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Corporate Internal Communication - SharePoint and document sharing platform

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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

I hereby declare that the Master's Thesis presented herein is my own work, or fully and specifically acknowledged wherever adapted from other sources. This work has not been published or submitted elsewhere for the requirement of a degree programme.

Prague, August 24, 2017

Signature

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Abstract:

This thesis provides recommendations on the content, structure, features and functionalities of the Customer Knowledge Management Platform in Hilti to enable Customers & Insights Team to share insights with stakeholders. The theoretical part reviews the most relevant previous findings regarding general communication, corporate communication, information management process and technological platforms used. The practical part describes the status quo of internal communication in Hilti including communication channels and knowledge, information and document sharing. The theoretical part consists of qualitative part which provides actionable recommendations on the content and structure of the platform and of quantitative part which focuses on desired features and functionalities of the platform. Results show that the requirements of the platform differ between the potential users and administrators and suggests ways how to satisfy both groups.

Key words:

Internal Communication, Knowledge sharing, Information sharing, Document sharing, SharePoint, Intranet

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Introduction

Nowadays, corporations spend a lot of resources into the development of new knowledge and capabilities of its workforce. And even though some of it is implemented in form of processes and guidelines, majority of it stays in the heads of the individuals. As nowadays an average person changes jobs 10-12 times, the knowledge and capabilities disappear and therefore the informal, people-based knowledge has very limited life. Many organizations are currently trying to tackle this problem both on the corporate, subsidiary and department level by implementation of various information channels and knowledge management platforms. (Askhenas, 2013)

The case of Hilti corporation is no different. Even though an average turnover of 12 years may indicate a better preservation of acquired knowledge and capabilities, the opposite is true. Especially in business driven departments such as marketing or sales where employees on average change roles every 3 years.

A department whose visibility is dependent on an effective knowledge management platform is a Customer & Market Insights (KEM) Team researching the market development, competitors, customer satisfaction and customer opinions regarding Hilti products. At the moment, the product & innovation team is struggling in particular as there is currently no information channel that would enable the team to share the insights with the rest of the organization. As a consequence, the corporation is not able to built on existing product related knowledge and fill in knowledge gaps. The head of the department recognizes the need for a centralized platform, where would the existing information be available in an accessible and actionable form.

As this problem is not only restricted to the Customer & Insights Team within the organization, other departments have already started working on developing information sharing solutions independently. Digital team is working on a platform about Hilti personas and Global Process Management team is developing a tool kit in order to enable employees to perform primary research in a way that enables comparison and longitudinal tracking.

This thesis aims to solve the problem that a Customer & Insights Team at Hilti is not able to share generated insights with its stakeholders in an effective way.

First part of the thesis provides theoretical information about communication in general and on corporate communication with a strong focus on internal communication and information sharing. The practical part of the thesis aims at providing actionable recommendations on the content, structure, features and functionalities of the information platform for the Customer & Insights Team – Customer Knowledge Management Platform (CKM).

The findings of this thesis are relevant to the Hilti corporation as it identifies the key needs and requirements of potential stakeholders of the platform and enables the KEM team to develop a platform that is based on those needs and therefore brings significant value to all of the stakeholders. A lack of throughout research on the needs and requirements may put the KEM team at risk of developing a concept that is not accepted by the stakeholders and provides irrelevant information.

Due to the complexity of the task, this thesis provides recommendations on the development of the platform but actual concept development is out of scope.

The key objective of this thesis can be summarized as:

To provide recommendations on the content, structure, features and functionalities of the Customer Knowledge Management Platform in Hilti to enable Customers & Insights Team to share insights with stakeholders.

This main objective will be achieved by answering following questions:

1. What are the most relevant previous findings regarding general communication and corporate communication?
2. What are the most relevant previous findings regarding knowledge management and information sharing processes? What are the technological platforms used?
3. What is the status quo of internal communication in Hilti? Which channels are currently in use? How is knowledge and information currently shared?
4. What is the recommended content and structure of the Customer Knowledge Management platform?
5. What are the recommended features and functionalities of the Customer Knowledge Management platform?

Author's motives for choosing the topic were fueled by an internship opportunity in the Customer & Market Insights team in the headquarters of Hilti in Schaan where one of her main tasks was a concept development of the Customer Knowledge Management platform.

As author was responsible for a development, implementation and execution of an information sharing platform in the Czech subsidiary in Hilti, she saw a potential to learn from past mistakes and replicate the successful aspects of the previous project by taking customer oriented approach with a strong focus on the needs and requirements of the stakeholders and by executing a usability study of the platform implemented in the Czech Republic. The possibility to further deepen authors' knowledge of the internal communication topic by secondary research of various modules, theories and concepts has motivated the author to research this topic in a master thesis.

Author believes that the possibility to tackle the problem in a structured manner will bring high practical value to the Hilti corporation with a potential to directly contribute to the overall success of Hilti. Developing a concept based on the recommendations will enable Hilti not only to save costs and increase the ROI of the researches but to empower decision makers to make a better informed strategic decision. The KEM team realizes those benefits of the platform and therefore this project has been identified with very high relevance within the team as it is necessary to develop a solution within the year 2017.

The theoretical value of the project is increasing with the global challenge to successfully capitalize acquired knowledge and capabilities within corporations. The capability of organizations to gather data and information is increasing but the ability to turn the data into meaningful, actionable insights that support the leaders in decision making process is lacking behind. In order to improve those abilities, the use of technology to develop a platform is crucial.

Methodology

Author has used secondary research in order to describe various theories and concepts of communication as a whole with special focus on internal communication, information sharing and knowledge management. The information is obtained from specialized text books, research journals focused on communication and research articles. A special attention was given not only on the origin of the literature but also on the year of publishing. In such a fast paced environment we are facing today, time has a crucial role. Therefore, majority of the sources used are not older than 10 years. Additionally, Hilti internal sources were a valuable secondary source of information as well especially in the practical part of the thesis.

For the primary research purposes, author has used a mixed-method research for the assignment and therefore both qualitative and quantitative research is included in the primary research.

Firstly, a qualitative research was executed in order to understand the needs and requirements of the potential stakeholders of the CKM. 10 Semi-structured, individual, face-to-face interviews were carried out with both the KEM employees and potential stakeholders such as product managers, global process management managers or digital managers. The aim of those interviews was to understand the needs and requirements regarding the content and structure of the Customer Knowledge Management platform of both owners of the platforms and potential stakeholders.

Secondly, a quantitative research in form of an online survey was executed to identify the key features and functionalities that the CKM platform should include. The respondents were an employees of the Czech Hilti subsidiary who recently implemented an information sharing platform on SharePoint. Author believed that identifying the key strengths and weaknesses of the surveyed platform and investigation in possible influence of respondent's characteristics such as age or department on the ratings would enable KEM to identify the required features and functionalities of the SharePoint software for the purpose of CKM.

Insights were generated by execution of a usability survey USE widely used both in corporations and dissertations projects to measure usability of software, hardware or services. Questionnaire measures subjective reactions to the usability of products and applications that are closely tied to user's behavior. Semantic differential scale is used enabling the respondents to express their level of agreement with statements across four main dimensions: usability, easiness to user, easiness to learn and satisfaction. (Lund, 2001)

The survey was targeted at employees of Hilti Czech Republic who have recently experienced an implementation of an information sharing software on SharePoint and generated 66 respondents across different age groups and job roles which enabled author to investigate the tendencies related to influence of those two characteristics on the ratings.

Author has decided to combine inductive and deductive approaches in order to increase the credibility of the research. (Saunders, 2009)

The inductive approach was used when researching the needs and requirements related to the content and structure of the platform. In-depth interviews served as a good method to obtain a solid understanding of what are the needs and requirements of the stakeholders. At a later stage, those findings were analyzed and implemented in a matrix with an aim to identify the synergies and commonalities between the needs and requirements of different stakeholders. This analysis has fuelled the recommendations on the content and structure of the Customer Knowledge Management platform.

In the quantitative part of the study, at first an inductive approach was applied to get a first insights into the opinions of the respondents. As the first results suggested possible influence of respondent's characteristics on the results two hypotheses were drawn.

The deductive approach was used after the two hypotheses were drawn due to inconsistencies in the general results:

- The age of the respondents may have an influence on the ratings
- The use case of the respondents may have an influence on the ratings

Both hypotheses were approved and had impact on the overall recommendations.

The strategies used in the thesis are case study and survey. The case study approach was used in order to understand the needs and requirements of potential stakeholders regarding content and structure of the platform. This strategy enabled author to gain in-depth understanding of the context and the requirements.

Later, a survey was developed in order to understand the usability of the SharePoint platform and required features and functionalities of the platform. The sample of 66 respondents represents 27% - a relatively high number for internal surveys. Further splits in roles and age of the respondents required calculations based on relatively low sample and the findings should therefore be considered as an indication.

Based on the strategy and the approach, author decided to choose mixed method research where qualitative and quantitative techniques were used sequentially. Firstly, qualitative research was executed – case study, which was followed by a quantitative research – survey. (Saunders, 2009)

Cross-sectional time horizon of the study means that both the needs regarding contents and structure as well as the required functionalities were studied in the presence. (Saunders, 2009)

The techniques used in the thesis were in-depth interviews and survey. In-depth interview method was chosen due to limited experience with interviews and the need to get similar information from all 10 interviewees. However, author wanted to give each interviewee the possibility to share any additional information and she values the possibility to ask additional questions if necessary. Survey was distributed via email and google docs platform was used.

With this thesis the author hopes to gain solid understanding of the theories and concepts related to communication, especially in the corporate context. Furthermore, she hopes to identify the key strengths and benefits of the SharePoint platform and important SharePoint features and functionalities to the users. On top, author hopes to be able to identify key areas that should be included in the platform and to provide suggestions on the structure of the platform.

The key limitation of the thesis is limited representativeness of the primary results. Firstly, insights generated by the case study method are applicable only within the context that they were studied in and cannot be therefore replicated.

The survey strategy may be generalized on the population of Czech Hilti employees with certain limitations. Even though 66 respondents out of a population of 242 represent 27%, the margin of error is 10%, which is higher than generally acceptable levels of 4-8% at the confidence level of 95%. (DataStar, 2008) However, as the main purpose of the survey is to compare the ratings relatively to each other, this limitation still enables author to draw valuable conclusions.

Theoretical part

The purpose of the theoretical part is firstly to summarize the most relevant previous findings in the area of communication in general such as communication processes, purposes of communication, forms of communication and communication barriers. Secondly to describe the role of communication in corporate context including external communication followed by introduction to the field of internal communication including the areas of internal communication, types of internal communication, direction and forms. Last part of the theoretical part is focused on the information sharing and knowledge management in corporations including the challenges, strategies and channels.

I. Communication

Communication is elementary for human survival and it is ancient as humanity itself. Many scientists believe that communication is the main factor enhancing the civilization through history. Over the course of the 20th century, the topic sparked the interest of several researches who developed various communication models, with the goal of explaining the communication processes among humans.

I.I. Communication process

First model was introduced by Shannon and Weaver in 1948 and was heavily influenced by the telephone technologies. Their model aimed at describing the communication process via phone and consisted of three parts: Sender, Receiver and a Channel (the telephone). Additionally, they also identified a static that interferes with the process – the noise. This simple model is often called a transmission model. (Shannon, 1949).

In 1960s David Berlo expanded the model introduced by Shannon and Weaver and developed a SMCR model (Sender-Message-Channel-Receiver). His model investigates the main factors influencing all four aspects of the model as well as the encoding and decoding on both the sender and the receiver sides.

Berlo's Sender (S)-Message (M)-Channel (C)-Receiver (R) Model of Communication

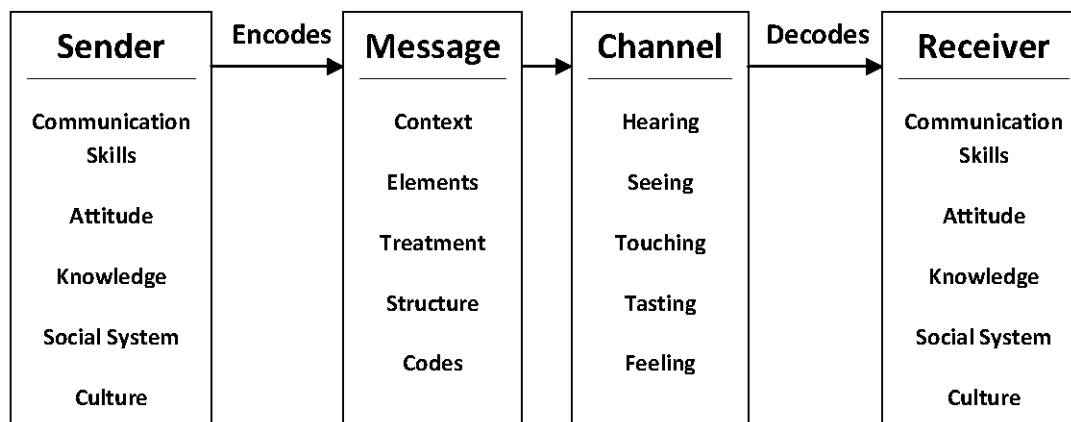


Table 1: Berlo's SMCR Model of Communication Source: Communication Theory, 2016)

On the side of the Sender (the one originating the message) factors such as communication skills, attitude, knowledge or cultural background influence the way how the message is sent and encoded. Same factors also influence the way a receiver (the one who receives the message in the process) decodes the message.

The message is in this case the information that is being transferred from the sender to the receiver and may be in many different forms such as spoken, audio, text or even a video.

The selection of a communication channel is critical and can be divided into verbal and nonverbal type. Verbal communication relies on words when communicating – hearing and can be further divided into written and face-to-face communication. Nonverbal communication shares information without words and is often subtle and includes seeing, touching, tasting and feeling. (STEGĂROIU, 2014)

Despite the limitations of this models such as the need for sender and receiver to be similar, lack of the noise factors that occurs in communication or non-inclusion of communication barriers within the concept, author decided to use this communication model in this thesis as it is a model that has been accepted and expanded by numerous scholars since the the time it has been published and is considered as the classical communication model. (Communication Theory, 2016)

I.II. Purposes of communication

The interest of researchers in communication in late 20th century was not only restricted to the communication structures and models. The purpose of communication was another topic that was appealing to researchers back in the day.

The communication with others is linked to satisfaction of human needs. At the basic level, humans communicate to satisfy physical needs in order to survive such as to obtain food, water, air or shelter. On a higher level, humans also communicate to satisfy psychological needs. Without contact to others

humans, we suffer serious consequences such as loss of sense or time. Sometimes, the topics of the communication are secondary to the actual act of communication. (Steinberg, 1994)

A researcher Janice Light has developed a model describing four main purposes for communication. The model that is still valid in today's environment consists of expression of needs and wants, information transfer, social closeness and social etiquette. (Light, 1988)

Expression of needs and wants regulates the behavior of the receiver in order to get something. The purpose for the sender is to communicate his needs, wants and desires and includes daily activities such as ordering in a restaurant, doing groceries or order a taxi. Expressing of needs and wants is crucial for survival of an individual. (Light, 1988)

The goal of information transfer is to share information with others. Unlike in the first purpose, the idea is not to request something but to communicate in depth on very wide variety of topics. Compared to expressing needs and wants, transferring information usually requires longer interactions. An example of information transfer is to explain a team leader how a problem was solved. (Light, 1988)

Social closeness is a purpose where the content of the message is of less importance than the interaction itself. The goal of this purpose is to develop and maintain relationship through communication. Feeling of connectedness is together with a feeling of safety and satisfaction critical for humans and this purpose of communication should therefore not be underestimated. (Light, 1988)

Goal of social etiquette purpose of communication is to comply with social conventions of politeness and includes phrases such as please, thank you or you are welcome. Social etiquette purpose is crucial in human interactions and it influences the perception of the sender within the society. (Light, 1988)

I.III. Communication forms

Communication does not necessarily have to always be cautious – the sender often does not realize that he is sending a certain message or that he is distorting the intended message by subtler factors – tone, stress, inconsistent gestures etc. Sometimes a frustrated face expression at a supermarket check out is enough to communicate a clear message. Therefore, basic division of communication forms is verbal and non-verbal. One can not only complement but also replace the other altogether. (Mikulastik, 2010)

Non-verbal communication is so natural to humans that sender often doesn't realize its use. However, this form of communication is already used by new-born children years before they master the verbal form. Even though humans do not need to know learn the principles of non-verbal communication to use it, certain knowledge of the form enables the receiver to encode both the intended but also unconscious parts of the message. Non-verbal communication consists of many elements. Eyes are an important organ in non-verbal communication as well as mimics. Body posture, kinetics (movements), haptics (touches), chronemics (use of time), neurovegetative reactions (turning red as a reaction to

stress) or proxemics (use of space) are all elements that are part of a non-verbal communication and heavily influence the decoding process at the side of the receiver. (Mikulastik, 2010)

Verbal communication includes the expressions with words and can be either direct, indirect, spoken, written, live or reproduced. It may be a monologue, dialogue, discussion or conversation between two or more people. The forms of verbal communication vary and each should be used in different situations. The richest form of verbal communication are face-to-face meetings as emotions are transmitted alongside the information and the receiver may respond immediately. Written form is suitable when the message includes more details, needs to be recalled at later stage or shared with more individuals. In the last decades, written communication has undergone a transformation from being perceived as slow to a form that significantly improves efficiency thanks to electronic mail and computer-aided communication. (STEGĂROIU, 2014)

Main advantage of verbal communication is the possibility of direct feedback and exchange of opinions. In combination with the non-verbal communication, the sender immediately sees the behavior of the receiver and has a chance to adapt the form and content of the message. Written communication lacks the possibility to analyze the non-verbal communication and therefore is more prone to misunderstandings. (Mikulastik, 2010)

I.IV. Communication barriers

Communication barriers are obstacles in communication that result in inaccurate or incomplete understanding of the message. They can be occurring on either one side of the communication process (either sender or receiver) or on both sides and usually there are more barriers at once within a communication process. The ability to admit that there are communication barriers is a first step towards a more effective and efficient communication. (Mikulastik, 2010)

In business environment, communication barriers may be categorized into environmental and personal barriers and both types may block filter or distort the message both on the side of the sender or the receiver. Environmental barriers come to play when we talk about corporate communication and include listening skills, time, managerial philosophy, multiple levels of hierarchy, power and status. On the other hand, personal barriers are independent from the organization and are linked to the individuals frame of reference believes, values, socioeconomic background, prior experiences, prejudices and lack of empathy. (STEGĂROIU, 2014)

II. Corporate communication

Corporate communication is a management function that offers a framework for the effective coordination of all internal and external communication with the overall purpose of establishing and maintaining favorable reputations with stakeholder groups upon which the organization is dependent. (Cornellissen, 2016)

Communication managers' role is to coordinate communication specialists across different disciplines such as media relations, public affairs and internal communication. Communication departments are responsible for activities such as planning, counseling to the executive board, or generation and publishing of content to relevant stakeholders. The complexity of corporate communication naturally grows with the size of the corporation and its level of internationalization. In large multinational companies, communication experts need to balance the communication between the headquarters, different divisions and business units of the organization. (Cornellissen, 2016)

As the success of corporations is no more dependent solely on customers, there is a need to orchestrate the communication to all the relevant stakeholders of the corporation including suppliers, government, employees or investors. (Cornellissen, 2016)

Even though the basic distinction between internal and external communication prevails, the recent switch to stakeholder's approach where employees are perceived as internal customers whose needs are as important as the needs of external clients has lead new opinions on the classical categorization. Coccozza encourages the adoption of the stakeholder's approach to communication as well resulting in a merge of internal and external communication together. (Ragusa, 2014).

However, such opinions are rather a novelty and for the context of the thesis, it is more suitable to refer to the concept of internal and external communication.

II.I. External communication

External Communication is a technique that involves all communication activities generated by a company to achieve the planned objective. (Aydar, 2016) After the economic crisis in 2008 and many corporate scandals and crises in the past years such as Enron, Toyota or Volkswagen, corporate communication became of strategic importance to a corporation and is therefore often reporting directly to the CEO. (FT, 2016)

External corporate communication as we know it today emerged through the convergence around fundamental business processes. It has evolved dramatically and is nowadays a vital and sophisticated marketing discipline whose mission is to sell the company continuously and effectively. (Goodman, 2010)

The term describes variety of functions including: public affairs, media relations advertising and marketing. (Goodman, 2010)

Public affairs are a strategic communication process that builds mutually beneficial relationships between organizations and their publics. (Public Relations Society of America, 2017) The success of each organization largely depends on its reputation which can be easily influenced by players outside of the organization such as customers, suppliers, investors, regulators or journalists. Therefore, it is vital to manage the perceptions of the organization in the eyes of those individuals and that is when PR comes into play. (Chartered Institute of Public Relations , 2017)

Media relations and Public Affairs are often used interchangeably, but there is a difference between those two fields. Media relations focus exclusively on relationships with editors, reporters and journalists across different media types such as newspapers, radio, TV and the internet. The goal of this field is to manage the perception of the company and its products or services similarly to PR. (Obrien, 2014)

Advertising is a mean of communication with the users of a product or service. Advertisements are messages paid for by those who send them and are intended to inform or influence people who receive them. In today's world, advertising uses every possible media to get its message through. It does this via television, print (newspapers, magazines, journals etc.), radio, press, internet, direct selling, hoardings, mailers, contests, sponsorships, posters, clothes, events, colors, sounds, visuals and even people (endorsements). (The Economic Times, 2017)

With marketing, corporations educate consumers why they should purchase their product or service over competitors. It covers everything that customer gets in touch with from advertising, word of mouth, customer service or the follow up service. (Lake, 2016)

II.II. Internal Communication

“Some people believe internal communication is a matter of life and death, I am very disappointed with that attitude. I can assure you it is much, much more important than that.”

