

# **The use of collaboration tools at work**

**How do employees perceive the use of new social media type collaboration tools in their everyday work?**

Master Media Studies Media & Business

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## 1. Introduction

Organizations and their environments have changed. This is not only because their external environments are constantly evolving, becoming, for instance, increasingly competitive, but also because the way employees work has dramatically changed. In this process, first, technology is taking an increasing role in employees' everyday work and tasks, making their work less visible, more abstract to their peers. Second, organizations have evolved in a way that they are more and more "jobless" or "boundaryless" (Ashkenas & Bridges as cited in Boswell, 2006). These terms are indicative of the fact that employees increasingly do not have very well specified jobs and how common it is for an employee to wear 'multiple hats' at the same time, enacting many roles instead of a singular and unique one (Illgen & Hollenback as cited in Boswell, 2006). Many employees have to work in a broader perspective than their own job duties and they are expected to go beyond their job, to understand the "big picture" (Boswell, 2006, p.1491). Simply doing their own jobs by responding to the commands and demands of their boss is not enough anymore. Employees are expected to take initiatives in respect to their organization's goals (ibid.). They are thus provided with greater autonomy, in the manner as well as in the location they decide to work to, and flexibility while doing their job (van Riel, Berens, & Dijkstra, 2008). This increasing demand for autonomy and the weakening of job boundaries make employees more difficult to control and manage. Both managers and employees have had to adapt the way they collaborate and communicate with each other and, in such context, collaboration may ask more efforts to be successful.

At the same time, the way people communicate with each other in their private life has also evolved during the last decades. People are more and more becoming users and, sometimes, heavy users of social media platforms. While it was, at first, considered as a medium for young people, social networking sites have now become mainstream communication tools for people from all age groups (Cardon & Marshall, 2015). In 2015, there were actually around 2,14 billions of social media users around the globe (Statista, 2017). It should also be noted that this number has more than doubled in 5 years, with 970 millions of users in 2010 (ibid.). People now communicate more on social networking sites than through emails, something that occurred for the first time in 2009 (Hindclife & Kim as cited in Cardon & Marshall, 2015).

Despite this, while social media have displaced emails as the primary way to communicate socially, in the workplace, emails remain the primary means of communication (Cardon & Marshall, 2016). This means that the workplace remains separated from the increasing dominance of social media, lagging behind regarding these new means of communication.

However, many experts foresee social networks will become the most popular form of communication among teams within organizations within a decade (ibid.). Social media technologies are indeed increasingly implemented and adopted by organizations (Van Osch, Steinfield, & Balogh, 2015). Those media provide employees with multiple communication tools to collaborate, socialize or share, post and edit files with coworkers (ibid.).

This thesis focuses on internal enterprise collaboration tools, specifically how organizations negotiate the use of workplace social media tools during employment and how it can lead to benefits or become a significant burden. More precisely, the focus will be on the use of social media from the employee point of view. How do employees experience such internal social communities? Are there benefits for them? How does it influence their happiness, commitment or well-being within their companies? More than understanding what might be the benefits for an organization, this thesis will focus on the first level of influence of such tools, by understanding the impact they can have on the individuals composing that enterprise. This will also enable us to understand how companies may act in order to improve their employees' experience. In order to accomplish this, the objectives in this thesis are focused on answering the following research question:

**How do employees perceive the use of new social media type collaboration tools in their everyday work?**

In order to elaborate further on the topic, this thesis is going to answer those two related sub questions:

- What do employees see as the positive and negative aspects in using those tools?
- How do employees experience the changes brought by those collaboration tools to their everyday work?

More precisely, this thesis is going to focus specifically on the use of the collaboration tools Slack and Yammer by employees. While both collaboration platforms are popular, with each several millions users in big companies such as Atos, the European institutions or LUSH, a cosmetic company, their current organizational environment are different. Indeed,

Slack is the product of a small company, Slack Technology, employing around 800 employees (Frommer, 2017), while Yammer is today the collaboration platform of Microsoft, who bought it in 2012 (Taylor, 2017). Moreover, both platforms have integrated tools, either promoted as “bringing all the pieces and people together” and help “getting things done” (Slack, 2017) or promoted as helping “connect with people and teams across the organization” (Yammer, 2017). Including both platforms in our study thus allow us to look at similar and popular platforms, but with a slightly different atmosphere surrounding their development.

The recent rise in popularity of such platforms leads today to a general ‘blurriness’ regarding their exact definition. Indeed, literature uses many different terms when it refers to what in this thesis we are going to call “social media type collaboration tools” (SMTCT). Huy and Shipilov (2012), for instance, use the term “social media tools”, Jones and Kochtanek (2004) employ the term “collaborative technology”, Vuori and Okkonen (2012) use the term “intra-organizational social media platform” and Chin, Evans and Choo (2015) use the acronym ESN, for “enterprise social networks”. We chose the term “social media type collaboration tool” (SMTCT), as it is a broad enough term that that can encompass all the different types of tools that aim to enhance communication and collaboration within a company.

This research attempts to fill in the gap in literature on social media type collaboration tools. Indeed, it appears that the existing literature dealing with the subject of collaboration tools tends to focus on the company point of view, and such a research would thus bring a different, and important, angle to the story. Additionally, studies about new tools such as Yammer or Slack appear to be nonexistent or only very limited. Besides, focusing on what people can say about their experience with those tools, on how they perceive the use of those and the place they take in their everyday work, how they make sense of the relationships and the knowledge they build on those tools can bring new insights and answers on the topic.

On the other hand, this research is also socially relevant. Indeed, it could also help companies to understand how their employees perceive and experience the use of enterprise collaboration tools, thus giving them a view on more than short-term financial benefits. This is particularly relevant because people spend a lot of time at work. For instance, Eurostat revealed in 2015 that, on average, full-time employed European workers worked 41,4 hours a week. This means that a great part of many people’s life happens at work. Moreover, boundaries between work life and personal life seem to be increasingly blurred. A survey

recently conducted by APA's Center for Organizational Excellence has indeed shown that 26% of working Americans report that they regularly bring work at home, 48% of them report that they respond to work-related communication during personal time and 42% report that they take care of personal/family needs during work (Poll, 2015). Therefore, focusing on people's experience and understanding what opportunities those collaboration tools can bring to them could be highly interesting and useful. Moreover, as people are spending an increasing time at work and as the line between work life and personal life is increasingly blurring, studying tools that have an impact on people's working environment and that are seeking to accomplish work tasks through social media practices is both academically and socially relevant.

In the following chapter, the existing theory about some of the challenges organizations nowadays have to face and how collaboration tools can help to tackle those problems will first be covered. An overview of the different theories that have already been elaborated and done in this field of research will therefore be given. The second chapter of this thesis will be dedicated to the research design and rationale. In this section, research methods that have been chosen to answer the research question will be explained. A detailed description and an argumentation concerning those methods will also be given in this part. Data collected during the interviews and an analysis of those will be presented in the third chapter. Quotes from the different interviews will be displayed in order to understand how people can make sense of their use of their organization's collaboration tool. This chapter will also offer a discussion about the results from the research and how they relate to the theoretical framework. We will finally conclude this thesis in the last chapter, the conclusion. An answer to the research question and sub-questions will be given. Limitations of the study and suggestions for further researchers will also be considered in this chapter.



## 2. Theoretical framework

In this section, we will discuss both the main challenges organizations face every day and what collaboration tools consist of. First, we will address five of the main challenges encountered by organizations today. Secondly, a definition of collaboration tools will be given. An explanation of what consequences and challenges such tools imply will be finally given at the end of the section. This will allow us, in the later chapters of our work, to explore how those challenges relate to the use of these tools through employees' perceptions.

### 2.1 Organization challenges

This thesis takes for granted that the world is changing. We have entered a world that is more volatile, uncertain, complex and ambiguous (VUCA) than ever before and, as Doheny et al. explain, this is changing the nature of competition (2012, as cited in Bennett & Lemoine, 2014a). This means that companies who are evolving in this constantly changing VUCA world have to navigate into new and agitated waters. The first characteristic of this VUCA world is *volatility*. Volatile situations are not especially hard to understand, but they are unexpected or unstable, and their duration is unknown (Bennett & Lemoine, 2014b). Second, this world is characterized by a high *uncertainty*. This means that, even though we are provided with a great amount of information about the cause and effect of a particular event, we do not know whether this event is going to happen or not (ibid.). Third, situations are becoming more and more *complex* and have many interconnected parts where the volume and nature of available information can be overwhelming (ibid.). Finally, this wave is also characterized by *ambiguity*. Ambiguous situations happen when there is “doubt about the nature of cause-and-effect relationships” (Bennett & Lemoine, 2014b, p.27).

Importantly, for organizations, these new aspects to the world of work lead, not especially to wholly new problems, but to stronger and stronger pre-existing challenges, five of which are today particularly related to the use of collaboration tools. Studying those challenges in detail will thus allow for a better analysis of the impact of such tools on employees. In the following section, we will be discussing these five challenges, namely: the need for organizations to reach a strategical alignment, the imperative for an effective knowledge management, the geographical disparity many companies have to embrace, the imperative to acknowledge and understand digital and communication transitions, and the coexistence of different generations in working environments.

### **2.1.1 Strategic alignment**

First, the imperative for companies to reach a strategic alignment among their employees can be a big challenge for organizations. Strategic alignment means that the entire workforce agrees and is aligned around the same goals, those of their organization (van Riel, 2008). van Riel (2008, p.351) talks about “strategically aligned employee behavior” (SAB) which represents “on-the-job actions that are aligned with the strategy” (Gagnon & Michael, 2003, p.26). This kind of behavior can be divided in two types of actions that both contribute to the realization of the organization’s strategy: task performance and contextual performance. The former can consist of the different actions that contribute to the organization’s output creation (e.g. increasing efficiency) and the latter refers to activities that contribute to the social and psychological context of the company (e.g. increasing internal cohesion) (van Riel, 2008). Both contribute to the realization of an organization’s strategy but contextual performances such as discussing the strategies with others, having initiatives to help in implementing the strategy or helping others to implement this strategy are the most essential ones in the strategy implementation (van Riel et al., 2009).

However, Boswell (2006) emphasizes the importance for organizations to develop a line of sight (LOS) among the employees. The concept of line of sight is defined as “an employees’ understanding of the organization’s goals and what actions are necessary to contribute to those objectives” (Boswell et al., 2006, p.3). Employees need not only to understand their organizations goals, they also need to understand how to contribute to their organization’s strategic objectives in order to “translate strategic goals into tangible results” (Boswell & Boudreau, 2001, as cited in Boswell et al., 2006, pp. 3-4). Therefore, two components conceptualize what Boswell (2006, p.1490) calls employees’ line of sight: “understanding an organization’s objectives” (i.e. LOS-objectives) and “understanding how to effectively contribute” (LOS-actions).

This concept of LOS can be observed and conceptualized at the individual level of analysis as this understanding of an organization’s objectives is likely to differ across the various employees and their characteristics (Boswell, 2006). Mintzberg (1983, as cited in Boswell, 2006) suggests that employees working at higher levels are likely to have a greater LOS while those at lower levels are more likely to have access to vaguer information about the organization’s goals. Employees’ perception about their organization’s climate therefore vary according to their hierarchic level (Boswell, 2006).

Boswell (2006) argues that if employees have an accurate understanding of their organization's strategic objectives and how to contribute, and thus a great line of sight, they are more likely to behave in alignment with their firm's interests and needs. On the contrary, without a proper LOS, employees may develop other, and possibly, contradicting goals that would be incorrect and counterproductive (ibid.). Increasing employees' line of sight is therefore a way to reduce the risk of inappropriate or ineffective behavior (ibid.).

Skivington and Daft (as cited in van Riel, 2008, p.351) argue that the implementation of a strategy within an organization "requires complex interaction processes between managers and employees". There are several factors, controlled by managers, that can influence the implementation of a strategy within an organization. Van Riel et al. (2009) argue that those factors can be divided into two categories: hard factors, that are linked to organizational systems and structure, and soft factors, that are about interactive processes between managers and employees.

It has been shown that an organization's reward and control system, and that are, thus related to the "hard" factors, play a role in how employees give importance to their organization's strategic objectives, in their motivation to behave in accordance to those objectives (ibid.). However, Dell et al. (as cited in van Riel et al., 2009) explain that "soft" factors are generally considered as "more important in determining implementation success" (p.1199). Besides, the perception of those managerial efforts is considered as more crucial than the actual efforts as they are more "proximal antecedents of employee behavior" (van Riel et al., 2009, p. 1199). Examples of efforts that foster strategically aligned behavior by managerial and non-managerial employees can be efforts to stimulate employees' motivation to contribute to the strategy, efforts to develop employees' capabilities that are needed to implement the strategy and efforts to inform employees about the strategy (van Riel et al., 2009).

Therefore, to respond to a lack of alignment within an organization, van Riel (2008) argues that top managers need to be fully on board and play their role of drivers and enforcers of change. van Riel (2008) proposes a model of 5 steps, divided into 3 phases: the phase of information, the phase of motivation and the phase of capabilities development. This model represents, according to the author, the "ideal approach regarding soft initiatives" (van Riel, 2008, p. 352).

