How enterprise social software enables organizations to increase their innovativeness

Azjen Barawy and Isabella Hinds
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Abstract

The organization the authors have collaborated with is one of the largest information technology services company in the Nordics, Tieto. This study intends to examine Tieto’s social idea management software solution called Eureka to determine if it helps organizations to increase their innovative capabilities. Eureka helps organizations collect, manage, share, and evaluate their employee’s proposed ideas. Eureka also enables an organization’s resources to better interact with each other in association with idea development. Eureka works like an intranet where by company employees internally get the opportunity to suggest ideas that could improve, e.g., processes, products or services. This study examines whether Tieto’s software solution can help an organization increase its capacity for innovation. An additional aim is to describe the actual value an organization receives by working with Eureka. Empirical findings demonstrate that Eureka is a great tool for organizations to get their employees to interact with one another when it comes to innovation and idea development.

Keywords: Innovation, Open Innovation, Tieto, Eureka, Software, Networking
Acknowledgment

In the process of writing this thesis we have had great support from our supervisor Loe Önnered. We would like to thank him for pleasant meetings and good discussions. We also want to dedicate a big thanks to our sponsor at Tieto, who is in charge of the software program Eureka. A special thanks goes out to the Eureka users who helped and answered our questionnaire. Without you, this thesis would not been possible.

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1 Introduction

Chapter one presents the background, problem discussion, and the purpose of this thesis. This section also presents the study's innovation grants, and its delimitation.

1.1 Background

The Webster dictionary defines innovation as: “a new idea, device, or method” (Webster, 2013). The term innovation has been featured as the single most important factor in the future growth of any business venture (Kuczmarski, 1996). As innovation becomes more democratic, many of the best ideas for new products and services no longer originate in well financed corporate and government laboratories. Instead, innovation can originate from anywhere or anyone. (King & Lakhani, 2013)

According to the article, “Software-Based Innovation”, written by - Quinn, Baruch, and Zien (1996)- most innovation occurs first in software. The authors indicate that software - among other things - lowers costs and increases the value of innovations. Furthermore, the authors discuss how - in many cases - software is the core element in process innovation. Therefore, the writers inform that software is the final “product” or “service” the customer actually receives.

Tieto values innovation within its business. The organization is one of the largest information technology services company in the Nordics. It offers other private and public organizations various kinds of technology solutions and services, and advisory services. One of the solutions offered is the social idea management software Eureka. The idea behind the software is to create interaction between employees. Eureka functions as an intranet for businesses, i.e., an organization’s employees have the opportunity to internally contribute ideas that can improve the company. Once an idea has been shared in Eureka, other employees can view it and take part in its further development. Organizations that purchase the Eureka software solution are predominantly large. They often have employees working in different departments, cities, regions or countries. By using Eureka, these organizations can easily create open communication between employees. A broader description of the software program Eureka is presented in this study's empirical data. (Tieto, 2013a)
1.2 Problem discussion

Organizations are constantly trying to improve and develop to better meet market growth expectations, and as a result innovation is in constant demand. Hamrefors (2009) discusses how organizations can develop their communication skills. He claims that it is necessary to develop the ability to interact in a group and create social interaction. According to Hamrefors (2009): “with a given organizational structure applies ...effective ways to communicate the big picture. The central tool to do that is intranets...” Hamrefors explains that organizations need to convey an overall picture in order to facilitate the learning experience; otherwise, there is a risk that the intranet usage will be unclear to users. Social interaction between people provides the opportunity for individuals to broaden perspectives and through that refine them.

Huang and Li (2009) note that organizations -which have improved innovation capacity - are better able to achieve favorable performance and improve work capacity. Knowledge, skill and commitment are three factors organizations rely on their employees - in the value creation process - when developing innovation initiatives. Social relations constitute information channels that contribute to both time and cost efficiencies –crucial requirements when gathering information. The role of social relationship networks has been recognized as important mechanisms for combining knowledge and exchanging ideas to better achieve favorable innovation results.

Tieto’s social idea management tool Eureka is not only about collecting ideas but about enabling people from different parts of the organization to communicate and exchange ideas together. The social aspect is currently a key theme in corporate software (Tieto, 2013b). The interest in the aspirations of this study occurred given that theories from; Huang and Li (2009), Bessant and Tidd (2007), and Chesbrough (2003)indicate that organizations that use innovative means and open communication are more successful than others. To be able to have a successful company, you have to develop new ideas to meet market growth expectations and provide a meaningful developing atmosphere for the organization’s human capital. When individuals within the organization get the opportunity to participate in the innovation process, the likelihood that they will be more content and contribute to the future growth of the company is greater.
1.3 Purpose
This study examines how Tieto’s social idea management software - Eureka - enables an organization to increase its capacity for innovation. This study aims, as well, to describe the actual value an organization receives by working with Eureka. An important sub-purpose is to recommend improvements that will enable Eureka to be a better social idea management solution.

1.4 Issue
This study investigates whether the Eureka social idea management software enables an organization to increase its innovativeness.

1.5 Boundary
This study solely covers Tieto’s Nordic offices in Sweden and Finland. The scope of the issue has been limited to inquiries regarding Eureka’s ability to increase an organization’s capacity for innovation. This case study is confined to 17 internal Eureka users. All user questionnaire responses have been treated anonymously.

1.6 Innovation contribution
In addition to investigating whether Eureka can increase innovativeness in organizations, conclusions – based on theory and empirics – have been drawn. Tieto’s internal Eureka users received the opportunity to share their perspectives about the solution via an Excel questionnaire. Thereupon, recommendations regarding how Eureka can change and improve are proposed.
2 Method

Chapter two contains an explanation of the approach throughout the process. This chapter concludes with a critical review and examination of the implementation, and an assessment of what could have been implemented differently.