- Bill Shankly

Internal communication has a strong influence on the success of a corporation as it is key for a corporation to be able to empower its employees and to motivate them in order to contribute their part to the overall objectives of the corporation.

Due to a broad scope of internal communication, there are many different definitions and there is not consistent usage of terms across the field. (Kalla, 2006) One inconsistency that can be encountered is the use of singular and plural version of the field – Corporate Communication(s). Despite no clear definition of the two topics, the most common use of the singular term is when talking about communication as a social process which operates when personal interaction takes place. The plural version is then use when talking about channels and technological means that the process is facilitated by. (Ragusa, 2014)

II.II.I. Areas of internal communication

The three main areas of internal communication include strengthening the stability and loyalty, Internal Public Relations and information management. (Holá, 2011)

Strengthening the stability and loyalty requires open communication between the management and employees with a goal of achieving a feeling of security and belonging. This is achieved not only by announcing the latest developments of the corporation and planned changes, but also allowing the employees to express themselves and contribute to the change process.

Internal Public Relations aims at motivating employees and to achieve shared visions and goals of the corporation. Management is consciously building a positive relations of employees to the corporation and uses similar tools as classical PR.

Information management is crucial for a success of any corporation. It is focusing on providing information necessary for successful performance of given tasks and their coordination in order to contribute to the success of the corporation. It includes information about processes in the corporation as well as content of assigned tasks and contextual information. As the main focus of the thesis is information sharing and knowledge management, this area will be further investigated throughout the thesis.

II.II. II. Types of internal communication

In internal communication, most of the researchers focus on one-dimensional construct of communication and divide this field further to formal and informal communication.

Formal communication is facilitated through official communication structures. Another factor that identifies formal communication is that communication is usually planned in advance and occurs in certain time horizons (weekly team meeting, yearly appraisal etc.) (Dedina & Odchazel, 2007)

Informal communication is often referred to as a grapevine and plays an inevitable role in organizations. Through informal communication, employees can talk about their problems, attitudes etc. which leads to job satisfaction. Grapevine is also a useful source of information that fills in the gaps of formal communication. Often the information transmitted through formal systems is insufficient and ambiguous and informal source can compensate for those weaknesses. There is a risk, however, when employees are not receiving enough information through formal channels that they rely on informal channels more strongly. (Sheykh, 2010)

II.II.III. Directions of communication

Formal instructions and information flow across the channels in three directions: downward, upward and horizontal and the communication processes are set up based on the formal hierarchy within the organization. (Sheykh, 2010)

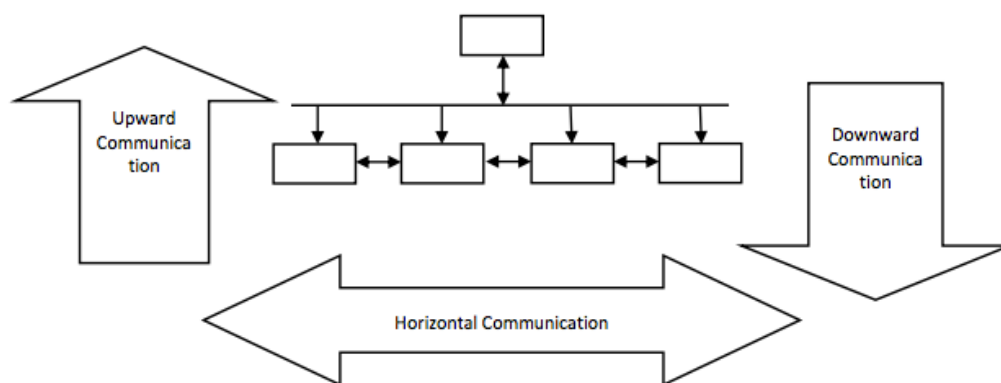


Table 2 Directions of communication Source: Fred C. Lunenberg (2010)

The most traditional type of communication is the downward communication flow which passes the information from top of the hierarchy down across the organization. Downward flow is often used for implementation of goals, strategies and objectives, jobs instructions, procedures, practices and performance feedback.

Upward communication refers to communication from employees across managers to the leader. An example of such message may be problems, suggestions for improvements, performance reports or financial and accounting information.

Horizontal information is informational and serves for coordination – to communicate within and across departments regardless of the hierarchical set up. An example of the use of horizontal informational channel are intradepartmental problem solving, interdepartmental coordination or staff advice to line departments. (Lunenburg, 2010)

II.II. IV. Forms of communication

The forms of communication within a corporation can be divided into a face-to-face and electronic form. The chosen type of communication depends on many aspects such as the importance and characteristics of the message, closeness of the sender and receiver or the communication standards in the corporation. Due to the amount of variables that influence the chosen type of communication, it is impossible to generally define which form is more effective. (Holo, 2011)

Face-to-face communication

Face-to-face is a form of communication that does not involve any electronic media. It is a form that is very popular and often preferred as it enables immediate reaction and interaction which limits the likelihood of misunderstanding. The prerequisite of a successful personal communication is the possibility of open dialogue and direct feedback. On top, the presence of non-verbal communication increases the chances of right understanding of the received message. Because of those advantages, personal communication is exceptionally useful in persuading, defense or explanation of a problem. In order to increase the amount of remembered information, it is advised to enrich personal communication with written documents. The disadvantages of personal communication are costs both in terms of time and traveling expenses. The main types of face-to-face communication are meetings, trainings or team buildings. (Holá, 2011).

Meetings are often involving more than just 2 people and therefore it can be also characterized as a group communication form and throughout preparation is crucial despite if the meeting is recurring or ad-hoc. A meeting can only be considered effective if all of the participants understood discussed problematic, had a chance to express themselves, received answers to their questions and given problem was at least partially solved. (Holá, 2011).

The meetings can be divided to many many types of meetings but the basic categorization includes three main types: operational, creative and problem solving. Operational meetings are conducted with an aim to solve current assignments which are possible to solve and implement right away such as coordination of tasks, eliminating barriers or preparations and finalizations of tasks. The purpose of creating meetings is to brainstorm possible ideas on how to solve problems with help of various brainstorming tools. The outcome is usually a list of possible solutions to the given problem. The outcome of creative meetings may be used in the last type of meetings – problem solving. The outcome

of such meeting is a decision on concrete, bounding solution which is in line with the overall priorities of the corporation. (Janda, 2004)

Team buildings or sports events give the participants a chance for informal discussion and relationship building including informal feedback possibility. Most corporations organize at least Christmas parties, anniversary or sport events. Often, family members are also invited for such events which strengthens the bond to the corporation and may even help the corporation to enlarge the circle of advocates who talk positively about the corporation. However, this form of communication is the most expensive and time consuming. (Holá, 2011).

Trainings is a group form of communication with a focus on learning new information or developing new skills aiming at improving capability, capacity, productivity and performance. It is crucial that employees are continuously trained in order to constantly increase those four core areas.

Electronic communication

As all other parts of the business world, internet has changed corporate communication as well, especially the forms of internal communication including written, visual, audiovisual communication that is conveyed through various communication channels. (Holá, 2011) Main communication channels include emails, instant messaging or (video) calls.

Emails have become the main source of communication across departments in many companies with three main benefits being cheap, quick and easy to store. Because of those advantages, e-mail tends to substitute face-to-face or phone communications. One of the common problems for many employees is the feeling of being overwhelmed with the number of emails and diminishing importance of the received emails which make it difficult to prioritize. Moreover, the research has showed that employees feel that e-mail channel increases misunderstandings and leaves too much space for false interpretations. Another point that has been mentioned in the research was the problem of group e-mails. Often, the relevance to the receiver is questionable and the responsibility for taking action is unclear. (Sisko, 2014)

For informal communication especially among colleagues, instant messaging is used instead of e-mails. This tool enables immediate feedback in real time. Apart from informal communication, chats are often used to check whether the receiver is available. In the past, other problem of instant messaging was that the conversations were not documented. However, this problem has been solved with the newest version of Skype for Business which offers much more than just an instant messaging service. (Sisko, 2014)

Another feature of Skype of Business is a feature of (video) calls both 1 on 1 and in groups. As they are free of charge, they quickly became a main mean of communication especially internationally. Additionally, the newest update brought many improvements such as including a special link in an outlook meeting invitation and many more. In such globalized environment we face today, Skype for Business is becoming a crucial channel which allows users to connect and co-operate effectively

thanks to functions such as desktop sharing, videos and more. The downside of this channel is mainly the lack of high-speed internet in some regions and inevitable bugs related to technology. (Sisko, 2014)

III. Information management

The world information is a buzz world in today's business world. It is often used in relation to information technology (IT) that supports many information processes. However, there is also a large number of information and knowledge that is not captured by IT software especially when it comes to business decisions made by managers. In decision making processes, managers need to rely on accumulated knowledge and expertise. Information management is a conscious process by which information is gathered and used to assist in decision making processes at all levels of organization. (Hinton, 2006)

III.I. Contemporary challenges

Successful corporations understand that the overall success of the business and future innovations depend on business-critical and experience-based knowledge employees possess. Therefore, corporations invest heavily in developing software and platforms for interactive knowledge exchange. But still, analysts expect that the companies in the Fortune 500 still lose a combined \$31.5 billion per year from employees failing to share knowledge effectively. (Mayer, 2017)

The main challenge to knowledge management is time. Often, the most important information is possessed by experts and experienced managers who are by nature very busy.

Secondly, information management relies on the assumption that users will actively look for information which is often not the case. A research has found out that in corporations, there are often two types of employees. One type that frequently searches for information and the other group, that almost never does.

Thirdly, the quality of information influences the success of any information management channel. It is crucial that there is a consensus within the corporation that one channel e.g. intranet includes all the documents, they are up to date and easily findable. If that is not the case, there is a risk that employees will rather use different channels in search for information.

The extent to which information management channel is up to date is strongly influenced by the technology in use. If the maintenance is very time intensive, there is a risk that employees will rather use other forms of communications to obtain information such as e-mail or instant messaging.

Level of interactivity is the last challenge. Even though most of today's information management platforms come with discussion function, often many of the questions submitted by users remain

unanswered which encourages the respondents to use other communication channels such as email, where the users are sure they will get an answer. (Sisko, 2014)

III.II. Channels

Information channels such as blogs, corporate social media channels, intranet or SharePoint enable corporations to share important knowledge and information necessary for the performance of the individuals' tasks in order to achieve company's objectives.

III.II.I. Blogs

Blogs are used in all three areas of internal communication. From the information management perspective, blog is a great tool for top down communication to share information such as the latest developments or upcoming changes. (Sisko, 2014). Corporations should consider the benefits of a video format that is becoming an increasingly increasingly important in the workplace substituting classical blog posts. 93% of communication professionals believe that video is vital. One of the main factors is the engagement of videos. Research showed that 55% of viewers finish the video till the end compared to 29% finish rate of blog posts. (Kalukofsky, 2017)

III.II.II. Corporate Social Media Channels

Inspired by social networking sites as Facebook, corporate social media channels encourage employees to communicate, share and collaborate in informal environment. It is a platform that connects members with the same email domain and encourages informal communication on a platform that resembles Facebook. (Rouse, 2012) Corporate social platforms such as Yammer use similar features to Facebook such as suggested groups, suggested people, networks, feeds and more. (Watters, 2017) Moreover, it is also a channel that facilitates information and knowledge management and exchange informally between employees.

III.II.III. Intranet

Intranet is a one-way communication tool, which enables corporations to share news, announcements and information. In many corporations, intranet is the main source of information, documents and announcements coming from different departments and usually, employees are able to find the most important information they need for their everyday work life.

Intranet is usually organized according to the organizational structure by various departments such as the HR, Sales, Marketing etc. In the majority of the cases, information in Intranet is accessible to everyone who has corporate email address. In some cases, Intranet can also consist of two-levels where the first one is open for everyone and the second level consist of various sub-groups with limited access for selected users who can share confidential documents. (Sisko, 2014)

III.II.IV. SharePoint

Another important platform for information sharing is SharePoint. It is a game changing product from Microsoft which is used by corporations to create internal websites. This document management and collaboration platform allows its users to safely store, share and organize information across devices with internet browser. (Microsoft, 2017)

As with many Microsoft products, this web-based software platform can do many things. In fact, there are so many possibilities that if 10 people are asked what SharePoint offers, they would give 10 different answers. An example of usage can be an online gallery of PowerPoint slides, display interactive spreadsheets in web pages or reuse information from company's database in Word documents. (Brand, 2013) SharePoint brings many new efficient features to its users and makes document sharing & collaboration easier and more effective.

The main benefits of SharePoint include bringing context around documents and folders, enabling constant communication with all staff, storage of all information in a central location and encouraging collaboration.

Compared to conventional folders stored on a shared drive, SharePoint enables its users to access much more context about the document including different versions of the same document. This feature enables teams to work simultaneously on the same document instead of saving several versions separately without the risk of losing the previous versions. (Fresser, 2017)

Usually, group emails are used widely within corporations to share important information with several members. The challenge with this approach is that the information can get easily lost and is often quite difficult to reference later. SharePoint has been developed to ease collaboration so that staff sees the important information and communication accordingly. From CEO video update to important upcoming event. All information can be stored at one place and easily accessible to everyone at any time. No need for announcements boards or email. (Fresser, 2017)

It is designed to get the community to one central point where they can collaborate, which can be especially beneficial in global settings. This approach enables the employees to work together despite big distances. (Fresser, 2017)

Features of SharePoint

SharePoint offers several features which significantly improve collaboration such as document library, picture library, discussion board, announcement, calendar or wiki.

Document library is the heart of SharePoint. It provides a place to securely store files that can be easily found, worked on simultaneously together and accessed from various devices – web browser is all that is needed. It can be used to store files related to a specific project, client or process. Adding files is easy with a drag & drop function. Apart from the name of the files and folders, this app enables users to view numerous details such as the format of the file, size, when was it uploaded, modified and by whom. Moreover, the files can be organized by any of the key information e.g. having the lastly modified documents on top for easy governance. (Microsoft, 2017)

Similar to the document library, picture library enables users to share albums of pictures and graphics. Even though pictures may be stored in document library as well, using this specific library has several advantages such as slide show view, easy download & edit functions. Additionally, pictures in picture library can be linked within the SharePoint site to numerous other locations e.g. home page. (Microsoft, 2017)

Another widely used feature are discussion boards enabling users to interact with each other. Discussion board show the most recent discussion first together with the number of replies for each discussion. This allows the users to identify the newest discussions & the ones with the most popular ones. Each member can also customize their discussion board view. (Microsoft, 2013) One of the most effective ways of disseminating information is to integrate company announcements onto the team site. Employees can immediately see the newest and the most important information. In order to engage the users, they may react on the announcements either with likes or rankings. (Withee, 2013)

SharePoint calendar may be used to store team events such as meetings, off-sites or all-day events. Milestones can be tracked as well such as deadlines, product release dates or financial result announcements. This feature enables everyone to have an easy access to common schedules and dates. (Microsoft, 2017)

Wiki enables users to create simple pages and to link them together. It is designed for groups to capture and share ideas & information. In essence, it is an internal website which may consist of only text, or integrate pictures and above mentioned apps, Yammer discussion field or videos, PowerPoint slides or excel tables. (Microsoft, 2017)

IV. Upcoming trends in Internal Communication

The corporations as we know it have gone through a significant transformation. At the beginning of the journey, the main focus was on the financial capital whereas nowadays, the focus has shifted towards human capital. The success of corporation is dependent on the people. The ones who manage to attract the most capable people, who are able to work together, bring smart ideas are innovative and run things. Nowadays, more and more corporations realize that bringing together diverse people has a positive impact on the overall performance. Naturally, this approach brings many communication challenges that need to be tackled. Considering the age diversity, there is a need to communicate through various communication channels in order to connect with everyone. (Mazzei, 2014) Face-to-face communication is preferred as it decreases the change of misunderstandings, but in the global settings of today, it is becoming increasingly difficult. This is where technology comes into the equation. (Mazzei, 2014)

Digitalization has significantly transformed many aspects of work and internal communication is no exception. Technology is progressing very fast and the success of corporations in the future will be to a great extent influenced in the ability to benefit from the new communication tools and technologies.

Practical part

The practical part of the thesis is a case study focusing on one of the biggest current projects in the Customer and Market Insights (KEM) department in Hilti. KEM is currently working on a developing a concept for a new information channel - Customer Knowledge Management platform on SharePoint that would enable the business partners to share the knowledge from previous researches. The content should include all the knowledge that would be potentially relevant to internal stakeholders in an accessible and useful manner. Ideally, it should also serve as a platform where other departments can share customer insights that they generated in more pragmatic way – the customer connect.

The objective of the thesis is to provide recommendations on the content and structure of the customer knowledge management platform as well as features and functionalities based on qualitative and quantitative primary research and consists of following parts:

- Description of Hilti as an organization including brief history, current strategy, business model and organizational structure
- Description of forms of communication used in Hilti with a focus on information channels
- Description of the Customer Knowledge Management project
- Background, analysis and findings of the qualitative research
- Background, analysis and findings of the quantitative research
- Conclusions and recommendations

As already mentioned in the methodology, author has developed a two-steps research method including both quantitative and qualitative research. First, author interviewed 10 stakeholders of the knowledge management platform including the potential administrators (KEM) and the potential users in order to understand their needs and requirements regarding both the content of the platform and the structure. Second, a quantitative research has been executed in order to identify the key features and functionalities that the platform should include taking into consideration the age diversity and the use case of the users.

The recommendations drawn in the report are focusing mainly on the KEM team and the implications of the findings on the Customer Knowledge Management platform. Additionally, the quantitative survey enabled the author to provide recommendations to the Czech marketing team for further improvements of the information sharing portal.

I. Company profile

Hilti is a well known international corporation operating in the construction industry. The corporation manufactures construction tools ranging from equipment for drilling, demolitions, cordless systems, measuring systems, anchors, installations and fire stop.

Hilti was established in 1941 by Martin and Eugen Hilti in Schaan, Liechtenstein. 75 years later, Hilti employs over 20 000 employees where more than 2/3 is in direct contact with the customer either as a sales representative, field engineer or as a customer service representative.

Hilti has its own manufacturing plants as well as research & development departments in Europe, United States and Asia. Even though Hilti is a truly global corporation present in over 120 countries, it still maintains the characteristics of family owned business with all of the shares with voting rights owned by the Hilti family.

Hilti is headquartered from Schaan in Liechtenstein with more than 2000 employees. Very culturally diverse nature of the employees reflects the global reach of Hilti corporation and is not restricted to German speaking staff.

I.I. Hilti Strategy Champion 2020

Strategy tower Champion 2020 is the current corporate strategy. It retains key elements from previous 3C strategy and changes and sharpens strategic objectives in order to successfully move into the future.

The tower image fits well the industry that Hilti operates in and visualizes different building blocks starting with a strong

foundation at the bottom all the way up to the purpose.



Overall, the tower consists of:

- Foundation
- Four strategic imperatives
- Strategy
- Purpose

Table 3 Champion 2020 Source: Internal Source Hilti (2017)

Foundation

Hilti has been established over 75 years ago as a family owned company and this heavily influences the Hilti culture. Built on strong values, Hilti is known for a caring and performance-oriented culture and it will remain so in the future. Core values serve as a framework on which all the decisions in the company are made.

Purpose

Hilti's Core Purpose is strongly embedded in the foundation and is a crucial element contributing to the way Hilti thrives. The overall purpose is to passionately create enthusiastic customer and build a better future. With long-term vision, Hilti culture is not focused on short-term wins and creating an enthusiastic customer requires a lot of devotion every day. Keeping customer at the center of all efforts in everything Hilti does is in the nature of all the employees. Hilti Contributes to building a better future not only by providing the safest tools possible and by reducing health and safety issues of workers but it also strives to leave a legacy behind by sustainable growth.

Strategy

The main strategic goal of Hilti is sustainable value creation achieved through leadership and differentiation. Creating value naturally includes profit but Hilti's focus is growth over extended periods of time instead of quick wins. With this long-term focus, profit is not sufficient measure of success. Capital management is crucial for Hilti and value creation is therefore measured as a Return on Capital Employed (ROCE).

Leadership

Striving for leadership is justified by the crucial advantages it brings, such as the economies of scale along the entire value chain. Leadership is defined by a relative market share – simply being first.

Differentiation

Differentiated products and services set Hilti apart from competitors and allows price premiums and margins that are required by the cost intensive direct sales model. Sustainable value creation will only be achieved by the combination of strong differentiation and long-term market leadership.

Strategic imperatives

Hilti defined four strategic imperatives in order to achieve the objectives set in the Champion 2020 strategy

- Products & Service differentiation

As mentioned above, differentiated products & services enable Hilti to have a premium price. Thanks to direct sales model, differentiated products can be directly demonstrated on site.

