Achieving successful knowledge sharing through enterprise social network collaboration

Noura Shaarawy
Hany Abdelghaffar
German University in Cairo, Egypt

Keywords
Enterprise Social Network, Knowledge Sharing, collaboration, Egypt

Abstract
Social networking has changed not only the way we communicate in our individual lives but also the way many commercial and public enterprises communicate, linking individuals across the globe and providing greater opportunities for collaboration and information sharing. The benefits of implementing an enterprise social networking platform are remarkable, but many organizations are unclear on the best path to take. Knowledge Sharing is the most vital out of all knowledge management process. Knowledge Sharing is an activity through which knowledge like information, skills, or expertise is exchanged among people, friends, families, digital communities, or organizations. A case study methodology was used to investigate how users share knowledge using enterprise social networks and tools and the factors collected from the literature that might affect the collaboration enhancement. The research showed that the behavioral factors like the sharing intention, sharing behavior, and sharing willingness has a positive relation with the environmental factors which are social influence and community identifications. Also the factors that affect the collaboration are the environmental and the behavioral factors but on the other hand the technological factors like knowledge integration, and knowledge transformation and confidentiality affects only the knowledge that is being shared.

1. Introduction
Many public and private organizations are convinced with the value of social business collaboration due to their benefits. Recently, deployments of enterprise social networking platforms used for knowledge management have become ordinary. These platforms help to harness the knowledge of workers by serving as repositories of knowledge as well as directories of knowledge holders. Nevertheless, there is still a lack of literature on the understanding of how and what might be the contributions of social network in facilitating knowledge sharing.

The problem facing the organization in attempting to increase knowledge sharing and reap the potential benefits of enterprise social network technologies lies in the successful implementation and maintenance of tools that allow sharing of user-generated content, while taking in consideration other factors, (an example would be when the adoption and implementation are maintained successfully, however, there is no push to use such technologies or there is lack of awareness of the benefits that may be collected). While many organizations are turning to enterprise social network technologies to enhance knowledge collaboration, not all embrace those technologies or realize the full benefits they can bring in part because of concerns about security and trust. These social technologies are increasingly entering the enterprise, involving complex social and behavioral aspects as well as an understanding of traditional technology acceptance factors (Andriole, 2010; Boh &Wong, 2013; Bulgurcu et.al., 2010; Jarvenpaa & Leidner, 1999).

Organizations need to deal with several issues as follows: an increased adoption rate of technology and connectivity standards, the growing demand for corporate transparency and an increase in the amount of information generated and stored by employees. Through the existing IS literature there are different factors influencing the social networking platform such as human factors, technological factors, community and environments factors for organizations that are each necessary for understanding the causes of knowledge contributions and collaboration.
Therefore, this research is intended to analyze enterprise social network concepts and characteristics with knowledge sharing requirements and factors that affect it. The research answers the following question: “How Enterprise Social Networks help users’ collaboration to enhance knowledge sharing?” In order to answer the research question, there is a need to answer the following sub-research question: “What are the factors that influence users to share knowledge in organizations using enterprise social network?”

The structure of this paper is as follows: First, there is a complete review of the literature, which includes a detailed look at knowledge sharing, knowledge collaboration, the enterprise social networks, collaboration that happens within the ESN, and knowledge sharing and the and how it’s affected. Second, the conceptual framework is introduced to review the theories that come from the literature. This is followed by explaining the methodology of the research. Finally, the results and discussion of the case studies are presented in sections four and five.

2. Literature Review
2.1 Knowledge Management Value Chain

Knowledge Sharing is an activity through which knowledge like information, skills, or expertise is exchanged among people, friends, families, digital communities, or organizations. (Bukowitz et al., 1999; Chin, et al., 2015a). Technology is not the only factor that affects the sharing of knowledge in organizations; others include organizational culture, trust, and incentives (Argote & Ingram, 2000; Frost, 2014; Miller & Shamsie, 1996).

