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Can the use of an Enterprise Social Network improve communication within an organization compared to intranet and email?

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<p>The objective of this research was to evaluate the effectiveness of using Enterprise Social Network (ESN) for internal communication. The key was to identify the organizational goal which is employee engagement; then to assess if using ESN can help the company reach the goal. Meanwhile, the author investigated if the ESN is a possible alternative to email and intranet by comparing their function and popularity.</p> <p>The author applied the quantitative approach and collected primary data through a survey at the case company – Staria. Among over 250 personnel, there were 59 respondents from nine departments. The author combined descriptive and exploratory methods to explain the results.</p> <p>The result described how the ESN boosts employees' emotional engagement and behavioral engagement, particularly relating this platform to email and intranet. Additionally, the ESN was recognized as an effective tool for the digital workspace during the epidemic. Moreover, the author also discovered the limitations of the ESN for further improvement.</p> <p>The research finally concluded that using ESN can help to enhance the efficiency of internal communication. The last chapter exhibited recommendations for other academic researchers to develop the thesis idea further and for the company to choose a suitable communication channel and a strategic approach for their internal communication.</p>	
Keywords	ESN, employee engagement, internal communication

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List of Abbreviations

ESN: Enterprise Social Network

SNS: Social Networking Site

MS Teams: Microsoft Teams

1 Introduction

Internal communication plays a key role in the success of a business. According to the Holmes report (2011), 400 surveyed corporations (with 100,000 plus employees in the U.S. and U.K.) identified that poor communication caused the average cost of \$62.4 million per year to the organization in lost productivity. Therefore, companies better pay more attention to it. In the same survey, Best Buy discovered that higher employee engagement resulted in better store performance. Specifically, the operating income of each store increased by \$100,000 annually for every percentage point it boosted employee engagement (Holmes, 2011).

Technology is undeniably a core factor contributing to the effectiveness of communication. The invention of the internet eliminated the costs of phone calls and physical meetings. New technologies are making people's behaviors, decisions, and preferences more visible (Leonardi, 2014). By using software and networking sites, the team can easily collaborate and synchronize their tasks. The use of Enterprise Social Networks (ESNs) is believed to increase communication effectiveness and work productivity.

Besides, technology was designed to serve human needs. Matt Mullenweg – a social media entrepreneur said:

“Technology is best when it brings people together.”

Indeed, the meaning of communication is for people to understand each other. Hence, user experience is, undoubtedly, a superiority when developers create or update a communication software.

The content of this thesis is to understand why and how the development of Enterprise social networks enhances internal communication effectiveness compared to traditional channels: intranet and email. To answer the thesis question, there are four sections in the Literature Review part. The first chapter 2.1 provides the basic model of the social communication and how it is applied in the organization. In chapter 2.2, the author aims to explain the definition, origin, advantages and disadvantages of ESNs. Chapter 2.3 emphasizes on the organizational goal: employee engagement. Meanwhile, the writer proves that ESNs help to improve the employees' emotional and behavioral engagement. Another important function of ESN is to facilitate the digital workspace.

Next, the section 2.3 indicates that the uniqueness of ESNs compared to other organizational communication tools such as email and intranet lies behind its higher degree of employee engagement (Leonardi 2014). Section 2.4 presents the popularity of ESNs as the evidence for the possibilities of the thesis question.

Supported by the case company Staria Oyj, the main intention of this research is to investigate the current status of Staria's communication channels from the users' points of view. Staria Oyj has over 250 employees and is currently expanding. This development drew the author's interest in investigating how teams manage to exchange information effectively and what improvement is vital for the future of the company.

2 Literature review

2.1 A glance at internal communication

Internal communication is one of the sustainable competitive advantages of an organization. It helps to reduce costs and differentiate the organization from others. In terms of cost-saving, effective internal communication can decrease employee turnover (the number or percentage of workers who leave a company and are replaced by new employees). In other words, hiring and training costs can be saved. When it comes to differentiation, employee performance is key because committed employees can create innovation, satisfy customers, and generate productivity for the company. To answer why the Enterprise Social Network (ESN) is in use, first we need to explore the development of internal communication.

2.1.1 The basic model of communication

Communication is an act of transferring information from one place, person, or group to another. The term requires a level of success in delivering a message, whether information, ideas, or emotions (Jabbar 2018).

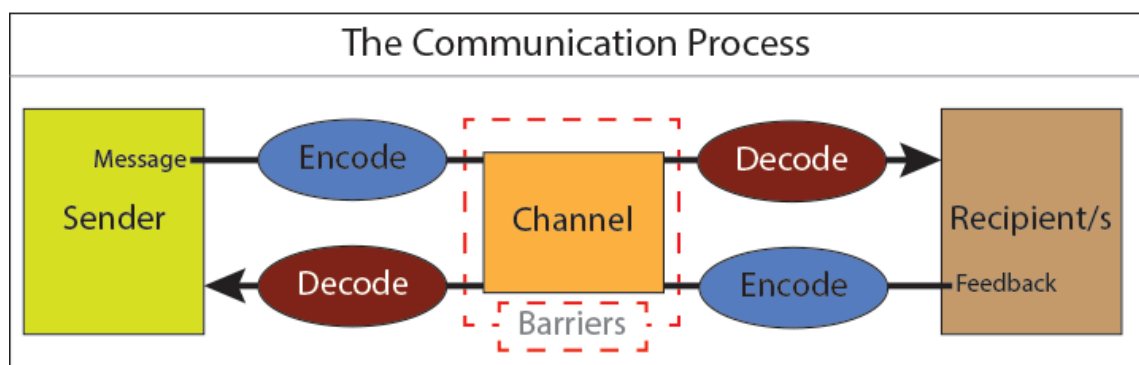


Figure 1. The communication process (Jabbar 2018)

The sender initially encodes the message into a form that is suitable for the communication channel, and the receiver(s) then decodes the message to understand its meaning. Barriers mean potential misunderstanding during the process of conveying messages. Hence, an effective communicator needs to select a proper communication

channel and understand the audiences to reduce misunderstanding by the receiver(s). The sender also wants to discover how the message is understood and attempt to correct any confusion; in other words, collect the feedback.

There are a variety of communication channels within an organization including face-to-face conversations, telephone calls, text messages, email, and multiple enterprise social networks such as Facebook and Twitter.

2.1.2 Organizational communication theories

Most organizations applied the top-down hierarchy model to build their structure even until now (Morgan 2015). Jaques in 1990 emphasized that managerial top-down hierarchy was the most efficient approach because it was the only form that enabled managers to control their employees' work and ensured the completion of assigned tasks. The decision - making as well as the internal communication process flowed top-down accordingly, meaning that higher managers gave the command and information for lower ones. This approach was supposed to increase effective management and decrease the risk of many contrasting opinions involved due to strategic decisions created from the top managers.



Figure 2. Hierarchical top-down organization (Whipple 2014)

However, there were many drawbacks to this model. If only top managers possessed power, the communication would be a subjective command from the top to the bottom which also negatively impacted the company development. Morgan (2015) indicated that the communication flow from top to bottom led to ineffective engagement between the top managers and employees. Employees might misunderstand because information went through a lot of layers. It was also a time-consuming process. Meanwhile, employees were less flexible to adapt and react to accidental environment issues because they needed acceptance from higher managers. Another problem was innovation deterrence since the bottom workers only followed the rule without creating a more effective way of working. The taller the pyramid was, the harder and more time-wasting the information flowed. Moreover, the approach caused lacking interpersonal trust among employees (Leonardi 2014). Employees might think the workload was divided unfairly or underestimate others' work.

Being aware of those disadvantages, bottom-up communication was designed to increase employee engagement (Eby 2018). According to Eby (2018), the approach relied on the inclusion of all employees, their ideas, and their perceptions of the business to make the most appropriate decisions. It was sometimes considered as the "seed model" since small ideas of each employee could combine and grow into a big goal and success of the company. There were many advantages of bottom-up communication. Firstly, it improved the company-wide communication when encouraging employees to actively participate in the decision-making process. Secondly, problem-solving could be faster and more efficient since employees shared their thoughts with each other. Thirdly, recognition of each member's value could shape a communicative and supportive environment where all members could learn and self-improve together. Finally, bottom-up communication boosted the growth of interpersonal trust within an organization where people obtained a deeper understanding of others' thoughts, responsibilities, and tasks.



Figure 3. Hierarchical bottom-up organization (Whipple 2014)

Nonetheless, there were still some disadvantages of bottom-up communication. Sometimes, a variety of ideas from many people could slow down the decision-making process while conflicts and disagreements easily appeared among colleagues.

Table 1. Comparison between top-up and bottom-down internal communication

Bottom-up communication	Top-down communication
<ul style="list-style-type: none"> ● High employee engagement to decision making process ● Faster information flow ● Faster responses to challenges ● Boost morale working environment that employees can be innovative and supportive ● Build interpersonal trust ● Lots of individual ideas can slow down the decision-making process ● Conflicts and disagreements can appear 	<ul style="list-style-type: none"> ● Dictatorial attitudes make subjective decisions ● Slow information flow ● Less flexibility to changes of environment and customers' needs ● Innovation deterrence due to lack of active employees' participation ● Lack of interpersonal trust ● Fast and simple decision-making process (only by top managers) ● Reduce the risk of conflicting opinions

Two theories tended to address different issues. Hence, a combination of them could facilitate the internal communication process.