Informing		Motivating		Cap. Level.
1. Media & message alignment	2. Cascading	3. Dialogue	4. Recognition & Reward	5. Capability Development
<ul style="list-style-type: none"> <li>- Get people onboard: Involve them with the company and its goals</li> <li>- Themed messaging about corporate goals</li> <li>- Be more specific about link HQ-BU goals</li> <li>- Increase consistency in corporate messaging</li> </ul>	<ul style="list-style-type: none"> <li>- Increase cross-organizational communication</li> <li>- Manage expectations regarding involvement in decision-making</li> </ul>	<ul style="list-style-type: none"> <li>- Explicit attention for cross-division dialogue</li> <li>- Make information accessible for other BU's</li> <li>- Increase line of sight: stimulate feedback about people's contribution to the whole</li> </ul>	<ul style="list-style-type: none"> <li>- People should receive recognition for their contribution to achieving Company's goals</li> <li>- People should be sufficiently rewarded for their contribution to achieving Company's goals</li> </ul>	<ul style="list-style-type: none"> <li>- Provide employees with sufficient resources to pursue the goals</li> <li>- Provide employees with sufficient training to pursue the goals</li> <li>- Provide employees with sufficient authority to pursue the goals</li> </ul>

Figure 1 – “Soft initiatives stimulating strategic alignment” (van Riel, 2009, p.353)

The “informing” phase consists of two steps. First, organizations need to reflect on their media and message alignment, making sure that their messaging and look and feel is consistent. Second, organizations need to set up meetings led by top management in order to communicate about the core elements of the organization’s strategy.

The first step of the “motivating” phase is to create a dialogue within the organization, increasing access for all to the information and, thereby, employees’ line of sight and to stimulate feedback. The second step of this phase consists of making sure that employees receive recognition and are rewarded for their contribution to their organization’s goals.

Finally, the “capability development” phase consists of providing employees with sufficient training, resources and authority to pursue the organization’s objectives.

Being strategically aligned helps organizations in being better equipped to increase their internal synergy, and to orchestrate their different activities, leading to an improved collaboration (van Riel 2008). This increased synergy among the different parts of the organization can be a significant competitive advantage for companies who succeed in reaching it (van Riel, 2008). But more than being a competitive advantage, collaboration and interaction are essential for modern organizations and seem to be the only way for the complex activities and processes to be undertaken (Barjis, Gupta & Sharda, 2010). Moreover, Boswell (2006) argues that companies should increasingly rely on their employees’ capability and commitment in order to compete in the business environment. Strategic alignment is therefore crucial. Our research will try and understand how the use of SMTCT impacts the perception of employees regarding their organization’s strategy, and thus potentially their

impact on an employee's line of sight and, in the end, on the global strategic alignment within that organization.

### **2.1.2 Knowledge management**

Another challenge companies face nowadays is the efficient management of an increasing amount of information. Companies need to implement strategies in order to manage its intellectual capital and the knowledge of its employees. According to Civi (2000), knowledge represents 75% of a company value and, because this value does not diminish in time, unlike traditional assets such as labor, land or capital, knowledge is a sustainable advantage.

Knowledge is often considered as the intellectual capital of an organization (Civi, 2000). Some authors argue that different types of knowledge can be distinguished; explicit knowledge and tacit knowledge (ibid.). Explicit knowledge is "articulated knowledge" (Saint-Onge, 1996) and can easily be translated in and communicated with words or numbers such as scientific formulas, specifications or mathematical expressions (Civi, 2000; Smith, 2001). Explicit knowledge is codified, easily stored and accessible by any employee within the organization (ibid.).

Tacit knowledge is considered as the greater level of knowledge within an organization (Saint-Onge, 1996). This kind of knowledge is not easily expressible and difficult to share with others (ibid.). It refers, for instance, to the beliefs, values, perspectives (Saint-Onge, 1996), intuitions or subjective insights that people might have (Civi, 2000). It is "deeply rooted in an individual's actions and experience as well as in the ideals, values or emotions" (Civi, 2000, p.166). Smith (2001) argues that the value of tacit knowledge is often underestimated and underused in working environments. Around two-thirds of work-related information that is transformed into tacit knowledge is exchanged through face-to-face contacts, casual and spontaneous conversations such as stories or mentoring that often occur in a free and open environment (Smith, 2001). Finally, there are two dimensions that need to be considered when it comes to tacit knowledge: the technical dimension and the cognitive dimension (Civi, 2000). The technical dimension consists of all the informal personal skills and crafts, often named as "know-how" (ibid.). The cognitive dimension encompasses all the personal beliefs, ideals, values or mental models an individual could have (ibid.).

Nonaka and Takeuchi (Civi, 2000) explain that those two types of knowledge (i.e. explicit and tacit knowledge) are not fundamentally different with each other. Knowledge is actually created through the interactions, named "knowledge conversion", between tacit and explicit

knowledge (Nonaka, Toyama & Konno, 2000, p.8). Nonaka and Takeuchi have developed a dynamic model of knowledge creation, called the SECI process, that involves four different processes of knowledge conversion that are highly independent and intertwined, namely, the processes of socialization, externalization, combination and internalization (Alavi & Leidner, 2001).

Four modes of knowledge conversion

		Tacit Knowledge	To	Explicit Knowledge
Tacit Knowledge	From	Socialization		<b>Externalization</b>
Explicit Knowledge		<b>Internalization</b>		Combination

**Source:** Nonaka and Takeuchi (1995, p. 62)

Figure 2 – “Four modes of knowledge conversion” (Civi, 2000)

- *Socialization* or *tacit knowledge to tacit knowledge* is the process when tacit knowledge is converted through shared experiences (Nonaka, 2000). During this process, people learn by “observing, imitating or practicing” (Smith, 2001, p. 316). Because tacit knowledge is difficult to express, tacit knowledge can only be transmitted when people share experiences such as spending time together (Nonaka, 2009).
- *Externalization* or *tacit knowledge to explicit knowledge* is the process when knowledge becomes explicit (Civi, 2000). When tacit knowledge is converted into explicit knowledge, the “inexpressible is expressed” (Stewart as cited in Smith, 2001, p.317), allowing knowledge to be shared with others (Nonaka, 2000). Thereby, this newly acquired knowledge can become the basis for further knowledge (Nonaka, 2000).
- *Combination* or *explicit knowledge to explicit knowledge* is the process when different pieces of explicit knowledge are combined and become a new whole

(Civi, 2000; Smith, 2001). Thereby, explicit knowledge is transformed into more complex and systematic sets of explicit knowledge (Nonaka, 2000).

- *Internalization* or *explicit knowledge to tacit knowledge* is the process when explicit knowledge is reframed and interpreted using a person's frame of reference (Smith, 2011). Thereby, others can understand and internalize this knowledge (ibid.). In other words, explicit knowledge is internalized by the individuals and becomes part of their tacit knowledge (Nonaka, 2000).

Evidently, these four different aspects of how knowledge evolves within an organization can and will be impacted by the use of SMTCT, whereby employees can easily exchange all different types of information, resulting in one or more of the aforementioned processes. But similarly impacted, and even more globally, at the organizational level, four different but interrelated processes characterize knowledge management: knowledge creation, knowledge storage/retrieval, knowledge transfer, and knowledge application (Alavi & Leidner, 2001).

- *Knowledge creation* is a process of continual interaction between tacit knowledge and explicit knowledge (ibid.). During this process, knowledge is collaboratively "created, shared, amplified, enlarged and justified" through social interactions (Alavi & Leidner, 2001, p. 116). The aforementioned Nonaka and Takeuchi four processes of knowledge conversion (i.e. socialization, externalization, combination and internalization) constitute the different possible modes of knowledge creation (ibid.).
- The processes of *knowledge storage and retrieval* are an important aspect of knowledge management since it has been shown that while organizations create knowledge, they also sometimes lose track of this knowledge and forget (Alavi & Leidner, 2001). It is therefore crucial for organizations to constitute an organizational memory where information is storage, organized and can easily be retrieved (ibid.).
- Another important process in knowledge management is the process of *knowledge transfer*. During this process, knowledge transfers occur at many different levels of the organization such as between individuals, from individuals to explicit sources or between groups (ibid.). Knowledge can be transferred through formal or informal, personal or impersonal channels with varying level of success in terms of socialization of effectiveness (ibid.). A parallel can here be made with what Ipe (2003, p.341) refers to as knowledge sharing, i.e. "the act of making

knowledge available to others within the organization”. This complex process, function of the nature of knowledge, the motivation to share, opportunities to share and the organizational culture (Ipe, 2003), aims at making task-related and social information available to other employees, in order for them to collaborate in resolving problems or sharing ideas (Gibbs, Rozaidi & Eisenberg, 2013).

- Finally, the last process that can characterize knowledge management is the process of *knowledge application*. According to Alavi and Leidner (2001) application of knowledge rather than knowledge itself can be a great competitive advantage for organizations. Different mechanisms such as directives, routines or specified tasks can help to apply knowledge within an organization (ibid.). This process can be helped and supported by technologies that will facilitate the capture, update and accessibility of this knowledge (ibid.).

Companies that create favorable conditions for an open knowledge sharing can reap benefits such as the development of novel processes, products or solutions and, thereby, innovation (Gibbs et al., 2013). Moreover, when employees have access to a wider range of knowledge, they get the chance to discover different perspectives and, eventually, develop more complex representations of the challenges they encounter (Gray et al., 2015). However, it is important to note that, on the other hand, open knowledge sharing is not always possible and can even be undesirable when it comes to sensitive or confidential information (Gibbs et al., 2013).

To summarize, we could see in this section that knowledge management can be characterized by four interrelated processes: knowledge creation, which includes four processes of knowledge conversion (socialization, externalization, combination and internalization), knowledge storage/retrieval, knowledge transfer and knowledge application. Further, we could also see that two types of knowledge can be distinguished: tacit knowledge and explicit knowledge. In conclusion, what is fundamental here is that when existing knowledge is effectively managed and shared among an organization’s employees, it has the potential to lead to a powerful sustainable competitive advantage. Just knowledge itself is not sufficient to create value (Cao et al., 2013). This is where the challenge of knowledge management for organizations lies: if well-managed and shared knowledge creates a powerful competitive advantage, the lack of it can have a highly negative impact on the well-being of an organization in today’s highly competitive ‘VUCA’ world. Obviously, as communication and collaboration platforms, i.e. on which knowledge can easily be processed and exchanged,



SMTCT could have a lasting impact on any organization facing the challenge of a sound and efficient knowledge management. This research therefore focused on trying to understand the level of impact they have on the employees' perception of knowledge management within their organizations.

### **2.1.3 Geographic disparity**

Organizations have to face more and more the challenge of geographic disparity. Distance collaboration is therefore part of modern business practices. Relationships are changing and employees do not only work with people situated in the same room, building, town or country, but instead often have to communicate and collaborate with people in another time zone, on the other side of the planet (Wahl & Kitchel, 2016). Organizations increasingly have to operate from different geographically distributed locations and need to stay competitive, regardless of where their best talents or resources are located (Friedman, 2005). This geographic disparity can cause difficulties and being effective at a distance can be more difficult than with traditional face-to-face forms of collaboration (Wahl, 2016). Organizations need more and more to find and choose the appropriate collaborative tools and internet-based resources that will enable them to address counter this issue (Wahl & Kitchel, 2016).

### **2.1.4 Digital and communication transitions**

As we already mentioned before, social networking sites are nowadays used by several billions of users from all age groups around the globe (Cardon & Marshall, 2015; Statista, 2017). Moreover, with the quick spread of mobile phones and tablet PC's, people have, more than ever, the opportunity to interact with each other by using information and communication technologies (Chan, 2014). Since they have appeared in individuals' lives, social media have completely transformed the way people communicate with each other.

First, as Chan (2014) explains, individuals are constantly connected with each other thanks to internet connectivity and mobile phones. In 2016, the Pew Research Center showed that, among respondents, 55% of them admitted they were going on Facebook several times a day, 35% of them said they were going on Instagram several times a day and 23% of them admitted they visited Twitter several times a day. An experiment that has been carried out in the Nottingham Trent University has shown that individuals tended to have little awareness of how frequently they use their phone and tended to underestimate their phone use (Andrews et al., 2015). The results have also shown that people checked their phone 84,68 times on average and spent 5,05 hours a day on it (ibid.). This connectivity on social network

platforms, more particularly, can enable individuals to develop, maintain and strengthen social relationships regardless the time or location (Chan, 2014; Riedl et al., 2013).

However, this connectivity or hyperconnectivity can, paradoxically, cause even more loneliness because of the mental and emotional resources it requires when people try to manage their social network in communication environments where the limit between private and public time and space is not perfectly clear (Turkle, 2011 as cited in Cha, 2014). On top of this, the need to be accessible to others can lead to additional stress and the impression to individuals that they are not totally in control of their own life, leaving them overwhelmed by ICT's (Chan, 2014).

Besides, in this context of digital transition, information and how it's been shared has also been transformed in terms of quantity and quality. People are nowadays provided with a great amount of rich and complex information (Bawden & Robynson, 2009). Information can usually be found in a large quantity on almost every topic (ibid.). It has not always been the case, as it is only around the 1990's that a shift occurred in the way we deal with information: while, before, people struggled to find a sufficient quantity of relevant information, people nowadays need to filter and select the most useful information among the huge amount of it they receive (ibid.). Chantepie (2009) actually explains that, with this abundance of information, there's been a profound mutation in the valorization of information and that, scarcity has moved from the side of information towards the side of attention. The challenge may therefore lie not in how to create and make flourish information, but rather how to optimally filter it in order to effectively draw people's attention.

Understanding this shift in how people communicate and share information in the digital age is crucial for organizations who want to take full advantage of their employees mental resources. Organizations need therefore to understand how to manage these mental resources in order to diminish the risk of information overload, for instance.

### **2.1.5 A multigenerational workforce**

Many reports have shown that the world's population is ageing. Although, this trend is not present in every country, reports suggest that people age 60 and older represent a larger proportion of the world's population than ever before (Pitt-Catsouphes & Matz-Costa, 2008). For instance, in the more developed areas of the world, while people from 0 to 14 years old comprised 27% of the population in 1950 and 17% in 2005, the percentage of people older than 60 was 12% in 1950 and increased to 20% in 2005 (ibid.). Knowing this, it is important

for researchers and organizations' leaders to take these demographic changes in account and to consider how age structures can impact "key employment outcomes such as recruitment, engagement, and retention" (Pitt-Catsouphes & Matz-Costa, 2008, p. 216).

