

# GOVERNANCE OF AN ENTERPRISE SOCIAL INTRANET IMPLEMENTATION: THE STATKRAFT CASE

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## Abstract

*Recent studies demonstrate that the implementation of enterprise social systems (ESSs) will transfer organizations into new paradigm of social business which results in enormous economic returns and competitive advantage. Social business creates a completely new way of working and organizing characterised by social collaboration, intrinsic knowledge sharing, voluntarily mass participation, just name a few. Thus, implementation of ESSs should tackle the uniqueness of the new way of working and organizing. However, there is a shortage of knowledge about implementation of these large enterprise systems. The purpose of this paper is to study governance model of ESSs implementation. A case study is conducted to investigate the implementation of the social intranet called the 'Stream' at Statkraft, which is a world-leading energy company in Norway. The governance model of 'Stream' emphasizes the close cooperation and accountability between corporate communication, human resources and IT, which implies paradigm shift in governance of implementing ESSs. Benefits and challenges in the implementation are also identified. Based on the knowledge and insights gained in the study, recommendations are proposed to assist the company in improving governance of ESSs implementation. The study contributes knowledge/know-how on governance of ESSs implementation.*

*Keywords: enterprise social systems, ESSs, social business, implementation, governance, strategy.*

## 1 Introduction

Companies embrace enterprise 2.0 technologies and the underpinning concepts of social collaboration and content creation in the development and implementation of enterprise social systems (hereafter ESSs) (McAfee, 2009). Chui et al. (2012) in their McKinsey report reveal that the use of ESSs will potentially increase the productivity of highly skilled workers by up to 20 to 25 percent. The report also estimates that the annual value from ESSs is worth in excess of \$1 trillion to companies. Companies are in the process of reaping the benefits of ESSs during adoption and implementation (e.g. Culnan et al. 2010; Majchrzak et al., 2009; Gallagher and Ransbotham 2010; Sinclair and Vogus, 2011). ESSs introduce a new business paradigm that requires organizations to transform toward social business, which is a distinguished way of managing and operating business (Hinchcliffe and Kim, 2012; Vatrupu 2013). ESSs bring also new technology affordance for people to collaborate and work on a social and voluntary base, which lead to a completely new way of working and organizing (e.g. Leonardi 2011; Majchrzak et al. 2013). Consequently, organizations face challenges in navigating towards the new business paradigm and in catering the unique new way of working and organizing.

Current research has mainly focused on studying the impacts of social media on organizations, especially with regards to external consumers (Culnan et al. 2010; Mandviwalla and Watson 2014). Investigation of large scale ESSs within an organization and governance of ESSs implementation are rarely explored. Information systems researchers are called upon to conduct studies to advance our understanding of ESSs and their impact on organizing work, changing organization structures, and ESSs implementation strategy and governance model (Kumar et al., 2014). The goal of this study is to ex-

plore a large ESS implantation in an organization with a focus on the governance model in relation to the implementation. In line with this goal, the research question is formulated: *What characterizes a governance model of ESS and what role does this governance model play in the implementation of ESS within an organizational context?*

In order to answer this question, we adopted a case study approach (Yin, 2014) to investigate the implementation of the social intranet called the Stream at Statkraft, which is a world-leading energy company in Norway. The Stream was implemented at Statkraft in November 2013. Interviews were carried out to collect research data in spring 2014. The 21 respondents included 16 top and senior managers and three young users from Statkraft, plus two managers from the vendor KnowIT. Thematic analysis (Braun & Clarke, 2006 & 2013) was performed to interpret the data. The governance model of the Stream implementation is illustrated based on Statkraft's practice. The Stream has generated satisfactory benefits to the company, including economic returns, competence sharing, collaboration, network creation, efficient daily work, and improved business understanding. Meanwhile, the challenges were identified in the implementation: conservative top management, lack of mass participation, incompatible organizational culture, and inadequate content and information management. Recommendations are proposed to assist the company to improve the governance of implementation in order to sustain the benefits and address the challenges. The study contributes knowledge/know-how on governance of ESSs implementation.

In the next section, we present our theoretical understanding of ESSs, social business, governance and implementation of ESSs. We then delineate the research method, case description and the analysis. The paper concludes by assessing findings, and discussing implications and limitations.

## 2 Theoretical Background

Organizational use of technology is moving towards Enterprise social systems (ESSs), which as discussed by Kumar et al. (2014), are referred to as Enterprise 2.0, Web 2.0, enterprise social software, and enterprise social media systems. ESSs, therefore, is the common terminology that we can use to highlight the fact that companies are in the process of utilizing Enterprise 2.0 technologies with the purpose of building a social organization and garnering unique capabilities in competition (e.g. McAfee, 2009). McAfee (2009) clarifies the following: enterprise 2.0 is social software which enables people to communicate, connect or collaborate through computer-mediated communication and to build up online communities; enterprise 2.0 is a digital platform in which contributions and interactions are visible to everyone and remain until the user deletes them; enterprise 2.0 allows new patterns and structures inherent in people's interactions to become evident over time; and enterprise 2.0 is freeform which is characterised by optional use, non-predefined workflows, informal structures and unstructured data. These new features of enterprise 2.0 are deemed to yield benefits to companies, such as group editing, authoring, broadcast searches, network formation and maintenance, collective intelligence and self-organization (McAfee, 2009). Chui et al. (2012) further predict that by deploying these ESSs, companies will obtain enormous economic returns and significant increases in productivity. The increasing adoption and utilization of ESSs in organizations has resulted in a new type of business paradigm that is termed 'social business' (Hinchcliffe and Kim, 2012; Vatrappu 2013).

The social business focus is introducing a new paradigm for organizations to navigate. Hinchcliffe and Kim (2012) claim that 'social business is a highly effective and more potent new way of working' (p.215). They propose the following ten tenets for understanding what social business actually is: (1) anyone can participate; (2) creates shared values by default; (3) while participation is self-organizing, the focus is on business outcomes; (4) enlist a large enough community to derive the desired result; (5) engage the right community for the business purpose; (6) participation can take any direction—be prepared for it and take advantage of it; (7) eliminate all potential barriers to participation—ease of use is essential; (8) listen to and engage continuously with all relevant social business conversations; (9) the tone and language of social business are most effective when they are casual and human; and (10) the most effective social business activities are deeply integrated into the flow of work. The authors con-

clude that the use of these tenets is making its way profoundly into transforming how business operate and achieve results. This is virtually affect governance of ESSs implementation.