Organizations have recognized that knowledge constitutes a valuable asset for creating and sustaining competitive advantages. Knowledge sharing is generally supported by knowledge management systems (Aliakbar et al., 2012; Amayha, & Nelson, 2010; Kee-Young & Do-Hyung, 2016). However, technology constitutes only one of the many factors that affect the sharing of knowledge in organizations, such as organizational culture, trust, and incentives. The sharing of knowledge constitutes a major challenge in the field of knowledge management because some employees tend to resist sharing their knowledge with the rest of the organization (Alavi & Leidner, 1999; Frost, 2014).

A knowledge value chain is “a sequence of intellectual tasks by which knowledge workers build their employer’s unique competitive advantage and/or social and environmental benefit. As an example, the components of a research and development project form a knowledge value chain” (Cabrera et al., 2006). Also pointed out the possibility of applying a model of knowledge value chain on knowledge organizations, which refers to the impact of this model in several areas of the organizations (Almarabeh et al., 2009; Bock et al., 2005).

Factors Affect Sharing Knowledge

Since, this research provides a synthesis of technology acceptance theory and socio-psychological theories to develop an overarching framework for knowledge sharing when using enterprise social network in the enterprise. The characterized technology factors in this research lies in the integration, transformation and confidentiality of the knowledge being shared in the platform. It is thought that allowing user-generated content on the social intranet is one method of gaining a significant buy-in from employees and therefore motivates them to use the enterprise social network tools for sharing their knowledge (Dennis et al., 2008; Kee-Young & Do-Hyung, 2016; Venkatesh et al., 2003; Stewart et al., 2013).

As noted above, behavioral theories have been used to investigate knowledge sharing intentions in the literature using social capital theory, social cognitive theory, social exchange theory, and social role theory (Bock et al., 2005; Chai et al., 2011; Chiu et al., 2006; Hsu & Lin, 2008; Huysman & Wulf, 2006; Robert et al., 2008; Staples & Webster, 2008; Teh & Yong, 2011; Teh & Sun, 2012). It is therefore apparent that in the context of social interactions, environmental factors will play a role in the intentions to share knowledge when using enterprise social network tools in the
enterprise. Many different environmental factors have been investigated in past knowledge sharing research, but the purpose of the current research is to present those factors thought to have the most significant effect of knowledge sharing intention.

Those factors are social influence and community identification. Therefore the greater the extent to which community cohesiveness is perceived to be characterized by community identification, and social influence, the greater the intent to share knowledge. Researchers studying interactive technologies such as wikis and blogs have identified the community itself as an important factor to examine when evaluating a user’s intention to engage in those types of activities (Hsu & Lin, 2008; Wang et al. 2013). Wang et al. (2013) identify a virtual knowledge community as being one in which members share knowledge through electronic forms or the use of ICT (Koo et. al., 2011).

2.2 Knowledge Collaboration

Karienzig (2002) was the first to propose the concept of Knowledge Collaboration (KC). He considered it as a strategic organizational approach that dynamically builds upon internal and external systems, business processes, technology and relationships communities, customers, partners and suppliers, to maximize business performance. KC demonstrates the extent to which a corporation has institutionalized processes for knowledge creation, capture, sharing and reuse as a fundamental means of creating value. These capabilities produce the greatest value when they are embedded in the organization's culture, values, processes and reward systems. Corporations that want to succeed in the networked economy need to master knowledge collaboration (Fulk et. al., 2013; Ellison & Boyd, 2013). Fulk (2013) defined KC as a multidimensional dynamic process, in which all these factors, involves subject, object, environment of KM, interact to a highly synergy situation, so that the right knowledge or information can be transferred to right object just in time. So it is a highly development phase of KM to integrate knowledge resources and flows.

By integrating social network tools with their existing systems, enterprises were able to meet their goal of improving knowledge management and collaboration. A major reason for why enterprise social networks succeed stems from its software interface that replicates social networks that are used by the employees (Amayha & Nelson, 2010; Kankanhalli et. al., 2005; Leonardi et. al., 2013).