2.2 An overview of Enterprise Social Networks (ESNs)

2.2.1 The emergence of ESNs

The Enterprise Social Network (ESN) has emerged along with the expansion of social media, technological development, and demand for employee engagement.

Public social networking sites (SNSs) were invented following the development of virtual communication. "Facebook was created in 2004, Twitter in 2006, the iPhone arrived in 2007, and several other social networks have come and gone since" (Synergy 2017). However, opposers argued that social media distracted employees because there is a lot of unrelated information appearing there. To solve the problem, an internal networking site for a workplace which only people in the company can access was invented. Global public SNSs users are predicted to rise to 2.55 billion users by 2017 (eMarketer 2013) is supporting the trend of social networking platforms usage in the corporate realm. One of the first networking sites was Yammer — a cloud and app-based social network for work — created in 2008. (Syrnergy 2017). The difference from other social media is that Yammer is a closed system that requires infrastructure and administration, connected only to the internal company. Yammer is an example of an Enterprise Social Network (ESN). The ESN is a social networking platform used within an organization.

With the aid of modern technology, there is various communication software invented to improve the communication process. By turning communication into data and information, communication is becoming more visible, which helps employees easily to "see". There is a saying: "Better to see something once than to hear about it a thousand times." Indeed, sometimes, writing is better than saying in delivering the throughout the meaning of an issue. When one may not remember the conversation, it is also easier to bring back the memory because communication is stored in the form of visible data. Cloud-base software and artificial intelligence (AI) are key driving forces to the improvement of ESNs because they facilitate the speed of the communication process and reduce manual work. Artificial intelligence (AI), as defined by Rouse (2020), is the simulation of human intelligence processes by machines, especially computer systems.

ESNs do not need installation on the desktop but can run on a network of remote servers hosted on the internet. Therefore, people can access the information by using a smartphone instead of a computer like before. AI can help to do people's regular work and make them find the requested information easier. For example, AI-driven chatbots were one of the favorite functions for employees (LiveTiles 2019). HR members face a common problem that they must answer the same questions repeatedly. Intelligent programs such as chatbots help to decrease this unnecessary repetition. Questions such as company policies can be largely automated with smart and specific answers. AI-functions like chatbots can save time for the HR team and other employees who need information.

The employees' role is increasingly important. Software developers aim to invent innovative communication channels to facilitate internal communication and connect the employees together. The use of Web 2.0 applications (for example, social networking, blogs, wikis, or micro-blogging services) for the information exchange within an organization is not a novel idea. McAfee (2006) referred to this phenomenon as "Enterprise 2.0" (or E2.0). ESN is a part of the E2.0 phenomenon and has been considered as a web-based internal social networking platform. ESN aims to connect managers, employees, and external stakeholders by creating and maintaining social relationships; facilitating collaborations and interactions through content creation (van Osch and Coursaris 2013). An ESN platform normally includes multiple social media functionalities such as status updates, blogging, creating groups and communities, real-time messaging, content management system (for instance, upload and share files and other digital resources), enterprise search, ratings as well as social network features such as profiles and the ability to connect with, follow, like or praise someone (Leonardi et al. 2013).

2.2.2 ESN vs face-to-face communication

Before the invention of the internet, face-to-face communication played a significant role in any business. Nowadays, this role has been shifted to virtual communication due to the outstanding advantages as following:

Convenience is the biggest advantage of using ESNs since the meetings via ESNs can occur anytime and anywhere. Especially in a large-size organization where there are many departments in different locations, it is time- and money-consuming to travel and

meet other staff. If the company applies digital workspace, money can be saved because there is no need for facilities, equipment, arrangement of transportation and accommodation to organize a meeting place. With online meetings, people can meet whenever they are available.

Additionally, workplace communication by telephone or face-to-face encounters is largely invisible to all but the parties involved. The number of people who receive the information is small relative to the size of most teams. On the other hand, the software increases communication visibility by loosening the requirement to select target audiences. For example, email can be sent to a huge quantity of users. Message can be also forwarded if someone is mistakenly not included in the conversation (Leonardi 2014). A virtual meeting via ESNs also widens the networking capabilities. More people can attend at the same time without worrying about arranging a face-to-face meeting that fits individual schedules.

Moreover, the sender can create, edit, and sort a file in shared folders that can be accessed by team members. Shared databases and other repositories are often password protected and stored in a location unknown to outsiders. Detailed information about the conversation can also be recorded in the software so that staff can retrieve information whenever they need it. It avoids wasting time repeatedly dealing with one issue. Users can view, post, edit and sort others' messages, and files in the organization.

Nonetheless, communication via the ESN lacks human interaction so it cannot replace face-to-face communication. The flexible use of both can lead to more effective communication than the use of one.

2.2.1 Drawbacks of using ESNs

On the other hand, ESNs still have drawbacks. Firstly, messages can get disorganized fast: When several people collaborate on a project in a chat window, a person has to spend a lot of time to find relevant information. At the same time, it is difficult to keep track of what is going on when a person is just offline for a while. Besides, when staff can use informal messages, it seems to be hard for substantive conversations over group instant messages. Moreover, with push notifications and emojis, like social media, people can be easily addicted by spending too much time checking messages and less time actually doing their work. If the employees use those social platforms only for social

talk, their productivity can be reduced. To prevent this issue, leaders of such social platforms should ensure participants understand that it is a business platform and not a social platform. Grimm (2018) ensure it remains a business platform is by: Communicate the business value that can be achieved through the platform; Showcase the business value achieved from the platform.

2.3 Internal communication effectiveness by using ESNs

2.3.1 Organizational goal: employee engagement

The employees have been a key in any organization (Dean 2018). Hence, the company's goal and strategy are always designed with the focus on the experience of employees. It differed from the traditional approaches where the director role was central, and strategy was a subjective preference of managers. The employee-centric approach involved the preferences and expectations of employees; thus, managers will make the decision to drive employee's participation.

"For employees to be highly productive, they require clear role expectations, the ability to do what they do best, communication about their organization's mission and purpose, and learning and development opportunities [...]. When employees' needs are met, they don't just become "happier"—they become better performers." – Gallup

There are several reasons for the development of employee-centric communication:

Firstly, employee-centric communication contributes significantly to higher profits and organizational growth. According to Williams-Staples (2015), 98% of employees at Atlassian were proud that their company culture was employee-centric. Atlassian grew its staff by 80% in a single year and with their satisfaction, the company was successfully expanding to the estimated valuation of \$3.3 billion just 13 years after its founding.

Secondly, it is a win-win approach that benefits both employers and employees. If employees commit to the short- and long-term goals of the company, they will boost productivity. Besides, employee-centric companies can attract talented employees, reducing employee turnover rate which is expensive. Hence, employers can increase

their received benefits due to business growth while employees have the satisfaction of working as discussed.

The employee-centric strategy has the full possibility to address the drawbacks mentioned above of hierarchical top-down communication. Employees can actively access information through networking channels without waiting for the managers. The information flow is faster when the number of layers reduces. Furthermore, staff can be more flexible and creative to address a sudden issue when they are allowed and encouraged to do so.

More importantly, staff can be especially more prompt in responding to customers' needs by virtual meetings. Speed is one of the competitive advantages of companies in the service field. Quick response to customers' needs can decide if the company can build up trust or lose customers to competitors.

The McKinsey Global Institute presented also that disengaged employees cost U.S companies around 450 to 500 billion dollars each year. The reason behind this loss is a reduction in employee productivity. Employees can become bored and think of leaving the job. The research also indicated that profit can increase by 21% in companies if employees are engaged (Smarp 2019). The engagement includes seeing and knowing organizational information, the ability to express themselves and get recognition, get involved in company activities.

According to Maslow's Hierarchy of Needs, the higher stage the employees' needs reached, the more commitment and contribution they could make (McLeod 2018). For example, a proper salary that employees receive helps them afford physiological needs such as food, clothing, and so on. Employees can be satisfied with safety needs if they have health insurance and security at work. Moreover, friendship with colleagues can make a person feel more connected with the working environment. Appraisal and respect from other coworkers will fulfill the needs of esteem. McLeod (2018) argued that after the needs in those four stages were met, employees' motivation would decrease.



Figure 4. Maslow's Hierarchy of Needs (McLeod 2018)

However, if the self-actualization stage was reached, it would increase the motivation. Indeed, an employee-centric approach whose focus is on motivation tries to deliver the highest level of needs to employees by giving them opportunities to feel as an important addition to the company.

To enable employees to engage in the workplace, Shuck and Reio (2013) suggest two constructs: Emotional engagement and behavioral engagement.