- Direct customer relationship

Having direct customer relationship as a strategic imperative ensures Hilti to maintain the sales model and a promise that the company will not embark on hybrid or indirect models. Customers will be reached through engagement and segmentation in order to build a B2B relationship that goes beyond a sales person and to ensure a holistic Hilti experience across departments.

- Operational excellence

Seamless, consistent and best-in-class processes for interactions with customer are crucial for Hilti with a strong focus on customer relationship management.

- High performing global team

Aligned, competent and engaged international team is important for Hilti's success. Hilti plans to invest into personal & professional growth and to provide outstanding career opportunities worldwide to attract the talent. Diverse international team calls for a very inclusive environment where everyone can be who they are and to perform at their best.

I.II. Organizational structure of Hilti

Hilti is an organization operating in more than 120 countries with sophisticated organizational structure. It is governed from the headquarters in Schaan and the structure consists of three main pillars: Corporate functions, Business units and Market organizations.

Corporate functions are located in Schaan and they support the corporation on the global level through cooperation with different business units and market organizations. Examples of corporate departments are design, global IT, corporate HR, Market Reach, global Legal Department, corporate Finance & Controlling or Corporate Development including Customer & Market Insights department.

Business Units (BUs) are organized based on the main product categories: Direct Fastening, Anchors, Installations, Measuring, PT&A (Power Tools & Accessories), Fire stop and Diamond. Each business unit is responsible for the development, global sales and marketing of respective product category.

Market Organizations (MOs) are subsidiaries in the markets whose main purpose is to sell Hilti products and services. Each organization has its own general manager who is responsible for the performance of the organization.

Many local employees such as product managers in different markets are managed in matrix. The official reporting is within the market organization, the team leader of the employee is responsible for set up of goals and related monetary incentives. Additionally, local product managers also report to responsible global product managers within the BUs.

I.III. Characteristics of the distribution network

Hilti's unique direct sales model does not cooperate with intermediaries and always sells to the end customer. Therefore, it is not possible to purchase Hilti products in a store or from a representative who is not officially employed by Hilti.

At some point, each company faces a decision on how to distribute its products. Hilti decided to go with the direct sales model and it had several good reasons for it.

Firstly, the entire profit is for Hilti. This benefit is not surprising as it is known that many intermediaries reduce the profit of the manufacturer and by employing direct sales model, Hilti is able to collect high profits which can be reinvested into product innovation in order to further differentiate from competitors.

From the marketing perspective direct sales model empowers Hilti to control all marketing activities. It is possible to organize, plan and evaluate marketing initiatives with 100% control, which can be a significant challenge with intermediaries.

Multi Channels Sales Strategy

On the global scale, Hilti is operating under the Multi Channel Sales Strategy leveraging four distribution channels: Customer Service, Sales representatives, Hilti Online & Hilti Centers.



Table 4 Multi-channel strategy Source: Hilti Internal Source (2017)

As customers have different needs and behaviors, Hilti does not expect everyone to get in touch with Hilti in the same manner. For that reason, Hilti has developed the Multi Channel Strategy which combines all the channels and provides the customer with variety of possibilities how to get in touch. Each of the channels has slightly different role and responsibilities.

- Customer Service

Following the overall global trend, Hilti has reacted on the customers needs and established a customer service call center. When customer gets in touch with customer service, he will never reach an automated machine but gets directly connected with a customer service representative.

The roles and responsibilities of the customer service representatives are broad. Apart from a routine tasks such as phone and online orders and complaints or service handling, customer service representatives are also able to solve complex problems where a personal visit of the sales representative is not needed or the customer does not have time to wait for a sales rep to visit him.

The key role in a smooth operations of customer service is the competence of the staff who need to be very qualified and experienced. For that reason, customer service representatives are often former sales representatives, who have experience from the field and are able to solve complex problems and to quickly identify the root cause of given problem. This approach naturally saves costs and time on both Hilti and customer side and enables sales representatives to better allocate their time.

- Sales representatives

The main task of sales representatives is to acquire and develop mid and upper market accounts, consult & sell Hilti systems, perform demos, support the customer on-site and to orchestrate the Multi Channel Strategy. Sales representative is responsible for the development of a strong relationship with the client in order to drive differentiation from Hilti competitors by providing exceptional service such as tool service within 3 days or free of charge which justify the premium prices charged for Hilti products. With the strong focus on innovative products, on-site demos are a crucial building block for Hilti's long-term success.

The role of Hilti sales representative is consultative instead of simply being a supplier of tools. Sales reps have a freedom to manage their own time resources effectively and their role is to consult the customer and help to solve a complex problem. As the challenges Hilti customers face are related to construction industry, it is necessary that sales representatives have the necessary knowledge in order to be a valuable partner to the customers to build 100% trust. In order to assure the needed qualifications of the sales representatives, each hire starts with a 3 weeks training with a focus on product training, technical knowledge and sales skills.

- Hilti Center

Hilti centers are retail stores which are 100% owned by Hilti and are therefore part of the direct sales model.

The main roles and responsibilities of Hilti centers are similar to the roles of sales representatives – to consult and to sell products & service. In more detail, Hilti Centers are supposed to acquire and develop small and non-loyal customers, enable products hand-on and comparisons, provide tool service and to consult systems to small and non-loyal customers.

The main difference is that customer initiates the visit himself and his requirement is clearly defined. In such cases, the Hilti Center Representative does not have many opportunities for cross and up-selling. If a customer visits a Hilti Center and does not have clearly defined need & opinion, Customer Center Representative needs to consult the customer and provide him with qualified recommendations.

The main advantage of a Hilti Center is that majority of the assortment is stocked so the products can be immediately demonstrated, which is a strong factor in decision making.

The main challenge for Hilti is to assure a consistent support across all Hilti Centers. Therefore, it is necessary that all employees have the same level of qualifications in order to guarantee qualified service.

- Hilti Online

Hilti Online is gaining importance and number of transactions via this channel is expected to grow over the next years. Apart from sales, the main roles of this channel are to provide information on products and services, provide approvals, software documentations, manuals etc. handle self-service requests and to provide leads for sales representatives based on the surfing patterns. Overall, there is a strong push within the organization to educate customers to order goods online instead of contacting customer service or sales representatives but as the employees in construction industry are not really tech-savvy, this process will still take time.

II. Forms of communication in Hilti

Hilti employees make use of all the forms of communication described in the theoretical part including face-to-face channels such as meetings, trainings or team buildings. Regarding the electronic form, communication channels such as emails, instant messaging or (video) calls are used and information channels such as blogs, corporate social media, intranet or SharePoint as well.

II.I. Face-to-Face Communication

Meetings are the key face-to-face communication form in Hilti. Each employee has a weekly 1:1 meeting with its supervisor in order to receive needed guidance and support. Additionally, many departments have weekly or bi-weekly meetings in order to update each other on the current status and to take important decisions. Other than the operational type of meeting described above, Hilti employees also organize creative and problem solving meetings, which are more often on an ad-hoc basis.

Hilti is also organizing various team building or sports events. Each market organization is organizing various informal gatherings such as children's day or sports day. Additionally, MOs have the opportunity to organize an annual kick-off, which is a gathering for several days where new products are presented. Each team also has a budget for a bi-annual team building.

As Hilti strongly believes in developing their own people, trainings is a crucial part of the face-to-face form of communication. On top of various skills and knowledge related trainings that employees are encouraged to attend, each department is required to participate in a team camp. This event is held every two years with a strong focus on reflecting on the performance of the team and its contribution to the C2020 strategy.

II.II. Electronic Communication Channels

Email communication has become a norm within Hilti. Majority of information is communicated via email as it is the mean of communication which allows its users to store all the information exchanged. This benefit is so strong that employees often summarize the information via email as a follow-up to a face-to-face, call or videoconference in order to avoid any misunderstandings in the future. Email is also used to organize face-to-face, call or Skype meetings.

Instant messaging (IM) is widely used within Hilti, but has a special place. It is used for informal chat among employees, to ask a quick question, send a document or to check availability. Since the newest update from Microsoft, all the chats are now archived which increases the use of IM for the exchange of important information as it can be easily findable.

Since Hilti is operating on the global level, video calls are a vital part of internal communication. However, they are mainly used for international communication outside the home organization such

as other market organizations or the headquarters. Phone calls are still preferred for communication within the subsidiaries.

III. Information Management Channels in Hilti

- Champion 2020 internal blog

Hilti makes use of internal blog dedicated to the Champion 2020 strategy. This blog is developed on a SharePoint site and includes the overview of the strategy, reviews progress and contains posts and videos from the executive board as well as “best practices” sharing of different MOs and departments.

- Hilti Yammer

As part of the Office 365 package, a corporate social media platform Yammer has been rolled-out within Hilti over a year ago. It contains many different groups and is mainly used to share pictures, information about various workshops or achievements.

- Intranet

Intranet is the key platform to share information within Hilti. However, due to several strong disadvantages described below, intranet is currently used mainly for sharing operational content. For knowledge sharing purposes on a more strategic level, various departments are looking for alternative platforms such as SharePoint.

The latest version of intranet has been globally rolled-out in 2007 and has not been upgraded since. There are different intranets for each market organization as well as an intranet for headquarters. All of the sites are one level and interconnected so practically every employee in the world can access intranet of other market organizations. Within the different intranet structures for each market organization and the headquarters, each department is represented with its own site or number of sites, depending on the needs.

Intranet in Hilti has three main disadvantages that are to a large extend in line with challenges of information management described in the theoretical part – allowing only one-way communication, lengthy process of maintenance and limited search functionality.

Firstly, two-way communication that is perceived as standard was not developed in the times when Hilti intranet was rolled out. However, in today’s world, one-way communication feels quite outdated.

Secondly, the lengthy maintenance process is a challenge. The process of uploading/updating documents is complicated, timely and not intuitive. As all the employees are busy, they often postponed their tasks related to intranet maintenance resulting in outdated/missing content on Intranet.

Even though only minority of people are responsible for maintenance of the portal, it leads to a common believe within the company that intranet does not contain the newest information and a different channel of communication were preferred.

Thirdly, the limited search functionality makes it difficult for users to find what they were looking for unless they have already familiarized themselves with the structure. The consequence is that it is easier to request information from the responsible directly via e-mail for instance.

- SharePoint

SharePoint has been globally launched in 2015 with high expectations. Currently, Hilti globally has over 800 sites and more and more are generated each day.

Due to constant exchange of information between the headquarters, business units and market organizations, SharePoint is widely used for knowledge sharing. Hilti makes use of both projects and community sites. Project sites are used for both cross-departmental projects as well as local, smaller project both on hub level or MO level. Community sites are used across all level of organization and can be grouped in three main types of sites.

Firstly, SharePoint is used by corporate functions to communicate with business units and market organizations. Departments such as corporate HR, Corporate Finance, Market Reach or Customer & Market Insights teams have their own SharePoint sites for their communities which are usually consisting of employees across business units and market organizations. Corporate departments use their SharePoint sites to communicate new initiatives and share information. Some of them go beyond a one-way communication and encourage discussions and exchange of information within the community.

Secondly, each business unit has own SharePoint site to share and exchange information with the hubs and markets.

Thirdly, different market organizations have their own sites where they share information locally. Some of the market organizations for example use SharePoint instead of intranet due to higher flexibility of this platform.

The requirements to access new SharePoint sides are not high. All of the employees in the headquarters may freely access SharePoint sides. The issuer in the markets have to go through a basic training on how to build up & manage the page, but the guidelines for implementation are not strict.

While this becomes an advantage in some aspects, it brings downsides in others. The biggest disadvantage of this approach is the look of the pages. As many of the site owners are tight on resources, especially time, they often opt for a solution that would provide them with desired functionalities (sharing documents in majority of the cases) but the look of the site is often neglected.

Consequently, poor design of the sites leads to a resistance among the employees and the believe that SharePoint is unsuitable platform, with confusing structure.

III.II. Customer Knowledge Management platform (CKM)

This part of the thesis provides the reader with contextual and conceptual information regarding the Customer Knowledge Management platform (CKM) – the new knowledge management platform, which is the main focus of the primary research in the thesis. Firstly, the background information about the Customer & market Insights departments is described such as the structure, main roles and responsibilities of the different pillars and current challenges regarding the knowledge management and information sharing. Second sub-chapter focuses on the Customer Knowledge Management project and describes different stages of the project and the contribution of the thesis to the overall project.

III.II.I. Contextual information

Customer and Market Insights (KEM) translates insights into the strategic context and actively contributes to the implementation tracking and ongoing development of corporate strategy.

The team is part of corporate development department reporting directly to the executive board. In recent years, management of Hilti realized that market research is key for the overall success of the organization and the department is currently going through a transformation phase. It is repositioning itself from data providers to business partners who are supporting the most strategic projects with insights & information.

The department consists of three areas:

- Customer Experience Insights team
- Market & Competitive Insights team
- Product & Innovation Insights team.

Customer Experience Insights continuously measures customer satisfaction and customer experience with touch points through various methodologies.

Market & Competitive Insights team observes current developments and forward-looking trends within the market and among competitors. This knowledge enables a deeper understanding of the market environment and Hilti's market position in a complex competitive landscape.

Product & Innovation Insights carries out projects related to product development to better understand customer needs and to align product development accordingly.

As already mentioned, Customer & Market Insights department has its own SharePoint sites which represent all three pillars. The platform works well especially for the Market & Competitive Insights

team, however, the current structure does not meet the needs of the stakeholders of the Product & Innovation (P&I) pillar.

P&I's SharePoint is currently a project archive, which is organized by BU, year and specific type of project, but not by insights and contains full reports instead of summaries. Moreover, there are no insights related to target group or application. Unfortunately, such archive concept is not used across the organization as accessing information is very time intensive. As a consequence, the organization is experiencing following drawbacks: Hilti is not sufficiently capitalizing existing knowledge and have to ask customers same/similar questions over and over, it is difficult to build up on existing knowledge and to fill knowledge gaps in structured way and onboarding of employees is very time consuming.

Moreover, as a direct sales model, market research is not the only way how Hilti collects information about customers. Apart from professional market research, information is collected via customer connect – marketing & sales employees approach the customers directly themselves and other feedback sources such as complaint handling or social media listening. Since the customer insights are fragmented, other departments across the organization realize the need to collect & share the insights in order to capitalize on the existing knowledge. Apart from the research department, digital team and global process management are simultaneously working on different project related to customer knowledge management platform.

III.II.II. Concept information

The Product & Innovation Insights team therefore initiated Customer Knowledge Management project which aims at developing a concept of one central platform to share and exchange on customer knowledge such as customer profiles, segmentations, customer behaviors, habits, pain points, unmet needs, purchase drivers, purchase barriers, communication strategy, brand loyalty, customer experience, customer trends etc.

The concept development was divided into the following steps:

1. Desk research to get knowledge in the topic & to bring in outside best practice cases
2. Qualitative interviews in order to understand internal stakeholders' needs regarding the structure and content of the Customer Knowledge platform
3. Quantitative usability survey of the SharePoint users in Czech MO to identify the the key functionalities and features of the Customer Knowledge platform
4. Exchange with Digital team and Global Process management and concept development

As already mentioned, the scope of this thesis is to define, execute and analyze both the qualitative and quantitative primary research and to provide recommendations on the content, structure of the platform as well as required SharePoint functionalities and features. Desk research on the best practices

and exchange with Digital and Global Process management teams are therefore out of scope of the thesis.

IV. Qualitative study (Required content and structure of CKM)

The qualitative part of the research aims at mapping the needs of both administrators and users regarding the structure and content of the platform and identify areas where the needs of both groups overlap.

Before the actual research, it was important to identify which stakeholders would be the administrators and which would be the users. As the main aim of the platform is to share knowledge generated through professional research, the administrator of the platform would be the P&I team of the Customer & Market Insights department. Other departments such as PM (Product Managers), MR (Market Reach), Global Process management or Digital team would be users in this case.

Global product managers are responsible for development, sales and marketing of one product or a portfolio of products. They are part of the Business Units and manage in matrix product managers in different markets.

Market Reach is a department responsible for all the channels how Hilti reaches its customers including sales force, customer service or online.

Global Process Management department is responsible for the operational excellence within Hilti including maintenance of current processes, software and platforms as well as development of new processes required as the corporation evolves.

Digital Team is responsible for the digital presentation of Hilti on the global level. They support different business units and market organizations and also develop new strategies and initiatives in order to improve the digital presence of Hilti.

Firstly, the author interviewed the members of the P&I pillar in order to understand the needs and requirements of the administrators when it comes to the structure and content of the platform. At a later stage, interviews with other stakeholders took place. All together, 10 stakeholders were interviewed across various departments. Two members of the P&I team, business developer from Market Reach, two project managers from Global Process Management, digital social media manager from the digital department, two global product managers, one hub product manager and a product marketing intern. Summary of all interviews can be found in Appendix II.

First interviews with the administrators of the platform were structured around following questions:

- What kind of customer insights would you like to share?
- What are the customer insights that are the most relevant to your stakeholders?
- What is the ideal structure of the platform? What are the ideal entry points?

Secondly, interviews with potential users took place covering similar topics as the interviews with the administrators in order to be able to compare the different needs and expectations and the guideline can be found in Appendix I. Areas that were covered were:

- What comes to mind when thinking about customer insights?
- What kind of insights are you looking for/where?
- What are the pain points when accessing customer insights?
- What customer insights would you wish to have?
- What is the ideal structure of the platform? What are the ideal entry points?
- Is your department generating customer insights?
- Would you be interested in sharing your content?

IV.I. Assessment of the required content

The main needs regarding content of both the administrators and users can be seen in the overview below.

	ADMINISTRATORS	USERS			
	KEM	PM	MR	Process M.	Digital
Understand Purchasing Behavior					
• Clustering of customers to target groups (company size)	x	x	x		
• Identification of decision makers/influencers per target group		x	x		x
• Insights on purchase behavior of DM/INF (purchase drivers, barriers, pain points)	x	x			
Understand the role of different channels					
• Market reach strategy by target groups (Appropriate channels)	x	x	x		x
• Communication strategy for different target groups	x	x	x		x
Understand usage behavior					
• Typical applications per trade		x			
• Product usage behavior for different applications	x	x			

Table 5 Required structure of CKM source: author (2017)

When it comes to the content of the customer knowledge management platform, the P&I team would like to share professional research covering three main topics: research about customers, research about products and their usage and research about different communication channels.

The platform should provide information about different customer segments. At first, it should provide description of different segments based on the size of the company, geography but also for example needs. For each of the segments, the platform should provide research insights such as purchase drivers, purchase barriers, pain points etc.

In addition to purchasing behavior, P&I team would like to include information related to communication and sales channels answering two main questions: Which channels to use to reach various customer segments and which communication channels to use.

As the customer knowledge management platform is a service to the internal clients of KEM, the requirements of the P&I team are linked to the needs of the clients, mainly to the needs of product managers (PMs). As PMs approach is very much product driven, P&I realize a strong need to provide information not only about customers, but also about product usage for different applications.

Comparing the needs of the administrators with users' needs on the three main content areas, many synergies can be identified. The product managers have a strong need to understand purchasing behavior of different segments. On top of the content that P&I team had in mind, they would also be very interested in knowledge about decision makers and influencers in different segments. As they are very sales oriented, they are not interested in any information unless they know that it is relevant information that will influence the sale. The need to provide tools to identify decision makers and influencers was also mentioned by market reach department and the digital team.

Having access to research that would fuel the development of market reach strategies is apart from product managers strongly supported by market reach and would be useful for the digital team as well, as they are responsible for the online channel. All three departments would also appreciate research insights that could fuel communication strategies for different segments.

The desire to access product related research is originating from product managers. On top of accessing information about usage of products on different application, they would also appreciate an overview of the main building trades and subsequent applications.

V.II. Assessment of the required structure

The main needs regarding structure of both the administrators and users can be seen in the overview below.

	ADMINISTRATORS	USERS			
	KEM	PM	MR	Process M.	Digital
Access Secondary Research					
▪ Promote the benefits of secondary research	x		x		
▪ Identify & leverage customer insights	x		x	x	
▪ Develop customer centric approach with trade focus	x	x	x		
▪ Access raw data (e.g. videos)		x			
Integration of Customer Connect					
▪ Share insights generated via customer connect	x	x		x	x
▪ Provide guidance on how to perform customer connect		x		x	
▪ Consolidate the findings from customer connect (provide templates)				x	

Table 6 Required structure of CKM source: author (2017)

The P&I team of the Customer & Market Insights (KEM) department would like to develop a structure that would promote the benefits of secondary research and offer actionable, consolidated insights from the past researches. The structure should consist of two main pillars, firstly customer insights including purchasing behavior and communication and product related pillar with construction trade as an entry point.

Moreover, P&I realizes the need to bring together various insights from different sources in order to build on the existing knowledge that Hilti possesses. This solution would enable the organization to recycle current knowledge instead of asking the questions to the customers repeatedly.

Comparing the suggestion by the KEM department with the needs of the other stakeholders, synergies can be found. Market reach and Global Process Management both realize the need to re-use past research and to promote the usefulness of secondary research in order to educate the organization that primary data is not the only way how to obtain information. Moreover, apart from KEM and Market reach, Product managers also realize the need to develop a customer-centric structure related to product insights instead of using familiar BU approach. Nowadays, each business unit is working in silos and there is a need to educate the organization that customers don't think in BU terms but rather in trade and application terms for which they use products across the BUs.

