Managing Electronic Multitasking in Meetings

Perspectives of meeting leaders

Authors: Jana Hasenberg
Katharina Machovsky

Supervisor: Chris Nicol
ABSTRACT

The growth of the internet combined with the proliferation of portable electronic devices has caused an increased use of Information and Communication Technology (ICT) at the workplace. Also in meetings, which present an important tool to communicate and interact within the team, the use of portable electronic devices is common. Individuals frequently use their smartphones and laptops while attending a meeting for meeting-related or -unrelated activities. This behaviour is defined as electronic multitasking. Literature indicates that there are both positive and negative effects of electronic multitasking that might improve the process of a meeting or impair the interaction during a meeting. Since it is the meeting leader’s responsibility to conduct effective and efficient meetings she has to manage potential effects of electronic multitasking. Hence, the meeting leader should make use of positive effects and in this case encourage Electronic Multitasking. On the other hand, if electronic multitasking has negative effects on the meeting, the leader has to limit this behaviour. Considering the entrance of younger generations into the workforce who are more confident in ICT use and view their devices as an important part of their life, the rising relevance of discussing and investigating the management of electronic multitasking in more depth is evident. However, there are only limited empirically developed approaches available to manage the effects of electronic multitasking. By conducting a multiple case study, this major gap was addressed.

The case study has been carried out in November 2015 in Umeå, Sweden. Through seven semi-structured interviews with experienced meeting leaders, rich qualitative data has been collected. To analyse this data, a tool called Thematic Network Analysis has been used. Our results encompass several management approaches for meeting leaders to both enhance and limit the effects of electronic multitasking. The identified approaches serve as a toolbox from which a leader has to choose the appropriate approach according to the context that is shaped by the participants, meeting situation and organisation. Leaders can set strict rules at the beginning of a meeting, for example by banning devices. To improve the enforcement of rules, they should be negotiated and respected by the leader as well. Electronic multitasking can be limited by actively confronting multitasking participants during or after the meeting with their inappropriate behaviour. The leader can also make jokes to catch participants’ attention or encourage interaction. Similarly to confronting people with inappropriate electronic multitasking, the leader can encourage the behaviour in case it is useful. For example, one person can be assigned to take notes from the meeting or phases in which all meeting participants engage in electronic multitasking can be announced. Furthermore, the meeting leader can set up meetings by using features such as agenda, breaks, goals, length, size and topics to influence the amount of electronic multitasking. Finally, the company culture or guidelines regarding the use of portable electronic devices can be shaped and applied by meeting leaders. Hence, practical implications have been made to a large extent. Furthermore, this study provides theoretical contributions in the areas of meeting leadership and electronic multitasking.

Keywords: meeting, meeting leadership, electronic multitasking, management of electronic multitasking
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Jana Hasenberg & Katharina Machovsky
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1 Introduction

In the first chapter we will introduce the topic of this thesis: electronic multitasking in meetings. We will describe the reasoning behind the choice of subject and the practical relevance of the chosen topic. Furthermore, we will present identified gaps in the literature and the derived research question. Finally, we will elaborate on the purpose of this study.

1.1 Choice of Subject

Our personal experience with electronic multitasking has inspired us to write a thesis on this topic. We have first experienced this type of behaviour when observing classmates being absorbed with their electronic devices while attending a lecture. Many of them brought their laptop for taking notes during the lecture, which has been very useful when revising the course material later. On the other hand, we have noticed that a lot of our classmates lost their focus and started other activities not related to the lecture. This sometimes resulted in less retention of what has been said during class. We then realised that, while we will soon have finished university and therefore classroom situations, the problem of electronic multitasking in meetings will continue once we enter worklife.

When searching for scientific literature on the topic, we realised that electronic multitasking in meetings is indeed discussed by different authors. However, we discovered that there is a lack of research on how a meeting leader can manage electronic multitasking behaviour of participants in a meeting. As indicated, electronic multitasking can be useful, for example when taking notes, but also negative when losing focus. Therefore, we realised that it is important for a meeting leader to both limit negative impacts of electronic multitasking and enhance possible positive effects. Because we will be leading meetings as future project managers, and portable electronic devices are invading the workplace, we believe that we have to be able to manage this type of behaviour increasingly during our career. Hence, we decided to focus our research on the management of electronic multitasking in meetings from the leader’s perspective. Research indicates that the organisational context of electronic multitasking has an impact on the multitasking behaviour of meeting participants and on how leaders manage meetings. Hence, we have further included company culture and company guidelines regulating the use of electronic devices in our study.

1.2 Problem Background

Meetings represent a vital communication tool in business (Nixon & Littlepage, 1992, p. 361; Rogelberg et al., 2007, p. 18; Rogelberg et al., 2012, p. 236) and play a crucial role in coordinating teams and goals (Luong & Rogelberg, 2005, p. 58; Rogelberg et al., 2006, p. 83; Stray et al., 2012, p. 274). Various authors express the importance of meetings for successful teamwork and cooperation (Kauffeld & Lehmann-Willenbrock, 2012, p. 131; Lopez-Fresno & Savolainen, 2014, p. 138; Rogelberg et al., 2012, p. 236). This is largely grounded in the interdependence of team members (Mathieu et al., 2008, p. 411; O’Neill & Allen, 2012, p. 187). Meetings therefore serve as a means for groups to coordinate, communicate and interact. This central aspect of meetings is threatened by electronic multitasking, which has the potential to affect interaction and discussion (Böhmer et al., 2013, p. 344). Due to the proliferation of Information and
Communication Technology (ICT) both in private and worklife this threat seems to be increasing.

With the growth of the internet, the use of ICT has risen extraordinarily. Nowadays about 90% of the Swedish population are connected to the internet and more than half of it owns a smartphone (Alström et al., 2013, p. 7). In business, more than 20% of the communication is conducted via mobile devices. In addition, 70% of SMEs in Sweden believe that digital tools improve the efficiency of employee communication (Alström et al., 2013, p. 18). Furthermore, the proportion of Generation Y (born between 1980 and 1995) employees is rising within the workforce. They are considered to be adaptive to multitasking and have a different approach towards communication due to their confident use of ICT (Anantatmula & Shrivastav, 2012, p. 10-12). Therefore, the trend of electronic multitasking during meetings will continue increasingly (Turner & Reinsch 2007, p. 37), especially considering the entrance of Generation Z (born between 1995 and 2010) into the workforce. This generation differentiates from the previous one since individuals are born in a digital world that for them has always been connected through the internet and portable electronic devices (Singh, 2013, p. 2). While the previous generation (Generation Y) is also tech-savvy and uses electronic devices as a tool, the digital natives of Generation Z have an emotional dependence on their devices and consider them an important part of their life. This even results in the fact that they significantly interact less with their physical environment (Singh, 2013, pp. 4-5). Hence, due to tech innate generations, the amount of electronic multitasking will grow further and presents an even increased threat for the interational purpose of meetings. On the other hand, multitasking is viewed as a necessity of today’s workplace, and the ability to multitask efficiently is considered a beneficial characteristic (Judd, 2013, p. 359; Kleinman, 2009, pp. 3898-3899).

In meetings, the occurrence of electronic multitasking has been caused by the emergence of new technology and media, such as instant messaging, and the consequent increased use of multiple portable electronic devices (Benbunan-Fich & Truman, 2009, p. 139; Stephens & Davis, 2009, p. 64; Turner & Reinsch 2007, p. 38). In this context it becomes clear that the proliferation of ICT use and electronic multitasking during meetings creates new challenges in managing meetings that have to be coped with. Indeed, a meeting leader is central for managing meetings (Leach et al., 2009, p. 86; Lopez-Fresno & Savolainen, 2014, p. 138). More specifically, research indicates that the use of electronic multitasking can be influenced by meeting leaders (Stephens & Davis, 2009, p. 78; Wasson, 2004, p. 56). Hence, the leader is the person who has to deal with electronic multitasking that is employed during meetings. However, electronic multitasking does not only lead to negative effects, but has been acknowledged as useful as well.

Meeting leaders value the possible contribution of electronic multitasking during meetings to enhance performance and productivity (Reinsch et al., 2008, p. 391). They also appreciate the potential increase of efficiency by accomplishing more than one task at the same time (Turner & Reinsch, 2007, p. 37). Still, it is a demanding and distracting process (Stephens, 2012, pp. 196-200), which might lead to disturbances, errors and inefficiency (Reinsch et al., 2008 p. 391). This is caused by a reduction in performance when engaging in multitasking behaviour (Krishnan et al., 2014, p. 203). Besides the effects on measurable outcomes, electronic multitasking can be perceived as rude (Stephens & Davis, 2009, p. 69), unprofessional and less trustworthy (Krishnan et al.,
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2014, p. 203), and disrespectful, if individuals feel they are ignored by the person engaging in multitasking behaviour (Cameron & Webster, 2011, pp. 755-756). Overall, the leader therefore has to find the right balance between limiting negative effects without disregarding the potential positive effects of electronic multitasking.

When searching the literature on electronic multitasking in meetings, we have therefore aimed at finding approaches for meeting leaders to both limit negative and enhance positive impacts. Hereby, we identified several gaps that will be presented in the following. These include a lack of research on meetings in general and on leading meetings as well as electronic multitasking and managing this behaviour in meetings more specifically.

1.3 Theoretical Background and Knowledge Gaps

1.3.1 Meetings

As group performance is often better than individual performance (DeSanctis & Gallupe, 1987, pp. 590-591; Romano & Nunamaker, 2001, p. 2), team meetings are seen to be especially valuable for solving crucial tasks (Sonnentag, 2001, p. 5) and complex situations (Kauffeld & Lehmann-Willenbrock, 2012, p. 131; Romano & Nunamaker, 2001, p. 2). Despite the importance of team meetings, meetings are often described as unsatisfactory by participants (Geimer et al., 2015, p. 2023). Research also repeatedly reports that meetings are perceived as unproductive and costly (Cohen et al., 2011, p. 91; Perkins, 2009, p. 300; Romano & Nunamaker, 2001), ineffective (Geimer et al., 2015, p. 2022; Leach et al., 2009, p. 65) and a waste of time (Perkins, 2009, p. 300; Rogelberg et al., 2012, p. 237). The contrast between meeting importance and their unsatisfactory quality indicates the need for improvements of meetings. However, research on meetings has been scarce and is only slowly increasing (Lehmann-Willenbrock et al., 2013, p. 366; Van Praet, 2009, p. 80).

When defining the term meeting, general agreement seems to exist. A meeting is a means of communication and interaction, and it includes two or more people coming together in order to achieve common goals (Cohen et al., 2011, p. 96; Geimer et al., 2015, p. 2017). Goffman (1963, p. 89) adds a stronger cognitive perspective in his understanding of meetings, describing that the participants of a meeting keep a single cognitive and visual focus. Consequently, if a meeting participant engages in electronic multitasking, this could be seen as a change of focus, potentially impacting the meeting. Romano and Nunamaker (2001, p. 1) extend their definition with the aspect of time and space: Meetings are “a focused interaction of cognitive attention, planned or chance, where people agree to come together for a common purpose, whether at the same time and the same place, or at different times in different places”. Meetings taking place at different times or in different places are typically facilitated through technology use. Overall, the different definitions encompass various facets of the term meeting. They combine the aspects communication and interaction, the involvement of multiple persons, goals achievement and focus. Furthermore, it is differentiated between face-to-face and technology facilitated meetings.

Technology facilitates the conduction of meetings in different places and at different times. Compared to face-to-face communication, technology facilitated communication has a lower degree of social presence and a lower level of information richness (Daft & Lengel, 1986, p. 560). This leads to lower effectiveness in complex communication
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situations (Turner & Reinsch, 2007, p. 40). As meetings are often used for complex situations such as problem solving, group decision making and resolving a conflict (Kauffeld & Lehmann-Willenbrock, 2012, p. 131), face-to-face communication seems to be better suited for such meeting situations. Hence, face-to-face meetings cannot be replaced by tele- or videoconferences (Kalika et al., 2008, p. 511). Social presence and information richness theory therefore indicate the value of conducting research on face-to-face meetings.

Face-to-face meetings are further differentiated according to the frequency with which they are taking place. Literature distinguishes between irregular and regular meetings (Adam et al., 2008, pp. 26-30; Bang et al., 2010, p. 253; Kauffeld & Lehmann-Willenbrock, 2012, p. 139; Lehmann-Willenbrock et al., 2013, p. 374). The former are referred to as crisis meetings (Jarzabkowski & Seidl, 2008, p. 1393). The latter are further explained as recurrent meetings, such as meetings every couple of weeks (Kauffeld & Lehmann-Willenbrock, 2012, p. 139), weekly meetings (Van Praet, 2009, p. 81) and daily meetings, i.e. in agile software projects (Stray et al., 2012). The routines of regular meetings are similar within a project, team, department or organisation (Adam et al., 2008, p. 30). In contrast, irregular meetings cover special issues (Adam et al., 2008, p. 26). Hence, they vary greatly depending on the problem. Similar to regular meetings, authors have adopted the term ‘typical meetings in a week’ and conduct their research based on this understanding of meetings (Leach et al., 2009, p. 66; Rogelberg et al., 2006, p. 86). Hence, they are asking their study respondents to think of typical meetings they participate in.

1.3.2 Leading Meetings

The existing literature on leading meetings and meeting skills is often anecdotal and aiming at guiding practitioners instead of being empirically driven (Adam et al., 2008; Bang et al., 2010, p. 254; Leach et al., 2009, p. 66; Malouff et al., 2012, p. 45). This indicates the need for empirical research on meeting leadership to enhance meeting success. There are different behaviours a meeting leader can exhibit during a meeting. A leader can use structural aspects or design characteristics such as agenda use and timeliness of a meeting to improve a meeting (Geimer et al., 2015, pp. 2022-2023; Leach et al., 2009, p. 66). For this type of leader behaviour, recommendations are rather based on experience than on empirical evidence (Leach et al., 2009, p. 65-66). As these design characteristics are usually controlled by the meeting leader, there seems to be a gap in empirical research investigating them. Other types of meeting leader behaviour are content and process-related. Average meeting leaders typically engage to a greater extent in content behaviour, while expert leaders tend to balance content- and process-related behaviour better (Perkins, 2009, p. 305). Hence, procedural meeting leader behaviour seems to improve a meeting significantly. Similarly, participants of a study by Geimer et al. (2015, p. 2023) mention criticism related to meeting processes such as unproductive discussions and the participant’s lack of influence on meetings. The importance of procedural behaviour is also stressed by Lehmann-Willenbrock et al. (2013, p. 383) who ask for future research on key leader behaviours such as procedural communication.

Hence, we focus our research on process-related behaviour of leaders. However, as the design characteristics also contribute significantly to meeting success and a meeting leader has control over them, we will further include structural leadership behaviour. Even though we use the term meeting leaders, we are not aiming to contribute to
leadership theory. Therefore, we do not include or discuss any specific leadership theories. Instead, this study focuses on the specific approaches of meeting leaders to manage electronic multitasking.

1.3.3 Electronic Multitasking

The term electronic multitasking has been introduced by Stephens and Davis (2009, p. 66), which they define as “the use of one or more communication technology devices during a F2F [face-to-face] or mixed-mode meeting”. This includes activities such as taking notes with a laptop or browsing the web while attending a meeting. Furthermore, this definition encompasses the concept of multicommunication when attendees engage in multiple conversations during a meeting. Individuals both participate in face-to-face conversations of meetings and technology-facilitated conversations on portable electronic devices (Stephens & Davis, 2009, p. 66). Turner, Reinsch and their colleagues are considered to be the originators of the construct multicommunication (Cardon & Dai, 2014, p. 2). It can be seen as a communication-focused type of multitasking caused by the proliferation of ICT use at work (Reinsch et al., 2008, p. 395; Stephens & Davis, 2009, p. 65). Hence, there is a link to general multitasking literature that has been acknowledged by several authors (e.g. Cameron & Webster, 2013; Dennis et al., 2010; Reinsch et al., 2008; Stephens & Davis, 2009; Stephens, 2012; Wasson 2004). Despite the existing conceptualisation and definition there seems to be a lack of consensus since few authors refer to the term electronic multitasking. Authors rather conduct research on technology use of participants in meetings without defining this behaviour as electronic multitasking (e.g. Böhmer et al., 2013; Kleinman 2007, 2009). Therefore, research specifically on the concept of electronic multitasking has been scarce.

