond those that enable member profiles and "friending" capabilities. They mention mobile connectivity, blogging, and photo/video-sharing, but the list of additional features can be much longer than this. For example, Drakos (2007), with Gartner Group, enumerates a feature list for use in a business setting (Appendix A). This analysis separates the features of social network technologies into two categories: those that are the bare minimum features for a business platform and those that could be considered advanced features.

To explore how actual organizations evaluate social network platform features, the research team is working with the American Accounting Association (AAA), a 7,000 member organization, which recently initiated a project to select a social network suite. They are conducting a four-phase strategic and technical analysis project to determine their social networking opportunities and requirements. In the first phase, a team was identified. It was comprised of the organization's senior leadership (the executive director, incoming president and vice president), three technical leaders (faculty experts in both the AAA organization and information technology research areas), several consultants (both strategic and related to specific systems implementations), and industry representatives from the Big Five accounting firms.

In the second phase, the team met to determine the social networking requirements for the organization. Aided by one of the authors, the team identified the organization's stakeholders and opportunities for collaboration between and across stakeholder groups. To identify the potential stakeholders, team members worked in pairs to identify all potential organizations, individuals, and roles that are key to the AAA's strategic plan and objectives (they have an aggressive membership growth goal to nearly double members in eight years.) The pairs each reported their results, and the group consolidated responses to arrive at a composite list of stakeholders. To structure the analysis of how SNTs could improve process performance, a matrix of stakeholders was created, and every cell in the matrix was studied to identify the opportunities for collaboration between the two stakeholder groups. Specifically, two person sub-teams brainstormed on how different aspects of SNTs could support stakeholder-to-stakeholder activities. For example, one team explored how Teacher-Teacher interaction could be supported while another brainstormed on how Auditor-Teacher relationships could be enhanced. Stakeholder pair opportunities were presented to the team, and additional ideas were incorporated for each possible pair. The following day, the group prioritized these Stakeholder-Stakeholder opportunities and identified the technical features necessary to support the activities which could provide the most value to the AAA membership at large. Their work resulted in the list of SNT requirements reported in Appendix B. Although naming conventions vary, this list contains substantial overlap with the list created by Drakos.

During the third phase of the AAA project, the project team reviewed many current vendors of enterprise social networking platforms (summarized in Appendix C) to determine which met the majority of the requirements[1]. The features that appeared in the literature, were valued by the AAA, and were in most of the platforms we reviewed are summarized in Table 1. In light of the relative standardization of these features across the evaluated enterprise platforms, this feature list will be used to discuss the value of SNTs in a business setting.

Features
• **Blogging-** regular written entries on a web page or website dealing with a particular subject area and usually maintained by an individual
• **Email Notifications-**emails that can be triggered on any event that happens in the system, such as anytime an addition is made to a particular blog, wiki, or personnel profile.
• **Favorite tracking-**the ability to bookmark the locations of content within a platform that you find of interest and maintain the bookmark list.
• **File Sharing-**the ability to upload any type of digital media and associate it with a wiki, a blog, a profile, or other similar content area.
• **Forums-**web page that accept and display user-generated content. Also known as bulletin boards or discussion boards. Message are usually shown in chronological order or by threaded discussion
• **Friend Maintenance (Enhanced Contact Management)-**the ability to add people to and remove them from a list of friends. Also includes the ability to display this group of friends to others both within and outside of the group of friends.
• **Group Creation-**the ability to create and join interest groups within a social networking platform. Group membership facilitates communication among the group members (through messaging) as well as information management (forums, blogs, documents, etc.) on topics that are important to the group.
• **Profile Management-**the ability to maintain rich personal contact information including phone numbers, hobbies, education, etc. and control who can see this information.
• **Search-**a text search box that returns matches in any of the platform formats including blogs, forums, wikis, and profiles.
• **RSS Feeds-**the ability to enable the broadcast of Real Simple Syndication feeds originating from content areas such as blogs or forums.
• **Tag Clouds-**a navigational tool showing the keywords (aka tags) users have used to describe content within a platform. The size or color of the words indicate the frequency of the words used and clicking on them takes you to content that has been flagged with those words.
• **Tagging-**the ability for individuals to associate content such as pages or documents with user-generated keywords.