2.3.2 Emotional engagement

Emotional engagement, as defined by Shuck and Reio (2013: 5), is to invest emotional resources such as pride, trust, and other positive feelings that employees have to their work. Employees can fully focus on the tasks if they are not distracted by negative or irrelevant thoughts. Employees who are emotionally engaged in their work answer affirmatively to questions such as "I feel a strong sense of belonging and identity with my organization" and "I am proud to work here." (Shuck and Reio, 2013, p. 5). Right attitudes can lead to the right behaviors which will be discussed in the next chapter 2.3.3.

Hoisein (2013) emphasizes that the use of social networking sites raised employees' emotional engagement by supporting both strong and weak ties:

Strong ties referred to trust and pride that encourages teamwork activities (Hansen 1999). For instance, if colleagues trust each other, it will be easier for them to do work

together and avoid conflict. In the ESN communities, information is disclosed and transparent so that the staff can know their tasks are meaningful and connected with the organizational goal. Besides, they also know others' tasks to avoid the feeling of doubt or unfairness. Moreover, people are free to share their achievements in ESNs. Appraisals and recognition from managers and other colleagues can be a significant motivation for them.

Weak ties meant the connection of individuals from different backgrounds in terms of non-redundant information exchange (Obstfeld 2005). For example, employees could share personal lives and build friendships, consequently being sympathetic to each other and being connected with the workplace. The ESN is an ideal place for the time-saving personal talk since people usually do not have a chance to meet face-to-face. The ESN also has 1-on-1 and small group channels so that employees can be more comfortable to share their thoughts. Both work-related and casual discussions are important for each employee to achieve the work-life balance.

The combination of two formats surely makes the employee feel connected to the workplace. Hoisein (2013) encouraged that the use of social media – as opposed to email, phone, and intranet – enabled staff to make their behaviors, knowledge, and preferences visible.

2.3.3 Behavioral engagement

Shuck and Reio (2013: 5) explain that behavioral engagement is the most overt form of the employee engagement process. The construct can be understood as increased levels of effort towards organizational goals. Employees who are behaviorally engaged can answer such as “When I work, I really push myself beyond what is expected of me” and “I work harder than is expected to help my organization be successful” (Shuck & Reio 2013: 5). The clear engaged behaviors are willingness to share knowledge and generate innovation.

Knowledge sharing

A huge quantity of studies in the past proved that successful organizations created the most convenient working environment where employees could share knowledge with one another (Hansen 1999; Tortoriello et al. 2012). Gibb et al. (2013) state that

increasing visibility of communication shaped the knowledge sharing in organizations. Using ESNs generated not only more visible information but also more effective knowledge sharing.

It is undeniable that the growth in the size of a company demands more knowledge sharing. Imagine that there are three people in a team. The communication would be simpler since one can keep track of the tasks of other members. When a team includes over ten people, it is more difficult to share knowledge. All members should cooperate and achieve a common goal. Without knowledge sharing, people may not be aware of others' tasks. This unawareness may cause problems of duplicate work, unnecessary meetings, to name but a few. If the communication is ineffective, the business growth will be stunted.

Leonardi (2014) indicates that a great amount of the work performs in an organization is highly invisible since work is divided into small task units and spread across staff in various groups and departments. Another problem is coordination which a person does not know if a task has been done or not, so duplicate work can easily occur. Knowledge sharing, hence, is to make workflow, activity status, and even worker locations more visible. It can enable knowledge sharing among employees and avoid many problems occurring when information is largely invisible.

Organizational knowledge such as knowledge about who knows what and who knows who can be acquired through ESNs. The knowledge helps to save time for employees for finding the needed information. Before staff can acquire further advanced knowledge, they must know where to get it and how to access to other staff, files, or databases (Leonardi 2014). For example, knowing more about colleagues' areas of expertise might lower the amount of effort needed for identifying experts for a knowledge problem (Hoisein 2013). Before the development of coworking portals, they could only observe others' tasks but now they can learn and gain a deep understanding of the working process. Communication software benefits, according to Leonardi et al. (2013), allows workers: "(1) communicate messages with specific coworkers or broadcast messages to everyone in the organization; (2) explicitly indicate or implicitly reveal particular coworkers as communication partners; (3) post, edit, and sort text and files linked to themselves or others; and (4) view the messages, connections, text, and files communicated, posted, edited, and sorted by others in the organization at any time".

Innovation generated by knowledge sharing

Knowledge sharing, as discussed in the previous chapter, is facilitated by using ESNs. Leonardi (2014) suggests that enhancing knowledge sharing among employees could lead to more innovative products and services. Innovation is no doubt a criterion to measure employee productivity. The author showed two new ways of working as a result of utilizing coworking portals to improve knowledge sharing. The first way was that enhancing knowledge sharing helped staff to avoid doing duplicate jobs. Duplicate jobs can be tasks that had already been done or knowledge that a coworker had already learned and could share. Avoiding knowledge duplication was a tremendous benefit for employees and for the whole organization (Leonardi 2014). There is a saying “We hire smart people and we want them to share what they know. We’re a better company when that happens”. It is essential to help individuals be aware of who might have done something similar or had similar knowledge and who could help them get to those people and their products. Another new way of working was that knowledge sharing helped us to collect existing knowledge in the organization and reuse in new combinations. New combinations could result in novel and useful changes in products or processes, which is called “recombinant innovation” (Leonardi 2014). It is difficult to generate good and new ideas that translate into new product offerings. Hence, this working method helps to save time and utilize efficiently organizational resources.

Two new ways of working could be facilitated by two behavioral changes (Leonardi 2014). First, “From Experiential Learning to Vicarious Learning” was to shift the way the employee learned from others. Instead of learning through personal experience, learning vicariously by asking directly from a coworker, or observing the communication among coworkers was encouraged. Because personal knowledge could be limited and opinion could be objective, knowledge sharing among colleagues was a key to find the best solution for a problem. The other one was “From Reactive Search to Proactive Aggregation”. Proactive work referred to aggregating information perceived daily after facing problems. People seek out knowledge and relationships that helped solve problems and created new knowledge (Hoisein 2013).

Implementation of ESN factors on behavioral engagement

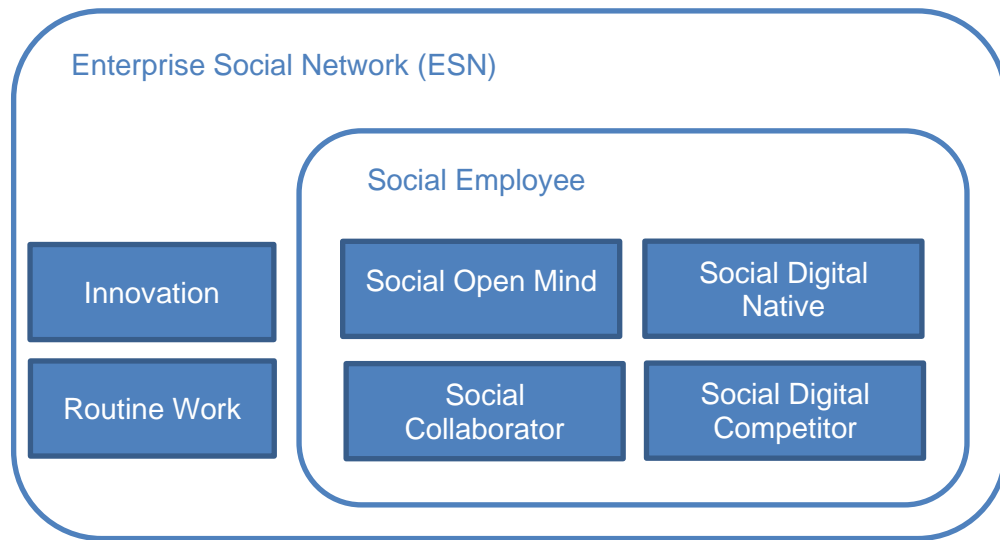


Figure 5. Employee ESN factors (Patroni et al. 2016)

According to Patroni et al. (2016), ESNs provide employees an indispensable opportunity for collaborating and discovering new ideas. The mentioned authors identify four key themes associated with employees' ESN use for behavioral engagement: social open minds, social digital natives, social collaborators, and social competitors.

In the "social open minds" theme, the mindset of employees who use ESN not only for routine work but also for innovation activities can be defined as being open-minded. Those people are willing to change their current work practices and learn from others. It is necessary to have a supportive environment that encourages an open mindset. ESN, hence, is used for promoting the open and transparent communication. Particularly, opinions and materials in ESN communities can be seen by many people, which differs significantly from traditionally more private methods of communication such as email or face-to-face meetings. It is the organizational responsibility to create an open-minded environment for idea sharing and brainstorming, since the employees need to feel safe to socialize ideas with others (Patroni et al. 2016).

The "social digital natives" are younger employees who use social media frequently. They can easily adapt the ENS and consider the tool as an opportunity to interact with their colleagues and managers. Employees in this category feel more connected and engaged when they received active responses to their posts and comments. In contrast,

the older generation who does not have experience with social media may prefer face-to-face communication. They even feel the ESN as a burden since it is difficult for them to use. Hence, they may not feel more engaged even if others respond using the ESN (Patroni et al. 2016).