Within the limited research that we have identified as relevant in the context of this study, several authors focus their studies on a single device. Hence, they either investigate laptop (Kleinman 2007, 2009) or smartphone use in meetings (Böhmer et al., 2013; Cardon & Dai, 2014; Washington et al., 2014). We argue that this can be criticised since meeting participants nowadays have access to both mobile phones and laptops and research should respect the multiplicity of portable electronic devices available for meeting participants (Stephens & Davis, 2009, p. 61). Therefore, multiple technologies that affect meeting attendees’ behaviour have to be studied in combination (Cameron & Webster, 2013, p. 367). Furthermore, new emerging devices such as tablets and smartwatches are neglected when focusing on a single device. Indeed, research seems to only discuss the use of laptops and smartphones but has not yet included portable devices such as tablets and smartwatches. This may be due to the fact that research struggles to keep up with the fast-paced innovations in ICT. Therefore, we argue that literature seems to be outdated and should be updated due to the emergence of new portable electronic devices.

Another identified limitation of existing literature is the geographical focus on North America. Studies have been conducted mainly in the USA (e.g. Kleinman 2007, 2009; Stephens & Davis, 2009) and few in Canada (e.g. Bajko & Fels, 2013). However, a comparative study by Cardon and Dai (2014) provides hints towards cultural differences in the attitude towards mobile phone use during meetings between American and Chinese professionals. The study reveals that in China younger meeting participants are less accepting of mobile phone use in meetings than older meeting participants, whereas in the USA the impact of age is reversed (Cardon & Dai, 2014, p. 18). Bajko and Fels
Also other studies investigate the acceptance of electronic multitasking. They reveal that this behaviour might lead to a negative perception. Hence, this electronic multitasking might be perceived as impolite and disrespectful because it indicates limited interest and attention of the multitasking person towards other meeting participants (Böhmer et al., 2013, p. 344; Dietel et al., 2011, p. 1281; Iqbal et al., 2011, p. 893; Kleinman et al., 2009, pp. 2504-2505; Pinchot et al., 2011, p. 44). Besides such emotional reactions, electronic multitasking might impair collaboration and interaction between meeting participants (Böhmer et al., 2013, p. 344; Dietel et al., 2011, p. 1275). Furthermore, studies show that electronic multitasking may negatively affect individuals’ performance because more mistakes are made (Benbunan-Fich, 2012, p. 17; Reinsch et al., 2008, p. 391) or misheard information has to be repeated (Newman & Smith, 2006, p. 1146). This eventually results in less productive and efficient meetings affecting the overall organisation (Dietel et al., 2011, p. 1280; Kleinman, 2009, p. 3900). Indeed, literature on the negative effects of electronic multitasking is overwhelming. However, the behaviour is often stigmatised and discussed from a narrow and only negative perspective (Cardon & Dai, 2014, p. 5; Reinsch et al., 2008, p. 400). Therefore, few yet valuable investigated positive effects of electronic multitasking have to be emphasised.

Portable electronic devices can be useful for taking notes from the meeting (Dietel et al., 2011, p. 1275). Taking digital notes is beneficial since they can be stored, shared and edited very easily. Access to additional information seems to be the most striking advantage and has been repeatedly mentioned in literature (e.g. Cameron & Webster, 2013, p. 353; Dietel et al., 2011, pp. 1283-1284; Kleinman, 2007, p. 2503). Participants can use their portable electronic devices for looking up information, searching for documents, or multilcommunicating with other colleagues to integrate their knowledge. This can result in improved decision making (Dietel et al., 2011, pp. 1283-1284). Hence, it has to be acknowledged that electronic multitasking leads to both negative and positive effects (Lyons et al., 2010, p. 11; Wasson, 2004, p. 56). However, there is an ambiguity on whether the advantages of electronic multitasking outweigh the disadvantages. This results in a need for further research to clarify this ambiguity (Iqbal et al., 2011, p. 891; Lyons et al., 2010, p. 12). Although, we will not fill this identified gap in particular with the study at hand, we want to address the flaw of other studies that focus mainly on negative effects. We do not bias the scope of our study to either negative or positive effects but emphasise the importance of balancing both.

Besides the focus of the different studies on a single device, a specific geographical area and mainly negative effects, we identified the major gap that almost all authors investigate electronic multitasking from the perspective of the meeting participants. There is research on the perception of meeting participants (e.g. Bajko, 2012; Bajko & Fels, 2013; Böhmer et al. 2013; Cardon & Dai, 2014) and the reasons and influential factors of meeting participants to engage in electronic multitasking (e.g. Dennis et al., 2010; Kleinman, 2007, 2009; Stephens & Davis, 2009). However, only the study by Iqbal et al. (2011) collects data from both the meeting leader and participants and compares their responses. The authors reveal that only 16 % of the meeting leaders never or rarely notice multitasking participants (Iqbal et al., 2011, p. 892). Hence, the majority of meeting leaders notices if attendees engage in electronic multitasking.
Furthermore, speakers feel that both smartphones and laptops distract their users (Iqbal et al., 2011, p. 893). In order to counteract, it is suggested that speakers should engage more with the audience (Iqbal et al., 2011, p. 894).

Overall, few authors provide recommendations about managing electronic multitasking. Benbunan-Fich and Truman (2009, p. 141) have developed recommendations for managers based on a study with undergraduate students. However, their chosen sample limits the applicability of their guidelines to meeting leaders. Other authors provide more general suggestions. For example, meeting leaders should set an example of respectful use of portable electronic devices to meeting participants (Pearson, 2013; Washington et al., 2014, p. 62). Several recommendations indicate the need for flexibility in the management of electronic multitasking (Benbunan-Fich & Truman, 2009, p. 141; Iqbal et al., 2011, p. 893). A simple exclusion of portable electronic devices would neglect previously mentioned positive effects of electronic multitasking and further support the one-sided discussion of the negative effects that we identified as limited. Bajko (2012, p. 11) also claims the need for further research to “support efficient and effective mobile device use in business meeting environment”. Therefore, conducting research on approaches for meeting leaders in terms of both enhancing positive effects and limiting negative effects of electronic multitasking will complement the existing literature on electronic multitasking in meetings significantly.

1.4 Research Questions and Objectives

The described problem background of the existence of electronic multitasking during meetings combined with the lacking research of potential approaches to manage its effects guides naturally to the following research question:

**How do meeting leaders manage electronic multitasking in face-to-face meetings?**

The main objective of this thesis is to gain a deeper understanding of how meeting leaders manage electronic multitasking in meetings, considering both the positive and negative effects of electronic multitasking. As identified in the previous section, the proper management of electronic multitasking encompasses both enhancing positive effects and limiting negative effects. Hence, a meeting leader needs to apply different approaches flexibly in order to find the optimal balance. The aim of the thesis is to reveal these approaches utilised by meeting leaders, paying specific attention to the process of a meeting, design characteristics and a balanced view on positive and negative effects of electronic multitasking.

Due to the identified research gaps and limited amount of literature we see the need to conduct an exploratory study in order to gain new insights (Saunders et al., 2009, p. 139). This allows flexibility in case new data appears (Saunders et al., 2009, p. 140). Given the exploratory nature of the research question, we will conduct a literature review, which is followed by a multiple case study. To be able to answer the stated research question and achieve the defined objectives a qualitative data collection and analysis technique will be applied. Through the means of semi-structured interviews with meeting leaders working in Sweden, the required data will be collected. The findings will be analysed using thematic network analysis. Based on our analysis of the empirical findings in combination with the literature review we will provide practical implications for meeting leaders facing electronic multitasking. Furthermore, by investigating approaches to manage this behaviour we will contribute to existing
literature on meeting leadership and electronic multitasking significantly. We therefore aim to gain a deeper understanding in this under-researched area and to lay the groundwork for further research and new theory.
2 Theoretical Framework

In the following, we will present our literature review that serves as a foundation for our understanding of the phenomenon electronic multitasking and its related concepts. Furthermore, it provides the basis for the following chapters including the methodology and data analysis. The first part of this chapter discusses electronic multitasking and includes defining what we understand from electronic multitasking. It is exploring the importance of the social context for this type of behaviour, the factors that influence an individual’s use of electronic multitasking and the effects of electronic multitasking. The second part combines a scrutiny on meeting success, the leader’s responsibility for success, literature about meeting leadership, and finally company guidelines and organisational culture related to electronic multitasking. It will conclude with a synthesis of the relevant literature.

2.1 Electronic Multitasking

2.1.1 Definition of Electronic Multitasking

Salvucci et al. (2009, pp. 1819-1820) characterise multitasking as a behaviour and define different types of multitasking along a multitasking continuum. The differentiation of these types is based on the time spent on one task before switching to another. One extreme they call concurrent multitasking, which is the execution of two or more tasks at the same time. The other extreme is called sequential multitasking, which is also referred to as task-switching. Here, a period of time is spent on one task before switching to another. Stephens et al. (2012, p. 37) support that there are at least two types of multitasking, which they name simultaneous and sequential multitasking. Participating in a meeting can be seen as an activity continuously taking place from the beginning until the end of the meeting. We therefore argue that any additional activity executed during the meeting would therefore happen simultaneously and is characterised as concurrent multitasking.

On the one hand, there is consensus in the literature about performance concurrency as a key characteristic of multitasking (Benbunan-Fich, 2012, p. 16; Stephens & Davis, 2009, p. 65; Wasson, 2004, p. 54). On the other hand, there is the argument that individuals are not able to actually pay conscious attention to two separate tasks at the same time due to limits of cognitive capabilities (Cameron & Webster, 2013, p. 354; Shao & Shao, 2012, p. 75). Therefore, multitasking can be seen as continuous and rapid task-switching (Pashler, 2000, p. 292). Nevertheless, when multitasking, individuals aim to perform the tasks at the same time in order to get more tasks done and increase the speed of task completion (Bluedorn, 2002, p. 107). This aim in particular differentiates multitasking from polychronicity, which is defined as the preference for doing two or more tasks simultaneously rather than focusing on one. The preference of focusing on one task refers to monochronic behaviour (Bluedorn et al., 1992, p. 17). Hence, polychronic and multitasking behaviour have the element of concurrent task completion in common. As indicated, multitasking is different with regards to the individual’s aim of executing more tasks in a shorter time period (Bluedorn, 2002, p. 107). However, this could be a fallacy according to several studies, which are indicating that individuals need more time to complete simultaneously executed tasks than sequentially performed tasks (Pashler, 2000, p. 277).
Besides performance concurrency, Benbunan-Fich (2012, p. 16) suggests task independence as another key characteristic of multitasking. Individuals engage in multitasking behaviour if they perform multiple unrelated tasks that do not pursue the same goal. Hence, reading related information or taking notes with a laptop during a meeting would not be considered as multitasking. This description contradicts an earlier study of the author and a colleague, in which they describe behaviour that is related to the meeting objectives as compliant multitasking. On the contrary, distracting multitasking, such as writing emails or reading unrelated documents, leads to a potential deviation from the goals of the meeting (Benbunan-Fich & Truman, 2009, p. 139).

Other authors seem to support the existence of compliant multitasking and distinguish multitasking behaviour during meetings in work-related and personal use (Bajko, 2012, p. 8) or meeting-related, work-related and not work-related (Böhmer et al., 2013, p. 344).

In the context of portable electronic devices in meetings the definition of multitasking is a challenge. This is due to the fact that technology, such as laptops and smartphones, can be used for multiple purposes, which are often unrelated to the meeting (Benbunan-Fich 2012, p. 16; Böhmer et al., 2013, p. 344). Indeed, studies show that only 8 % of attendees in a meeting use their smartphones solely for related tasks (Iqbal et al., 2011, p. 892) and only 13 % use their laptop for compliant multitasking (Benbunan-Fich & Truman, 2009, p. 140). Hence, the majority spends time on their laptops and smartphones for not meeting related tasks. In addition, it is usually not apparent for other participants whether the individual engages in related or unrelated tasks. In addition, it is usually not apparent for other participants whether the individual engages in related or unrelated tasks (Iqbal et al., 2011, p. 893). Surprisingly, compared to their own behaviour, individuals often assume that others are much more likely to engage in meeting unrelated activities such as browsing the web or playing games (Böhmer et al., 2013, p. 345).

Similar to Stephens and Davis (2009, p. 66), we call the use of portable electronic devices during meetings electronic multitasking. For our study we define electronic multitasking as simultaneously participating in a face-to-face meeting and using one or more portable electronic devices for activities related or unrelated to the meeting (Lyons et al., 2010, p. 7; Stephens & Davis, 2009, p. 66; Wasson, 2004, p. 54). Hence, in this thesis we characterise behaviour as electronic multitasking whenever the individual is engaging in multiple tasks and at the same time using technology. The alignment of the different task objectives is not considered as important. This is due to the reason that both related activities, such as discussing the meeting topic via instant messaging, reading related information or taking notes, and unrelated activities, such as answering emails, updating the calendar, or reading unrelated documents, result in a division of attention and distraction and are therefore considered as electronic multitasking.

This understanding of electronic multitasking hints at the concept of multicommunication, which is considered important in the context of our thesis. Several authors have focused their attention on multicommunication (Dennis et al., 2010; Reinsch et al, 2008; Stephens, 2012; Turner & Reinsch, 2007), which is defined as “engaging in two or more overlapping, synchronous conversations” (Reinsch et al., 2008, p. 391) and facilitated by the use of technology (Stephens, 2012, p. 197; Reinsch et al., 2008, p. 391). Hence, participating in a meeting and simultaneously chatting with a colleague external to the meeting or emailing can be considered both as multicommunication and electronic multitasking. Both behaviours are similar in their
definition of engaging in two or more tasks at the same time. Hence, the two of them are affected by our finite attention and cognitive capabilities (Miller, 1994, p. 346; Kahneman, 1973, p. 155). Additionally, multicommunication and electronic multitasking are associated with using technology. Hence, multicommunication can be considered as a specific type of (electronic) multitasking (Cameron & Webster, 2013, p. 353; Bluedorn, 2002, p. 75). Turner and Reinsch (2007, p. 36) even argue that “multitasking has become synonymous with the communication technology-infused workplace of today”. Due to this overlap we argue that we can apply existing multicommunication literature in this thesis for broadening our understanding on electronic multitasking. Furthermore, extensive research has been conducted on the factors influencing multicommunication, which might be relevant to consider when managing this behaviour. These factors and research about aspects determining the use of electronic devices in meetings will be elaborated in chapter 2.1.3.

According to the literature, multicommunication is a more complex and demanding form of multitasking because individuals have to balance different conversations and interlocutors, switch their roles accordingly and manage different media (Turner & Reinsch, 2007, p. 38; Stephens et al., 2012, p. 25). Stephens et al. (2012, p. 25) argue that multitasking compared to multicommunication does not require consideration of others such as adjusting the role to various communication partners. However, our understanding of electronic multitasking includes multicommunication as a specific type. Therefore, the mentioned considerations could also be relevant if a meeting participant is chatting with a person external to the meeting, for example. Indeed, we argue that in the context of face-to-face meetings the social context plays an even more important role, because the person who engages in multitasking behaviour is not the only one impacted by this action (Kleinman, 2009, p. 3896). For example, a ringing mobile phone during a meeting does not only attract the attention of the owner but also of the surrounding attendees (Tang, 2005, p. 1). Hence, it distracts the surrounding participants as well.

2.1.2 Electronic Multitasking in the Social Context

The relevance of the social context is evident in the existence of social awkwardness when engaging in electronic multitasking (Tang, 2005, p. 1). Indeed, in face-to-face meetings “participants seem to feel social pressure not to multitask because it would look disrespectful toward the speaker” (Wasson, 2004, p. 54). Other studies also show that organisational norms, culture and social factors moderate the frequency of electronic multitasking during meetings (Kleinman, 2007, p. 2503; Stephens & Davis, 2009, p. 75; Reinsch et al., 2008, pp. 396-397). This may be due to the fact that face-to-face meetings are social interactions that have three characteristics: visibility, awareness, and accountability (Erickson & Kellogg, 2000, pp. 61-62).

First, social information is visible meaning that other participants of a meeting can see if a person engages in electronic multitasking. Second, the person enacting this behaviour is aware of the fact that other participants can observe the behaviour. Therefore, social rules are applied. Third, since the person is held accountable for the behaviour, the rules “become effective mechanisms for social control” leading to social awkwardness and a reduction of electronic multitasking (Erickson & Kellogg, 2000, pp. 61-62; Lyons et al., 2010, p. 10). The moderating effect of the characteristics of social interactions is supported by a study by Lyons et al. (2010, p. 11). Their results show that 73.7 % of the participants of a teleconference, which lacks the mentioned characteristics, often or
always multitask, whereas the amount of multitasking participants decreases to 10.6 % in face-to-face meetings. These results emphasise the importance of the social context in the individual's decision to engage in electronic multitasking.