Organizations must consider how to navigate this new paradigm when implementing and governing ESSs. Implementation of ESSs should tackle the uniqueness of the new working and organizing in order to achieve economic returns and competitive advantage. An efficient governance of implementation is vital for a successful implementation. Weill and Ross (2004) assert the importance of governance for obtaining higher performance of information technology (IT) in companies. IT governance is defined as "the organizational capacity exercised by the board, executive management and IT management to control the formulation and implementation of IT strategy and in this way ensure the fusion of business and IT" (Van Grembergen 2007, p.1). However, governance of implementation in case of ESSs is rarely studied in literature. Current research has focused on governance of implementing social media, especially strategies with regards to external consumers. Culnan et al. (2010) prescribe three key elements of implementation strategies, namely mindful adoption, community building and absorptive capacity. The authors explain that firstly a company needs to make a 'mindful decision' toward initial adoption. The contextual elements, expected business values and possible risks should be fully assessed before the introduction of social media. Secondly, a company should motivate community building because social media are communication systems. A critical mass of people in the community will increase the possibility of valuable contributions. Finally, a company should possess the absorptive capacity in order to recognize and acquire new knowledge and to be capable of exploiting any knowledge generated by users. Supported by the notion of organization as a capital conversion and creation system, Mandviwalla and Watson (2014) develop four strategy tactics for implementing social media for generating capital: *listening and branding* is aimed at driving human, social and symbolic capital generation; *mining and deciding* promotes data-driven analysis and decision making which produces human and organizational capital; *conversing and sharing* focuses on knowledge retention and diffusion that create human and social capital; and *co-creating and innovating* is to achieve product innovations and new solutions for generating organizational capital. Richter et al. (2013) find two implementation strategy approaches, exploration and promotion, that companies usually adopt when introducing corporate social software. Exploration strategy is defined as 'a continuous investigation of possible use cases for new tools, through a participative approach' (ibid, p.140). This is closely related to building a 'mindful adoption' (Culnan et al. 2012). Promotion strategy is operationalized as 'the intentional business-aligned and skilled use of the new tools focusing on well-defined usage potential' (ibid, p.140). This strategy has clear goals to build 'communities' and to achieve 'capitals' from the implementation of ESSs.

Leadership is a vital component of governance model, and is considered as one of the critical success factors in reaping values and capitals from ESSs and in transforming business into 'social business' (Li, 2010). Deans (2011) presents four leadership/governance models at the C-level for successful social media strategies. Model A is CIO-dominant, which presents the key role the CIO plays in implementing social media, as well as the governance of social media residing in the IT department. Model B is CMO-dominant, which depicts the influential role of the marketing executive (CMO) in leading the social media implementation. In this model, the governance is distributed across the marketing and IT departments. Model C is joint CIO and CMO ownership, which the author believes is a successful model. This model facilitates a strong collaboration between the CIO and CMO and improves business and IT alignments in implementing social media. The CIO and CMO are jointly accountable for the governance. Model D is C-level ownership which, as the author argues, is the 'most radical' and is necessary for the organizational changes to ensure the implementation. This model requires all C-level executives to be responsible for the implementation. Collaboration among the top managers is essential. A strong leadership and involvement from the CEO is a must to transform business. The governance framework is built to facilitate the collaboration among the CIO, CMO, and CEO. The model D implies paradigm shift in governance practice. Deans (2010) further proposes the five leadership dimensions necessary for a company to become a 'social business'. These are: (1) greater information

sharing; (2) a mindset for collaboration; (3) a willingness to relinquish some control; (4) more shared decision making; and (5) personal leadership growth.

In general, the governance models and strategies proposed in literature would guide companies to implement their ESSs to some extent. However, they have a clear focus on social media strategy and how companies can leverage social media for value creation. In addition, the strategy and governance models are formulated to embrace the value with mainly external consumers. This research builds upon existing research (see appendix 1) by studying governance of a large scale ESS implementation within an organizational context with the aim of improving internal organization operation and performance.

### 3 Research Method

We adopt a case research methodology for this study (Walsham, 1995 and Yin, 2014). This method is particularly useful because knowledge of governance of ESSs implementation is not well explored in information systems research. We thus need a deep understanding of the phenomenon which is something a case study can definitely provide. We chose Statkraft for the case study because we have personal contact with the company. Pettigrew (1990) defined it as planned opportunism in conducting field research in companies. We were informed of the development and implementation of the enterprise social intranet called the Stream. This gives us a unique opportunity to explore how Statkraft implements and governs the Stream.

The Stream was launched in November 2013. We began studying it in January 2014. First, we did a desk research of Statkraft in order to get to know the company better. We then reviewed the documents regarding the Stream project, its development, business cases, implementation plan, and governance policy. We interviewed 21 people face-to-face in March 2014 when we visited the company. The respondents included 16 top and senior managers, and three young employees from Statkraft, as well as two managers from the vendor KnowIT. The 16 managers are influential persons and thinkers at Statkraft, who have the power to influence the company's development. The three young users are trainees who are talented and have the potential to take on future important roles in Statkraft. The interviews were conducted in Swedish, Norwegian or English, depending on the language preference of each interviewee. The interview averaged one hour with a semi-structured protocol. The interview protocol was discussed intensively between the team and the contact person at Statkraft. After several iterations, the final protocol (see appendix 2) was compiled and written for guiding the interviews. The interviews were then transcribed and sent back to the interviewees for approval. In June 2014, we presented the preliminary results of the study to Statkraft in a one-day seminar. A memo was compiled to document the feedback and discussions. A follow-up personal communication between the first author and the contact person in Statkraft was done in October 2014. In the data collection process, with a lot of help from the contact person, we were able to communicate with as many managers as possible to ensure authority and reliability of the raw data. These respondents are either involved in the development and assessment of the Stream, or have direct roles in governing the implementation in the Intranet development office (IDO) or sit on the advisory board.