During the last 6 years, three different generations, the Baby Boomer Generation, Generation X, and Generation Y also known as millennials have coexisted in organizations (Kaifi, 2012). Moreover, academic research as well as discussions in the business world are both starting to give issues related to generational differences some attention as they may have a significant "impact on the leadership and success of the organization" (Salahuddin, 2010, p. 1 as cited in Kaifi, 2012). Simons (2010) explains that it is crucial for organizations to take those generational differences in account because they can have an impact on their ability to function.

Those different generations have grown up and evolved in different contexts, with different cultural influences, and are known for having different features, characteristics or preferences in terms of working conditions, for instance. Baby Boomers were born between 1946 and 1964 (Rosenberg, 2009 as cited in Kaifi, 2012). They were raised in a context of economic prosperity and tend to be optimistic, "expecting the world to improve in time" (Kaifi, 2012; Simons, 2010, p.31). Moreover, Baby Boomers did not grow up with technology and tend to perceive it as "artifacts of organization cultures (Simons, 2010, p.31). Finally, this generation seem to value flexibility in their everyday work and find work/life balance important (Kaifi, 2010).

Generation X are the people born between 1965 and 1980 (Kaifi, 2012). This generation is smaller than previous generations and marks the end of the baby-boom with a declining birth rate (ibid.). The context in which this generation has appeared is characterized by the advent of mass media and technology (Simons, 2010). This generation is often described as independent, persistent and with a great adaptability (ibid.). This means that, in the workplace, this generation has a need for autonomy, preferring direction such as "do it your way" or "there aren't a lot of rules here" whether they are being supervised by someone or managing other people (Simons, 2010; Gentry, 2011, p. 45 as cited in Kaifi, 2010). Finally, Gen Xers are described as not especially caring about the 'career ladder' meaning that they can evolve laterally (Simons, 2010).

People that are part of the Generation Y or millennials were born between 1977 and 1998 in a context of globalization (Simons, 2010). This generation has grown up in the digital age (Kaifi, 2012). Therefore, millennials are very familiar with communication, digital

technologies or media and represent, therefore, a “great asset when it comes to working with new technologies” (Kaifi, 2012, p. 31). This generation, also called the Millennials, was raised in a time that was more child-centric than ever before and has, therefore, a high level of self-confidence (ibid.). Millennials are team-oriented, tend to prefer collective work and work well in groups (Simons, 2010; Kaifi, 2012). Generation Y is often described as a generation that wants to be heard (Kaifi, 2012). Finally, Millennials want to accomplish tasks and missions that matter to them and want to be, among other, socially conscious, eco-aware and optimistic (Kaifi, 2012).

However, one of the most obvious difference or gap between those generations is their relationship with technology (Simons, 2010). This digital divide between younger and older people can also be observed, more generally, in our societies and not only in organizations. In 2011, Brandtzaeg established an internet user typology divided into five different categories. Those five categories were “Non-users”, “Sporadic users”, “Entertainment users”, “Instrumental users” and “Advanced users” (Brandtzaeg, 2011). This study showed that the main predictors for the user type divide of those five types were access and age (ibid.). These results suggested that, even though access is an important variable in predicting user types, young people tend to be more interested in learning and exploring new technologies (ibid.).

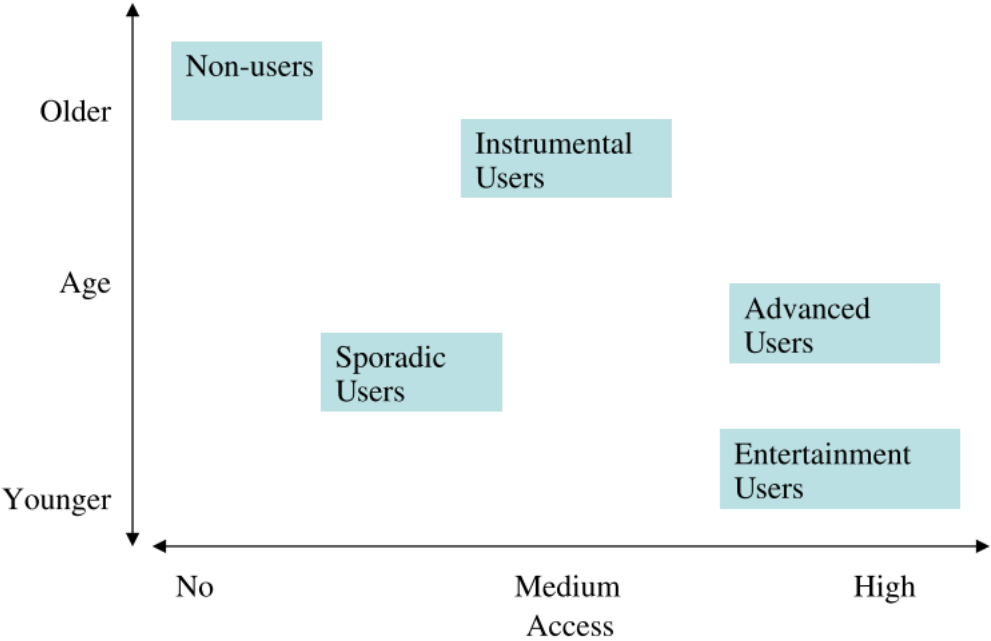


Figure 3 – “Relationship of access and age for the five identified Internet user types” (Brandtzaeg, 2011)

As shown in this figure, while older people are more likely to correspond to the “Non-users” type than younger people, younger people are more likely to correspond to the category of “Entertainment users”.

This difference can be partially explained by the fact that Baby Boomers have not grown up with new internet technologies (Simons, 2010). Simons (2010, p.32) explains that, even though Baby Boomers have also made great progress when it comes to familiarizing themselves and using technology and the Web, they also tend to have a limited vision of technology’s positive impact in optimizing workplace efficiency and to perceive those systems as “discrete integrated solutions designed to meet a specific need”. On the contrary, Millennials are highly familiar with technology and this familiarity exceeds their predecessors’ (ibid.). They are also more likely to adapt to new technologies and many tend to prefer to learn via interactive technology than in a traditional classroom (ibid.).

However, these characteristics should be taken with a grain of salt for two reasons. First, we could draw a parallel with what Hacker (2003) explains about ethical issues when it comes to studying digital gaps. Hacker argues that researchers should remain cautious when reporting research data. Indeed, repeatedly referring to certain groups as “lagging” might reinforce to a “kind of negative self-fulfilling prophecy” for the members of those groups (Hacker, 2003).

Second, because those numbers, classifications and results can sometimes be limited. It seems that none of the existing literature focuses on the relation between age and the digital divide in the business world. People working in organizations might be more skilled than their age-cohort mean or even be exceptions.

## **2.2 Social media type collaboration tools**

The effective implementation of an organization collaboration tool can be part of the resolution when it comes to face the aforementioned problems and challenges (i.e. reaching a strategic alignment, managing knowledge effectively, dealing with geographic disparity, understanding digital and communication transitions and effectively managing a multigenerational workforce). This is what makes the study of these tools particularly relevant today, when these challenges represent important hurdles for organizations to fully tap into their potential.

The use of internet based collaboration tools is a quite recent phenomenon and is considered by Wahl and Kitchel (2016) as a “natural extension of the increasing role of the internet in society” (p.28). Actually, as mentioned above, while social network sites are considered as the main means of online communication, emails are still the primary means of communication in working environments (Cardon & Marshall, 2015). However, as previously mentioned, many experts predict that, within the 10 next years, social networking will become the main means of business online communication and team communication (Cardon & Marshall, 2015). Besides, the increasing role of online social networking at work has already been recognized by many business researchers (Cardon & Marshall, 2015).

Enterprise social networks, or social media type collaboration tools (SMTCT) as named in this thesis, are integrated platforms that enable a wide range of activities such as blogging, microblogging, social networking, and the sharing of content such as documents or posts (Van Osch et al., 2015). Those tools are an online place where employees can interact with each other in a different way than traditional channels such as emailing or chatting. SMTCT offer more visibility and persistence: any content can reach a wider audience across the organization and stays available for a longer time. Those two characteristics make collaboration tools great opportunities for social learning (Leonardi, Huysman & Steinfeld, 2013, p.3). Indeed, the fact that the content people share to their colleagues can be visible to everyone, sometimes to people that were not originally involved in the exchange, and for a longer time, means that more people can both learn from this exchange and contribute to it (Leonardi et al., 2013, p.4).

More and more organizations implement such collaboration tools in order to improve their internal communication and collaboration, to foster knowledge sharing and, consequently, to foster innovation (Chin, Evans & Choo, 2015). According to Huy and Shipilov (2012), companies who successfully achieve to create internal social media programs which contribute towards building employees’ emotional capital are able to benefit from an increased collaboration, improved information flows and a higher employee motivation. Engaged and committed employees are more likely to be interested in their business’ successes, more likely to innovate and will probably be more efficient (Pastore, 2016).

Moreover, those initiatives of knowledge sharing can help employees with locating accurate and relevant information they may need or with providing access to new people and expertise (Gibbs et al., 2013). First, those kinds of platforms can provide employees with a clearer vision of the social network in the open space and make it easier for them to identify

individuals that share the same specialty or expertise (Cao et al., 2013). More broadly, information technology (IT) can foster knowledge transfer because it can help extending individual's reach beyond the people they usually get in contact with through formal and direct communication lines (Alavie & Leidner, 2001). Employees are therefore not limited to immediate coworkers anymore (ibid.).

Additionally, according to Spiess et al (2014, p. 19), "enterprise social networking applications help employees build organizational collective wisdom and work more effectively by discovering implied relationships through shared social data". Secondly, Civi (2000) argues that when people have access to their organization's information, they get a chance to better understand and give a meaning to their environment. This can, for instance, enable them to find new ways to perform, better work together and share a vision with the other employees (Civi, 2000).

For all of the aforementioned reasons, it is reasonable to believe that SMTCT collaboration tools such as Slack or Yammer can address the challenges we exposed in the first part of this chapter. First, they allow for an improved knowledge management. Indeed, while, by making information persistent, they enable asynchronous collaboration, they also enable it in an informal manner. Moreover, because they dramatically widen an individuals' network, they help in virtually reducing geographic disparity. Finally, these tools foster information communication and, thereby, improve the co-workers relationships. This helps them in sharing a common vision, while giving meaning to their work environment, leading to a better strategic alignment across the whole organization.

However, the potential changes those tools will bring in the business communication field will also bring new challenges. Cardon and Marshall (2015) explain, for instance, that "most business professionals will need to significantly alter how they share information and with whom they share it". The use of those tools will call for new skills, new attitudes because they are not only built around improving efficiency but also built around improving the relationships (Guinan, Parise & Rollag, 2015). Besides, convincing the technology-averse individuals to invest time on learning how to use the tools, gaining employees' overall acceptance (Guinan et al., 2015) or gaining their willingness, which companies are highly dependent on can sometimes be difficult and challenging when trying to implement collaboration tools (Gray et al., 2015).

Therefore, companies need a real and clear strategy as well as a real sense of purpose if they want to be successful (Guinan et al., 2015). Gartner (2013) claims that companies that

have a “provide and pray” approach when starting a social media initiative only have a 10% success rate. This means that only investing in a new collaborative technology will not necessarily be a success or lead to a better productivity.

In conclusion, this chapter raises two important points for this research study. First, we see that social media type collaboration tools, such as Slack or Yammer, can help organizations to address 5 great challenges they daily have to face to thrive in their respective environment. These challenges are indeed all directly related to the employees, in how well they are connected with their organization and its tools, and their colleagues, split across generations and continents. Besides, as explained above, these tools can also bring up new challenges to the work environment. SMTCT can therefore potentially have a high impact on organizations, through their employees, as new communication and collaboration tools. This is why our thesis, in the following sections, will focus on the employees’ point of view, to try to understand how those who regularly use Slack or Yammer perceive their use and impact on their everyday work and on their connection with their organization and colleagues. We will try to shed some further light on the perceived benefits and difficulties of its everyday use. In the next section, we address in detail the methodology that was followed to achieve the objective of this thesis. Indeed, this methodology will then allow us to examine in details the SMTCT phenomenon, and finally guide us in answering our research question.



### **3. Research design and rationale**

#### **3.1 Research design**

In this section of the paper, a rationale for the methods of research choice taken to answer the research question and sub-questions were given. Based on those research questions and theory, the reasons behind the choice of those methods will be explained as well as methods of sampling, data collection and data analysis. Qualitative methods, and more precisely, in-depth interviews were used in this study in order to collect and analyze data. The relevance of this approach will be justified and motivations for choosing this method will be given. The process of data analysis will be described and explained as well. Finally, ethical implications for this study will be described.

#### **3.2 Data collection method**

For this thesis, and in order to answer our research question and sub-questions, qualitative methods were chosen. Qualitative research methods attempt to understand social phenomena by understanding how people make sense of it (Trumbull, 2005). It is a “naturalistic, interpretative approach concerned with understanding the meanings which people attach to phenomena (actions, decisions, beliefs, values etc.) within their social worlds” (Ritchie & Lewis, 2013, p.3). As the objective of this thesis is to better understand employees’ perception and experiences with collaboration tools, qualitative methods allowed for this in-depth examination of both perception and experience.