Despite the characteristics of face-to-face interactions that seem to limit electronic multitasking, this behaviour is ubiquitous and is part of the social norm (Tang, 2005, p. 1). Although the existence of social awkwardness both indicates the importance of the social context and the awareness of individuals that electronic multitasking is inappropriate, this understanding does not necessarily avoid this behaviour (Krishnan et al., 2014, p. 193). This may be due to the cultural shift to an “always on” society in which people are challenged by the expectation to be constantly available (Pinchot et al., 2011, p. 39; Wasson, 2004, p. 54). There are three main drivers of this shift. Firstly, portable electronic devices and technology-mediated communication have arrived both in our daily and business life. Secondly, employees experience an increased workload and use multitasking as a strategy to cope with this time pressure. Thirdly, changes in the attitude towards multitasking during meetings leads to an increased acceptance of such behaviour (Wasson, 2004, pp. 58-59).

In the context of technology use during meetings, several authors investigated the attitude and perception towards electronic multitasking (Bajko, 2012; Bajko & Fels, 2013; Böhmer et al. 2013; Cardon & Dai, 2014; Dietel et al., 2011; Iqbal et al. 2011; Kleinman, 2009; Washington et al. 2014). The main finding of a study by Bajko (2012, p. 7) is the difference in the acceptance of the use of laptops and smartphones during meetings. While 75 % of the participants find it reasonable to use a laptop during a meeting, more than 62 % perceive the use of smartphones as inappropriate because it seems impolite or rude. Furthermore, laptop use is not only supported by meeting participants but also by company policies. The reason for the difference in the acceptance might be due to the commonly associated function of smartphones to make and receive calls even if they are not used for that purpose in a meeting. In fact, also the high acceptance of laptops during meetings is only directed to work related tasks, yet not work unrelated tasks. Accomplishing tasks with a laptop not related to the meeting is reasonable for about one quarter of the participants in case of work with high priority or if their participation in the meeting is not necessary. Less than 10 % would use their laptop for personal use (Bajko, 2012, pp. 7-8). The diverse acceptance of portable electronic devices is a relevant aspect to consider in the context of this thesis. Based on the studies, a meeting leader might be more accepting or even supporting laptop use rather than mobile phone use, especially for meeting-related tasks.

Two years later, the study by Bajko was replicated to reveal any changes over time in the acceptance of laptop and smartphone use in meetings (Bajko & Fels, 2013, p. 4). The results show that the use of laptops during meetings is even more accepted. Also the use of smartphones gained significantly in acceptance by the participants (Bajko & Fels, 2013, p. 4). Regarding the company policies, there are no significant changes reported in the acceptance of laptops and Blackberries. However, companies have become more supportive towards the use of iPhones (Bajko & Fels, 2013, p. 5). In conclusion, the results of the two studies provide empirical evidence for the trend of an increased acceptance of electronic multitasking in meetings. At first, the attitude towards laptop use in meetings has changed and was then followed by an increased acceptance of newer technologies such as smartphones (Bajko, 2012, p. 8; Bajko &
Theoretical Framework

Fels, 2013, p. 5). This again indicates an increase of electronic multitasking and emphasises the relevance of investigating management approaches.

Washington et al. (2014, p. 55) investigate the attitude of American professionals towards mobile phone use during formal and informal meetings. They find different types of mobile phone behaviour that was observed by the participants and considered disrespectful. Taking or making calls and sending text messages or emails was perceived as rarely or never acceptable in formal meetings by more than 80 % of the professionals (Washington et al., 2014, p. 57). This is supported by the findings of the study by Bajko (2012, p. 9), in which about 70 % of the participants state that they would not text in a meeting and make or accept a work or personal call. These findings suggest that a meeting leader has to be aware of both the differences between various devices and different behaviours meeting participants have when using a particular device.

Furthermore, Washington et al. (2014, p. 58) find evidence that age and income, which is usually related to a higher position, are significant predictors of the perceived appropriateness of mobile phone use in formal meetings. These results contradict with the study of Bajko (2012, p. 10) who states that age, gender and position are no factors impacting the attitude towards portable electronic devices in meetings. According to Washington et al. (2014, p. 58), younger professionals are more likely to consider electronic multitasking with mobile phones acceptable. This is supported by other authors. Dietel et al. (2011, p. 1281) stress that generational membership influences the perception of mobile phone use during meetings. More Baby Boomers (born between 1945 and 1965) than Generation Y (born after 1980) individuals consider this behaviour rude. Similarly, Pinchot et al. (2011, pp. 44, 46) conclude that younger individuals are more likely to consider mobile phone use in face-to-face interactions acceptable and that this positive attitude reverses into negative the older the person. In terms of income as a potential predictor, professionals with a higher income show a lower acceptance (Washington et al., 2014, p. 58). When conducting our research we are aware that these characteristics of individuals might influence the leader's perception and eventually their approach of managing electronic multitasking.

The previously discussed studies show that, despite a general increase in the acceptance of electronic multitasking, especially the use of smartphones is still considered highly uncivil, inappropriate and distracting. This might be an important consideration for leaders managing electronic multitasking in meetings. However, it has to be mentioned that these studies are conducted in North America and other parts of the world might have different perceptions due to cultural differences (Cardon & Dai, 2014, p. 6). Overall, research stresses that meeting participants have negative emotional reactions towards electronic multitasking. This behaviour is perceived as rude, counterproductive, impolite, frustrating and disrespectful because it demonstrates low interest and attention (Böhmer et al., 2013, p. 344; Dietel et al., 2011, p. 1281; Iqbal et al., 2011, p. 893; Kleinman et al., 2009, pp. 2504-2505; Pinchot et al., 2011, p. 44). These emotional reactions indicate that individuals are aware of other participants’ behaviour during meetings (Kleinman, 2009, p. 3899). This stresses again that face-to-face meetings as a process of social interaction are formed by the social context and its actors. Furthermore, it indicates the need to manage electronic multitasking to avoid negative emotional reactions that might impair meeting success.
Up to this point, we defined electronic multitasking and emphasised the importance of the social context in face-to-face meetings. To further extend the understanding of the concept electronic multitasking, research about the influential factors of electronic multitasking will be explored in the following. After this section, a description of potential benefits and downsides of electronic multitasking will conclude the understanding of the phenomenon. The comprehension of factors influencing electronic multitasking and the effects of this behaviour serves as a useful basis for meeting leaders to make decisions regarding the use of portable electronic devices in meetings (Reinsch et al., 2008, p. 400).

2.1.3 Factors Influencing Electronic Multitasking

When researching electronic multitasking, authors also focused their attention on factors influencing this behaviour. Reviewing the literature on impact factors is relevant in the context of this thesis, since they contribute to the understanding of the phenomenon electronic multitasking. This understanding is crucial for meeting leaders, since the factors might represent important drivers that should be taken into consideration when managing electronic multitasking. In the following, each study and the observed factors will be described including potential management applications. At the end of this section an overview about the revealed factors is provided in table 1.

Turner and Reinsch (2007) focus their studies on multicommunication in a general business context. In a mixed-method study using a mainly American sample, the authors discover equivocality and interlocutor status as two factors influencing multicommunication behaviour in the workplace (Turner & Reinsch, 2007, p. 51). Equivocality refers to situations in which several, sometimes conflicting interpretations of an issue are existent. In order to solve this situation, individuals have to communicate (Turner & Reinsch, 2007, p. 40). The authors show that higher equivocality discourages multicommunicating. They also find evidence that the higher the status of the communication partner, the less likely the occurrence of multicommunication, since the individual tries to avoid errors when communicating with a superior.

In another study the authors discuss three antecedents of multicommunicating: facilities, norms and schemata. New technology and the availability of such media in business facilitate multicommunication. An organisational norm for productivity and efficiency may encourage multicommunication. Since this study also includes the context of meeting leaders and their participants, organisational norms are particularly relevant. Schemata are used by individuals to estimate the appropriateness in a certain situation to engage in multicommunication (Reinsch et al., 2008, pp. 395-397).

Within the general business context, several authors conducted their studies of electronic multitasking and multicommunication by focusing on face-to-face meetings (Dennis et al., 2010; Kleinman, 2007, 2009; Stephens & Davis, 2009; Stephens, 2012; Stephens et al. 2012; Cardon & Dai, 2014). As previously described, the social context plays an important role in this setting. Stephens and Davis (2009, p. 75) investigate social influences on electronic multitasking by conducting an online survey in the USA and reveal two factors that have an impact on whether individuals multitask during meetings. First, the perception of others on what they think about ICT use during meetings influences the individual. Second, individuals make observations about the organisational norms and see if other attendees engage in electronic multitasking.
behaviour. Similarly, this factor of organisational norms is mentioned by Reinsch et al. (2008, p. 396).

In the context of collaborative decision-making meetings, Dennis et al. (2010) study the impact factors of instant messaging (IM) on the outcomes of such meetings. IM is a communication tool rather than a decision-making tool (Dennis et al., 2010, p. 873) and can be seen as a specific type of multicomunication and hence electronic multitasking. By conducting semi-structured interviews in US-based companies, the authors find six sub-genres of IM describing the different intentions when engaging in IM: Directing the meeting, providing task support, seeking clarification, providing social support, participating in subgroup meetings, managing extra-meeting activities. In order to validate the results gained by Dennis et al. (2010), Stephens (2012, pp. 204-214) develops and tests a scale that measures multicomunication behaviour. She includes five factors of multicomunication in meetings: informing (receiving information), influencing others, supporting others, participating in parallel meetings and being available. These factors hint at possible applications of electronic multitasking to enhance the meeting success or increase an individual's productivity.

The study of Cardon and Dai (2014) focuses on investigating the attitude of Chinese professionals towards mobile phone use during formal and informal meetings. Apart from that, they collect data about self-reported multitasking behaviour in meetings and conduct a regression analysis. The results show that gender has a significant influence on the frequency of mobile phone use. Female professionals in China tend to use their mobile phones less often than men in informal meetings. With this in mind, a meeting leader could adapt her management approach accordingly. The authors also find evidence that the meeting size matters a lot: The bigger the size of a meeting the higher the frequency of mobile phone use in informal and formal meetings (Cardon & Dai, 2014, p. 14). This seems to be a relevant factor, since a meeting leader has influence on the size of a meeting.

Böhmer et al. (2013, p. 345) come to the same result regarding the meeting size. They invited employees working at Microsoft’s headquarter located in the USA to answer a web-based questionnaire about smartphone use in meetings. The results show that as the size of the meeting increases, participants are more likely to engage in internet browsing (including both work-related and not work-related) during the meeting. Interestingly, the more the individuals were browsing the web, the more they considered to engage in not work-related multitasking. Another factor that impacts the probability of frequency of smartphone use during meetings is the meeting type. Presentation meetings (51.6 %) and status update meetings (48.3 %) are the meetings type in which participants most likely use their smartphone. Hence, the purpose of a meeting seems to determine the extent to which electronic multitasking occurs.

Kleinman (2009) also shows that the type of meetings is one of the main determinants for laptop use in meetings. The data were collected in the USA by interviewing and observing two senior managers and conducting a survey with 40 employees around the country. According to the results of this study, participants will most likely use their laptop in internal project meetings. Being aware of the varying amount of electronic multitasking according to the meeting type might again help meeting leaders to apply and appropriate management approach. Besides taking notes, the reasons for using laptops overlap with the impact factors revealed by Stephens (2012): looking up
information ("informing" in Stephens, 2012) and staying in contact with people outside the meeting ("being available" in Stephens, 2012) (Kleinman, 2009, pp. 3897-3898). Furthermore, she considers polychronicity, the preference for multitasking, as a potential impact factor on laptop use during meetings. However, the preference for multitasking has no significant impact on whether individuals actually engage in this behaviour, which can be explained by the necessity of multitasking in today’s workplace regardless of personal preferences (Kleinman, 2009, pp. 3898-3899).

In another study, Kleinman (2007, pp. 2503-2504) conducted 15 interviews in the USA and identifies five factors why individuals use technology in meetings. (1) Organisational culture of constant availability and (2) rules for specific groups ("organisational norms" in Stephens and Davis, 2009; “norms” in Reinsch et al., 2008) are likely to be relevant for managing electronic multitasking. (3) Information available on laptop ("seeking clarification" in Dennis et al., 2010; “informing” in Stephens, 2012) seems to be a beneficial meeting-related activity. (4) Power and status is another predictor of electronic multitasking (“status” in Turner and Reinsch, 2007). Hence, if a meeting leader has a high status she might have to manage electronic multitasking less. Furthermore, if participants consider the (5) meeting topic as not relevant for themselves they engage in electronic multitasking in order to use time efficiently. The latter can be confirmed by Iqbal et al. (2011, p. 892) who show that about 75 % of participants of lecture-like meetings report often using a smartphone or laptop when the meeting does not meet expectations.

Wasson (2004, pp. 54-56) conducts her study about multitasking in the context of virtual meetings. Hence, the previously discussed characteristics of face-to-face interactions, visibility, awareness and accountability, are not valid in this setting. Therefore, their findings have to be qualified in the context of this study since the moderating effect of the characteristics might not apply in virtual meetings. However, the author suggests several factors that shape an individual’s amount of multitasking in virtual meetings that seem to be relevant in our thesis. “Personal skills” refers to individuals’ ability to multitask that increases the amount of electronic multitasking. “Meeting Activity” is related to the required attention of meeting participants. During meeting activities such as information sharing and routine decision-making that require lower levels of attention, the author observes higher amounts of multitasking. Some multitasking was observed during activities such as idea generation and problem-solving that require a high degree of attention. This factor might be relevant for meeting leaders to evaluate the appropriateness of electronic multitasking and the necessity to intervene. Another factor revealed by the study is “Topic Relevance”, which is consistent with Kleinman (2007) and Iqbal et al. (2014). The amount of multitasking increases if participants do not feel affected by the topic. This might also be a crucial factor a meeting leader has to take into consideration when holding a meeting.

In summary, the studies discuss information access, communication within or outside the meeting and meeting characteristics including type, size and relevance as impact factors of electronic multitasking during meetings. We consider these factors as highly relevant in the context of this study since they can be influenced by the meeting leader. Furthermore, individual characteristics such as age, status of communication partner or meeting participants, and social factors such as organisational culture might be of importance when adapting the managing approach to different meeting situations.
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<td>virtual meeting</td>
<td>Factors shaping the amount of multitasking:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- personal skill</td>
</tr>
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<td></td>
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<td></td>
<td>- meeting activity</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>- topic relevance</td>
</tr>
</tbody>
</table>
2.1.4 Effects of Electronic Multitasking

To complete the understanding of electronic multitasking, the potential effects of this behaviour on the social context, the organisation and the multitasking individual will be discussed in this chapter. This serves as a basis for the assessment of the different multitasking behaviours and can help the meeting leader to decide how to manage the behaviour.

A potential reason for the mainly negative perception of electronic multitasking and the emotional reactions discussed in chapter 2.1.2 is that the multitasking meeting attendee draws her attention away from the physical environment and present conversation (Gergen, 2002, cited in Bajko, 2012, p. 4). Furthermore, it sends the signal to other participants that they are not important (Dietel et al., 2011, p. 1275). Hence, the relational dimension of a meeting that is characterised by collaboration, teamwork and interaction, is negatively affected (Böhmer et al., 2013, p. 344; Dietel et al., 2011, p. 1275; Tang, 2005, p. 2). These negative effects are also referred to as social costs (Iqbal et al., 2011; Tang, 2005). This may eventually impair meeting success since interaction of meeting participants is a crucial success criterion (Geimer et al., 2015, p. 2023; Van Praet, 2009, p. 80). A study by Böhmer et al. (2013, p. 344) shows that electronic multitasking is perceived as hindering face-to-face interactions. 47 % of respondents agree that smartphone use during meetings hinders social interaction and discussion, whereas only 24 % disagree. Similarly, the majority of the participants of a study by Dietel et al. (2011, p. 1280) views the use of personal electronic devices during meetings as negatively impacting personal relationships. Once again, this emphasises the relevance of the social context when multitasking in face-to-face meetings. This behaviour may adversely affect other meeting attendees who are dependent on the attention of the multitasking person (Krishnan et al., 2014, p. 193). Hence, a person participating less during a meeting due to electronic multitasking might not contribute valuable input to a discussion that is dependent on the attention of all meeting participants.

The potential negative effects of electronic multitasking are not limited to the threats for the social good. The individual productivity and hence the task dimension of a meeting may also suffer (Krishnan et al., 2014, p. 193). Electronic multitasking may cause performance degradation because individuals make more mistakes (Benbunan-Fich, 2012, p. 17; Buser, 2011, cited in Shao & Shao, 2012, p. 76; Reinsch et al., 2008, p. 391). Even though the study of Böhmer et al. (2013, p. 344) shows that only 20 % of respondents think that productivity is impaired by smartphone use during meeting, other authors reveal that the majority believes that electronic multitasking leads to less productive meetings (Dietel et al., 2011, p. 1280; Kleinman, 2009, p. 3900). Similarly, it is reported that individuals engaging in electronic multitasking are distracted by their devices and mishear key information. Consequently, they ask for a repetition of what has just been said (Newman & Smith, 2006, p. 1146). This eventually leads to longer and hence less efficient meetings, affecting organisational productivity (Dietel et al., 2011, p. 1280).