Gartner (2012) recently reported the details of how "80 percent of social business efforts will not achieve the intended benefits due to inadequate leadership and an overemphasis on technology." Carol Rozwell, vice president and distinguished analyst at Gartner, stated that "There is too much focus on content and technology, and not enough focus on leadership and relationships." Like any corporate initiative, progressing toward a social business requires significant strategic thinking (Amayha & Nelson, 2010; Leonardi et. al., 2013).

2.3 Enterprise Social Network

An Enterprise Social Network is an internal workplace that allows communication among co-workers to become simpler. It gives employees a sense of online community and help forge connections between departments, especially within larger corporations (Stackpole, 2012; Pelz-Sharpe &Mullen, 2014; Li, 2012). It could be regarded as an accumulation on the idea of the intranet, which was used at first as a channel to distribute data among the corporations but now as users there is much more to gain from it.

Internally, social tools can help employees to access the knowledge and resources they need to work together effectively and solve business problems. Enterprise social networking includes the use of in-house intranet. Software as well as third-party social network platforms like Yammer and Socialcast to improve communication and collaboration between employees (Li, 2012; Lang & Li, 2014; Liu et.al, 2014). Externally, public social network platforms like Facebook, Twitter and Google+ can help an organization stay close to their customers and conduct research to improve business processes and operations.
A new way of thinking about information retrieval, communication and collaboration is essential to public and private organizations. Growth, productivity and innovation are the three main traits for any organization that require ongoing engagement, communication and collaboration among the organization, between employees and their customers. It is also important that any environment has the right infrastructure to promote interaction across different regions and time zones (Abidi et. al., 2009; Liu et. al, 2014).

Enterprise social network is a new business model that arises from modern business and government organizations that needs to equip their employees with the know-how of how to search, find and combine information in order to connect and create conversations across all business lines and have these collaborative communication capabilities in one central, secure location (All et. al., 2014; Chin, et. al., 2015b).

Social Network Theory

The social structure of a social network is made up of a set of social actors for example individuals or organizations and a set of communication ties between these actors. These social networks provides a variety of theories explaining the patterns observed in these structures as well as a set of methods for analyzing the structure of social entities as a whole (Kadushin, 2004; Scott & Davis, 2003). The study of these structures uses social network analysis to identify local and global communication patterns, locate influential entities within, and examine network dynamics. Social networks and the analysis of them is an inherently interdisciplinary academic field which emerged from social psychology, sociology, statistics, and graph theory. Social network analysis is now one of the major models in contemporary sociology, and is also employed in a number of other social and formal sciences with other complex net. Works, it forms part of the nascent field of network (Freeman, 2004; Kadushin, 2004; Scott & Davis, 2003). Georg Simmel authored early structural theories in sociology emphasizing the dynamics of triads and “web of group affiliations.” (Scott & Davis, 2003). In Kuo & Lee., 2011 Jacob Moreno is credited with developing the first sociograms in the 1930s to study interpersonal relationships. These approaches were mathematically formalized in the 1950s and theories and methods of social networks became pervasive in the social and behavioral sciences by the 1980s (Freeman, 2004; Kadushin, 2004; Kuo & Lee, 2011; Scott & Davis, 2003).

How companies interact with each other, distinguishing the many informal connections that link managing together, as well as associations and connections between individual employees at different companies are used to be examined by social enterprise networks. These social networks provide ways for companies to gather information, determine competition, and even collude in setting prices or policies (Hilman, 2007; Kadushin, 2004; Scott & Davis, 2003).