2.1 Selection of issue

Selection of issue arose in contact with the information technology services company, Tieto. At the beginning of this thesis, various targeted organizations were contacted via telephone and electronic mail. The electronic mails introduced the thesis authors and communicated their aspirations to write a thesis about innovation technology. Electronic mails sent to the sponsoring organization presented different aspects about the subject matter and expressed openness to other topic ideas. During the exchange of electronic mail, it became apparent that it was important to find an organization or a principal sponsor to directly interact with.

As has been noted, contact was made with an organization that was interested in collaborating. The principal sponsor at Tieto considered the proposed topic interesting. The Eureka software solution was discussed in this context and an assignment was granted. Tieto’s proposed that “Mälardalens University” examine their Eureka idea management solution to study whether the tool increases an organizations’ capacity for innovation.

2.2 Data collection

2.2.1 Primary data

This study encompasses both primary and secondary data. One approach applies the collections of primary data - empirical data -by utilizing a questionnaire. With the aid of the questionnaire, it was possible to reach out to a wider variety of Eureka users within the organizations. Another reason for using questionnaires - in this case - was that most Eureka users are not located in Sweden. By using this approach to capture primary data, users are able to quickly and easily respond to selected questions - as it is not a time consuming activity. The questionnaire consists of nine questions where respondents can answer queries about their gender, age, and the department they belong to. The intent is to assess whether gender, age, or some departments are more creative than others. Since we have limited the questionnaire to 17 persons, this will be an approximate study because there are
approximately 10,000 Eureka users today. To begin with, the collected material from the questionnaires were assessed and compared. Next, a diagram of the result was developed. The questionnaire aspires to capture more profound answers from Tieto respondents. The questionnaire was designed with the help of Google Docs. This method was perceived the most suitable way, as respondents get the opportunity to motivate their thoughts and opinions in seven of the nine questions asked. Approximately 50 questionnaires were sent to Tieto employees. The forms were sent with the help of our sponsor at Tieto, however, only 17 Eureka users responded.

Another approach that has been used to collect the primary data in this thesis is an interview with Tieto’s business consultant in Finland. He works in the business and IT transformations department. The respondent is also one of the contact persons for the software program Eureka. The interview was made by electronic mail and has been based on a qualitative approach.

2.2.2 Secondary data
Secondary data - data that already exists – was captured by gathering information from scientific literature, articles, and selected electronic sources. The selected articles were found through the university's database, ABI/INFORM Global. Examples of keywords used to find scientific articles include: "Open Innovation", "Networking", and "Software Program". Tieto's own website was an additional source used to find relevant information. To gain a better understanding about how Eureka works - to enable closer examination and study - the sponsor at Tieto provided the authors of this thesis an own Eureka user profile. The user profile gave the authors the opportunity to gain a deeper understanding of the solution and its various tools.
2.3 Selection of method

2.3.1 Qualitative method
This study is qualitative in nature but it has elements of the quantitative approach. According to Bryman (2011), a qualitative research is a study in which a respondent is interviewed to acquire answers to questions relevant to a specific topic. A qualitative study is conducted to gain greater depth in the questions posed to the respondent. The method is used to acquire a more detailed response from respondents, i.e., not a yes or no answer. A qualitative study can be performed in two different ways. One way is through a structured format and the other an unstructured form. The questionnaire sent to Tieto respondents were in structured form. This means that interview questions are answered in order placed. Respondents had no chance to go back, skip or expand questions. The interview that was conducted with a resource responsible for the Eureka software was conducted in an unstructured manner. As a result, the authors were able to return with additional clarification questions and thoughts.

2.3.2 Quantitative method
The opposite approach to qualitative research is the quantitative approach. The latter is a research approach that involves the collection of a variety of evidence. The evidence is analyzed and the results used to explain a different phenomenon. Quantitative research methods do not contribute to deeper respondent data capture (Bryman, 2011). An indication of how this study has applied the quantitative approach is via two check questions requesting information about the respondent's gender and age.

2.3.3 Template
As a template for the construction of this thesis, Per Lindström’s scientific reporting guidance in the art of writing an essay in psychology has been used. A "Quick Reference" by Kerstin Nilsson (2005) has also been used for referencing the APA-style of writing.

The authors have written individual diaries — with thoughts surrounding the working process — on barriers experienced. The diaries served as foundation and support – when determining how obstacles have been monitored and resolved.
2.4 Reliability and validity

Reliability concerns the question of whether the results of an examination will be the same if the study is performed again or if it has been affected by random or temporary conditions (Bryman, 2011). For this thesis, geographic location must be considered. The outcome of the study would probably be different if it was conducted in Finland - where personal contact with the creators of the Eureka software program could have been established - since Helsinki is where the creators of the solution are based. In addition to this obstacle, the thesis maintained a high degree of reliability in that the interview questions attempted to avoid misunderstandings and misinterpretations. When a misunderstanding occurred, clarification was provided in order to receive a response to the initial questioned posed.

The validity of a study determines whether the conclusions that have been generated from a study are related or not, i.e., a way to measure how well the research question has been answered (Ibid). In this study’s case, the opportunity to interview external persons was not possible, and therefore the questionnaire was sent directly to a selected number of Tieto employees. Because it was not possible to interview external persons, the validity may not reach targeted levels. However, the thesis research question and purpose has been considered throughout the study in order to maintain a common thread.

2.5 Critical review

This thesis is written in English in order to reach out to Tieto’s entire global organization and adhere to the organization’s corporate language standard. This complicates the execution of the thesis, as our native language is Swedish. However, this challenge is viewed as an opportunity for further personal growth. Moreover, the research is challenging because no direct contact with Tieto’s customers is possible, as several of the targeted customers are located outside of Sweden. Our principal sponsor at is based at Tieto’s head office in Finland while our Tieto mentor is based in Stockholm. This has contributed to difficulties communicating and it has demanded extra time.