Potential problems arising from electronic multitasking originate in the limits of our cognitive information processing capabilities (Miller, 1994, p. 346). Although parallel processing of simultaneous tasks is possible, it is likely that the tasks are interfering because they are competing for limited capacity in the brain (Kahneman, 1973, p. 137). If these limits are exceeded, this may result in decreased task performance. This is
especially likely if the tasks are complex and impose heavy demands on the cognitive resources (Sweller et al., 1998, p. 290; Adler & Benbunan-Fich, 2015, p. 437). Performance erosions can occur both in terms of effectiveness and efficiency. Individuals engaged in increased levels of computer-based multitasking show a significant loss in accuracy that reduces effectiveness (Adler & Benbunan-Fich, 2012, p. 166). This may be due to the fact that less cognitive resources are used for each task when performing tasks simultaneously compared to focusing on one task (Shao & Shao, 2012, p. 76). Furthermore, multitasking creates the illusion of productivity for the individual, because the person who is working on more than one task simultaneously believes to spend less time with each task (Benbunan-Fich, 2012, p. 19; Shao & Shao, 2012, p. 76). In reality, individuals need more time for simultaneous task completion than executing the same tasks sequentially (Kahneman, 1973, p. 146; Pashler, 2000, p. 276). Hence, they are less efficient because time passes while going back and forth and refocusing between the different tasks (Shao & Shao, 2012, p. 76).

Overall, the outlined research about the negative impacts is overwhelming and shows that electronic multitasking both affects the relational and the task dimension of a meeting. In addition, most professionals remember only negative effects of electronic multitasking (Cardon & Dai, 2014, p. 5; Kleinman, 2007, p. 2505). Therefore, the behaviour is often stigmatised (Cardon & Dai, 2014, p. 5). Nevertheless, many multitasking individuals perceive their own behaviour as not distracting but as enhancing their personal productivity (Dietel et al., 2011, p. 1283; Iqbal et al., 2011, pp. 892-893). This may be due to the fact that many people attribute the ability of multitasking to themselves. Individuals believe that they are able to multitask and be productive while simultaneously paying attention to the meeting in order to not miss anything (Bajko, 2012, p. 7; Kleinman, 2007, p. 2504). Indeed, some authors suggest that multitasking can have positive consequences if tasks are simple (Adler & Benbunan-Fich, 2015, p. 437; Judd, 2013, p. 359). Lisman and Sternberg (2013, p. 275) conclude that multitasking consisting of a routine and a non-routine task can be efficient. Even though the routine task might not be executed optimally, the possibility to complete an additional task would make the loss of performance acceptable. In a study by Iqbal et al. (2011, p. 891), users of laptops admit to missing useful information during the meeting but they argue that this can be outweighed by the benefits of multitasking (Iqbal et al., 2011, p. 891).

Potential benefits that could outweigh negative aspects are mainly described on a personal level. Most of the meeting participants claim that electronic multitasking improves their productivity. Electronic multitasking functions as a time management strategy because it enables individuals to accomplish other tasks during the meetings and use work time efficiently (Dietel et al., 2011, p. 1283; Kleinman, 2007, p. 2505). In terms of meeting related multitasking, portable electronic devices could be useful for taking notes (Dietel et al., 2011, p. 1275). But also on the meeting and organisational level electronic multitasking can be used beneficially. The access to additional resources, e.g. by looking up information with a laptop, allows for enhanced and accelerated research and decision making (Dietel et al., 2011, pp. 1283-1284), affecting meeting efficiency. Process gains can also be achieved when multicommunicating with colleagues external to the meeting to have concurrent discussions and integrate their diverse information for faster problem solving (Cameron & Webster, 2013, p. 353). Especially in the service industry it is important to be constantly available for clients.
This required accessibility can be enabled by electronic multitasking (Cameron & Webster, 2011, p. 767).

It can be concluded that electronic multitasking leads to both positive effects in terms of effectiveness and efficiency and negative effects in terms of the ability to pay attention and participate (Lyons et al., 2010, p. 11; Wasson, 2004, p. 56). However, it is not clear whether the benefits may outweigh the costs (Iqbal et al., 2011, p. 891). The ambiguity regarding the positive and negative effects indicates a need for further research (Lyons et al., 2010, p. 12). Reinsch et al. (2008, p. 400) criticise that electronic multitasking is often discussed from a negative and narrow perspective. Since this uncertainty regarding the effects is persistent, we do not want to bias our research towards either positive or negative effects of electronic multitasking. We argue that due to the existence of both positive and negative effects, an appropriate management of electronic multitasking is required. Electronic multitasking should be encouraged to the extent that it enhances productivity without jeopardising process gains by the negative effects (Lyons et al., 2010, p. 10; Wasson, 2004, p. 56). In the following, we will therefore discuss various aspects of managing electronic multitasking.

2.2 Managing Electronic Multitasking

2.2.1 Meeting Success

Various authors have aimed at improving meetings, mostly assessing meeting success with the concept of meeting effectiveness (Geimer et al., 2015, p. 2017). According to Maciariello (2006, p. 49), effectiveness is “Getting the Right Things Done”. Hence, meeting effectiveness can be connected to reaching the common goals of a meeting. A study by Bang et al. (2010, p. 255) focuses on team effectiveness achieved through a meeting. The sub-categories that measure team effectiveness are defined as task performance, relationship quality and member satisfaction. Other authors measure perceived meeting effectiveness by asking how well meetings are contributing to the achievement of personal work goals, colleagues’ work goals, and departmental goals, to acquire information, to network and to produce commitment to the meeting’s content (Leach et al., 2009, p. 67; Rogelberg et al., 2006, p. 86). Meeting success therefore seems to be related to the results of a meeting and the contribution of a meeting to higher goals, such as team or organisational goals.

In the literature, it is stressed that meeting effectiveness and therefore meeting success is negatively impacted by unproductivity during meetings, especially considering wasted time and money of employees and companies (Geimer et al., 2015, p. 2015; Rogelberg et al., 2012, p. 239). In order to increase meeting productivity, it is important to examine meeting procedures, as appropriate group processes lead to better results of a meeting (Nixon & Littlepage, 1992, pp. 366-367). Marks et al. (2001, p. 356) confirm the importance of understanding the processes of team members interacting with each other. Improving the process of a meeting will therefore decrease the amount of unproductive time, and consequently lead to higher effectiveness of meetings and teamwork. As the leader plays a central role for meetings (Leach et al., 2009, p. 86; Lopez-Fresno & Savolainen, 2014, p. 138), we will now argue for the responsibility of the meeting leader in decreasing the amount of unproductive time during the meeting.
2.2.2 Responsibility of the Meeting Leader

The way leaders manage the meeting process influences the results of a meeting (Baran et al., 2012, p. 331). On the contrary, if the meeting is perceived as ineffective by its participants, this can diminish the team’s satisfaction with the leader (Perkins, 2009, p. 299). At the same time, managers and supervisors spend a great portion of their work time in meetings (Rogelberg et al., 2006, p. 87; Stephens, 2012, p. 218). It is therefore in their own interest to manage meetings well, hereby enhancing the effectiveness of meetings. Part of the responsibility of the meeting leader is to structure the meeting process and to focus the discussion on the goals of the meeting (Geimer et al., 2015, p. 2023). Considering that electronic multitasking is often unrelated to the meeting (Benbunan-Fich & Truman, 2009, p. 140; Iqbal et al., 2011, p. 892), it poses a major threat to the leader’s possibilities to keep the participants focused on the meeting. However, it is suggested that it is likely that meeting leaders possess a high influence on the norms of multitasking (Stephens and Davis, 2009, p. 78) and are actually able to manage multitasking behaviour of attendees (Wasson, 2004, p. 56). As part of this, a meeting leader can for example model the practise of using electronic devices during meetings, e.g. mobile phone use (Dennis et al., 2010, p. 856).

Considering the described negative and positive effects of electronic multitasking in meetings, leaders therefore have the potential and the responsibility to manage electronic multitasking in meetings. This includes limiting negative effects, for example distraction of other attendees (Tang, 2005, p. 1), as well as enhancing the positive effects, such as looking up additional information during the meeting (Dietel et al., 2011, pp. 1283-1284). In order to enable meeting leaders to manage electronic multitasking, it is important for them to know how to limit negative effects and enhance positive effects (Cameron & Webster, 2013, p. 367). Hence, literature on managing electronic multitasking during meetings will be explored in the following.

2.2.3 Meeting Leadership and Electronic Multitasking

The literature provides a very limited amount of recommendations about managing electronic multitasking behaviour in meetings. A general suggestion for leaders is to act as a role model to show their meeting participants that communication tools have to be used respectfully (Pearson, 2013; Washington et al., 2014, p. 62). This includes that the meeting leader should let meeting participants know when she urgently needs to engage in electronic multitasking behaviour (Pearson, 2013).

More specifically, authors recommend to explicitly set basic rules regarding the use of electronic devices, for example at the beginning of the meeting (Benbunan-Fich & Truman, 2009, p. 141; Dietel et al., 2011, p. 1278; Pearson, 2013). As part of these rules, managers could impose restrictions with regard to the use of technology (Benbunan-Fich & Truman, 2009, p. 141), for example asking the attendees not to use their mobile phones during the meeting (Böhmer et al., 2013, p. 342). Another approach mentioned by Iqbal et al. (2011, p. 893) is to focus more on the importance of the speaker engaging in process-oriented behaviour instead of having rigid rules (Iqbal et al., 2011, p. 894). This includes walking through the audience, mentioning people by name, and creating tasks. Additionally, it could be valuable to emphasise the importance of face-to-face interaction in a meeting to demonstrate that some electronic multitasking behaviour impairs the meeting (Pearson, 2013). Instead of just limiting electronic multitasking through rules and policies, it therefore seems to be important for leaders to engage the audience through their behaviour. Complementary, the meeting leader
should plan for breaks to allow attendees to answer emails and make important calls (Pearson, 2013). In contrast to simply banning devices, it might sometimes be preferable to allow laptops as they are important to take notes, i.e. in lecture-style meetings (Iqbal et al. 2011, p. 893). This emphasises again that there are also some positive applications of electronic multitasking that should not be neglected. By staying flexible and not simply imposing strict rules, a meeting leader would be able to make use of the mentioned positive effects of electronic multitasking. Including technology when it leads to positive effects has also been demanded by Benbunan-Fich and Truman (2009, p. 141).

Furthermore, study results suggest that different multitasking behaviours are perceived differently by individuals. They consider some behaviour as especially rude. These include taking and making calls, writing and reading text messages and emails, followed by browsing the internet. Ringing phones, bringing the phone to the meeting and checking the time on the phone are less often considered as rude behaviours (Washington et al., 2014, p. 55). In another study, laptop use was more accepted than phone use during meetings, especially if the tasks performed on the laptop are related to the meeting (Bajko, 2012, p. 7). Hence, multitasking behaviours could be treated diversely, depending on the level of perceived incivility. Similarly, the meeting leader should be aware of interpersonal differences, as gender, age, and status have been proven to have an impact on the perception of mobile phone use in meetings (Washington et al., 2014, pp. 59-62). Again, this indicates that strict and general rules on the use of electronic devices in meetings might be too unreflected. Instead, leaders might have to be flexible in their management of electronic multitasking behaviour, depending on the type of multitasking and the participants of the meeting. However, as leadership approaches are rarely researched upon, we see the need to explore this topic, hereby aiming to find a variety of approaches that a leader can use flexibly. As indicated by Iqbal et al. (2011, p. 893), it is important to improve the meeting itself through process-related behaviour instead of only focusing on the management of electronic multitasking during the meeting. Hence, the following section will introduce literature discussing how leaders can improve their meetings.

2.2.4 General Meeting Leadership
The literature on meeting leadership can be divided into content and process related as well as structural considerations. Content is related to what is being discussed, therefore content behaviour of a leader is expressed in her words and the agenda she uses (Bens, 2012, p. 9). Furthermore, content leadership behaviour is connected to giving and seeking information, and supporting and disagreeing with meeting participants (Perkins, 2009, p. 300). Hence, a leader often expresses her own opinion when using content related behaviour (Bens, 2012, p. 9; Perkins, 2009, p. 300). It can be interpreted that leaders engaging in content related behaviour act more like a participant of the meeting because they are involved with their opinion in the discussion.

On the other hand, examples for process behaviours are reducing tensions, following up with questions, giving summaries to keep the team together, and asking questions to learn if the group has reached a consensus (Perkins, 2009, p. 300). Process behaviour therefore relates more to the way topics are discussed, including for example tools, procedures, the style of interaction, and the group climate and dynamics (Bens, 2012, p. 9). Hence, a leader engaged stronger in process related behaviour acts more like a moderator of the discussion. Hereby, she facilitates an open discussion and includes the
opinions of all meeting participants (Bens, 2012, p. 103). This helps to foster interaction of attendees as one of the crucial features of meetings. In Perkin’s study (2009, p. 305), average leaders spend 80% of the meeting time on content behaviours and expert leaders spend only 50% on content behaviour, the other 50% being devoted to process related behaviours. Successful leaders therefore seem to balance process behaviour and leading the meeting with their own opinions. Lehmann-Willenbrock et al. (2013, p. 383) support the importance of procedural communication as a key leader behaviour that is often insufficiently used by meeting managers. Because content-related behaviour is already used more by leaders, there is a need for the improvement of process-related leadership behaviour, which will be examined further in the following.

Leader impartiality is one aspect of leaders focusing on process rather than content behaviour to increase the success of meetings. Impartiality supports the discussion of a variety of opinions, instead of limiting the group to opinions favoured by the meeting leader (Perkins, 2009, pp. 300-303). Furthermore, an open and systematic process allows to develop different alternative solutions to a problem and to reach higher meeting effectiveness (Nixon & Littlepage, 1992, p. 366). In a study by Nixon and Littlepage (1992, p. 366), leader impartiality could not be proven to be associated with accomplishing the goals of a meeting, but to be related to the participants’ satisfaction with the group decision. Furthermore, most of the leaders in their study struggled to stay neutral and follow the recommendations of leader impartiality.

Another important aspect of procedural leader behaviour is actively pursuing the goals of the meeting. This includes stating goals clearly (Bang et al., 2010, p. 260; Niederman & Volkema, 1999, p. 342) as well as encouraging goal directed communication between the participants (Bang et al., 2010, p. 260; Lehmann-Willenbrock et al., 2013, p. 383). Moreover, procedural behaviours such as moving the meeting along, encouraging decision making, and summarising decisions that have been made can contribute to attendee satisfaction and meeting productivity (Malouff et al., 2012, p. 45). Process behaviours can therefore also help to avoid unproductive discussions by focusing and reconnecting the meeting to its goals (Geimer et al., 2015, p. 2023).

Finally, procedural behaviour aids in encouraging participation (Bens, 2012, p. 9; Malouff et al., 2012, p. 45), which is again strengthening participants’ satisfaction and meeting productivity (Malouff et al., 2012, p. 45). The importance of participation and cooperation (Sonentag 2001, pp. 13-14) and the necessity of interaction and attendee involvement for team performance are also stressed by other authors to achieve successful meeting processes (Geimer et al., 2015, p. 2023; Van Praet 2009, p. 80). This is consistent with the various definitions of meetings, which incorporate interaction as an important aspect of meetings (e.g. Romano & Nunamaker, 2001, p. 1; Cohen et al., 2011, p. 96). Hence, managers should ensure the engagement of meeting participants (Allen & Rogelberg, 2013, p. 546). In this context, it is important for meeting leaders to maintain the relevance of the meeting for all of the attendees during the meeting process (Allen & Rogelberg, 2013, p. 560; Geimer et al., 2015, p. 2023). This can be ensured for example by having the right people in the room, i.e. only those that are important for the meeting purpose (Cohen et al., 2011, p. 101; Weisbord & Janoff, 2007, p. 16). If a meeting becomes irrelevant at some point for an attendee, the meeting leader could for example let this person leave and return to individual tasks. Criticism of participants on meetings is often related to not having a say in the meeting (Geimer et al., 2015, p. 2023).
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By engaging in procedural behaviour, i.e. encouraging interaction, the meeting leader would be able to face this criticism.

