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Title of the Master's Thesis:

**Internal communication on Social Networks
in international companies: Focus on
community learning & development**

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D e c l a r a t i o n o f A u t h e n t i c i t y

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Prague, August 11, 2019

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Internal communication on Social Networks in global companies: Focus on community learning & development

Abstract:

This thesis acknowledges the need for comprehensive qualitative collection of learnings on effective internal communication, knowledge sharing as well as Learning & Development approaches in international companies. The objective of the thesis is to offer applicable recommendations for the Hilti's global L&D department on practices proven to be successful in creating organic and engaged employee behaviour across the mentioned areas. Firstly, the thesis will define key corporate knowledge sharing and communication channels, as well as current known practices. Secondly, the thesis will present the data collected in qualitative study among 12 international companies across industries, focusing on their experience with building and management of channels and platforms enabling effective communication. Collected learnings aim to present deeper user-centric understanding of platforms designed for sharing and retention of internal knowledge as well as employee development.

Key words:

social learning, internal social networks, internal communication, learning & development

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Abbreviations

IC – Internal communication

L&D – Learning & Development

LMS – Learning management system

MOOC – Massive open online course

SNS – Social network sites

SN – Social networks

SSO – Single sign on

TTP – Time to performance

UGC – User generated content

Introduction

Importance of the study

The need for the study arose as global L&D department in Hilti understood the importance of successful employee engagement, which brings lower cost of learning, employee onboarding, better access to information and amplifies the relevance of greater employee empowerment. Effective knowledge sharing and collaboration also leads to innovative ideas, influencing company's productivity. Additionally, increasingly common flexible working & learning structures indicated urgency for effective communication channels and highly accessible digital sources of information, no matter where the employee is located. With Hilti's workforce growing by 30% in the space of 5 years (Figure 1), the emphasis on both knowledge retention as well as organic and effective knowledge sharing increased. Likewise, high employee turnover in addition to shortage of talent accelerate businesses to pay more attention to employee retention. Lalitha (2012) considers employee retention to be one of the leading challenges confronted by HR in the modern economy. Therefore, the purpose of this study is to help establish successful effective knowledge sharing practice that would assist with sustainable employee growth and both knowledge sharing and retention within the company.

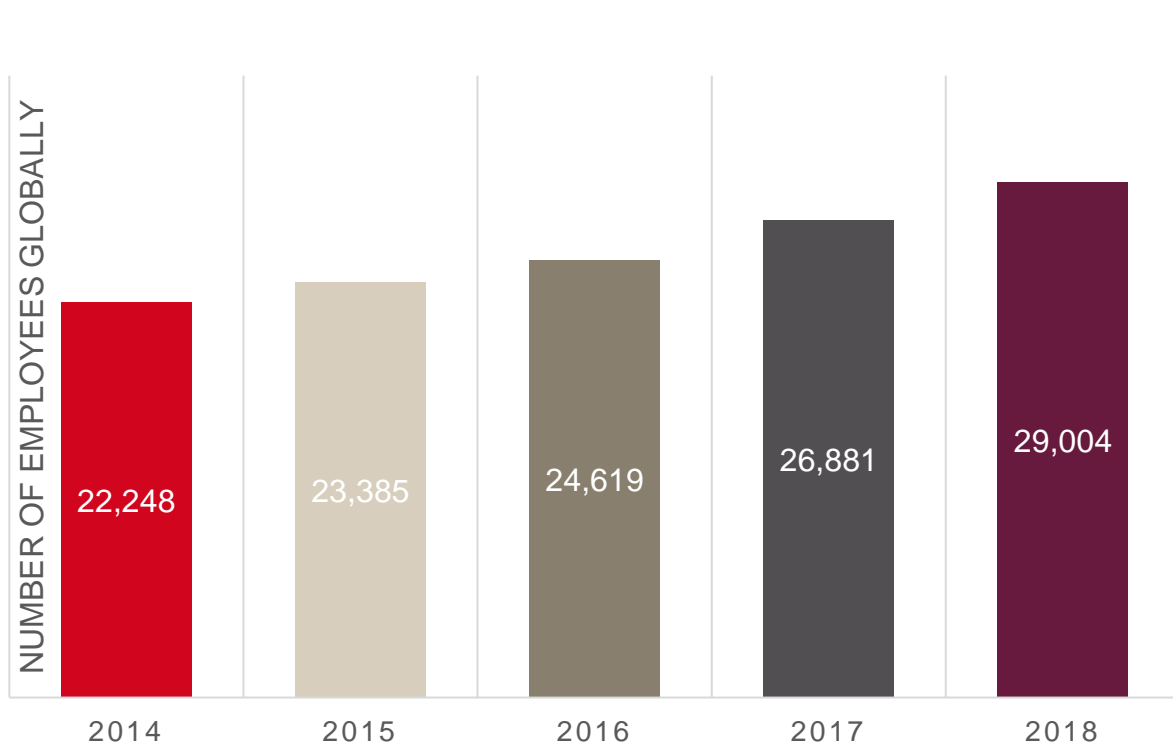


Figure 1 – Growth in number of employees in Hilti globally 2014-2018 (company report 2018)

The need to address the topic of communication platforms and effective learning in Hilti was registered from different departments and across geographical regions, this only increased the importance of exploring different approaches in other international companies. Additionally, multiple attempts to consolidate the guidelines and learnings about the topic has been noticed in individual markets on. This resulted in the need of L&D department in Hilti to explore practices in other international companies and gather insight. Furthermore, on an individual level, various types of employees in Hilti can benefit from understanding how to efficiently exchange ideas that help them personally depending on their role.

With the current approach of organizations towards external utilization of new technologies such as social media and networks, the question of taking advantage of new communication platforms for internal use arises. According to studies (Korzynski 2014), online social networking platforms are one of determinants of efficient communication, which has an impact on company's productivity and therefore both directly and indirectly influences their business success, namely in organizations operating across time zones and countries. As Leonardi, P. M., Huysman, M. and Steinfield, C. (2013) explains, researchers in the field of communication have focused on usage of social media.

Furthermore, one of the areas that can benefit from effective knowledge sharing among employees is Learning & Development, which is significantly connected to training of new employees and shortening their TTP (time to performance) upon the onboarding process, as well as their continuous development and retention. Both above mentioned areas of influence have been discussed within the L&D department in Hilti, recognizing the need for further education and innovation of the department in possible company strategies in internal communication and knowledge sharing. However, practical qualitative experience from other international companies facing the same dilemma were also deemed advantageous. On that account, the author has conducted a qualitative research to provide deeper understanding of companies' experience with adopting new communication practices. Point of focus of the research is given to digital social networks, as a focal point influencing all three main areas: internal communication, knowledge sharing and L&D.

Throughout studies, we encounter variety of definitions of social networks and social network sites (SNS). One of the SNS definitions by Nicole B. Ellison stands behind the

definition in which “SNS are web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site.”. According to Art Kleiner (2002), “social networks, hubs are well-connected people who are able to foster and maintain knowledge flow. Their interdependence results in effective knowledge flow, enabling the personal understanding of the state of activities organizationally. In the context of companies, Leonardi, P. M., Huysman, M. and Steinfield, C. (2013) define enterprise social media (ESM) as “web-based platforms that allow workers to (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 anyone else in the organization at any time of their choosing.”

For the purpose of this study, social networks are approached in its wider term and also in its connection to collaborative knowledge sharing.

Goal of the study

The goal of the study is to convey a comprehensive collection of experience with utilization of social networks, knowledge sharing platforms and L&D techniques throughout companies contributing to this study. The core focus is put on company’s strategy and journey of introducing and new digital tools enabling progress in those areas, best practice, challenges and learnings. As a result, it will present recommendations to Hilti and its L&D department on best practices in managing internal communication platforms and how to increase effective communication and knowledge sharing in the company. To further define the essence of what does an effective communication in a company mean, the study is specifically targeting knowledge of practices resulting in organic and sustainable knowledge sharing, engaged employees benefiting from knowledge sharing and open communication among employees across geographical, departmental or hierarchical boundaries.

Structure of the study

In the theoretical part, the thesis will define social networks, learning and development practices, knowledge sharing and needs of the current international workplace. In the practical part, the author will introduce the companies included in the research by industry, size, interviewee departments, year spent in the company and key learnings. Subsequently, thesis will further in detail describe experience and learnings in all the areas from the theoretical part. Final chapter of the thesis will focus on how the findings could benefit international companies such as Hilti, and Hilti in specific.

Theoretical part

Throughout following chapter, the thesis will discuss most significant and most discussed aspects of both more and less successful approaches to effective communication, digital communication, knowledge sharing and social learning. Given the richness of the information sources on the topic covered and in order to establish the structure, the thesis will follow simplified framework of Kremer on knowledge sharing illustrated in the Figure 2. As Kremer explains, empirical studies hold certain behaviors as principal determinants of successful organization. Since many of Kremer's recommendations are connected to focus of this study, therefore the author of the thesis will be referring to this Figure throughout all subchapters of the theoretical part. The full framework is available in the appending and Kremer's views are further discussed in the Knowledge sharing subchapter. Please find the relevant recommendations and their relevant implementation guidelines below in Figure 2a, as well as full set of recommendations in the appendix (Figure 2b).

Recommendations	Implementation guidelines
Develop the right group norms	<ul style="list-style-type: none"> Promote employee trust/respecting sharing of ideas Boost reinforcement of information sharing among all members/create a culture that encourages knowledge sh
Design teams strategically	<ul style="list-style-type: none"> Promote self-management/ empowerment / responsibility for individual growth or further education Combine formal mechanisms and informal openness Establish fair practices such as leadership rotations peer evaluation
Manage interactions with those outside the team	<ul style="list-style-type: none"> Encourage cross-department sharing / networking Encourage employees to demonstrate trust Collaborate across organizational, physical and hierarc boundaries
Show Support as a leader	<ul style="list-style-type: none"> Focus on lessons learned instead of mistakes made Promote social learning Support and motivate employees

Display organizational support	<ul style="list-style-type: none"> • Create a climate of innovation and encourage employees voice their opinions • Promote low bureaucracy and design formal mechanism for upward communication/ Ask directly for ideas and suggestions • Open door policy • Reduce employees` concerns about breaching written / unwritten rules + Redesign jobs to increase autonomy
Use performance management effectively	<ul style="list-style-type: none"> • Use PM to promote voice and knowledge sharing • Implement PM with heavy L&D link • Turn knowledge sharing into feedback instruments • Create incentives to facilitate knowledge sharing

Figure 2a – Knowledge sharing recommendations & implementations guidelines – Simplified (Kremer, 2018)

1. Internal communication

"Internal communication isn't about telling employees what to think, it's about creating and enabling authentic, ongoing dialogues with and between them. "

Paul Barton, ABC

Beginning in 1990s throughout both US and Europe, various factors such as globalization or economic crises contributed to organizational restructuring, outsourcing or downsizing. This had a negative impact on employee trust in management and overall employee loyalty. The understanding of the relevance of internal communication has developed the field of internal communication into one of the fastest growing specializations in public relations and communication management (Verčič, 2012).

As indicated both at the beginning of the chapter and in Kremer's simplified guidelines, there is a strong link between trust and impactful communication in organizations.

There are multiple factors influencing trust in companies, equally we can find numerous areas in which are companies being affected by trust, such as leadership effectiveness, employee engagement or open knowledge sharing and employee/ talent retention. These areas are also characteristic to success factors in the field of internal communication.

According to a study (Wang, 2013), it has been argued that “authentic leadership was positively and significantly correlated with employee trust (...) and employee engagement”.

In further studies (Thomas, 2009), it has been concluded that the quality of information can predict the level of trust in one`s colleagues and managers. On the other hand, information adequacy is positively correlated with one`s trust in top management. Figure 3 shows the flow of the conclusion of the study, in which Thomas used mediation analysis and structural modeling to confirm his hypotheses: “Quality or quantity of information influences trust, which creates the perception of organizational openness and greater employee involvement.”.

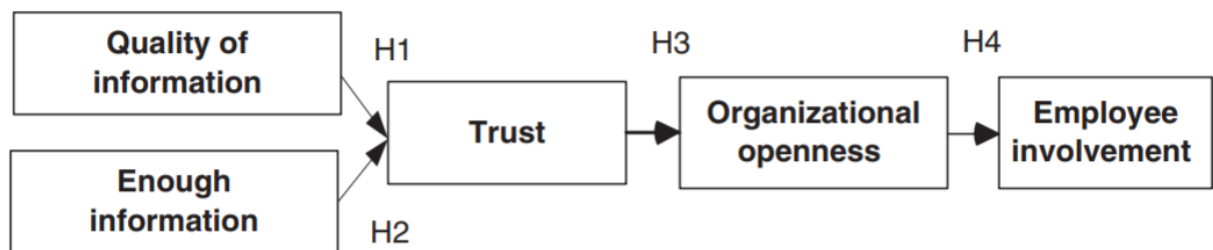


Figure 3 - Theoretical model of perceived communication, trust, experienced openness, and the effect on employee involvement in organizational goals (Thomas, 2009)

- H1 - Hypothesis 1 - Quality of information is be positively associated with higher trust.
- H2 - Hypothesis 2 - Receiving enough information is positively associated with higher trust.
- H3 - Hypothesis 3 - Higher trust is positively associated with perceptions of organizational openness.
- H4 - Hypothesis 4 - Organizational openness is positively associated with involvement in organizational goals.

Similarly, Chitsaz-Isfahani and Boustani (2014) examined impacts of organizational trust, studying it in relation to talent retention, concluding “positive and significant relationship between talent management and organizational trust”. Their study identified organizational

trust reaching higher correlation levels than for example job experience, mentoring or training (see Figure 4).

	Feature	1	2	3	4	5	6	7	8	9
1	Talent Management	1	-	-	-	-	-	-	-	-
2	Organizational Trust	.859	1	-	-	-	-	-	-	-
3	Employee Retention	.870	.870	1	-	-	-	-	-	-
4	Succession Planning	.811	.692	.675	1	-	-	-	-	-
5	Job Experience	.883	.687	.690	.776	1	-	-	-	-
6	Training	.880	.747	.729	.644	.761	1	-	-	-
7	Coaching	.874	.770	.729	.611	.677	.737	1	-	-
8	Mentoring	.859	.777	.721	.588	.627	.694	.756	1	-
9	Career Management	.892	.809	.768	.637	.711	.721	.756	.819	1

Figure 4 – Correlation between research variables; notably the relationship between organizational trust and other variables (Chitsaz-Isfahani, Boustani, 2014)

1.1 Digital communication

According to Stodd (2016), Technology is together with Engagement and Narrative, one of the crucial dimensions of social leadership, which a term describing a set of skills necessary for effective leadership in the Social Age. Author suggests that leader's authority and power is significantly influenced by the content he/ she curates as a part of their digital presence.