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[1] The fourth phase is a structured demonstration process to compare the leading platforms. This process did not identify any alternate characteristics, so it is not discussed further in this paper.

- **Voting-**the ability for users to flag content as important or unimportant to increase the likelihood of it being found and read by others.
- Wiki-a collection of web pages that can be edited by anyone who views them. They serve largely as a collaborative platform for knowledge management

Table 1: Summary of Social Network Features with Potential to Provide Business Value

BUSINESS PROCESS AND FIRM IMPACTS OF SOCIAL NETWORK FEATURES

Building upon this SNT feature set, the research team further defined the business value model of social networking, by identifying business processes that can be supported by the social network features and their performance impacts. To do this, they performed an extensive review of the (sparse) academic and practice literatures that described SNT implementations and the value expected to be received from them. Second, they worked with the Center for Advancing Business through Information Technology (CABIT) to conduct executive workshops on social networking and the value creation from elements of SNTs, in which IT leaders from companies such as Google and Intel collaborate on issues related to business and technology. The session on the value of SNTs began with a review of the characteristics of SNTs (from the previous session). Next, attendees were asked to work in pairs to identify processes that could benefit from incorporating the different SNT features. After approximately 30 minutes, the pairs were asked to present their findings to the group, and their notes were submitted to the research team. The research team then consolidated all of the responses, and categorized them by the type of process (internal or external), the specific process, and the benefit that could result. These results were distributed at the next workshop, and feedback was incorporated to further refine the model. Table 2 summarizes the perceived processes that can be affected by SNTs and the predicted value of those process improvements.

This list examines several of the features of social networking platforms which are recognized as important for business implementations. It describes implementations as being internal (focused within an organization) or external (being open to outside stakeholders) and then identifies processes that could be affected with the social network technology. Using this model, managers can identify processes within their organizations that are candidates for improvement through social network technologies, and subsequently they can create objective evaluation criteria to measure the value of changes to those processes. Thus, this list can provide a valuable starting point for an IT leader when considering the following: which processes within an organization are candidates for improvement using social network technologies, which SNT might be used to impact those processes, and what will be the value-based impact.

CONCLUSION

We have presented a model for use in identifying and measuring the value of social network technologies. We have also identified key feature sets of business platforms for social networking. IT leaders contributed their insights into both how individual social network technologies can impact business processes as well as how to measure the process outcomes from SNTs. The list of technologies, affected processes, and outcomes we have collected from current IT leaders should serve as a starting point for other IT leaders looking to make informed decisions about the value of SNT investments.

Future research should include studies to validate the situations in which SNT do support organizational processes and provide firm value. Because many of the intermediate impacts identified in this paper are qualitative and difficult to measure, initial studies may use case study techniques to gain richer insights into the firm and environmental characteristics that moderate the effect of social networks on value. For example, research may show that the strength of social ties mediates the impact of some SNT features on firm value. This would support McAfee's (2007) hypothesis that certain SNT features are appropriate in different business process contexts, depending on the relationship strength between the employees. He proposes that wikis should be used when teams have strong connections and defined requirements whereas blogs may be more appropriate for loosely affiliated employees to share infrequently needed expertise. This perspective could be used to create an enhanced model for evaluating and selecting SNTs.

Empirical studies would provide more generalizable results regarding the intermediate and overall impact of SNT on firm outcomes. These studies must focus attention on performance metrics and the causal path from process outcomes to firm-level outcomes. These studies will likely be constrained to examining a limited number of dimensions of social network adoption in business situations, and must control for the external factors that will impact value to be successful.

Finally, developing a robust model of the characteristics of SNTs, the environments in which they add value, and the key success factors to achieve the potential value will extend the literature on the value of IT while simultaneously providing guidance to organizations attempting to differentiate the market hype regarding SNT from the reality they can provide.