Besides procedural leadership behaviour, structural leader actions are another important aspect. They relate to the design characteristics of meetings such as agenda use, quality of facilities and timeliness (Leach et al., 2009, p. 67). Meeting design characteristics are usually under the control of the meeting organiser and should be used by her to impact meeting outcomes (Cohen et al., 2011, pp. 91-94; Geimer et al., 2015, p. 2015). Having a written agenda for the meeting and distributing it before the meeting also seems to be related to perceived meeting effectiveness (Geimer et al., 2015, p. 2023; Leach et al., 2009, p. 68). Contradictory to this, Nixon and Littlepage (1992, p. 366) have found that agenda use itself does not improve meeting effectiveness. However, in case an agenda is used, they clarify that it should be followed. Using an agenda could be useful to react to the common criticism of participants that they did not have the possibility to prepare for the meeting (Geimer et al., 2015, pp. 2019-2020). Moreover, the timeliness of a meeting was found to be an important factor. Both starting and ending the meeting on time is related to improved meeting effectiveness (Geimer et al., 2015, p. 2024; Leach et al., 2009, p. 68; Nixon & Littlepage, 1992, p. 366). Similar to this, suitable meeting facilities are connected to perceived meeting effectiveness (Geimer et al., 2015, p. 2023; Leach et al., 2009, p. 68). The appropriateness of a room and having the equipment needed, for example a projector or a whiteboard, can therefore aid the meeting (Leach et al., 2009, p. 68).

Even though design characteristics are typically described as structural components, they can not only be initiated before, but also used during the meeting to model the meeting process (Geimer et al., 2015, p. 2015). Hence, we argue that some design characteristics can be related not only to structural leader behaviour, but also to process behaviour. For example, an agenda is usually set up before the meeting as a structural component. However, it is important to actually follow it during the meeting to improve the process and consequently improve meeting effectiveness (Nixon & Littlepage, 1992, p. 366). Similar to agenda use as a design characteristic, timeliness is usually considered as a structural component (Leach et al., 2009, p. 67). Also in this case, we argue that enforcing the time limits during the meeting can be interpreted as leadership process behaviour. For example, a leader could guide the participants of a meeting to the next topic in case there is not much time left. This makes clear that the association of design characteristics to either structural or procedural behaviour is sometimes ambiguous. Therefore, we expect that some of them will become important when studying how leaders manage the process of a meeting. As the meeting leader is typically in control of the design characteristics of meetings (Leach et al., 2009, p. 65-66), we argue that it is the meeting leader’s responsibility to use them efficiently to limit unproductive time during meetings and consequently improve the meeting process.

Overall, focusing more on both procedural behaviour and design characteristics is important for meeting leaders to improve the process of a meeting and finally increase meeting success. This is in line with a suggestion made by Iqbal et al. (2011, p. 893) to not only pay attention to managing electronic multitasking itself. Improving a meeting in general to avoid multitasking behaviour might therefore be an important aspect to consider in our study. Procedural leader communication includes being impartial and hereby allowing the participants to develop various alternative solutions, actively pursuing the goals of a meeting, and encouraging the interaction of the attendees, for
example by maintaining the relevance of the meeting for all participants. Design characteristics that are mentioned in the literature and can positively impact the meeting process encompass timeliness, agenda use, and facilities. Another aspect of leadership behaviour during meetings is the surrounding organisational context. The literature has discussed to a small extent how organisational guidelines and culture can impact the way meeting leaders manage electronic multitasking behaviour during meetings. The next section will therefore introduce this topic briefly.

2.2.5 Company Guidelines and Organisational Culture

In order to support their meeting leaders in managing electronic multitasking behaviour in meetings, some companies have started to impose company policies such as banning electronic devices completely from corporate meetings (Guynn, 2008). Dietel et al. (2011, p. 1276) also mention such restricting types of rules, but realise that this topic is under-researched. According to them, it is not clear how many companies are actually implementing policies to deal with electronic multitasking in meetings, and how the policies look like. In their study, 70 % of the respondents state that their company does not have policies to govern the use of mobile devices in meetings. And only 52 % of these respondents would like to have company policies (Dietel et al., 2011, p. 1281).

Bajko and Fels (2013, p. 2) suspect that non-existence of company policies leads meeting participants to use electronic devices based on their personal beliefs. This indicates a need for organisations to install policies because participants acting based on their own beliefs might contradict company culture (Bajko & Fels, 2013, p. 2). Indeed, several studies have shown that company norms, culture and social factors can moderate the extent to which an individual engages in electronic multitasking (Kleinman, 2007, p. 2503; Stephens & Davis, 2009, p. 75; Reinsch et al., 2008, pp. 396-397). Because the leader is a part of the organisation, we argue that these norms will not only influence the electronic multitasking behaviour of meeting participants, but also have an impact on the way the meeting leader manages electronic multitasking.

In terms of company culture, there seems to be a change with regards to iPhone usage in meetings. Bajko and Fels (2013, p. 5) found out that companies are more supportive of iPhone usage than two years before, when they conducted their first study in 2010. Similar to this, they reveal that answering important voice calls and text messages in meetings is more and more accepted by company culture. As the acceptance and usefulness of different types of electronic multitasking behaviour in meetings seems to be suspect to change, we argue that implementing rigid company policies might be short-sighted. Furthermore, possible positive effects of electronic multitasking are disregarded by strict company rules simply banning electronic devices in meetings. Positive effects can, for example, include access to information outside of the meeting, which can serve to enhance the productivity of a meeting (Stephens & Davis, 2009, p. 77). Reinsch et al. (2008, p. 397) therefore see the need to further investigate perceived organisational norms to understand how norms are used to justify or limit multicommunication behaviour as a special type of electronic multitasking. Hence, we consider it as necessary to include the organisational context of a leader in our research, consisting of formal company guidelines as well as informal organisational culture. This will enhance the diversity of the approaches that can be revealed with our study and can consequently be used by meeting leaders.
2.3 Synthesis of Reviewed Literature

With the aid of our literature review, we have been able to conceptualise the literature on electronic multitasking. It is a first step to answering our research question: *How do meeting leaders manage electronic multitasking in face-to-face meetings?* Figure 1 serves to visualise the described relationships between the social context of a meeting, the leader, design characteristics and electronic multitasking. The centre of the figure shows electronic multitasking in meetings, which can be influenced by the meeting leader. If managed properly, it can positively affect meeting success. If managed insufficiently, it is likely to impair meeting effectiveness. Besides engaging in procedural behaviour discussed in the previous section, we have also shown in chapter 2.1.3 that the leader can make use of the design characteristics of meetings to influence electronic multitasking behaviour. We have argued that these can be both structural aspects, but also be influenced during the process of a meeting. Therefore, they are depicted with a dotted line both before electronic multitasking in meetings starts and during the meeting. Finally, the meeting leader and the meeting are influenced by the social context, consisting of company guidelines and organisational culture.

![Diagram of social context, leader, design characteristics, and electronic multitasking](image)

*Figure 1: Relationship between social context, leader, design characteristics, and electronic multitasking*

We have shown that meeting participants multitask for different purposes, which can be meeting-related, work-related, and for private use. In order to improve the meeting process, we suggest that a meeting leader should mainly limit private use and work-related multitasking. Encouraged can be meeting-related electronic multitasking behaviour, such as taking notes and accessing resources outside of the meeting by looking up information or contacting a colleague. However, if a meeting is seen in the wider context of team and organisational goals achievement, electronic multitasking during the meeting might have to be accepted. This could be the case if an attendee is
using it as a time management strategy due to a high workload or if meeting participants have to stay accessible by clients.

Even though it can be applied positively, we would like to emphasise that a meeting leader should always be aware of the negative effects when managing electronic multitasking in meetings. On the one hand, these include threats for the social good, such as negative emotional reactions of other participants, less interaction, and distraction of other attendees. On the other hand, the task dimension of the meeting can be impaired by attendees engaging in electronic multitasking because the individual productivity for the meeting is decreased and they have a loss of attention to the meeting. Consequently, they might mishear key information and make more mistakes. As already indicated, we propose that the meeting leader adopts a flexible approach in managing electronic multitasking during meetings. This could also include acknowledging individual differences between meeting participants or adapting the acceptance of electronic multitasking to the types of devices that are allowed to be used.

Design characteristics have been shown to have an impact on both electronic multitasking in meetings and meeting success in general. Design characteristics include the meeting size and the relevance of the topic (see chapter 2.1.3), which have been directly connected to electronic multitasking. Moreover, the type of meeting seems to make a difference in terms of the use of electronic multitasking (see chapter 2.1.3). Furthermore, the timeliness of a meeting, inviting the right people, the quality of the meeting facilities and agenda use and distributing it before have been connected with enhancing the success of meetings (see chapter 2.2.4).

Even though the literature on managing electronic multitasking in meetings is scarce, we have been able to identify some behaviour a meeting leader can engage in. These include behaving as a role model in their own adoption of electronic multitasking, letting participants know if they urgently need to take a call, setting basic rules, for example restricting the use of certain devices, planning for breaks, and encouraging the use of technology when it is of use for the meeting. More generally, the leader should use procedural behaviour to engage the audience and hereby hinder electronic multitasking behaviour. This encompasses leader impartiality, focusing the meeting on its goals, and encouraging the interaction of participants. Moreover, process-related leader communication can also include following the meeting agenda and keeping the relevance of the meeting high to engage them in the meeting.

Finally, we have shown that the social context of a meeting matters. First of all, how an individual perceives the beliefs of other meeting attendees influences her own behaviour. Second, a meeting participant usually adapts her multitasking behaviour to the organisational norms she perceives (see chapter 2.1.3). Third, a meeting leader will be influenced by company guidelines that are set to support her in managing electronic multitasking during meetings (see chapter 2.2.5). As guidelines can impact meeting participants and leaders, it might be useful for a company to consider implementing policies on this topic, or emphasising the organisational norms more.
3 Scientific Methodology

In the following chapter, we will describe our understanding of the nature of the social world, including our pre-understandings and our philosophical viewpoints on science in terms of epistemology and ontology. Furthermore, the chapter clarifies on our research approach and design as well as how we conducted our literature search. We would like to emphasise that there is no single right methodology. However, we show our trail of evidence to tie the research question and chosen methods together.

3.1 Pre-Understandings

As Remenyi (2002, p. 39) describes it, “the science is in the way the results are understood and interpreted”. Hence, it is important for researchers to reflect on their own context and experiences and the pre-understandings deriving from this (Patton & Appelbaum, 2003, pp. 68-69). This is especially true for case study research, as this type of research “is subjective and strongly influenced by the researcher” (Patton & Appelbaum, 2003, p. 68). Therefore it is considered important to state one’s own preconceptions very clearly. By doing so, the researcher is becoming an acknowledged variable of the research and the reader as well as the author are able to reflect on the influences the author had on the research (Patton & Appelbaum, 2003, p. 69).

Our research on electronic multitasking in meetings has been influenced by our personal experiences with it, mostly during classroom situations while studying our Master in Strategic Project Management. During lectures, courses and group works for our studies, we observed individual differences in terms of electronic multitasking behaviour. Also while working as student research assistants during our bachelor studies in Germany, we have learned that it is important to acknowledge different viewpoints. During the process of writing our thesis, we have therefore regularly discussed our individual perspectives and how they might influence our research choices. Within these discussions, different pre-understandings often appeared. In our opinion, they derived mainly from differences in our personal background. We finished our bachelor studies in different subjects, one of us in Business Administration with a focus on management, marketing and innovation, the other one in Sport Management and Sport Communication. The first one has directed her attention towards for profit, the latter towards non-profit organisations. Because of our backgrounds and our pre-understandings, we expect that each of us is biased to a certain extent, which has possibly affected our research. However, working in a pair and making use of the differences in our personal background helped us to come up with diverse ideas that will be contributing to the literature on electronic multitasking in meetings.

3.2 Research Philosophy

Similar to the importance of considering the researcher’s pre-understandings, the way a researcher perceives the world and knowledge creation has important consequences for the research. This includes, for example, the methods chosen for data collection and analysis (Cunliffe, 2011, p. 651). Hence, a discussion on our philosophical viewpoints is important to understand how we contextualise our research results. However, we accept that there is no clear-cut answer to philosophical questions. Rather, the different answers to these questions reflect different ways of seeing the world and the way research should be conducted (Ritchie & Lewis, 2003, p. 15).
3.2.1 Ontology
Ontology describes the nature of reality and whether social reality exists independently from the human being or if it is constructed by them (Long et al., 2000, p. 190; Ritchie & Lewis, 2003, p. 11). Two main ontological positions are depicted on a continuum: objectivism, which is usually related to quantitative research and natural science research methods, and constructivism, which is mostly connected to qualitative research (Long et al., 2000, pp. 190-192). Advocates of objectivism regard social reality as predetermined and governed by generalisable laws, common to all social actors and external to these actors. On the other hand, constructivists believe that social actors create the social entities they belong to (Morgan & Smircich, 1980, p. 492; Ritchie & Lewis, 2003, pp. 11-12). This creation process is happening constantly due to interactions and is therefore considered as dynamic (Morgan & Smircich, 1980, p. 495).

From a constructivist perspective, truth is relative and depends on a person’s perspective as well as the context and time investigated (Baxter & Jack, 2008, p. 545; Cunliffe, 2011, p. 656). Furthermore, truth is relative because research is also influenced by the researcher. Participants and researchers construct multiple realities through their meanings and explanations for the social reality that is being researched upon (Cunliffe, 2011, p. 656; Ritchie & Lewis, 2003, p. 12).

In the context of our thesis, we take a social constructivist perspective due to the following reasons. First of all, recent studies have shown that individual acceptance of electronic multitasking and organisational norms with regards to electronic multitasking have changed (Bajko & Fels, 2013, pp. 4-5). This indicates that the social reality of electronic multitasking in meetings is not a fixed structure, but subject to change. Second, there is evidence that human beings are limited in their adoption of electronic multitasking in face-to-face meetings by other participants (Erickson & Kellogg, 2000, pp. 61-62; Tang, 2005, p. 1). This includes, for example, social pressure as an impact factor on electronic multitasking behaviour in meetings (Wasson, 2004, p. 54). Third, the meeting leader can have an impact on the participants’ adoption of electronic multitasking (Dennis et al., 2010, p.856; Stephens and Davis, 2009, p. 78; Wasson, 2004, p. 56). Fourth, external factors to a meeting such as organisational norms and expectations to be constantly available can influence electronic multitasking behaviour within the meeting (Pinchot et al., 2011, p. 39; Stephens & Davis, 2009, p. 75; Wasson, 2004, p. 54). Hence, it can be seen that electronic multitasking behaviour in meetings is shaped through the interaction of meeting participants, leaders and the organisation. Therefore we see our research in line with a social constructivist viewpoint.

3.2.2 Epistemology
While ontology deals with the social reality of human beings, epistemology is concerned with the nature of knowledge (Cunliffe, 2011, p. 649; Morgan & Smircich, 1980, p. 493). Depending on the philosophical position, knowledge can either be objective and therefore theoretically available for everybody, or subjective, and reliant on individuals’ experiences (Long et al., 2000, pp. 190-191). Consequently, epistemology asks if a researcher can detach herself from the social reality she is examining. If this was possible, data collection and knowledge generation could be done in an objective way. This corresponds with the epistemological position of positivism (Ritchie & Lewis, 2003, pp. 5-7; Silverman, 2011, pp. 170-171). If detachment was impossible, research is automatically influenced by the researcher’s understanding and interpretation, relating to the epistemological perspective of interpretivism (Ritchie & Lewis, 2003, pp. 5-7; Silverman, 2011, pp. 181-182). While
positivist researchers are aiming at finding law-like generalisations, interpretivists focus more on understanding the subjective meanings of actors’ experiences (Gephart, 2004, p. 455; Ritchie & Lewis, 2003, pp. 6-7). These meanings are relative to the place and time they are constructed (Cunliffe, 2001, p. 656). In order to examine how meanings are constructed, interpretivists investigate language, text, talks, words, symbols and interactions (Cunliffe, 2011, p. 651; Gephart, 2004, p. 455).

For our thesis, we adopt an interpretivist perspective, which is aligned with the ontological position of social constructivism. We believe that we cannot detach ourselves completely from the social reality that we are investigating. Age seems to be a factor of electronic multitasking behaviour because the use of electronic devices is much more natural to younger people than it might be to older generations (Dietel et al., 2011, p. 1281; Pinchot et al., 2011, pp. 44, 46). As we have grown up with a constant use of technology, we believe that it influences our viewpoints on the topic and puts emphasis on the interpretivist perception that our own experiences influence our research (Cunliffe, 2011, p. 656). Likewise, it indicates the importance of understanding the context and experiences of the people that are being studied (Cunliffe, 2011, p. 656; Ritchie & Lewis, 2003, p. 7). For example, an older interviewee might perceive electronic multitasking more negatively than a young respondent.

As context and personal experiences matter, we expect that the understanding of electronic multitasking varies from individual to individual. Hence, we are not aiming to find definitive explanations, but rather to understand how electronic multitasking in meetings is experienced by our research participants (Gephart, 2004, p. 455; Long et al., 2000, p. 191). We believe that our research results will naturally be influenced by our understanding, the perspectives of the research participants and our interaction with them (Cunliffe, 2011, p. 656; Ritchie & Lewis, 2003, p. 7; Silverman, 2011, p. 169).