Additionally, interviewed product managers have expressed the desire to access raw data such as excel files, videos etc.

While KEM sees the need to integrate all the primary research performed by individual business units and market organizations (customer connect), this topic was of the biggest interest to the Global Process Management department. Currently, there is no standardized way how to approach customers and Global Process Management is developing a toolbox on advising employees on how to do it.

Naturally, they see a need for integrating all of the findings on one platform in a standardized way that would enable for comparison. Product managers together with Global Process Management also expressed a wish to include guidelines on how to perform customer connect with e.g. templates.

V. Quantitative study (Required features and functionalities of CKM)

As mentioned earlier, this quantitative part of the research aimed at assessing the usability of the information sharing portal in Hilti Czech Republic. The findings help to identify the key features and functionalities required by the users and the influence of age and use case on the ratings. Insights enable the P&I team to learn from the SharePoint implementation experience of the Czech MO by identifying the key benefits and weaknesses of the platform and required features and functionalities overall, per age group and for users and administrators.

The USE method, which is widely used across corporations, is applied to measure the usability of the platform. It measures subjective reactions to usability of the platform, which are strongly related to user behavior. It measures reactions across four dimensions: Usefulness, Ease of Use, Ease of Learning and Satisfaction.

This chapter first describes contextual information about MO Czech Republic, then focuses on conceptual information of the SharePoint platform including the reasons for the implementation followed by the results of the USE Survey.

V.I. Contextual information

Hilti ČSFR s.r.o. has been established in 1991 in Prague and initially employed only 10 employees. In 1993, the subsidiary splits in two: Hilti ČR s.r.o. based in Prague and Hilti Slovakia s.r.o. based in Bratislava. At the moment, there are 242 employees in Hilti Czech Republic.

The subsidiary is part of the EE-EU sub-region governed from Russia together with Slovakia, Hungary & Baltics countries. The head of the Hilti CZ is the general manager. From there the organization is divided into marketing, finance, HR, logistics, customer service, IT and sales departments. The organization structure clearly shows that it is a sales organization as manufacturing or R&D are not represented. The focus of the organization is clearly visible in the ratio of employees in different departments as sales employees account for vast majority of total staff with 188 out of 242 employees.

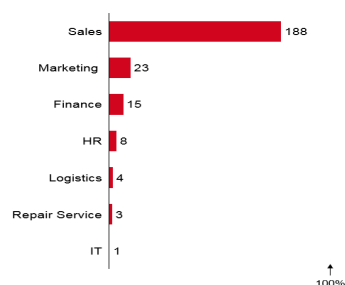


Figure 1 Distribution of Hilti CZ employees Source :author (2017)

V.II. Concept information

The use of SharePoint for the purposes of the Czech Republic were slightly different than the typical usage within Hilti. Rather than a collaborative space where multiple people working on the same documents, a decision has been made to use the platform to share important information and documents on the operational level. In general, Hilti uses a different platform for those purposes – the intranet.

Unfortunately, intranet has been launched 10 years ago and since then haven't been refreshed.

The maintenance of intranet has been quite challenging especially for the responsible employees, who were uploading the documents. The difficulties regarding the process lead to outdated information on the intranet and therefore low general usage. The management realized the weaknesses of the current platform and a decision has been made to develop a new information sharing system on a new, more flexible platform: SharePoint. Additional information about the advantages of SharePoint over intranet and the development plan can be found in the Appendix III & IV.

V.III. Results of the Usability Survey

Usability survey distributed among the employees of Hilti Czech Republic aims at providing quantitative insights on the opinions on the knowledge sharing platform on SharePoint among the users. The outcome enables the author to identify the key strengths and weaknesses as well as to recommend key features and functionalities for the Customer Knowledge Platform across four dimensions: usability, easiness to use, easiness to learn and satisfaction.

On top of two open questions regarding the biggest weaknesses and strengths for the respondents, the questionnaire measures the most important dimensions of usability for users – Usefulness, Satisfaction & Ease of Use and Ease of Learning. (Lund, 2001) The survey contains of 22 statements and respondents were asked to express whether they agree or disagree with each statement rate on a scale 1-5 (1=Strongly disagree, 2=Somewhat disagree, 3=neither agree nor disagree, 4=somewhat agree, 5=strongly agree). The questionnaire can be found in Appendix V.

The data is firstly analyzed on the overall level followed by cross-data analysis based on the age of the respondents and their job role due to serious inconsistencies in the overall results.

The questionnaire was distributed in cooperation with the marketing management vial email across the organization and generated 66 responses. Majority of the respondents were male (88%) and the age of the respondents varied between 20 years old to 55. The respondents were from three departments: sales (52%), marketing (45%) and Finance (3%).

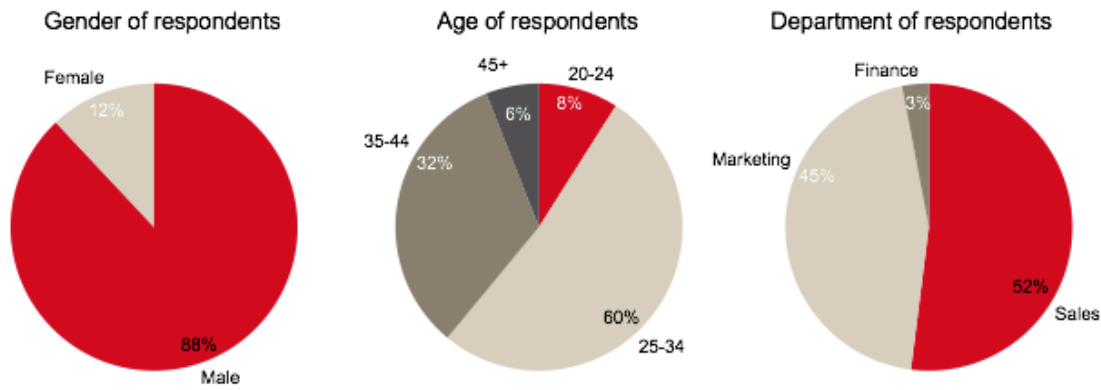


Figure 2 Demographics of the Usability Survey Source: Author (2017)

V.III. I. Overall results

The following section visualizes the results in 2 graphs for each dimension. One is showing the percentage of people rating each statement 4 or 5 (somewhat or strongly agree) and one graph showing percentage of people rating each statement 1 or 2 (somewhat or strongly disagree). This visualization makes it easy not only to compare the satisfaction of different dimensions, but also to see the strengths and weaknesses within the dimensions. Showing top 2 and bottom 2 boxes is a method commonly used in market research as it excludes neutral responses such as I don't know or neither agree nor disagree and limits the influence of strong ratings compared to computing averages. Moreover, comparing the ratings 1&2 vs. 4&5 enabled the author to uncover inconsistencies which lead to further cross-data analysis based on age and job role. The results per each questions can be found in Appendix VI.

At first, respondents were asked to mention the main strengths and weaknesses of the platform. The biggest advantages of the platform that spontaneously came to respondents' mind was that it is easy to find information (21%), it is easy to share documents (18%), information is up to date (9%) and the platform is easy to search (6%).

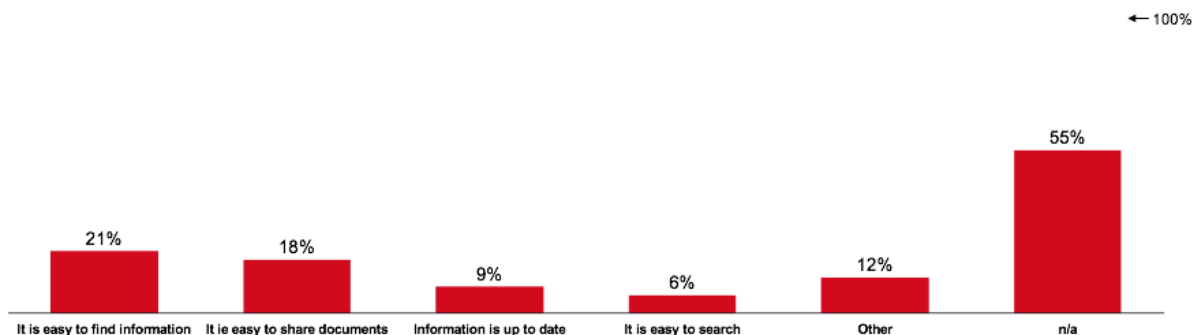


Figure 3 Advantages of the SP platform Source: Author (2017)

Looking into the disadvantages, it was mentioned by 24% of respondents that the documents are not always up to date (24%), platform has limited functionalities of the search function (15%) and the structure is too complicated (12%).

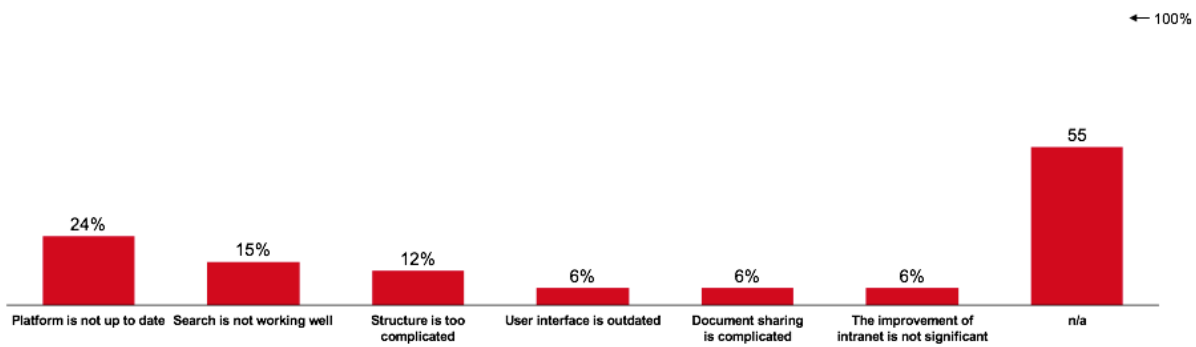


Figure 4 Disadvantages of the SP platform Source: Author (2017)

Comparing results from both questions, it can be concluded that there are no strong strengths or weaknesses of the platform that would be commonly shared. The reason for that is that most of the strengths mentioned are at the same time identified as weakness by other respondents. This can be seen nicely on an example of the biggest weakness – the platform is not up to date, which has been mentioned by 24% as a weakness. At the same time, one of the strengths of the platform is that it contains actual information (9%). Such results indicates that there may be different opinions within the organization.

Usefulness

Usefulness dimension is investigating whether the platform brings any value to the users. If it helps them in their daily tasks, saves their time and if it contains all the information they need. It can be considered in some way a hygiene factor or a prerequisite for a successful usage because if users do not see the added value, they will not use it in their daily live.

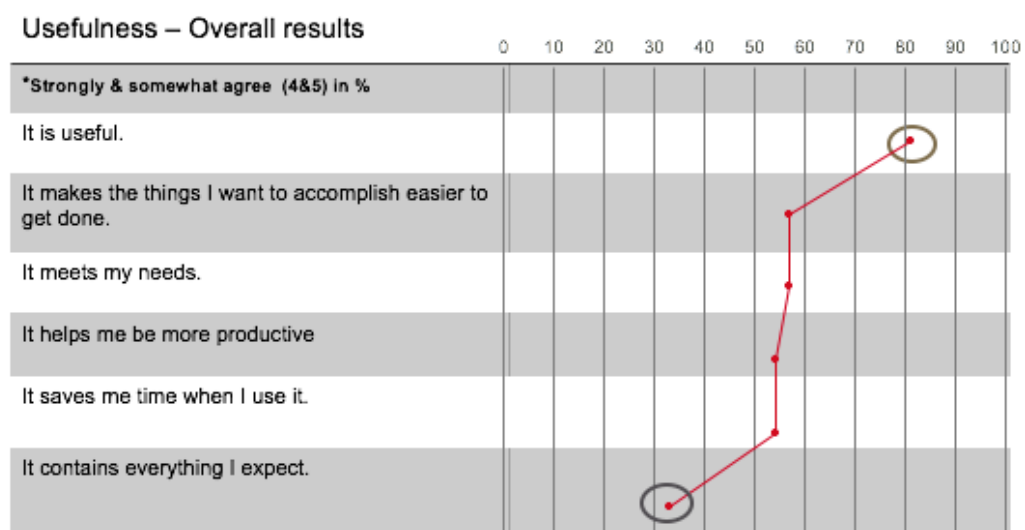


Figure 5 Overall Usefulness ratings 4&5 Source: Author (2017)

Results show that respondents believe that the platform is useful. Majority of the respondents agree with all the statements except the last statement: “It contains everything I expect.” Strong majority of

the respondents (81%) finds the platform useful - one of the highest rankings in the overall survey. Other statements e.g. It meets my needs, helps me to be more productive or saves me time were ranked similarly with roughly half of the respondents agreeing with the statement. The weakest point regarding usefulness is lack of some information as only 33% agree that the platforms contains everything they expect.

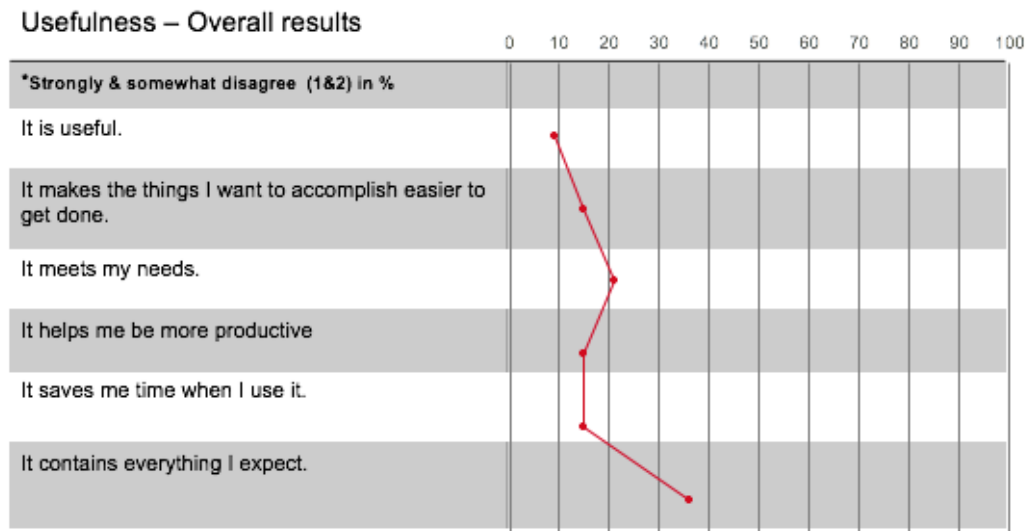


Figure 6 Overall Usefulness ratings 1&2 Source: Author (2017)

Looking at the respondents who disagree with the mentioned statements, there is a consistency with the previous graph. The biggest strength is the usefulness and the biggest weakness is the information the platform contains. An interesting finding is that the statement “It fits my needs” has been disagreed with by 21% of respondents, which makes it the second weakest point of this dimension.

In conclusion, it can be said that respondents perceive the platform as useful because it makes it easier for them to accomplish the tasks they need to do. When it comes to meeting the needs of the respondents, the sample is quite polarized. This statement was ranked as true for 57% of the respondents but at the same time, 21% of the respondents disagree which makes it the 2nd weakest point regarding usefulness. The content of the platform is by far the biggest weakness with a big gap from the other ratings as only 33% of respondents think that it contains everything they would expect compared to +50% agreement with all the other statements.

Ease of use

This dimension is focusing on the user experience with usage and navigation throughout the platform.

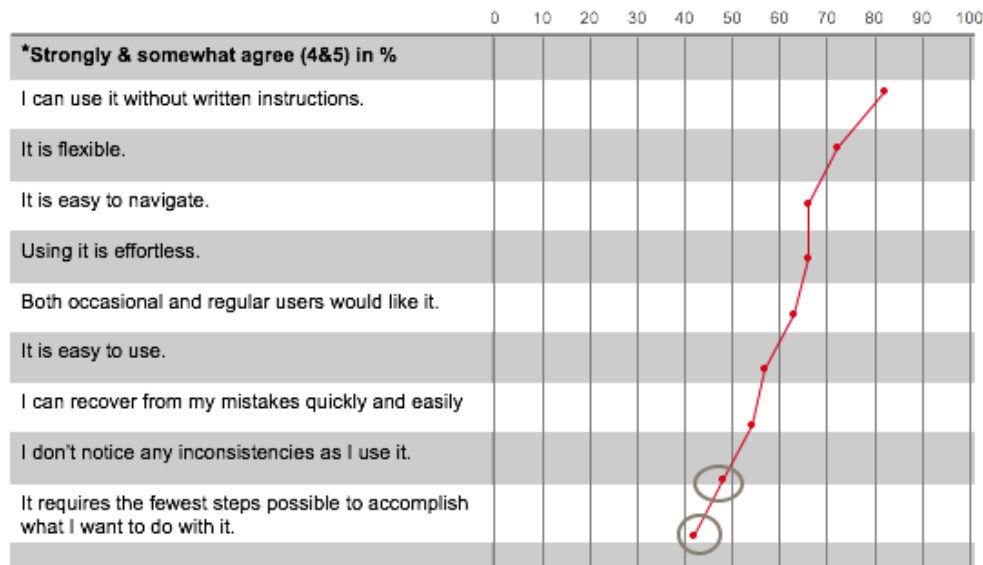


Figure 7 Overall Ease to Use ratings 4&5 Source: Author (2017)

The platform is perceived as easy to use with most of the respondents agreeing with related statements. However, respondents notice inconsistencies when they use it and they believe that it does not require the fewest steps possible to accomplish the tasks they need to do (only 42% believes it is true). On the positive side the platform is perceived as flexible by 72% of respondents and 81% believes it can be used without written instructions.

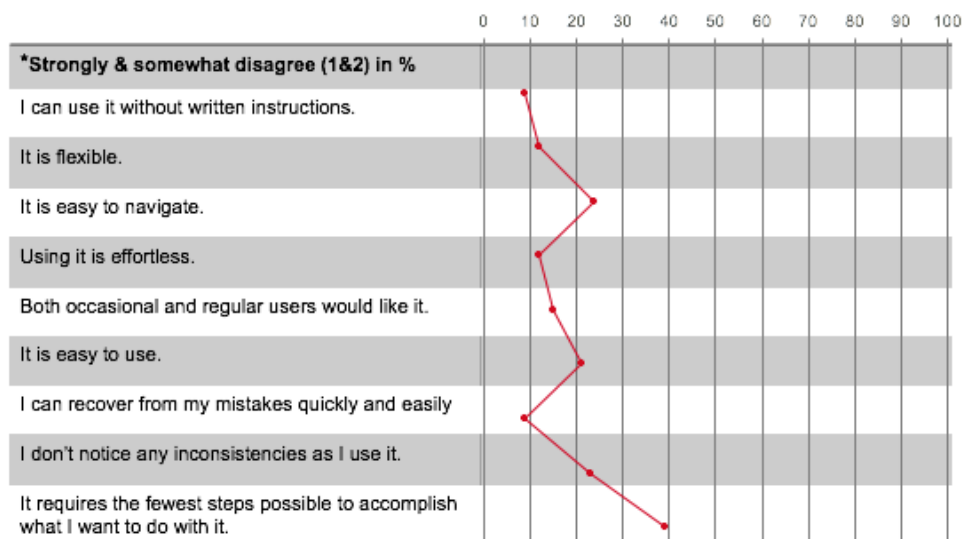


Figure 8 Overall Ease to Use ratings 1&2 Source: Author (2017)

When looking into the percentage of respondents who disagreed with the statements majority of the statements yield consistent result. However, the easiness of navigation indicates some level of polarization. It was the 3rd best rated statement but at the same time, it is the statement with second highest level of disagreement (21%). This polarization can be further proven by much lower proportion of respondents answering with neither agree nor disagree (9%) compared to other statements within

the dimension. Seemingly low rating of being able to recover from mistakes is driven by high number of I don't knows (21%) instead of disagreement with the statement (9% is one of the lowest in this dimension). Full results including neither agree nor disagree and I don't know per each statement can be found in appendix.

In conclusion, the flexibility of the platform and the ability to use it without written instructions are the biggest advantages of this dimension. The weaknesses are the inconsistencies when using the platform and the number of steps required to accomplish what needs to be done. Ease of navigation is a polarizing point as this statement is the 3rd biggest strength and 2nd biggest weakness at the same time. This result may be driven by different opinions of different users.

Ease of learning

This dimension is focusing on the ability to learn and to use the platform in a short period of time. This dimension heavily influences the willingness to change to a new software among respondents and the easier it is to learn how to use the platform the smaller the barrier to switch.

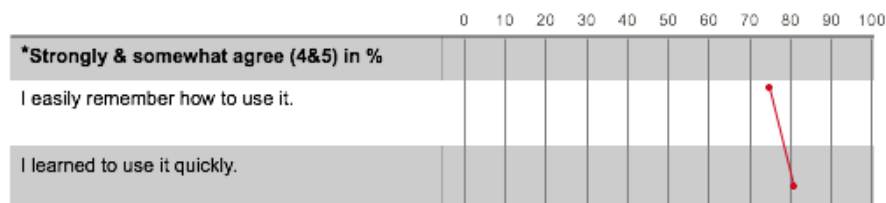


Figure 9 Overall Ease of learning ratings 4&5 Source: Author (2017)

Ease of learning has received the highest scores among the four areas surveyed. Over 75% of respondents stated that they learned to use it quickly and 81% said they easily remembered how to use it. Moreover, respondents were also exceptionally enthusiastic about the statements with 45% of the respondents strongly agreeing with both statements. Such a high result may be influenced by the user-friendliness of the SharePoint platform but also by high efforts invested into the training of the employees across departments.