The “social collaborators” refer to employees who believe in transparency of communication, collective thoughts, and working smarter by building on the work of others. The ESN, hence, provides them the chance to create new or use existing ESN communities to actively and openly share their opinions, posts, and comments with employees from different teams, departments, and regions. Social collaborators believe that knowledge sharing is a win-win approach; in particular, the success of an individual or a team can be learned and adopted by other individuals or teams (Patroni et al. 2016).

Some employees feel that ESN communities enable friendly competitions, so they are called “social competitors”. The concern of others’ achievement can become the motivation for “social competitors” to be more creative. This form of competition encourages employees to share knowledge, outstanding performance and results on the ESN communities. Importantly, competition takes place outside any obvious managers’ investigation and is mostly driven by pride and competitive motivations (Patroni et al. 2016).

2.3.4 Facilitating digital workspace

During the Covid-19 epidemic in 2020, ESN is also a compulsory tool for the digital workspace.

Definition and driving forces of the digital workspace

According to Radius (2017), the digital workspace is “a new concept that enables tech-savvy employees to access the systems and tools they need from any device—smartphone, tablet, laptop, or desktop—regardless of location. Emerging technologies now make it possible to deliver the infrastructure needed to enable employees to work securely and productively from home, the office, or on the road.” In a simpler way, the digital workspace means to enable employees to work remotely. The digital workspace empowers employees and unlocking new possibilities to increase productivity.

Working from home is becoming more popular since employee well-being is getting more concern in businesses. IWG (a Switzerland-based serviced office provider) surveyed 180000 business professionals and discovered that 70% of professionals work remotely at least one day per week (Browne 2018). The ability to work from home and the emergence of digital office enabled the change in employees' attitudes. "If you offer workers the chance to work where they need to be, and not where they are told to go to, it completely transforms their view of the company, they are more productive," Chief Executive Mark Dixon of IWG said (Browne 2019). Digital workspace is particularly useful for those who are on holiday or having small children to do distant work. Employees can achieve work-life balance since they do not need to come to the office every single day. They can spend time on hobbies and healthcare.

Role of ESNs in digital workspaces

The adoption of ESNs tools facilitates real-time and quick communication among colleagues and teams. Work collaboration can become more comfortable when employees can receive instant responses to their problems with modern ESN platforms. Communication with other stakeholders can also be more efficient with prompt answers and actions because information in ESNs is up to date with real-time messaging function. Communication is the center of any business success. Teams need to collaborate frequently so physical workspace was the best choice in the past. However, nowadays people can use ESNs to communicate quickly with colleagues. It proves that the ESN is a core tool in the digital workspace (van Osch and Coursaris 2013).

ESNs in smartphones - new solutions to digital workspace

It is apparent that there is soaring smartphone use. In the fast-driving technological era, it is difficult to see someone who does not have a mobile phone. Mobile phones are becoming indispensable, particularly for youngsters. According to Coworker (2019), two-thirds of employees found information on their company mobile app faster and easier than other content sources such as intranets. The survey presented a dramatic trend in using mobile applications in communication because it seemed to be quicker than the traditional method. Indeed, if the information is located on the intranet, employees need to spend a lot of time searching. Employees nowadays are more comfortable with mobile phones. It can be especially more convenient for traveling workers to interact with mobile

communication than web-based intranet because employees do not always bring laptops to access the intranet.

2.4 Comparison among ESN, Intranet and Email

ESN vs Intranet

The first intranet was built in 1989 by Tim Berners-Lee (Sobczak 2015). The intranet was for top-down communication only, in other words, one-way distribution of official information from top management to employee. Senior leaders played an essential role in the intranet launch and ongoing adoption plan because apparently more employees would take notice of a message from the CEO rather than their colleagues. The concept also provided the intranet a legitimacy when top executives emphasized how it matched with organizational goals and strategies. Some examples of official internal communication could be company guidelines, official internal bulletins, and articles written by the top management (Korhonen 2018). Its prominent characteristics were stability and hardly change. Hence, new information may not be updated on time. The wrong information can be spread throughout the organization without notice. Furthermore, employees normally said they could not find their required information without long-time searching, leading to the time-consuming. The biggest problem of the intranet was the poor user experience. The intranet includes mainly dashboards for senior executives, which also discouraged collaboration and social influencing (Singh & Diamond 2015: 359) Employees needed more functions than reading companies' news. Many employees did not feel interested in the company news because they could not engage themselves.

On the other hand, ESN includes both the top-down and the bottom-up communication, meaning the two-way communication within the teams and communities. It differs from the intranet because of characteristics: ordinary, everyday, informal, appearing within work communities, forming communities, supporting work tasks, information changing constantly (Korhonen 2018). The benefits of social communication were that people can freely create knowledgeable documents and share with others. Hence, the staff might feel more valuable and connected to their work. Employee, as mentioned in the previous section, has been a key factor in communication. Therefore, the channel which regarded human as a central element was always the right choice of companies. Standard

examples of unofficial or social communication could be working in a project, an active exchange of ideas between experts within the same organization. For example, employees' editing rights and content contributions are available in the ESN but not the intranet. Besides, ESNs are equipped with a searchable history function that staff can search for every file and conversation whenever they need it. It can be faster than searching on the intranet (van Osch and Coursaris 2013).

ESN vs Email

Email or electronic mail was invented in 1969 by Ray Tomlinson (Phrasee 2016). The outstanding innovation was quickly adopted globally and played a significantly important role in the business including internal communication. Email supported both 1-to-1 communication and group discussion virtually. Companies could create workgroup emails to reach staff which was more convenient than word of mouths or sending printouts (Faber 2018). There were many disadvantages to emails nowadays concerning employee experience. Skeels and Grudin (2009) suggested that email was employed in an organization a "push technology". It meant that emails arrived at people's mailboxes not because the recipients wanted them but because the messages were sent to them (push toward employees). Hence, people were often stressed when dealing with a high quantity of received emails, especially many irrelevant emails such as marketing and promotion ones. Messages could be dismissed or left unread. They could not ignore email for a long time because more emails would come. Therefore, emails required constant maintenance which might cause distraction in work. It is undeniable that email is not suitable for discussing time-sensitive issues. It normally takes time for a person to respond due to a huge quantity of emails. Especially if the content of the email is long and complicated, it can be misunderstood. The message which requires additional discussion should be delivered by a call or face-to-face meeting. Next, email is where people exchange formal writing which is more or less a time-wasting way of communication because they need to think of appropriate words in use. More importantly, opposers of emails emphasized that emails were outdated and boring to employees to use.

On the other hand, there are a variety of modern ESNs supporting digital workspace and improving employee experience. Opposing to email, those ESNs have improved social connection function. Hence, they were considered as "pull" technologies (Skeels & Grudin 2009). They had a unique characteristic that they could provide both information

and communication capabilities. Furthermore, the chat window is equipped with a lot of emotional stickers, attracting the employees more than email communication. Employees can easily adopt information since it was delivered in a less formal and more creative way. Another interesting function is that they are even better in collaboration function than email due to 1-1 communication, direct messaging, and to name but a few. ESNs have a unique function named real-time communication, meaning prompt information exchange without delay. This function is a solution to the postponement issue of email, allowing timesaving. Employees can in real-time share, comment on documents or other opinions, and receive instant feedback. Another unique feature supporting real-time communication is notifications. Platforms will send alerts to users when there is a new message in their group.

2.5 Use of ESNs, intranet and email nowadays

In fact, many startups and growing SMEs nowadays use ESN platforms such as Slack, Hipchat, Campfire, Basecamp, Redbooth, to name but a few. The platforms are especially helpful when companies operate activities abroad. Besides coworkers, a business can bring clients, contractors, or guests into specific conversations. The communication applications can help to keep important stakeholders who are not part of your core team up to date on a project. They are new solutions for fast-growing companies, since new employees get access to any previous conversations once they're added to a channel (van Osch and Coursaris 2013). Moreover, companies often changed their plans and objectives due to growth requirements. If they use the intranet, the documents are easily outdated and need constant updating. If they use email, they need to wait a long time to get respond. Hence, ESNs are designed for up-to-date information and fast response to any issues. Businesses with many vendors, customers, regulators may also benefit because they require flexibility and speed in communication. If the platform features can be further improved, according to supporters, it will be the future of internal communication (van Osch and Coursaris 2013).

Even with many advantages, ESNs cannot replace totally intranets. While intranets can integrate smoothly with other software programs, ESNs cannot. For example, the most popular intranet platform - Microsoft SharePoint managing workflows can link with a documents-storage OneDrive, collaboration tools Skype and Team, and also company social media such as Facebook and LinkedIn. This is what Slack - a mobile

communication platform cannot have. Advocates of the intranet indicated that huge and stable organizations seem to prefer the intranet over ESNs. The reason is that the materials of company goals and strategies can be provided to employees thoroughly on the intranet. Hence, employees can have a clear view of organizational charts and each member's role. ESNs seem to focus more on real-time activities and short-term objectives than organizational information and long-term objectives. Therefore, staff may not follow the company's strategic direction, which can prevent the firm from developing. Moreover, an ESN cannot provide enough information for an organization with a complicated workflow and a large number of employees (Leonardi 2014).