The central objective of communication technologies is to share the information without being physically present in same space. This was true to communication technologies developing from the simple letters, through the invention of telegraph and continues to develop further with availability of today's phones, emails, instant messengers or face-to-face video chatting. The digital age understandably earned the reputation for previously unprecedented speed in which new communication media come to live. As public have always reacted to new media with confusion, it is also natural to be concerned about their effects on our relationships (Baym, 2015).

In the corporate communication, ubiquitous communication challenges are often connected to what Baym calls "asynchronous media", referring to communication in which allows very large groups to sustain interaction on platforms such as social networks, online forums, support groups and communities. Asynchronous communication is not occurring at the same time, therefore people can strategically and in their own time manage their contributions and interactions with other participants. In the context of corporate internal communication, the information exchanges and UGC recorded and kept available for future participants to search for, are in fact considered valuable.

Two of the long-disputed questions brought by digital communication is discussing the relationship between the formal and informal communication behaviors along with the change of communication style connected to development of "individual voice" one can have when not communicating face-to-face.

First, focusing on the former question, which approach is supposedly considered the best practice? Tenhiälä and Salvador (2018) from MIT argue that as much as informal communication and casual mannerism is increasingly encouraged, it might have negative influence on company's performance. As authors studied 73 sites manufacturing high-tech machinery over two years, they concluded that although "informality helps an organization's daily operations run more smoothly ... no one would argue against the value of formal, reliable communication ... that no company should overlook". Risk of overly relying on informal communication means is rooted in its unprecise and erratic characteristic. For instance, in business in need of precision in cross-functional communication, protocol-guided communication presented a consistent performance lead.

It is essential to clarify that in their study, both informal and protocol-guided communications are utilizing digital tools, the difference is mainly in how much they adopt further freedom of unstructured digital interactions.

Organic digital communication goes hand in hand with informal approach towards information sharing, nourishing different communication styles. In informal setting, employees as well as managers are encouraged to find their own voice using rather unofficial language. Even appraisal techniques are following more informal approach in past decade shifting from traditional e.g. annual performance to frequent informal feedbacks. In the HBR article “The performance Management Revolution” (P. Cappelli, A. Tavis, 2016), authors state that “As you might expect, technology companies such as Adobe, Juniper Systems, Dell, Microsoft, and IBM have led the way. Yet they’ve been joined by a number of professional services firms (Deloitte, Accenture, PwC), early adopters in other industries (Gap, Lear, OppenheimerFunds), and even General Electric, the longtime role model for traditional appraisals”. Such a penetration of informal practices implemented throughout various departments in organizations further signal the change in the field of communication.

The second question associated with digital communication involves the discussion on changes in one’s communication styles outside of face-to face communication. While voicing an opinion across a company digitally, no matter if an employee chooses written form such as an email or a video recording, the behavior and message-sharing style changes. Besides other reasons, this effect is also observed due to communicator’s restrictions in reading immediate response of the audience. Such a pressure to find a communication style, which would effectively share information throughout the company, can cause unnecessarily impersonal message. On the opposite side of the spectrum, in internal communication, especially when semi-permanently and publicly accessible for all employees, management can often fear employees voicing partisan opinions and conclusion.

Effective communication becomes even more challenging in international companies, where global teams often rely on digital platforms to discuss sophisticated issues across time zones, cultures or accents/languages. If effective communication in organizations can be costly, global teams require even higher coordination costs connected to project delays due to

incompatible schedules, cross cultural or linguistic misunderstandings creating non-billable reworks or technology disruptions causing missed deadlines (Gardner and Mortensen, 2015).

Global teams are continuously fighting the mutual knowledge problem. This term was coined by Catherine Cramton, identifying five types of communication problems in thirteen geographically dispersed teams she studies: failure to communicate and retain contextual information, unevenly distributed information, difficulty communicating and understanding the salience of information, differences in speed of access to information, and difficulty interpreting the meaning of silence (Cramton, 2001).

Cramton's approach is one of many in line with the notion of Silo mentality (Forbes, 2013). The author describes such a mentality as a “mindset ... when certain departments or sectors do not wish to share information with others in the same company”. The article places the responsibility for breaking down the damaging silos in the hands of the leadership - one of the four proposed areas to help with the process is improvement of collaboration and creativity. This can be achieved by for example:

- Reducing unnecessary long and frequent meetings → therefore, improve the communication practices
- Implement a cross-departmental training/ education system → therefore, improve L&D techniques
- Encourage constructive feedback from outside departments → therefore, improve communication and knowledge sharing e.g. in form of SNs

Above mentioned improvements could be enhanced by higher availability of digital tools, empowering employees to take partial responsibility for overall health of the organization.

According to a study (Alvarez, 2018), employees being empowered with training and various productivity incentives are allowed to develop themselves and improve employee satisfaction. Also, Ranjay Gulati explains in his article “Structure That’s Not Stifling” how difficult it is to find the balance between employee empowerment and operational discipline. He found that leaders often fluctuate between these extremes, authors study of more than a dozen organizations showed that “guidelines are not the death of freedom if they’re well designed and well implemented ... giving employees positive, galvanizing sense of where the

organization is trying to go”. Study further reinforces the importance of choice for employees, which can trigger greater commitment to the company and improve performance.

Author also names multiple studies supporting the link between autonomy and growth of innovative ideas in the company. This is particularly important for the study, since one of the primary purposes of social networks and knowledge sharing tools in internal communication is to enhance learning and collaboration leading to innovation and increased productivity in the organization.

1.2 Social Networks and Social Learning

As argued by Smith in her book *Effective internal communication* (pg. 209, 2008), it wasn't until 2006/7, that the notion of incorporating social media into internal communication has become popular. She further states how invaluable are the feedback properties and interactive possibilities of social media, forming a powerful communication channel to be harnessed alongside (not as a substitute of) other traditional communication methods. Though author also voiced her concern with the level of contribution of this channel, if the company tried to control and monitor its usage in a similar manner as companies tend to communicate other communication channels. Though in approximately 10 years since the publication, the usage of adults using social media increased from 7% to 65% (2005-2015, Reuters).

Therefore, if we consider transferability of peoples' communication skills and preferences between their personal and professional life, it would be only natural for the use of social networks to be increasingly adopted by companies. Further examining behavior of social media users, Reuters (Digital news report, 2019) reported that consumers habit of absorbing information through social media is increasingly seen e.g. in its usage when accessing news channels. Such a substitution of more traditional news outlets is an indicator of user convenience connected with social media.

In the context of employer – employee relationship, it is imperative to nurture trust in order to reach employee engagement. Otherwise employees have tendencies to hesitate to share their thoughts, they might be afraid of judgement from both their managers and their colleagues.

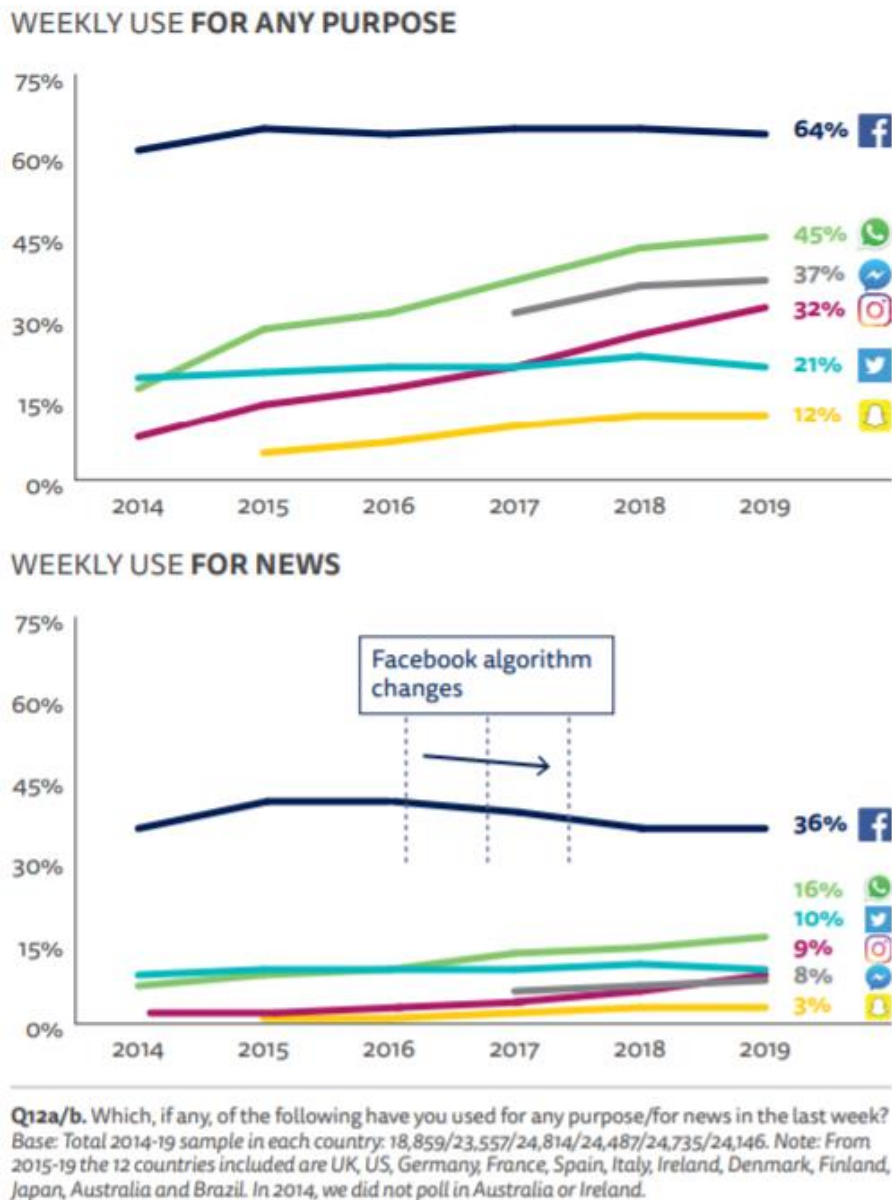


Figure 5 – Use of social media platforms and messaging platforms 2014-19 (Reuters, 2019)

Deducing similarities between two types of learning: 1. increasingly popular information gathering styles representing simple learning of new facts and 2. channels used for more formal environment of useful knowledge sharing at work, many studies (Reed, 2010) arrived at concept of Social Learning embracing usage of social media.

Initially, social learning was seen as individual learning that takes place in a social context (Bandura, 1977), though evolution of the term with technology development led peoples' behaviors towards us to social learning platform or system where knowledge is

socially mediated (Dabbagh & Reo, 2011a; McGloughlin & Lee, 2010; Minocha & Kerawalla, 2011 – Figure 6).

SL offers the advantage of leaving a digital audit trail, documenting the learning path of an individual that can be followed again by unrestricted number of employees after (Bingham & Conner)

In Hilti, it has been observed that employee/department engagement on social networks is rather asymmetrical across various markets. Equally, engagement of diverse and cross-departmental opinions is one of the most enriching aspects of knowledge collected on social media platforms. For this reason, employee engagement on social networks has been one of the focal points for international companies looking to engage employees with different backgrounds across their organization.

Recently a study on strategic internal communication in large and medium-sized companies (Men, 2014) showed that among most preferred communication channels, social networks rank last for both employees and the corporation likewise (see results in appendix Figure 7).

One of the initial summaries of best practices connected to social media usage (Smith, 2008) offers recommendations in Figure 8.

Key points to remember
1. Social media is just another communication channel like any other.
2. Can your employees actually use social media? Are they skilled? (If not, train them.) Are they even interested? (Give them incentive.) Do they have the technology readily to hand?
3. Why do you need a further strand of your communication tapestry?
4. Will social media do anything new for you that other delivery methods cannot?
5. Check what you already have by way of channels and test them for fitness and purpose.
6. Avoid duplication of effort/outcome.
7. Set up clear guidelines for usage if you do decide to go ahead.
8. Be prepared to hear the worst and respond.

Figure 8 – Initial summaries of best practices connected to social media usage (Smith, 2008)

1.3 Knowledge sharing and collaboration

“Innovation is not a luxury but a necessity in the hyper-competitive and global context of the 21st century organizations. Firms that harness the creativity of their workforces to transform ideas into new products and services pull ahead of the competition. Recent research has provided substantial empirical evidence regarding the critical role of employee voice and knowledge sharing as success factors for creativity and innovation. Our evidence-based recommendations, together with implementation guidelines, can help managers become innovation leaders. Based on the empirical evidence gathered to date, leaders who embrace these recommendations will be successful at promoting voice and knowledge sharing and therefore help their organizations not just survive, but thrive” (Kremer, 2018).

The core of Pixar’s creative success is founded on the establishment of a safe work environment in which all employees are able to wholly share their knowledge, contribute to the organization. Leaders within Pixar promote employee voice and knowledge sharing each day by supporting employees across organizational functions (e.g., art, technology, business). Such behaviors from the company also supports promotion of employee trust within the organization.

Even though many company leaders shared they value the collaboration in their organization, they expressed frustration with whether their collaboration is proven to be successful. (Gino, 2019).

In her *Consequences for dispersed collaboration*, Crampton argues that especially in geographically dispersed teams, collaboration and retention of “mutual knowledge” is challenging. She identifies five types of problems causing failures in this area, with three of them being highly relevant for digital collaboration and learning discussed in the thesis: ineffective formulation or retention of contextual information, differences in speed of access to information or interpretation of silence.

Above mentioned contextual information or interpretation of silence are failures that could be at least partially prevented with innovative digital solutions such as retention of digital collaboration in a form of recording session on shared information services, therefore employees have access to refer to it again and deepen their understanding of discussed topics.

Additionally, speed of access to information is also relatively easily mediated by cloud sharing and effective digital project management tools.

1.4 Learning & Development

The importance of L&D in organizations surges with understanding that managing today's knowledge-based work has influence on their productivity costs and opportunity costs. Analyst estimates that \$31.5 billion is lost every year by Fortune 500 companies due to ineffective knowledge sharing, by trying to reinvent the wheel, repeating others' mistakes or wasting time searching for expertise. Formal systems might help communicate established best practices (the *what*), but often don't explain *how* an individual should apply them. Therefore, formal systems only allow us to "see the picture of the cake without giving out the recipe" (Myers, 2017).