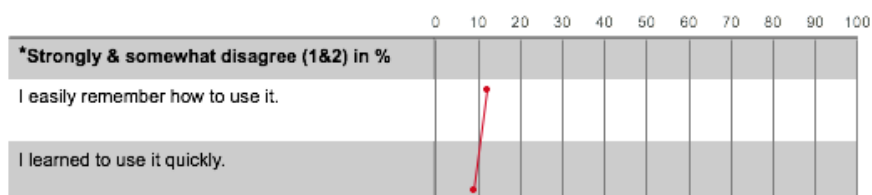


Figure 10 Overall Ease of Learning ratings 1&2 Source: Author (2017)

The results for 1& 2 ratings confirm the overall picture. Respondents agree that they learned how to use the platform quickly and that it is fairly easy to remember how to use it.

Satisfaction

The last dimension is considering actual satisfaction of the respondents with the current software, whether they would recommend it to a friend and if it works the way they want.

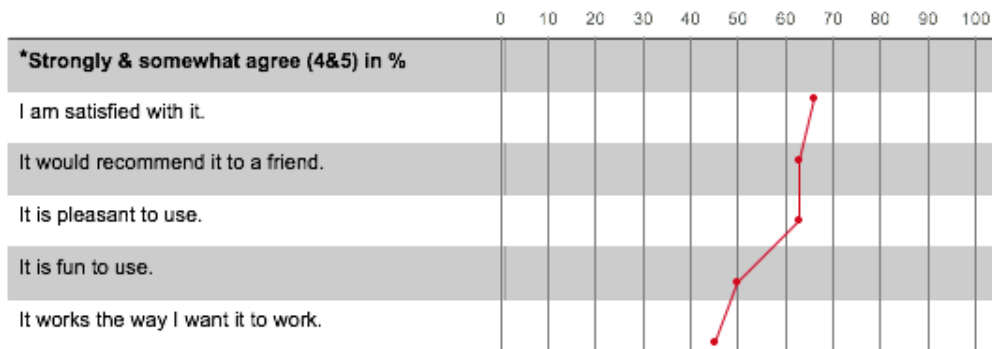


Figure 11 Overall Satisfaction ratings 4&5 Source: Author (2017)

Over 2/3 of the respondents are satisfied with the platform, they think it is easy to use and they would recommend it to a friend. Half of the respondents believes it is fun to use but only 44% believes that it works the way they want it to work.

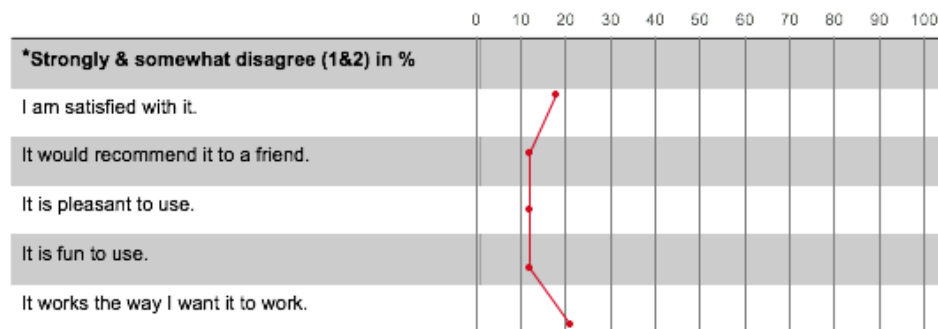


Figure 12 Overall Satisfaction ratings 1&2 Source: Author (2017)

Comparing with the negative results, the picture is consistent except overall satisfaction which suggest some degree of polarization. This statement is agreed with the most (45%) but at the same time has the second highest disagreement (18%). It seems that there are two types of respondents, one type which is satisfied and the other, smaller group (20%) who are not satisfied. The weakness of the platform seems to be that it does not work the way the respondents would want it to in 20% of the responses.

Overall results sub-conclusion

To conclude, overall results provided important insights. Already the first open questions indicated, that the platform does not have commonly shared opinion on big strengths or weaknesses. Rather, results showed that features or characteristics that may be perceived as strength to some respondents are a weakness to others.

The indication that there may be different groups with various opinions has been further strengthened with analysis of different dimensions. When comparing the respondents who somewhat or strongly agreed with the statements vs. the ones who somewhat or strongly disagreed revealed that there are several statements which were rated as a strength and weakness at the same time. Polarizing statements such as as the overall satisfaction, meeting of respondent's needs and ease of navigation were also from different dimensions. However, the polarization seems to be especially strong in the satisfaction dimension. Results indicate a different level of satisfaction for two types of respondents. More than half was satisfied but over 20% indicated that they are not satisfied, which is relatively high number compared to the other dimensions.

Identifying the key strengths and weaknesses: overall, respondents find the platform very useful (81%). The most appreciated benefit of the platform is that it is intuitive. In particular, the ability to use it without written instructions (84%), ability to learn and remember how to use it (81%, 75% respectively) and its flexibility (72%). The main weaknesses of the platform are the number of steps required to navigate through. Almost half (39%) of the respondents do not believe that the platform contains the least possible steps to achieve what they need to do. Respondents are furthermore not satisfied with the content of the platform – 36% does not believe that it contains everything they expect. Third weakness mentioned by respondents are inconsistencies – 23% of respondents notice inconsistencies while using the platform.

Comparing described results with spontaneous reactions at the beginning of the survey a connection can be seen. The main strengths of the platform mentioned by respondents were the easiness to find information (21%) and easiness to share documents (18%). Both characteristics are influenced by the intuitiveness of the platform. Considering the weaknesses, the main weakness mentioned spontaneously was that the platform is not up to date (24%) – which may be linked with the dissatisfaction with the content and complaints about the inconsistencies.

Comparing results of different dimensions is challenging as the results greatly vary within each dimension. However, Ease of learning is an exception and the winner. Those statements were not only rated the highest, but respondents were very enthusiastic about the easiness to learn. Almost half of the respondents (45%) strongly agreed with both statements I easily remember how to use it and I learned how to use it quickly. As mentioned earlier, such a high result may be influenced by the throughout training plan.

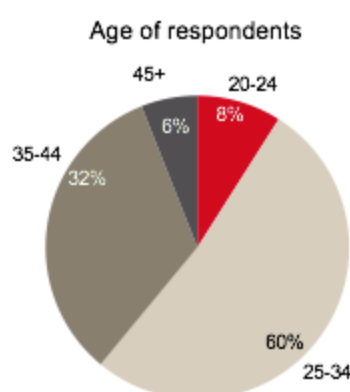
The inconsistencies have lead the author to an assumption that the results of the usability survey may be different for different user groups due to their different needs or digital habits.

Therefore, the author has decided to investigate the influence of two elements on the results.

Firstly, the author compared the results of different age groups (20-34 vs. 35-55). The age element was chosen based on an assumption that age has influence on the digital literacy of the users and their ability to learn and use new software. (enGauge, 2016)

Secondly, personal experience with the development & implementation of the platform equipped the author with knowledge that there are two types of users with different use cases. First use case is the usage of the platform in search for information by all users and the second usage is sharing information by administrators. Decision to deep dive into those two use cases was based on an assumption that those two user groups use the platform differently and may likely have different needs and requirements.

IV.III. II. Cross-data analysis based on age of respondents



In order to perform the cross data analysis based on age, the respondents were split into two groups according to their age. First group of 40 respondents represents the younger respondents in the age 20-34. The group representing the older employees includes 26 respondents in the age 35-55.

Figure 13 Age of respondents Source: Author (2017)

Usefulness

Usefulness dimension is investigating whether the platform brings any value to the users. If it helps them in their daily tasks, saves their time and if it contains all the information they need.

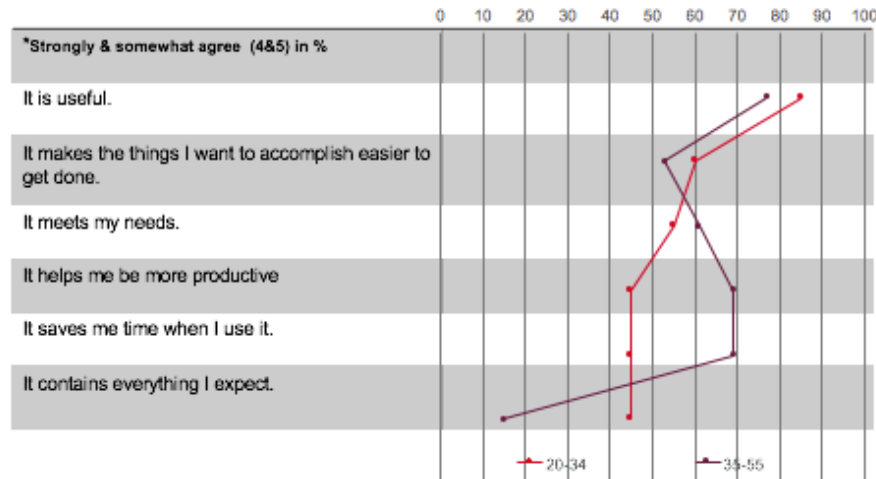


Figure 14 Usefulness ratings 4&5, age split Source: Author (2017)

Comparing the results of the two age groups, it cannot be concluded that one age group finds the platform more useful than the other as none of the groups rated the statements consistently higher than the other. Some statements received similar ratings e.g. It is useful, It makes things easier to accomplish things or It meets my needs. The ratings of other statements vary strongly. Statements It helps me to be more productive and It saves me time when I use it were agreed with by 69% of the older group and only 45% of the younger group in both cases. Other statement with a big difference in the ratings was the statement It contains everything I expect which was agreed with by 44% of the younger group but only by 15% of the older group.

Ease of use

This dimension is focusing on the user experience with usage and navigation throughout the platform.

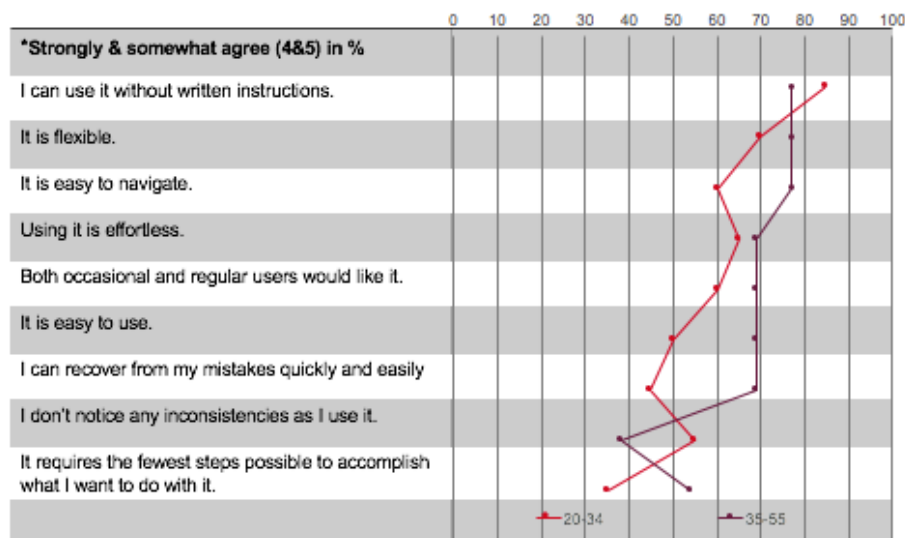


Figure 15 Ease of use ratings 4&5, age split Source: Author (2017)

Unlike in the case of usefulness, this dimension shows quite consistent results with higher ratings of the older group on almost all the statements. There are only two exceptions to this trend. Firstly, the statements related to usage without written instructions, where the agreeableness of the younger group was higher by 8 %. Second statement was related to noticed inconsistencies. The statement I don't notice any inconsistencies as I use it was agreed with by 54% of the younger group vs. 38% of the older group.

Ease of learning

This dimension is focusing on the ability to learn and to use the platform in a short period of time.

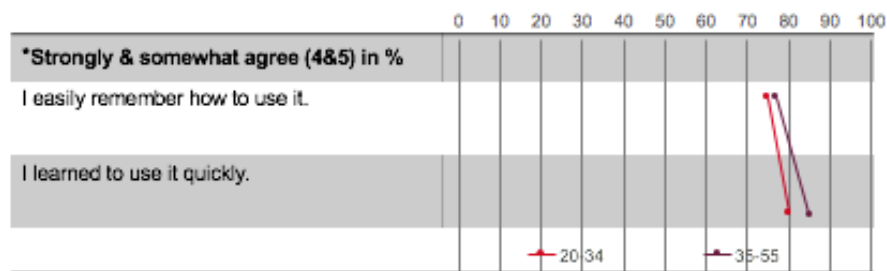


Figure 16 Ease of learning 4&5, age split Source: Author (2017)

There is a clear indication that majority of both groups agrees with the statements related to easiness to learn. Older users rated both statements of this dimension higher than the younger group. Therefore, it can be concluded that there is a tendency that older users perceive the platform as easier to learn how to use it.

Satisfaction

The last dimension is considering actual satisfaction of the respondents with the current software, whether they would recommend it to a friend and if it works the way they want.

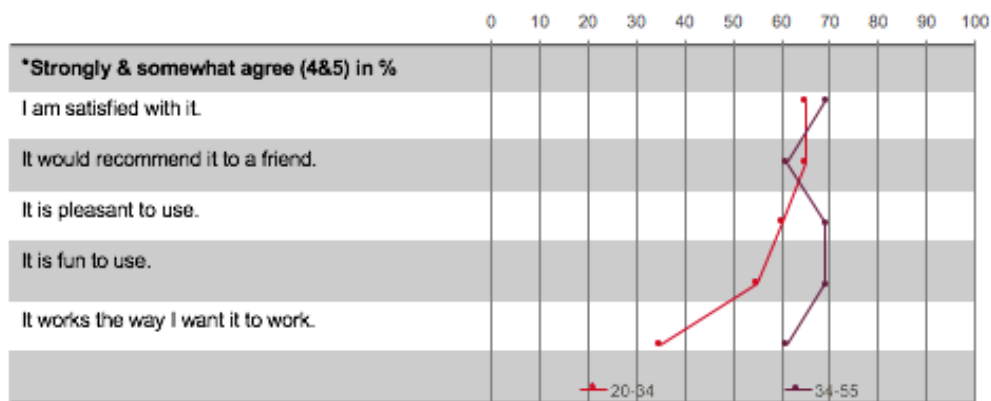


Figure 17 Satisfaction ratings 4&5, age split Source: Author (2017)

Overall, majority of both age groups are satisfied as almost all statements have been agreed with by more than 50% of the respondents. The results show that the older users are more satisfied with the platform compared to the younger users. The only statement with which the younger users agreed with

more was the recommendation to a friend. The statement with the biggest difference was It works the way I want it to work. Only 33% of the younger group agreed with this statements versus 60% agreement of the older group.

Sub-conclusion age split

In conclusion, there seems to be differences of ratings between the two age groups. The overall tendency across dimensions is a higher rating of the older group compared to the younger one. The older group finds the platform easier to use, easier to learn and is also more satisfied. The results of the usefulness dimensions are the only exception with no consistent message suggesting a better perception by one or the other group.

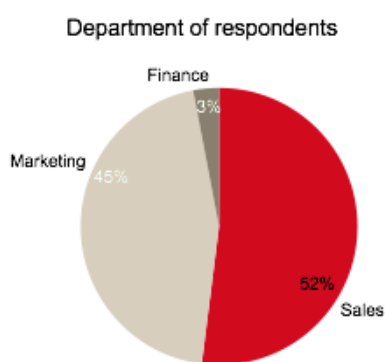
Looking at the main strengths and weaknesses for each group, it can be seen that older users were more conservative (without extremes) with their ratings. Only one statement was agreed with by more than 80% - I learned to use it quickly. Other statements with high ratings were It is useful, I can use it without written instructions, It is flexible, It is easy to navigate and It is easy to remember how to use it. All of those statements were agreed with 77% of the respondents from the older group. The main weaknesses for the older group were the content and inconsistencies. Only 15% of the older group agreed that the platform contains what they expected and 38% of respondents did not notice any inconsistencies while using the platform.

The younger group was more radical with their ratings. There are three statements that were agreed with by more than 80% of the respondents: It is useful (85%), It works without written instructions (85%) and I learned to use it quickly (80%). The main weaknesses for the younger groups were the number of steps required and the fact that the platform does not work the way they want it to. Only 35% of the respondents agreed that It requires the fewest possible steps to accomplish what they want to accomplish and the same percentage of respondents agrees with the statement that It works the way they want it to work.

It's important to keep in mind that despite more radical ratings of the younger group, the older group has had higher ratings in 3 out of 4 dimensions. Some of the main weaknesses and strengths differ per age group, which shows that the requirements for SharePoint features and functionalities of the two groups may vary to a certain extent. The initial assumption that age of respondents may influence the outcomes of the survey has been approved. The key take away is that older users find the platform easier to use, easier to learn how to use it and are also more satisfied

IV.III.III. Cross data analysis based on the use case

Based on the author's experience with the development & implementation of the platform she identified two main types of users – the administrators and the users. General users are all the Hilti employees who use the platform to obtain needed information. The other group of users are employees of corporate functions such as marketing, finance, HR or IT who are in addition to being users often also administrators of their own pages responsible for uploading of documents etc. As the administrators mostly use the platform to upload their own information and users use it mainly to access information the author assumes that the needs and requirements for the features and functionalities of the platform may be different between those two groups.



The sample demographics shows an almost equal split between corporate functions such as marketing or finance who are administrators of the platform and sales – who are the users. However, the results should be treated more as tendencies due to relatively low sample size.

Figure 18 Department of respondents Source: Author (2017)

Usefulness

Usefulness dimension is investigating whether the platform brings any value to the users. If it helps them in their daily tasks, saves their time and if it contains all the information they need.

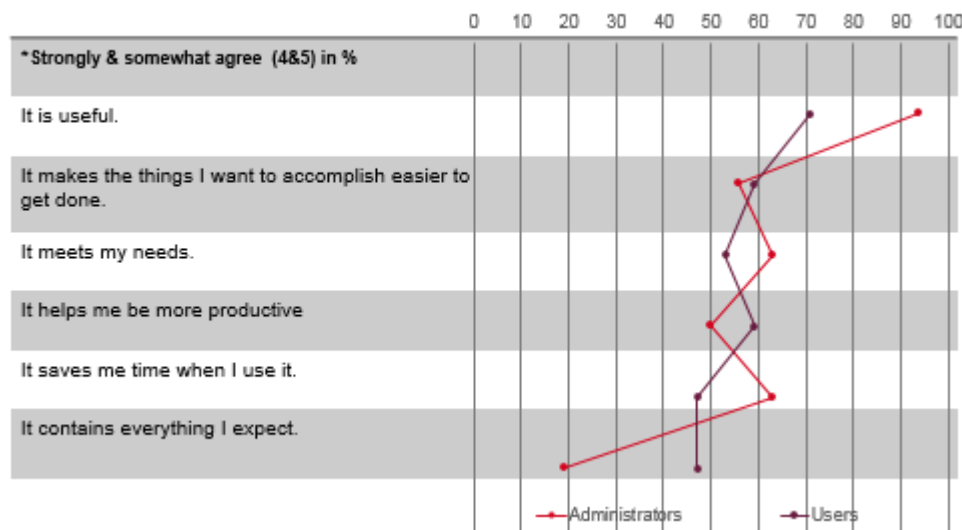


Figure 18 Usefulness ratings 4&5, use case split Source: Author (2017)

The cross-analysis based on the use cases does not suggest that one group would find the platform more useful than the other group. It can be clearly seen however that users are more conservative with their

ratings compared to administrators whose opinion on the different points varies greatly from 20%-95%.

Another important insight is different opinions of the two groups on all the statements. The ones with the biggest difference are related to overall usefulness, time savings and content. Statements It is useful and It saves me time when I use it have been rated higher by administrators. On the contrary, the statement It contains everything I expect has been agreed with by 21% of administrators and 48% of users. In addition to being a statement with the biggest difference among the two groups, it is also a statement with the lowest rating for both administrators and users.