To accomplish this, in-depth semi-structured interviews were used. As Ritchie and Lewis (2013) explain, language has a great power in illuminating meaning. It has also been stressed that talking to people is highly important in order to apprehend and gather their opinion and views on different topics (Burgess, 1982 as cited in Ritchie & Lewis, 2013). Indeed, language gives the capacity to create descriptions, evaluations or explanations about an infinite variety of subjects, aspects of the world and even about language itself (Hammersley & Atkinson, 1995 as cited in Ritchie & Lewis, 2013).

Interviews can be characterized as a form of conversation or even as a “conversation with a purpose” (Ritchie & Lewis, 2013, p. 138). During interviews, a process of knowledge construction about the social world is reproduced in a context of “normal human interactions” (ibid.). Moreover, in-depth interviews enable a good understanding and apprehension of how people make sense of things and the meaning they give to them, which is exactly what the

research question of this thesis is about: understanding how people experience the use of a new social media type collaboration tool at work.

In order to answer the research question “How do employees perceive the use of new social media type collaboration tools in their everyday work?”, two related sub-questions were formulated:

- What do employees see as the positive and negative aspects in using those tools?
- How do employees experience the changes brought by those collaboration tools to their everyday work?

Finally, this approach is inductive and its purpose is to describe many different realities and to develop a deep understanding of human perspectives (ibid.). Showing and conceptualizing the variety of that “exists within the subject under study” is crucial in qualitative methods (Boeije, 2002, p. 393).

### **3.2.1 Sampling method**

Participants have been chosen on a basis of purposive sampling. This method is a non-probability sample method (Ritchie & Lewis, 2013). Indeed, units are chosen for the purpose of reflecting specific features or sub-groups of the sampled population (ibid.). Features of the population are at the basis of the selection and the goal of this method is not to create a sample that is statistically representative (ibid.). Therefore, non-probability samples are perfectly suited to in-depth and small-case researches (ibid.).

In the purposive sampling method, units are selected on the basis of specific criteria and those criteria will enable the researcher to conduct a deep and detailed exploration of the themes he wants to study (ibid.). Those criteria may be multiple. For instance, those selection criteria could be socio-demographic characteristics or particular experiences, behaviors or roles (ibid.). Guarte and Barrios (2006) define purposive sampling as “a random selection of sampling units within the segment of the population with the most information on the characteristic of interest”. Purposive sampling is a subjective method of sampling where participants are chosen according to the requirements of a research. The aim of this method is to choose the information-rich cases from which we can learn a lot and have a good understanding of the topic (Coyne, 1997). While this method of sampling does not allow for generalizing the results to a population, it can be useful in order to have an insight of a phenomenon or some practices (Onwuegbuzie & Collins 2007).

The fact that research units are chosen with a “purpose” to represent a certain criterion has two principal aims (Ritchie & Lewis, 2013, p.79). First, it guarantees that all the “key constituencies of relevance” to the studied subject are covered (ibid.). Second, it also enables the researcher to include some diversity within the sample (ibid.).

For instance, in this particular case, the sample is composed exclusively by people that use Slack or Yammer at work. Participants were not necessarily all intensive users but needed at least to know the tool, to know how to use it and to use it on a regular basis (i.e. at least once a week). The goal was to interview participants that were average users that could explain how they experience and perceive the impact of such tools in their everyday work. Moreover, interviewees of each category (Slack/Yammer) come from at least two different organizations. These requirements enable a collection of data that are rich and worth using in order to answer our research question and sub-questions. We could therefore characterize this purposive sample as a “typical case sampling” where participants are chosen because they seem to be average, normal users SMTCT (Ritchie & Lewis, 2013, p.93).

First interviewees were contacted thanks to acquaintances and with the help of Facebook and LinkedIn posts. Those people come from different organizations: European Institutions, a financial company, a baby-sitting app company, an HR company, a car-leasing company and a production and post-production company. This variety in terms of sectors of activity was an opportunity for this exploratory work to be as diversified as possible, giving diverse perspectives coming from different types of workplaces.

After getting in touch with the first interviewees, snowball sampling method was used in order to get in touch with other interesting prospective interviewees. This means that existing informants enabled to get in contact with new informants that could be helpful for this thesis (Noy, 2008). However, this method was not as successful as I wish it would be and helped me with getting in touch with only one additional employee.

A majority of those interviewees did not feel comfortable with their identity being revealed in this thesis. Therefore, in order to respect their choice and also in order to create a coherent whole, all the names of the interviewees have been changed and replaced by pseudonyms. Moreover, names of the organizations those interviewees work are not mentioned either. Again, this is in order to respect all the respondents’ privacy.

Below is a list of their pseudonyms, age, the SMTCT they use and the type of organization they work in:

Pseudonym	Age	SMTCT used at work	Type of company
Anna	54 years old	Yammer	International institution
Oliver	25 years old	Slack	Financial services company
James	52 years old	Yammer	International institution
Emily	40 years old	Slack	Baby-sitting app company
Emma	26 years old	Slack	Regional agency
Leo	29 years old	Slack	Production and post-production company
Samuel	42 years old	Yammer	International institution
Sophie	32 years old	Slack	HR company
Amy	25 years old	Slack	Baby-sitting app company
Sarah	46 years old	Yammer	Car-leasing company

### 3.2.2 In-depth interviews

As mentioned before, in-depth semi-structured interviews were used in order to gather data for this study. Those interviews provided this thesis with rich, in-depth information that enable us to understand how people give meaning and perceive their experience with the SMTCT that are used within their organizations. Moreover, according to Holstein and Gubrium (1997), “interviewing provides a way of generating empirical data about the social world by asking people to talk about their lives.” (p.114).

Those in-depth interviews were semi-structured. This kind of interviews provides the researcher with greater flexibility and freedom, while still offering a good structure to make

sure that the conversation evolves in the desired direction. The goal of in-depth interviews is to effectively combine structure with flexibility (Ritchie & Lewis, 2013). This means that, on the one hand, interviews were based on a list of prepared, open-ended questions and probes but that, on the other hand, interviewees were given the opportunity to elaborate more on certain topics if they want to. Those semi-structured interviews also enable the interviewer to adapt the interview questions according to the interviewees' answers and to make sure all the topics are covered.

Although the interview guide had a certain order, questions were not necessarily asked in this same order. This enabled the interview to “unfold in a conversational manner offering participants the chance to explore issues they feel are important” as semi-structured are supposed to (Longhurst, 2010, p.143). Additionally, probes were prepared in order to be asked to the interviewees to obtain meaningful and in-depth information from them. As Ritchie and Lewis explain (2013), probes are meant to be used consecutively. The researcher should not stop asking questions and probes until he feels that saturation has been reached (ibid.). Thereby, all of the possible information is explored, which enables a thorough understanding of the interviewees' perspective (ibid.).

The interviewer's role in such data collection is highly important and conducting in-depth interviews requires some skills. First, the interviewer should be able to listen properly to what the interviewee has to say (Ritchie & Lewis, 2013). Being able to understand and digest interviewees' answers in order to decide which further questions or probes to ask is therefore crucial (ibid.). Second, in-depth interviews call for a clear and logical mind (ibid.). This means that the researcher should be able to think quickly, to identify the essential points of the interviewees' answers and to thoughtfully decide how to pursue the conversation and which questions to ask (ibid.). Third, the interviewer needs to have a good memory because it is sometimes necessary to return on a certain point the interviewee mentioned earlier in order to ask for deeper or additional clarifications (ibid.).

Finally, in order to avoid as much as possible researcher's bias, reflexivity has been taken in account very seriously. Because the researcher is in fact involved in the data collection method chosen in this research, it is crucial to acknowledge the asymmetrical power relation between the interviewer and the interviewee (Kvale, 2002). Besides, during the interview, far more happens than simply the collection of verbal data, a relationship is being established (Nicolson, 2003). As Nicolson (2003, p. 138) explains this relationship “becomes almost a

third actor in the research scenario”. In social sciences, subjects can, for example, be affected by the “process of being studied” (Ritchie & Lewis, 2013, p.13).

Moreover, researchers should strive to reach or to tend as much as possible to be objective and neutral (Ritchie & Lewis, 2013). Indeed, during in-depth interviews, the researcher is involved in a co-construction of the world and the communication between him and his interviewee is not only a transmission of message. This communication takes place in a specific context. Researchers should therefore try to minimize as much as possible their influence on interviewees’ views during the course of in-depth interviews (ibid.). For instance, not divulging personal information about themselves during data collection or avoiding leading questions are measures that can be taken in order to strive for neutrality and objectivity (ibid.). It is therefore necessary to reflect on both interviewer’s and interviewees’ attitudes, roles and expectations in order to better acknowledge the researcher’s bias. However, neutrality or objectivity remain an ideal that can never be entirely reached (ibid.).

### **3.2.3 Operationalization**

Ten Interviews were conducted during the months of April and May for this research. The initial planned period to conduct those interviews was extended in order to better adapt to the interviewees’ tight schedule. The interviews were conducted in French or in English, depending on the interviewees’ mother tongue. As such, nine of the interviews were conducted in French and one of them was conducted in English. Every interview was audio-recorded and transcribed verbatim for the earliest possible (i.e. the same day or the day after). The approximate mean duration of all ten interviews is 41 minutes. Interviews conducted in French were translated in English. A verbatim transcription often provides the researcher with a great amount of data. This is why data needs to be organized, coded and analyzed very carefully, as it is going to be further explained bellow.

The interviews were conducted in the place of the interviewees’ choice, namely their office or a quiet public space (i.e. Coffee place or restaurant) near their office for those who did not have a personal office in order to make them feel comfortable to talk and to build a rapport with them. Each interview began with the signature of the informed consent, an introduction about what the study consisted of, an explanation of the interviewees’ rights and other practical details. Finally, the interviews were coded and classified on paper as I wanted to be able to visually examine the data.

### **3.3 Data analysis method**

As mentioned above, qualitative analysis was used in order to transform the great amount of data collected in findings (Boeije, 2010). The goal of doing this analysis was to segment the data and, then, reassemble it with the aim of producing interpretative explanations of the empirical data (Boeije, 2010). The goal of doing such analysis is to organize, have a clear vision and give a meaning to the raw data collected (Boeije, 2010).

A coding process is at the basis of this analysis and consisted of reading carefully the data and then, separating it in meaningful parts for the purposes of defining and understanding what the data describe (Boeije, 2010). However, although the coding processes of Grounded theory were used, it should be noted that the goal of this thesis is not to fully develop a ‘grounded theory’ that could be applied in other research but rather to give some insights on the situation introduced by the research question and expand upon current theoretical conceptions. As mentioned before, this process was done on paper as it allowed me to properly visualize all the data. This did not pose any problem since the scale of the study was relatively small. The coding process is, according to Strauss and Corbin (2007), divided in three types of coding: the open coding, the axial coding and the selective coding. Each of those coding types will be used in the qualitative analysis of the empirical data collected during the 10 in-depth interviews.

#### **3.3.1 Open coding**

Strauss and Corbin (2007) define the open coding process as the “process of breaking down, examining, comparing and categorizing data” (p.61). This open coding is a way for researchers to open up and look at all the possibilities the data has to offer (Strauss & Corbin, 2017). In practical terms, once the data has been collected, the researcher needs to read it very carefully and to divide it into fragments (Boeije, 2010). In order to do so, all of the interviewees were printed and read carefully several times.

Then, all the fragments must be compared with each other and grouped into categories that have the same subject (Boeije, 2010). This comparison should be detailed but not too much, as it still needs to enable a comparison between the fragments (Boeije, 2010). Each category must be labelled with a code (Boeije, 2010). The open coding process results in a clear organization of the data and an indexing system (Boeije, 2010). Along this process, the researcher should keep several questions in mind such as “what is this person trying to tell?” or “which experience is represented here?” (Boeije, 2010, p.99). For instance, in this indexing

list, categories such as “SMTCT enable to gain some time” or “SMTCT create some noise” appeared. It is worth noting that the open coding is an iterative process and that it could be resumed at any time when a new code is generated (Boeije, 2010). Saturation is met when a new code would not be necessary (Boeije, 2010).

### **3.3.2 Axial coding**

The goal of axial coding is to relate concepts to each other (Strauss & Corbin, 2007) and to make connections between the categories developed in the open coding (Boeije, 2007). Axial coding and open coding actually go hand in hand, the first aiming to break the data apart, the second, aiming to put it back together (Strauss & Corbin, 2007). The categories developed in the first phase are now tested and confronted with the new material (Boeije, 2010). By making choices among the codes and trying to elaborate connections between them, the researchers try to clearly determine the properties of each category (Boeije, 2010). This process ends up in a reduced and reorganized dataset where the very similar categories are merged and where the redundancies are removed (Boeije, 2010). This process ends up when the categories’ properties are well defined and when no further adjustment is needed (Boeije, 2010). At the end of this step, 13 categories were established.

### **3.3.3 Selective coding**

Selective coding marks the end of the qualitative analysis process (Boeije, 2010). After the data has been fragmentized, it is now being reassembled in light of the problem statement (Boeije, 2010). Core concepts are defined, described and put together in a coherent story (Boeije, 2010). The goal of this process is to answer the research questions and to draw conclusions (Boeije, 2010). Saturation is reached when “new data collection provides data which are consistent with the descriptions thus far and fit the theoretical model” (Boeije, 2010, p. 118). During this step, I realized that all 13 categories could be rearranged and grouped into 10 categories. These are the final categories presented in the results section of this study.

## **3.4 Research ethics**

When doing in-depth interviews, several ethical implications should be taken in consideration. First, interviewees’ privacy should be protected. As mentioned before, all of the names of the participants were changed and replaced by pseudonyms in order to respond to most of the participants’ request to remain anonymous. Moreover, as Allmark et al. (2009)



explain, when conducting interviews, there is a danger of voyeurism and the researcher could be tempted to focus on the elements of the study that are the most sensational. Interviewers should therefore try to avoid asking questions and “probing into areas that at least one interviewee would prefer to keep private” (Allmark et al., 2009, p.5). The subject of SMTCT is not very likely to lead to sensitive questions. However, making sure that interviewees did not go off track or did not mention information that was too private and, therefore, not necessary was part of the collecting data process.