Our data analysis followed a thematic analysis approach (Braun & Clarke, 2006 & 2013), given that it is a widely used qualitative analysis method in social science research, and is also applied in IS research (Sarker et al. 2013). The method contributes significantly to the analysis in supporting us to identify the core themes of governing the implementation of Stream, as well to find out the benefits and challenges in the implementation. The analysis of the results is structured according to the six phases: (1) familiarizing ourselves with data we collected from different resources; (2) generating initial codes by studying data; (3) searching for themes; (4) reviewing themes; (5) defining and naming themes; and (6) producing the paper. The thematic analysis was carried out through triangulation where all the authors were involved. The transcribed interview data, Statkraft documents of the Stream project, as well other supporting corporate documents were carefully studied when generating the initial codes and searching for the themes. We made several iterations in the analysis process to ensure that the data were interpreted in the rigorous manner and the defined themes fully revealed the phe-

nomenon concerned. Due to page limitation, only the final thematic maps are presented in the results. An example of the data analysis is shown in appendix 3.

## 4 Case Description

Statkraft is one of the leading energy providers of renewable energy based on hydropower, wind power,

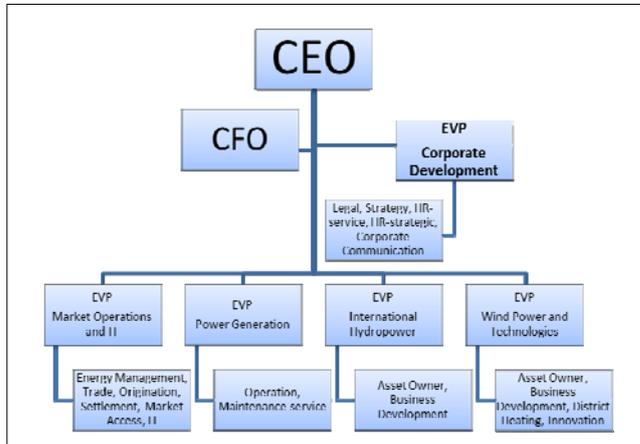


Figure 1 Statkraft Organization Chart

gas-fired power and district heating both in Europe and internationally. The company's headquarter is located in Oslo, Norway and wholly owned by the Norwegian state. As of 2013, Statkraft had more than 3,600 employees across more than 20 countries, and gross sales in excess of NOK 49.6 billion (Euro 5 billion). Statkraft's vision is 'providing pure energy'; its main business values are: (1) Competent: 'Using knowledge and experience to achieve ambitious goals and be recognized as a leading player.'

(2) Responsible: 'Creating value, while showing concern for employees, customers, the environment and society in general.'

(3) Innovative: 'Thinking creatively, identifying opportunities and developing effective solutions.'

(Statkraft: Vision, Value and Strategy). Statkraft is a hierarchy organization (Figure 1). The CEO has the main responsibility for all business areas and departments. The CFO and the EVP (Executive Vice President) of Corporate Development manage the two main functions over the organization. There are four main business areas, each of which has different responsibilities. Both the CMO and CIO work in the business area of Markets Operations and IT. Statkraft's old intranet portal was deployed in 2004. The intranet supported vital daily tasks with the 450 applications and functions connected to it. It was also a source for corporate news and announcements with over 20,000 pages of information and documentation about processes, standards and steering documents. The information varied in quality and relevance and it was hard to find; this resulted in inefficient use, time-consuming processes, a fragmented information landscape, and ultimately unhappy users. In addition, managers had no platforms or tools for communicating within and across business units. The old intranet also lacked the capability to support mobile workforces. In order to tackle the deficiency of the old intranet, to meet Statkraft's new business ambitions and values, and to embrace the new technological advance in Enterprise 2.0 (McAfee, 2009), a new social intranet (the Stream) was initiated in 2012. The name Stream implies not only Statkraft as a huge hydropower

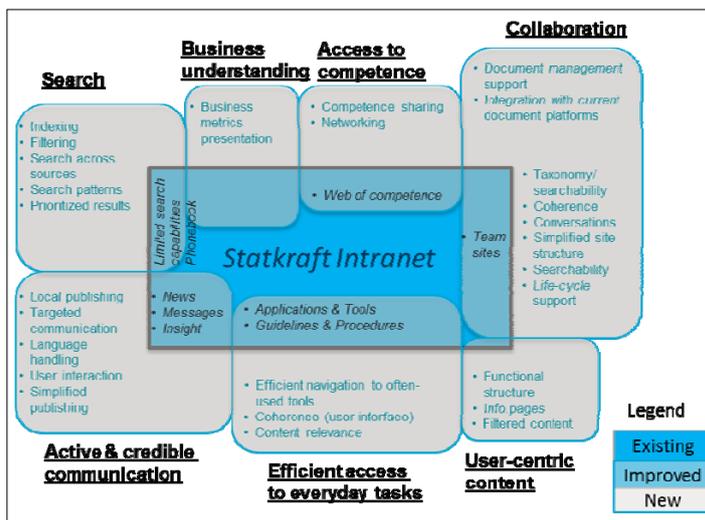


Figure 2 The Stream: features and purposes

generation company leveraging water streams, but also the fundamental information architecture of defining and mining data/information streams. The architecture is based on information capsules (news, articles, messages, tweets, comments, etc.) that are tagged with a time stamp, geogra-

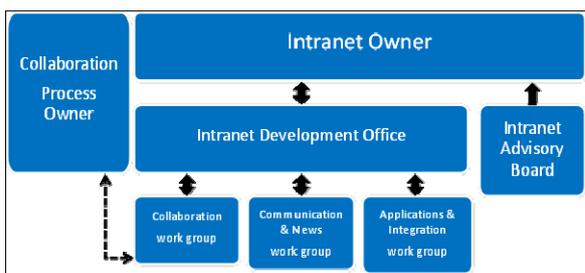
phy/location, business unite, language, key words from a taxonomy defining the whole business. These tags are used to filter and create the content of all pages shown to users in the Stream. Statkraft used 167 stakeholders as advisors in developing the Stream. The company also engaged reference groups, pilot groups and testers from different business areas and departments in order to build the platform that everyone needed. The small group representing corporate communication, human resources (HR) and IT played a leading role in defining the project purposes and goals and in ensuring these fundamentals were used as guidelines throughout the whole project life cycle. The EVP of corporate development commented that ‘we want to build something for the future generation shift in Statkraft’. The strategic goal of developing and implementing the Stream is to improve employees’ productivity and to achieve Statkraft’s business values in the long run (Statkraft documents, 2013). The Stream is an adaptable and transparent platform. This is the integrated digital platform for both work and social related tasks. An overview of the Stream and its features is shown in Figure 2. The color schemes indicate the existing, improved, and the new features of the Stream. Its collaboration function is an enterprise 2.0 technology based on Microsoft SharePoint 2013 and EPiServer, which consists of a variety of features that are both work and social related. Corporate systems tools, including the SAP applications are also integrated in the Stream to improve the daily work of employees. For information security reasons, the SAP applications cannot be accessed through mobile devices. New document management taxonomy and content architecture are used to support enterprise search functions. The Stream aims to improve searches and business understanding across the graphical regions, easier access to competence, promote collaboration and improve the company’s joint problem-solving capabilities. Meanwhile, the Stream should fulfil the purposes of providing active and credible communication, efficient access to everyday tasks, and user-centric content.