Relevance of the L&D is further supported by overall global spent on employee training and education further increasing from \$356 to £359 billion (Beer, 2016; Glaveski 2019). Yet Glaveski (2019) further states that:

- 75% of 1,500 managers surveyed from across 50 organizations were dissatisfied with their company's Learning & Development (L&D) function
- 70% of employees report that they don't have mastery of the skills needed to do their jobs
- Only 12% of employees apply new skills learned in L&D programs to their jobs
- Only 25% of respondents to a recent McKinsey survey believe that training measurably improved performance.

These findings render majority of training efforts meaningless, not contradicting their importance, though arguing the effectiveness of the purpose, timing, content of the training and crucially the implementation of the lessons learnt in practice need to be improved. Glaveski further mentions Hermann Ebbinghaus's forgetting curve hypothesis of decline memory retention in time. It suggests that if a person doesn't put the newly acquired knowledge in practice, the 75% of the new information is forgotten within 6 days (Figure 9).



Figure 9 – The forgetting curve by Herman Ebbinghaus (Glaveski, HBR)

One of the definitions of learning by John Sweller (Cognitive load theory and E-learning, 2011) explains that “learning is a positive change in long-term memory. If nothing has changed in long-term memory, nothing has been learned”. One of the natural information processing principles by Swallen focusing on obtaining the information from others indicates, that “as an electronic device “remembers” information ... we borrow vast bulk of the information held in long-term memory from other people”. Therefore, facilitating learning between employees would increase knowledge sharing efficiency from the cognitive point of view.

As Bingham and Conner explain, "social learning is about getting on the same page in constructivist approach, where every voice is heard and everyone contributes to the solution". Authors further recognize, that "our challenge, at every level of organization (is that) we need to accept learning is produced by society, by us, and that we each play a role in that production". The ultimate goal of an organization is therefore creating a self-sustained organism, that is formed by people that perpetually get better at getting better (Bingham & Conner).

On the relevance of managing social learning from the perspective of talent development, Cappelli and Tavis (2016), one of the more prominent concerns is the people development, especially when we are globally facing shorter supply of it. Organizations need to determine who to let go, who to retain or who to reward. Especially in consulting companies, we can see that companies are doubling down on development and putting their employees in charge of their own growth - prerequisite is their undeniable motivation. This approach requires rich feedback from supervisors - a need that's better met by frequent "touchpoints" (term coined by GE) rather than annual reviews.

Kingdon (2012) argues that in order for the innovation to occur in an organization, there must be a dissatisfaction with a process, something that drives the person to go further and faster. Whereas Lisa Lai (2017) shares her opinion that employee motivation is "less about employees going great work and more about employees feeling great about their work". Combining these two approaches, it can be argued they support each other in construction of one approach – employees want to be motivated and feel great about their work, therefore discomforts are spotted, employees work on their elimination by looking for an innovative solution.

Informal learning and knowledge sharing in an organization is also linked to development of improvement initiatives (Melo, 2015). Both internal and external sources of information can enrich company's development, though leveraging internal knowledge takes advantage of various types of internal networks and collaborations. Understanding organizational learning and knowledge retention are vital techniques that need to be understood by managers in order to establish the learning processes in the organization. Author highly supports the idea of management involvement in the process.

Learning from one's mistakes is determined by a constant battle in organization to either prioritize safety approach (usually observed right after a failure occurred) or progress in a form of new product launch, increased sales, while pushing cautiousness to the background. Companies often underestimate that one catastrophic failure could easily setback the progress they can make by ignoring the path of cautiousness (Polidoro Jr., 2016). This equation is true not only in case of big failures such as Challenger explosions (NASA) or oil rig explosions (BP) examples from Polidoro's article. Learning from failures happens (or doesn't happen) in

organizations on smaller level every day. Many successful business leaders claim that the more they fail and learn from their mistakes, the higher chances of discovering successful ideas (Tylor, 2017).

As to learning in professional setting, the 70-20-10 model (McCall) explains how a substantial part of learning occurs in the course of every-day work. Seventy in the model is assigned to the ratio L&D we take in from real-life experience we encounter, when performing daily tasks on the job. Twenty represents the knowledge acquired in social setting, such as when receiving formal or informal feedback, coaching, communication with colleagues. The remaining ten percent is assigned to formal training, for example in the form of classroom style sessions. This ratio is a result of a study, in which managers reported their own experience of self-development.

It is further reiterated by Jenkins, former chief of learning officer in Thompson Reuters, that “70:20:10 is not about numbers. The numbers simply remind us most learning happens naturally as part of the daily work-flow, through doing work, and through conversation with colleagues” (Bingham).

Furthermore, studies show employees continuously learning on the job perform up to three times higher in comparison to others, with the employee engagement.

In Artificial Intelligence in Education, Biswas shares the link between learning through emotional experiences, therefore the importance of increasing positive emotions and decreasing the negative ones in the process of learning is vital to knowledge retention and its effectiveness in future use. Building on the premise from Jenkins that employees learn 70% of new information on the job, it is in employer's best interest to cultivate an environment of trust, safe surroundings. Additionally, cognitive appraisals are one of the emotion-regulating methods that can be used in learning environment.

1.5 Communication in Hilti

Primary reasons for effective SN communication in Hilti are connected with clear explanation of company strategies and enabling the environment where employees share their knowledge, which the company itself capitalizes on. At the forefront is allowing the communication from the company to employees, among employees as well as facilitation of

everyday tasks with help of more effective communication. Special focus is given to needs of employees in the sales department. Figure 10 shows example of priority tasks in various roles.

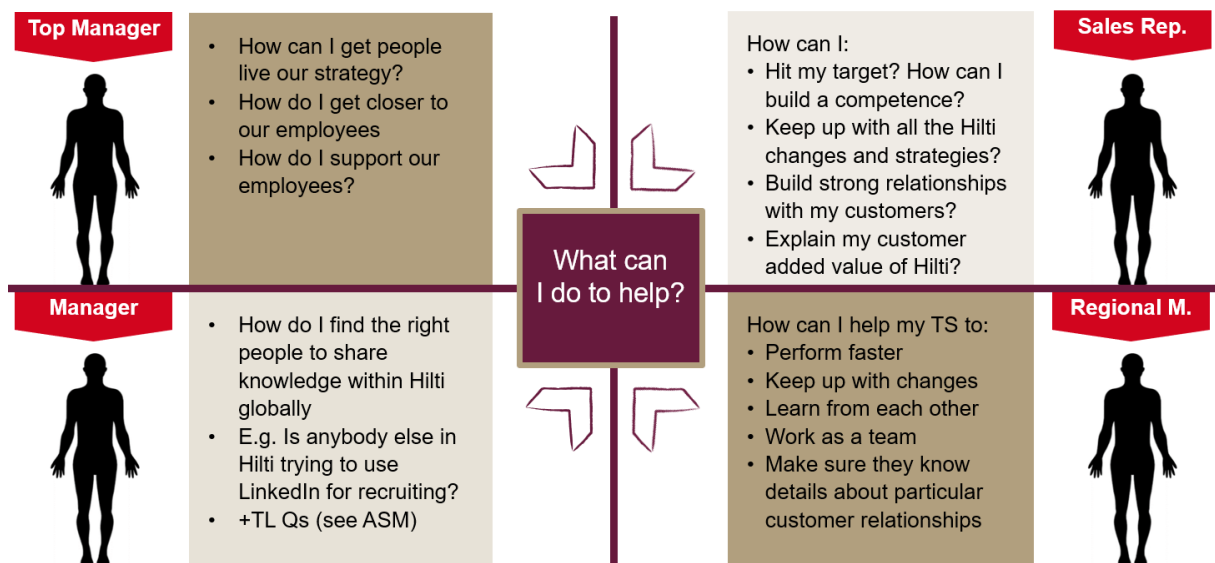


Figure 10 – Examples of employee priorities on the job, potentially enhanced by more effective communication and developed L&D practices

In connection to social learning and social networks, a poll was created in one of the groups on Hilti's SN. Employees were asked if they think it would help them to connect with colleagues in easier way if there was a possibility know more about their colleagues' professional experience, e.g. shared within their individual profile on a company communication platform. This poll was shared in a global group with 76 respondents recording their answers, 78% believed knowing their colleagues experience can positively impact their social network.

2. Research and methodology

2.1 Overview

In order to acquire as relevant data as possible, the companies and interviewees were chosen according to multiple criteria. Author considered different aspects that determine successful strategy in internal communication such as industry or size of the company, experience of the interviewee and their position within the company. However, the research was conducted under the assumption of transferability of acquired knowledge within the field of internal communication. Naturally, availability of sources and their willingness to share information was considered as well. All the interviews took place between 2017 – 2019.

The choice of companies was aimed to cover examples of organizations in different sizes per number of employees considering existence of international operations to be the most relevant factor. Gartner (2019) defines companies with 100 – 1000 employees as medium-sized enterprises, while companies above 1000 employees belong to large enterprises. This division defined the first group. Further sub-divisions of large enterprises were chosen deliberately to communicate the size of their operations, while maintaining the anonymity of interviewed companies, by choosing following categories:

- 100 – 1 000
- 1 000 – 60 000
- 60 000 – 100 000
- >100 000

First group of companies selected due to their industry was focusing on technology industry, namely big companies that are leaders on the global market but also smaller organizations that don't dominate the market but provide a source of innovative approach in the field. Technology industry is therefore prominent among chosen companies for their deeper insight in the topic. Other organizations cover sectors such as FMCG, construction, advisory, telecommunications and real estate.

Major focus was given to technology industry which is for the purpose of this study defined as industry in which companies focus on one or multiple of the following areas: internet,

cloud computing, computer software, computer hardware, artificial intelligence, social networking service, software development, information technology, telecommunications. Companies under the umbrella of technology industry are often themselves providers of social platforms and social network services, therefore they offer a unique insight into their use.

Approaching employees, author assumed interviewees working for the company across various roles in HR, Communication, L&D, Marketing, Finance and Sales, providing both strategic knowledge on behalf of the company, as well as end users providing more user-centric information. Moreover, employees approached were already established within the company for 2+, 5+ or 10+ years. My efforts were aimed towards at least 2 interviewees per company for the core list or organizations in the study, supported by the knowledge gathered from supporting companies, where mentioned criteria couldn't be fully met. Nevertheless, both groups provide valuable information relevant for the study. For anonymity purposes, research outcomes address all the interviewees in masculine gender, even though aggregated data show ratio of female and male respondents. Same approach was chosen in regard to geographical criteria (Figure 11). Interviews were conducted either in person or over video call, with respondents per company either separately or together.

	Company	Employees	Industry	Interviewee 1	Interviewee 2
1	Company A	1 000-60 000	Construction	L&D	HR
2	Company B	1 000-60 000	Real estate	Marketing	HR
3	Company C	>100 000	Technology industry	PR & Communications	Business develop
4	Company D	>100 000	Technology industry	L&D	Finance
5	Company E	100 – 1000	Technology industry	Marketing	HR
6	Company F	100 – 1000	Technology industry	HR	Co-founder
7	Company G	>100 000	Technology industry	HR	Sales
8	Company H	1 000-60 000	Technology industry	Communications	Marketing/ Branding
9	Company I	>100 000	Professional services	Consulting	Audit
10	Company J	1 000-60 000	Financial services	Finance	L&D
11	Company K	1 000-60 000	FMCG	Branding	HR
12	Company L	60 000-100 000	FMCG	Finance	Marketing

Figure 11 – Companies included in the study

2.2 Research questions

To guide this thesis, qualitative research method was adopted to understand values and perceptions of employees in international organizations, which provides information for deeper analysis of their behaviors in internal communication. Anonymous semi structured in-depth interviews enabled access to employees` reasoning behind their behavior and allowed the author to gather closer knowledge of their individual experience. Topics discussed during the interview included areas:

- Employees professional background
- What are means of internal communication available in your company?
- How and when you introduce communication platform to your employees?
- What are strategies of your company in the field of internal communication?
- What are the initiatives/campaigns/activities you introduced to engage internal communication? Which aspects determine their successful rollout?
- Where and how do your employees learn and develop?
- Do you support them to learn socially?
- Have you established a role of Community manager to support it?
- What is the approach towards using social networks during working hours?
- Link between communication and learning techniques to a company culture - flexibility of working hours, informal approach, hierarchy etc.
- Ratio of individual initiative and top down given approach when it comes to further development
- Formal/informal communication styles – Which are more common in your company and why?
- Do you adopt approaches such as – learner centric, 70:20:10, mobile first etc.

Practical part

3. Qualitative research

3.1 Introduction to study

The practical part of the thesis consists of qualitative interviews with professionals in 12 international companies, providing information about communication, sharing and learning practices in their respective companies. Author offers overview of the company with simple background information about its size, industry it operates in as well as tenure of interviewees and departments they belong to in the company. Summaries of aggregated interview learnings per individual company follow the introduction.

As previously mentioned in the methodology, participating interviewees are referred to in masculine tense, companies are referred to Company A-L and their size is indicated in brackets. These steps are taken to assure company anonymity. Aggregated learnings are also presented in the Figure 9 in the end of the practical part.

The aim is to provide recommendations to Hilti based on the knowledge gathered in the interviews, authors knowledge of heterogenous communication practices in Hilti and needs of L&D department to gather insight into practices of other international companies.

3.2 Individual company learnings

Company A

- *Industry: construction*
- *Size (employees): 1 000 – 60 000*
- *Interviewees: HR and L&D/ Communication*
- *Years in the company – 2+, 5+*
- *Key learnings: trialing/piloting prior to launch of tools; mobile first; CRM is a communication tool as well*

Just as construction industry is considered to be a traditional industry, Company A is by its nature facing an environment less prone to digital innovation. In 2013, company`s efforts to manage the digital communication started with simple intranet, but soon it became clear that managing digital communication across the company requires more resources and strategy. As

a result, a dedicated department on global level was guild, with its primary focus to plan, implement and facilitate digital workplace internally.

Communication challenges of Company A are often connected to blurred lines between the internal and external communication. Approximately half of its employees is not internal, they are not present on their internal infrastructure of platforms, therefore the communication with this portion of employees differ from regular internal workforce. The importance to include non-internal employees on internal platforms was confirmed by e.g. when a blue-collar employee managed to share his input on construction site safety topics on the social network platform, reaching ears of management and having them heard. This wasn't possible before, since his direct line manager never communicated these ideas further. For this reason, the company decided to adopt wide variety of platforms available for internal, semi-internal and external communication types.

Company A mentioned one of the main motivators to analyze their internal digital communication channels, is coming from company's external communication, from their customers. They face questions not only regarding how they communicate among themselves, but also with their clients. The company has been on numerous occasions contacted by their clients, suggesting collaboration on the level of communication/knowledge sharing, which raised the urgency of further development in the area. This also confirmed additional reach of communication topic, to external branding, how innovatively is the company perceived from the customer perspective.