Finally, the researcher must be careful to avoid the pitfall of “forcing the data” to fit preconceived assumptions or hypotheses when doing the data analysis (Flick, 2013, p.306). For example, the researcher should not only try to pick data from the data set to support his preconceptions but should also include “negative cases and discrepant data that would disprove or complicate findings” (Flick, 2013, p.306). Here, again, the researcher should try to reflex on and try to identify his own subjectivities (ibid.). For instance, in this study, my preconceived assumptions were that SMTCT can be revolutionary for working environments. I did not expect to have such nuanced results. Including both results that confirmed my preconceived assumptions and results that confronted them helped me not falling into the pitfall of “forcing the data”. Moreover, being surprised by the data resulting from the in-depth interviews has enriched my experience of doing this thesis and made the process way more interesting than I thought it would be.

## 4. Results and discussion

This study aims to identify and understand how employees perceive the use of social media type collaborations tools (SMTCT) at work. With some experts in the computer industry believing that the use of social networking tools at work will overtake emails within 10 years, the growing role of such tools as already been recognized by many business researchers (Cardon & Marshall, 2015). The use of SMTCT at work has become an important phenomenon with significant economic and social implications. However, very little research has been done on the impact of such tools on employees' experience and on how they perceive the use of it. The following findings of this research highlight how employees' perceptions on SMTCT can be diversified and conflicting. Even though many concurring views were expressed during the ten interviews completed for this research, contradictions also emerged from them. However, three main topics emerged from this research within the interviews that allow for an elaboration that begins to answer the research question and sub-questions.

First, the findings highlight the fact that SMTCT tend to have an impact on employees' relationship with *immediacy*. SMTCT enable employees to save some time for different reasons such as communicating in a way more straightforward and targeted way or benefiting from other employees' connectedness and responsiveness. Employees tend to see SMTCT tone of voice less formal, which enables them to create more intimate relationships with their colleagues. Finally, it enables employees to communicate with each other beyond geographical limitations. However, we could also observe that this immediacy can also generate a feeling of loss of control over time among employees.

Second, SMTCT induced some transitions in the way people *share and exchange knowledge*. While respondents tended to perceive SMTCT as a way to better learn collectively by sharing their views and experience as well as a way to centralize and archive knowledge. They also seemed to recognize that SMTCT do not enable a very organized and structured archiving.

Finally, SMTCT seem to have an impact on employees' *mental resources management*. The addition of new tools on top of many already existing tools within organizations seem to be sometimes a bit complex to handle. Having to deal with a great variety of attitudes and behaviors from other employees towards SMTCT and having to deal with a multiplicity of communication tools can sometimes increase employees' mental load.

## **4.1 Immediacy**

The first observation resulting from the data collection process is the fact that SMTCT (Social Media Type Collaboration Tools) seem to have an impact on employees' relationship with immediacy. The reasons why the interviewees perceived SMTCT as having an impact on their relationship with what can be characterized as immediacy are varied and multiple. Many of the interviewees explained for instance that they see those tools as time savers, enabling them to constantly staying in touch with their colleagues or to quickly obtain pieces of information. Additionally, SMTCT was seen to enable them to be more responsive and to benefit from other employees' responsiveness, they enable a communication that is targeted and effortless, and finally they have an impact on their relationships with their colleagues.

### **4.1.1 Immediate connection**

As Samuel, a 42 year old internal communicator in an international institution, explains below, Yammer is an easy and fast way to obtain a piece of information in a short amount of time. People just have to post their questions in a group and someone will answer.

“The thing is that you have the answers somewhere, probably, in the intranet or some, you know, documents. Yammer is...it's easier to get an answer. It's quicker. You just ask it, put it out there and someone replies. Or maybe just put a link "hey, have a look here".”

In other words, instead of researching to find the right information, Yammer users mobilize their colleagues' knowledge to help them answer their questions or solve their problems. As Samuel explains further, those colleagues will either know the answer or help in locating the answer within existing and available information.

“Instead of looking in the intranet where, of course, you don't have a search engine like Google, so, sometimes, you search for stuff... It's not obvious that you get what you want... Also for lazy people... You know it's easier to ask a question than to search for an answer, so this is a time saver for sure.”

Other users' reactivity is also something that Emma, a 26 year old marketing officer in a regional agency, values.

“If I need a piece of information, people are highly reactive. It’s super pleasant and it enables me to move forward quickly and not having to send an email or to make a phone call.”

Leo, a 29 year old project manager in a production company, explains that Slack helps him with quickly getting opinions from his colleagues about their running projects. Having those opinions enables him to take decisions or to satisfy a client’s request, eventually enabling his organization to cope in a highly competitive sector.

“[I use Slack to obtain] quick opinions in order to react quickly enough and, perhaps, adjust a video or address a client’s request. Because we constantly get “it’s urgent” requests from our clients. Every single day. And because the audiovisual sector is saturated, we need to be fast, to react quickly.”

Sophie, a 32 year old partner in a human resources start-up, also argues that Slack allows her and her team to be more reactive to their clients’ questions and requests. She, for instance, explains that when she is at a meeting with their clients, she can instantly answer those clients’ questions without having to wait to email or call her team afterwards.

“This allows me to make sure that I can answer client’s questions as fast as possible. [...] So, typically, I am at a client’s, IT has a burning question, I will not wait during three hours until I meet with my team, I will directly ask it. Therefore, we don’t wait.”

For his part, Oliver, a 25 year old financial funds manager, explains that he often helps his colleagues to quickly answer their client’s questions. They will ask him on Slack to provide them with some information or a quick update on their funds.

“For example, my sales people often have questions from institutional or private clients who ask “Listen, I don’t understand why you have this in your fund”. Sometimes, the sales person doesn’t have the answer so they will transmit the question by saying “This person asked me this question, can you answer it? Can you make a quick update, a small thing?”

For each of these interviewees, SMTCT are perceived as a tools that enable employees to be more connected and responsive to their colleague’s requests and vice versa. Respondents suggest that benefiting from their colleagues’ responsiveness helps them being more efficient whether if it’s in their everyday work or to meet their clients’ requests. Given that SMTCT are perceived as a way to foster efficiency among employees, they also and consequently can be seen to foster more “strategically aligned behavior” (SAB). This is clearly a form of what

Gagnon and Michael (2003, p.26) defined as “on-the-job actions that are aligned with the strategy.” These can be then be divided into two types of actions: task performance and contextual performance (van Riel, 2008). In this case, the responses of the interviewees seem to suggest that SMTCT foster actions that correspond to task performance, particularly as this increasing efficiency corresponds to actions that contribute to the organization’s strategy.

#### **4.1.2 Straightforward and targeted**

In addition to allowing for immediate connection, SMTCT also allow for something the interviewees agreed upon: SMTCT enable a communication that is targeted and straightforward. First, Leo explains that Slack’s channels are very convenient in order to target your communication to the right person, as each channel is dedicated to a specific theme, with specific people.

“Actually, we have different channels and each channel is going to be used for each of the subjects. [...] You can split your communication. You can say “I’m going to communicate with one person”, “I’m going to communicate with a group of people” or “I’m going to communicate with the whole enterprise”. That’s super convenient!”

Sophie also appreciates the possibility to create these different channels which enables to create a well-organized communication and to avoid or reduce confusion throughout the organization.

“What I find great [...] is the fact that you can separate the channels. So, working by themes, that’s great. But not the whole team, it’s not a big pot where everyone drops his thing, no, not at all. It’s really... It allows to split the subjects and to put the right people on the right topics.”

Leo also describes how people communicate differently on Slack: in a more direct and simple way. He thinks that Slack is used in order to communicate short pieces of information without greetings or closing formula.

“I got the impression that Slack forces people to be direct and to use short messages. So, as I said before, avoiding to wrap up everything. And, so, on a daily basis, I’ve got the impression that I’ve saved some time.”

Amy, a 25 year old business developer in a start-up that connects parents with babysitters, explains that she uses Slack to share small pieces of information or quick questions with her colleagues.

“You don’t have this formal aspect when you have to say “Hello, I hope you are well” (laughs). On Slack, you directly ask your question. You don’t sign off. That’s why it’s really quick.”

Therefore, SMTCT tend to offer a way to communicate in a more effortless manner than, for instance, emails. This was confirmed by Emma \when she explained that communicating with Slack requires a smaller investment than communicating with emails.

“With Slack, I don’t really worry much. Sometimes, I don’t even say hello but.... “Do you have this info?”, “Do you approve?”, “Is it okay for you?”. And, then, I really saved some time.”

Sophie explains that Slack helps her to save some time compared to emails or phone calls and that this time gain is much appreciated in her busy schedule.

“I often rush from a meeting to another.... Sometimes it takes 30 seconds to ask them a question while making a phone call... This would automatically be longer and, sending an email, typically, I wouldn’t see myself do that again.”

Oral communication also seems to be more time consuming than Slack when it comes to communicating with colleagues. At least, that’s what Amy, who works in an open space, thinks. First, she explains that Slack is a way not to bother every one of her colleagues in the open space.

“I often need a document we’ve already made or an image... I don’t know where it is. If I need to stand up, to go to my colleague’s desk, to ask him if I can disturb him for 5 minutes... I’ve already disturbed everyone and I disturbed my colleague.”

She also explains that using Slack is a way to have respect for her colleague’s work by letting them the choice to react whenever they want or can. For instance, if a colleague is writing an email when she wants to ask a question, this colleague will either need to stop doing what he was doing or she will have to wait until he’s done.

“If I had asked on Slack, he would’ve checked after he had written his email and I would have done something else while waiting. Then, he would have answered and it would have taken the minimum time necessary...”

To sum up, we can observe here that interviewees perceive SMTCT as tools that offer a way to communicate in a briefer and more effortless way than they would do with emails or one-to-one interactions, for instance. This suggests that SMTCT enable employees to

communicate in a more effective manner than one-to-one conversations and without having to care about email etiquette rules.

Once again, this suggests that employees perceive SMTCT as a way to foster SAB and, more precisely, task performance as it gives them the impression that it helps them increasing their efficiency.

#### **4.1.3 Beyond geographical limitations**

SMTCT also seem to have offered a way for coworkers to better collaborate beyond geographical limitations. Some of the interviewees explained that they had to deal with geographic disparity in their everyday work. As we mentioned before, this disparity can cause problems and make it rather difficult for organizations to be effective than with face-to-face collaboration (Wahl, 2016). Either for multinational enterprises, for companies who have several different locations or for employees who often are on the move, SMTCT seem to enable a communication that is more effortless than phone calls and more immediate than emails.

Amy, for instance, explains that she needs to constantly collaborate with her French counterpart, in Paris. She explains that they need to exchange ideas and think together about their prospective clients all the time. Therefore, she considers Slack as not only useful but even crucial and indispensable.

“With my French counterpart, Slack is a goldmine. Without this, we would have to use WhatsApp. There’s nothing worse.... So, yes, it enables me to work with her very easily.”

Amy’s organization seems therefore to have found and chosen an appropriate collaboration tool that helps its employees to address and counter the issue of geographic disparity (Wahl & Kitchel, 2016). Besides, Sarah, a 46 year old financial director in a car leasing company that is present in more than 40 countries, explains that Yammer has enabled her to know more about what was happening at the international level.

“Some communications are sometimes better shared. We learn things at the international level that we didn’t know before.”

James, a 52 year old internal communicator in an international institution explains that Yammer enabled him to feel less isolated in his own organization. He explains that there are

many internal communicators in his organization but that they all work in different directorates.

“We are all alone to deal with our work in our DG [Directorate General]. If we need an advice or to discuss with someone, we don’t have anybody here, physically. My counterparts are in others buildings, other DG’s.”

When Yammer was introduced in their organization, those internal communicators created a community on Yammer to share questions, experiences, pieces of advice or ideas with each other. This has helped them to exchange views, to collaborate or to simply support each other without having to make a 30-minute journey to meet face to face.

Finally, Oliver explains that Yammer helps him to save some time when he is on the move. With Slack on his phone, he can stay up to date with what happened at work.

“Every now and then, for example, if I go to meet a company.... I’m in the metro, going there or coming back from there, I will use Slack because it allows me to stay informed and not to have to wait until I’m at the office, open my Slack and see what’s happened.”

To sum up, we can observe here that SMTCT has helped our interviewees to be better informed about what was happening in their organization, beyond geographical limitations and to better collaborate with colleagues that work in different locations. SMTCT seem therefore to offer a solution in order to face the challenge of geographic disparity.

#### **4.1.4 Intimacy and equality**

One observation that came out of the interviews is the fact that a different tone of voice is used to communicate on SMTCT. Communication on these media is indeed, as we already mentioned, more straight to the point and informal. Besides giving the impression of a time gain, this informal tone of voice is also perceived by the interviewees as one of the main aspects that make SMTCT social facilitators. Moreover, this informal tone of voice is also giving interviewees the feeling that they are all more equal, that the hierarchy is flattened on SMTCT.

Emma explains that she does not like to communicate in a formal way with her colleagues by email. She’d rather talk with them on Slack, because conversations are more relaxed and friendly, thanks to, among others, the use of smileys.



“I really like smileys and I think it makes the conversation a bit more relaxed. Because there are all of those smileys, all of those little things that make the conversation a bit more accessible.”

Just like Emma, Sophie thinks smileys play a role in building a friendly atmosphere on Slack. She also explains that conversations can be formal as they can be less formal on Slack and that is the reason why she perceives Slack as an intermediary tool between emails and WhatsApp.