Initially, the idea was to interview external users, i.e., Tieto's customers that use Eureka. The reason for this was to minimize the chances of getting a distorted view of how the solution is perceived by customers. Furthermore, by utilizing external users the likelihood of acquiring impartial user perspectives is higher. This was not possible, however, as Tieto's customers
were not willing to contribute to this study. Due to this challenge, the option to interview internal users – persons utilizing Eureka internally at Tieto – was implemented. For this reason, questionnaires created were treated anonymously. The underlying thought was to give Tieto employees the chance to express their opinions honestly - to avoid an embellished picture of the Eureka solution.

The contact with the respondent was made through our own network, which may cause that the study’s outcome to be different than that of randomly selecting respondents. In addition, there is a risk that respondents- who are Tieto employees - may provide information that might contribute to producing an embellished image of the company. This may influence how a respondent replies to questions asked. Another risk to consider when conducting interviews via Internet is, for example, authors adding their own values. This risk could lead the authors to interpret a respondent’s answer in a different manner; perhaps it would have been handled differently if the interviews were conducted face-to-face. In a personal interview, it is easier to read a respondent’s expression. And, the ability to follow-up questions is made possible if a respondent expression, e.g., signals uncertainty or lack of understanding regarding a question posed. In this situation, questions that are not clear can be clarified directly. This makes it less likely that own values and interpretations are included in the assessment of responses. (Bryman, 2011)

A quantitative method involves performing inquiries with several people or companies through - for example – surveys. The methods outcome leads to a broader perspective. It also contributes to a lack of a comprehensive perspective of the subject matter. The medium of choice for interviews was electronic mail contact and a questionnaire generated by Google Docs. The downside of this option is the inability to pose follow-up questions or dive deeper into questions with respondents, e.g., regarding specific issues. Another disadvantage is the possibility of respondents misinterpreting questions, which could lead respondents to provide responses outside the study’s interest. Given these circumstances, every question should be designed as clearly as possible to avoid misunderstanding. (Ibid)
3 Theory

In this section, the thesis’ theoretical framework will be treated.

3.1 Innovation

Innovation is about producing, changing and developing new ideas. It may involve minor and major radical revolutionary ideas concerning products, processes, organization and mindset. Based on which area it treats, it may be about everything between technology, marketing, and process development. Areas can be product, process, positions, and even large paradigm changes. (Bessant & Tidd, 2007)

All individuals within a company can contribute to change and process, which in turn can alter the company’s future development. One idea is to reward employees who bring new ideas within the company to foster innovative thinking. Whirlpool’s former CEO David Whitwam developed a concept called: “Innovation for everyone everywhere”. They built up innovation teams in different regions and continents. The group’s sole objective was to look for revolutionary new ideas. The aim was to encourage all employees in all areas to think outside of their comfort zone. The company has been extremely successfully and it has grown its earnings from 78 million in 2003 to 1,6 million in 2006. (Gibson & Skarzynski, 2008)

To build and maintain an innovation, it is important to consider both what you already have and what is needed from the market. To develop and encourage innovative thinking it is positive to have some kind of reward system. (Ibid)
3.2 Innovation process

Fig. 1 The innovation process model (2014).

The innovations process is divided in five stages: entrepreneurial goals and context, recognize opportunity, find resources, develop venture, and create value. It is important to have goals, but it is nearly impossible to achieve the goals without resources and competent individuals with different experiences to accomplish the goals. The precondition to make goals and ideas possible is a combination of: innovative people, high education, research facilities, and a good infrastructure. (Bessant & Tidd, 2007)

Bessant and Tidd (2007) inform that an organization should recognize opportunities whether it has technical capabilities or other development. One must try to find resources that think strategically and take hold of ideas and develop them. Shape ideas into reality because there is no guarantees that value can be created - regardless of how hard one works. After one has viewed the possibilities, make a strategic decision and identify needed resources. The next step is to shape the idea into reality. This is where knowledge of the market and technology are connected into a successful innovation. (Ibid)

Individuals bring the idea into the organization where the ideas are transformed to create better value. Regardless of how hard it works, there are no guarantees that an organization can create value. In this situation, organizations need to think about and manage the innovation process to maximize its chances of success. In addition, organizations should be able to look back at projects and reflect on what they have learned, as well as, what they can do better the next time. (Ibid)
3.3 Open innovation versus closed innovation

3.3.1 Open innovation

According to Chesbrough (2003), all industries will be migrating to open innovation. The concept behind open innovation is simple. Instead of organizations developing everything within the company, they now can choose to collaborate with external partners to develop - for example - services and ideas (King & Lakhani, 2013). Entrusted this, there are several different ways to perform open innovation. No right or wrong way exists regarding how a company agrees to its open innovation strategy. However, the general idea is to use external sources to develop a product or service. Munch (2009) explains that three different approaches to achieve open innovation exist. First, new ideas can originate from a much larger range of parties with different perspectives than what might be receive from internal sources. Second, business and financial risk can be mitigated by the participation of one or more third parties, as joining forces can attain greater market scale. Finally, time-to-market may be accelerated by special contributions made by other partners or contributors in the ecosystem.