ESNs can be more efficient in real-time communication but cannot win email on keeping important messages and files. Supporters believe that email is the most versatile communication tool and can be improved instead of abandoned. Emails should be used efficiently in specific situations, for example, simple and short messages with a few attachments. Big group discussion, long text about company knowledge, transporting large files are not suitable email activities (Leonardi 2014). More importantly, email is free of charge while ESN platforms require charging on license fees. Companies with limited budgets may choose email over other modern platforms. More importantly, formal communication is still prioritized, particularly in communication between employers and employees because it creates a more reliable and responsible feeling than an informal one (Leonardi 2014). Email has been still one of the most popular tools for internal communication nowadays (Vdovin 2020). Popular email channels are Outlook and Gmail.

To sum up, each channel has its own advantages and disadvantages. Depending on using purpose, an organization can choose a more suitable option. Request for instant feedback from employees is necessary for developing an appropriate communication channel.

3 Research Methodology

3.1 Case company and research objectives

Staria Oyj is an international company based in Helsinki, Finland. The company provides international financial services in over 30 countries with experience in many industries, ranging from the traditional forestry industry to expertise in restaurant chains. Staria's services include HR & Payroll, Netsuite ERP solutions, Accounting services, and Robotic process automation. Staria's unique ONE STOP® delivery model is designed for international growth companies. The model means offering a new and easy way to manage subsidiaries around the world – with one partner and one team.

Staria is currently expanding with over 250 employees and 8 offices. It was revealed that company turnover rose by 40% in 2019 and estimated to reach € 25 million in 2020. Staria is a leading NetSuite partner in the Nordic countries with multiple awards and acknowledgments.

Under the CEO, there are nine departments. Due to the pressure of rapid growth, the company is hiring more employees across all departments. Communication among departments and employees is becoming more complicated.



Figure 6. Staria Organization Chart

Besides, the company has witnessed an epidemic time caused by COVID-19. All company members must stay at home and work remotely. The communication challenges have increased.

Therefore, the main objective of this case study focuses on the user experience of different communication channels to help the business run smoothly. The main portals of the company are Microsoft SharePoint, Team, Skype, and Outlook. The author will investigate if the use of ESNs can boost the communication effectiveness compared to the email and intranet.

3.2 Research design

Data collection method

Data collection methods used in this research is quantitative approach. While qualitative technique generates no statistical data but only descriptive perceptions or opinions, the quantitative method always collects data in the numerical form which will be later analyzed with mathematical terms (White 2003). This method is utilized as there is a large number of respondents needed

In quantitative research, the representativeness of the sample is significantly important. It includes the method of how to choose the sample (random, proportional, convenient...) and the sample scale. Collecting information requires a predetermined structure, based on the research model and research targets. Factors in the model must be measured or transformed into numbers (White 2003).

The author will use primary data collected by a survey. This method can help to address the issues with the right targets. The survey will be made by Google Form and distributed to the internal organization.

Type of research

There are three types of survey research: exploratory, descriptive, and causal. Exploratory research aims to explore the ideas and insights as opposed to collecting statistically accurate data (White 2003). This type of research builds mostly open-

ended questions to expand the author's understanding of surveying people. Unlike exploratory research, descriptive one is preplanned and structured in design so the information collected can be statistically inferred on a population. The main purpose of this research is to better describe an opinion, attitude, or behavior so multiple-choice questions are chosen. Like descriptive research, causal research is based on preplanned and structured in design. The difference from the former one is that it aims to explain to decide whether a relationship is causal through experimentation.

The author will use the descriptive research as the main method. The purpose is to statistically collect feedbacks from the personnel with structured questions and answer choices relating to the literature review chapter. Besides, the author will include a few open-ended questions and apply the exploratory method to gain the insights of ESN users.

Data sample

Choosing a data sample is necessary because it provides up-to-date, in-depth, relevant, and highly accurate information. Besides, it is difficult to gather information from all the people involved. Hence, this method can save time and money (White 2003).

There are two types of sampling: Probability and Non-probability. The former one has uniform criteria and higher reliability while the later one has convenient criteria. The author, hence, chooses the probability sampling.

The targets of the survey are Staria employees. The researcher will use the simple random sampling, meaning to select randomly a group of staff to investigate. Among 250 personnel at Staria, the study aims at a sample of 50 random ones.

Survey process

The process of doing a survey or a questionnaire will be in order: identifying the content, formulating questions, sequence questions, and format the questionnaire (Dillman 2000).

In terms of content, the survey will analyze the user experience of employee-coworking portals relating to the literature review. The facility of digital workspace, social media

function, and speed of the communication process are considered when the author assesses the effectiveness of internal communication. Besides, self-evaluation of employee productivity when they use the portals will be acknowledged

Formulating questions is an important step. The questions should be short, simple, and interesting. Leading questions or assumptions should be avoided to ensure objectivity. It is necessary to accommodate all possible answers, use balanced scales, or produce variability of responses. The questions, moreover, better avoid unfamiliar words, abbreviations, and terms for which the definition can vary because those can confuse the respondents.

Table 2. Types of Survey Questions (Dillman 2000)

Type of question...	Best Used for...
Open-ended	Breaking the ice in an interview; when respondents' own words are important; when the surveyor doesn't know all the possible answers.
Closed-ended	Collecting rank ordered data; when all response choices are known; when quantitative statistical results are desired.
Likert-scale	To assess a person's feelings about something.
Multiple-choice	When there are a finite number of options (remember to instruct respondents as to the number of answers to select).
Ordinal	To rate things in relation to other things.
Categorical	When the answers are categories, and each respondent must fall into exactly one of them.
Numerical	For real numbers, like age, number of months, etc.

When it comes to ordering of questions, it is essential to arrange from the most salient to the least salient one. The first question should be relevant and easy to motivate the respondents. Demographic questions should not be placed at the beginning. Potentially objectionable questions are located near the end (Dillman 2000).

Finally, formatting a complete questionnaire is a step that can attract respondents. To make the questions easily understandable, write them in bold and emphasize crucial

words. The responses can be in a lighter font. Knowing how to group questions appropriately under distinct sections can help the survey to be more logical. The introductory page should be designed properly and perhaps include some rewards or incentives.

Survey content

The survey checklist for this case study is built based on the Literature Review chapter. Under these themes, there will be correspondent questions to explore, describe, and explain how the use of employee-coworking portals can improve internal communication effectiveness and employee productivity. The survey checklist is presented in the table below.

Table 3. Survey themes checklist

1. Internal communication effectiveness
 - a. Emotional engagement
 - b. Behavioral engagement
 - c. Facilitating digital workspace
2. Comparison among ESN, intranet and email
 - a. Frequency of use
 - b. Effectiveness evaluation

After the author proposed and got approval from the case company about the topic and the sample staff, the survey was sent to the sample as discussed.

3.3 Data analysis

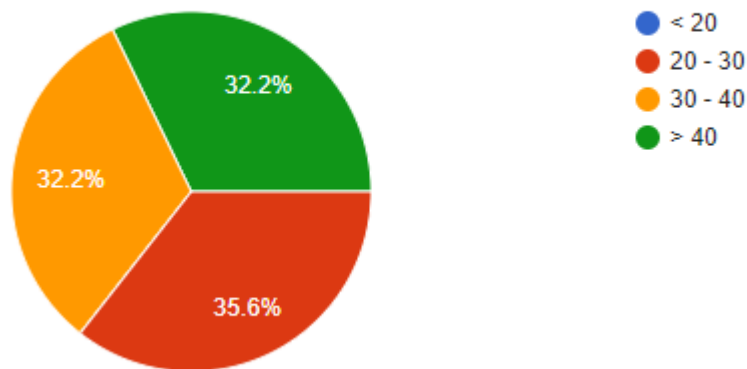
As mentioned above, quantitative data is usually analyzed with statistics and mathematical formulas. Nowadays, with the technological development, software packages, such as Minitab, SPSS, and Sigtest, appear to reduce the use of mathematical burden. Quantitative information is totally demonstrated in the numerical form to ensure the proper function and structured data outputs. The interpretation of the result will be represented by illustrations such as tables, graphs, and charts. Illustration reporting will be accompanied with comments and explanations for the readers. Nevertheless, in this research, there is no use of complex mathematic formulas as the

main purpose is to explore the data of frequency of responses. The result from the survey would be gathered and simply illustrated through tables or figures created by Microsoft Excel and Word. Illustrations are provided to maximize a clear understanding for the readers.