2.4 Knowledge Sharing Factors in ESN

Not only are issues related to the technology itself or the environment and social context of knowledge sharing relevant, but so too are individual differences. With are view of the technological and sociological factors believed to influence knowledge sharing when using enterprise social network complete, the next step is to assess the relevant behavioral factors. While there are relatively few studies in the IS literature using the theoretical lens of behavioral theories, their use in examining knowledge sharing is increasing (Cho et. al., 2007; Karkoulian & Osman, 2009; Kuo & Lee., 2011; Matzler et. al., 2008; Matzler & Mueller, 2011). With individuals being a critical element of knowledge sharing, research on complex socio-psychological issues that affect interpersonal interactions with coworkers is necessary. Because of the changing patterns of communication as a result of technology, globalization, and increased competition, social computing environments are increasingly encroaching on the enterprise. As employees are either required to or simply desire to use enterprise social network tools to collaborate and share knowledge in the workplace, it is important to understand the individual differences that affect knowledge sharing intention and
behavior. These behavioral factors include disposition to trust, openness to experience, and conscientiousness.

Enterprise social networking on the other hand are aimed at connecting employees and emulate much of the functionality of online social networking sites. Social networking sites have three core properties (Bock et al., 2005): Profiles, which can be seen as a ‘digital body’ where people write about themselves; Friends, who comprise an imagined audience and a self-defined social group; Comment structures that allow public interactions, and where relationships with others are displayed.

In summary enterprise social networks can be a big lever in improving employee engagement, internal communication, learning, productivity, sales effectiveness etc. Employees will come to the enterprise social network for meaningful conversations. They will also come for meaningful people. While mobility is becoming an important capability for many enterprise applications, enabling users to move from simply sharing and discussing information to acting on it by providing features such as task management, templates and rudimentary workflow (Abdul Razak et al., 2014; Shuey, March, 2014; Evangelista et al., 2010; Ulmer & Pallud, 2014; Wietske et al., 2015).

ESN provide affordances that aid in the distribution of information and the sharing of knowledge at the individual and organizational level. Importantly, ESN support the socialization and interpersonal interaction that provides a foundation for many knowledge sharing processes. While much of the literature on knowledge sharing has emphasized the task related dimensions, we hope our discussion here has highlighted the value of an integrated approach to knowledge sharing in modern organizations that considers both social and task dimensions, especially in relation to the roles played by social capital dynamics, identity information, context collapse, and networked organizational structures in constraining, enabling, and reshaping knowledge sharing within the organization (Denyer et al., 2011; Dingel & Spiekermann, 2013; Ellison et al., 2014; Wietske et al., 2015).

2.5 Conceptual Framework

The proposed framework, shown in the figure above, highlights the major influences that affect knowledge sharing collaboration levels in an enterprise social network used in an
organizational setting. Social network theory also had a base in building the framework above as the actors from the theory were used in clarifying the factors that could affect the knowledge sharing.

First, the factors are categorized into three groups, technological, behavioral, and environmental factors. The literature analysis in this research showed that there are five major requirements need to be present in an environment that involves knowledge sharing: social interaction, experience sharing, observation, informal relationship/networking, and mutual trust. These requirements were analyzed against social network process and characteristics of value chain management to see how they map together.

3. Methodology

This research will follow multiple case study methodology, in order to generalize the findings over a range of industries. Also this strategy gives an in-depth and precise approach that starts with a discussion of the existing literature in order to find a solution. The three companies this research is conducted on are all multinationals; the first company is one of the largest ERP vendors worldwide. The second company is a global leader in data warehousing and the third company is an international consumer product brand. The phases of this methodology are defining the research question, determining the data collection tool and the analysis technique, data collection, data analysis and data interpretation and reporting (Yin. 1994). The phases will be briefly summarized in the below section.

First phase was defining the research question after reviewing the literature, the second stage, determining the data collection tool and analysis technique, the tool is a set of interview questions related to the position held by the user for example a manager or a junior position. The analysis was done on each company on its own. The data collection phase was mainly collecting the answers of the users and documenting all the details dependent on the position and the company related to the user. Also observations of the users were documented. The data analysis phase was comparing the data collected against the framework developed, and the literature review. The last stage data interpretation and reporting, the interpretation of the data is discussed individually as a company and against the other companies in order to try to make the findings valid and sound for developing a better practice. Moreover, it showed that the behavioral and environmental factors had an effect on the knowledge sharing.