Every user at Statkraft can see the start page after logging in to the Stream. On this page, a user has the access all content, features and functions on the Stream. The sections shown on the page include news, ‘my activity stream’, important messages, Insight, local messages, events, and business indicators. A user can visit the collaboration sites where all employees, from any division of Statkraft, can work together to solve problems. Any user can start a collaboration site. On this site, users can discuss project ideas, share documents, lists, tasks, calendars and links, communicate problems and convert solutions, as well other social interactions. Other users can be invited to join the collaboration site or just follow the collaboration activities without becoming a member of the site. The enterprise search engine has greatly improved at the Stream. Instead of navigating through menus, a user can type search terms and the relevant matched results will appear. The search also allows the user to put restrictions, e.g. time constraints, authors or type of content. Tools and toolbar functions give users the permission to select and ‘customize’ those tools which are most relevant for their own work.

## 5 Case Analysis

The Stream has been implemented for one year. The implementation is on the right track guided by the new governance model. Some business benefits and operational goals are obtained in the initial implementation stage, which indicate the effectiveness of the governance model. However, the challenges in implementation are also identified. Recommendations are given to improve governance of the Stream implementation.

### 5.1 The governance model of the Stream implementation



In order to ensure a successful implementation, governance model (Figure 3), and critical success factors for governance (Figure 4) were defined and presented before implementation (Statkraft Project Charter, 2012).

Corporate Development is responsible for the governance of the Stream at the C-level. The team

Figure 3 Governance Model of the Stream

includes the Intranet Owner, the Collaboration Process Owner and two representatives from the Intranet Development Office. **Intranet Owner** is the head of corporate communication. She reports to EVP-corporate development. She is responsible for providing a useful and timely intranet with a clear purpose, vision and strategy that meets current and future business needs. She facilitates and coordinates all activities developing and achieving value-adding usage of the intranet. **Intranet Advisory Board** includes managers from all business areas. They provide advice on how the intranet shall be developed to best meet business requirements and business value. They advise on purpose, strategy, vision, principles and standards, governance and ownership models, and business needs. They also prioritize resources for operations, improvements and changes to the Stream. **Collaboration Process Owner** is the head of strategic human resources (HR) who supports collaboration to discover what is needed from other parts to develop a closer integration to enable collaboration. **Intranet Development Office (IDO)** is the executing governance body requested by the intranet owner and the advisory board, who makes sure that the Stream is developed and implemented in the right direction. That is aligned with Statkraft's goals in relation to the business needs highlighted by the Intranet advisory board. The IDO prepares propositions and business cases for the advisory board. The representatives from IT, HR and Corporation Communication sit in the IDO. **Work groups** –The IDO has three sub-groups of collaboration; communication and news; and applications and integrations. The work groups' members are representatives assigned by the advisory board.

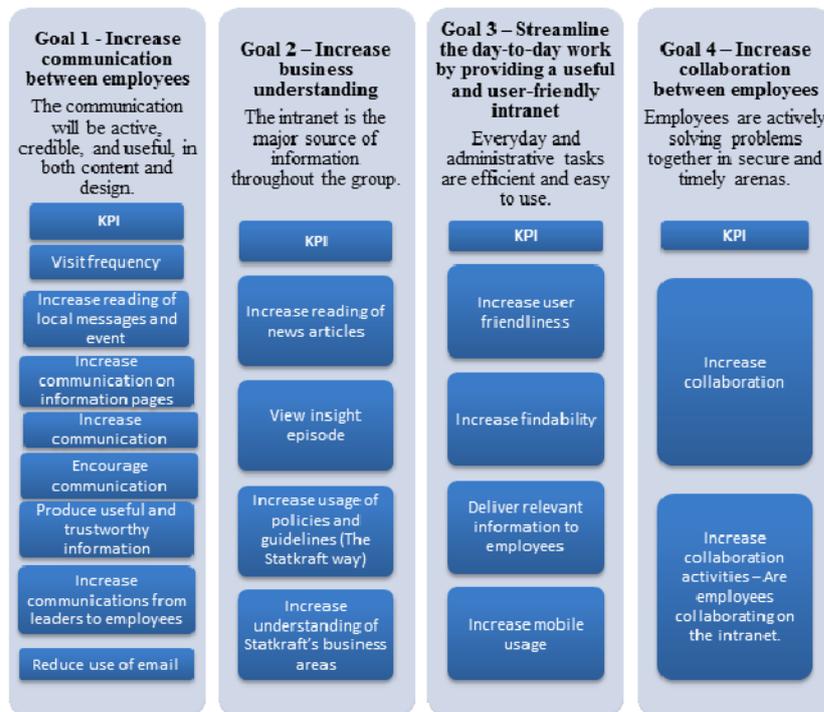


Figure 4 The Stream implementation goals/KPIs

able. The managers' motivation was to increase employees' curiosity in the Stream, thus generating a strong impetus to use the new intranet on a large scale. The IT project manager stated that 'we believe that as users discover the benefits of using the Stream, then there wouldn't be anything stopping them. They will realize that this is the new way we are working and developing'. Another reason was that the managers were afraid that a huge launch would trigger resistance to yet another new IT system. They were confident in the ease of use of the Stream, and users would not need thorough training before the launch. They also planned to publish tips and articles on how to use the new features of the Stream afterwards.

The implementation of Stream is aimed at achieving four operational goals. The key performance indicators (KPIs) are also defined to measure the performance of the Stream implementation (Figure 4). The IT project manager expressed that 'the goals are very clearly defined, and are mapped to functions of the Stream. KPIs are well defined'. After all this managerial and operational preparation regarding governance of implementation, guidelines and KPIs, the Stream was *silently* launched in November 2013. This meant that people were only informed on a certain date that a new Intranet had been deployed and the old one would no longer be accessible.