4 Results

4.1 Sampling analysis

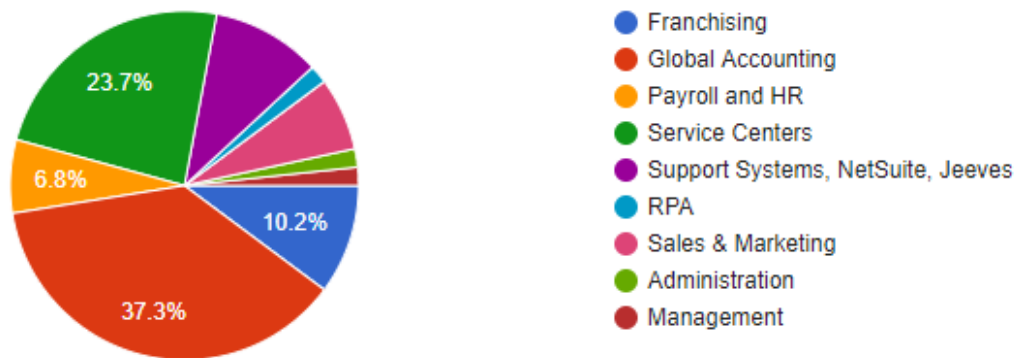
There are 59 responses out of over 250 people at Staria. The author would like to collect the data on the aging group to discover if people of different ages have different preferences on using ESNs. Moreover, the author would like to investigate if participants are from all the departments of the organization because different departments may use the communication channels for different purposes.



Respondents 59 missing 0

Figure 7. Staria participants by age

Participants are divided equally into three different age groups: 20-30 years old, 30-40 years old, and over 40 years old, which increases the objectivity of the research.



Respondents 59 missing 0

Figure 8. Staria participants by the field of work

Besides, each department has at least one participant in the survey. Hence, the sample which represents the population of Staria becomes more reliable. Among departments, Global Accounting has the greatest proportion of participants (over one third). The figure from Services Centers comes next with 23.7 %.

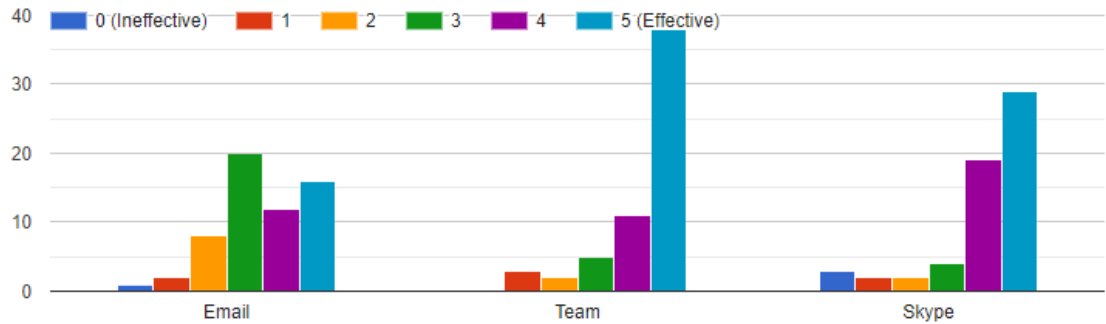
4.2 ESN is a more effective channel compared to email and intranet

4.2.1 Outperforming traditional email

1-on-1 communication

Garside and Kleiner (1991) emphasizes the significant role of 1-on-1 communication on building personal relationships and accomplishing personal goals within an organization. The 1-on-1 communication occurring in the daily work can be work collaboration, casual chat, or providing feedback to the manager. Hence, the demand for an effective channel for this communication form is essential. Otherwise, the communication process cannot flow smoothly. Speed and transparency are key factors to achieve the communication effectiveness. Using ESNs is believed to enable those key factors (van Osch & Coursaris 2013). Indeed, figure 9 shows that the majority of Staria employees think that ESN channels: Microsoft Teams (or MS Teams) and Skype are highly effective in 1-on-1

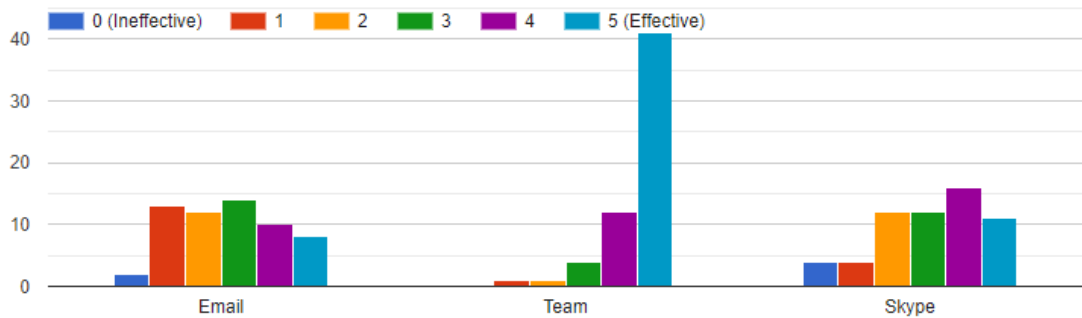
communication with the average rate of 4.34 and 4.05 respectively. Email rating averagely 3.49 is considered less effective than the other channels.



	Email	Teams	Skype
Average rate	3.49	4.34	4.05

Respondents 59 missing 0

Figure 9. Effectiveness of communication channels for 1-on-1 communication



	Email	Teams	Skype
Average rate	2.69	4.54	3.10

Respondents 59 missing 0

Figure 10. Effectiveness of communication channels for group conversation

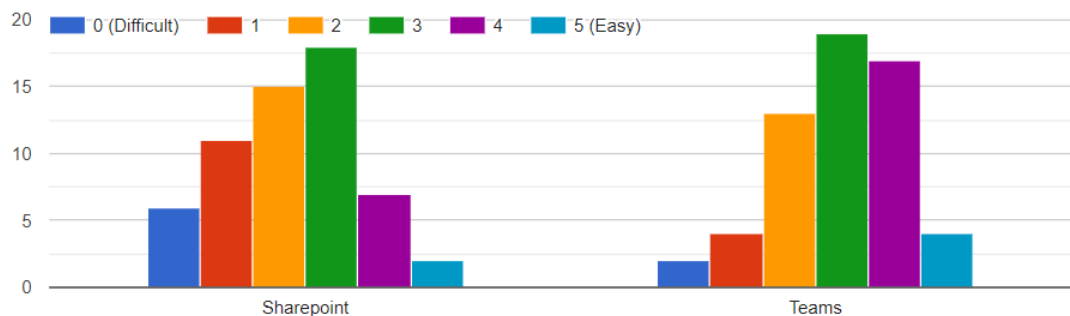
Group communication

The group communication is more complicated than the 1-on-1 communication. The content of a group conversation can be long, complicated, and easily misunderstood. Hence, it requires fast and constant discussion in the real-time. ESN is an effective tool in the real-time communication with various functions such as public chatbox and notification alert. Indeed, figure 10 shows that an ESN: MS Teams is the most effective channel for the group discussion with an average score of 4.54 points. Another ESN: Skype comes next with the figure of 3.10 points. More employees rate email as low effectiveness in the group discussion (2.69 points) than in the 1-on-1 communication (3.49 points).

To explain deeper the reasons behind those evaluations, the author includes an open-ended question on how people feel about MS Teams. Most answers agree that MS Teams is effective on chat and call because of many functions, for example, real-time conversation, nice and interesting design, screen sharing, to name but a few.

4.2.2 Outperforming intranet

Both intranet and ESN are channels for storing organizational information. Hence, it is essential to gain feedback on how easy or difficult to retrieve the needed information.



	SharePoint	Teams
Average rate	2.25	2.97

Respondents 59 missing 0

Figure 11. Level of effectiveness in searching for the information

As can be seen from figure 11, employees can find the information easier in MS Teams – an ESN than in SharePoint – an intranet with 2.97 and 2.25 points of effectiveness respectively.

4.3 Enhancing behavioral and emotional engagement by using ESNs

To evaluate how Microsoft Teams boosts the employee engagement of employees, the author collects their opinions in the following table.

Table 4. Purposes and benefits of using Microsoft Teams

Respondents 59 missing 0

Purposes and benefits	Average effectiveness rate (max: 5)
Casual talk with colleagues	3.31
Routine work collaboration	4.12
Share new ideas	2.85
Knowledge sharing with colleagues	4.03
Build relationships with colleagues	3.63
Get recognition of your work	2.49
Receive support from colleagues & managers	3.83

The content is based on the analysis of chapter 2.3.2 Emotional engagement and 2.3.3 Behavioral engagement.

4.3.1 Emotional engagement

Strong ties

Strong ties can be evaluated based on the efficiency of the work collaboration and knowledge sharing because they present the how employees trust each other and how they are proud of their work. Routine work collaboration and knowledge sharing are two activities that receive the highest rate of effectiveness (4.12 and 4.03 respectively). The

result shows that the ESN can enhance strong ties or working relationships among employees.

Weak ties

Weak ties can be measured by the employees' satisfaction of the casual talk and building relationships with colleagues (3.31 to the former and 3.63 to the later). The high satisfaction explains the using effectiveness of ESNs in promoting weak ties.

4.3.2 Behavioral engagement

Social open minds

A large number of Staria employees shows that they are open-minded. They use ESN for mostly routine work collaboration with the highest effective rate of 4.12 compared to other activities. Besides, they also share new ideas, new processes, and new methods of work to other colleagues and managers. The activity is not as effective as the routine work with 2.85 efficiency points. However, innovation activity can be improved by the encouragement of the organization. Many employees are satisfied with the level of support they receive from colleagues and managers, which is evaluated by 3.83 points. The supportive environment is a core factor to let employees be free to share their thoughts without worrying about judgment and ignorance from others. The ESN helps to provide this type of environment.