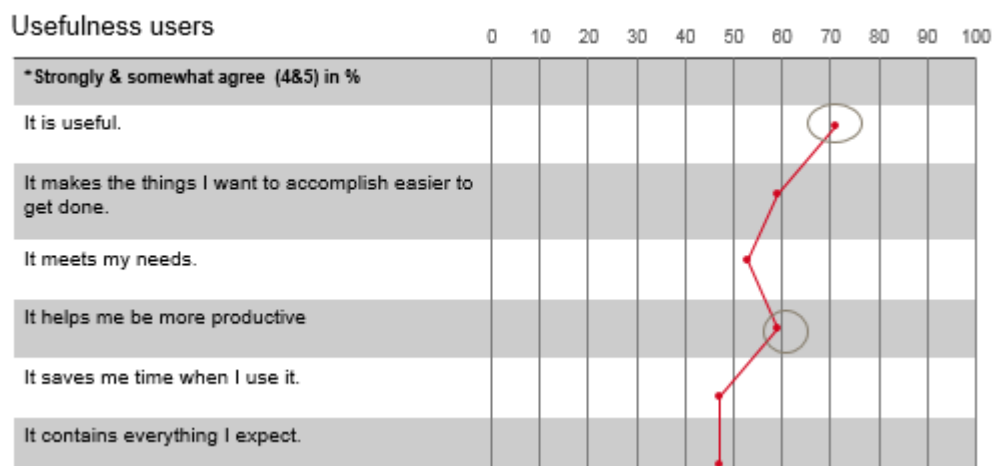


Figure 19 Usefulness ratings 4&5, users Source: Author (2017)

As mentioned earlier, users are more conservative with their positive ratings of the usefulness of the platform. More than 70% of users believe that the platform is useful and almost 60% believes that it helps them to be more productive.

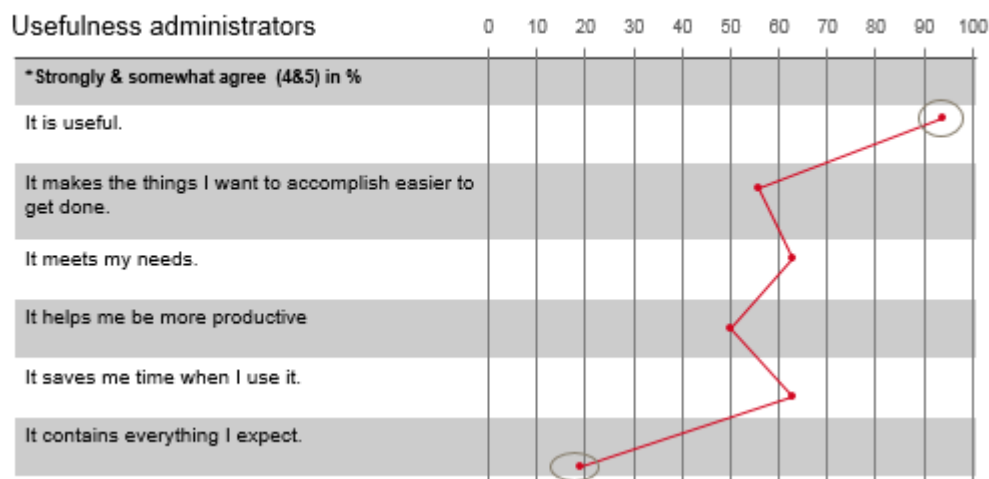


Figure 20 Usefulness ratings 4&5, administrators Source: Author (2017)

The ratings of administrators are much more deviating than in case of users. On the low end only 21% of respondents agree that the platform contains everything they need and on the high end 94% of

administrators agree that they find the platform useful. Apart from the high level of deviations, over 60% of administrators agree that the platform meets their needs and that it saves their time.

To conclude, results show that defined user groups have different opinions on the usefulness of the platform which is in line with the initial assumption. As the platform helps especially the employees in corporate functions to share information with the sales people and with the rest of the organization, it is natural that they see a higher value in the platform than the sales people. It is also logical that it saves them time when they use it as they only need to upload the information once and they no longer have to send the documents on ad hoc basis via email to each individual request.

Ease of use

This dimension is focusing on the user experience with usage and navigation throughout the platform.

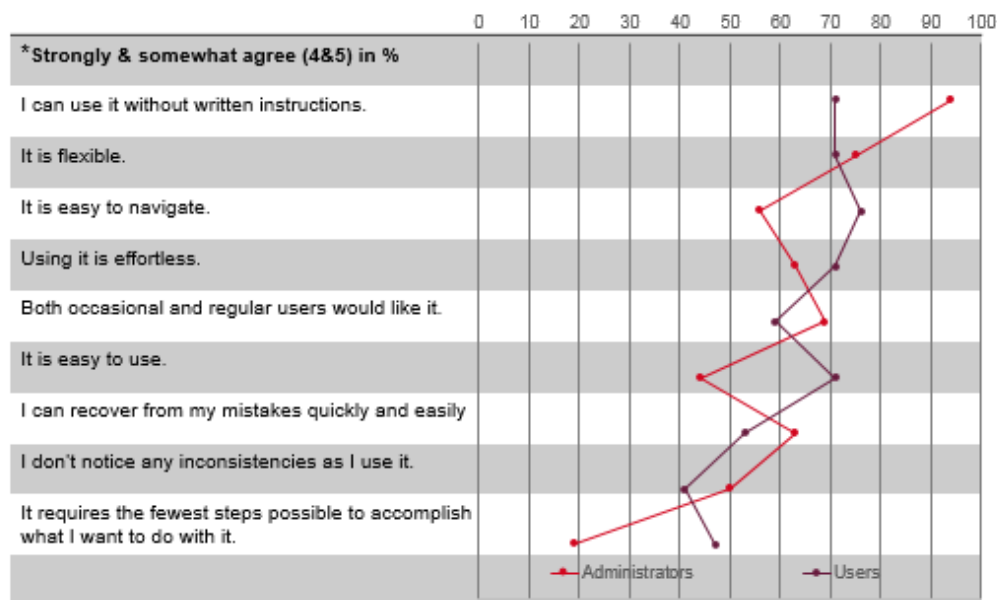


Figure 21 Ease of use ratings 4&5, use case split Source: Author (2017)

Similarly, to the usefulness dimension, the opinions on the different aspects of the ease of use vary between administrators & users and there is no clear indication that one group would find the platform easier to use. Rather it indicates that different agreement radiate with different types of users. Users believe that the platform is easier to navigate, easier to use and requires fewer steps to accomplish what they need than administrators. On the other hand, administrators agree more with the statement that the platform can be used without written instructions.

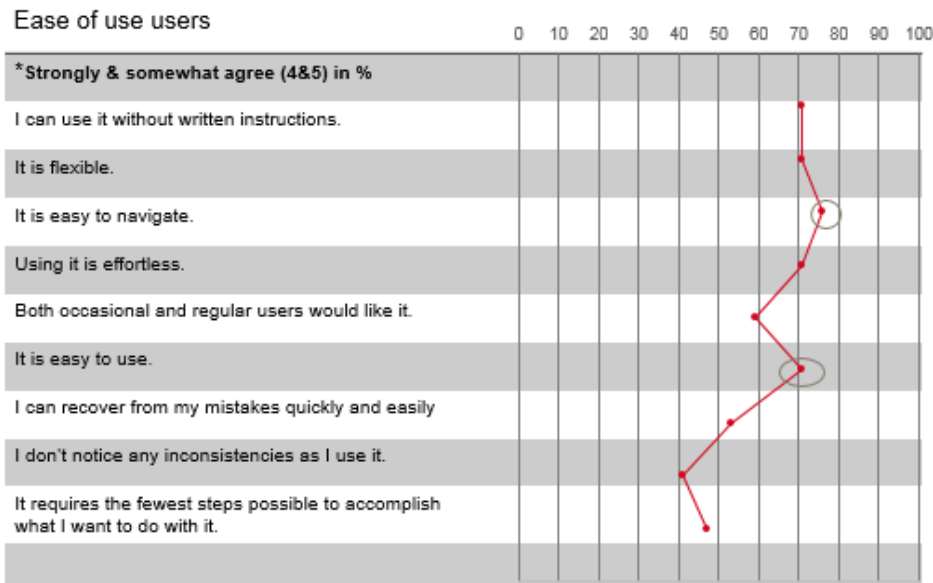


Figure 22 Ease of use ratings 4&5, users Source: Author (2017)

Majority of users believe that the platform is easy to navigate (76%) it is easy to use (71%) and the usage is effortless (71%). However, inconsistencies seem to be an issue to users as only 41% of the users agree with the statement I don't notice any inconsistencies as I use it.

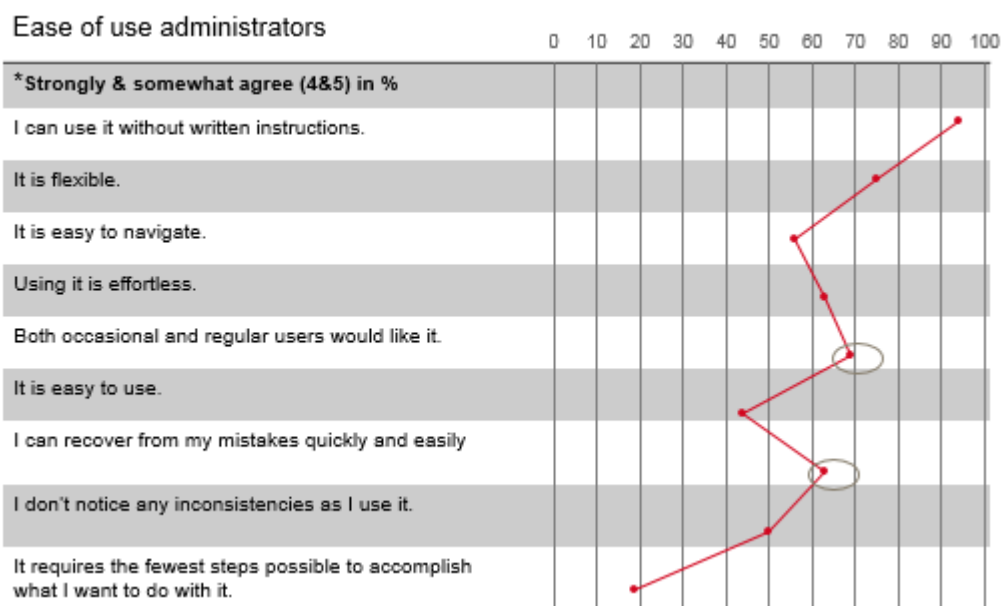


Figure 23 Ease of use ratings 4&5, administrators Source: Author (2017)

Similarly, to the usefulness dimension, the results range in agreeableness from 19% to 95%. Almost all administrators (95%) believe that the platform can be used without written instructions compared to 72% of users. They also think that the platform is flexible (76%), that both occasional and regular users would like it and that they can easily recover from their mistakes. The weakest point for administrators is by far the number of steps required to accomplish what they want to do.

The results support the assumptions that different user groups have different opinions in a similar way as in the usefulness dimension. The different opinions are linked to the needs and use cases of the

different groups. As administrators use the platform more frequently, more than 1/3 of administrators believe that the platform can be used without written instructions compared to the users. (They remember more easily) On the other hand, less administrators agree that the platform is easy to use compared to users and more of administrators also believes that it requires too many steps to accomplish what they want to do. Such result is not very surprising either as administrators need to upload document and maintain the platform which requires more steps & processes which may appear to be uneasy to use.

Ease of learning

This dimension is focusing on the ability to learn and to use the platform in a short period of time.

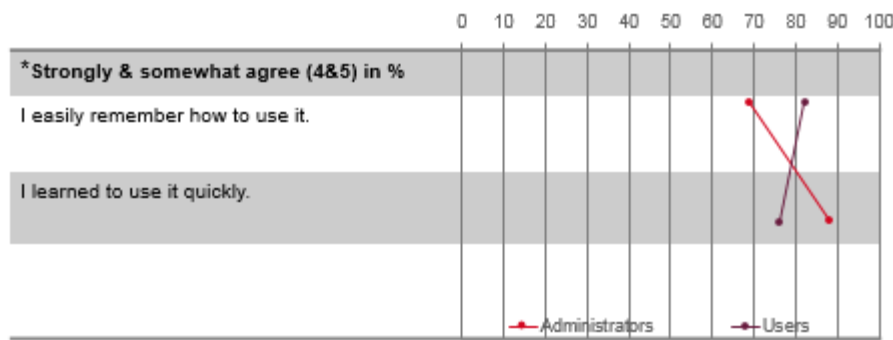


Figure 24 Ease of learnings 4&5, use case split Source: Author (2017)

As mentioned earlier, ease of learnings received the highest overall ratings but even this dimension shows opposite opinions in between the users and administrators.

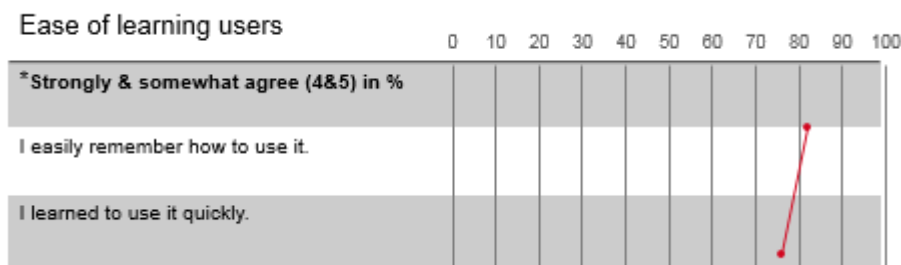


Figure 25 Ease of learnings 4&5, users Source: Author (2017)

The users remembered how to use it easily (81%) but it took them bit longer to learn as only 73% of users agree that they learned how to use it quickly.

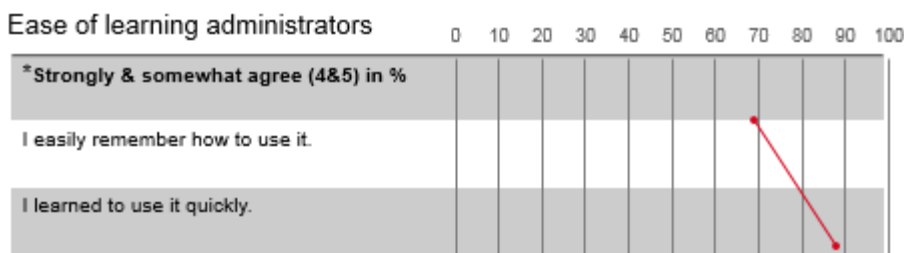


Figure 26 Ease of learnings 4&5, administrators Source: Author (2017)

For the administrators, almost 90% agreed that they learned how to use it quickly, but only 69% of them believes that they easily remember how to use it.

Such results show again that different usage heavily influences the opinions of the users. Administrators need to remember all the different procedures for maintenance of the platforms whereas sales people do not need to perform that many steps and only had to learn where to find what and how to download it.

Satisfaction

The last dimension is considering actual satisfaction of the respondents with the current software, whether they would recommend it to a friend and if it works the way they want.

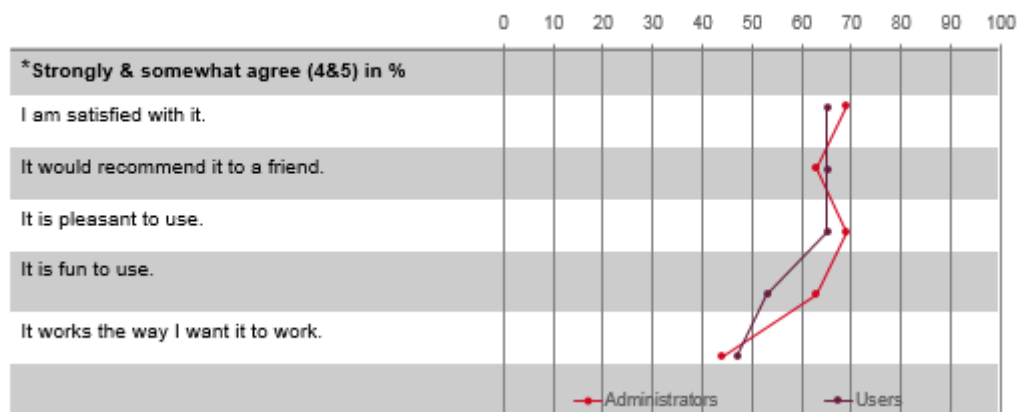


Figure 27 Satisfaction ratings 4&5, use case split Source: Author (2017)

The satisfaction is the only area where the findings are more or less similar between the two groups. In general, administrators are more satisfied with the platform even though less of them believe that it works the way they want compared to users (as already seen in the overall results).

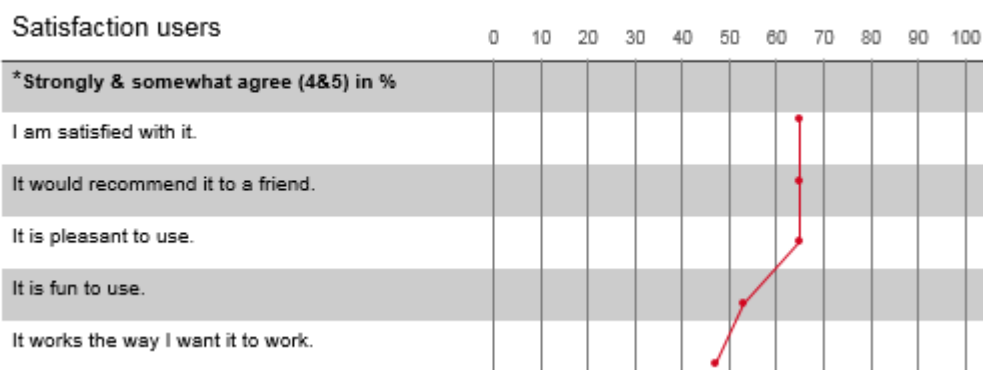


Figure 28 Satisfaction ratings 4&5, users Source: Author (2017)

Majority of the users is satisfied with the platform (65%) and would recommend it to a friend. However, only 47% of the users believes it works the way they want it to work.

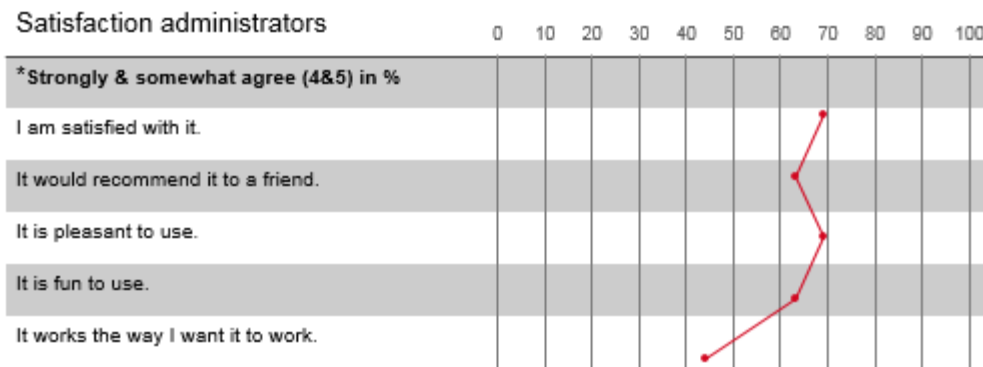


Figure 29 Satisfaction ratings 4&5, administrators Source: Author (2017)

The results for the administrators are similar to the users' results. The weakest point that is influencing the satisfaction is that it does not always work the way administrators want it to work.

Sub-conclusion use case split

To conclude the main findings from the cross-analysis based on use cases, there are big differences in the opinions of the two user groups in usefulness, ease of use and ease of learning dimensions. Users seem to see less weaknesses and strengths in comparison to administrators as their rating was flatter. The satisfaction was the only dimension where it can be concluded that administrators are more satisfied with the platform than the users.

For the users the highest rated statements were the ability to remember how to use it (81%), ability to learn to use it quickly (76%), the easiness to navigate (76%), the easiness to use (71%) and the usefulness of the platform (71%). The main weaknesses for the users were the inconsistencies that they have encountered (only 41% did not notice any) and the fact that it doesn't work the way they want it to (53%) which may be linked to the first weakness.

The main strengths of the platform for the administrators are its usefulness (95%), possibility to use it without written instructions (95%) and ability to learn how to use it quickly (88%). The two key weaknesses are that the platform does not contain everything they expect (agreed with 19%) and that it does not require the fewest possible steps (agreed on only by 19% of the respondents).

The initial assumption that administrators and users may have different opinions on the statements has been confirmed. Considering the background of the assumption – different behavior, use cases and therefore different functionalities needs of the two groups influence the results across all dimensions.

V.III. IV. Conclusion usability survey

The initial analysis indicated the key strengths and weaknesses of the platform as well as the most important features and functionalities required by the users. The ease of learning scored the highest among the dimensions with both statements I easily remember how to use it and I learned to use it quickly. Moreover, respondents were exceptionally enthusiastic ratings with 45% of respondents strongly agreeing with both statements. Considering individual statements, the most relatable ones were related to usefulness of the platform, ability to use it without written instructions and its flexibility. Main weaknesses of the platform are the number of steps required, lack of content and inconsistencies.

Apart from the identification of key strengths and weaknesses, the initial analysis indicated a lack of commonly shared opinion among the respondents. Instead, the results implied that there may be different opinions within the organization which were often contradictory. Polarizing statements were often the ones with the highest agreement but at the same time a high percentage of respondents disagreed with the statement. Those statements appeared across dimensions with a stronger tendency in the satisfaction dimension. Those inconsistencies required further cross-analysis to identify whether certain characteristics of the respondents may have an influence on the ratings.

The author assumed that there are two main characteristics that may influence the ratings. Firstly, the author performed a cross-analysis based on age as this characteristic may have influence on the digital literacy of the respondents and their ability to learn how to use a new software. Second cross-analysis was based on the use cases of the respondents as the purpose of the usage influences required features and functionalities.