## 5.2 The initial benefits of implementing the Stream

After several months of using the Stream, the return of investment has been obtained. The business case was clarified by IDO. Almost every employee can save up to 15 minutes per week on conducting everyday tasks and administration (Statkraft document, 2013). The time saved improves the daily operation excellence. Managers are satisfied by the initial economic returns. Figure 5 presents the thematic map of the initial benefits obtained.

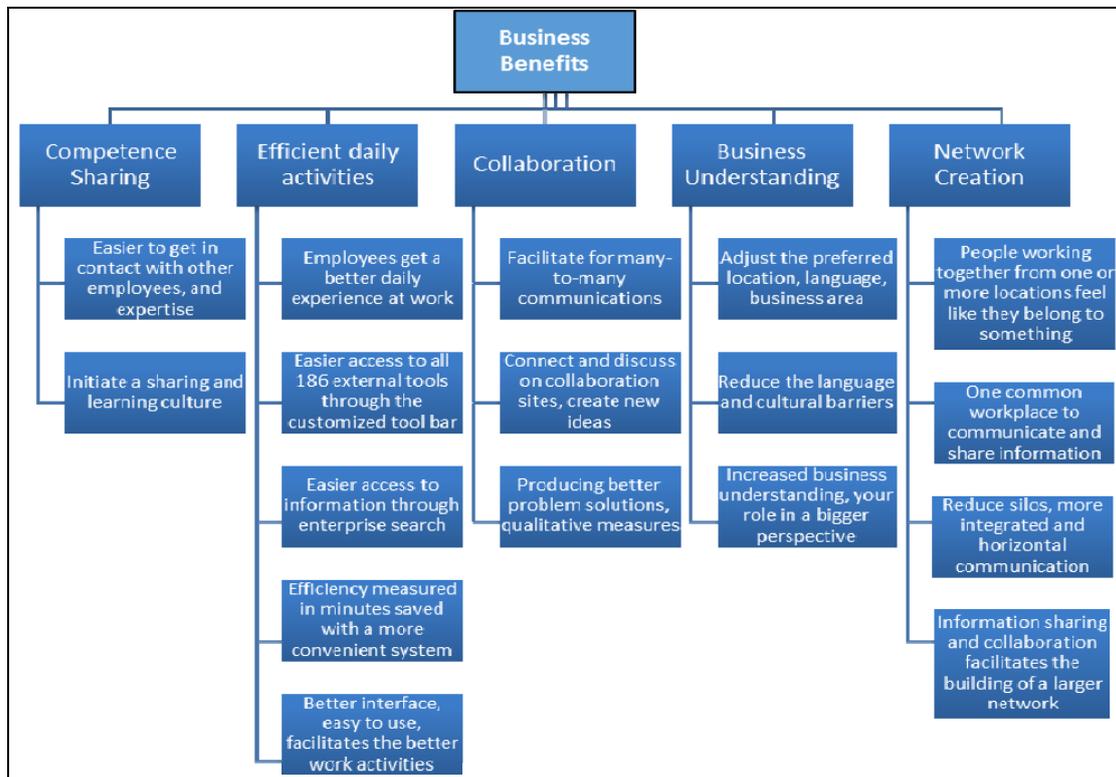


Figure 5 The Benefits of implementing the Stream

### Easier competence sharing

Statkraft is a knowledge-based company. Competence is one of the fundamental business values of Statkraft. The Stream facilitates collaboration, knowledge and information sharing more easily through collaboration sites and more efficient enterprise searches. One of the young employees we interviewed commented ‘I finish a lot of tasks by just seeing the picture of one person and reading the ‘About Me’ section’. Users can thus get in contact with other employees and access their expertise in a more open and direct way. Users can follow a person on the collaboration site and get a notification in ‘mentions’ of the activities happening on the site. The IT project manager expressed that ‘the Intranet is search driven which enables the employees to work faster and competence sharing has improved’. The Head of Global Application Management was more optimistic: ‘It is in the human beings’ nature to collaborate and the value will follow that’.

### Efficient daily activities

The information management of the Stream adapts the approach of open, centralized control, and distributed contribution. ‘It is of great benefit to have control over information, making it searchable, easy to find and reusable, and placing it in the archive’ (Head of Global Application Management). Information is open by default to all users. The young users said that ‘documents are more available and less restricted for searching and accessing’. The information production is decentralized both at the business area level and the individual level. Each business area is responsible for producing and

adding information to the Stream. Each individual can publish information and everyone becomes his or her own editor. The Stream's chief editor further pointed out that 'easier access to information and easier processes to publish and share information reduces the workload'.

The Stream has a better designed interface. The VP Business Development was glad that 'the applications and tools are better organized at the users' disposal. The enterprise search makes it simple and fast to access any information and databases'. In addition, users can personalize their Intranet usage and set up their own dashboard with tools and applications they use every day. The toolbar can be customized for personal requirements. The information and text from the SAP portal are also built into the Stream to avoid multiple steps in accessing tools and data. All these improvements enhance the users' daily experience.

### **Collaboration**

Innovation is the third business value that Statkraft wants to achieve. Collaboration at the Stream is designed for this purpose. The collaboration feature is mainly supported by Microsoft SharePoint and to some extent via the close integration with EPiServer. 'This enables the many-to-many communication and makes social collaboration possible in the daily work', the CIO stated. The Stream chief editor added 'we want people to have conversations where they can comment and contribute'. The collaboration rooms are for business areas, or project areas, or interest groups to share information, documents, and insights. The EVP of corporate development appreciated the collaboration and stated 'the collaboration rooms make communication more effective as the problems are becoming more complex which requires more people to solve them and the response time can be reduced'. The information and activities in collaboration are transparent to all users. Collaboration makes it possible for more people across the company to work together to solve problems. Collaboration also improves knowledge extraction and retention. As the Head of Network Services asserted, 'building a common collaboration site will mean that even if I leave the company, the value will be present in Statkraft instead of hidden in an email or archive where no one will find it'. The business area of wind power and technologies is leading the collaboration activities so far. The team is very active in using the collaboration sites and rooms for exchanging ideas and solving problems. People are watching their activities and are expecting the outcome (Personal communication, October 2014). More employees use 'like' or 'comments' in the Stream (IT Advisor).