Social digital natives

It is true that the age factor affects the ability of using the ESN, which will be discussed in the following chapter 4.5.

Social collaborators

Knowledge sharing is a key in the social collaboration approach because individuals and teams can learn from each other. Most Staria employees agree that they can use MS Teams in sharing thoughts and opinions with other colleagues with a high level of

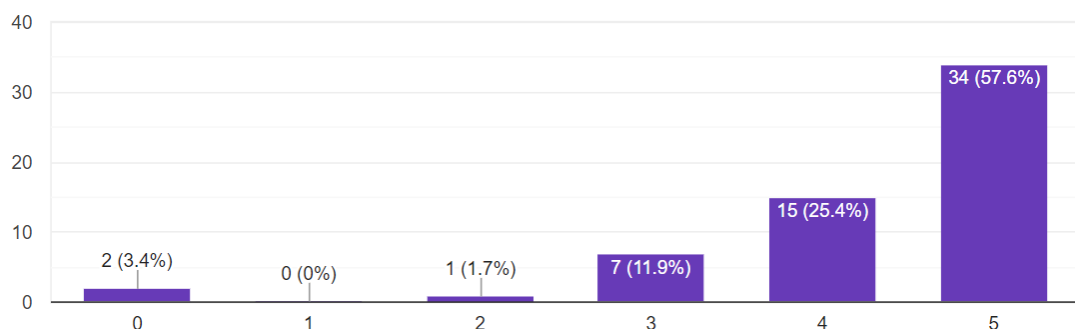
effectiveness (4.03). Over thirty out of the total participants indicate that they receive useful and quick advice from others via MS Teams.

Social Competitors

A friendly competition can be a motivation for employees to commit to work. To evaluate how the friendly competition works, the author asks participants to assess the level of recognition that they receive through sharing their achievements via ESNs. The average rate of 2.49 proves that social competition in ESN communities affects the employees' behavioral engagement but not significantly.

4.4 ESN – a necessary tool for the digital workspace

During the Covid-19 epidemic, all personnel are forced to work from home. Hence, the role of the digital workspace is becoming more important. To facilitate the internal communication, MS Teams has come to use. Eleven out of total participants just began to use MS Teams since the beginning of the quarantine time. They comment that it is necessary to use Teams for daily meetings with their teams because they cannot meet face-to-face. The work collaboration activity via MS Teams increases accordingly to ensure a smooth workflow. Besides, people join more casual discussions to share their personal life, hobbies, and preferences. This kind of communication aids the mental health and helps the staff to achieve the work-life balance. For example, there are some teams holding “Morning coffee” sessions for casual talks. Each session lasts 30 minutes daily before work starts. It provides employees with comfort and energy to start a new working day.



Respondents 59 missing 0

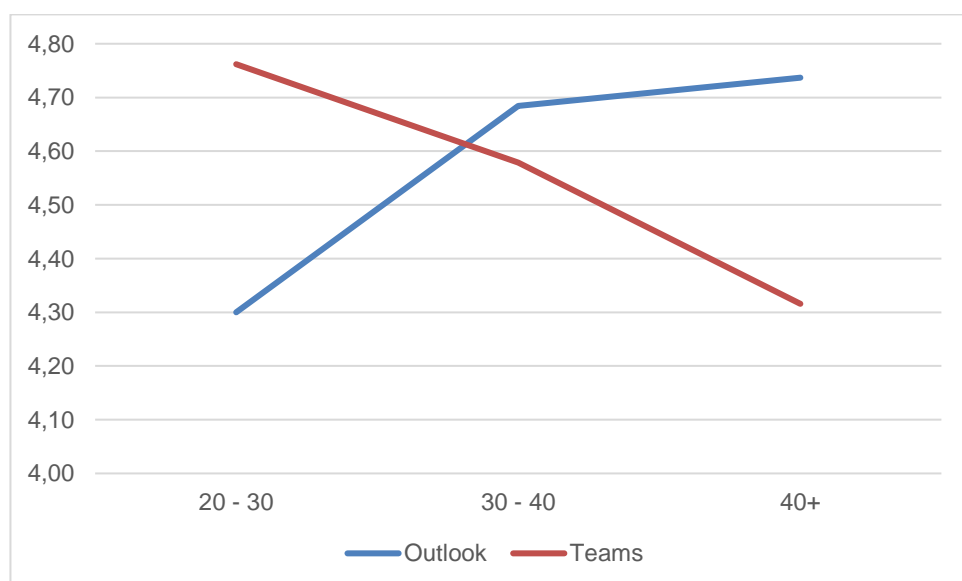
Figure 12. Efficiency of using Microsoft Teams in the Covid-19 epidemic

Figure 12 demonstrates that the majority of Staria staff agree on the high efficiency of using MS Teams, particularly during the quarantine time. Over 50% of total participants rate 5/5 for the level of efficiency, a quarter of them rates 4/5 and only 2 of them never use MS Teams.

4.5 Use of ESN affected by age factor

It is true that the younger generation can adopt a technological skill quicker than the older generation. Hence, the ESN which is popular in recent years can be difficult for the older age group to use. The below figure is a prominent example.

Age group	Outlook	Teams
20 - 30	4.30	4.76
30 - 40	4.68	4.58
40+	4.74	4.32



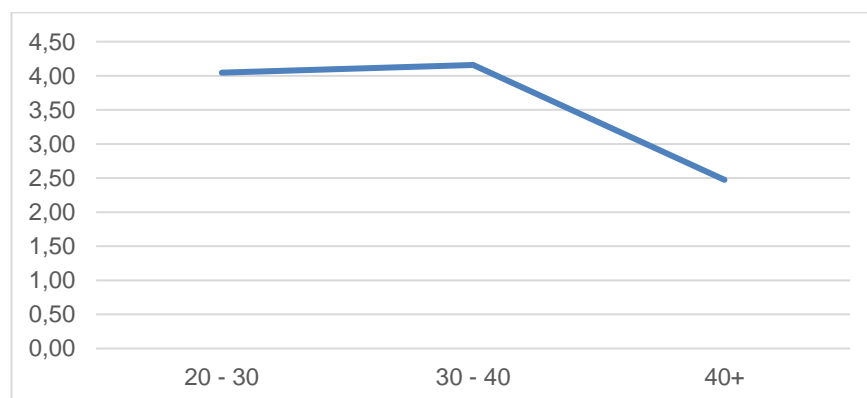
Respondents 59 missing 0

Figure 13. Frequency of using communication channels

There is a slight decrease in the frequency rate of using the ESN (from 4.76 to 4.32) when the age is higher. In contrast, older people tend to use email more frequently than younger ones. To explain the issue, some participants in the age of 30 to over 40 say they do not know how to use or newly use the ESN. Hence, email is a more comfortable tool for them. Young people from 20 to 30, on the other hand, are interested in using the ESN because they are familiar with social media. They feel convenient to adopt the ESN because the tool can help them to communicate faster and delight them with modern functions.

When it comes to the uniqueness of social media, it worth mentioning the function of sending stickers, gif, and emoji in the chat box to express users' feelings and emotions. The function can help to enhance the user experience, reduce the stress during the work and connect people more efficiently (Leonardi 2014).

Age group	Frequency rate (Max: 5)
20 - 30	4.05
30 - 40	4.16
40+	2.47
Grand Total	3.58



Respondents 59 missing 0

Figure 14. Frequency of sending sticker, gif and emoji when messaging

According to figure 14, people aging from 20 to 40 years old use stickers, gif, and emoji regularly with the rate of frequency reaching over 4 out of 5. They reveal that they are fond of casual talks. Sending and receiving stickers can cheer them up more than only using words. In contrast, people over 40 years old are less interested in this function with the same figure of 2.47. They rarely use social media in their daily life, so they are not used to this function.

4.6 Limitations of ESN

To improve the ESN, the author asks the participants what functions of MS Teams they are not satisfied with. Answers can be categorized as below:

Table 5. Problems of using Microsoft Teams

Respondents 59 missing 0

Problems	% of total responses
Complicated structure with many groups, events, hard to retrieve the previous messages and information	10.17%
Lack of calendars & meeting reminders	11.86%
Cannot open multiple chat boxes or multiple files at the same time	14.29%
Do not know well how to use MS Teams and need training	18.64%
All good	30.51%
Others	14.53%

Nearly one-third of the total participants think that MS Teams functions well and provides a satisfying user experience. Besides, approximately 20% of the respondents admit that they do not have a clear instruction of using MS Teams and wish to have the training. This group of people is from 30 to over 40 years old. The younger generation can figure out how to use MS Teams because they are familiar with social media, but the older generation need to learn and practice the tool. Over 50% of the participants indicate problems that they face when using MS Teams. There are three main problems. The most common one (14.29%) is that users cannot open multiple chat boxes or multiple files at the same time. Hence, it is difficult for employees to do multi-tasking. However, on a good side, it drives employees' attention to only one task or activity to get it done. The next problem is the lack of calendars and meeting reminders in the MS Teams, contributing 11.86% of the responses. Hence, employees still use Outlook to have this function. Lastly, 10.17% of participants complain about the complicated structure of MS Teams with many groups and events. They find it hard to retrieve the previous messages and information because they may not remember those messages and information belong to which groups. There are also other problems (14.53%) relating to how the MS Teams functions effectively. For example, sharing of video recordings to people not in meetings is rather hard to do. Another problem is the difficulty in calling and chatting at the same time. Those issues require further training and practicing.