At this stage of digital development, an ongoing priority for the company is to make all their communication platforms as integrated and interconnected as possible together with their availability on smart phones – a topic that might seem dated for other digitally progressive industries. Though in construction, even this simple step to assure seamless access to information and knowledge sharing has its room for improvement. It was also clear for the communication department, that providing mobile access is a priority, given the large proportion of employees is field based, often without direct access to internal networks through their computers.

On the topic of internal social networks, Company A has decided to adopt three major platforms, overlapping in their usage purposes. The end goal of effective communication is to link people with valuable knowledge, to take advantage of internal knowledge, since the intellectual capital is considered a vital asset in their company.

Firstly, the company tried to adopt a popular internal communication platform, which is part of Microsoft's Office 365 package – Yammer. Adopted in 85% of Fortune 500 companies, Yammer represents a common first step for companies to experiment with enterprise social networks. Launch of the platform was initially triggered locally, while the communication strategist hoped for organic growth among the employees. No formal launch or training/guidelines for the platforms were given to employees. However, natural unsupported approach didn't generate further employee engagement on Yammer across the organization. This was most likely due to the lack of internal expertise and experience with management of such platforms. At the moment, Company A is attempting to relaunch the platform, this time with more structured approach and with a strategy in place.

Second sharing platform strove to co-develop a social knowledge sharing platform internally. As to user structure, closed groups were created for local or global teams, as well as groups facilitating specific projects. The aim was to offer co-working space, document management, sharing of external content such as articles. This platform also containing blogging section, was developed on the HQ level, established as a “must have” tool in order to access information and is mostly utilized in developed countries.

Third social network platform used is the Workplace, Facebook's product mirroring the widely-used platform adjusted for internal communication. The company opted for continuity, creating similar group structure as used in the case of their internal platform. Main differentiator of the third solution lies in the use of instant messaging – employees prefer this tool for quick massaging, when there is no time for emails. Assumingly, employees are comfortable to use this tool as its functionalities mirror communication via Facebook, which is familiar to most of social network users. Popularity of the platform confirms the transferability of learning and sharing techniques discussed in the theoretical part of the thesis.

Throughout the process of launching and supporting employee engagement on these 3 SN platforms as well as other communication tools, the L&D and communication departments have learnt the importance of:

- running trials (series of tests in different countries) as well as trials (controlled implementations); assuring there are various types of teams partaking e.g.
- explaining the “Why-s” and “How-s” of SN usage to employees
- involving employees in the implementation process to increase their engagement
- internally justify the usage to employees – explaining “what is in it for them”; the tool must help them, otherwise they won’t use it
- most engaged topics on SNs use informal communication style, influencing knowledge sharing indirectly by nurturing inter-personal relationships
- creating unified sharing culture as a base of successful knowledge sharing

The purpose of providing multiple options for users is to give them a choice – the digital department doesn’t want to force the engagement, rather empower employees to find which platform suits them the best. Some groups/teams were initially included in setting their own rules for how the team will use the platform. On the other hand, some teams were simply given instructions. It showed the former groups were more successful, creating more organic engagement. Therefore, involving employees in decisions and formation of the solution had a strong impact on their engagement.

Given the complexity of various platforms available, it is common for employees to be confused which platform should they use for which tasks. Apart from three mentioned internal channels bearing social network qualities, the company provides access to much longer list of collaboration and knowledge sharing tools. Currently, they are developing a usage framework on the HQ level. These guidelines are aiming to be structured enough to provide guidance, yet open enough, to be adjusted and adopted locally.

Another topic discussed throughout interviews with Company A was centered about their internal Customer Relationship Management (CRM) tool, which was seen as an important customer knowledge information sharing space for employees. Company A was at the moment in the process of adopting new CRM solution, leaning towards a platform providing cloud based

and innovative product. This step is not only in line with company`s mobile first initiatives, but also including a platform enhancing communication for their field based departments.

Mentioned cloud-based solutions comprising elements of social networks reflected also the L&D strategy of the company. The eLearning development was set at the forefront of further employee development. Interactive learning material including embedded videos, text as well as quick testing were implemented. Apart from internal material, access to variety of MOOCs is also available for further personal development of employees.

Interviewees from Company A raised the questions of employee education across different ages. Employing workforce stretching through 3 generations, ranging from baby boomers to millennials, requires adopting solutions that would suit people used to significantly different learning styles. The company itself was (when the interview took place) learning how can they adjust the L&D approach to suit new talent coming to the company. Notably the onboarding process of new employees needs to reflect the learning style of the newcomer. There is notable polarization of what is expected from two very differently responding parts of the workforce. The company understands all the employees have the same needs, but they have different expectations of communication tools and differ in their willingness to change or adjust to different ways. Company`s end goal is to bring their employees together and take all of them into account when taking decisions regarding the L&D and communication.

Another area connected to management of generationally diverse employees arose with efforts to engage company leadership in implementation of new digital platforms, such as social networks. The top management stands behind new changes, they understood the need to embrace technology in order to progress and remain competitive on the market in the future.

Though difficulties in adopting change lies with middle management - in this area is considered process-hindering for digital innovation. One interviewee expressed that in their organization, it is more effective to build ideas from the bottom up. Unlike the top-down approach, changes are adopted and embraced by employees with lower grades, which they want to support in knowledge sharing the most.

Information sharing within a company consists of two main added values it can bring to the company. It amplifies best practice, therefore allows a company to avoid unproductively

reinventing the wheel or lose valuable knowledge all together. On the other hand, it enables repetition of same mistakes. It should be noted that Company A has embedded failure sharing in its culture, given the health and safety measures and their importance in the construction industry. Every project is followed by a case study discussing encountered failures and lessons learnt. However, this behavior hasn't been utilized in information sharing in other areas.

Company B

- *Industry: real estate*
- *Size (employees): 1 000 – 60 000*
- *Interviewees: HR and Marketing*
- *Years in the company: 2+*
- *Key learnings: limited tool availability; formal training for internal communication tools as well as SN launch*

Company takes advantage of limited communication tools, some of which include options from the Office 365 offering, but also tools developed internally. As of the time when these interviews took place, email remains the most utilized tool – interviewees agreed they are personally using email for 90-95% of digital communication.

Newly implemented is a video conferencing software, whereas for example official instant messaging tool hasn't been introduced yet. However, employees are often using WhatsApp for conversations as an unofficial quick communication tool. Even though WhatsApp is not an officially approved for internal communication, it is tolerated within the company, most likely due to previous lack of a substitute official tool with similar functionalities.

In Company B It is common for different departments, business units or markets use different tools. For example, regional market using local video conference tool, which is not widely used in the rest of the company. However, its recently launched substitute, Skype, is seemingly increasing videoconferencing among employees. It is also for the first time when employees globally have unified access to an official instant messenger within Skype functionalities.

Social network used for team communication with groups being formed for different markets (local/regional), cross-functional or themed, with e.g. 50-100 members. The activity on this platform often serves as a communication tool between the HQ and individual markets. The communication style is therefore more formal. The platform would rather serve as substitute for bulk emails, allowing the content to be available to wider relevant audience without the need to cc 100 colleagues in the copy of the email, potentially forgetting recipients.

Therefore, even though the SN was introduced, employees haven't been using it for the SN functionalities, rather as another platform with same communication habits offered by the previous tools such as email. The main added value of SN was the searchability of the UGC shared among the company in one place, not individual inboxes and chain reactions to it.

Informal communication style is sometimes adopted in emails, newly implemented and not yet widely used video conferencing software or instant messenger.

Implementation of the newly introduced SN has been accompanied by half a day training of the employees, emphasizing the importance of formal knowledge about its functionalities as well as company recommended guidelines on how to use the tool. Training included specific guidelines for the content they are allowed to share on the platform, keeping the communication business related, omitting sharing personal information. It was also explained why the change is taking place and how would it contribute to company's communication. Company stated they wish for organic sharing of business-related best practices.

Groups on the platform are first created by the person who is responsible for communication L&D of the particular department, serving as a simple community manager for the group at its initial set up. Such a coordinator creates the group and adds employees to the group, though is not involved in management of its engagement levels later.

Employee engagement level on the platform varies, though at the time of interviews, it has only been 5 months since its official launch. Interviewees mentioned some employees are prospering from the SN launch, increasing their personal visibility within the company, understanding that company's top management is also keeping track of content shared in some groups.

Company B has previously attempted to implement another platform, which carried characteristics of a SN, though the platform didn't succeed in creating high engagement from employees.

Regarding the documentation and knowledge sharing, the company has newly introduced centralized intranet, offering one-way communication of corporate guidelines. For knowledge sharing, often used is an internal software, allowing employees to share files, sending them from one to another with an expiration date – limiting access to files. Since the launch of the SN, employees begin to take advantage of its document sharing function as well, however this is not yet widely used.

Majority of the digital communication is carried on personal computer, though almost all communication platforms are also available within mobile application as a priority.

For the purpose of further employee development, company is providing access to MOOC, with recommended amount of training to be completed by an employee every year (calculated in hours). Additionally, Company B offers face2face training as well Individual learning plans are set as a combination of recommendations by direct line manager, according to personal preferences of an employee as well as influence from regional structures of the company.

There is always a possibility to influence one's self-development path by building a business case for further training/ education internally or externally, followed by discussions with direct line manager and subsequently receiving the financial grant. Such support is granted in line with personal appraisals. It is encouraged to develop employee's knowledge in different areas of the business by for example supporting their cross-departmental development.

Interviewed employees agree that trainings or any L&D activities have supporting function, though majority of knowledge acquired and necessary for their every-day work comes from daily performance of the job itself – which is in line with the 70:20:10 approach towards employee knowledge retention.

Company's interest in further employee development is also visible in direct involvement of line manager with employees that don't proactively apply for trainings or any personal development activities – in such instances, they are formally recommended by the manager.

Ideal scenario, interviewees expressed in internal communication included availability of communication tools they have enjoyed at their previous workplaces. Yet one of the

interviews conveyed he considers the number of communication tools to be accessed, adding he thinks he would be happy to simply use only email for his communication.

Company C

- *Industry: technology*
- *Size (employees): >100 000*
- *Interviewees: PR & Communication and Business development*
- *Years in the company: 2+*
- *Key learnings: failure sharing; high sharing and self-development motivation; employee trust*

The complexity of learnings from Company C are again connected to their scope of business, which among other products consists of communication and knowledge sharing platforms. As knowledge sharing practices are embedded in company's practices so much, that projects, ideas or successes "don't exist if they are not posted on company's social network". Employees are highly motivated to promote their work and share their learnings/ outcomes throughout the company.

The notion that distinguishes this company from almost all the others interviewed for this research (apart from Company H), is their openness to find positive spin to learning from their failures. Sharing instances that would have been buried in many other organizations are proudly, even though if through a lens of a positive twist, shared through the company in order to prevent the same mistake from happening in the future.

Another behavior influenced by the nature of company's product is already strong employee knowledge of internal communication tools. As product managers already carry the responsibility to educate internal employees on functionalities and technicalities of their products, it relieves the HR/Communication department from this duty.

In terms of formal/informal communication style on internal communication platforms, one of the interviewees explained "social networks will always adopt more informal style, nevertheless we would expect the content to be business related". Though they understand their highly informal company culture plays a vital role in their overall laid back communication style, which enables Company C to ease into SNs easier. Structure of the SN would include

groups of different sizes, temporary/permanent, project based, geographically based. Though for sharing purely social/informal information, groups specifically created for this purpose should be used.

Naturally, the higher the participation of senior management in the group, the more formal communication style is adopted. Similar effect, to bring about rather formal language, is observed in groups with thousands of participants where employees don't know each other personally, as they would in small local team groups.

It has never been deemed necessary to describe barriers as to what is or is not appropriate to share on the platform, or how formal/informal should employees be. It is considered natural to show trust in their employees, their emotional intelligence and ability to exercise their own judgement.

Occasionally, an employee would seek advice from the communication department, if they are not sure which their communication style to use. Such a confirmation was sought for example by a newly onboarded employee, yet unsure about the company culture.

In regard to training requirements following a launch of a new SN or any other communication tool, guidelines bringing the feeling of familiarity of use to employees can play an important role. If an employee tries the tool himself, creates a habit of using special features of the tool that are useful for their role, chances he will remain an engaged user are higher.

Community manager from a communication department can initially create a strategy, ensure buy-in of various departments/ users, train and support users. Though in internal communication, it wouldn't make much sense to employ a community manager in the sense of manpower proofreading and correcting the content of a group. Potentially, exceptionally large company could employ a community manager even for internal communication, though it would need to be the right person that has experience in project management as well as communication.

Similar role could undertake an ambassador or influencer/early adopter of the SN to enthusiastically motivate the use during its launch. This wouldn't be the primary job role of the employee.

Definition of social networks is seen in much broader manner. In Company C, it is recognized that elements of SNs are present in other digital platforms as well, even if they don't belong under the umbrella of SNs.

Looking closer on the bottom-up or top-down approach to reach engagement on their SN, Company C shared they have adopted each of these approaches at the same time in geographically neighboring countries.

One country focused on implementing the SN as a tool complementary to existing communication channels, relying on organic growth in employee engagement.

At the same time, the organization across the border opted for more structured top-down approach. Despite management involvement, it wasn't a forceful push, rather "leading by example" presence. It was conveyed they have very clearly demanded the leadership to be involved in content and activity generating on their newly launched social network platform. In order to gather as authentic content as possible, the communication department walked company's top management through struggles of a common employee connected to openly sharing their thoughts on the platform.

Asking top leaders to develop their own voice and communication style on the platform as well as to trust the community will accept their message formed the base for the launch of their social network platform.

Ideally, no matter if the company wants to increase engagement among employees or stimulate management participation, the key is to bring relevant value proposition to desired group of users. Company can do so by following these tips:

- It is crucial that the company-department launching a new platform knows what its main purpose is
- The very first step in launch should be clear and specific, answering specific need
 - For example, if HR wishes to increase engagement on the new SN, they could start sharing information undoubtedly interesting for the employees, such as information and announcement of additional employee benefits. If there is a genuine interest in the topic, it wouldn't be relevant whether it is a top-down or bottom-up approach.

- Avoid convictions, that strategic planning consists on purely agreeing how many posts a week should the department share in order to bring the tool to life – which wouldn't create organic engagement

One of the respondents from Company C expressed he would ideally like to have access to source of internal information, that would work as one centralized “brain” of all the possible knowledge. He wished information wouldn't be scattered across platforms and email inboxes.