“It’s really nice. It’s like a WhatsApp combined with emails, to me. It’s really both of them. So, basically, it’s purely professional and, now, next to this, we also have conversations that are less professional, too. That’s what brings us together, in a way.”

Leo explains that professional conversations and relaxed, informal conversations are also both part of Slack in his organization. He explains that Slack has created a nice dynamic, a friendly atmosphere where people can make jokes and use smileys.

“We tend to react very quickly to certain things, to create a very friendly atmosphere with smileys, things like that. So it brings a side that is very, very.... You can make jokes, you can post pictures, so it’s really fun.”

This impression of creating more intimate relationships among colleagues is not really surprising because, with SMTCT, employees have the possibility to communicate with their colleagues in a way that is more instantaneous than emails. It actually connects with Hu et al.’s study (2003) that suggested that instant messaging promotes intimacy and that established a positive relationship between the amount of instant messaging usage and verbal, affective and social intimacy. Moreover, it has also been shown that text-messaging enable students to more carefully formulate their messages than with telephone or face-to-face interactions, which is typically an indicator of a situation that fosters intimate exchange (Lenhart et al., 2001 as cited in Hu et al., 2003). We could therefore believe that those results could be extrapolated to a population such as employees.

Besides, Amy explains that she really appreciates the fact that she does not have to wonder how to act on Slack, whether it is with one of her team’s colleague or with her boss. There seems to be a general agreement on how to act on Slack.

“With Slack, you don’t need to wonder because you know that everyone uses it in the same way. There is a kind of equality.”

Indeed, as Amy suggests when she mentions this “kind of equality” present on Slack, SMTCT seem to have flattened the hierarchy that exists in some of the interviewees’ organization. James explains that managers that use Yammer do it as people and not as managers, that everybody seems to be more equal on Yammer than in real life.

“Yammer gives the opportunity to bring together the mere employee with the general director. They are on a platform where there are no more grades. [...] It has virtually flattened the pyramid.”

All of this suggests that SMTCT actively participate in building a free and open environment. Smith (2001) explains that tacit knowledge, which refers to the beliefs, values, perspectives or the “know-how” (Civi, 2000; Saint-Onge, 1999), is typically exchanged through casual and spontaneous face-to-face interactions that occur in an environment that is both free and open. We could therefore extrapolate this to the interactions that occur through SMTCT. Moreover, organizations that succeed in creating favorable conditions for an open knowledge sharing can foster innovation (Gibbs et al., 2013).

Finally, SMTCT also seem to have an impact on how people network and get to know their colleagues. By being part of her organization’s Yammer community, Sarah explains that she gets the opportunity to spot some people and to know they exist. However, she also explains that she does not get in contact with those people via Yammer.

“I can discover a colleague that I don’t know. I will see his picture and then, his style of communication. It will give me an indication on how this person is...But, it doesn’t mean anything. [...] A first contact will never happen on Yammer.”

James explains that, on the contrary, Yammer has given him the opportunity to get a new position as an internal communicator within his organization. He was spotted and got directly contacted via Yammer.

“Yammer has offered me the opportunity to get, not a new job, but to go in another organization. I keep on doing what I was doing already before, but I do it here. I didn’t apply, they came to get me.”

Given all of this, we can see here that SMTCT users have the impression that they’re building a different relationship or strengthening their relationships with their colleagues on it thanks to the lighter and less formal atmosphere of it. Besides this lighter tone of voice seem to enable relationships of equals with each other. Finally, those tools also seem to enable employees to identify, locate some of their colleagues or, on the contrary, to be identified by

them. In other words, SMTCT seem to provide employees with a clearer vision of the social network in their working environment (Cao et al., 2013).

#### **4.1.5 Struggles**

SMTCT seem to have brought a lot to their users in terms of time management and socialization with their colleagues. First, many of the interviewees perceived such tools as a time gainer thanks to people's responsiveness when it comes to be quicker in their own work (Emma, Amy, Leo and Oliver) or to answer a client's request (Sophie, Leo and Oliver). Second, it has helped them to collaborate beyond geographical limitations. Finally, the informal tone of voice of Slack and Yammer seems to lead to an easier and more effortless way to communicate as well as to more intimate relationships among employees.

##### **- Immediate connection**

However, other people's reactivity is not always perceived as positive, especially when the interviewees become those "other people". Because communication is immediate on SMTCT, some of the interviewees admitted they were feeling pressurized to be more connected and responsive, too. Emma, for instance, explains that Slack can become a burden when she feels that an interaction requires an immediate reaction on her part.

"[This idea of] being constantly available, being online. It means we are there... But we are not necessarily constantly on the app and we have other things to do."

This means that, even if other people's responsiveness can be very helpful and valuable in an employee's work, this responsiveness can be a burden when employees lose control over their own time management. SMTCT can therefore become somewhat intrusive for their users. Besides, Oliver explains that the information flow going on Slack is constantly growing. This means that it can sometimes become hard to follow.

"The risk I perceive with Slack is that, the more we're going to use it, the more information we're going to have. We have to take the time to read them, we need to take the time to see them because, otherwise, you lose ground. That's why you need to use it often enough."

This suggests that besides having to be constantly available for their colleagues, employees also need to constantly have an eye on what's happening on SMTCT to avoid the risk of losing track. In other words, adjacent to the imperative of availability is the imperative of pace keeping.

### - **Beyond geographical limitations**

Moreover, this need to be available and connected even sometimes persist beyond working hours. Sophie, for instance, explains that she has recently checked what was happening on Slack during her holiday.

“So, typically, when we [she and her family] were on holiday, last week, I could see on Slack that a meeting had gone wrong. And so, you pay attention on what’s happening and it allows you to take action at the right time.”

Oliver also sometimes uses Slack outside working hours. He explains that it is sometimes difficult to make a clear distinction between private and professional life. He installed Slack on his phone and sometimes gets messages at night from his colleagues. Even though he explains that people who send those messages don’t always expect a fast or immediate answer, he sometimes needs to answer some urgent questions.

“For instance, if someone sends at 10:30 “listen, we have an enterprise appointment tomorrow at 8:30, can you go?”, then, yes I will answer directly because it’s tomorrow at 8:30. But, depending on the message, I know if I may allow myself not to answer.”

James also sometimes uses Yammer when he’s not at work. He explains that it is available everywhere, which is very convenient because he uses it on the train when he goes to work or goes back home. He admits that he also sometimes connects himself on the platform when he is at home.

“And sometimes, even at home... Which I would like to avoid but, it happens when I have nothing to do.”

This suggests that even though SMTCT, which are available and accessible anywhere and anytime, can be really helpful when it comes to communicating beyond geographical limitations, they can also cause blurred boundaries between private and professional life.

### - **Straightforward and targeted**

Beyond this, because communication has become so informal, effortless and free, in a way, the interviewees noted that employees do not always communicate crucial information. If this has a positive aspect on relationships with their colleagues, as we mentioned before, some people also realize that a greater amount of noise is, thereby, created.

Leo, who had, for example, explained how nice it is to share jokes and information that are not strongly related to work, also admits that, sometimes, Slack can become a burden

when communication is less relevant than it should be. First, because some people are sometimes investing too much time on sharing this non-relevant information, secondly, because this non-relevant information is going to be processed the same way as some other pieces of information that are more strictly related to work.

“There are always some people who don’t use it [Slack] the right way. Even if it forces to be short and direct, some people will do it their own way and send 3000 notifications. There, we will lose some time, for sure.”

Amy is of the same opinion and explains that sometimes, one of her colleagues uses Slack as a writing pad, noting down all her thoughts and ideas. She explains that it can be worthlessly overwhelming.

“She exaggerates, every time she thinks of something, she notes it down on it [Slack] whereas we have planned meetings to share all of our new ideas. My Slack never stops ringing.... She could keep everything for herself and express everything during a meeting instead.”

This suggests, therefore, that while people tend to less filter the content they share on SMTCT, they have to filter more what other people share with them.

Emily, a 40 year old business development associate in a start-up that connects parents with babysitters, realizes that she does not really see how Slack can be useful in her everyday work. As she explains, conversations on Slack are just creating a noise that she needs to filter.

“I must say that many messages that I received, that were intended to everyone... Either I don’t understand them, either I can’t do anything with them because they don’t concern me. So I try to filter, you see. Filter the noise. I don’t need to know everything.”

Sarah also explains that she sometimes perceives what’s happening on Yammer as some noise she needs to filter.

“At one point, I found that there were some things that were completely useless. So, of course, while they are in the group, people are free to communicate. [...] So I filter the messages. So, I have a selection of messages, I read them or I don’t.”

The fact that employees feel the need to filter the great amount of information shared on SMTCT and that they can sometimes feel overwhelmed connects to Bawden and Robynson’s (2009) shift in the way we deal with information. Indeed, employees are not trying to collect

as much information as they can, but rather are trying to refrain it, and to select the most useful and relevant information from it. Consequently, we can assume that, as Chantepie (2009) explain, while information's perceived value has diminished, employees' attention is more than ever needed in order to process the information.

Besides, more than creating a communication clutter, this greater freedom for everyone on SMTCT also leads to a loss of control over internal communication or, at least, a transfer of this control from the staff to all of the employees. Sarah explains that her company will soon enter the public stock market. Management will therefore have to find a way to avoid sensitive information to go public, such as the acquisition of a customer.

“We'll really have to educate people and say “Watch out! You can't communicate this anymore!”. This means that people will have to force themselves to wonder “Can I communicate this, or not?” and maybe it will demotivate some people to communicate on Yammer, if they have to think, each time, if they can write it or not.”

A loss of control over this internal communication can also sometimes lead to undesirable behavior on the part of some employees. Samuel explains that there were some episodes when some employees said things he would not expect from someone from his organization.

“It's difficult because there is this balance between freedom of expression on one side and on the other side, you know, this kind of duty we have of loyalty towards the organization, the values of the organization. [...] It can be annoying and difficult to manage.”

For all of these reasons, some employees express the need to restrict their use of SMTCT, precisely because they do not want to be overwhelmed by the notifications or messages that are shared on it and that are not necessarily useful for them or by other employees' questionable behavior. For example, Anna, a 54 year old head of unit in an international institution explains that she dedicates some restricted time almost every morning to see what's happening on Yammer. This way, even though she thinks that a lot of information shared on it is not really relevant, she never gets bothered unduly. Moreover, she does not really perceive Yammer as having any significant impact on her own time management or personal organization.

In conclusion, while SMTCT is often considered by the interviewees as wonderful tools that help them save their time by benefiting from their colleagues' responsiveness, by not having to care about formalities or by communicating essential pieces of information, even if

they seem to consider SMTCT as a way to reinforce their relationships with their colleagues, those tools can also be a burden in those interviewees' everyday work.

Therefore, we can see that interviewees' experience with Slack or Yammer can be very contradictory. For instance, while other people's responsiveness is appreciated, the imperative to be connected and available can be annoying. Moreover, while employees appreciate the fact that they can communicate on SMTCT in way that is more free and effortless, some of them realize that this freedom of speech also sometimes fosters the creation of more content and, eventually, more noise.

## **4.2 Transitions in knowledge sharing and vision**

The introduction of SMTCT has led to changes in the way employees share and exchange knowledge with their co-workers. Indeed, SMTCT seem to have transformed the learning process, the archiving of information and the vision employees can have of their organization and their working environment.

### **4.2.1 Collective learning process**

SMTCT seem to be very useful when it comes to knowledge sharing. James, for instance, as we mentioned before, explains that Yammer helps him to communicate and share experience with his counterparts that are in other units. Whether it is strongly related to work or not, he likes the fact that he can learn from other employees' experience.

“Sometimes I have very strategic questions. For example, we need to radically transform the entire DG, we need to share very sensitive messages because we will maybe need to release 100 coworkers... ‘What do you think?’ ‘What’s the best way?’ And, there, you receive ideas from others.”

This relates to what Cao et al. (2013) explain to be a SMTCT typical characteristic: enabling individuals to identify employees that have the same specialty or expertise as them. Besides, as Leonardi et al. (2013) explain, SMTCT offer more visibility to the information that is shared on it, and this information can therefore reach an enormously wider audience across the organization. This is what James also explains. Indeed, according to him, SMTCT have multiplied the number of people likely to see the information he shares, compared to emails for instance. He thereby suggests that communication on SMTCT is less scattered and more centralized, open to everyone.

“Everything is visible to everyone. With emails, what is annoying is that only the recipients will see the information. And sometimes, this information can be useful for other people, while you don’t even suspect it. On Yammer, everything is public so, you share with everyone and the one who needs it will find it and maybe get in touch with you or join the conversation. So the fact that it is open, transparent, in the public square, it’s the foundation of knowledge sharing.”

For his part, Leo explains that Slack has an added value in the way he exchanges information and ideas with his colleagues. As he works in an audiovisual enterprise, he often needs to send visual documents and, as he believes, Slack can be more efficient than emails in doing so.

“In the audiovisual sector, we always have visual supports, because we talk about visual supports. We talk about videos, we talk about pictures, we talk about many things. [...] So, yes, I find it more efficient, yes. But, maybe it is because of the sector we work in.”

Anna explains that she is only interested in articles that are connected to her work or her organization, but also admits that it is never directly related to her everyday work. She explains that she only uses Yammer to read what other people share about politics or to have some professional inspiration.

“It’s either information about politics, generally... It’s sometimes about a personality or about work. It can also be practical information that the organization shares about some events.”

James explains that he likes to share his experience to help other employees. When he experiences some difficulties or faces a specific problem, he likes to share the solution he came with when he thinks it might be useful for his peers.

“When I do something that I think might be good to know for others... Because I had a hard time with a problem and I solved it, I share it in the right communication.”