### 3.3 Research Approach

When reflecting upon possible research approaches, the nature of our research automatically led us to an inductive approach. In the case of our research topic, a multitude of concepts and the lack of research on managing electronic multitasking in meetings from the leader perspective necessitate an inductive approach. Electronic multitasking and meetings have been connected to various fields of research, including academic, business and psychological contexts as well as communication literature. At the same time, different concepts such as multitasking, multicomunication and task-switching can be linked to electronic multitasking. Hence, it was not possible to derive testable hypotheses or theories from the existing literature, which is typical for deductive approaches (Cunliffe, 2011, p. 664; Elo et al., 2008, p. 113; Ritchie & Lewis, 2003, p. 13). In contrast, inductive approaches are mainly used if existing theories are insufficient to answer the research question or when knowledge on the topic is fragmented. Furthermore, inductive approaches are usually connected to qualitative research (Eisenhardt & Graebner, 2007, p. 26; Elo et al., 2008, p. 113). Within inductive approaches, theory generation is typically the main goal (Bryman & Burgess, 1994, p. 6; Eisenhardt & Graebner, 2007, p. 25). However, we acknowledge that our study might be limited towards theory generation. This is due to the fragmented nature of the topic. Hence, we aim to lay the basis for a new theory, instead of generating a completely new one.
3.4 Research Design

In this chapter we will introduce our research design that serves as a general plan of how we will answer the research question. This is influenced by the scope and focus of the thesis (Patton & Appelbaum, 2003, p. 64; Saunders et al., 2009, p. 136) and nestled within our philosophical viewpoint (Gephart, 2004, pp. 455-456; Long et al., 2000, p. 190; Morgan & Smircich, 1980, p. 491). We will present the reasoning behind the decisions made in terms of research strategy, and whether to use qualitative or quantitative data collection techniques and analysis procedures. It is important to mention that we do not aim to discuss exhaustively all potential solutions we could have used but rather focus on arguing for our choices by highlighting the advantages in the context of this thesis.

3.4.1 Research Strategy

The most important determinant to identify the appropriate research strategy is the research question. “Why” and “how” questions are associated with experiments, histories and case studies (Yin, 2003, p. 7). As our worldview encompasses plurality and complexity and we aim to gain an understanding of the context and the enacted processes, case study is a natural choice for a research strategy (Patton & Appelbaum, 2003, p. 63). The goal of a case study is to reveal patterns, interpret meanings and based on this draw conclusions to build theory (Eisenhardt & Graebner, 2007, p. 25; Patton & Appelbaum, 2003, p. 67). This is in line with the inductive approach of this study.

Case studies can be further categorised into single and multiple case studies. When conducting a single case study, an unusual, rare or critical case is investigated (Yin, 2003, p. 47). However, we cannot satisfy this rationale since we could not identify any prime examples of meeting leaders who are well-known due to their management skills of electronic multitasking. In addition, multiple case design is preferred over single-case design because evidence derived from several cases is often more compelling (Yin, 2003, p. 46). This is because investigating multiple cases has the advantage to allow a broader exploration of the phenomenon (Eisenhardt & Graebner, 2007, p. 27). Moreover, there is the analytical benefit to identify differences and similarities between the cases to show whether results can be replicated across cases or are idiosyncratic for a particular case (Eisenhardt & Graebner, 2007, p. 27; Yin, 2003, p. 47). Therefore, research based on multiple cases is typically more robust than single cases (Eisenhardt & Graebner, 2007, p. 27; Yin, 2003, p. 46). Due to this rationale we adopt a multiple case study research design.

To conduct a rigorous case study, we followed several steps. First, we determined the unit of analysis, which is “a phenomenon of some sort occurring in a bounded context” (Miles & Huberman, 1994, p. 25). In this case study the unit of analysis is the meeting leader. Second, it is important to place boundaries on the scope of the case to be able to focus (Baxter & Jack, 2008, p. 546; Patton & Appelbaum, 2003, pp. 66-67). Therefore, we limited the case by place (Baxter & Jack, 2008, p. 546) and conducted the case study in Umeå. Third, we built a theoretical basis by conducting a literature review (Patton & Appelbaum, 2003, pp. 66-67). Furthermore, a rich theoretical framework is the basis for the case selection in the next step (Yin, 2003, p. 47). Fourth, as we will describe in chapter 4.2, we strategically selected the cases that are relevant for the chosen topic and allow for the collection of valuable data. Fifth, when analysing the data a rich description of the findings served as a basis for conclusions (Patton & Appelbaum, 2003, pp. 66-67).
3.4.2 Research Choice

The research choice is concerned with the decision on whether to use quantitative or qualitative data collection techniques and analysis procedures. Quantitative methods generate numerical data by using techniques such as questionnaires (Saunders et al., 2009, p. 151). Qualitative methods are associated with techniques for the systematic collection of any non-numerical data derived for example from interviews or observations (Malterud, 2001, p. 483). Likewise to the previous decisions, the research choice must be consistent with our philosophical viewpoints and the research problem being explored (Gephart, 2004, p. 457). Even if any research paradigm allows the use of both qualitative and quantitative methods (Guba & Lincoln, 1994, p. 105), our interpretivist position makes us mainly interested in understanding social meanings by investigating text, talks and words.

Also the research strategy should not lead to an unreflected choice of method. In multiple case studies both qualitative and quantitative methods can be applied. However, usually qualitative methods predominate (Gummersson, 2006, p. 168; Patton & Appelbaum, 2003, p. 64). For our multiple case study we consider a qualitative method as most suitable to address the research problem, because a qualitative approach offers more depth to explore complexity (Gephart, 2004, p. 455). Due to the complexity of electronic multitasking, the relevant variables that could be examined using a quantitative method are not evident. A qualitative method is well suited since it collects participants’ meanings and focuses on the understanding of a social phenomenon and its context rather than testing variables (Creswell, 2009, p. 17; Ritchie & Lewis, 2003, p. 5). This is in line with our interpretivist understanding, which aims at understanding the meanings of the social actors, i.e. the meeting leaders. Furthermore, a qualitative method is needed because electronic multitasking in meetings is a relatively new topic, has to our knowledge never been investigated by using a Swedish sample or from the perspective of the meeting leader (Creswell, 2009, p. 18).

Multiple case studies typically use multiple sources of evidence by combining several data collection methods (Patton & Appelbaum, 2003, p. 60; Saunders et al., 2009, p. 146; Yin, 2003, p. 14). In this thesis we focus on conducting interviews as our primary data source. Additionally, in the context of this study the observation of meetings and the leader's behaviour could have provided interesting results. However, since we conduct our research in Sweden but do not speak Swedish, this data collection technique would not have been feasible for this research project. Hence, we employed a mono-method research (Saunders et al., 2009, p.108). Nevertheless, we asked the meeting leaders to provide any documentation of organisational policies regarding electronic multitasking in meetings. Among the interviewed meeting leader only one stated that the company has written guidelines concerning the use of portable electronic devices in meetings and was therefore able to provide us with this data. Nevertheless, the single document was very useful in broadening our understanding of the case and complementing the rich data gained through the interviews.

3.5 Literature Search

The search for relevant literature in the field of study started with the identification of several keywords such as electronic multitasking, face-to-face meeting, multicommunication, outcomes of multitasking, meeting process, meeting success, and meeting leader. These keywords and their combinations were used to search for relevant articles in recognised electronic databases such as EBSCO Business Source Premier and
ScienceDirect accessible from Umeå University Library to find specialist material. The Google Scholar search engine was used to look for commonly used sources. However, especially in the case sources derived from Google Scholar we were selective to ensure the quality of information (Bryman & Bell, 2011, p. 115). Furthermore, electronic multitasking in meetings is a multidisciplinary topic that is not only related to Business Research but also to the field of Information Systems, Management Communication, Business Psychology and Human Factors in Computing Systems. Therefore, we looked into relevant and highly ranked journals of the identified fields such as the *Journal of Business Communication* for the latest research and articles about the topic. Scanning the table of contents of journals also allowed us to find relevant articles that have not been caught by our keywords (Webster & Watson, 2002, p. 16). Another effective way to discover further literature was the screening of the reference lists of articles (Randolph, 2009, p. 7).

Since books often contain outdated material (Saunders et al., 2009, p. 71), we aimed to rely our research mainly on academic journals. The use of recent research is particularly important in the context of electronic multitasking due the novelty of the topic and the fast-paced innovation in technology. Since journals include detailed information, literature reviews and an extensive bibliography, this literature source is most useful for this thesis. Furthermore, we mainly based our thesis on journal articles that are peer-reviewed by experts to ensure their quality (Saunders et al., 2009, p. 70). Nevertheless, we critically examined sources for their objectivity and validity. Therefore, we tried to avoid secondary referencing throughout the thesis and to use the original source to capture the original meaning of statements in their context.
Practical Method

In the following, we will discuss the choice of qualitative data collection method, including the sampling technique and interview procedure. Furthermore, our approach of qualitative data analysis will be presented. The chapter concludes with a discussion on relevant truth criteria in qualitative research and ethical considerations.

4.1 Qualitative Data Collection Method

Given the purpose of the study and the exploratory nature of the research question we see the need to collect primary data. Within qualitative research, interviews are one of the most popular data collection methods (Qu & Dumay, 2011, p. 238). Especially in multiple case studies interviews are the primary data source because they are highly efficient in gathering rich data (Eisenhardt & Graebner, 2007, p. 28). However, the extensive list of potential data sources in case studies also includes observation, documentation such as meeting agendas, archival records, films and photographs (Yin, 2009, p. 85). Interviews have “the purpose of obtaining descriptions of the life world of the interviewee in order to interpret the meaning of the described phenomena” (Kvale & Brinkmann, 2009, p. 3). Furthermore, they allow the researcher to collect opinions of their respondents (Czarniawska, 2004, p. 47). These purposes are in accordance with our interpretivist view and the desire to understand how meanings are constructed. As interviews are a linguistically complex situation and the interviewee’s answer should therefore not be idealised (Alvesson, 2003, p. 14), we acknowledge that the data derived from interviews is not the absolute truth. This is in line with our philosophical standpoints that truth is relative. Therefore, it has to be interpreted in relation to the interview partner’s context, our own pre-understandings and the theoretical background of the study (Alvesson, 2003, p. 14).

Types of interviews can be distinguished with regards to their setting. In interviews taking place in a group setting, called focus groups, several people are interviewed together (Qu & Dumay, 2011, p. 243; Saunders et al., 2009, p. 343). Next to time savings, this has the advantage that discussion and interaction between the interviewees evolves (Qu & Dumay, 2011, p. 243). Hence, the researcher takes a less active role and introduces less bias (Silverman, 2011, p. 162). However, focus groups should not be used for exploring sensitive subjects (Qu & Dumay, 2011, p. 243). Since electronic multitasking is often associated with negative emotional reactions we consider focus groups as not suitable in this context. Therefore, we decided to conduct interviews in an individual setting.

Within an individual setting, interview methods can be categorised along a continuum of structured, semi-structured and unstructured interviews (Qu & Dumay, 2011, p. 239). Unstructured interviews are informal and open-ended (Saunders et al., 2009, p. 321; Qu & Dumay, 2011, p. 245). This allows the researcher to probe the phenomenon in more detail in the context of the interviewee’s world. Hence, it is a very powerful yet demanding method since the researcher has to keep the purpose of the study in mind while simultaneously developing and adapting questions. This is beneficial considering the assumption that the researcher does not know in advance, which questions might be necessary (Qu & Dumay, 2011, p. 245). However, this assumption is not valid in our thesis since we already have gained an insight about the relevant concepts concerning electronic multitasking through the theoretical framework.
Structured interviews are located on the other end of the continuum. With these, the researcher reads the same prepared and standardised questions to all interviewees assuming that all relevant information will be revealed. The reasoning behind this is to avoid researcher bias and increase the generalisability of the findings (Qu & Dumay, 2011, p. 244). However, structured interviews limit the flexibility of the researcher to modify the questions to the background of the participant and in this way gain deep insight in the investigated phenomenon (Doyle, 2004, cited in Qu & Dumay, 2011, p. 244; Kvale & Brinkmann, 2009, p. 134). As the topic of managing electronic multitasking in meetings is not explored by existing literature, we expect that we will get important new ideas during the interviews. Hence, it is important to stay flexible and react to the interviewees’ answers.

Semi-structured interviews are located in between the two poles of the continuum. They are the most common method in qualitative research (Alvesson & Deetz, 2000, p. 194) and are frequently used in exploratory studies (Saunders et al., 2009, p. 322). During semi-structured interviews several previously identified themes are covered. Hereby, an interview guide is used including suggested questions that can either be relatively loose or detailed framed. Depending on the interview process the sequence of questions can be varied (Kvale & Brinkmann, 2009, p. 130; Qu & Dumay, 2011, p. 246; Ritchie & Lewis, 2003, p. 141). Furthermore, it allows the interviewer to probe and ask follow-up questions to obtain a satisfactory answer and deeper understanding of the interviewee’s meaning (Bryman & Bell, 2011, p. 467; Qu & Dumay, 2011, p. 247; Ritchie & Lewis, 2003, p. 141). Hence, semi-structured interviews provide some degree of freedom but ensure that all relevant themes for the study are covered (Saunders et al., 2009, p. 321; Qu & Dumay, 2011, p. 246). Furthermore, they allow to explore meanings, perceptions, and interpretations (Cunliffe, 2011, p. 659), which is in line with our subjectivist ontological and interpretivist epistemological viewpoints. Therefore, semi-structured interviews are preferred in this thesis.

4.2 Qualitative Data Collection

Before applying a sampling technique we limited the population of potential interviewees to address two issues that have arisen while reviewing the literature. First, the fact that most of the relevant studies have been conducted in North America creates the need for investigating electronic multitasking in another cultural setting. Second, establishing personal contact is of importance when interviewing individuals and language so that meanings are investigated in depth (Ritchie & Lewis, 2003, p. 142; Saunders et al., 2009, p. 324). Therefore, research interviews are usually conducted face-to-face (Ritchie & Lewis, 2003, p. 142). Since we are living and studying in Umeå, we limited the population to meeting leaders working in this city to make face-to-face interviews feasible. Simultaneously, this addresses the first issue of conducting research in another part of the world than North America, namely Sweden.

In quantitative studies a large and random probability sample is required to allow generalisability (Lukka & Kasanen, 1995, p. 72). This is not necessarily a truth criterion of qualitative research (see discussion in chapter 4.4). Furthermore, since we do not aim to test theory but contribute to their development, the random sampling technique is not preferable in case studies (Eisenhardt & Graebner, 2007, p. 27). In addition, qualitative methods are associated with a bigger amount of effort and time, which makes the processing of large data sets infeasible (Qu & Dumay, 2011, p. 244). Hence, adopting a sampling logic is misplaced in case studies (Yin, 2003, p. 48).
In multiple case studies, the selection process is particularly challenging and usually based on the contribution of each case to the data set (Eisenhardt & Graebner, 2007, p. 27). Hence, each case has to be carefully selected and serve a specific purpose (Yin, 2003, p. 47). The purposive sampling technique aims to ensure that particular features or characteristics of the unit of study are met that are of importance for the study. At the same time, some diversity within the key criteria has to be ensured. For our study we were seeking for a hybrid sample that entails some diversity but is homogeneous enough to allow comparison (Ritchie & Lewis, 2003, p. 79).

We contacted several local companies via email with a request for a research interview stating our research purpose, providing some explanations of the concept electronic multitasking and indicated the estimated length of the interview. When targeting companies we aimed at achieving variance and divergence in the data set (Pauwels & Matthyssen, 2004, p. 5) in terms of industry, age of the meeting leader and company size. Furthermore, we stated the need of interview partners who have high experience in leading meetings as a selection criterion. It is important to interview individuals who have profound knowledge about the phenomenon and are able to view it from diverse perspectives (Eisenhardt & Graebner, 2007, p. 28). Therefore, we targeted project managers, general managers and consultants who organise meetings on a regular basis. We consider them to be highly knowledgeable executives. Having received our request, the potential interview partners could self-select into the sample. This has the advantage that meeting leaders who replied have a high commitment to contribute to the research at hand. They are particularly interested in the research subject because it is relevant to their current work or they have the opportunity to reflect on a topic, which is beneficial for our research (Saunders et al., 2009, p. 241).

After we have received a positive response from the potential participants, we arranged date, time and location to conduct the interview at their convenience. All interviews were conducted by both authors together and in English. Since this is not the native language of the interviewees, few issues sometimes arose when asking for rich descriptions. However, the fact that we conducted face-to-face interviews and could observe facial expressions and gestures was very beneficial.