Another area that significantly stood out in the approach to internal communication in Company C is connected to the level the management embraces the change towards utilization of social networks, especially the informality connected with it. As stated in the theoretical part of this thesis, P. Cappelli and A. Tavis consider involvement of management in various departments in newly introduced informal communication style.

Company C shared that upon launch of internal social network platform, members of senior management were asked to participate and lead by example. They were therefore pushed to deal with struggles any employee would experience when voicing their opinions and ideas, both more and less successful, on the platform all company has access to. An interviewee recalled one particular senior manager struggling with pressure to find his voice on the social network platform. All of the sudden it was only himself, not an assistant, finding his own personal style, facing the vulnerability of presenting himself on an informal platform. Encountering challenges connected with this experience, it made the manager more understanding of why the social network should play the role of open, informal setting, where participants can trust each other and the company to share their opinions and learnings candidly and without the fear of judgement.

Company D

- *Industry: technology*
- *Size (employees): >100 000*
- *Interviewees: L&D and finance*
- *Years in the company – 5+, 2+*
- *Key learnings: cross-department learning; AI; innovation; failures sharing; freedom of choice, agile approach throughout company*

Within this study, Company D belongs organizations with deeper knowledge of communication tools, due to their product offering in the same sector.

One of the interviewees explained the importance of sharing the knowledge between departments as incremental ever since it caught his attention when he has previously witnessed discussions within a focus group of young talents. The purpose of the group was to provide critical and constructive feedback on new training & development processes and assess development needs of their peers. One of the top 5 suggestion concerned cross department training/exposure to understand each function better. They believed that with help of shadowing, workshops or gamification activities supporting the cross-department learning, employees (particularly sales department) would achieve higher performance within the organization. This approach has been adopted in L&D practices of the company this interviewee represents.

Company D considers knowledge sharing and L&D to be at the forefront of their employees focus from their onboarding as well as throughout their career within the company. As an organization providing communication and learning platforms as their end products, they are also actively utilizing these platforms internally. Continuous learning and knowledge sharing are to certain extend structurally required from top down in a compulsory manner, but also facilitated with further recommendations for self-development with access to wide selection of internal and external sources. Intensive academy connected to their onboarding process consists of F2F trainings (often internationally across e.g. Europe), self-study, eLearning modules. Trainers within the organization are highly experienced employees with in depth knowledge of the company and departments they represent within the content they carry responsibility for. Ubiquitous motto for learning in the company says, “We learn from the minute we join and the learning never ends”.

Additionally, thanks to the nature of their business and the company culture, they have been promoting as well as developing innovative learning techniques. One of them would be to learn from each other mistakes by sharing individual failures on the team level. Another is developing AI solutions with customized content across their communication platforms. Personalization based on historical activity over numerous platforms is believed to increase accuracy of prediction which content is either of employee's interest or should be beneficial for their further development. The interviewee pointed out how fast-changing is the world of digital communication, explaining their employees have to learn constantly, every day, in order to keep the pace with internal topics in the company.

Described approach is in accord with Cappelli and Tavis (2016), explaining the trend of putting the employees in charge of their own growth. It is imperative for the employees to complete the compulsory online learnings as well as further cultivate their motivation for knowledge in additional areas of their interested connected to their field.

In internal communication, employees adopt very informal communication style, which is considered a part of the company culture.

Interviewee admitted that the vast number of platforms and information sources can be overwhelming. One of the innovations developed within the company is using artificial intelligence (AI) to propose for example areas of development, articles, SN posts to individual employees. Recommendations depend on their interest, professional background both within the company and in their lives prior to joining, already consumed content within their information and communication platforms. Large portion of such a knowledge about the employee is stored in their internal employee profile, though is linked to external sources such as LinkedIn as well.

Employees often keep their peers updated on their current work and progress with short 3 min videos accessible to everybody in the company. This increases knowledge sharing, "people know who to turn to if they want to learn more about the topic".

Employees spending the biggest part of their work time on learning are participants of the talent program, which is 50% of their working hours. These employees are constantly learning and following developments in their particular fields of interest.

Most relevant changes brought (and implemented in Company D) by digital world mainly in communication and learning in past years pointed out by the employee are:

- Visible and measurable impact of better communication and L&D practices on company values and performance
- Even remuneration system depends more on coaching, mentoring and other practices when company collects feedback on the employee
- Agile methodology utilized throughout the company, especially in connection with L&D as illustrated in Figure 12. The essence of agile approach is constant development of ideas in collaborative environment, before forming a product good enough for a launch. In this case, interviewee explained for him product can be an idea, training session, project etc.

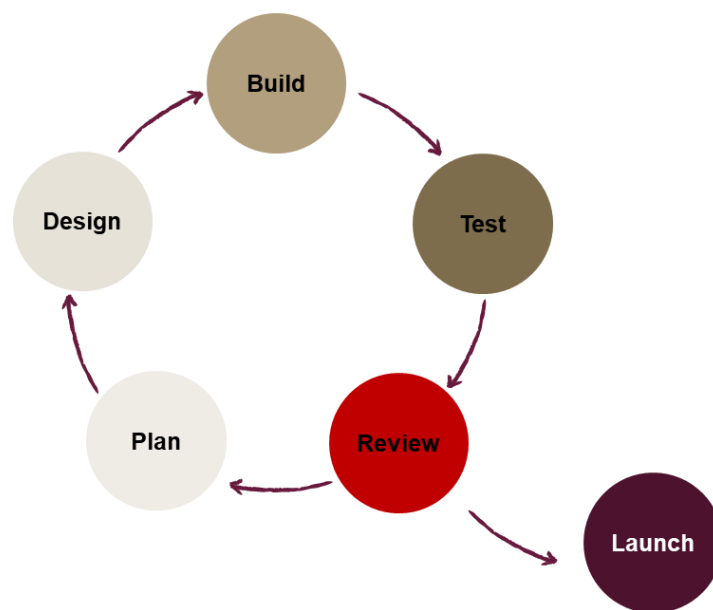


Figure 12– Agile methodology as discussed in the interview

Company E

- *Industry: technology*
- *Size (employees): 100 - 1 000*
- *Interviewees: HR & Sales*
- *Years in the company – 2+, 2+*
- *Key learnings: communication tools impact performance; approach of mature vs. young company; need for united communication practices*

Due to his professional experience, HR representative of the company E provides a specific outlook on significant differences in internal communication approach between large mature technology company and relatively small young company in the same field. Years of experience in the former significantly influenced his perception of the latter. He explains there is a huge difference between them.

In his previous job, company used their own internally developed tools, as those were among their product offering, whereas his current company, (production of internal communication tools is not in the scope of company's business) has flexibility and variability in its DNA, allowing usage of various tools from different providers. Nowadays he has freedom to use tools and their alternatives, keeping in mind that every particular employee or department can decide which communication style as well as platform suits them the best. This approach results in multiple advantages as well as limitations.

For example, a company that reached its maturity has already trialed different approaches to internal communication, learning a long the way. Therefore, it can focus on improvement and finetuning of its processes, it has time and human resources available to ameliorate them. However, depending on the size of the company, its agility doesn't might be lower, resulting in slower pace of adopting changes.

In the environment of a young company, especially of smaller size, change could be adopted much faster due to greater agility. In the example of Company E, the variety of communication options and employee flexibility to choose their own communication style is considered the core value of the company. The company is proudly identifying its company culture with employee empowerment and freedom, provided beyond just internal communication tools.

The interviewee emphasized he hasn't seen a company of similar size to Company E offering similar variety of communication tools, admitting such an approach of complete

freedom can cause productivity drop. Additionally, with potential company growth, he states the optimization of tools would be necessary.

The key step in the optimization process would be identifying primary communication tools, while continuing to grant freedom of choice for tools complementing the primary one. Thus, every employee should be available on the primary company tools, with further flexibility beyond these options.

The same interviewee also stated that upon arrival to current company, his self-measured performance decreased by as much as 30% solely due to different communication practices and the time needed to discover the most effective communication channels. Percentage drop was estimated as such, even if we take into account influence of new environment and responsibilities. For example, some colleagues not logging into a video call, because the invitation was sent for a tool they didn't use, effectively causing their absence and need for a follow-up meeting with the interviewee.

The resistance towards use of a tool from the point of view of employee can be caused by lack of proper training and tool introduction. Regarding communication tools, employees in Company E receive brief training focusing on what is available, but there is no room for further tips and tricks, showing full spectrum of features and importantly, what is the added value of each tool and why should they use it.

The drop has been mitigated once the interviewee understood specifics of communication and knowledge sharing with different departments. Moreover, he used this to his advantage to communicate with precisely the tool best accepted by particular groups of employees.

Despite adopted CRM software which offers additional internal communication tools, Salesforce, company is not taking full advantage of this offering. Tool continues to be used mainly for reporting purposes, result oriented data and is seen as a business tool, rather than a communication platform.

From the knowledge of an HR employee, company has not yet exploited potential of the CRM tool in terms of communication/knowledge sharing. The company discussion regarding the CRM system are currently focused on increasing informative value that can be extracted from the available data. "We are going back to the basics, working on data consolidation and discipline in data accumulation - consistent data entries by all sales employees". Therefore,

given their present scope of CRM enhancement, as of now they are not focusing on further possible features of the tool.

Failure sharing is not yet embedded in the company culture. Both employees sharing best practices and sharing failures are awarded for their, latter mainly for thinking outside the box and courage to try something new. Interviewee's understanding is therefore that sharing failure enables employees to think critically, to think outside of box and find different paths to solve every-day tasks in hand. However, he proposes sharing best practices as a stepping stone, to ease employees into sharing slowly, encouraging innovative ideas.

Under a strategy of a young company, sharing failures is not on the priority list, since failures are "not allowed". It is a direct consequence of being an immature company, where even basic products and processes are yet to be perfected.

Under the L&D strategy of the company, representatives have met with a local provider of a platform with elements of both social network and LMS lately, though this topic is not their priority at the moment.

On the topic of social networks, an interviewee has experience from his professional career pointing at the importance of management and their usage of SN as a unique sharing tool. Without leading by example, die-off of groups on the platform was very common. According to his experience, excessive freedom given to employees in shaping the structure of the SN resulted in high number of groups without any employee engagement. This has also resulted in information shared within them to be lost, as they were isolated in private groups. Such a practice brought a decision to ban independent creation of new groups - the reason for their generation must be based on specific needs and allowed by the owner of the SN topic within the company first.

In the company E, employees have access to primary product management and collaboration/ SN platform, which is integrated with e.g. company's email. Apart from the primary tool, some departments or groups of people such as software developers opted for more individualistic tool better suited to their needs, therefore not succumbing to usage of top down solution. The company understands that some departments have their specific communication styles, also their manager is trying to be understanding and adjust to it with tools he uses, to make information more digestible for the team. He would estimate though, that they are still

passively following information on the primary tool, but not actively engaging. This behavior is nevertheless in line with previous assumptions, where it is effective to have a primary tool as well as flexibility of additional tools per employee's preference. It is also important to point out company's IT department with their tech background is an important stakeholder in decision making process when determining primary communication tools such SNs.

On discovering new platforms/solutions. Interviewee would like to optimize, reduce or replace current platforms, instead of adding another one on the top of existing portfolio. He lacks decisions resulting in complete abandonment of non-performing platforms for the purpose of simplification. Otherwise, the interviewee couldn't see the clear progress in development of effective internal communication beyond current status quo.

He has never encountered fully functioning social network for the purpose of internal communication when exchanging knowledge with HR counterparts in either smaller or bigger companies, also adding that maybe it's because those companies are not led by millennials. As a result, if leadership can't use these platforms properly, sufficient engagement is difficult to achieve.

Knowledge sharing is not the strongest in the company, according to interviewees. Despite the marketing department being highly engaged on the collaboration/ SN platform, it is sales department that is in need of more attention, as they are the slowest to show progress in the area of knowledge sharing, yet it is a department with a very vital information to share among themselves.

As to interviewees' vision of an ideal internal communication system, unification of primary tools is on the forefront. Additionally, they communicated it is of higher importance to have a training in place, bringing already existent tools closer to employees by explaining their functionalities, added value and guidelines which platforms are best for which information/situations. Such a training is imperative, exceeding the importance of having primary communication tools without further training.

On the topic of SNs, skepticism towards their added value to communication and knowledge sharing on the top of other more traditional communication tools prevails.

Company F

- *Industry: technology*
- *Size (employees): 100 - 1 000*
- *Interviewees: HR and Founder*
- *Years in the company – 2+, 10+*
- *Key learnings: centralized and integrated communication platform; encouragement of informal behavior and personal relationships to increase collaboration*

Communication strategy in Company F is in large part influenced by its size and sector they are part of – software development. Interviewee has admitted that avoiding unnecessary email communication with overloaded inbox folders is very much in align with company culture. The company recognizes unnecessary email communication could be stressful for employees.

The core of Company F is their young age. As a young company with a startup mindset, despite the fact they are no longer a startup, they are testing all the new trends on the market, including office TV displays to broadcast company events, an internal website and newsletter, Slack and other solutions. For them, it is highly important to be the leading company in new technology trends. For example, the company has even installed iBeacons all over their offices to give employees fresh news via mobile notifications.

Primary communication tool across the company is Slack, serving as a social media platform, instant messenger or project management communication tool and is fully integrated with major providers of office communication tools. Slack is widely preferred platform across software development sector. Structure of the platform includes groups/ channels according to departments in the company structure, both social and business-related groups, open as well as private groups. They have also created a group that is specifically used for questions directed to entire office, if the employee isn't sure who to direct the question to. Secondary platform widely used is Google Hangouts for video conferences, further project management platforms depending on preferences of particular teams. Apart from continuous communication and information sharing, Company F takes advantage of shared drives.

Company F believes start-ups and modern technologies have changed the way internal communication works. Internal communication is not just cantered on the company newspaper or magazine. Interviewee expressed he understands more and more international companies are

turning to popular communication platforms like Slack Enterprise or even Microsoft's Skype, which have significantly influenced how employees are getting the most relevant information these days. Except for collaborative communication solutions like Slack or Facebook at Work, the trend is to build internal websites which are more like news sites.

There are many new communication channels on the market, and each individual gets used to using certain platforms. This makes internal communication even harder. One can ignore these modern trends, but then you are taking a risk that your employees are not being properly informed. This new era requires companies to have more internal communication channels than ever before.

As Company B or E, interviewees stated different departments tend to use different tools. In the case of Company F, it is mainly influenced by background of employees and the communication tools often used in their area of expertise. For example, software developer's strong preference for Slack, cloud based.