The age cross-analysis revealed an interesting pattern. The older age groups (35-55) rated the statements higher on three out of four dimensions. (Easiness to use, easiness to learn and satisfaction). Moreover, the analysis showed that younger group (20-34) is more radical with their ratings compared to the older group and the main weaknesses and strengths differed based on the age as well. Therefore, the assumption that the age of respondents may influence the outcomes was approved.

The use case cross-analysis showed big differences in the opinions of the two groups on most of the dimensions. (Usefulness, ease of use and ease of learning). However, on all of those dimensions it cannot be said that one group rated the statements better than the other. The only exception was satisfaction, where administrators were more satisfied than users. The assumption that the use case has influence on the results of the survey has been confirmed. Majority of the dimensions has opposite ratings of the statements which is most likely related to different needs of the users and administrators when it comes to functionalities of SharePoint.

Conclusion

Communication is a crucial element of human interactions that serve diverse purposes such as expression of needs and wants, information transfer, social closeness or social etiquette. No wonder that the topic of communication gained interest of many researchers already in the second half of 20th century. In that time, the main communication models were developed with the goal to explain how humans communicate. The most widespread communication model that is used till today and has been further developed by many scholars is Berlo's Sender – Message - Channel – Receiver Model of Communication. This classical model has already pointed out the importance of the different forms of communication – non-verbal communication in particular. The main weakness of this model is the non-inclusion of communication barriers that result in inaccurate or incomplete understanding of the message, which is a problem both on individual and group level.

Corporate communication is a communication discipline that offers a framework for the effective coordination of all internal and external communication in order to establish and maintain favorable reputation with stakeholder groups. This field is further divided into internal and external communications. External communication involves all communication activities generated by a company to achieve the planned objective and includes functions such as public affairs, media relations, advertising or marketing. Internal communication is key in empowering and motivating employees to contribute their part to the overall objectives of the corporation and consists of three key areas: strengthening the stability and loyalty, internal public relations and information management. Internal communication can further be divided into formal and informal communication where formal forms are officially recognized and take place through organizational structures in various directions: downward, upward and horizontal. The informal form is not organized officially and is often referred to as a grapevine. Often, if the formal communication is not fueled with enough information, employees tend to rely on informal form more strongly. The main forms of corporate communication are face-to-face (meetings, team buildings and trainings) and electronic forms (emails, instant messaging and (video) calls. Chosen type depends on many aspects such as the importance and characteristics of the message, closeness of the sender and receiver or the communication standards within the communication.

Information management is a conscious process by which information is gathered and used to assist in decision making processes at all levels of organization. Nowadays, more and more corporations realize the importance of information sharing in the overall success of the business and future innovation. However, corporations still face huge losses due to inefficient knowledge sharing internally especially due to time constraints. There are several channels that can be used for information sharing among employees such as blogs, corporate social media channels Intranet and document and information sharing platforms such as SharePoint.

In Hilti both face-to-face and electronic forms of communication are used. Meetings are the key face-to-face communication form where each employee has a 1:1 meeting with its supervisor in order to receive guidance and support. Team meetings are also very common including all three types of meetings: operational, creative and problem solving meetings, team buildings and trainings also take place both internally and externally. From the electronic form of communication, email is the dominant form of communication within Hilti.

The knowledge sharing within Hilti is facilitated mainly through intranet and SharePoint. Intranet is the key platform to share information on the MO level. Each market organization has their own intranet which is used mainly for sharing of operational content and non-confidential information as everyone with Hilti email address can access the information. SharePoint has been launched in Hilti in 2015 and currently has over 800 sites. As there is a need for a constant exchange of information between headquarters, business units and market organizations, SharePoint is widely used for knowledge sharing. Three most common use cases of SharePoint are knowledge sharing between corporate functions with business units and market organizations, knowledge sharing between business units and market organizations and knowledge sharing within market organizations.

One of the corporate departments which communicates with business units both on the corporate and local level is the Customer & Market Insights department. Some teams within the department have successfully implemented a SharePoint platform for knowledge and information sharing but the team focused on Product & Innovation insights is lacking a platform that would enable the team members to facilitate knowledge effectively to its stakeholders.

Therefore, a quantitative and qualitative research has been executed in order to provide actionable recommendations on both the content and structure of the Customer Knowledge Management platform as well as recommended features and functionalities.

The key findings of the qualitative research are related to the content and structure of the platform. Respondents desire information on the customer segments, their behavior and insights fueling communication strategy. Moreover, respondents would like to include product related information such as the purchase drivers, barriers or product usage. The structure of the platform should be organized in two pillars: customer insights & product insights and should also integrate insights from other departments and guidance on how can the stakeholders generate insights through primary research independently.

The quantitative analysis surveyed the users and administrators of the SharePoint platform that has been recently implemented in Hilti Czech Republic. The initial analysis identified key strengths and weaknesses of SharePoint platform. The main strengths of the platform are that it is perceived as useful, intuitive, flexible and easy to use. The key weaknesses were the number of steps required to navigate through, the content quality and encountered inconsistencies.

The initial analysis has revealed inconsistencies in the results suggesting that there may be different groups within the sample with opposite opinions. A further cross-analysis based on the age of the respondents and the use case (users vs. administrators) of the respondents revealed two key insights.

Firstly, the older respondents were more satisfied in 3 out of 4 studied dimensions finding the platform easier to use, easier to learn how to use it and are also more satisfied. Secondly, the deep dive based on the use case showed big differences in the opinions of the users and administrators in usefulness, ease of use and ease of learning and revealed that the strengths and weaknesses of the platform differ for users and administrators. The recommendations below provide suggestions on both the content and structure of the platform as well as the features and functionalities.

Recommendations

Recommended functionalities and features of the platform

1. Use SharePoint for the CKM platform as it is a platform that is considered useful, intuitive and flexible
2. Replicate high ratings on the learning dimension with targeted training of both the users & administrators
3. Integrate the update of the CKM in the research process guidelines in order to ensure that the generated insights are published and that the platform is actualized
4. Integrate a discussion board where users can report inconsistencies
5. Avoid lower satisfaction of younger users by limiting the required steps to achieve the outcome and by increasing flexibility of the platform in order to meet the expectations of how the platform should work
6. Limit the number of steps required for the use and maintenance by substituting “promoted links” feature with simple pictures and by substituting document libraries with simple tables
7. Test the concept with potential users to develop an intuitive structure which meets the expectations of the users

Recommended content of the platform

1. Segment customers based on size of the company, location, trade and role in the decision making process (decision makers vs. influencer)
2. Provide insights about customer behavior per each customer segment e.g. purchase drivers, barriers or pain points
3. Provide insights about appropriate market reach channels (Hilti Online, Sales Rep, Hilti Store) per each customer segment
4. Provide insights about appropriate communication strategy per each customer segment
5. Provide an overview of the key applications in each trade
6. Provide insights on the key products per each application (product usage, purchase drivers, purchase barriers)

Recommended structure of the platform

1. Provide consolidated insights focusing on key message (e.g. Management Summaries)
2. Develop a two-pillar structure - customer insights & product insights
3. Develop a customer insights pillar with insights on customer behavior & communication per each customer segment
4. Develop a product insights pillar with an overview of the most common applications per trend and key products, provide insights per each product
5. Integrate insights generated by customer connect in the platform, but clearly distinguish from the insights generated by professional research
6. Provide guidance on how can stakeholders collect insights from customers themselves

Recommendations to the Czech Marketing Team

1. Leverage the key strengths of the platform, communicate its intuitiveness, easiness to learn and to use the platform without written instructions and its flexibility
2. In case the platform will be further developed, limit the number of steps required to find or upload information (a weakness especially for administrators)
3. Investigate which inconsistencies are noticed by the users
4. Ensure that the content is up to date and that administrators maintain their sides in timely manner
5. Investigate the reason behind higher ratings on most of the dimensions by older users (easiness to use, easiness to learn & satisfaction)
6. Act up on the opinion of administrators that the platform does not contain everything they need by providing more flexibility regarding both the structure of the platform and the content
7. The lack of mobile version of SharePoint has not been mentioned by the respondents so there is no need to develop it at the moment

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List of abbreviations

MO	Market Organization
BU	Business Unit
KEM	Customer & Market Insights
P&I	Product & Innovation Team
MR	Market Reach
PM	Product Manager
GPM	Global Process Manager
SP	SharePoint
CKM	Customer Knowledge Management platform

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Appendixes

Appendix I. Guideline of the interviews

Warm-up questions

Personal information

Your job and responsibilities

Main body of interview

1. What comes spontaneously to your mind when you think about customer insights?
2. What kind of insights are you looking for? PROMT: Job roles, behavior of different customers, behavior, product purchasing behavior, application of the products
3. For what job tasks do you need customer-related insights?
4. Where do you look for customer-related knowledge? PROMT: Other colleagues, SharePoint, KEM, Shared Drives
5. What are your pain points when you try to access customer related insights?
6. Do you generate customer related insights yourself? / If yes, what insights?
7. Does your department generate customer related insights? / If yes, what insights? PROMT: job personas, pain points etc.
8. With whom do you share generated knowledge? PROMT: Within BU, BU segment, MOs, other HQ departments
9. Where do you store the customer knowledge you generated? PROMT: ShareDrive, SharePoint, up on a request etc.

Magic Wand

Let's now imagine you have a magic wand that you could wave to change the way we handle customer insights

10. What customer insights would you wish to have? Ask in detail
11. Imagine you could create a platform where you can find all those insights – How would it look like? Could you draw a proposal? (content/ layer/ filter)
12. How could the content look like? PROMT: ppt reports, summaries, wiki...
13. Besides content, which general requirements does the person have towards the platform? (e.g. search function)
14. What kind of content would you/your department share on such platform?
15. In which format? PROMT: PPT, summaries etc.
16. What is important for you when sharing information?

Appendix II. Summary of the interviews

Catrin – Head of KEM

Catrin was the initiator of the project. With her strong background in FMCG firm, she was familiar with the struggles of insights sharing among the organization and realized the need for an insights sharing platform within Hilti.

Catrin firstly explained the outside situation:

- Customer information/feedback is collected from different stakeholders, in different ways, it is mainly collected on an ad hoc basis and because of that, following drawbacks are observed:
 - We are not sufficiently capitalizing existing knowledge (also cross-BU)
 - As a consequence, we are asking customers same/similar questions twice or even more often (risk of wearing out customers)
 - Onboarding of new employees is very time consuming/not efficient
 - We cannot build up on existing knowledge and extend our knowledge base respectively fill knowledge gaps in a structured way
 - Limited visibility of KEM activities/insights
- A corp. market research SharePoint for knowledge management exists. It is mainly used for sharing market & comp. insights and for providing ICOS/RTF results. These sections also meet high internal acceptance. Regarding the customer knowledge (based on product & innovation or other ad hoc studies), the corporate market research sharepoint is not used today.
- While we (KEM) see the strong need in relaunching our sharepoint (from organization/navigation but also content perspective), the digital unit is currently setting up a Wutupedia (Wikipedia for personas). In addition, global process management also pushes a knowledge management project.

Furthermore, she also proposed required content that should be answering following questions:

- Who are our customers: customer profile, customer segmentation (incl. need based segmentation), job functions, etc...
- What are their behaviors/habits: applications, product usage, ...
- What are their pain points/unmet needs: development opportunities
- How do they purchase: Purchase drivers, purchase barriers
- How can we activate them: communication behavior (which channel, which tonality, etc.)
- What is their relationship/experience with brands: brand loyalty, customer experience
- What are customer trends: digitalization/connectivity

David – Business Partner KEM

David recently joined the team and was able to bring the practices that were used for knowledge sharing in other corporations. His former employer was using a software that required researchers to update the summary of each project together with filling up certain attributes such as the target group, brand, age of the respondents, questions answered, sample size etc.

Alberto – Business Partner KEM

Alberto shared the approach of his former employer that used a platform that was used at the initiation of any research project and it was therefore required to update it from the very beginning. Without putting a project description into the system, a project could not be initiated. Such approach eliminated the “double work” required from the side of the business partners which may have influence on the level of how up to date the platform will be. He also stressed the need to include information related to products as his stakeholders are mainly product managers and segment managers who are primarily interested in the insights of their own products.

Andrzej Business Development Manager in Market Reach

Andrzej works in the global Market Reach team as a business developer. He explained that there are two elements that Market Reach focuses on on the global scale, firstly it is the establishment of processes for the channels (retail, online, customer service) and secondly it is the sales related processes such as the data quality, structure or sales execution.

For Andrzej, customer insights have two main dimensions, firstly customers as businesses, the typical approach in B2B business, but secondly the individual level. On the individual level he would be interested in understanding why customers behave the way they behave especially related to sales processes e.g. how they buy, why they make decisions, decision making process or channel preferences. He sees a big value in CKM as he realizes the difficulties when secondary information is required. He gave an example of a new big project that was initially based on secondary sources only but unfortunately to access such information was so difficult, primary research was conducted instead. The limited access within the corporation to the researchers leads to fragmented understanding of customer internally.

He believes the platform should include information on how people are buying, customer profiling and behaviors as well as the usage of different sales channels. He believes that summaries of each project would be sufficient in order to save time.

Regarding structure, he believes that the needs of the stakeholders are very fragmented and that a search engine would serve those needs better than a classical structured approach. He believes that the structure needs to be very complex and needs to respect geography, trade of the research and type of products in questions and the size of the company that the respondent works for.

Moreover, in his opinion product managers think in silos and Hilti is struggling to look at different products contextually in trades and application approach because this is how customers think.

Peter – Global Process Manager

Peter's department is responsible for setting global processes internally. One of the projects currently working on is a tool kit providing markets with all the necessary information they may need in order to be able to perform effective "market research". A design thinking customer development tool will be provided to the markets in order to enable them to assess whether there is a business opportunity within the market. This project is already piloted in South America and they also have a SharePoint site where users of the toolbox can share insights and tips within the community. Petr sees a strong need for consolidation of data internally in order to be able to compare different projects.

Sanja – Digital

Sanja is the digital manager and she is working on the Wutupedia – an internal Wikipedia of personas of different Hilti customers. She guided the author through the platform and explained the rationale behind. The project is still in development, currently finalizing the structure that would rather be potentially fueled with the content. The platform is very detailed and if fueled with the right information, it would provide valuable insights. However, the challenge is how to collect this information in unbiased manner. There is currently not enough insights generated through professional market research so all the content would have to be fueled from "customer connect" which is not the main objective of the Customer Knowledge Management Platform.

Tony Product Manager in PT&A

Tony is responsible for the UCD segment products on the global level. For him, customer insights are mainly related to various required studies throughout the product development process such as DAT (Design Acceptance Test), CUSAT (Customer Acceptance Test) etc. He sees the role of a PM to bring a customer voice to the development team. Every decision made in regards to the product development comes firstly from the field and he believes that for a product manager it is crucial to actually be in the field himself and to understand the challenges and applications required by the customer.

He understands the value of the platform as identifying what we know about the customers already. He himself, however barely looks for secondary information as he does not feel that it is relevant for his product portfolio. He believes he obtains majority of the needed information through his sales experience and especially the basic training where all sales people study how to target different target groups such as job roles. He also believes that he can understand the behavior of customers the best if he sees and talks to them personally.

When he does his own customer connect he only shares the insights with his development team and not with other PMs as he believes that it brings no value to the others.

Content-wise he would be interested in understanding the purchasing behavior and especially buying process within corporations. He believes that this can be explained only if the size of the company and size of the investment are taken into consideration.

When it comes to customer connect he is not really interested in findings of other product managers unless the research would be for the same product that he is responsible for. And even in such case, he would not base any decisions on the numbers as the background and the methodology behind the number is not clear. However, he would appreciate raw data such as video footage etc.

He also believes that the product managers are not appropriately trained to approach customers in order to get an unbiased information. This problem is strongly influenced by the fact that majority of the product managers have been in sales above so they are trained to influence the customer.

He also sees a risk of building a platform that makes conclusions based on wrong information because of lack of context and methodology methods.

From the structure perspective, he also sees the risks of different PMs working in silos and believes that customer centric approach with trade entry point would bring value to Hilti.

Jan – HUB Product Manager EE-EU

Jan realized that for him the customer insights platform is not of such a value as for the global community as majority of the research is done in FR, GER & USA.

For him, customer insights are associated with reporting to the global product managers. Usually, they receive a prototype from the global PM with a request to test it with a customer and fill in a questionnaire covering both the product and the application. Getting responses from the customers is very complicated for the HUB PMs.

From the content perspective he would be interested in understanding the pain points that the customers are currently facing with current products and the usage behavior. Generally, he sees a challenge in the quality of information distributed from the headquarters as it is often very generic and not applicable for the EE-EU market.

From the structure perspective, he believes that aspects such as geography, trades, size of the company and identification of who is the influencer and decision maker is crucial.

Petr – Global Product Manager Screw Fastening

Petr was quite new in his role and our exchange mainly focused on the different factors within the structure that may influence the customer behavior patterns. The challenge we discussed was the trade of between easy-to-navigate structure and the factors influencing the decision making process. Petr believes that the key factors are the size of the investment, size of the company, location and trade.

Saloumi – Intern PT&A

This interview was initiated by Tony, the product manager interviewed earlier. Saloumi is currently working on her master thesis on the topic of information sharing and she also identified challenges within her team as each of the product managers is generating their own questionnaires and other research materials and each of them is asking essentially similar questions. She believes that sharing the information would eliminate the number of double work currently performed by all the product managers. She also realizes a certain reluctance that was already indicated by Tony and that is that each of the product managers is looking into slightly different sample even if asking the same question. This is something however, that cannot be dealt with on the global level but rather an initiative that needs to be fueled within the business unit itself.

Appendix III. Advantages of SharePoint over Intranet

INTRANET	SHAREPOINT
MULTIPLE CLICKS FOR A SIMPLE UPLOAD	Easy content management
STATIC DOCUMENT ARCHIVE	Interactive database
POOR SEARCH ENGINE	Metadata search
VPN KEY	Easy access from any device
ARCHAIC DESIGN	Modern style
DISCUSSIONS NOT AVAILABLE	Forum options
RSS	Easily managed alerts
DEPARTMENT STRUCTURE	Cross-functional interaction

One of the crucial problems of intranet is the upload of documents. Any upload is a two-step process. Firstly, document has to be uploaded to a “cockpit” which is some sort of a back-end of the system and as a second step, the documents need to be inserted to the front-end and displayed. This leads to outdated information in general and to the fact that documents are more often than not shared via email.

SharePoint offers a very simple drag and drop solution, which allows its users to simply drag all the files they desire to upload right from the folder to SharePoint.

SharePoint brings change in the maintenance of documents as well. In Intranet, each new version of a document has to be deleted and uploaded from scratch through the 2-step process. The drag and drop solution of SharePoint makes the maintenance of documents much more interactive offering additional possibilities such as allowing more users work on a document together very much in a way that Dropbox works.

Even though intranet offers the search option, the quality of the searches is questionable. Many users complain that it is impossible to find something on intranet. SharePoint solution offers a metadata search, which allows its users to filter documents based on predefined set of criteria and also to search the content of various documents.

In order to access intranet, the user needs to be logged on the company network or via a VPN (a card which allows the user to access company network remotely). This solution has caused problems especially to the salesforce, as they always had to first connect via the VPN in order to access Intranet. For the access of SharePoint, user only needs a device with browser. Additionally, it can be accessed not only from laptops but also from tablets and phones, which makes it especially convenient for the salesforce. Sales reps can easily log-in on the customer-site with their phone to find relevant information.

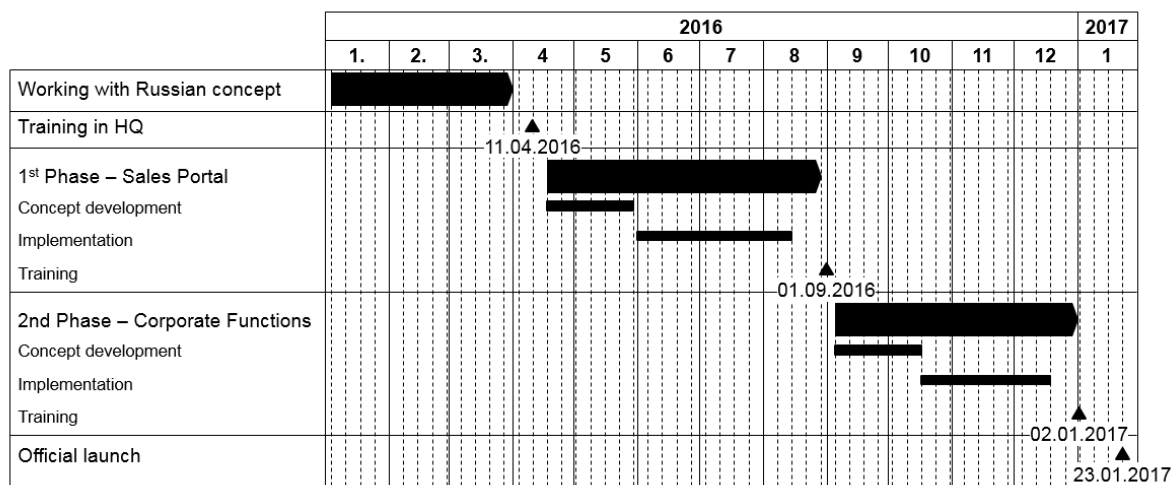
Appendix IV. Development of the information portal in MO CZ

As Czech Republic is part of EE Region headquartered in Russia, it is often the case that new initiatives are encouraged from top-down and that was the same case for SharePoint. Firstly, Russia has developed their portal on SharePoint and they suggested that our subsidiary can be one of the sub-sites to the Russian SharePoint Portal. Due to technical complications, Hilti CZ/SK decided to proceed independently from Russia in the end.