5 Discussions

5.1 Findings

The objective of this thesis was to deliver a comprehensive look at the use of ESNs for internal communication and research which technology improves communication. By reviewing relevant literature and analyzing a case study, the thesis aims for the human resource managers to achieve a throughout understanding of ESNs and a real-life example for reference. Thus, they are able to choose a suitable communication channel and encourage employee engagement in action.

It has been presented consistently across different literature that employee engagement is highly important for an organization and a very strong competitive advantage in the business performance. Hiring people is not easy but keeping them is even more difficult. Companies often face challenges of losing employees since they do not feel connected. It is the responsibility of the organization to create a supportive working environment for the employees to develop themselves. One of the key solutions is to use the ESN to increase communication effectiveness. The use of ESN has emerged in recent years due to the shift from employer-centric to employee-centric in the organization; and an increasing demand for employee satisfaction that cannot be achieved by traditional tools such as intranet and email.

This finding is complemented by the result of the survey. Understanding their own employees is a key strategy of not only Staria but also other businesses. Collecting feedback from employees can help to improve the communication channel, which enhances the user experience and increases employee satisfaction. The company's strategy starts with understanding the employees' insights and choose a suitable channel for them to communicate effectively. It is apparent that employees are satisfied with using the ESN in the internal communication. Through the ESN, they can speed up their work, build relationships with colleagues, express themselves, learn from others, and to name but a few. The effectiveness can be shown by how Staria employees utilize Microsoft Teams. Practices at the case company helped further analyze that MS Teams and also other ESNs can help to boost employees' emotional and behavioral engagement better than the email and intranet. People who are engaged in an organization can commit to a long-time work and a better performance.

The use of ESN affected by the age factor is also an interesting finding that emerges from the case study. The younger generation who are fond of social media can easily adopt an ESN. However, it is difficult for the older generation to get used to modern technology. They may not understand comprehensively all the functions of an ESN and may not be interested to use. They may prefer to use what they have already known, for example face-to-face communication, email, and intranet. Staria is a company which has a large number of employees over 30 years old. The survey shows that two-third of participants are in this age group. Thus, email channel – Outlook still plays an important role in the organizational communication; and intranet channel – SharePoint is still in use even people do not use frequently. Moreover, it is necessary to provide transparent instructions and training on how to use the ESN.

Last but not least, another interesting finding is that people use the ESN for casual conversations more frequently during the epidemic time. The demand for sharing personal stories is rising since people have to stay at home for a long time. The idea is applied by Staria teams to increase understanding among team members. Many people feel that the ESN is becoming more important for their internal communication than before the epidemic. Some employees start to learn how to use the ESN channel even though before they refuse to adopt. Since the huge amount of email can become a burden to a person, an ESN seems to be a more relaxed tool due to informal messaging with stickers, gif, and emoji.

5.2 Limitations

Robson (2002) identifies that there are two threats to reliability: participant error and observer error. The participant error concerns the degree of employees' enthusiasm during the survey time which may affect their answers. The observer error refers to possible biased data interpretation based on the researcher's assumption. Firstly, in terms of tackling participant error, the author choose a "neutral" time – middle of the week when the employees maybe not either on a "high mood", looking forward to the weekend, or on a "low mood" with the working week in front of them. Secondly, regarding to observer error, it is important to acknowledge that the author has been working at the case company for over five months. The author uses the communication channels frequently and understands the company's culture. Due to applying the descriptive research, the author built structured questions due to her assumption on the

effectiveness of using the ESN. However, the author also applies exploratory research by asking open-ended questions so that Staria staff can provide insight thoughts.

Following the general time scale of a Bachelor thesis, time limitations were a factor in the research and gathering of data for this work. In the survey process, there are only 59 responses out of over 250 personnel in the company. If more time is allowed, the author could have more answers and the research result can be more reliable. The author would like to investigate if the use of the ESN can boost productivity but do not have time to complete the finding.

6 Conclusions and recommendations

6.1 Conclusions

“When people are financially invested, they want a return. When people are emotionally invested, they want to contribute” - Simon Sinek

Internal communication is highly important for an organization. It can become a competitive advantage that reduces costs and differentiates the company from other competitors. The basic idea of communication is to transfer the information from one person to another person or a group of people. Previously, the company applied top-down communication which means information flows only from employers to employees. The business realizes the inflexibility of the model because the rapid development of technology enables a fast-changing environment. Hence, the top-down communication approach which allows information to flow from employees to employers is a new solution. The role of employees within an organization is increasingly valuable.

The Enterprise Social Network (ESN) has emerged along with the expansion of social media, technological development, and demand for employee engagement. There are many advantages of an ESN. Particularly comparing to face-to-face communication, communication via an ESN can occur at anytime and anywhere. Hence, it prevents wasting time and money for organizing meetings. Besides, an ESN still includes drawbacks, for example, distracting the employees from work.

Realizing that the organizational goal is to engage employees, the company apply the ESN in the internal communication to boost the employees' emotional and behavioral engagement. The literature review and the survey results prove that using ESN can increase the employee connection. In terms of emotional engagement, using ESN helps to enhance an individual's trust and pride in their work (strong ties) and build relationships with colleagues (weak ties). Behavioral engagement relates to knowledge sharing and innovation generating, which can be also facilitated by using the ESN. The employees' behavioral changes can be social open minds, social digital natives, social collaborators, and social competitors. Moreover, during the epidemic, the ESN becomes an essential tool for the digital workplace.

The ESN has many functions that outperform the traditional email and intranet. The ESN allows faster responses and information search and lets people freely share their thoughts. Many organizations nowadays have applied the ESN for the internal communication. Email and intranet are still in use and one of the key reasons is the age factor. Constant improvement of the ESN's function can promise the expansion of the tool and the possible alternative to the email and intranet in the future.

6.2 Recommendations

The objective of this thesis is to evaluate the effectiveness of using the ESN in the internal communication compared to the intranet and email along with examples through a case study. For academic researchers, the thesis provides a starting point of understanding the employee engagement strategy and the utilization of the ESN to facilitate the communication. It can be further developed by considering employee performance and productivity before and after the application of the ESN. The win-win approach includes both employee satisfaction and the company benefit. Collecting feedback on user experience is as important as evaluating employees' performance.

In order to apply the discussed knowledge, tools, and techniques successfully, the company, however, needs to combine with a very clear understanding of their own business context and resources. The thesis can be more persuasive if evaluating how company profit increases from utilizing the ESN. Before the company invests, they would like to know if there is any possible return. Every business is different and diverse. It is important to be open-minded and adapt to the new trends of the market.

Finally, it is worth mentioning that the employee engagement strategy is for sustainable growth. It is not easy to evaluate the effectiveness of this approach as well as the use of the ESN in a short period. Hence, the business directors should acknowledge that and prepare for the long-time development of the company

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Internal communication survey at Staria

Questions	Type of questions
Could you evaluate the frequency of using the channels: SharePoint, Outlook, Teams and Skype?	Likert-scale: 0 (Never) – 5 (Frequently)
How effective are SharePoint, Outlook, Teams and Skype for 1-on-1 communication?	Likert-scale: 0 (Ineffective) – 5 (Effective)
How effective are the SharePoint, Outlook, Teams and Skype for group conversation?	Likert-scale: 0 (Ineffective) – 5 (Effective)
How easy can you find the needed information?	Likert-scale: 0 (Difficult) – 5 (Easy)
How often do you send the stickers, gif and emoji when messaging via Team and Skype?	Likert-scale: 0 (Never) – 5 (Frequently)
What are the purposes of using Teams for you? (Casual talk with colleagues, Routine work collaboration, and Share new ideas)	Likert-scale: 0 (Never) – 5 (Frequently)
What does Teams benefit you? (Build relationships with colleagues, Knowledge sharing with colleagues,	Likert-scale: 0 (Ineffective) – 5 (Effective)

Get recognition of your work, and Receive support from colleagues and managers)	
How does Teams help you to communicate in the Covid-19 epidemic?	Likert-scale: 0 (Ineffective) – 5 (Effective)
What can be other benefits of Teams?	Open-ended
What functions of Teams are you not satisfied with? Do you have any suggestions?	Open-ended
What is your age? (< 20, 20-30, 30-40 and >40)	Multiple-choice
What is your field of work? (Franchising; Global Accounting; Payroll and HR; Service Centres; Support Systems, NetSuite, Jeeves; RPA; Sales & Marketing; Administration; Management)	Multiple-choice