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Table 2: An Analysis of Process- and Firm-Level Outcomes from Social Networking

Application Reach	Business or Trading Partner Process Affected	Business Process Performance	Organizational Performance	Impediments/Comments
SOCIAL ASPECTS				
Social Networks				
Internal	Discussion boards/forums for exchange of ideas and opinions	Team building and understanding of team morale -> Improved operations: the power of the crowd	More efficient operations	The Business Value of Social Networking (http://hivelive.com/files/hl_idc_spotlight.pdf)
		-> Employee satisfaction -> Reduced turnover	Reduced payroll costs	5 reasons to deploy a corporate social network (http://www.cioinsight.com/slideshow_viewer/0,1205,l=&s=300&a=216593&po=6,00.asp?p=y)
		Distributed team activities	Reduced travel costs	
	Identify resources/expert networks (people, skills, information)	Reduced time searching	Reduction in consulting expenses; improved productivity	
		Eliminate bureaucracy	"speed flow of information, cut time wasted searching for answers, streamline organizational process, cut email by half, cease re-inventing the wheel, increase worker throughput 20% to 30%."	Taken directly from Making the Business Case for Informal Learning (http://internettime.com/2007/09/27/making-the-business-case-for-informal-learning/). Interesting response: ROI is so Business 1.0: not (http://blogs.zdnet.com/Howlett/?p=183&tag=nl.e 622)
		Conversation	"faster cycle time, improved problem-solving, more time on mission, higher morale, lower turnover…"	Making the Business Case for Informal Learning (http://internettime.com/2007/09/27/making-the-business-case-for-informal-learning/). Interesting response: ROI is so Business 1.0: not (http://blogs.zdnet.com/Howlett/?p=183&tag=nl.e 622)

Application Reach	Business or Trading Partner Process Affected	Business Process Performance	Organizational Performance	Impediments/Comments
		Social networks are cheaper than knowledge management systems	Reduced IT costs	Social Networks at Work Promise Bottom-Line Results (http://www.cioinsight.com/article2/0,1540,2192599,00.asp)
	Informal information sharing (hobbies, etc.)	-> Employee satisfaction -> Reduced turnover	Reduced payroll costs	
		Appeals to younger workers and can make the "part of the company" more quickly	Reduced training and payroll costs	5 reasons to deploy a corporate social network (http://www.cioinsight.com/slideshow_viewer/0,1205,l=&s=300&a=216593&po=6,00.asp?p=y)
	Sales process (when combined with robust Web 2.0 featured platform)	Benefits: "better-informed sales force, more competence on sales calls, more cross-selling, better presentations, easier to bring partners up to speed, avoid cost of product training." -> "Salesforce Readiness"	Increased Sales; Reduced Costs of Sales	Taken directly from Making the Business Case for Informal Learning (http://internettime.com/2007/09/27/making-the-business-case-for-informal-learning/). Interesting response: ROI is so Business 1.0: not (http://blogs.zdnet.com/Howlett/?p=183&tag=nl.e622)
	R&D	Technical-advice and Organizational-advice networks -> Provide support to other employees. Evidence that they are key to successful R&D teams.	Reduce support costs; improve R&D effectiveness	Rizova, P. 2006. Are you networked for successful innovation? MITSloan Management Review. Spring (47:3).
	R&D	Instrumental networks (established for a specific goal) - >Focus on work-related problems	Improve operational effectiveness	Rizova, P. 2006. Are you networked for successful innovation? MITSloan Management Review. Spring (47:3).
	R&D	Expressive networks: Friendship/social -> employee retention	Also improved R&D effectiveness	Rizova, P. 2006. Are you networked for successful innovation? MITSloan Management Review. Spring (47:3).

Application Reach	Business or Trading Partner Process Affected	Business Process Performance	Organizational Performance	Impediments/Comments
	Video conferencing or chat	Platforms such as 2nd Life are free and easily available; Perhaps more involvement from quiet individuals	Reduced IT Costs	Growing Pains: Can Web 2.0 Evolve Into An Enterprise Technology? (http://www.informationweek.com/shared/printableArticle.jhtml?articleID=202601956)
External	Advertising (key is to get viral marketing to take off); Service; Customer management	More customer contact -> Loyal customers; better market research	Increased sales	High potential;
			Decreased selling expenses	Could be argued, given Target's Facebook experience
		Increased word of mouth advertising	Increased sales	
	On-line experiences		From the customers'' point of view: "Valued experiences = purchases and profitability"	Realizing the Value of Social Networking Sites (http://whitepaper.informationweek.com/shared/write/collateral/WTP/51350_68840_99428_Web_2.0_Business_Primer.pdf?ksi=336965&ksc=1293056770)
		Higher affinity with group -> greater participation -> greater loyalty	Increased sales	Realizing the Value of Social Networking Sites (http://whitepaper.informationweek.com/shared/write/collateral/WTP/51350_68840_99428_Web_2.0_Business_Primer.pdf?ksi=336965&ksc=1293056770)
	Services	Peer-to-peer communication -> peer-to-peer support services	Reduced customer support costs	The Business Value of Social Networking (http://hivelive.com/files/hl_idc_spotlight.pdf)
Internal/external	Collaborative innovation	More and better ideas -> improved processes	Reduced costs	
		Reduced decision cycle time	Reduced costs	
		More and better ideas -> faster product design	Increased sales	
		Support distributed activities	Reduced travel costs	