Finally, James also explains that Yammer can be useful when it comes to know-how sharing. He, for instance, explains that he once attended a Lightroom workshop during a lunch break, organized via Yammer.

“We have different communities. For example, the photography community. We’ve already organized some meet-ups. A specialist... For example, Lightroom, which is an



app to edit photographs... And he said ‘I can see that many people would like to discover it [Lightroom]. I offer to explain to you Lightroom basics during a lunch break, an hour.’ And, bang, everything is decided on Yammer. We meet and he explains. He comes with his own laptop, his own Lightroom and, for an hour, you have a complementary class.”

To sum up, we observe here that SMTCT can be seen to have an impact on how interviewees share information and knowledge with each other. First, SMTCT offer a way to share visuals more effectively than emails or conversations. Second, they seem to encourage employees to share inspirational information that are or are not strongly related to their everyday work. Finally, they offer a way to share information in a way that is less isolated and more open to every user, and thereby, more visibility to the content that is shared (Leonardi et al., 2013). All of this therefore suggest that SMTCT help in improving the process of knowledge transfer, which is one of Alavi and Leindner’s (2001) four processes of knowledge management.

#### **4.2.2 Archiving**

Some of the interviewees explain that SMTCT can also be very useful in terms of archiving. Indeed, all of the information that has been shared is centralized and more easily retrievable than with emails, as Leo for example explains.

“Everything is archived. If you want to retrieve a document that has been uploaded, you can retrieve it more easily than with emails, when it is sometimes difficult.”

Amy also explains that all of their documents are systematically exchanged on Slack. It is therefore really easy to retrieve those documents.

“We send all of our documents by Slack. So, if I’m looking for a document, I look through my files and I see everything we exchanged.”

However, Amy also explains that those files are not as well organized as they could be in a drive. Therefore, more efficient ways to store documents and knowledge seem to exist.

“We have plenty of tools in our [shared] drive. And it’s very well organized. And, so, I find the things that we share on Slack... They’re not organized at all. You see, we exchange files or images. Then, when you have to find it, you look through all the files... You see everything and nothing is especially organized.”

SMTCT thus seem to be handy when it comes to sharing files, documents, experiences or ideas, and when it comes to centralizing all of this knowledge. However, it may not be the best way to store all of this knowledge that has been shared, as knowledge seem not to be effectively organized and, thereby, easily retrievable.

In conclusion, while SMTCT enable pieces of information and knowledge shared by employees to be more persistent and centralized, they surely not are the best way to archive information for it to be organized and easily retrievable. The Alavi and Leidner's (2001) process of knowledge storage and retrieval seem therefore not to be more effectively done through SMTCT. This means that if organizations do not develop alternative solutions and tools that enable an effective knowledge storage and retrieval, they might run the risk of losing track of this knowledge (Alavi & Leidner, 2001).

However, James explains that he had some debates with experts in knowledge sharing that were arguing that SMTCT may not be about the capitalization of knowledge, but rather about the creation of this knowledge altogether.

“I used to see Yammer as a knowledge base where you capitalize what people know, because they typed it in. [...] They told me “The important thing is not the knowledge that is written on the platform but it's rather the knowledge that has been created in people's head.”.”

As James suggests, the concept of knowledge management could therefore not only be about finding the best processes to store knowledge and capitalize it, but also about employees collectively constructing knowledge. Precisely, SMTCT could be efficient knowledge management tools, as they seem to allow employees to have access to a wider range of knowledge and, therefore, to get the opportunity to discover a variety of perspectives and develop more complex representations of the challenges they encounter (Gray et al., 2015).

### **4.2.3 Vision**

Some interviewees explained that SMTCT have an impact on the vision employees can have on their organization. For example, Leo explains that Slack allows him to better understand what is happening in his organization and to better keep being up to date with his colleagues' progress on the different projects.

“I can easily know or, I get more information than if I didn’t communicate on Slack. And, so, I can easily know at what level of progress we are on a project via this tool. Because we communicate a lot and so, I get more feedback.”

Oliver explains that Slack allows the different departments of his company to better communicate with each other, since each of them is located in a different room. Thereby, all of the departments are better informed on what other departments do.

“We’ve even noticed that now the Private Client division, which is the least flexible of our departments, now starts to use it too in order to, precisely, communicate internally and to be better informed on what’s happening in the enterprise and in the other departments.”

This suggests that SMTCT can help employees in having a clearer vision of and be more aware on what is happening in their working environment. James, for his part, explains that Yammer helped him to better understand what his organization, was doing, by discussing with his colleagues and by reading their explanations on certain current topics that are related to his organization.

“I will never take the time to read all of the reports that are online about what the Commission is doing. It’s so hard to read. But, on Yammer, when people discuss about it, about their politics, about their work, their everyday life, they do it with everyday words. And only by reading this, it sheds light on it. You don’t suddenly become an expert but it shed a light on it.”

In this case, rather than giving James useful information that could have value in his everyday work, SMTCT has enabled him to better understand his organization’s impact on its environment. This connects to what Civi (2000) explains: when employees have access to their organization’s information, it can help them to give a meaning to their environment. This can foster, for instance, the creation of a shared vision among employees (ibid.).

However, many interviewees also claimed that discussions about strategy are not especially part of SMTCT in their organizations (Samuel, Sarah, Amy and Sophie). Sophie, for instance, explains that if Slack is a great tool to manage people and make sure they are aligned with her company goals, she thinks it will never be as effective as face-to-face meetings.

“I still prefer to do meetings or things like that. To me, Slack can’t replace an alignment on a product roadmap or on our global vision. I wouldn’t see myself do that on Slack, typically.”

Therefore, while SMTCT seem not to be especially likely to increase what Boswell (2006) calls employees’ line of sight (LOS) as they do not enable them to better know their organization’s goals (i.e. LOS-objectives) nor how to contribute to those (i.e. LOS-actions), they can, nevertheless, help create an internal dialogue (van Riel, 2008). Creating this dialogue within the organization and enabling the different department or units to better stay informed about what each other is doing can increase the organization’s internal synergy and, thereby, the organization’s strategic alignment (ibid.).

Finally, it is legitimate to wonder if SMTCT enable employees to see further than their own job, to perceive the big picture. If communication is fragmented, if SMTCT are only used in order to communicate short pieces of information, are employees really able to have a wider vision on what is happening beyond their own job?

Emily, for instance, explains that she regrets the fact that information shared on Slack often suffers from a lack of context. She admits that she is a great advocate of emails because they enable a richer communication and are more suited to her everyday work.

“Honestly, I find emails the best for what we’re trying to do in the knowledge economy. Maybe, if you work in a factory, and you work with machines, you are a hairdresser, for a chain hair salon, you’re a taxi driver, I don’t know. And you have to have your laptop, you don’t have any desk, and you have to receive and send short messages, very occasional, maybe Slack is magnificent and you will hate and never use emails. I think it depends on what your job is. I have to write blog posts and send them to someone to get feedback.... I couldn’t do this with Slack.”

What Emily highlighted suggests that, even though SMTCT enable an instant communication and sharing of what is closer to real time communication, they maybe do not allow every employee to better understand their working environment.

### **4.3 Mental resources management**

A point that was frequently reiterated during the interviews is the fact that not all employees are equal regarding the use of SMTCT. Many interviewees explained that emails remain the main tool to communicate internally (James, Emma, Sarah, Matteo and Anna).

Besides, whether SMTCT have become the standard way to communicate or not, the level of participation seems to be uneven in all of the interviewees' organizations.

For instance, Sarah explains that the chairman of her group posted his new year greetings on Yammer but that he also had to send them by email because a lot of employees never go on Yammer.

“There is a growing awareness that not everybody is an enthusiast nor joined the tool to communicate. I am convinced that, in the company, there are still 20 to 30 percent of the people that never go on Yammer.”

Emma also explains that even in her team she can see varying levels of participation. While some people seem to feel confident in their use of Slack, some remain more careful when it comes to participating.

“Some people are way more careful and others don't hesitate to, to share on Slack and are connected all the time. Others sometimes forget to log in, like me... And others don't use Slack at all to communicate.”

#### **4.3.1 Digital divide**

Some of the interviewees tend to observe a gap between younger employees' and older employees' use of SMTCT (Leo, Emma, Oliver and Emily). Leo, for example, explains that the only employees who tend to have a lower participation on Slack are both in their forties.

“Maybe it is a clash of generations, once again, but my boss goes once a week on it [Slack]. He's forty. Another one who's the same age maybe goes once a week on it. And all of those who are in the same age category.... I will say 23 to 32.... They all are on it. And we're all on it on a similar manner. [...] The two 40-year-old men, they almost never come. But, once in a while, they spend one hour on it and look at all the things that have been said, to make sure they didn't miss anything.”

This suggests that, not only, employees do not all participate at the same level, but that they also organize their time differently on SMTCT. As we mentioned above, some limit their use of such tools, organize a moment in their day to have a look at it, while others are constantly connected and available on it. As Leo suggests above, millennials from his organization tend to have a less organized and more continuous participation on SMTCT than older employees.

For Oliver, SMTCT are more instinctive and, therefore, easier to use for younger employees because they are generally the most active social media users. This is consistent with Simons (2010) description of Generation Y: a generation that is highly and more familiar with technology than previous generations and which is more likely to easily adapt to new technologies. Therefore, this generation is characterized by Kaifi (2012, p.31) as a “great asset when it comes to working with new technologies”. However, Oliver also points out the fact that he was impressed by some of his older colleagues who are almost as active as him on Slack.

“I think age also plays on the fact that some people never go on Facebook or never go on other social networks. So, it is true that if you’re a Facebook or LinkedIn user, understanding Slack is really intuitive while, for them, it’s a real discovery. So, it’s true that it takes more time for them. But I think that... At least, in our company, I’m impressed to see some people who I didn’t think would use it and who, in the end, nearly use it as much as I do. So... Some are capable (laughs).”

For Leo and Oliver, this difference in usage could also be a question of habits. Indeed, according to them, younger employees are more likely to easily adopt Slack compared to older employees who are used to only communicate online with emails. Leo explains that his boss thinks Slack is time-consuming, only perceiving it as a gadget.

“My boss, who is afraid to use the tool, who has the feeling that it is time-consuming... While, what I try to explain to him is that it precisely saves us a huge amount of time. Maybe it is because he doesn’t use it the right way.... Or sees the “gadget” aspect, “novelty item” that young people use. So I think he’s got this vision. And I don’t think he will change his habits because he’s been working this way for 20 years and maybe he doesn’t want to change his habit in order to install a new tool.”

Oliver explains that Slack was installed 6 months after he had arrived in his organization, and that it may have been easier for him to adapt than for some of his colleagues.

“I think that it must be harder for a person who, for 15, 20 years, has always used the same tools to say “Okay, I’m going to use this, now and I’m going to change everything”. It’s easier for me who arrived one year and a half ago, after 6 months.... “Well, I’ll stop with emails and use Slack, now”... It was way easier for me, of course.”

Finally, for Emily, knowing where to put the limits with collaboration tools such as Slack is a question of better self-knowledge and maturity. Older employees would be, therefore, better equipped to deal and to manage SMTCT.

“People, often with technology and the speed of technology, people tend to jump on the latest technology without any real thinking process... Whether it’s going to be useful or not. I’ve already experienced such tools so I set the limits with them because I know it’s going to have an impact... It bothers me. I know myself. But maybe it requires maturity to be able to filter... To organize oneself.”

In conclusion, while some interviewees perceived a gap between younger and older employees in terms of usage and behavior towards SMTCT, it remains difficult to assert that a real digital divide exists between those different generations. First, because not all of the interviewees expressed the fact that they observed this digital divide. Second, because some of the interviewees that were not Millennials, Samuel and James for instance, seem to be very familiar and comfortable with the SMTCT used within their organizations.

#### **4.3.2 Dealing with many tools**

SMTCT have been implemented in working environments where employees already had other tools and ways to communicate online. SMTCT therefore did not invent online communication. They may have reinvented it, in a way. Indeed, many interviewees have adapted to Slack or Yammer the content they share online with their colleagues by, for example, as mentioned before, sharing shorter and more straightforward messages. Besides, Sarah explains that her and her colleagues started sharing pieces of information that were not shared before using Yammer.

“The successes, for instance, of the inspirational groups initiatives. [...] It was less... We were less aware of that kind of things.”

However, even though SMTCT have partially transformed the way employees communicate with each other, it has not overshadowed the other tools used for online communication. As we mentioned before, almost all of the interviewees continue to communicate by email with their colleagues. And for many, emails even remain the primary way to communicate internally (Sarah, Samuel, James, Anna, Sophie and Emma), as it is generally the case in the business world (Cardon & Marshall, 2015). Moreover, some of the interviewees also explained that their organizations were talking about adopting newer tools to communicate internally (Anna, James, Samuel and Sarah).

SMTCT can be very practical for some employees because, as Amy explains, they are a way to centralize internal communication, a place to join any of her colleagues.

“What I like is the fact that it’s centralized and that, because everybody uses it, it’s a thing that has been implemented by the organization, you don’t need to wonder “How did it get in touch with me? Was it on Facebook? Did he leave a sticky note on my desk? Did he send me an email?” If you want to send... If you want to talk with someone, you systematically go on this platform and, normally, everybody uses it. So, it’s super convenient.”

For others, SMTCT are just another tool among many available and used in their organization. Employees have to juggle with several tools and to wisely choose the right tool to communicate in the right situation. For example, Sophie explains that because not all of her colleagues are on Slack, it is sometimes difficult to make sure that nobody misses anything.

“There is a risk, as I said earlier... We work on Slack, yes, but, beside, there is an audience that does not work with Slack. And so, you have to ensure the same level of information. And so, this is the risk, the problem I can see at this time.”