Chesbrough (2006) notes that: “A company that is too focused internally is prone to miss a number of opportunities because many will fall outside the organization’s current businesses or will need to be combined with external technologies to unlock their potential.” (Chesbrough, 2006, s 130)

Although several studies indicate that companies embedded in the benefit-rich networks are more likely to have greater innovation performance and learning effects, companies may have other reasons not to pursue a strategy of open innovation. Companies may be reluctant to disclose their business model, as revealing its model can weaken its competitiveness - while enhancing its competitors by selling and transferring relevant knowledge. (Inaunen & Schenker-Wicki, 2012)

A successful organization that utilizes open innovation is the American company InnoCentive. The organization uses open innovation as a platform whereby people from all over the world come together to solve business problems. One can either visit their website to become a problem solver or sign up to put up a challenge. All the challenges that are uploaded conclude with a reward (InnoCentive, 2014a). InnoCentive believes that by unleashing human; creativity, passion, and diversity, they can solve problems that matter to business and
society. Similar to other theories, InnoCentive claims that with their work method, problems are solved better, faster, and at a lower cost. (InnoCentive, 2014b)

User innovations that are read and reviewed by multiple other users often result in development of ideas. The possibility to modify an initial idea can create positive results. (Von Hippel, 2006)

3.3.2 Closed innovation
Closed innovation is the opposite of open innovation. The strategy is based on that companies generate ideas and develop them in-house. These companies do not have the possibility to collaborate with external partners to develop a product or service. All innovation is internally generated and based on the organizations own ideas. (Chesbrough, 2003)

3.4 Innovation capacity
Innovation was as earlier mentioned as a new idea, method or device. But the word capacity in this context can refer to the volume of innovation. The innovation capacity in an organization is considered to be an improvement in the overall capacity - found within the organization- to generate innovation and develop new products to meet market needs. One way for organizations to extend this kind of capability is through interaction. Innovation capacity can be incrementally or radically increased by engaging in activities that trigger the availability of resources for innovation and transformation. The interaction that is performed is a process that provides stimulation. (Szeto, 2000)

3.5 Creativity
Creativity is about finding opportunities for communication and new connections to help us think about different possibilities. Utilizing a diverse approach and varying methods enables an organization to open new and unusual opportunities to generate alternatives. This can bring value to an individual, group, organization, and society. When you look at generating new ideas, it can be good to use different personalities with different mindsets and different behavior patterns to generate a breadth of creativity. It may be helpful to find a structured process-oriented plan for creative thinking, which includes planning and environmental factors, such as business environment and culture. (Bessant & Tidd, 2007)
Many different research works exist on how an entrepreneur generates development in their company. Personal characteristics that often lead to the generation of new ideas, include; internal locus of control, ambition, and a need to perform as an individual. The importance of measuring total risk taking and motivation - to find solutions to problems - get positive feedback. (Ibid)

It is important not to steer too much in a creative business, it is important to frame and look at what can be a success and respond to what may be a threat. An example of a great innovator is Steve Jobs, who contributed to the transformation of Apple from an ordinary computer company into a leading digital product innovator. (Wind, Y. 2006)

Below are four different steps to increase creativity in organizations:

- As part of business development, convey that it is acceptable to fail. In this way, the organization eliminates the workers fear that failing when taking risks means consequences.

- To provide the space and tools to enable creative thinking.

- To bring together diverse teams and professionals to think outside the box.

- Different communities can develop business clusters to encourage creativity in some areas. (Ibid)

Eric von Hippel (2006) describes the democratized use of innovation - which enables individuals and the company to be better develop new innovation exactly as they would like - to outsourcing. The company can benefit from innovation they develop on their own and they can freely share it within the organization.

3.6 Networking
Collaboration between different departments in an organization increases the companies’ innovation performance. The information exchange between the divisions in the company enhances the number of potential useful ideas. Another advantage is that collaboration
increases the flexibility of the workforce and improves the functional performance of new products. (Cuijpers, Guenter, Hussinger, 2011)

Gibson and Skarzynski (2008) inform that it is myth that individuals or small groups have developed all the good ideas and innovations - a false perception of the innovation process. In fact, the most creative and disruptive innovations are created by interacting and networking with various individuals. According to the authors, it is possible to mix and combine products by taking advantage of semi-developed ideas and concepts. With a variety of individuals and groups creativity, the product can evolve and become something new and unique. Radical innovations are based on the interaction of different ideas that do not really belong together. To create these innovations, you have to communicate with each other. Networking and interaction between different organizations are key factors to successful innovation. The more interaction there is between; individuals, companies and their ideas, the better the chances are to increase an organization’s innovation capacity and generate breakthrough ideas. (Skarzynski & Gibson, 2008)

To increase the innovativeness of organizations and to get as good quality of innovation as possible, an organization should involve as many people as possible to establish contacts and build large networks where individuals can work together to discuss and exchange ideas. This should be performed both internally and externally, and between organizations so that as many ideas as possible can be collected. Gibson and Skarzynski (2008) state that asking for ideas is the best way to get ideas but most organizations avoid doing.

Granovetter’s (2005) notes in his theory: “the strength of weak ties” that due to close ties with friends in life – in the same social circle as ourselves – the information flow that finally reaches an individuals may overlap with what he or she already knows. He believes the reason this happens is because our acquaintances resembles us less than our close friends do. He also concludes that this occurs because acquaintances spend less time with us, as they move in circles that differ from that of close friends. Because of this, acquaintances can be a better sources when ones needs to go beyond what his or her own group knows - for instance, when ones needs to get a job or help with an service. Despite that our close friends may be more interested than acquaintances in helping an individual, social structure can dominate motivation. This theory indicates that if each person's close friends would know each other, they would be able to jointly form a close-knit clique. These individuals would then be
connected to each other through their weak rather than their strong ties. From a social network viewpoint, this means that such bands determine the extent of information dissemination in large-scale social structures.

### 3.7 Software program

According to Quinn et al., (1996) managers need to recognize the potentials of software in their development processes and change their approaches to utilize the full potentials of software-based innovation. By doing so, they can improve: innovation quality, shorten cycle times, cut costs, lower risks, enhance the results of innovation, and increase its diffusion to customers. A discussion explains the powerful possibilities of software-based innovation and provides many examples of how companies develop and manage software successfully. Furthermore, the authors discuss how software is a way for all the different departments in the company to visualize solutions and work together in a complex system.