Application Reach	Business or Trading Partner Process Affected	Business Process Performance	Organizational Performance	Impediments/Comments
	Information Search	Ability to find unstructured information from trading partner	Improved productivity	
	Identify resources/expert networks (people, skills, information)	Reduced time searching and identification of appropriate trading partners	Reduced search costs; improved supply-chain wide operations	
	Hiring process	Find possible employees in public social networks	Reduce recruiting costs	Social Networking Connects For Business (http://www.informationweek.com/news/showArticle.jhtml?articleID=183702489)
	Sales process	Introductions through friends is more effective	Reduce sales costs, increase sales	5 reasons to deploy a corporate social network (http://www.cioinsight.com/slideshow_viewer/0,1205,l=&s=300&a=216593&po=6,00.asp?p=y)
	Financing	Use social networking sites to identify lenders with lower rates than banks	Reducing financing costs	Social Networking Connects For Business (http://www.informationweek.com/news/showArticle.jhtml?articleID=183702489)
	Sales process	Keep in touch with prior employees -> easier sales opportunities	Increased sales	5 reasons to deploy a corporate social network (http://www.cioinsight.com/slideshow_viewer/0,1205,l=&s=300&a=216593&po=6,00.asp?p=y)
	Hiring process	Keep in touch with prior employees -> rehire employees	Reduced recruiting costs, reduced training costs, faster time to value adding employee	Social Networks at Work Promise Bottom-Line Results (http://www.cioinsight.com/article2/0,1540,2192599,00.asp)
Stand alone			Advertising model; subscription based (for example: Flickr, doctors)	
Do-It-Yourself applications				
Internal	Self-service processes (such as HR)	Employee empowerment -> employee retention	Reduced payroll costs	

Application Reach	Business or Trading Partner Process Affected	Business Process Performance	Organizational Performance	Impediments/Comments
	IT Development	Enable low cost solutions, quickly	Reduced IT costs	Impact Assessment: Web 2.0 (http://www.informationweek.com/1160/IEweb2_ia.jhtml)
External	Self-service processes	Outsourcing activities to trading partners	Reduced costs	Creating real business value with Web 2.0 (http://blogs.zdnet.com/Hinchcliffe/index.php?p=14)
Stand along business	Wide range possible	"Sticky" features	Page views; advertising revenues	
			ROI will be driven by downloads, members, active participants, effectiveness	High potential
Blogging				
Internal	Idea generation/dissemination	Fewer meetings	Time savings	
		Participation based on interest -> improved participation -> more effective time use and better decisions	Time savings	
	Expert knowledge management through chronological storage and publication (by executives and experts)	Daily capture of activities -> capture expertise	Time savings for expert	
		With effective search, make knowledge available to anyone who needs it -> Reduced search time -> more effective operations based on knowledge discovered and applied	Improved productivity	How to Hit the Enterprise 2.0 Bullseye (http://blog.hbs.edu/faculty/amcafee/index.php/faculty_amcafee_v3/how_to_hit_the_enterprise_20_bullseye/)
	Pose questions	Distributed, quick feedback collected	Data driven decisions	