Case study selection

The selection criteria are stakeholders who will be interviewed and observed are analysts, developers, and end-users involved in the enterprise social network. The interviews focus on the results of applying integration of enterprise social network with the value knowledge sharing on employee performance, its benefits, requirements, challenges, and risks. All of this is tested through the accumulated constructs collected from the literature above. The companies involved in this research were referred to them as, company A, company B, and company C.

Company A original idea was to provide an interactive ability with a common corporate database to customers for a comprehensive range of applications. The applications have proven their worth in the corporate field as many corporations are using its products to run their own businesses. The platform used combines elements of prior social collaboration platform a collaboration platform that it acquired when it purchased already existing software for ESN and they combined it together to produce the new ESN tool, the tool is integrated with ERP modules produced by company A to bring social collaboration to individual departments, such as human capital management (HCM), customer relationship management (CRM), and sales. ESN of company A is the main product now that they are promoting for all the companies that require such a solution.
On the other hand, company B is an international computer company that is publicly held. Where the main products it provides are analytic data platforms, marketing applications and related services. Data consolidation from multiple different sources and having the data ready and accessible for analysis are what the analytics products are meant to do. Company B has marketing applications that aid marketing teams in their usage of data analytics tools to develop and retrieve programs, for data modeling and decision support systems. Therefore, it uses external systems to aid the employees to share knowledge and collaborate on it to reach a decision.

Company C is the leading international consumer company, with six of the world’s top 15 international brands. Its goals are to provide high quality and innovative products to adults, generate superior returns for shareholders, and reduce the harm caused by smoking while operating the business sustainably and with integrity. With this new perspective, the company really felt that it is behind many companies in the technological

Data Collection

In this case study, data collection was held through observations of the users’ usage of such platforms and interviews were conducted with all the stakeholders involved; each meeting was held separately from the original sample (i.e., the three companies selected). The following are the main points found in the structure that was viewed more closely: 1) work environment and 2) knowledge database.

Research design included the development of interviews which was administered to employees using enterprise social network tools in their organization to evaluate their knowledge sharing intention and behavior. Field examinations offer many advantages to the researcher including the following: 1) the strength of better external validity as the data are collected in real social settings and thus provide better generalizability. As this research provides a synthesis of multiple perspectives from multiple theories, an interview is the appropriate choice for data collection.

The second stage in the data collection included the observing of employees using enterprise social network tools in their organization to evaluate their knowledge sharing intention and behavior. An observation is the appropriate choice for data collection. The observations were carried out by spending a period of time observing the employees and their interaction with the ESN. Third source of data was documentations. Documentation is one of the important stages as well as deliverable in any case study. The documentations were in the form of detailed description of the observations of the employees using such platforms. This in addition to the documents which provides more details about the platform and the company.

4. Results
Case #1-- Company A

From company A IT manager’s perspective, the proposed framework in the study is the base of any ESN business model they may provide for themselves or other enterprises. In their opinion all of the ESN process steps are important, whether it’s having the right people working on a project or capturing the intelligence in reaching a solution or fostering the collaboration.

The factors that may affect such projects are many, as per the literature they are categorized into three groups: environmental, behavioral and technological. In regards to the technological factors, from Company A employees’ opinion the main factors that would affect the performance are the integration of the knowledge and transformation (75% of the people interviewed agreed with this statement) as they effect the response back time. The ease of use is a factor that all, 100%, of the participants agreed upon because if the solution created did not make the sharing of knowledge easy, it lost the collaboration edge. “The user friendliness of such tools makes it easier for us as users more willing to use and share our knowledge” said a junior technical executive. The behavioral factors were sharing intention, sharing behavior, individual willingness and trust; their ranking was
20%, 40%, 10% and 30%, respectively. Also it was argued that intention and willingness could be viewed the same but having intention of doing an action is far more effective than willing to do an action by force.