### 3.8 Motivation

Motivation theory explains what organizations can do to encourage people to apply their efforts and capabilities in a way that can support the achievement of organizational goals and meet their own needs. There are several different methods that organizations can apply to motivate their employees, e.g., through rewards, measures to address the needs, and punishment. (Jiang, 2010)

Organizations work to attract different business and maintain existing employees. To make it as successful as possible, they analyze the human nature, such as needs, requests and what the central driving force is its employees. Needs such as power, money, and status are described as central for humans. While working at a company it is important to have a fun, develop and have challenging job. Achieving goals in a community builds driving force. Competitive instinct, normalization, visibility to get attention gives a human confirmation. In addition, getting a salary plays a big part in motivating employees to be a driving force at the company. The identity - where you belong to a relation - gives human fulfillment and satisfaction. (Alvesson & Svenningsson, 2007)
4 Empirics

The fourth chapter begins with a description of the information technology company Tieto and its idea management solution. The chapter continues by presenting the results from collected secondary data, interviews, and questionnaires.

4.1 Tieto

Tieto is one of the largest information technology services company in the Nordic region. It offers comprehensive portfolio of solutions and services to private and public sector organizations. The company operates on a global scale. It has product development and global delivery centers in various countries. Tieto was established in 1968. Its headquarters is located in Helsinki, Finland. Tieto has annual sales of approximately EUR 1.8 billion. It has close to 17,000 employees in over 20 countries. The company’s vision is to develop business and society through information technology. (Tieto, 2013c)

4.2 Eureka

Eureka is a social idea management software solution developed by Tieto in 2010. The idea behind the software is to help organizations; collect, share, manage, and evaluate their employee’s ideas. The solution, additionally, helps organizations to interact with each other. Eureka works like an intranet. A company’s employee’s gets the opportunity to suggest ideas for internal changes and improvements, which can be related to new products and services. Once you have shared an idea on the page, other colleges get the opportunity to comment and discuss the idea. It is possible for a user to upload a picture of oneself on their Eureka profile, so your colleagues know that it is your idea. Managers get the opportunity to select and rate the idea with the best potential for further development. Tieto considers this an excellent way to make innovation a regular practice within the organization. They also consider it a good way to jointly develop ideas into a prototype. (Interview, 2013)
4.3 Results from the interview

A key Tieto respondent is the Service Owner of the Eureka solution. The organization regularly captures feedback from its customers. Some years ago, they noticed that indicators related to Tieto’s innovativeness - as perceived by the customers - were lagging behind other indicators. This led Tieto’s management to initiate a company-wide innovation program called “Innovation in Reality”. The Eureka software solution was developed and launched as a part of this program. The respondent describes the software as “an under-developed idea management solution” offered by Tieto. Eureka enables a systematic process of: capturing, co-developing, organizing, evaluating and prioritizing employee's ideas. It is also a systematic process for gathering feedback or other valuable insight. Eureka is suitable tool for many use cases - a technique in system development used for capturing user requirements - such as;

“Community is the place sharing and nurturing ideas for supporting business and information technology development. It helps organizations to foster innovation such as new or improved products, services or processes”.(Tieto, 2013d)

Fig. 2 An image of the Eureka program (Tieto, 2013d).

Fig. 3 Statistics schedule (Tieto, 2013d).

The schedule presents statistics over the number of ideas that were shared on Eureka’s first year period. There was a drastic increase from about 300 to 1700 divisions in thirteen months. On average 100 new ideas each month. 60 percent of Tieto’s employees are active Eureka users. (Tieto, 2013d)
driving organizational innovation by collecting employee’s ideas or engaging with customers by way of capturing product or service development feedback.

Within Eureka, different competitions are initiated by so-called "challenge owners". These key stakeholders within the organization, such as business owners and other managers. When a competition is published, employees have the possibility to submit their ideas to these competitions. Competitions often end with a prize. But, it is the challenge owner who decides whether there is a prize or not. In order to determine which idea is the winning concept, every challenge owner appoints a "scoring team." Anybody can be a member of the scoring team. The challenge owner selects people - who have enough knowledge to rate the ideas - as members of the scoring team. These resources in turn, distribute different points on the proposed ideas. If Tieto decides to implement an employee’s idea, it will be carried out as part of the employee’s normal work. Hence, Tieto owns the solution and results – in accordance with Tieto employment agreements. If an employee’s idea can be patented, it will be handled according to Tieto Invention Award Policy and patenting processes.

Eureka’s customer base is a Tieto trade secret. However, known Eureka users include the City of Helsinki and Yle, a Finnish broadcasting company. Presently, Eureka does not have any specific marketing plans or activities in place. According to the respondent, this is unfortunately because sales in business-to-business works differently. He explains that Tieto's customer executives discuss client business needs, which can result in Tieto positioning Eureka with target customer. Nonetheless, Tieto has some marketing information on their external website. According to the respondent, enabling organizations to drive innovation internally is the main benefit Eureka offers. Other benefits include, enabling systematic management of ideas, boosting co-development, and cross- organizational collaboration. (Interview, 2013)

**4.4 Results from the questionnaires**

In order to acquire a better understanding of how users experience the Eureka software program, respondents were asked to answer six questions. 17 internal Tieto employees answered the questionnaires. All of these users work in different departments.
4.4.1 How Eureka is used and how often

All of the 17 respondents use Eureka to post new ideas, reflect on past ideas or to find competitions. One of 17 users utilizes Eureka once monthly. Others users visit the tool a few times a year. Various responses were received regarding the idea competitions. Users felt it increased their motivation to get a reward but they perceived the evaluation as unfair. An anonymous user informed that there was a competition for an idea to build a mobile app - the winning prize was an Iphone 5. (Questionnaire, 2013)