Very informal culture, though very strict on for example branding guidelines, even in internal communication documents. In such a situation, before-mentioned Slack can easily substitute such a communication and save employees time and effort.

Employee collaboration and knowledge sharing is highly encouraged, especially in software development teams. Collaborative behavior is further recognized for example by "Thank you notes" initiative. Employees give and receive thank you notes for helping each other, these notes can be later transformed into monetary vouchers for shops, services outside of the company.

For a limited time, employees were using a platform where everyone openly shared the list of their skills, resulting in series of one-to-one knowledge and skill sharing activities. This platform was unfortunately shut down by its operator, though it worked well for the company while it was operational. However, it also shaped further activities organized by community manager, focusing on internal knowledge sharing between employees.

Communication engagement on internal platforms as well as in F2F interactions is initially created on social/ friendly level, helping to build internal relationships and further converted capitalize on them in professional setting.

Facilitating social relationships among employees is at the forefront of the onboarding process as well, during which an employee answers 14 questions about himself. This is shared across entire company and further serves as potential conversation starter and an introduction of the employee to his new colleagues. Especially due to smaller, yet geographically spread teams across different time zones, it is important for the company to make every employee feel included in the team. Employees are also encouraged to share short video updates on their current projects with the rest of the company on social platform. The onboarding process also includes introduction to communication tools.

Interviewee would recommend creating employee engagement with trust between management and employees, based on honesty. Giving employees feedback whenever they want/need it. They consider caring approach extremely important – showing employees the management cares about their problems, even when they are negative. Interviewee expressed he understands people are the strongest capital in the company. If there is an active approach from the management, then employees will naturally engage. At least this is the approach that worked well for Company F.

Formal training as well as individual development of employees is highly dependent on proactivity of the employee himself. It is practically required from employees to be enthusiastic about their development, asking for specific trainings, applying for grant - which are available to and used by all the employee. Lean managers are naturally monitoring employee development activities, while still empowering the employee to build his development path.

Company G

- *Industry: technology*
- *Size (employees): > 100 000*
- *Interviewees: HR and Sales*
- *Years in the company – 2+, 5+*
- *Key learnings: empowerment/ self-responsibility for personal development; importance of high quality videoconferencing; SN re not necessary*

It is worth pointing out that Company G, as well Company C and D, does have communication platforms in their portfolio of products. The company is relatively advanced in the knowledge of their product portfolio; however, its employees use platforms by different

providers as well. Within the company structure, individual sections of the business receive a lot of freedom from the HQ. It is understood that ideal communication system is a subjective experience. Therefore, in every day job, employees are not exclusively using company's tool offering, nor they are expected to, despite the fact the portfolio covers all types of internal communication platforms.

In terms of platforms used for internal communication, emails, video conferences and shared drives, project management tool and messenger are the most common. Nonetheless, many more communication platforms are available to employees. Above mentioned practices virtually entirely replaced telephone communication.

Though slowly substituted by quicker forms of digital communication, email still play a significant role in communication as well as information exchange. Very common is sharing of cloud information storage access/documents, however usually shared via email.

Company G considers video communication as one of the most powerful tools, almost entirely replacing inessential F2F communication. Especially cross-country communication is heavily relying in high quality video conferencing. Video often basically serves as the primary tool, over which colleagues establish and maintain their almost exclusively virtual relationships. However, there are further specifics as to how is the video used. Duration is kept to essential minimum, which would for majority of meetings represent 30 minutes. This timing is taken seriously, achieved with the help of structured agenda, communicated upfront via email.

High quality of available video conference room is essential for both quality of the communication and its impact on employee's capacity to connect and build professional relationships over a digital tool.

Increase in video communication is visible not only in communication among employees, but also for instance when announcing company-wide quarterly kick-off. Traditionally, such a communication including company results, advancement of individual business units, industry development, has been previously conducted by the leadership via emails.

Another area of noticeable increase in utilization of video content is L&D. The importance of visual interpretation in learning is increasing, while written text still retaining its vital role in knowledge sharing, allowing employees to absorb the information in the speed that

suits them individually. Apart from plethora of information from both internal and external sources, employees have also access to F2F trainings involving travel if required.

Overall approach to L&D is deeply connected with company culture. For Company G, the key indicator as well as success-determining factor in effective knowledge sharing is considered to be an employee endowed with team-player qualities and inherent sense of curiosity. In the interest of breaking the barriers between silos and indirectly helping to fulfill company's business needs, such employee behaviors should be natural across the company.

Knowledge sharing within wider teams are structured in regular video calls, aimed to exchange project knowledge. Whereas formal trainings, connected to relevant project an employee is/will be working on are, take place approximately every three months, depending on the project rotation and duration.

Additional learning and information sharing are part of a personal initiative employees take, if they wish to acquire knowledge in specific topics. The company also subsidizes grants for external collaboration in the form of conferences, video conferences, webinars, speakers as well as individual language learning.

In the sense of 70:20:10 learning, company's L&D is very hands-on, with employees learning as part of their every-day job. Though truly strong is the initiative to empower employees through self-responsibility for their own personal development. Company G allows its employees to dedicate work time to projects of their own interest, contributing to their personal development. Social learning through sharing, commenting and increased information searchability is a big part of company culture.

Another widely popular communication style is internal messenger/ chat. One of the interviewees indicated that whereas in other companies or with external colleagues, you can often wait for email response for 5 days, we usually respond to internal instant messages within an hour. At the same time, another interviewee admitted that this form of communication can be distracting for some employees, depending on their work style.

Altogether, centralized system of all communication platforms is regarded as highly convenient. Majority of tools are integrated and connected to one search engine. Despite of availability of the SNS, employees are not using it organically, nor are they urged to use it. They communicate by sharing information, commenting discussing topics of individual or project interest, they also use various groups on different platform according to their

geographical location, interests or project focus. Therefore, many of social media elements are present, though spread across many interconnected platforms, instead of one SNS. Some of the functionalities closely associated with social networks, such as likes and comments, are available on some of the communication platforms, even though they are not fully considered to be SNSs. These

On the topic of formal vs. informal behavior, employees are considered highly informal within their teams and local company structure. Though emotional intelligence prompts them to be slightly more formal when communicating with limbs of the business in culturally different areas. This is especially true for countries where showing hierarchical respect is of importance. As a rule of a thumb, informal communication across all communication platforms is still leaning towards very professional.

Company G has specific approach in combining the top-down and bottom-up methods. Leadership is often reaching out to employees in the bottom, asking for feedback on their communication, which ensures its relevance and effectiveness.

Nowadays, the most relevant topics for the HR department are:

- Employee productivity – how to measure and increase it
- Effective communication
- Onboarding processes
- Employee empowerment – employees have abundance of freedom to direct their own development; their self-improvement tendencies are automatically regarded as given

Employee empowerment efforts are also visible for example in team meetings, where company adopted rotation ownership of the leading role by team members, thus decreasing the power distance between employees. Another empowerment exercise supported by the company is focusing on building one's confidence, openly discussing their strengths – writing 5 of them down as part of a workshop. Company G also addresses topic of empowering women, touching upon reasons why women often lack tendencies to “sell themselves” and their success internally. By contract, men have tendencies to overshare in the professional setting, therefore the company attempts to bring more balance between the two approaches.

On the topic of failure sharing, such a practice isn't institutionalized in the company. Every team approaches failure sharing in a different way. It is regularly shared during personal performance reviews. Often, if there is a mistake or a glitch discovered, employees focus their efforts in rectifying it rather than openly publishing its existence. However, some learnings from for example project failures can be searched on internal information sharing platforms.

Company H

- *Industry: technology*
- *Size (employees): 1 000 – 60 000*
- *Interviewees: Communication, Marketing/ Branding*
- *Years in the company – 10+, 5+*
- *Key learnings: understanding behavioral aspects of successful communication and their transferability between employees' work and private lives; learning from their own external social media experience*

This company took a different approach towards establishing their internal communication strategy. Interviewees responsible for identifying the most effective communication (on sub regional level of the organization) decided to firstly research the consumers outside of the company in a more structural manner. They have identified social media as a powerful instrument for internal corporate communication and they have conducted research into most popular social media/ communication platforms globally as well as in their region. This step helped them to establish the cultural and behavioral aspects that influence effective communication outside of work environment, and therefore increase the chances of successful and organic knowledge sharing within the company. Within their research, they considered various sociodemographic factors such as specific locations (countries and cities), age, education. They were driven by offering employees platform where they can voice their opinions and ideas, rather than traditional one-way communication model of intranet platforms.

Company's approach towards making educated decisions on overall usage of social media networks by consumers is in line with Reuters findings. The company consulted various statistical sources and arrived to same conclusions, which further guided their decisions when choosing new internal communication platform.

“Company H” has also identified the important role of social media in their customer relationships. They have assessed the contribution of their own experience with communicating with customers throughout social media, specially the speed of instant direct feedback. According to interviewees` leanings from this area, they have identified similarities between external and internal customers, promoting their messages internally in the same manner as their products to external consumers. The interviewees understood the importance of promoting and collecting the feedback from their employees to increase their products` perfection before they launch it to their customers.

To test their hypothesis, they have decided to open the space for feedback prior to launch of their new product (on their new internal social media platform). The space was open to all the employees in their specific market organization and have observed multiple examples of enthusiastic employees discussing potential bugs and truly improving multiple aspects of the product.

Both interviewees confirmed, that internal communication resulted in collaboration, unveiling potential complications that would have arisen after the products official launch. Additional learning applied from their external social media experience included seizing the contribution of employees from various departments, that wouldn't have been involved in product development otherwise, understanding the need for openness, transparency and diversity of contributors. Employees not only voiced their own opinion, but also shared external sources they have learnt from, therefore widening the information pool that can be capitalized on.

Challenges occurring in the process of forming and implementing the social network strategy included the question of network regulation, potentially low participation from shy employees or unnecessary questioning of company's` steps and strategies by employees with undesirable comments and ideas.

It proved challenging to internally decide on the social network regulation rules, finding the middle ground between full company control of the content and complete self-governance, the interviewees leaned towards the latter. Employee trust as well as informal communication style was believed to offset possible issues in this area. This approach is in line with findings confirming trust enabling greater productivity across organizations as a direct effect of greater flow of ideas (Pentland, 2014). Moreover, as we learned from the example of Pixar, safe work

environment in which all employees contribute to the organization. Pixar's leaders encouraged employee voice and knowledge sharing across many different departments (Kremer, 2018).

As to employees' participation on the platform, interviewees repeatedly opted to learn from their experience with external social network management and decided to accept possibilities of negative externalities of employee participation.

Additional positive by-products of organically working internal social networks arisen in finding hidden internal talents and horizontal communication among their employees. Allowing spotlight to previously unrecognized ideas and employees resulted in further career opportunities for some. As to the second parallel learning, the company identified a path to break boundaries in their internal hierarchy, allowing internal networking without unnecessary barriers on peer-to-peer bases.

In regard to the form in which the information occurred, usage of videos shared dominated, and was subsequently recommended, to enhance efficient communication especially for employees working for the company remotely. Sharing employee videos was in this case seen an alternative to lengthy office meetings, or at least as their supporting medium.

Company I

- *Industry: professional services*
- *Size (employees): > 100 000*
- *Interviewees: Advisory and Audit*
- *Years in the company: 2+; 2+*
- *Key learnings: smaller selection of tools increases productivity; employee training on tool usage*

Specifics of Company I reside in its branched structure, currently dividing internal knowledge and communication among its individual entities, together forming the company across the globe. Due to highly regulated approach towards information sharing and complex issues connected to international exchange of knowledge, it is significantly hindered internationally. However, there are activities connecting these entities for example in a form of

leadership training across units. Recently it also has been discussed how would the knowledge sharing structure need to change in order to add value to individual entities.

Email has been identified as a primary communication tool both internally and externally, however additional tools providing options to chat and share information are available. Those are not fully identified as SNs. Chat wouldn't be used with in communication towards senior management, and even among colleagues it is used only for communication which is not directly linked to work-related topics. In smaller groups or teams, unofficial chat platforms such as WhatsApp are occasionally used, especially since official chat platform doesn't allow for storing the information. Documents and conversation disappear as soon as the chat window is closed. Despite the platform being unofficial, it is tolerated by the company, provided there are no sensitive information shared.

Data security is of utmost importance for the company, therefore access to external platforms such as Facebook is not even permitted on company devices.

Major change in communication tools strategy has been implemented throughout the company and across entities just recently, replacing one primary provider with another. Interviewee subjectively confirmed there are more individual tools being utilized from the portfolio of the new provider. Change management process included up front communication employee training, including local community managers/ product owners supporting their office. Some of the support forms were for example providing FAQs, guidelines or supporting colleagues by running a two-week long helpdesk to answer ad-hoc practical questions. This switch was followed by more than a year long period during which company migrated all the data to platforms of the new provider. Major difference between the former and the latter is integration of given tools with the shared drive. Additionally, company communicated advantage of the new package is availability of these tools on smart phone apps.

As an interviewee shared, there is no time to have too many tools to cooperate with. It seems the company is limiting the number of tools available to minimum, realizing that the less can be more and not overwhelming its employees. In the world of advisory, the attitude of the company towards knowledge sharing is rather conservative. Partners usually serve as a middleman, providing their subordinates with support as they search for information within the company. As if the collective knowledge is stored in minds of employees, rather than in cloud

and the newcomer is basically pushed or rather expected to find solutions with his own proactive efforts.

Communication style across the company is leaning towards formal and professional. This is seen for example in knowledge sharing orientated communication. Personal and social activities of employees might be nice to share, though the company's purpose is to generate profits. Therefore, in cross-departmental learning, there is no specific emphasis on social aspects of building relationships. Interviewee gave an example in which his department understands that learning about other departments in the company could help them with cross selling, to sell wider range of service offering provided by the company to their clients. Motivation to learn from other departments is accordingly linked to basic knowledge, rather than ongoing knowledge exchange.

Additional cross-department sharing restrictions are caused by the nature of business that vary from one unit to the other. For example in advisory, distinctive project don't allow for its specifics to be replicated. However, in audit repetitive tasks allow for similar practices across vertical lines of business.

Knowledge sharing platform storing project information is internal, for some departments can be shared with some of other entities – allowing employees to see credentials of their colleagues, in order to directly contact them. Since Information is usually shared within local office, company partners would have the best knowledge to navigate employees to relevant information, often stored on shared disks. External information that would add value to employees' project are available to all.