Besides, because of the varying level of participation on SMTCT among employees, some people need to adapt themselves to other employees’ preferences or behavior. Oliver explains that he is going to use different ways to communicate based on his colleagues’ habits.

“Now, as I said before, the problem is that some people are more active on emails than on Slack. So, you need to know your colleagues to know which, which network, which mean of communication to choose.”

Oliver explains that he mainly uses emails to communicate with his clients, because they are not part of their Slack community, but that he also uses it with his colleagues who prefer to use emails.

“I use it [emails] with some colleagues who use emails way more than Slack. So, I directly use emails because I’ve already lost too much time by trying to use Slack with them.”

Emily, for her part, admits that some of her colleagues need to adapt themselves to her habits. As she already explained above, she had already tried Slack before starting to work in her current organization. She therefore knew she did not like the tool and warned her



colleagues that emails might be a safer way to communicate with her when she is not available face to face.

“I’ve already clearly warned my colleagues that if... That I don’t have... So, I warned them that I don’t have Slack on my mobile. So if you want to make sure I receive something when I’m away, write me an email. So maybe it [Slack] has a bigger impact on other people’s habits than on mine.”

This multiplication of tools can also be overwhelming for some people. Emily explains that she already uses a lot of tools to communicate in her professional life, and that she only sees Slack as a useless tool on top of all the other tools she already uses.

“I think there is a huge duplication of the tools. Compare to WhatsApp... I find WhatsApp interface way more user-friendly to just exchange “okay, alright, something...”. For everything that is deeper, more serious, documents, messages, content... No messaging service will replace emails, to me. I also use LinkedIn messages. So, for me, Slack adds a layer on four or five tools and I don’t have the patience.”

Finally, as Emily explains, one problem with this multiplication of communication tools is that no clear rules or boundaries have been set within her organization.

“Here, we use Slack for internal communication but, at the same time, a lot of emails circulate. So I think that there is no real golden rule, no regulation.”

Sophie explains that she thinks that Slack requires a prior discussion on how and when to use Slack in order to avoid any confusion.

“Actually, I think that there must be a good prior discussion about... Here, we share documents through this channel... “Do we share documents? Do you share links?”. I mean, that kind of things. I think that, for our part, we’re not quite there yet.”

This suggests that one solution to this problem might be to set clearer rules regarding which tool to use in what situation. Those clear and well-known by all rules could facilitate coexistence of the different communication tools within an organization and help organizations and coworkers in minimizing confusion.

## 5. Conclusion

Technologies are taking an increasing role in employees' daily work, and having a significant impact on it. These are indeed causing blurred boundaries: first, on how jobs are delimited (Ashkenas & Bridges as cited in Boswell, 2006); second, between work life and personal life (Poll, 2015). Moreover, people are spending a lot of time at work, which is therefore nowadays a big part in an individual's life. For all of these reasons, exploring the use of tools that have an impact on people's work environment and that can help them accomplish work tasks through social media practices seemed to be very relevant. That is why the aim of this study was to understand how employees perceive the use of new social media type collaboration tools at work. More precisely, the objective was to understand what were the aspects that employees perceive as positive or negative in using those tools, and to understand how employees experience the changes brought by those collaboration tools to their everyday work.

The existing literature about SMTCT and how employees perceive and make meaning of their use appears to be very limited. Therefore, theories about different concepts and phenomena not directly related to SMTCT were used in order to explore and answer the research questions of this study. The goal of presenting all of those theories was to set the landscape in which SMTCT appeared and are today used within organizations. This theoretical framework has helped me in better understanding how to explore people's perceptions, how to build my interview guide and how to give a deeper meaning to the collected data.

In order to explore the topic and answer these research questions, we interviewed employees from different age groups, from different companies of different sectors, and from different area of work within their organization. These employees were questioned about their behavior, attitude and perceptions towards SMTCT. In order to accomplish this, qualitative data methods were used. This choice of methods was highly appropriate as, as Trumbull (2005) explains, the goal of such methods is to understand social phenomena by understanding how people make sense of it. More precisely, the in-depth interviews conducted as part of this study provided this thesis with interesting insights and diversified opinions about the use of SMTCT.

Clearly, the findings of this research show that participants perceive social media type collaboration tools (SMTCT) as having an impact on many aspects of their work and their

work environment. The interviews reveal that three main aspect of work are particularly impacted by their use, namely the relationship employees have with immediacy, the exchange and sharing of knowledge among colleagues and their mental resources' management. SMTCT did definitely bring changes to the daily work of employees.

First, SMTCT thus seem to have an impact on the relationship employees have with what can be characterized as immediacy. For instance, interviewees have the feeling of having, through SMTCT, a more immediate connection with their colleagues. This translates in the fact that employees are constantly available for each other, in order to exchange information or to answer each other's own or client's questions. Besides, it also means that respondents perceive communication on SMTCT as effortless, straightforward and targeted, thereby increasing their efficiency at work. This higher efficiency at work, leading to better task performances, means that SMTCT seem to foster a strategically aligned behavior (van Riel, 2008). It also translates in the fact that SMTCT tend to be perceived by employees as social facilitators as well as a way to communicate as equals, regardless of the hierarchical level. Finally, SMTCT enable employees to communicate and collaborate with each other beyond geographical limitations. This means that it helps employees face the challenge of geographic disparity by enabling them to effectively collaborate at a distance (Wahl, 2016).

However, the impact of SMTCT on employees' relationship with immediacy can also be perceived as negative. The fact that employees are constantly connected and available for each other can actually become a burden, as they feel that there is an imperative to be constantly available for other employees, and even at their disposal. Additionally, the growing flow of information exchanged via SMTCT also creates for employees the imperative to stay connected in order not to miss anything. Besides, even the opportunity for employees to collaborate regardless of their geographic position also has negative sides. In the end, this means that SMTCT reinforce the blurring of boundaries between work and personal life, by making work available everywhere, at any time. Finally, the ease of communication that SMTCT can also be annoying as it often leads to the creation of more noise.

Secondly, the findings of this study show that SMTCT have caused transitions in the way people share and exchange knowledge, in the way people archive knowledge and in the understanding of employees of how the other parts of the organization work. Indeed, SMTCT allow employees to exchange their experience and to learn from other people's experience that have the same expertise as them (Cao et al., 2013). They also offer more visibility to the information that is exchanged there, which enables that information to reach a wider audience

across the organization (Leonardi et al., 2013). All of this suggests that SMTCT can improve the process of knowledge transfer (Alavi & Leindner, 2001). Besides, SMTCT seem to offer a solution in order to centralize all the information that is shared. However, employees also explain that knowledge is not effectively organized and structured on SMTCT, and that information stored on it is not always easily retrievable. This means that organizations are at risk of losing track of this knowledge if they do not develop alternative solutions (ibid.).

Finally, the findings of this study indicate that SMTCT have an impact on the employees' mental resources management. Indeed, employees' attitudes and behaviors towards the use of SMTCT are very diversified. It partly leads to an uneven participation of employees on their organization's SMTCT. This forces employees to adapt themselves to each other's preferences and habits and, thereby, to deal with multiple tools. E-mails remain the main means of communication at work, and SMTCT therefore seem to be considered as an additional tool employees have to juggle with, potentially increasing the difficulty in managing their whole work environment and thus their mental load at work.

In conclusion, SMTCT are perceived by employees as having a greatly positive impact on their efficiency, as enabling an easier process of knowledge transfer, as offering a straight-forward and direct communication channel, where more intimate and equal interactions are made possible. But SMTCT also seem to have some negative aspects. Indeed, SMTCT are participating to the increasing blurriness of the thinner and thinner line between work life and personal life. They also do not enable an optimal archiving of the information shared on it, and can thus be overwhelming for employees when too much information is too quickly shared on it. There seems to be an imperative of availability as well as an imperative of pace keeping when it comes to using social media type collaboration tools, increasing the mental load of certain employees.

## **5.1 Limitations**

A first limitation in this study lies in the choice of methods. Indeed, even though qualitative methods of research helped me in answering the research questions, this specific kind of methods contains some limitations. First, the fact that the researcher is the first and main tool in the data collection can be a risk factor in ensuring the research's objectivity. In order to minimize this risk and to avoid researcher's bias, it is crucial to acknowledge the power relationship between the researcher and its participants, and to reflect on the relationship that is being established between them during the interviews, as this relationship

can almost be considered as a “third actor in the research scenario” (Kvale, 2002; Nicolson, 2003, p. 138). The researcher should also try to diminish his influence on the interviewees’ views during the data collection process (Ritchie & Lewis, 2013). Another risk that exist while doing a qualitative research is the risk of “forcing the data”, by trying to make this data fit pre-conceived hypotheses (Flick, 2013, p.306). Making sure to include conflicting findings and to present nuanced results were an important part of trying to make this study as objective as possible. Finally, in order to avoid all of these risks, inherent to qualitative research methods, we made sure that the data collecting and analysis were fully transparent and sufficiently explained.

A second limitation of this study was the size and nature of the sample. First, the sample that was studied in this research was relatively small and expanding it a little bit would have made the results somewhat stronger. Second, it would have been interesting to have an even more diversified sample than the one that was used in our research. All of the respondents were direct or indirect acquaintances of the researcher and thus, all coming from approximately the same socio-economical surroundings. Besides, having a greater age diversity would have also been interesting, in order to further explore a possible divide between different age cohorts, and to thus collect richer and more diversified data.

Finally, another limitation lies in the fact that respondents knew why they were interviewed for. This connects to what Ritchie and Lewis (2013, p.13) explain as subjects being affected by the “process of being studied”. For instance, I could sometimes observe that interviewees had already thought about the topic and sometimes even anticipated my questions. While those anticipations were often relevant in the scope of my research, a few were also going in directions that I did not want to explore. I therefore had to make sure that the interviewees did not go off track, and to guide them in order to extract the most relevant and useful information possible.

## **5.2 Recommendations for further research**

As mentioned above, the literature studying new social media type collaboration tools such as Slack or Yammer seem to be rare or almost inexistent. Research aiming at observing the employees’ perceptions towards such tools suffers the same rarity. Further investigating on this side of the story, and thus less about an organization’s point of view, would be interesting both for the academic and the social world.

It would be interesting for scholars to do similar research than this on a bigger scale. First, simply by having a larger sample, second by having a sample that is more diversified, as mentioned above. Thereby, findings resulting from such a research would be stronger. Besides, in-depth interviews could benefit from being combined with case studies. This would indeed offer a more holistic approach to the research questions, allowing for employees' perceptions to be confronted with observations made about the organizations' functioning.

Finally, it would also be interesting to do a network analysis to analyze communities within the SMTCT of an organization. Such an analysis could offer a better understanding on how people interact with each other. It could also help researchers in investigating whether SMTCT are inclusive, whether all users are fully equal on it, or whether SMTCT are creating a cleavage among an organization's employees.

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## **Appendix – Interview guide**

This is a study about how employees perceive the use of new social media type collaboration tools in their everyday work. In particular, I would like to focus on how employees experience the changes such collaboration tools have brought to their everyday work and impacted their workplace.

Your participation in this study is strictly confidential. Interviews are normally tape-recorded, and this simply provides for accurately keeping track of information. Your participation in this study is important. However, should you at any time wish to stop, you may do so without prejudice to you, and at any time you should feel free to ask me questions concerning the interview or the study. Do you mind if I record this interview? May we begin?

- 1) Could you, first of all, explain in what your daily work consists of?
  - What area do you work in?
  - What type of tasks does your everyday work consist of?
  
- 2) What's your position in your organization?
  - For how long have you been working in this organization?
  - In what type of situation do you need to collaborate with your colleagues?
  - How often do you need to collaborate with your colleagues?
  
- 3) What social media networks do you use in your everyday life?
  - Why are you/aren't you on social media?
  - With whom do you communicate with on social media?
  - How did social media change the way you communicate with people?
  - How much time do you spend on social media every day?
  
- 4) In what type of situation do you use Slack/Yammer?
  - How often do you use it?
  - Why did you start using it?
  - What difficulties have you encountered when you started using Slack/Yammer?
  - What other ways do you use to communicate online with your colleagues?

- 5) What kind of changes did Slack/Yammer bring to your everyday work?
- In what type of situation is Slack/Yammer useful in your everyday work?
  - What are its positive aspects?
  - For what type of tasks is Slack/Yammer a time saver in your everyday work?
  - What opportunities did Slack/Yammer bring to you?
  - In what type of situation is Slack/Yammer a burden in your everyday work?
  - What are its negative aspects?
  - What feature is, according to you, missing on Slack/Yammer?
- 6) What type of relationships did you build on Slack/Yammer with your colleagues?
- Who do you communicate with on it?
    - o Did Slack/Yammer put you in contact with people you otherwise wouldn't have known? (probe)
    - o Are there some people that you communicate with only via Slack/Yammer? (probe)
  - Are you more active or more passive on Slack/Yammer?
  - What type of content do you share?
  - What type of content do you consume?
  - What are the varying levels of participation on Slack/Yammer?
- 7) How has Slack/Yammer altered the way you perceive your organization?
- How did it change the vision you have on your organization?
  - How did it alter the way you perceive your organization's values?
  - How did it change the vision you have on your organization's strategy?
    - o Would you say it helped you to better work in alignment with this strategy?
- 8) In what ways has Slack/Yammer altered the way you share, exchange information with your colleagues?
- Is Slack/Yammer an efficient way to share some information?
  - How do you perceive the time you invest on Slack/Yammer to share information?

- Do you perceive it as more efficient than email/one-to-one communication?
    - In what type of situation do you use it?
  - In what way would you say that Slack/Yammer is a better way to share information than other ways to communicate such as one-to-one conversations or emails?
- 9) This is now the end of this interview. Do you think that there are other issues/points that I may have missed?