4.4.2 Does Eureka enhance an organization’s innovation capability?

The respondents report that it is positive to develop innovations within the business but there are shortages when it comes to providing individual giving contributors developing ideas recognition or feedback. Furthermore, when knowledge in specific areas lacks, Tieto should consider training the mentors that manage the system. Being able to recognize and reward ideas in Eureka is a positive aspect. Respondents state that it is positive to share ideas. However, some users perceive that the organization does not fully value ideas received, as ideas are not being implemented. (Questionnaire, 2013)

4.4.3 Positive and negative feedback

Anew, being able to share ideas is viewed as positive. The solution’s manageability is also viewed positively. Eureka offers Tieto the chance to inspire its employees with new thoughts. By its openness, everyone has the opportunity to contribute to innovation within the organization. The majority of respondents agreed that it was a good way to vent new ideas in a easily managed manner.(Ibid)
Limited functionality is seen as negative. Resources who evaluate ideas should have varying cultural backgrounds and cross-disciplinary expertise. Improving group consolation could enable Eureka to develop ideas better. It would lead to more focus on the innovation process than the individual contributors. Idea follow-up could minimize deficiencies and increase customer innovation. The aspect that has been brought up most by respondents is Eureka’s deficiencies when it comes to flexibility, e.g., ideas in different fields are not adopted. (Ibid)

4.4.4 Interaction between different units or employees

The interaction between different departments and employees could lead to; better software development, ideas within the company, and more satisfied customers. Developing innovation within the company - where different areas and expertise meet - gives the employees the ability to improve their thoughts and ideas. Respondents mentioned that stringent structures, poor cooperation between departments, and expertise where interaction is more like transactions is prevalent. Developing new approaches while cooperating with different processes is important. This could lead to a better work areas and easier opportunities to communicate and exchange of ideas. (Ibid)

4.4.5 Improvements recommendations for Eureka

All in all, there were many responses regarding possible ways to improve Eureka. Evolutionary ideas in layout and a link to the intranet, as well as, an automated solutions received the most requests by users. Better possibilities for publish ideas simply and freely were also mentioned. Besides making the tool more accessible, synchronizing it with social media or intranet is important. Employees also suggest that notifications functionality be added, e.g., when someone liked or commented on your idea.

Respondents feel that Eureka should be developed for use on a daily or regular basis. Expanded functionality to make it possible to develop financial business cases. Other suggestions include: having open topics where one can freely add ideas, creating a column or category for free ideas and automating the search feature - for similar ideas to avoid duplicates. More insight into the process – by way of the tool – is needed. Respondents also indicated that Tieto should develop a mobile version of Eureka, to easier share ideas anytime. Utilize feedback regarding ideas to develop personal insight and motivation is suggested. In
the long run, a group of experts with different backgrounds should be utilized to develop and evaluate the Eureka solution. (Questionnaire, 2013)

4.5 Eureka’s innovation process

According to Tieto, their innovation process model is the backbone of their service, Eureka. The organization describes their innovation process as an open and transparent process. (Tieto, 2013e)

The model’s first step is, new idea. This step involves the generation new ideas, which are then published so all Eureka users can view them. Published ideas are completely open. All Eureka users have the chance to like or comment on published ideas. The idea behind this step is to gather the organization's feedback. After the challenge owner reviews the idea and decides that there is enough feedback on it, he or she moves the idea to the scoring phase. In the scoring phase, the ideas are reviewed by the group. Each member of the scoring team has the opportunity to rate the idea using the criteria challenge the owners have chosen. The final assessment of the idea is the average of the scores of each scoring team member.

The ideas with the best final score are moved to prototyping, which is a business case phase for analyzing the ideas potential business value, i.e., customers, revenue, costs, and etcetera. The final step in the innovation process model is rewarding. Challenge owners move the processed ideas to this phase - when the final decision is made to implement an idea. (Interview, 2013)
5 Analysis and discussion

In this chapter, the empirics and theories are compared and analyzed. This chapter also highlights the actual value organizations get from working with a solution like Eureka. This chapter will conclude with a list of improvement recommendations for Eureka.

5.1 The process of innovation

All humans can contribute to change and process (Gibson & Skarzynski, 2008). This phrase is very much like the idea behind Eureka, which gives individuals within companies the opportunity to contribute to their innovation process. As any other innovative company, Tieto uses an innovation process in the development of an idea or work process. Their innovation process consists of six steps where the first step is an idea and the very last step consists of rewarding. Tieto's innovation process is very similar to the innovation process developed by Bessant and Tidd (2007). But, one thing that sets these models apart, i.e., Bessant and Tidd attach great importance to the learning experience of the process. Bessant and Tidd believe that organizations should look back on the project and reflect on what they have learned and what could be done better the next time. This is instructive to do, in order to view what could have been done differently the next time. One perspective on how this can be done is by writing a reflection about the project. The reflection could be a visible document on your Eureka profile, so that others can benefit from your experience and learn more about the processes.

The different steps in Tieto's innovation process describes quite clearly what happens after you share an idea on Eureka or have been involved in a challenge. This gives employees a clear understanding of what happens with their idea - after they have contributed it to the company. One of the questions in the questionnaire was about their view regarding Eureka’s ability to help organizations increase their innovation capability. The respondents’ response was that it was positive that an organization’s ideas got the opportunity to view and reward ideas. However, some employees felt they were not receiving sufficient attention or feedback. Improving scoring team and mentor user feedback, could motivate users to continue contributing ideas - even get more people to contribute ideas.
5.2 Open innovation

Chesbrough (2003) describes the different ways to use innovation where ideas can develop in-house or outside the company through external resources. Eureka has chosen to give its user clients the opportunity to contribute towards its innovation. According to Chesbrough (2003), if employees of within an organization are the sole contributors to idea development, they will lose good opportunities outside the organization. Chesbrough argues that an organization's current business has to be combined with external technologies to unlock their full potential. Furthermore, he indicates that no right or wrong way exists for organizations to relate to the theory of open innovation. He notes, additionally, that organizations can be open in different ways. Inaunen and Schenker (2012) describes that organizations sometimes are afraid to open their operating model to external individuals from fear of competition. In Eureka’s case, the solution used by both external customers and Tieto’s own employees. As a result, Tieto benefits greatly because their employees also utilizes Eureka. Eureka also brings forth economic benefits to Tieto. Tieto Eureka users can help to solve business problems through the program instead of receiving special compensation for contributed ideas. Instead of paying employees, an organization can reward the problem solvers with a special prize.