Intensive employee training is delivered as a part of onboarding process, comprising of structured induction lasting three weeks. It focuses on both development of strategic and technical skills necessary for the job. Training style is very practical, in line with 70:20:10 model. New employees are learning by completing practical tasks and simulations in an environment far from traditional classroom setting. Additional follow up training is also provided to further deepen employee knowledge of relevant topics, which is also compulsory.

Company offers sponsoring options for certification connected to employee's field of work as well as soft skills related training – in this case cross-departmentally. Sponsoring depends on proactivity of the employee, providing his line manager with case study arguing

added value of the investment to the company. Example of such value adding training would be two selected employees attending external seminars focusing on data analysis, followed by presentation of their learnings internally to other employees.

Though company is providing social media platform for internal communication, the interviewee only remembered its existence towards the end of the interview, stating it is not actively used by employees

Ideal scenario to increase employee productivity illustrated by the interviewee would be having access to information across entities as well as eliminate the role of a middleman when accessing information.

Company J

- *Industry: FMCG*
- *Size (employees): 60 000 – 80 000*
- *Interviewees: Marketing*
- *Years in the company: 2+; 2+*
- *Key learnings: need for communication department; communication tools resulting in confusion; cross-departmental sharing due to personal networks*

Company J considers email their primary communication tool, though other social sharing platforms from the same provider are also used across the company.

There is no structured training process in place to communicate guidelines connected to utilization of communication tools, though company has been carrying out informal unofficial introduction of the tools by the assigned team member of the newcomer. As a result, overview of the platforms is introduced, however most likely not to the full extent of entire platform portfolio in the company.

Interviewee also added he has already heard the topic of standardization of communication tools is a pain point of increasingly more colleagues. In an attempt to share their successes, it has been an ongoing struggle to choose the right platform in order to reach wide, but relevant audience. This is even more amplified because of overlapping functionalities of certain platforms.

One of the examples would be some of the HR content, which could be shared on two platforms: company's intranet and social media platform. Employees should, in theory, follow both of them. Though there is no measurement in place of which one is more effective for in fact delivering the information to as wide audience as possible. At the same time, some of the more formal content shared is sent via email to all employees in the local organization. Interviewee was puzzled what message does this send to an employee: Information shared elsewhere, not via email, is not important? Wouldn't it be more convenient if other geographical parts of the organization would also have access to this information?

In terms of cross-generational communication, interviewee shared he can definitely see utilization of different tools depending on the age of the colleague, but also on their "company age" – therefore how long have they been in the company. Newcomers that have joined the company after all current tools were available, would be more comfortable to use them to share information as well as for collaboration. Whereas employees that have been in the company for longer are usually set in their ways, unless they have specific interest in innovative or digital novelties.

There is also difference in which information sharing platforms are used in which department. When it comes to digital tools, sales department would rely on CRM more, though it doesn't have the form of a fully collaborative tool at the moment when the interview took place.

Social media in internal communication has been experienced by the interviewees over a longer period of time (1+years), though they still feel confused about its primary purpose. The launch of the platform was considered challenging, mainly due lack of experience and deeper knowledge of social learning and information sharing.

On the topic of L&D, interviewee is content with variety of both structured training and freedom in self-managing his development further. Company J offers both variety of online sources, mentorship and well as potential external trainings depending on the communication between the employee and his team leader.

Employees tend to also organize training sessions among them, across departments etc. This process is though not formal and overly structured, it usually develops from personal

connections and networks, informal conversations eventually resulting in identification of a gap in knowledge of multiple colleague and the training itself.

Interviewee shared he would welcome a communication department in the company, even if only consisting of one person, which could assist all the departments in the company specifically on the questions of internal communication.

Company K

- *Industry: FMCG*
- *Size (employees): 1 000 – 60 000*
- *Interviewees: HR, Branding*
- *Years in the company: 2+; 2+*
- *Key learnings: overly formal environment hinders collaboration; connection between company culture and quality of social learning practices*

Company K is officially using one main provider with additional use of internally created platforms, for example company intranet.

One of the interviewees had an opportunity to work both in HQ as well as a local organization, therefore can reflect on different communication habits of employees across countries in the company. Digital communication in Company K heavily relies on email communication, which has been estimated up to 90% in local organization and slightly lower, up to 75% at HQ. HQ took advantage of Skype and its instant messaging more than the local organization. This is partially given by office size as well – In local organization, substitutes instant messaging with F2F communication.

Company K is also using shared drives for documentation storage, though not project management functions.

Looking closer into informal and formal communication styles, the interviewee confirms company's heavy usage of email is connected to company culture, which is highly formal and conservative. Due to its culture, all official communication should be stored in emails, further supporting use of this tool. Interviewee identifies other areas, in which he believes the company culture hinders seamless communication and decreases productivity. Numerous decision-making processes are linked to approval steps or authorizations on digital platforms. For example, in order for the decision to be authorized, 6 people have to log into a digital tool

to do so (no SSO, no integration with primary communication platforms). As a result, platform not build for project management takes over approval process and prolongs the decision-making process.

Interviewee has also noticed, especially in comparison with his work experience in a different company in the same industry, how culture effect employees' willing ness to learn. He considers the culture of Company K to be very closed up, traditional, lacking proactivity and motivation to learn and collaborate. Employees often refer to how busy and swamped with work they are, claiming they don't have time for additional learning or building their social network.

Social media platform, Yammer, has been implemented across the organization. Interviewee admits he didn't see much value in using it while working for the HQ, since he is a very good networker and was already aware of information shared. Therefore, he would occasionally scroll through weekly catch up emails automatically sent from the platform, though not really paying too much attention to it. Interviewee shared he personally doesn't have time to think about internal social media, writing posts etc.

Information sharing is described as a process not dealt with digitally enough. Information search therefore mostly begins with reaching out through personal network, discussing the topic in hand. This step partially replaces role of a fully functioning search engine, allowing employees access to company information.

Communication and information sharing on cross-departmental or cross-divisional level is rather low. On if the interviewees had a chance to work on projects across departments and divisions and was surprised about the lack of relationships and knowledge between them. He found multiple instances of different divisions doing the same things differently, reinventing the wheel and not sharing the best practices nor their learnings. He believes his knowledge of the company and effective communication is considerably linked to his social network and ability to create relationships with colleagues. According to the interviewee, this is more visible in local organization.

Interviewee admits this can be partially hindered by different generations not "speaking the same language" in their communication styles.

Formal L&D activities are managed from a platform called training academy, which offers F2F and e-learning modules, both internal and external.

F2F trainings are often international and would last multiple days, though an employee can't apply for it himself, nor can he choose which training would he like to complete. This decision is based on so called "nomination" from the line manager, effectively taking over employee's development path.

On the other hand, eLearning modules are mostly completed by passing a test in the end of 60-90-minute-long segments. However, learnings are not put into practice right away, resulting in majority of it being forgotten before they can be used in every-day scenarios. There is no social aspect of commenting or leaving feedback/ rating for individual modules.

Ideally, the interviewees would prefer if the company culture was more informal, therefore they could capitalize on their relationship to "get things done faster and better". They believe social space on digital platform would be beneficial for the company, as long as it would be communicated as an important part of culture and employee behavior. Also, availability of integrated tools together with encouragement to use them would be preferred.

Company L

- *Industry: FMCG*
- *Size (employees): 1 000 – 60 000*
- *Interviewees: Finance, Marketing*
- *Years in the company – 5+, 2+*
- *Key learnings: cross-department teams to work on change management; focus on reliability and easiness of use; company can't manage SNS, but they can build them*

Company L has just recently been investing their resources into internal communication strategies to put further structure into communication channels used, as well as switching to a different primary provider of communication platforms. The company has been looking for a provider that is highly reliable, especially in platforms enabling video conferences. Since internationally working teams are rather common throughout the company, they understood the need for high quality video calls that can partially replace otherwise costly face-to-face meetings.

One of the interviewees shared he would use video-conference 80% of the time, showing his strong preference over simple voice calls. From his experience, even colleagues that are not

used to this type of communication would follow his lead, describing using video conferences as “contagious”. The interviewee expressed that availability of high-quality video-conference rooms as one of potential solutions to mutual knowledge problem (Cramton, 2001) described in the Communication section of this thesis.

The interviewee explained that despite of a major change of the primary provider, the company is not afraid to “mix and match”, picking specific platforms from various big providers for example using both Microsoft as well as Cisco products, depending on personal preference. Another focus of attention was easiness of use, by for example allowing SSO, single sign on, for employees across various platforms. Therefore, enabling employees to freely choose communication methods that make them the most productive, by offering a wide variety of providers. Though provider change decision came from company’s HQ, they still made old tools available indefinitely, allowing employees to stay with previous platforms as well.

Company L also decided to pay special attention to change management connected with usage and management of communication platforms. They have formed a cross-department team, identifying early adopters and influencers to enhance knowledge sharing in the company. Early adopters would also serve as community managers, running pilots of various platforms, in order to form a strategy for company-wide launch of new tools. As part of the pilot project, one of the interviewees was chosen as an early adapter, sharing what he learnt when researching the topic himself. He was surprised to find out that most of the global companies he talked to were still heavily relying on email as a main communication tool, though would already setting up their own internal projects to innovate in this area.

Considering the importance of effective communication and knowledge sharing, the company chose to apply both top down and bottom up approach to boost usage of available platforms, notably those with social sharing content. As in case of Company H, they have realized that bottom up approach is more effective when they promote sharing of informal/ personal updates, alongside strictly business-related topics.

In regards to most relevant factors which can help to foresee effective communication as well as its consequences, especially in informal setting, interviewee shares:

- Employees need to create relationships – for example if employees' network is strong, his connections are his ambassadors, which streamlines further communication, increases productivity and knowledge sharing
- F2F communication is necessary – even if majority of communication takes place digitally, occasional F2F meeting helps to create much stronger relationship

L&D opportunities in the company provide a lot of F2F learning and training opportunities. Interviewee shared he is experiencing more F2F opportunities in comparison to his previous experience with company trainings. Unlike structured e-learning plans, topics of F2F trainings are not given, employee is trusted to set up his learning plan in this area himself. One of the combined (F2F and online) trainings available to employees called “How to build effective internal network” should help employees to build informal effective network between colleagues that otherwise wouldn't meet. Such a training is a good example of learning automatically used in practice by creating network of colleagues attending. Since 70% of employees' internal communication is with colleagues internationally and only 30% with colleagues based in the same country, it is vital for him to effectively use available communication platforms as well as build his social network.

There are e-learning modules on the online platform offer digital content for self-development, often accompanied by simple assessment often throughout as well as in the end of training modules. Questions placed throughout the module are viewed by the employee as a simple assurance to prevent passive listening or watching of the material. Content of eLearning modules is often bite-sized and easily digestible.

Interviewee believes digital training options are mostly beneficial for newcomers, employees that are in the company for longer take more frequently take advantage of F2F trainings.

Though e-learning platforms support the possibility to leave comments or likes, employees are not interested in doing so. Only L&D team would sometimes prompt employees to express their feedback in this form, but it has never picked up.

The interviewee is appreciative of company's approach to provide and implement more communication and collaboration tools, but he also admits that tools he uses in his private life can sometimes be more user-friendly. This was especially palpable while describing informal/

non-business communication with colleagues – they would be using their personal accounts on different platforms, by large part because of convenience.

Given almost all the employees are working from their computer, Mobile first approach is not the main focus when choosing the most relevant platforms to implement, though it is important for the tool to offer this function.

As to ideal communication, interviewee appreciates availability of integrated tools, especially having search engine combining various platforms. For example, Google proxy search allowing searchability through all SharePoint sites or internal shared drives from the provider in the company. Though this solution is not seamless, it is a good place to start.

At the same time, interviewee understands that no matter how much company would work on technical aspects of communication such as providing centralized data bank, information would always be shared among employees informally as well. He believes a company can't manage a SN, but it can build them. Therefore, the interviewee can't see the purpose in SNs being managed, regulated, steered by the company itself. What company can do is build the structure of the SN and make it available to its employees with sufficient communication explaining its added value and user benefits.

Additionally, the interviewee would prefer improvement of mobile first approach across both communication and L&D, though he can see this is an area that has been worked on already.

3.3 Analysis & Aggregated learnings

Qualitatively oriented discussions in the interviews were meant to bring together experience of professionals across industries, analyzing which practices, learnings and challenges occurred across multiple companies.

Learnings are organized according information provided in the interviews as well as simplified Kremer guidelines introduced in the theoretical part. As mentioned in the theoretical part, the information quality depends on the degree to which the subjects of interviews shared their knowledge with candor and well-rounded knowledge of the company itself. However, their communicated experience is subjective. To simplify the language used, views of the interviewees are referred to as views of their respective companies, though they represent the views of their employees that participated in the interviews.

Overview of the aggregated results can also be found in the Figure 13 in the end of this chapter. Additional learnings are part of Recommendations for Hilti.