### **Business understanding**

Statkraft is present in more than 20 countries worldwide. The Stream is implemented simultaneously across these regions. The Stream presents the same interface, default settings and functionalities to all users. Users can personalize their language preferences, news, daily tools and the location where they work. They can publish and edit their own content/information to a specific group or location; the content is accessible by users from other regions. The role of an individual employee is played in a bigger perspective. The Head of Global Application Management believes that 'the Stream is something that can tie the company together in a common place for communication. It facilitates collaboration within and across country borders'. The CIO added that 'we are diminishing culture barriers, we are integrating the organization and we are sharing information with all'. The EVP of corporate development was also positive and expressed that 'the Stream is used for connecting business areas and creating a greater overall business understanding within the company across geographical regions'.

### **Network Creation**

The social features of the Stream have paved the way for the company to become a "networked" organization. People have the important feeling of belonging. The Head of Network Services explained that 'people working in Narvik feel that they are in the same team as us. They can see what is going on without being here in Oslo'. The Corporate System Manager also shares this view: 'this project includes the entire company instead of most projects which are made for each department and are not very horizontal in the organization. People feel like they are part of the project together for the development of the entire company'. The Stream chief editor argued that 'we want to create a communication channel that goes in both directions, not just from the headquarters and out'. Communication re-

sponsibility is distributed at different organizational levels by using the same platform. The message addressed to a small group of people at a specific region is transparent to other users. The Head of Communication in Markets commented ‘the Stream is an easy platform for exchanging information across different places and time zones’. The social features of the Stream also allow ‘people to communicate many-to-many, comment and like, which enables employees to express themselves outside the established organizational boundary and structure’, the corporate chief architect stated.

### 5.3 The challenges in implementing the Stream

Most of the respondents at Statkraft claimed that the main challenges of the Stream implementation is mass user participation. The fundamental question that requires to be addressed fully is how to make everyone, including top and senior managers, involved and engaged in using the Stream. Figure 6 summarizes the challenges in a thematic map.

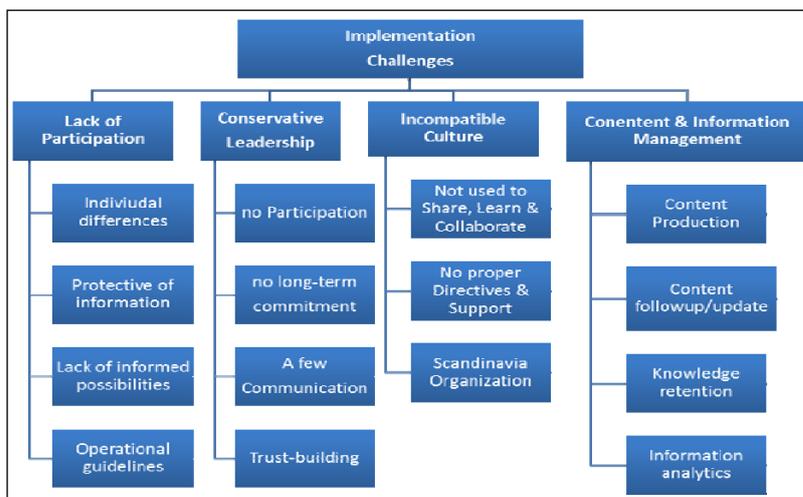


Figure 6 The Stream Implementation challenges

to working like this’. Consequently, ‘the older generation needs not only to receive training in understanding the benefits of social media, but also needs encouragement in using them in order to create comfort and trust towards the Stream’, the corporate system manager commented.

The Stream is built for all 3,600 employees to participate and use it. However, ‘we need to exploit all the available functionalities of the Stream for them and show them where to start’, the VP of business solutions claimed. Due to the silent launch of the Stream, the manager also believed that ‘many users use the Stream in the same way as they used the old one’. Meanwhile, our respondents indicated that most of the users felt protective of their information and resistant to publishing its content. Employees were not sure who sees their information and what the consequences of sharing it may imply. This implies the same finding of “safe enclaves” and “political enclaves” as Hayes and Walsham (2001) conceptualized. For instance, how will the manager view it? Or how to apply an information security policy to avoid risks when posting classified content? The VP of power generation stated that ‘many people don’t use it because they are unsure about the correct way’. Although KPIs are introduced to measure individual participation, communication, content access and the number of collaboration sites, the IT project manager asserted that ‘Statkraft needs the capacity to embrace the results. It will take more time to see whether the processes are improved, and if the Stream increases the profit significantly’.

#### Conservative Top Management

Statkraft is a hierarchical organization. Leaders have a more important role in enforcing change and building a new mind-set. Although both top and senior managers have a positive attitude towards the

#### Lack of mass participation

The average age of the employees at Statkraft is between 45–50 years old, which indicates that most of the users are not familiar with social media technologies. The corporate system manager explained ‘social media is not very common in their private life. Therefore, they need a higher threshold to use it professionally at work’. The Stream chief editor further added: ‘it is a new way of communicating, sharing and collaborating. We have an older average age group who are not used

Stream, and have put a tremendous effort into developing it, they do not use it effectively in the execution of their tasks. They are aware of this problem. The EVP of corporate development pointed out that 'it is a top-down thing; we have to use it at the top. However, the top does not have the culture to work differently'. It takes time to get leaders to use the Stream for communication instead of sending emails. Obviously, engagement and encouragement are needed from the leaders in order to motivate employees and build trust in communities. The leaders have to set the tone and be good examples and then people will follow. The young employees stated that 'if the managers don't start showing their employees how to use collaboration sites there is no incentive for the employee to do it himself'. A manager from the IDO work groups also worries that the leaders pay less attention to the Stream implementation after the successful business case was identified. The leaders prioritize other issues in their agenda. The promotion of using the Stream from the leaders is not promising; the HR group especially was not active in steering the collaboration activities (Personal communication in October 2014).

### **Incompatible culture**

Statkraft is present in 20 countries worldwide. However, 'Statkraft isn't an international organization, it is a Norwegian and Scandinavian organization that has started to become international', the VP of business development argued. The management team is rather conservative in changing the organizational culture in order to embrace the new capabilities. The Stream chief editor explained that 'Statkraft doesn't have a culture for this social communication, sharing and collaboration. We are not used to working like this'. The young employees also expressed their concerns and understanding of the slow process: 'I think it is really hard for people to adapt to change... this is such a big change so I think it's going to take a while before people really embrace all the capabilities and it is really used to its full potential'.