Granovetter's (2005) theory: "The strength of weak ties" demonstrates that people can use their own social network to access other person’s social networks. The idea behind the theory is that people are commonly surrounded by; people in their family, friends or work colleagues. Thus, one has a better chance of getting help with issues from persons outside ones own inner circle. This is due to the fact that information received from ones own network, overlaps with that one already knows.

The Eureka system is an open system, i.e., registered organizational users can view all contributions. A person’s idea can be read and further developed by others. As a result, enhancing organizational value creation.

After examining the Eureka software program and its corresponding functions, it is evident that organization already engages in open communication and collaboration. However, the organization could take innovation to another level by way of closer interaction with other companies in its network. A way to make this possible is by making the software partially accessible or visible to other businesses and organizations in its network.
The challenges posted on the Eureka’s website could even be visible to external partners—rewarding anyone who finds a solution to a business problem. This is also a great way for Tieto to share costs and find new collaboration partners. Another advantage of using external partners or sources, include; increase innovativeness, better learning effects, and higher innovation performance. (Inaunen & Schenker (2012)

Since Tieto sells the software to other companies and organizations, it is important to be flexible since may companies feel uncomfortable sharing their business ideas to other potential competitors in the industry. Thus, they ideally continue with closed innovation. One suggestion to enable an increase in flexible is to allow buying customers the option to be visible to other organizations. Another thought is to enable more choice, e.g., an organization can choose specific areas - in their intranet - that could be partially or fully visible.

5.3 **Collaboration is the key to innovation**

Tieto uses a reward system at the end of a challenge in Eureka. According to the Eureka users who have participated and replied to the questionnaire, the reward system increases their motivation to contribute more ideas. Jiang (2010) describes the importance of encouraging, rewarding and, in some cases, punishing employees. Eureka use different incentives and reward systems. It is human nature that power, money, and status are central driving forces. Other important aspects include; having fun, being able to help develop the company, and having a work environment where one is encourages challenge oneself. (Alvesson & Svenningsson, 2007)

Eureka brings other positives benefits in that ideas are shared and visible to other employees in the organization. For the person who shares their ideas, this is an excellent opportunity to be seen or find help to further develop their ideas into an actual product or service. In addition to being visible and getting help with idea development, one can take advantage of using a tool like Eureka to cut back on costs for the development of ideas. By finding people who want to work with you, a person is able to share costs. (InnoCentive, 2014b)

Gibson and Skarzynski (2008) describe ideas gathered internally and externally within and between organizations. Networking and interaction between companies are something that Eureka could develop in order to gain a broader and deeper customer base and capability for
development. A suggestion for Eureka would be to develop the model so it could be used between different organizations or develop chosen ideas with multidimensional profession groups. According to Cuijpers et al., (2011), collaboration between departments in an organization increases an organizations innovation performance. This theory proves that Tietos software Eureka increases organizations capacity for innovation. Another benefit of using the Eureka is that information exchange between divisions - within the company - increases the number of potential ideas. Collaboration between employees also increases organizational flexibility and improves the functional performance of new products.

5.4 Creativity

Bessant and Tidd (2007) state that a process-oriented plan for creative thinking often generates good creativity. Tieto has built a model were a formalized solution for the employees can contribute to business innovation. Respondent feedback indicates that feedback positively influences employee performance. Eureka has provided incentives to users who provide winning ideas, e.g., a price for best innovative idea exists.

Wind (2006) informs that through developing special tools, organizations can develop creative thinking. This is strongly associated with Eureka’s design and idea. It is a tool that benefits the company by way of getting free ideas, helping a user to develop own ideas, and providing beneficial comment to varying existing projects. And, it’s a good way for the employees to network with each other. A suggestion for Eureka is to allow external experts or customers to take part in the development of ideas or the software.

Wind describes the development of clusters within an organization can encourage creativity. The software Eureka has a similar thought, by having the opportunity to read and comment on each other’s shared ideas to better enable their further development.

Von Hippel (2006) describes the benefits an organization receives when individuals within the company create innovations. This can be beneficial because one can freely use developed ideas within the organization - which can be compared to the Eureka model - where the users can develop new ideas that benefit the organization.
5.5 Feedback on Eureka

At the beginning of this thesis - the Eureka program was a complicated service - it was difficult to understand and explain it to others. After receiving a username and getting the chance to learn more about the software program – as a test user – it was much easier to understand.

Making use of a software as Eureka is an excellent way for businesses to get their employees to interact with each other. A larger company located in different cities or even different countries get the chance to know each other and communicate through this program. As it is possible to upload a profile picture on Eureka, it is likelier that people greet and socialize more with each other at a future organizational event. An additional benefit is that managers see ones profile picture - where it shows how many challenges you have participated in even if you have won. This can be beneficial to both the employees, as well as, the managers. As an employee - you have the opportunity to do well and show your skills - while managers can view who is engaged in solving organizational problems and how innovative their ideas are.