Application Reach	Business or Trading Partner Process Affected	Business Process Performance	Organizational Performance	Impediments/Comments
		Unexpected collaboration arises: open communication channels		
	IT Support: blog all problems	With effective search, make knowledge available to anyone who needs it -> Reduced search time -> more effective operations based on knowledge discovered and applied	Reduced support time; improved IT up-time	
	Versus other knowledge sharing techniques		Lower cost publication solution from other development tools previously available	
External	Process documentation (chronological records by trading partners)		Increased accountability	
	Customer blogging	Increased communication -> faster identification of problems -> quicker reaction	Minimize impact of flaming, problems	
	Executive/expert blogging	Share insights with market -> more brand awareness	Increased Sales	
		Externally posted blog comments -> direct market feedback	Improved operations	
Wikis				
Internal	Knowledge management	Increase the availability of "tribal knowledge"		Need incentives to get people to collect information. For example, Sun has an application/program called CEpedia for Customer Engineers to enter valuable information that can be discovered, accessed and utilized for multiple benefits. Contributors are incentivized through financial rewards based on the number of times their entries are accessed.

Application Reach	Business or Trading Partner Process Affected	Business Process Performance	Organizational Performance	Impediments/Comments
		Revision control -> better document management	Time savings	
		Self-correcting documentation -> reduced errors	Increased productivity	
		More effective team work - deliver documents	Increased productivity	How to Hit the Enterprise 2.0 Bullseye (http://blog.hbs.edu/faculty/amcafee/index.php/faculty_amcafee_v3/how_to_hit_the_enterprise_20_bullseye/)
	IT processes	Wikis are cheaper than Content Management systems; require less IT Support	Reduced IT costs (acquisition and payroll)	Growing Pains: Can Web 2.0 Evolve Into An Enterprise Technology? (http://www.informationweek.com/shared/printableArticle.jhtml?articleID=202601956)
External	Early concept exploration	Collaboration among team -> improved decision-making across supply chain (identification of supply chain-wide optimization opportunities)	Reduced costs from collaborative product and process design	
Recommendations				
Internal	More effective resource-sharing tool	Immediate feedback -> Quicker decisions and consensus	Improved productivity	Threadless, Nike shoe designs
External	Product development	Improved market feedback	Increased sales	

Appendix A: Features of Social Network Sites (Drakos 2007)

Baseline For Consideration	High Expectations of Additional Optional Functionality
- membership management - access controls - user profiles - shared workspaces - document sharing - discussion forums	- calendar integration - task allocation - task tracking - workflow - basic project management - wikis - blogs - social tags - social bookmarks - social network analysis - social network visualization - content feeds - people search (expertise location) - team decision support (voting, sorting, ranking, scenario planning and categorizing) - content rating - reputation management - alerting

Appendix B: American Accounting Association required features for SN Platform

Features
• Ability to host meetings in a virtual space
• Blogs
• Create Groups
• Create Profile Similar to Facebook
• Develop Group Pages
• Document Repository
• Document Repository
• Find people using a circle of friends
• IM
• Recommendation Capabilities
• Save Files (videos, photos, etc.)
• Secure Collaboration
• Send Emails to Group Members
• Share Files
• Statistical Analysis Tools
• Survey Tools
• Tagging Documents
• Threaded Discussion Groups
• Wikis

Appendix C: Features found in different Enterprise Social Networking Platforms

Company or Product Name	Features
HiveLive	Blogging, wiki, file and media sharing, group creation, customized interface, manage network of friends, RSS Feed, Email Notifications, API, voting/content ranking, forums, mark favorites
Awareness	Wikis, blogs, email submissions, forums, voting and rating, RSS feeds, mark favorites (bookmark), search, incoming/outgoing RSS, email notifications, photo album, video album, podcast, tagging
Onesite.com	Rating, tagging, blogging, customizable interface, search, photo gallery, message board, watch friend activities, Broadcasts, forums, private messages, chat, groups
civixx.com	Profile, Buddy List, blogs, content ranking, tagging, wiki, RSS feeds
Leveragesoftware.com	Profile, search, personalized page, file upload of anytime, chat, messaging, blogs, forums, RSS, email subscribing, rating system, group functionality
Ning.com	EmailAlert, Chat, photos, blogs, message boards, profiles, search, groups
Goingon.com	user profile, ratings, comments, discussion boards, RSS syndication, blogs, post files and videos, tag clouds, polling
Golightly.com	Blogs, forums, friend lists, chat, search, customizable, wikis, bulletin boards
Jive software	Tagging, blogs, forums, files, wikis, RSS notification