### **Content & information management**

The content production into the Stream is distributed to each business area. It is the site owner's responsibility to update the information in collaboration rooms. The senior managers of each business area cannot act as the site owner and make the pages dynamic. However, 'to make all the senior managers describe their business area was difficult', the CIO commented. The corporate system manager explained that 'if people don't get answers and responses, the Stream will not be dynamic and users give up using it continuously'. The business areas need to motivate and produce more content on the Stream: 'it will lead to a more dynamic intranet, it will be easier to get closer to the core business, the EVP of corporate development argued.

Most of our respondents were concerned about how to harvest the value of all the information/content generated within the Stream. No one takes responsibility to manage the generated information, for instance, from the discussions in collaboration rooms. The corporate system manager worried that 'all information has become dead'. The VP business solutions recommended that 'we need a community manager or an information steward that can administrate the information and documents in order to define where they can be found, what their value is, and who can access them'. Since the user-generated content is unstructured, the head of SAP analytics application suggested structured and clean-up analytics should be introduced for ensuring knowledge retention.

## **5.4 Recommendations for improving governance of implementation**

Although the governance model (Figure 3) has ensured the implementation in the right track and achieved the initial benefits. However, the challenges need to be addressed. Based on the knowledge from literature and insights gained in the interviews, recommendations are proposed for improving governance of the Stream implementation.

1. Managers should be patient when waiting for users to generate content and contribute insights at the Stream. There are two reasons stated by McAfee (2009). One is that self-organized participation in using ESSs is difficult and it requires effort to build communities and information resources without

explicit coordination by any central authority. The other is that the usage patterns and structure of ESSs can only emerge over time. Managers can let the excellence of collaboration emerge itself, for example, the activities in the business area of wind power and technologies. Since the participation needs effort, it is necessary to provide proper user training to fully utilize the new features of the Stream. In addition, the governance policy for users should be carefully formulated and introduced. The policy can reduce the users' uncertainty and reluctance in contributing content to the Stream.

2. Conservative top management can be improved by showing participation and contribution to the Stream. The five dimensions of leadership for 'social business' proposed by Deans (2010) are not difficult to apply in the Scandinavia context. The leaders at Statkraft have the mindset for collaboration. Most of them were involved in developing the Stream to define its purpose, goals and requirements. The business culture in Nordic countries is characterised by a consensus decision style (Axelsson et al., 1991). This implies that leaders are willing to reduce control and share the decision making. The EVP of each business area can build up collaboration sites in the respective area, and perform activities such as listening to the most active employees and informally chatting with them in the forum. This is an effective way to share information and set the tone in collaboration. Alvessons and Svenningsson (2003) also claim that it is the best way of 'doing leadership' in the Nordic context. Hinchcliffe and Kim (2012) also assert that the tone and language should be casual and human (tenet no. 9). These leadership activities should be conducted consistently and with engagements over time (tenet no. 8). Leaders should build relationships and foster them over time in order to build trust in collaboration. Trust is the critical ingredient to a healthy culture.

3. An incompatible collaboration culture can be changed incrementally instead of radically. When managers give more time for users to participate and let the collaboration emerge over a longer period, the collaboration culture will come into being simultaneously. Richter et al. (2013) express that ESSs do not require employees to radically change their practices because ESSs are indeed flexible for possible customization and adaptation to existing practices. Yet, the HR group should put more effort into promoting the culture. HR is the owner of collaboration at the Stream. It is also usually HR's responsibility to establish the organizational culture. Cerra et al. (2013) state that HR leaders are ambassadors of culture change; they need to address the new way of working enabled by the technology available in the enterprise; and they should promote the key role technology plays in influencing a healthy culture. Employees' positive emotions towards new social software would generate organizational impacts, such as decreased staff turnover, higher morale and increased employee engagement (Koch et al. 2012).

4. Content and information management should be high on the agenda in the continuous implementation of the Stream. Information should flow and be dynamic in this platform. 'Mining and deciding' tactics (Mandviwalla and Watson, 2014) should be integrated in the implementation in order to increase 'absorptive capability' (Culnan et al., 2010). In the 'new' information management, the positions of information steward, information analytics, and community manager should be introduced. The 'freeform' and unstructured user-generated content should be smartly analysed to yield more business intelligence for the company's development. This also helps to engage the right communities to produce business values (Hinchcliffe and Kim, 2012, tenet no. 5). The effective governance will also ensure knowledge retention and dissemination, which is crucial for achieving the business goals of being competent and innovative. As Hinchcliffe and Kim (2012) claim, 'prepare for it, and take advantage of it' (tenet no. 6).

## 6 Discussions and Conclusions

The paper is designed to investigate governance of ESSs implementation. A case study of the Stream implementation at Statkraft is explored to gain practical insights. The governance model of implementation (Figure 3) has played the important role for ensuring the business benefits gained by the Stream. Yet, the challenges should be carefully addressed by improving governance of implementation in order to sustain the gained benefits and explore the full potential of the Stream in the long term.

Our contribution to governance of ESSs implementation is threefold. **Firstly**, a new governance model of ESSs implementation is fully investigated. This implies paradigm shift in governance of ESS implementation. The Stream is designed for internal use, thus the governance model places the focus on internal operations within Statkraft. The model emphasises more collaboration of managers from IT, HR and corporate communication. The close collaboration and shared accountability between the three management teams is essential for the success of the Stream. These three units form a trinity focusing on business matters (not only the technology). This contributes a better business understanding of the technology, and vice versa. Which implies the alignment between business and IT in both developing and implementing the Stream. The governance model also requires close collaboration among the managers from different business areas by presenting at the Intranet advisory board. In this model, the role of the marketing executive is not considered as important as that of the communication and human resource executives. The marketing executive is in the supporting position to advise on the implementation of the Stream and ensure its alignment with business goals. In addition to the four leadership/governance models presented by Deans (2011), the governance model of the Stream is a new model that we can adopt in ESS implementation with the purpose of improving internal organization operations. **Secondly**, a complex, yet effective implementation process of ESSs is discussed. Statkraft adopted a 'promotion' strategy in introducing the Stream even though it was launched silently. The Stream project was well prepared, and the requirements were sufficiently gathered from many managers in different positions and at various organizational levels. 'A mindful adoption' (Culnan et al., 2010) was built in the initiative stage. The social features of the Stream, the functionalities of facilitating collaboration, communication and business understanding are fully presented to users. The tactics of 'conversing and sharing' and 'co-creation and innovating' (Mandviwalla and Watson, 2014) are emphasized in the implementation. Users can easily access competences and find experts. 'Building communities' (Culnan et al., 2010) is also encouraged to promote network creation. The implementation of the Stream is aligned with Statkraft's vision and business goals. The well-defined KPIs measure the performance of the Stream to ensure its fulfilment of the goals (Figure 4). The Stream is making its way into employees' workflow and processes of communication and collaboration. These are the most effective social business activities claimed by Hinchcliffe and Kim (2012, tenet no. 10). **Thirdly**, a concrete case of appropriating ESSs and social business is depicted in the Scandinavia context. In the wave of being social, transforming business, and obtaining the benefits, there is a lack of cases and empirical studies that show us 'what' to do and 'how'. Our study fills this gap. The benefits and challenges we identified in the case may help others to be aware of the crucial elements in governing implementation. The recommendations would guide practitioners to build proper governance of implementing ESSs.