As previously mentioned, the open innovation method is a way to cut costs for developing an idea. But even the use of a software program can; reduce costs, shorten timelines, and minimize risks (Quinn et al., 1996). Eureka enables innovation and idea development. The Eureka respondents suggest ideas that could to enhance the software’s performance and customer benefits, e.g., some employee’s requests that functions be added, as well as, different subjects. Another proposal by the respondents who completed the questionnaire is to develop a mobile version of Eureka –to enable easier sharing ideas anytime and anywhere. Another important aspect that several Eureka users have pointed out is that they would like to add notifications. For example, send an alert when someone has liked or commented on your idea or perhaps when you update the status of an idea. In this way, employees would have the chance to see the notification directly, for example, through their electronic mail. (Questionnaire, 2013)

In this particularly case, the use of Eureka is considered a boost on an organization’s innovative capacity. Obviously, there are several suggestions regarding how to improve the software – to enable the organization to raise its innovation capacity. This has been addressed by the theories noted in this study. A typical way an organizations can expand their innovative
capabilities is through interaction. Interactions with other parties in network can radically increase an organization’s innovation capacity. (Szeto, 2000)

The employees provided useful feedback regarding Eureka. It’s a positive tool to develop new ideas. The users provided tips that can further improve the solutions and enhance its use usefulness in other areas within the organization. All in all, users believe that Eureka is a beneficial tool though it has room for more improvements.

5.6 Eureka improvement recommendations

Below is a list of improvements that can make Eureka a better innovation development tool. These suggested improvements are developed with the help of the thesis theory and its empirical data. The thought behind provided improvement recommendations is that they will help Tieto increase its capacity for innovation even more.

- Use the theory of open innovation and adjust Eureka, so that it can be made visible to external parties.

- Create a mobile version of Eureka for easier accessibility.

- Add functionality for notification handling - to handle inform about status changes or when someone comments on an idea.

- Increase the feedback on ideas by mentors or scoring teams – to motivate users to continue contributing ideas.

- Write a reflection about the project you participated, so that others can benefit from ones experience, as a result increasing learning.

- Have open subjects where you freely add ideas, create a column or category with free ideas – for a wider variety of ideas.

- Automatic search for similar ideas to avoid duplicates.
6 Conclusions

The final section answers the thesis issue. Conclusions are drawn on the analysis in the previous chapter.

6.1 Does Eureka increase an organization’s innovativeness?

This study has investigated how the Eureka social idea management software enables an organization to increase its innovativeness. The authors of this thesis have discovered several ways that Eureka increases an organizations' capacity for innovation. First and foremost, collaboration between different persons or departments is a way for organizations to increase their capacity for innovation, according Cujipers et al., (2011). The Eureka software has its core focus on interaction between employees. In addition, the Eureka community is the place of sharing and nurturing their ideas. The software program helps organizations to foster innovation such as; new or improved products, services and/or processes (Tieto, 2013d).

Tieto's innovation process — which is the backbone of their service Eureka — is an important aspect in the assessment of how the software increases a company's capacity for innovation (Tieto, 2013e). The model is clearly structured. It has different steps that describe how to proceed when attempting to bring an idea to fruition (Interview, 2013).

Jiang (2010) emphasizes the importance of rewarding and encouraging employees. The motivational aspect of Eureka is a fundamental process to increase innovation capacity. Through its various challenges — with reward systems and prizes — Eureka enables more employees to engage and contribute their ideas. It has provided incentives to users who provide winning ideas, e.g., a price for best innovative idea exists.

Another key to achieve innovation ability is creativity. Wind (2006) believes that through developing special tools, organizations can develop creative thinking. Eureka’s whole design and idea is associated with exactly this thought. Besides increasing an organizations’ capacity for innovation, the software has other advantages such as; reducing costs, shortening timelines, and minimizing risks (Quinn et al., 1996).
6.2 Suggestions for further research

Future studies to develop the result could be a combination of a larger users study – utilizing questionnaires in combination with interviews. Another possibility would be to look at ideas from the initial start of Eureka until today to determine whether ideas have been useful to the company. One could also investigate how many ideas have received patents and/or developed- from ideas to products. Further, studies could investigate how the system can be developed – via user feedback provided in this study. It would have been interesting to examine why all Tieto employees do not utilize Eureka and why so few responses — to the questionnaires — were received. This study shows that users think the Eureka software is useful but broader possibilities to provide input need development. Couple with this, studies in how ideas can be beneficial used by the organization could be examined, as well as, an examination into the whole process – from idea to results.
7 References


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Annex 1

Questionnaire

Innovation Technology Research

Isabella Hinds, Mälardalen University

*Obligatorisk

Background information

Gender *
☐ Female
☐ Male

Age *
☐ 30 or less
☐ 31 or more

In which department do you work? *

Research questions

How do you use Eureka? And how often do you use the software? *

Have you ever shared an idea or helped someone else develop an idea? If yes, have you been able to develop the idea? *
In what way do you feel that Eureka contributes to the company’s innovation capability? *

What do you consider is positive with the software and what do you consider is negative? *

What do you consider the interaction between different units/employees of a company contributes to? *

What would you like to improve or add to the software Eureka? *
Annex 2

Interview questions

• What is your role in relation to Tieto Eureka business? For instance; founder, contact person?

• Please provide a brief summary of Eureka and its purpose?

• In what year was Eureka created?

• What led Tieto to design or develop the Eureka system? If an unmet internal need existed within the organization, could you please specify what the need was?

• How do you market the software today? Do you have a specific target groups?

• Are all Tieto employees using the same Eureka system or does the system look different for different departments or users?

• According to our questionnaire we found out that there are “three categories” to share ideas in, which are these and why are they chosen?

• How does the Eureka challenge work? Who post them and how often? What type of rewards does the winner get?

• Who are the mentors and scoring teams? Are all ideas graded or just selected once? How does a mentor grade an idea?

• How are selected employee ideas funded?

• Are there “Confidentiality or Intellectual Property Rights (IPR)” clauses related to ideas shared via Eureka?

• Please describe what the outcome of the different steps in the Eureka innovation process? (New idea, cross-organizational feedback, mentor review, group review, prototyping and rewarding.)

• What do you believe is the actual value and/or benefit users get from working with Eureka