An interview guide was used (see appendix 1) to make sure that the same thematic approach was applied in all interviews and all identified themes are covered (Qu & Dumay, 2011, p. 246). The three themes we considered important derived from the literature review (Saunders et al., 2009, p. 239): limiting negative effects of electronic multitasking, enhancing positive effects of electronic multitasking and organisational guidelines regarding the use of portable electronic devices in meetings. Before the beginning of the interview we gave a definition of electronic multitasking and asked the participant to think of internal face-to-face meetings that she typically leads, when answering our questions. Asking for typical meetings offers the opportunity to focus the participants of the study on those meetings that they experience most. This will enable them to recall best how they manage electronic multitasking behaviour in meetings. During the course of the interview, we reminded the respondents about this understanding of electronic multitasking and meetings in case they seemed to drift away in their answers from the original meaning.

Our initial question was concerned with the experience and extent of electronic multitasking in the meetings executed by the interviewed leader. This question was
regarded as simple to encourage the interviewee to answer questions freely (Ritchie & Lewis, 2003, p. 141). If we got the impression that a participant perceives electronic multitasking negatively, we first probed this aspect before turning to the positive aspects later in the interview. Changing the sequence of questions is an advantage of semi-structured interviews (Ritchie & Lewis, 2003, p. 141). Furthermore, it is likely that, as the interview proceeds, new ideas and thoughts are generated that have been undiscovered before (Ritchie & Lewis, 2003, p. 142). Therefore, we concluded the interview with the request to summarise the most important points, provide recommendations for other meeting leaders and indicate any ideas they have thought of but not implemented yet.

With permission of the meeting leader, all interviews have been tape recorded. This is important since note taking could not capture the qualitative data in its natural form (Ritchie & Lewis, 2003, p. 142). Shortly after conducting the interviews, the records have been transcribed. This generated about 90 pages of raw material. In total, 6 interviews have been carried out in Umeå, Sweden, in November 2015. Due to unforeseen circumstances, the seventh interview had to end after about 30 minutes before it could be completed. However, since the majority of questions have been answered we do consider this a minor issue and the data as valuable. Table 2 gives an overview of the respondent's position in the company and the industry in which the company operates. The size of the company is indicated in terms of overall amount of employees and the amount of employees of the local branch where the meeting leader operates. The interviews lasted between 36 and 52 minutes. In the following, the codes in the first column will be used when referring to the participant.

Table 2: Participant overview

<table>
<thead>
<tr>
<th>Participant</th>
<th>Industry</th>
<th>Position of Interviewee</th>
<th># employees</th>
<th># employees in Umeå</th>
<th>Length (in min.)</th>
<th>age</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>IT Consulting</td>
<td>Consultant</td>
<td>220 (Sweden)</td>
<td>7</td>
<td>52:02</td>
<td>49</td>
</tr>
<tr>
<td>P2</td>
<td>Consulting</td>
<td>Consultant</td>
<td>450 (Sweden)</td>
<td>40</td>
<td>37:34</td>
<td>38</td>
</tr>
<tr>
<td>P3</td>
<td>Machinery manufacturer</td>
<td>Project Manager</td>
<td>1,450 (worldwide)</td>
<td>470</td>
<td>36:24</td>
<td>38</td>
</tr>
<tr>
<td>P4</td>
<td>IT Consulting</td>
<td>Project &amp; Portfolio Manager</td>
<td>14,000 (worldwide)</td>
<td>150</td>
<td>50:08</td>
<td>47</td>
</tr>
<tr>
<td>P5</td>
<td>Housing company</td>
<td>Manager</td>
<td>180 (Sweden)</td>
<td>61</td>
<td>40:40</td>
<td>63</td>
</tr>
<tr>
<td>P6</td>
<td>Utility supplier</td>
<td>Project Manager</td>
<td>360 (Umeå)</td>
<td>200-360</td>
<td>47:40</td>
<td>45</td>
</tr>
<tr>
<td>P7</td>
<td>Audit &amp; Consulting</td>
<td>Public Accountant</td>
<td>225,400 (worldwide)</td>
<td>30</td>
<td>32:15</td>
<td>48</td>
</tr>
</tbody>
</table>
4.3 Qualitative Analysis

4.3.1 Analysis Tool

Within qualitative data analysis tools, thematic analysis is a fundamental method (Braun & Clarke, 2006, p. 78). It serves to identify and analyse patterns, which are called themes. By using thematic analysis, the data can be broken down into smaller parts, but still described richly (Braun & Clarke, 2006, p. 79). It is a method that does not require extensively deep technological knowledge about the approach. Therefore, it is especially useful for young researchers (Braun & Clarke, 2006, p. 81). Nevertheless, it can offer a rich and detailed account of the data when conducted well (Braun & Clarke, 2006, p. 78). Furthermore, it can be used within different philosophical stances, including social constructivism (Braun & Clarke, 2006, pp. 78, 81).

Different authors criticise that there is a lack of tools and well-defined procedures in qualitative data analysis (Attride-Stirling, 2001, p. 386; Gephart, 2004, p. 458). To address this issue, Attride-Stirling (2001) has introduced a step-by-step model of thematic network analysis. Following the three steps proposed for creating thematic networks considerably helped us to get an orientation how to conduct qualitative analysis and to prepare the big amount of qualitative data for our analysis. Thematic networks are “web-like illustrations that summarize the main themes constituting a piece of text” (Attride-Stirling, 2001, p. 386). The aim of these networks is to explore the understanding of a phenomenon (Attride-Stirling, 2001, p. 387). It does so by breaking up the text, hereby allowing the author to find rationals and their meanings within the data (Attride-Stirling, 2001, p. 388). In our case we aim to get an understanding of the experiences and meanings of meeting leaders.

As shown in figure 2, thematic networks are a visual tool that allows to organise themes on different levels in a simple way. There are three levels, which are called basic, organising, and global themes (Attride-Stirling, 2001, pp. 387-388). Basic themes are the lowest-order themes of the data. They are derived from the textual data and represent simple notions of the data. In order for basic themes to make sense, they have to be seen in the context of their respective organising themes. These are middle-order themes and cluster similar basic themes. Hence, they are more abstract in the sense that they enhance the meaning of the underlying basic themes. A group of organising themes then constitutes a global theme, which presents what the data is about in the context of the given research question. As they are abstracted, global themes do not only summarise the text, but also include interpretations of the text as well as the basic and organising themes (Attride-Stirling, 2001, pp. 388-389).
As thematic network analysis is a tool within thematic analysis, we considered some advice on general thematic analysis that we deemed useful. According to Braun and Clarke (2006, p. 83-85), it is important to explicitly state the decisions we have made for the qualitative data analysis. First, this includes defining what we consider to be a theme. In order to define our themes, we have followed the above mentioned description of basic, organising, and global themes. Second, it is important to decide which type of analysis and claims we want to make. This can either be a rich thematic description of the data or focusing on one specific detail. The way meeting leaders manage electronic multitasking is an under-researched area. Because of this, it is also difficult to anticipate the participant’s views on the topic. These two aspects led us to give rich thematic descriptions of our qualitative data to explore the various facets of the topic (Braun & Clarke, 2006, p. 83). Third, we need to define how we are coding our data. In our case it was not feasible to deduce a coding frame from the existing literature prior coding the data. Therefore, we decided to use inductive coding since it does not try to fit the data into an existing coding frame or into the researcher’s preconceptions. Instead, it is driven by the data (Braun & Clarke, 2006, pp. 83-84). Hence, we consider inductive coding as more open to discover new aspects than deductively driven approaches. Finally, the types of themes that are used have to be agreed upon. These can either be semantic or latent themes. During our data analysis, we have mainly used semantic themes, which describe what is more explicit in the responses of the participants. However, some general aspects of managing meetings were described by the interviewees and not directly in relation to electronic multitasking. In these cases, we felt the need to use latent themes to capture underlying ideas of the meeting participants (Braun & Clarke, 2006, pp. 84-85).
4.3.2 Procedure

Besides clearly stating the decisions that were made prior to analysing the qualitative data, it is also important to explain how we have conducted the actual data analysis in order to assess the quality of our analysis (Attride-Stirling, 2001, p. 386; Braun & Clarke, 2006, p. 80; Gephart, 2004, p. 458). In the following, we therefore describe the procedures that we followed.

To create the actual thematic network, three steps are needed (Attride-Stirling, 2001, pp. 390-393). First, we coded the data inductively. Second, we identified and refined themes. Third, we constructed the thematic networks by arranging and rearranging the themes developed before. After the thematic networks were created, the data was explored and analysed with the help of the thematic networks (Attride-Stirling, 2001, pp. 393-394). Apart from the steps suggested by Attride-Stirling (2001), there are some features of our data analysis that are important to mention here. We re-read the interview transcripts to familiarise with them before starting to code the data (Braun & Clarke, 2006, p. 87). For the coding itself, we used the qualitative analysis software MAXQDA. It helped us in comparing the transcripts, for example to validate the consistency of our codings between the different transcripts. Furthermore, we coded the data as a team. This enabled us to discuss our different understandings and viewpoints and create codes that were best fitting to the data. If we were unsure how to code a piece of data, we usually listened to the audio record again to capture how something was said to get a better understanding. Every time we finished coding an interview, we checked the list of codes for redundancies and also clarified if we still had the same understanding of the single codes we had created. Similarly, whenever we coded an interview and realised that there might be an inconsistency with a coding that we made earlier, we looked at this quotation again and, if necessary, changed the code or the coding. Hence, we paid close attention that the quotations from the data fit with the codes we created.

When creating thematic networks, it is possible that more than one global theme is created (Attride-Stirling, 2001, p. 389). In our case, we collected six global themes, resulting in six thematic networks: Rules, Active Behaviour, Applicability of electronic multitasking, Company Guidelines, Organisational Culture, and Design Characteristic. Our complete thematic networks can be found in appendix 3, while the analysis of the qualitative data that we performed based on the thematic networks can be found in chapter 6.

4.4 Truth Criteria

Any type of research has to pass a critical examination of the accuracy and credibility of findings (Creswell, 2009, p. 190; Morse et al. 2002, p. 2). Hereby, many authors refer to the concepts of validity and reliability that have been developed by natural sciences and hence on the basis of philosophical viewpoints related to quantitative research. Therefore, it can be questioned whether the same concepts are valid to determine the quality of qualitative research (Morse et al. 2002, p. 3; Ritchie & Lewis, 2003, p. 270). Several authors suggest replacing these concepts with new criteria such as authenticity and trustworthiness, which can be assessed by credibility, transferability, dependability and confirmability (Creswell, 2009, p. 191; Guba, 1981, p. 80; Morse et al., 2002, p. 2; Ritchie & Lewis, 2003, p. 271). However, all these concepts are summarised in the basic idea of reliability and validity, which makes the concepts associated with
quantitative research applicable in qualitative research with the restriction to interpret the concept more broadly (Ritchie & Lewis, 2003, pp. 271, 273).

In its broadest sense, reliability means “sustainable” research (Ritchie & Lewis, 2003, p. 270). Reliability refers to the replicability of research findings (Ritchie & Lewis, 2003, p. 270; Saunders et al., 2009, p. 156) and indicates that the research design is consistent across different studies (external reliability) and different researchers (internal reliability) (Creswell, 2009, p. 190). Meeting external reliability in qualitative research is particularly challenging (Bryman & Bell, 2011, p. 400). Since case studies occur in natural settings that are subject to change it is difficult to generate the same findings and conclusions in the same case (LeCompte & Goetz, 1982, p. 35). As suggested by Yin (2003, p. 38), we documented all procedures we followed during the research process to achieve external reliability. We thoroughly described the steps we took to conduct a rigor case study. Moreover, we documented the strategies used to collect data and explained the applied data analysis technique in depth (LeCompte & Goetz, 1982, p. 40; Elo & Kyngäs, 2008, p. 112).

To maximise internal reliability of our study we ensured close collaboration between ourselves by coordinating the research process. We had meetings on a regular basis and maintained continuous communication and discussion about all critical decisions. Furthermore, we stored all literature and files in a common cloud storage and simultaneously edited shared documents. We mutually cross-checked written text and transcriptions of the interviews and collectively analysed the findings, following the suggestions by Creswell (2009, p. 190).

The basic idea of the concept validity is “well grounded” research (Ritchie & Lewis, 2003, p. 270). Validity concerns the accuracy, correctness and precision of findings (Creswell, 2009, p. 191; Ritchie & Lewis, 2003, p. 273). A distinction can be made between internal and external validity (Ritchie & Lewis, 2003, p. 273). The criterion of internal validity is one of the most important criteria of a case study (Lukka & Kasanen, 1995, p.75) and is satisfied if the research actually investigates what it claims to investigate. Hence, we have to ask ourselves: “Are we accurately reflecting the phenomena under study as perceived by the study population?” (Ritchie & Lewis, 2003, pp. 273-274). We addressed this question by implementing several procedures. Most importantly, we provide a rich description of the empirical findings to share our experience with the reader. Thus, results become more credible and realistic (Creswell, 2009, pp. 191-192; Lukka & Kasanen, 1995, p.75). Likewise, we present different perspectives and negative or contradicting findings, which adds to the credibility. Another important aspect is a self-reflection about pre-understandings and how this might bias our interpretation of the findings (Creswell, 2009, pp. 191-192). As discussed in chapter 3.2 we acknowledge that the researcher is a variable in the research design and introduces subjectivity that can be objectified by critical reflection (Patton & Appelbaum, 2003, p. 69).

External validity is often seen as synonymous to generalisability (Ritchie & Lewis, 2003, p. 264; Saunders et al., 2009, p. 158). The concept refers to the extent to which findings are applicable to other individuals or contexts other than those under study (Creswell, 2009, p. 193; Ritchie & Lewis, 2003, p. 273). There is an ongoing discussion among researchers whether qualitative research can be generalised and inference can be drawn. This discussion is driven by the different ontological and epistemological
perspectives of the authors (Ritchie & Lewis, 2003, p. 253). Many advocates of quantitative research criticise qualitative methods in general and case studies in particular due to their lack to produce generalisable results (Patton & Appelbaum, 2003, p. 65). However, it should be distinguished between statistical generalisability that can be achieved through random sampling and other modes of generalisability (Flyvbjerg, 2006, p. 227; Lukka & Kasanen, 1995, p. 83). In case studies, some degree of non-statistical generalisability can be achieved through an in-depth description of the context and the analysis that implies abstraction of the findings (Lukka & Kasanen, 1995, p.77; Malterud, 2001, p. 486; Patton & Appelbaum, 2003, p. 65). Therefore, the accumulation of knowledge of the studied field in the research community is possible, which makes case study research valuable (Flyvbjerg, 2006, p. 227; Lukka & Kasanen, 1995, p.75). Furthermore, through the large amount of presented information the reader can determine the level of similarity to other cases and is not dependent on general conclusions suggested by the authors (Patton & Appelbaum, 2003, pp. 65-66). Finally, the main purpose of this study is to gain an understanding of the phenomenon and not necessarily generalise findings.

### 4.5 Ethical Considerations

When conducting our research we aimed at engaging in ethical behaviour at all times. Ethical concerns have been addressed in terms of informed consent, anonymity and confidentiality (Bryman & Bell, 2011, p. 129; Tracy, 2010, p. 847). Informed consent means to give potential participants sufficient information to make a decision about whether they want to participate in research (Bryman & Bell, 2011, p. 139). This includes information about the purpose of the study, the research team, and the requirements of participation (Ritchie & Lewis, 2003, pp. 66-67). When sending our requests for research interviews we introduced ourselves as students of Umeå University, stated the purpose of our study and that the participation requires about 45 to 60 minutes to conduct the interview. To minimise inconvenience, the most suitable time and place for conducting the interview was chosen by the participant. Anonymity was achieved by coding the participants’ names and not providing any personal data that could conceal the identity of participants when presenting the findings. All data are kept secret and private to ensure confidentiality (Ritchie & Lewis, 2003, p. 67; Tracy, 2010, p. 847).

It is crucial to make these issues very clear to the participant (Ritchie & Lewis, 2003, p. 67). Therefore, we already stated the respect of anonymity and confidentiality in the request for research interview and repeated our commitment shortly before the interview started. In addition, we asked the participants to sign a consent form (see appendix 2). Hereby, the interviewee also signed that he/she participates voluntarily in the study and can drop out whenever they wanted without giving a reason. By signing the consent form the participant gave his/her permission to record the interview. This approach does not only contribute to ethics but also to more credible results (Miles & Huberman, 1994, p. 291) since it reduces anxieties of the participant, because anonymity and confidentiality are assured by the consent form (Saunders et al., 2009, p. 331). This allows the participants to answer more honestly without worrying about potential negative consequences when answering sensitive questions.
5 Empirical Findings

This chapter will present the empirical findings of our study, following the structure of our interview guide. Hereby, we will report a significant amount of the collected data by providing direct quotes from the interviewees. Even though we acknowledge that our own pre-understandings and interpretations are influencing the way we present our empirical findings, we believe that it is important to provide an extensive overview of the interviewees’ statements to capture the diversity of meanings. This will allow the reader to gain a own understanding of the leaders’ contexts and approaches of managing electronic multitasking, before we provide our own analysis of the data.