This study's findings have limitations. First, the results may be biased toward the employees' view of the Stream implementation. The results are dominated by the views of managers who may be positive in their evaluation. Second, the paper pays more attention to describe the case and to bring empirical evidences and insights gained through these. Theoretical implications of the results for ESS implementation are less explored. The third limitation is the generalizability issues of a single case study (Yin, 2014). In future research, we aim to address these limitations, for example, by gathering balanced views from both managers and employees, by theorizing a new governance paradigm, and performing a cross-case study, if possible, in different cultures.

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## Appendix 1 Key concepts of Governance and ESSs

Key concepts	Explanation	Literature
IT Governance	"the organizational capacity exercised by the board, executive management and IT management to control the formulation and implementation of IT strategy and in this way ensure the fusion of business and IT" (p.1)	Van Grembergen (2007)
Enterprise Social Systems: ESSs	Large scale enterprise systems that utilize Enterprise 2.0 technologies with the purpose of building a social organization and garnering unique capabilities in competition.	McAfee 2009
ESSs and Social business	The increasing adoption and utilization of ESSs results in a new type of business paradigm, i.e. social business. Social business is a highly effective and more potent new way of working and organizing.	Hinchcliffe and Kim 2012, Vatrapu, 2013
Tenets of social business	Self-organized mass participation; eliminating barriers for participation (ease of use of ESSs); shared values creation; building and engaging in community for business outcomes; casual and human languages/tone in conversation and communication; social activities integrated into flow of work.	Hinchcliffe and Kim 2012
Key elements of Social media implementation strategies	Mindful adoption: To assess contextual elements, business values, and possible risks and to make a "mindful" decision towards initial adoption. Community building: To motivate community building to reach a critical mass of people in community for ensuring valuable contributions. Absorptive capacity: To recognize and acquire new knowledge and to be capable of exploiting any user-generated knowledge.	Culnan et al. 2010
Strategy approaches for social media implementation	Exploration: A continuous investigation of possible use cases for new tools, through a participative approach. Promotion: the intentional business-aligned and skilled use of the new tools focusing on well-defined usage potential.	Richter et al. 2013
Leadership/governance	CIO-dominant: CIO plays key role in implementation. Governance resides in IT department. CMO-dominant: CMO plays key role in implementation. Governance	Deans 2011

model for social media implementation	<p>distributes between IT and marketing department.</p> <p>Joint CIO &amp; CMO ownership: A strong collaboration between CIO and CMO in implementation. CIO and CMO are accountable for governance.</p> <p>C-level ownership: All C-level executives to be responsible for implementation. Governance is built to facilitate the collaboration among CIO, CMO and CEO.</p>	
Leadership dimensions for social business	(1) greater information sharing; (2) a mindset for collaboration; (3) a willingness to relinquish some control; (4) more shared decision making; and (5) personal leadership growth	Deans 2011

## Appendix 2 Interview Protocol

1. What are/were the main business goals/outcomes and challenges of implementing the new intranet that includes social tools?
  - a. Why did you decide to include the social collaboration feature in your intranet?
  - b. If there are any challenges, how will these be overcome?
2. What are the challenges for Statkraft to make sure that your staff makes sufficient use of the new intranet, and specifically the social features within it?
  - a. How is usage of the social collaboration measured and compared to the purpose of the project?
  - b. How is the intranet outlined in terms of employee access and connection between departments?
3. What benefits were identified before the project and have any benefits been realized or surfaced?
  - a. How do you ensure that these benefits are met and when?
4. How is the information or value generated from the social collaboration tool managed and handled?
5. Are there any specific improvements in your daily operations/business processes that you expect to realize with the social collaboration feature in your intranet and how will it progress in the future?
  - a. How should employees' task procedures be supported and enabled with the social collaboration feature in a way that generates the expected and desired behaviors?
6. How does social collaboration contribute to the company's overall business values and objectives?
7. How is the intranet governed at Statkraft today and what is your role in the governance process?
  - a. Do you have any specific strategies for the intranet?
  - b. Where there any specific challenges when implementing it?
  - c. Considering that you've just deployed a new intranet with new features:
    - Have you changed any elements in your governance efforts or are they the same as you used for your previous intranet?
    - What specific improvements do you expect in your daily operations thanks to the social collaboration feature within your intranet?

### Appendix 3: An example of the levels of coding

Themes	Sub-themes	Codes/ illustrative quote
Business benefits	Competence sharing	Easier to get contact with other employees, and expertise Quote: "I finish a lot of tasks by just seeing the picture of one person and reading the "About me" section". (Young employee)
		Initiate a sharing and learning culture Quote: " The intranet is search driven which enables the employees to work faster and competence sharing has improved". (IT manager)
	Collaboration	Facilitate for many to many communications the collaboration features builded upon Microsoft SharePoints with close integration with EPiServer Quote: " This enables the many to many communication and makes social collaboration possible in the daily work" (CIO).
		Connect and discuss on collaboration sites, create new ideas Quote: " We want people to have conversations where they can momment and contribute" (The Stream chief editor)
		Producing better problem solutions, qualitative measures Quote: " The collaboration rooms make communication more effective as the problems are becoming more complex which requires more people to solve them and the reponse time can be reduced" (EVP of corportate development)