Support from the top management to adopt ESN is essential in order to get the employees invested in using such tools. The environmental factors of community identification and social influences are agreed upon as the pivotal factors but the social influences weight more than identification by 60% because if the team as a whole is willing to add their knowledge to the system then any skeptical user will be influenced to do the same as the benefits of using such tool.

From observing the work environment and the system functionality in the researched companies, it became clear that having such a tool at the employees’ disposal, can be very useful or inefficient; this depends on the direction of the decision makers.

Case #2—Company B

Company B can be of more use to those companies as it utilizes all of its assets through knowing the talent and collaborators within the company. The technical manager said “Having a powerful ESN and knowing how to extract the employees who are active on such tools will make it easier for us to promote and build insights on how to move further in the business.” In regards to the technological factors, the main factors that would affect the performance are the integration of the knowledge (45%), richness of the knowledge (10%) and transformation (45%), as they effect the response back time. The ease of use is an important factor because if it is not simple to share and reach out to others then what is the use of having such tool in place. Environmental factors on the other hand from the previous literature are indeed the most important ones and as per the technical manager admission “If we didn’t taking care of the environment around us, this could undo all the efforts put in building such projects.” The social influence of fellow coworkers can be very powerful and also identification with the community a person is in; that is why the weight given to each is 50%. The way the company could persuade the users to use such environment is through imposing policy, information retrieval of the network and documentation for future reference. The behavioral factors were sharing intention, sharing behavior, individual willingness and trust; their rankings were 30%, 30%, 10% and 30%, respectively.

Case #3—Company C

Other than an increasing demand for corporate transparency is an increase in the amount of information generated and stored by employees as one of the factors related to the behavioral factors. The behavioral factors included sharing intention, sharing behavior, individual willingness and trust; their rankings were 35%, 40%, 10% and 15%, respectively. “Sharing behavior and intention are the most important factors for behavior as the other two feels like an extension to them in my opinion as this affects the capture collective intelligence stage from the framework.” said the business solution supervisor. Organizations must also deal with an increased adoption rate of technology and connectivity standards to keep with the competitive market. Finding the right information on time is becoming more difficult and costly as the response time is decreasing with every technological advancement which leads to the technological factors which are the integration of the knowledge (45%), richness of the knowledge (10%) and transformation (45%). The environmental factors of community identification and social influences weight 60% and 40%, respectively, because if the team as a whole is willing to add their knowledge to the system.

They also mainly concentrated on the second step of the ESN process in the proposed framework and they are working on exactly achieving the steps mentioned in it and they believe it is the most important step because if this step is done correctly, then the other stages of the process can be obtained easily. The business solution supervisor mentioned “We are really concentration on the capturing of the intelligence and foster intelligence stages from the framework as we closely monitor the factors the effect the knowledge flow and the top management are backing us up to come up
with solutions.” With the ESN tool produced by company A, company C had succeeded in eliminating the boundaries, time, geographies and departments communication gaps and limits. That is why, they agree with all the factors presented in the framework that they are needed to be taken care of so they can keep their employees engaged and stop the resistance from the older or traditional users and collaborators.

**Case Study Triangulation**

Then a comparison of each company to the other took place and it showed that even if the companies come from different industries their concerns regarding knowledge sharing and collaboration are the same and they seek to gather value from the information they have within the company. Afterwards a case study triangulation was done on all the three companies in order to verify the factors affecting the knowledge sharing and observing the different percentage between each company in this research. Moreover the concepts that were drawn from the research helped in defining some bottlenecks that the companies should monitor when using enterprise social networks in order to yield the benefits it can provide.