Internal communication practices

- **9** companies identified email as their primary internal communication tool, despite efforts to substitute part of the communication by other tools
- **6** companies provide structured employee training or guidelines for communication tools either during onboarding process or when new tools are introduced
 - **2** were working on this step at the time of interview

Number of platforms for internal communication

- **7** companies have multiple platforms per type of communication, offering employees flexibility in choosing their preferred tools
- **5** companies are using combination of tools from two or more major platform providers (Microsoft, Google, Cisco, IBM etc.)
- **7** companies stated they rather add additional tools, than replace existent ones from their portfolio by more innovative tools
- **3** companies believe it is necessary to have multiple options of communication platforms, since different generations working for them are familiar and comfortable with receiving and sharing their information differently
- **6** companies have different tools for different departments

- **7** companies consider mobile-first approach as an important factor when implementing a new communication tool

Formal vs. informal approach towards communication

- **9** companies stated they support informal approach towards internal communication, especially on Social network sites
- **9** companies directly linked employee empowerment with ability of employees to use their Emotional Intelligence to accurately assess the right level of formality, whereas **3** companies have defined specific guidelines regarding what to share and how to share information on the SN

Social media/ Social network sites usage

- **11** companies are currently using, implementing or planning to implement platform with social media features in their internal communication
- **7** companies shared it was a challenging process to implement SNs
- **8** companies shared they used influencers/ ambassadors to launch the SN
- **7** companies involved multiple departments to contribute to SN launch strategy
- **6** companies identified it is causing too much clutter to allow employees to freely create groups on SNs, preferably group structure should be regulated/ created by the company
- **9** companies tried to launch social media platform by engaging employees without fully formed strategy and hoping for organic engagement on the platform, out of these 9:
 - **3** companies also adopted partially structured support (therefore not relying on the organic growth ONLY)
 - **3** companies trial tested bottom-up approach before involving the top-down approach as well and relaunching the same or a new social media platform
- All **12** companies are of the opinion there needs to be a formal support on SNs in order for the platform to become engaged, used by employees or adding value to their company
- **7** companies believe it is instrumental for company leadership to be involved on SNs to lead by example and encourage employee engagement

Company culture

- **9** companies clearly linked their company culture to peoples` motivation to share information and continuously dedicate time to self-development

- 7 companies nurture employee empowerment and build trust as a bases for transparent and open communication, leading to higher productivity or overall having positive impact on to company
 - In 2 companies, lack of trust given by the company is significantly perceived by the employees

Employees wishes

- 7 of companies expressed a wish for fully centralized structure of integrated communication systems with highly functioning search engine

L&D

- 8 companies recognize they learn the best on the job
 - 1 company (underlined) practices learnings on real-life scenario case studies as the part of
- 5 companies rely on employees proactively learning both on the job as well as enthusiastically ask for training in areas they would like to develop
- 6 companies admitted they either openly share failures across the company or they share it with a positive twist in lessons learnt form
- 12 companies adopt visibly structured elements in L&D approach
- 9 companies consider visibly proactive approach from employees in L&D
- 4 companies identified with 70:20:10 learning model

Challenges

- 6 companies expressed they are happy with their current L&D opportunities and activities, while 6 companies were either dissatisfied with it or can see a lot of room for improvement in the area
- 6 companies stated they need to make the topic of internal communication and social learning on digital tools their priority, otherwise it is difficult to successfully implement the SN

Company/Topic	A	B	C	D	E	F	G	H	I	J	K	L
Email as primary tool	Y	Y	N	N	Y	N	Y	Y	Y	Y	Y	Y
C.Tools structured training	Y*	N	Y	Y	N	Y	Y	N	Y	Y*	N	Y
Multiple platforms for same purpose	Y	N	Y	Y	Y	Y	N	N	N	Y	N	Y
2+ major C. Tools providers	N	N	N	Y	Y	N	N	Y	N	Y	N	Y
Replace or Add C.Tools	A	R	A	A	A	A	A	A	R	R	R	R
More C. Tools for different generations	Y	N	N	Y	N	N	N	N	N	Y	N	N
Different C. Tools per department	Y	Y	Y	N	Y	N	N	Y	N	Y	N	N
Mobile-first approach	Y	Y	Y	Y	N	Y	Y	N	N	N	N	Y
Communications style Formal/Informal	I	F	I	I	I	I	I	I	F	I	F	I
Judgement of Formal/Informal	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Lack of trust	N	Y	N	N	N	N	N	N	Y	N	Y	N
SN in place	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Challenging SN implementation	Y	Y	N	Y	N/A	N	N/A	Y	N/A	Y	Y	Y
Influencers/ Ambassadors	Y	N	Y	Y	N/A	Y	N	Y	Y	Y	N	Y
SN involving departments	Y	N	Y	Y	Y	Y	N	Y	N	N	N	Y
Free SN group creation	Y	Y	Y	N	Y	N	N	Y	N	N	N	Y
Attempt for organic engagement on SN	Y	Y**	Y**	N	Y	Y	Y	Y	N	Y	N	Y**
Triad Bottom-up before trying Top-down	Y	N/A	N/A	N/A	N/A	N/A	N/A	Y	N/A	N/A	N/A	Y
Need for formal support	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Leading by example	Y	N	Y	Y	Y	Y	N	Y	N	N	N	Y
Company culture	Y	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y
Nurturing employee trust	N	N*	Y	Y	Y	Y	N	Y	Y	N	N*	Y
Wish for more centralized systems	Y	N	Y	N	Y	Y	N	N	Y	N	Y	Y
Learn on the job	Y	N	Y	Y	Y	Y	Y	N	Y	N	N	Y
Employees learn on the job AND proactively	N	N	Y	Y	N	Y	Y	N	N	N	N	Y
Failure sharing	Y	N	Y	Y	N	Y	Y	N	N	N	N	Y
L&D structured	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
L&D proactive	N	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y
70:20:10 approach	N	N	Y	Y	N	N	Y	N	Y	N	N	N
Content with current L&D	Y	N	Y	Y	N	Y	Y	N	N	N	N	Y
Priority of SL & IC	Y	N	Y	Y	Y	N	N	Y	N	N	N	Y

Figure 13 – Aggregated results of relevant findings of the qualitative study

Y – Yes

Y* - Yes, in progress

Y** - Yes, but with additional support

N - No

N* - No, employees feel the exact opposite

I - informal

F - formal

A - add

R - replace

4. Recommendations for Hilti

Hilti's L&D department has repeatedly come across a question of effective communication and learning technics, allowing for information being stored for future use in a more permanent manner.

Recommendations for Hilti are based on both qualitative outcomes of the study, as well as specific tips that are relevant for Hilti's company culture, structure, industry, current portfolio of internal communication tools or L&D practices.

Recommendation for communication and L&D

- Use Mobile first approach: Construction industry calls for field-based workforce to have access to cloud-based information across the board – this includes communication tools, learning materials, information shared as well. It is also in line with Mobile first approach adopted by companies from the study with field-based employees. This approach also includes CRM.
- Support curiosity: Study showed companies with employees who are curious by nature see automatic engagement and information sharing both digitally on SN and in F2F interactions. Curiosity is a quality that can be spotted at the very beginning, during the recruiting process.
- Combine structured and self-governed development opportunities: In order to empower employees to coordinate their development proactively, they should officially have responsibility and opportunities over a portion of their development. It is important to provide structured compulsory training during the onboarding process. Dedicated development time (for example in % of the work time) can further strengthen company's message about the importance of self-development on the job.
- Implement aspect of “learning on the job” in formal training: Majority of interviewed employees admitted they learn best while doing the job itself. One of the companies effectively implemented real life complex scenarios as a large portion of their formal training, which can suit Hilti as an example. Learnings from both F2F and digital training should be directly used or tested in real-life scenarios, increasing employee's knowledge retention.
- Support social networking: Effective communication is strongly linked to one's ability to create his social network with employees across departments and divisions.

Therefore, social networking should be encouraged and included as an option in company's training portfolio. The more interactions in cross-departmental setting the more opportunities to learn and combine shared knowledge and foster innovation and progress. Another digital way to support networking is easier searchability of employees' profiles stating their work experience, interest, projects or topics they wish to develop.

- Teach agile techniques: Agile approach can be adopted across departments, not only within L&D. Offering Agile and supportive Change management courses would affect the organization positively.
- Encourage failure sharing: In order to avoid “reinventing the wheel”. communicate openness and nurture employee trust, failures should be shared as lessons learnt.

Recommendations on communication platforms

- Provide variety of communication platforms and guidelines for the primary ones: Majority of interviewed companies would offer flexibility to their employees in choosing the platform that suits them the best. Therefore, providing more options to suit different individuals, generations and departments, while clearly communicating which are the primary platforms. It is necessary to provide both technical aspects allowing internal communication as well as nurturing the culture encouraging motivation and eagerness to share and learn. The key is to steer, but not micromanage the SNs.
- Add rather than replace tools – Trend among interviewed companies is to rather add new platforms. let the old ones naturally “die out” rather than replace them forcefully.
- Provide training guidelines for communication tools: This should be part of onboarding as well as with existing employees.
- Management involvement: In order to encourage social learning and employee knowledge sharing on digital platforms, management should lead by example and “normalize” such a behavior and lead by example.
- Informal communication: Study showed that company culture influences employee trust and their ability to assess when formal/informal behavior is appropriate, such is the case of Hilti, I believe. However, in a digital setting on SN, employee engagement was often linked with informal communication style on SNs.

- Integrate communication tools: Employees find it easier to gather knowledge if they have access to it through integrated communication tools.
- Community managers- ambassadors: Utilize community managers to steer the structure and engagement on the SN upon their launch, Ambassadors and early adopters have also positive impact on future successful employee engagement on the SN.

4.1 Recommendations for further study

Further study could benefit from analyzing following aspects of internal communication and L&D:

- Analysis of social media platforms in companies over longer period of time, since companies included in the study were often still in the process of collecting well-rounded collection of best practices in SNSs strategy.
- Developing KPIs to measure productivity increase of teams before and after fully implementing social sharing and communication into their everyday work.
- Measuring employee satisfaction before and after implementation of communication tools following outcomes of the study.

Appendix

Figure 2b – Original source: From manager to innovation leader: Research based recommendations and implementation guidelines (Kremer, 2008)

Recommendations	Implementation Guidelines
1. Develop the right group norms	<ul style="list-style-type: none"> • Encourage employee trust • Praise the willingness of experts to help other employees • Boost reinforcement of information sharing among all team members • Create a culture that encourages knowledge sharing • Build up norms that encourage politeness and respectful sharing of ideas • Promote team extroversion to share experiences and knowledge among communication partners
2. Design teams strategically	<ul style="list-style-type: none"> • Design smaller groups and encourage them to be self-managed • Adopt fair practices, such as rotating leadership and peer evaluations to decrease the power distance among employees • Directly ask new team members for input and encourage them to speak up as valuable team members • Promote overt leader behavior to get more employee ideas on the table • Rely on both formal mechanisms (e.g., suggestion systems) and espoused openness to input (e.g., an open door policy), but also show through your behavior that you explicitly welcome voice • Train yourself in both the delivery and receipt of upward information, practice non-defensive listening, and communicate the rationale for (non)action in response to voice • Support team cohesiveness by avoiding constant changes in team composition
3. Manage interactions with those outside the team	<ul style="list-style-type: none"> • Encourage your team members to share their knowledge and ideas with those outside the team • Encourage employees to demonstrate trust in their interactions • Train for and assess trustworthy behavior through evaluation procedures or by investing in processes to create a shared vision and language for trust to flourish • Collaborate across organizational boundaries, physical barriers, and hierarchical levels • Enhance employees' awareness of others' expertise • Support employee networking (e.g., affinity groups, LinkedIn, etc.)
4. Show support as a leader	<ul style="list-style-type: none"> • Signal support for your team • Focus on sharing lessons learned instead of mistakes made • Promote social learning • Establish ethical models to both support and motivate employees • Create a climate for innovation in which employees are encouraged to propose suggestions and voice their opinion • Employ ethical leadership practices and encourage managers at all levels to do the same
5. Display organizational support	<ul style="list-style-type: none"> • Encourage universal support for managers and employees throughout the entire organization • Promote structures low in bureaucracy and design formal mechanisms to facilitate upward communication • Ask directly for ideas and suggestions from employees • Acknowledge the value of and implement recommendations made by all employees at all organization levels • Maintain regular encounters between employees and skip-level leaders to reduce anxiety among employees • Do not only declare an open door policy but regularly make time to walk through that open door • Listen more than talk and respond in ways that reduce employees' concerns about breaching written or unwritten rules • Take steps to enhance organizational identification along with personal control (e.g., redesign jobs to increase autonomy)
6. Use performance management effectively	<ul style="list-style-type: none"> • Use performance management systems to promote voice and knowledge sharing • Implement performance management systems that have a heavy developmental component • Design and revise already-in-place performance management systems with the specific goal of promoting voice and knowledge sharing • Use performance management systems to encourage employees to establish relationships that span departmental and organizational boundaries, physical barriers, or hierarchical levels • Incorporate the behaviors found to influence voice and knowledge sharing into feedback instruments • Institute open communication and feedback from all levels (e.g., 360-degree) to promote voice and knowledge sharing • Create incentives (e.g., promotion, bonus, higher salary) to facilitate knowledge sharing and also help build a supportive culture • Use performance management systems to formally quantify knowledge sharing behaviors

Figure 6 – Social media supporting self-regulated learning (Dabbagh, 2012)

N. Dabbagh, A. Kitsantas / Internet and Higher Education 15 (2012) 3–8

Table 1

A framework for using social media to support self-regulated learning in Personal Learning Environments (PLEs).

	(Level 1) Personal information management →	(Level 2) Social interaction and collaboration →	(Level 3) Information aggregation and management →
Blogs	Instructor encourages students to use a blog as a private journal to set learning goals and plan for course assignments and tasks	Instructor encourages students to enable the blog comment feature to allow for instructor and peer feedback enabling basic interaction and sharing	Instructor demonstrates how to configure a blog to pull in additional content and how to add the blog to RSS aggregation services
Wikis	Instructor encourages students to use a wiki as a personal space for content organization and management	Instructor encourages students to enable the wiki's collaborative editing and commenting features for feedback	Instructor demonstrates how to view a wiki's history to promote student self-evaluation of their learning across time
Google Calendar	Instructor encourages students to use Google Calendar for personal planning	Instructor encourages students to enable the calendar sharing features to allow feedback and collaboration to complete course tasks	Instructor demonstrates how to archive personal and group calendars to promote student self-valuation regarding time planning and management
YouTube or Flickr	Instructor encourages students to use Flickr or YouTube to set up a personal media archive related to course content	Instructor encourages students to enable the sharing feature of the media archive and join similar media archives created by peers	Instructor demonstrates how to aggregate media from several media archives to refine their personal archive
Social networking sites	Instructor encourages students to create an academic and career profile on LinkedIn	Instructor encourages students to connect to online communities related to their professional goals	Instructor asks students to engage in self-reflection with the goal to restructure their profile and social presence
Social Bookmarking	Instructor encourages students to use a social bookmarking tool (e.g., Delicious) to organize course content	Instructor encourages students to collaborate with other classmates and create a shared list of bookmarks related to a specific learning topic or project	Instructor asks students to self-reflect on their personal and group bookmarks to enhance the desired learning outcome

Figure 7 - Strategic Internal Communication. Management Communication (Men, 2014)

Table 1. Descriptive Statistics for Corporate Internal Communication Channels ($n = 400$).

Variables	Items	<i>f</i>	%	<i>n</i>
Corporate communication channels	Email	289	72.2	400
	Employee meetings	236	59.0	400
	Print media such as memos, brochures, newsletters, reports, policy manuals, and posters	153	38.2	400
	Internal communication with my direct manager	135	33.7	400
	Internal website	131	32.7	400
	Phone and voice mail	61	15.2	400
	Video conferencing	27	6.7	400
	Internal social media	2	.5	400
Employee preferred channels to receive corporate information	Email	295	73.7	400
	Employee meetings	268	67.0	400
	Internal communication with my direct manager	181	45.3	400
	Print media such as memos, brochures, newsletters, reports, policy manuals, and posters	154	38.5	400
	Internal website	128	32.0	400
	Phone and voice mail	56	14.0	400
	Video conferencing	34	8.5	400
	Internal social media	12	3.0	400

Note. Respondents selected three communication channels for each variable.

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