The only other MO that has developed intranet on SharePoint was MO Switzerland. They do not have one single portal as MO CZ/SK, but they have several different portals such as the Sales portal or HR portal. Furthermore, a training has been provided to MO Hungary as they intend to develop their portal as well and CZ/SK Portal serves as an inspiration.

Many of the employees who have been in touch with Hilti on the global level have been familiar with SharePoint. Especially marketing department had a sound knowledge, as marketing community relies heavily on this software. Majority of the employees who knew SharePoint were not very optimistic by the choice of the platform because of negative experiences they have had with globally maintained SharePoint sites.

The end-to-end development of the portal lasted a full year and was divided into two parts (Sales and Corporate Functions) and included several stages (Adaptation of Russian concept, development of a new concept, implementation and migration of the data and training of the staff).



Management has decided to migrate on SharePoint in a two-step process. As the salesforce is at the center of the the organization, a decision was made to pilot the project with all the information relevant to the salesforce in August 2016 followed by a second-stage with migration of all the other documents and information relevant to corporate functions by December 2016.

That way, salesforce could already benefit from a better platform as of August while the information relevant to corporate functions was still shared via Intranet until December. As of the beginning of 2017, an official announcement was made and intranet was no longer updated in order to assure a full migration and to avoid simultaneous usage of both platforms.

The project evolved over several stages that all contributed to a successful implementation of the solution: adaptation of the Russian concept, development of a new concept, implementation and migration of the data, training of the staff.

- Adaptation of Russian concept

Initially, the idea of migration of internal communication from Intranet to SharePoint was powered from the hub in Moscow. MO Russia developed a sophisticated knowledge management portal with many functions and invested a lot of resources into the project. Naturally, Czech subsidiary wanted to join MO Russia and to switch to SharePoint as well.

Unfortunately, the adaptation of Russian concept was not possible due to several challenges: Lack of IT skills in Czech subsidiary, limited permissions for the Czech subsidiary and lack of support from the headquarters for the Russian version of SharePoint.

As the SharePoint project has been of a great importance for MO Russia, they employed 2 full time IT specialists for a year to work solely on the development and implementation of the portal. Apart from a standard functions offered by Microsoft, they have additionally developed their own custom apps and significantly changed the look and feel of the portal. When Czech subsidiary tried to localize the concept, problems started to emerge fairly quickly. Even though there was a genuine willingness of Russian colleagues to support Hilti Czech, lack of IT skills on the Czech side and a language barrier made almost impossible to receive the needed support.

Limited permissions of the Czech subsidiary were related to the fact that Czech Portal was supposed to be only a sub-site of the Russian Portal. As the permission levels in SharePoint are granted for the entire site, granting Czech colleagues full permissions would enable them to adjust the content and settings of the Russian Portal as well, which was naturally not desired by Russian counterparts. On top of limited permissions, the storage size would have to be shared as well which might have caused significant troubles in the foreseeable future.

As MO Russia developed many applications and features in-house without a support from Microsoft, the headquarters could no longer guarantee a full functionality with upcoming updates from Microsoft. In case some of the functions would no longer work, HQ would not guarantee any kind of support in resolving the issues.

The challenges mentioned above all contributed to the decision to develop an independent portal from MO Russia with direct support of the HQ. Two employees visited Schaan for an all day training with the IT department in order to ensure smooth implementation and maintenance of the Portal.

- Development of a new concept

Upon a training in the headquarters, the first part of the project was kicked-off with a focus on the Sales Portal followed by development of the portal for other corporate functions.

Initially, several interviews with the salesforce were conducted to understand the biggest pain points and needs when it comes to accessing knowledge. Those interviews served as backbone for further development of the concept.

In a next stage meetings were set up with each department in order to identify which information is relevant for the salesforce and how to structure the information. Those insights were then used for the development of the concept and initial structure.

The most challenging part was without a doubt the product information structure. As Hilti portfolio covers more than 4000 different products, it was challenging to come up with a structure that fits all the business units.

The 2nd stage of the process was similar to the 1st stage. Another round of meetings with all the departments were scheduled in order to integrate the rest of the documents which were not published in the 1st stage. In vast majority of the cases, the most of the documents were already uploaded.

- Implementation and migration of the data

Once the structure was established and approved, all the documents have been collected and uploaded onto the new platform. Some of the documents were only migrated from the Intranet, some were stored within the departments previously and only distributed up on request via email and some were created – e.g. generating catalog lists per product.

- Training of the staff

The last step of the process was the training of the staff. As different groups of employees played a different role in the maintenance and usage of SharePoint a training strategy was developed in order to assure a smooth transition.

Firstly, the administrators within each department needed to be trained on maintenance and update of their sites. Most of those trainings were done individually face-to-face followed by training materials (PowerPoint & video) which could be used at a later stage as well.

Secondly, a proper training of salesforce was crucial for the acceptance of the new portal. It was therefore decided to train each sales rep through a so called “TS Champ” – a nominated employee in each sales team who was responsible for the support and education of the rest of the team related to new software & hardware. In the beginning of September 2016 was a meeting of TS Champs both in Czech Republic & Slovakia where a training was given together with training materials and TS Champs were responsible to train their sales team within a month. That way, each of the sales reps

were trained face-to-face. Additionally, training materials were provided on SharePoint Portal under the section Help.

Appendix V. Questionnaire USE

1. What is your gender?

☐ Female

☐ Male

2. What is your age?

☐ 20 - 24

☐ 25 - 34

☐ 35 - 44

☐ 45 – 54

☐ 55+

3. In which department do you work?

☐ Sales

☐ Marketing

☐ Finance

☐ HR

☐ Other

4. List the most negative aspect(s):

- 1.
- 2.
- 3.

5. List the most positive aspect(s):

- 1.
- 2.
- 3.

6. Usefulness

	Strongly disagree [1] <input type="checkbox"/>	[2] <input type="checkbox"/>	[3] <input type="checkbox"/>	[4] <input type="checkbox"/>	Strongly agree [5] <input type="checkbox"/>	Don't know [99] <input type="checkbox"/>	
It helps me be more productive.							[1]
It is useful.							[2]
It makes the things I want to accomplish easier to get done.							[3]
It saves me time when I use it.							[4]
It meets my needs.							[5]
It contains everything I expect.							[6]

7. Ease of Use

	Strongly disagree [1] <input type="checkbox"/>	[2] <input type="checkbox"/>	[3] <input type="checkbox"/>	[4] <input type="checkbox"/>	Strongly agree [5] <input type="checkbox"/>	Don't know [99] <input type="checkbox"/>	
It is easy to use							[7]
It is easy to navigate.							[8]
It requires the fewest steps possible to accomplish what I want to do with it.							[9]
It is flexible.							[10]
Using it is effortless							[11]
I can use it without written instructions.							[12]
I don't notice any inconsistencies as I use it.							[13]
Both occasional and regular users would like it.							[14]
I can recover from mistakes quickly and easily.							[15]

8. Ease of Learning

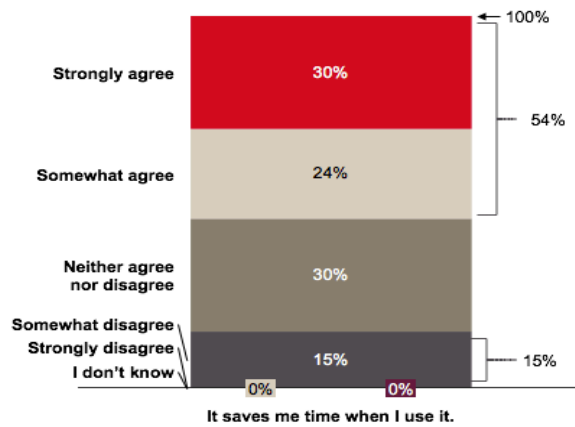
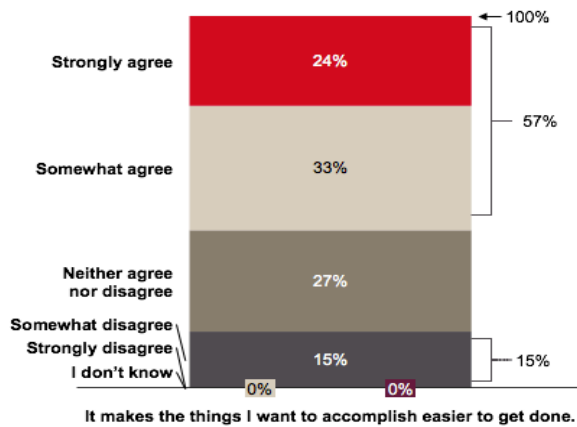
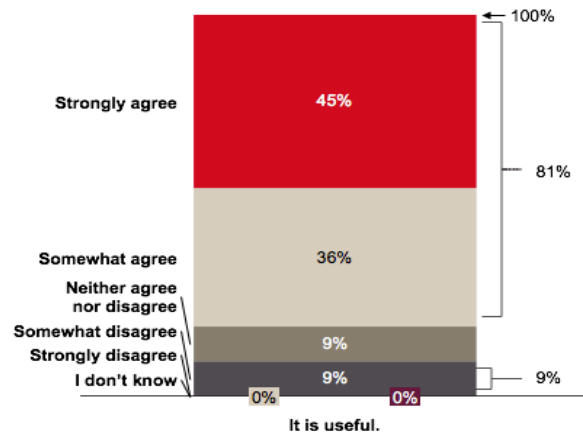
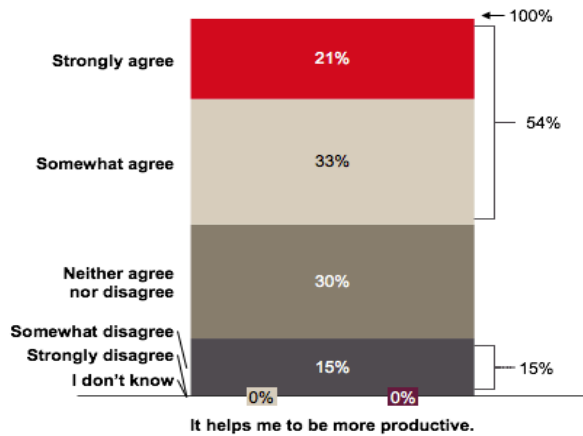
	Strongly disagree [1]	[2]	[3]	[4]	Strongly agree [5]	Don't know [99]	
I learned to use it quickly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[16]
I easily remember how to use it.							[17]

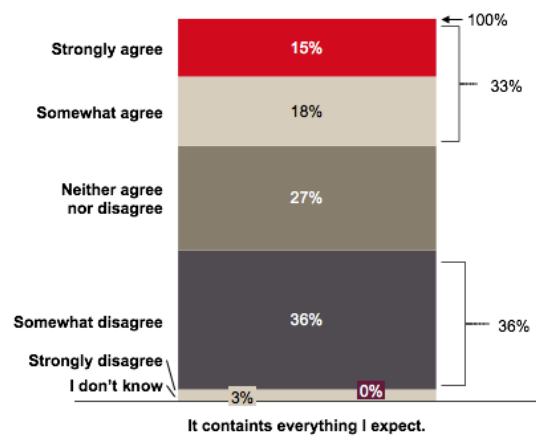
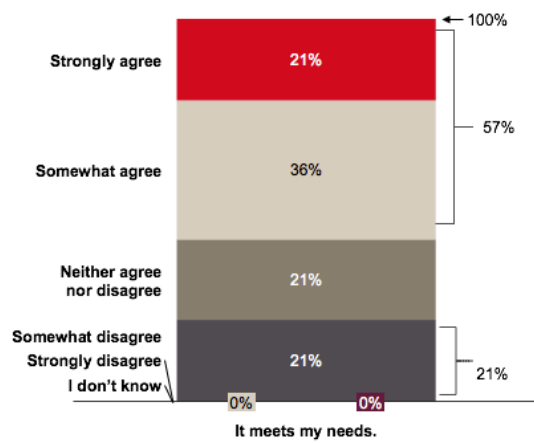
9. Satisfaction

	Strongly disagree [1]	[2]	[3]	[4]	Strongly agree [5]	Don't know [99]	
I am satisfied with it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[18]
I would recommend it to a friend.							[19]
It is fun to use.							[20]
It works the way I want it to work.							[21]
It is pleasant to use.							[22]

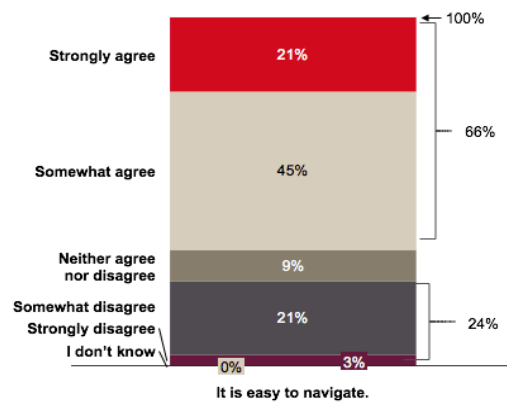
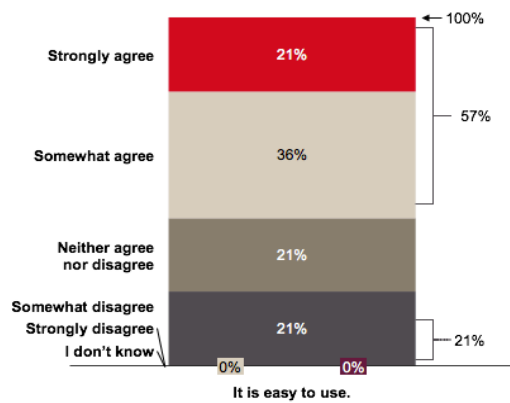
Appendix VI. Results of the questionnaire

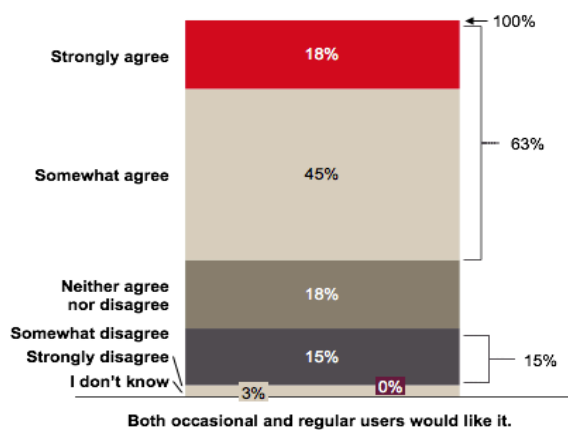
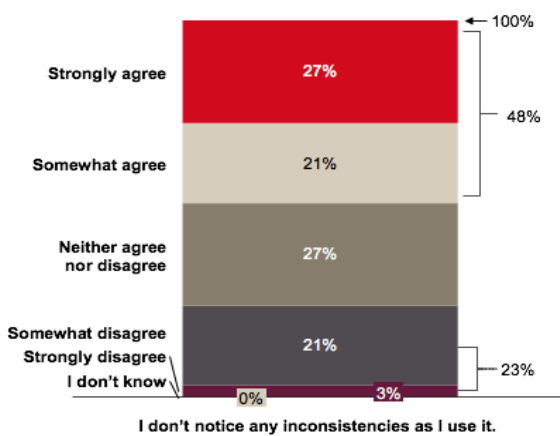
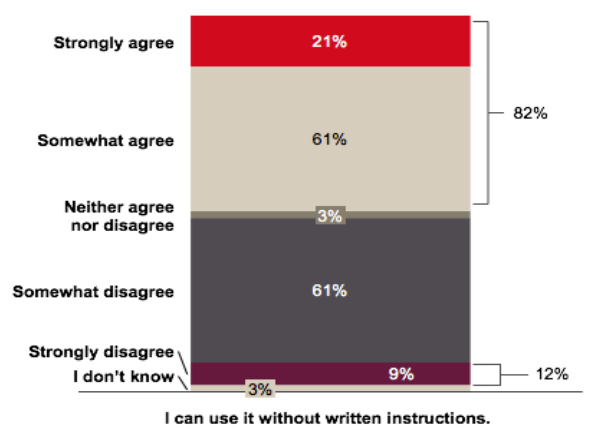
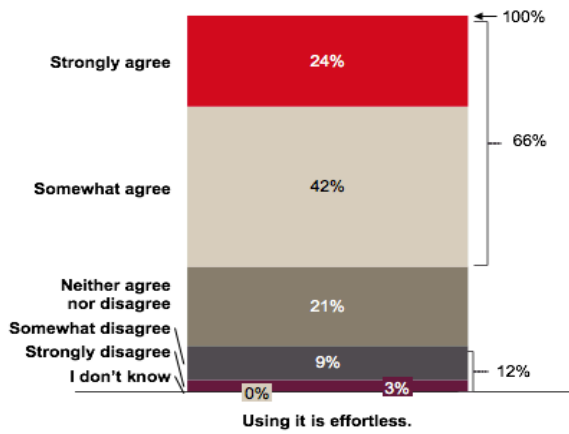
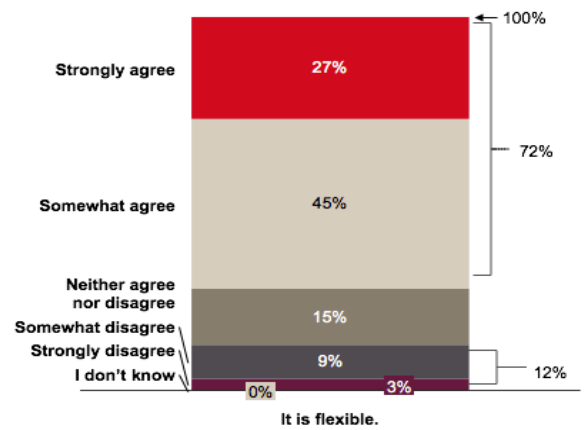
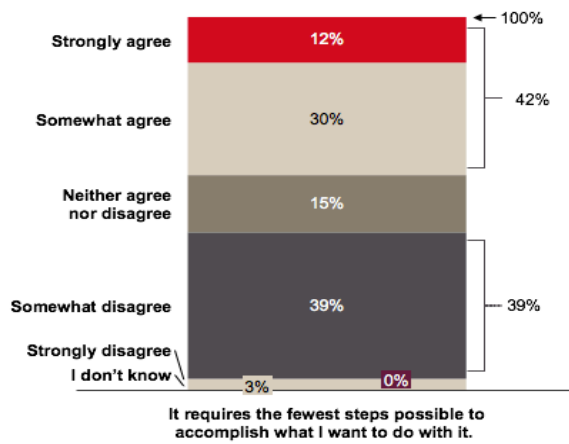
USEFULNESS

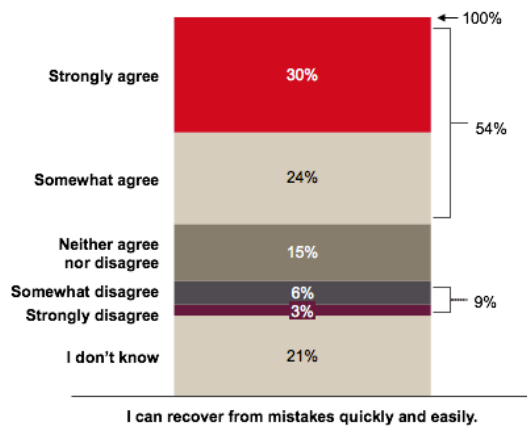




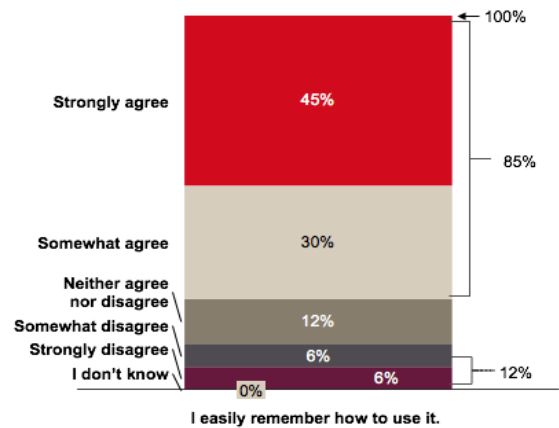
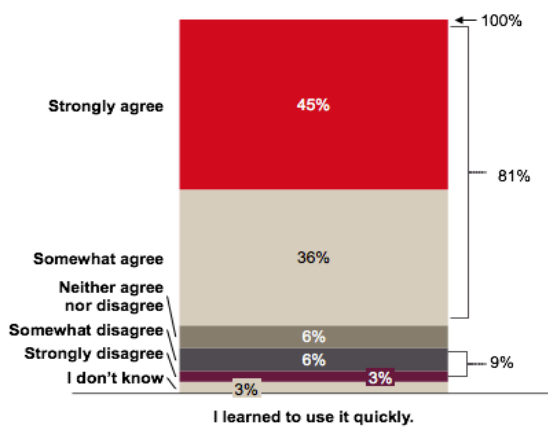
EASE OF USE







EASE OF LEARNING



SATISFACTION