**5. Discussion**

This research proposed a framework for assessing knowledge sharing intention and knowledge sharing behavior among employees using ESN tools. This research studied the effects of technological advantage, community cohesiveness, and individual willingness on the knowledge sharing intention and knowledge sharing behavior of employees using social software tools in their organization. The study found that technological advantage had no significant effect on the intention to share knowledge, but did have a significant positive effect on actual knowledge sharing. Additionally, the study found that environmental factors comprising community cohesiveness and behavioral factors comprising individual willingness each had a significant positive effect on both the intention and the actual behavior of knowledge sharing. The study extends existing literature on the use of ESN tools and provides guidelines for organizations implementing social technologies as a way to foster knowledge sharing among employees.

**ESN & Knowledge Sharing Collaboration**

This research was to propose and empirically test a framework for assessing knowledge sharing intention and knowledge sharing behavior among employees using ESN tools. This research studied the effects of technological advantage, community cohesiveness, and individual willingness on the knowledge sharing intention and knowledge sharing behavior of employees using enterprise social network tools in their organization. The study found that technological advantage had no significant effect on the intention to share knowledge, but did have a significant positive effect on actual knowledge sharing. Additionally, the study found that environmental factors comprising community cohesiveness and behavioral factors comprising individual willingness each had a significant positive effect on both the intention and the actual behavior of knowledge sharing. The study extends existing literature on the use of ESN tools and provides guidelines for organizations implementing social technologies as a way to foster knowledge sharing among employees.

With the aim of moving towards a collaborative working environment based on social media, we have gained the expertise of delivering on an enterprise scale. This experience is also backed by global presence, giving the ability to design, deliver and deploy in parallel across multiple locations, worldwide, saving time whilst preserving the quality and integrity of the product.

Working with collaboration tools, makes you think of the different collaborative network arrangements and collaboration roles. Through the study it was evident the importance of having a clear roadmap that will move you towards a fully enabled collaborative environment at a pace that suits the needs and expectations of your business.
The organization should employ a community manager skillful in human behavior such as resolving conflicts that arise in the online community, relationship building, and also communicating organizational information. A productive social environment must be fostered by striking a balance between organizational goals and individual user goals, monitored for appropriateness, and participation encouraged as a way to develop and strengthen relationships among coworkers. One way to do this is to recognize those employees who exhibit individual willingness and recruit them as early adopters who will then encourage other employees to use the ESN tools.

Organizations are different and have unique cultures that are based on their unique core values and goals. In helping organizations evolve into social enterprises, any organization approach is to establish goals and objectives, define a governance model and adoption processes, and creates strategies to manage organizational change to create a cultural transformation, while staying aligned with the core goals of an organization.

Through the implementation of enterprise social networking, organizations become more collaborative and many are finding it difficult to get past simply providing employees another social platform experience. The aim of these new ESN tools is to enable business users to work and explore the collective intelligence of an enterprise to get work done in new, easier and faster ways, which can lead to greater efficiency and better business results from decision support to advancement in their fields (Beck et. al., 2014; Wagner, et. al., 2014; Kee-Young & Do-Hyung, 2016).

On the contrary, large and small businesses that have carefully planned, deployed and managed enterprise social networks reported that their workforces and partners have become more collaborative and have developed into a more cohesive business teams. This provides guidelines to enterprise social network and collaboration management provides supporting evidence for that argument in the form of case studies about successful social network and enterprise collaboration implementations. It also includes expert tips on planning and managing such initiatives, instructive videos about the benefits organizations can gain from their enterprise social networks, and articles about the latest trends in social network and collaboration for the enterprise. It should be especially informative for those IT and content management professionals who are interested about how best to introduce enterprise social networking to their companies. It also provides practical information on how organizations can develop a strong business case for investing in enterprise social networking technologies and set up a program and manage the deployment process (Beck et. al., 2014; Wagner et. al., 2014).

Enterprise Social Networks, similar to all IT tools, main purpose is to enable companies to achieve their goals and advance. Taking into consideration before implementing an Enterprise Social Network to share and distribute knowledge, companies need to reconsider their Knowledge Management strategy and set it or adjust it to fit their visions on which this tool will be based. As well as it’s not smart and it should be state of the art solution to add value to such collaboration (Beck, et. al., 2014; Kee-Young & Do-Hyung, 2016).

**Successful Collaboration in ESN**

Through various indicators successful collaboration can be defined. The interviewees’ perception of a project team can be one indication of having a successful collaboration. Nonetheless, external indicators may also be a factor of successful collaboration, for example project and product success. These indicators can be either subjective or objective. Subjective evidence may include statements made by interviewees about their perception of product success, while objective evidence presents evidence in the form of sales, growth, and industry recognition associated with the product. While objective evidence should not be biased, one has to acknowledge that some indicators may have been manipulated prior to presentation by the company (e.g. sales figures). The perception of interviewees with regard to product success and personal satisfaction, representing successful collaboration, is presented below. These statements were analyzed and associated with product
success and personal satisfaction based on the definitions provided above (Berger et.al, 2014a; Berger et.al, 2014b).

This research contributes theoretically by proposing a conceptual framework that help to understand of how enterprise social networks could help users’ collaboration to enhance knowledge sharing. The proposed framework filled the gap of the literature by considering different elements of technology acceptance, knowledge value chain, environmental, and behavioral theories. Moreover, the research helped to identify at which stages certain factors can be the main influencers in the knowledge sharing for end users in organizations. Moreover, the research contributes to the industry by providing a better understanding of the best practices for organizations to consider when they introduce enterprise social networks to enhance collaborations between employees to share knowledge.

6. Conclusion, Limitations & Future Research

By conducting an efficient literature review, three major factor groups were found and that required attention in an environment that involves knowledge sharing. These factor groups are behavioral factors, environmental factors and technological factors. These factors have been analyzed against social network concepts and characteristics to see how they fit together. The results showed that social network have abilities to comply some of the main requirements of knowledge sharing.

The conceptual framework clarified the roles and the actions that needed to be taking in order to adopt such technology. Also that by having such technology the user can get really distracted by the environment around. If the company didn't keep promoting and giving instructions on how to use such technology as ESN to share their knowledge. As one of hinders faced by the companies studied was at the beginning when the ESN was newly introduced in the company. It had a high participation rate but as time went by the participation rate declined. This is where the company needs to create the environment and the behavior to share the knowledge by providing the users with the benefits they will gain by using such platform and also creating a unity experience between the employees in the same company. In order to be able to capture the collective intelligence and the correct dissemination of the knowledge is required in the fostering collaboration phase of the ESN process. Furthermore putting the information required to do a certain project on the ESN aided in creating the environment of using the ESN platform moreover created the habit of using such tool which in turn helping the behavior of sharing the results accumulated from a project with the team members. This will help in the last stage of the ESN process as what each and every company is after which is the increase of productivity and streamlining the communications with all the employees in a project with the decision makers.

ESN is a tool that is built to make its users collaborate with each other but collaboration for the sake of collaboration won’t benefit the company or its employees. ESN enhances the collaboration when the factors such as the environment, technology and behavior are addressed and taken in consideration such as the intention to share the knowledge and seek knowledge on the other side to finish a project or just to create new ties with other employees so when a new project arise you can seek their help in achieving this target if they could be of use. The concept of using such tool proved success in many areas as it creates a reservoir for knowledge for anyone to retrieve to be able to finish their project or even take some lessons learned in a similar project that has been conducted previously to avoid when doing their project. All this is important as it aid in the decision making process.

Research Limitations

The limitations included a small sample size that was drawn only from the Egyptian culture and the diversity of companies. Therefore, the results are not generalizable to other cultures.
Further Research

The research proposes that future studies should conduct a survey across the IS industry where there is causal relationships between these three main concepts and focuses on controlling the effects of age, job classification, and job tenure variables on knowledge sharing behavior.

References