5.1 Context

5.1.1 Experienced Frequency of Electronic Multitasking

We started the interview with a question about the extent of experienced electronic multitasking behaviour. Although we only targeted experienced meeting leaders with our request for a research interview, we intended with this question to further validate how our interview partners have experienced electronic multitasking. By getting an overview of the respondents' experiences with multitasking, we were able to assess how much they have had to deal with electronic multitasking in meetings before. Several of the participants state that electronic multitasking is a common practice and that they observe the behaviour in many meetings. While some respondents indicate that it happens sometimes or often (P2, P4, P5), one interviewee explains that “it does happen all the time, more or less in every meeting” (P7). One participant describes the situation in her company in the following way: “most of the people put the phone on the table, ready to use. I have that in every meeting.” (P5). However, she also clarifies that “they don’t always use it” (P5) but adds that “it’s very common that [...] you can see that four of six persons are just looking at their phones or their iPads.” (P5).

The meeting leaders mention various electronic multitasking activities. Most of them are meeting-related such as “taking notes” (P2, P3, P6, P7), “reading something [related information] they should have read before” (P5), “searching for information” (P7) or “chatting during the meeting to ask some special question or double check is this correct” (P1). However, the interviewees also notice that some attendees are “doing other things and get out of the scope or the subject” (P1) or “would like to have an eye on what is going on if they are like busy with many other problems” (P4). Especially for “longer meetings you would bring your computer because you would probably do something. Then it tends like to be that you just checking your email, inbox or whatever” (P7). Also two other leaders mention “emailing” (P2) and that “laptops are used for mail, and looking at things not having anything to do with the meetings” (P6).

One leader is sure that people using a laptop during the meeting “are writing a lot, they are doing something else” (P5). Nevertheless, activities are still “work related mainly” (P6, P7). However, one of the leaders admits: “Well, it could happen. I mean that's just, that's most likely that it happens all the time. Just because it's available, and it's just so easy. You can look as if you are working but you are totally doing something else” (P7). Also two others suspect that attendees “are looking at something else. Some of those people are sending messages and are on their Facebook accounts and so on, they are blogging and, you know, any of these” (P5). The second experienced that participants are “looking at their smartphone, maybe chatting with your kids or with your wife or whatever that's more like of a social private thing that you do” (P2).
The participants describe how the frequency of the occurrence of electronic multitasking varies with regards to different types of devices. The various types of devices are related to the device preferences of the leader’s meeting participants, which are very diverse. In two companies there is “the tendency to use the computer during the meetings” (P3) and “laptops are used more” (P6). On the other hand, one leader thinks that mobile phones are used more and “not so much laptops or tablets” (P1) whereas another respondent notices that “before, we almost only had smartphones. [...] Nowadays, they have [...] tablets” (P5). In one company “the mobile phone is quite commonly used” (P4). However, especially in “workshops [...] people are using laptops” (P4). Finally, one leader thinks that generally “people use their laptops more” (P2), but she feels that among younger meeting participants “smartphoning is much more common” (P2).

Several participants notice that there has been a change in recent years with regards to the amount of electronic multitasking. They observe that it has increased a lot (P2, P4, P5). Another participant sees the increasing trend that “people are not interested in the subject [...] and they’re doing other things” (P1). In contrast, two participants see a decrease in the amount of electronic multitasking over the last years: “I think more people are aware of the fact that when you are looking at your laptop, you are not participating in the meeting. So I think during this year, we have become more aware of the fact and fold down the laptop” (P6). However, the person does not give reasons for the gained awareness. The other respondent notices the change that “it has been decreasing [...] since we have introduced these rules” (P3). The fact that the majority of leaders has experienced electronic multitasking to a large extent and it has been increasing for most of them in recent years underlines that they have got in touch with electronic multitasking frequently. Therefore, we believe they bring enough experience with them to be valuable interview partners for our research. Additionally, the large amount of electronic multitasking emphasises the importance to manage this behaviour and eventually justifies the relevance of our research topic. Since electronic multitasking occurs on a regular basis there is a need to investigate the approaches of how to manage this behaviour.

5.1.2 Typical Internal Meetings

Most of the interviewees further elaborate on the different meeting types they consider to be typical, internal and face-to-face, which are the meetings we were investigating in our interviews. These descriptions added up to our understanding of the context in which the meeting leader operates, which is an important aspect of our research philosophy. A differentiation between various meeting types is often made based on the short or long duration of the meetings. One leader conducts daily recurring meetings in the morning with his department. These pulse meetings “in the morning is 15 minutes” (P3) whereas the “weekly meeting is one hour roughly” (P3). In another company, meetings usually last two hours. But they also “have a lot of short meetings [...] that last one hour or two hours” (P5). Furthermore, she notices that “if it’s very short [...] then almost no one is taking the phone like this (gesture: placing the phone in the table). But if they are more than half an hour there is no difference” (P5) in the amount of electronic multitasking. Likewise, another respondent feels that “the longer the meeting runs, the more people multitask” (P6). His meetings are “typically not longer than two hours” whereas short meetings last “half an hour” (P6).
Some respondents not only characterise meeting types by duration but also by the purpose of the meeting. One interviewee considers “project meetings that are supposed to be like 15 minutes or 30 minutes” for “keeping timeline, budget” typical. In this case an electronic device “doesn’t provide any value to the meeting and then it shouldn’t be there” (P2). Nevertheless, she also mentions “work meetings” (P2) and states that “in other kind of meetings [than project meetings] of course it could be useful for the meeting” (P2). Another type of meeting was called “decision making meeting [...] where you need to make some decision” (P4). On the other hand, there are “workshop like” (P4) meetings “to reveal any kind of knowledge or things like that” (P4). Meetings of this leader typically last “30 minutes, one hour, some meetings are longer than that but it’s quite rare that they are more than like two hours” (P4).

It has been mentioned that the extent of electronic multitasking depends on the type of meeting (P3, P4). This becomes more clear in the statement of one leader who describes the difference between “information-type meeting”, which lasts “15 minutes to half an hour” and “working-type meeting [...] that would be like two hours”. He elaborates that if they “have a meeting that's gonna be a long meeting everyone brings their computer” (P7). However, for “shorter meetings no one really brings their computer” (P7) and he explains that “very few meetings that are shorter involve any kind of electronic device as part of the meeting [...] therefore, most of the meetings that we have are providing information, providing basis and you do get everyone’s attention because you keep it really short and it's to the point” (P7). The leader also mentions meetings with other purposes such as “monthly reporting meetings” where “the only one who would have an electronic device of any kind would be the leader of a meeting. All others would be without computer at least, but they would have their smartphone, which they would probably use like constantly” and “they would not hesitate to bring it up”. Although “they would not answer, [...] everyone would bring their [smartphone], for whatever reason [because] they cannot be without it for 15 minutes or 30 minutes” (P7).

### 5.1.3 Meeting Participants

Another important determinant of the leader’s context are the participants attending the meetings. The interviewees who are between 38 and 63 years old and therefore not part of the tech-savvy Generations Y and Z mention several times that the age of the meeting attendees seems to influence the electronic multitasking behaviour. “Older people mostly take note by pen and paper and younger people want to use their computers. And the younger, smartphoning is much more common” (P2). In general, younger colleagues “do a lot of things at the same time” (P7) because “they grow up with this, so they think this is the natural way to do” (P5). The same interviewee thinks that the smartphone “has grown to be part of your body today” (P5) and if “it's not there, it's like [...] something in the body is lost and [...] you are afraid, something is happening. It's something you have lost” (P5). She further explains that “young people are also stressed with this, because they must always be in contact and if they don't, they get stressed” (P5).

However, not only younger people feel the need to be constantly available. Meeting participants in general “cannot be without it [the smartphone] for 15 minutes or 30 minutes” (P7) and “keep track of who is calling” (P7). This behaviour is also the norm in another company where employees “must always be reached [...] if something happens” (P5) and the phone “it's always with you and it's always in people's minds” (P5). According to our interviewees, the problem is that people struggle to ignore their
mobile phones, because “once you get pop-up messages or push information you just want to look at it” (P7). One leader believes that it “is a nature human thing, that you know there is information available and then get desire to take part of it. So turning off the sound and turning off the announcements of new information, then you don't know it's there” (P4). Another respondent takes this one step further and states that “people have a weakness, I have a weakness and it's like discipline” (P6).

The descriptions regarding the individual’s need of always being available and the desire to receive information are in line with the high frequency in which electronic multitasking occurs. The participants of our interview partners engage in this behaviour, although the majority of the meeting leaders believes that they lack the ability to multitask. “Some people have problems to multitask” (P1) “because you cannot split vision in that way” (P3). Likewise, one respondent says that “many people think that they have the capability to multitask but I don't think that” (P5). Her explanation is also related to the split of vision, as mentioned by P1. She emphasises that communication is based on both voice and gestures (P5). One leader particularly points out the difference in taking notes using paper or a laptop. When writing notes “most people look at the paper and they look up [...] but when they put their eyes at the screen, they are stuck there” (P2). She states that only some people are able to multitask without losing focus (P2). Similarly, another respondent thinks that “we have a problem” (P6) if individuals “switch context away from the meeting” (P6). He explains that “there is one context which is the meeting, and there is another context, which is what you are looking at on the screen. And, switching contexts in general is a horrible idea” (P6).

5.1.4 Meeting Setup

Apart from the different meeting types each meeting can be designed individually according to features such as duration and breaks, agenda and goals as well as relevance of topic, which is related to inviting the right people and having the appropriate meeting size.

**Duration**

As already indicated in the description of the different meeting types, the meeting leaders typically differentiate between short and long meetings. Hereby, several leaders have a clear preference for short meetings. One of them states that she tries “to make meetings as short as possible” (P2), and also another leader thinks that “the meeting is too long if it lasts more than an hour [...] because then you cannot focus” (P3). Therefore, he conducts “short meetings that have a very clear purpose why we are here, what input is needed, what output is expected” (P3). Another respondent argues similarly: If “I want to come to a decision and want to focus on that then [...] I would make it very very clear and short” (P4). In general, he suggests to make “the meeting as short as possible” (P4). Similarly, one interviewee mentions: “we often make short meetings to more like focus and that it will not be too long meeting” (P1). Complementary, short meetings can be conducted standing up as one leader describes: “There are some meetings we do just in this open area outside these kind of rooms standing up just to shortly go through some information. That actually limits it [electronic multitasking], because standing on your feet, you don't see the people doing like this (gesture: trying to type while standing) when you're just 10 minutes around” (P4).
When holding longer meetings, some of the leaders use breaks to ensure the focus of participants. One of them plans ahead and says “if you have a really long meeting, then you sometimes schedule breaks in order to answer mails, things like that” (P6). Other leaders react spontaneously “if you see that a lot of people are losing interest it's really time for a break” (P2). Likewise, another interviewee explains “if I see that a lot of people, or when we have a long meeting, for 3 hours for example, it is important to have some breaks. Because for some people it is hard to focus for a long time [...] So try to take some breaks to minimise the risk of people focus on other things” (P1). Spontaneously and with the consultation of the meeting participants one leader would say “let's focus or do we need a short break?” (P4) or "we need to focus otherwise we go and take a cup of coffee, you can check your stuff and then we come back” (P4).

Meeting Agenda and Purpose
Three of the meeting leaders mention the importance of having a clear agenda for the meeting. The first explains: “we have very strict agendas written down [...] at least in the recurrent meeting, we have a timed agenda minute by minute” (P3). Furthermore, he keeps this agenda always visible and says: “If I run the meeting with the laptop then I have the agenda and the rules are always visible [...] Or we have like the pulse meeting which is not electronic and you still have the agenda on the board outside so you can see them” (P3). He gives the reason that it “is easier for people to see how long you are supposed to be on one subject” (P3). The second leader follows a similar procedure and argument to emphasise the importance of having an agenda: “If it is organised in the right manner I think it's possible to avoid it [electronic multitasking] partially I think. Depends on how the agenda is set up and how clear that is. [...] Where you need to make some decision then it is very good to have that criterion, the agenda, so to avoid the kind of people not being there really mentally. [...] But in those kind of meetings I put the minutes onto the screen. [...] The time when you really need the focus, if you show that time clearly” (P4). The third leader uses the same “clear agenda” (P6) for every meeting and announces it in advance: “it's the same agenda every time and it's a part of the meeting notice” (P6).

Similarly, three other interview partners indicate the purpose of the meeting ahead of or at the beginning of each meeting. For one of them “it's very important” (P3) to state for “short meetings that have a very clear purpose why we are here, what input is needed, what output is expected” (P3) while the second leader “always get to state when you start a meeting what is the purpose of the meeting, why are you here” (P1). The third interviewee associates this aspect with the situation in which you need to make a decision: If “I want to come to a decision and want to focus on that then I would, if a call for this meeting, I would make it very very clear: [...] ‘we need to go for this decision now, this is what we want to achieve”” (P4).

Relevance of Topic
Another feature of the meeting setup is to ensure the relevance of the topic and have “interesting topics” (P6). Hence, the meeting leader is responsible to gather “the right person in the right meeting” (P1) and has to ask himself “are they the right people or is there someone who shouldn't be there” (P2). One leader explains the reasoning behind it in the following way: “To be focused you need to feel that you have something to bring to the meeting, because all that we are discussing really has an impact on your work. [...] It needs to be important to you.” (P2). Similarly, another respondent observes that participants “will be more and more out of the scope if it doesn’t discuss
something that they really think is relevant” (P1) because they realise “I'm done, that's not my point, that's not my issue' you do something else” (P2). One leader notices “that's normally an issue with these meetings that you kidnap people basically. People who are not supposed to be in the meeting they cannot contribute but they are still there for some reason and they don’t know why” (P3).

Another aspect some of the leaders mention is that the participant is also responsible for the evaluation of whether the topic is relevant and if she should attend the meeting or decline the invitation. “If they are just sitting there working with something else or I am not sure what they are working with then they shouldn't be at the meeting. Obviously that thing they are doing is much more important so either they go and fix that or they are attending the meeting” (P3). In situations when the participant feels she is not needed, another leader recommends “in general I feel then it's better to not accept a meeting invitation. If you feel like that it's better not to accept the invitation, I think” (P6).

Despite their effort to gather the right people, it happens that “sometimes you have a meeting but you haven't the key person, it didn't attend” (P1). Another leader also experienced this situation and says “if this situation arises it's sometimes better to reschedule the meeting, because in general you need the person's contribution. So it's not only the fact, maybe it's the view on the facts or something like that so it becomes difficult [to only chat with the person or call the person to get information]” (P6). The same holds true for the opposite situation if too many people are present to discuss a specific issue: “We don't solve problems during the meetings. We only report status. We go through every point and if we find a problem then we make separate meetings for that problem. Because normally that problem only involves perhaps 10 % of the meeting so there is no point in 90 % sitting and listening to these persons to discuss it” (P3). A second respondent also schedules “two meetings because the first meeting doesn't gain the goal of it because the group is too many or too few” (P1). One leader suggests that “a group is working at it's best when it's like 5 to 7 people” (P2).

Political reasons can also play an important role that sometimes there are not the right people in the meeting. “Sometimes you need to, even though I don't want to, but for political or for other reasons, you need to send in notation to some people” (P1). The other leader explains that specific representatives are needed for decision making to ensure their commitment: “The structure of how we make decisions is based on the fact that someone is representing a business executive […] But in order to make things work properly after the decision is made, you have to have made sure that the right persons have stood by the decision. So it's more like, it's more because of politics” (P6).

5.2 Perception

During the interviews it caught our attention that most of the meeting leaders have a very strong opinion about electronic multitasking. We assume that their perception might bias the answers. Therefore, it is important to summarise their statements regarding their perception of electronic multitasking at this point. Four of the interviewees showed a mainly negative attitude towards electronic multitasking. One respondent even asked us: “I sound very negative don't I?” (P2). In typical meetings of this respondent she thinks “that phones or something like laptops it doesn't provide any value to the meeting and then it shouldn't be there” (P2). Likewise, one meeting leader told us: “I think as I see it right now it is a negative thing, it is not a positive thing right
now” (P1). Another interviewee perceives the decrease of electronic multitasking as positive. He told us: “since we introduced these rules I think we have seen a positive change. [...] It has been decreasing” (P3). The fourth respondent is very clear and states that she is “very much against that” (P5). Furthermore, she believes that there are no positive effects of electronic multitasking, “not in the meetings” (P5).

Two other meeting leaders have a more indifferent opinion. For one of them it is “depending on how you multitask [...] It can have a negative impact, but not necessarily a negative impact” (P6). The second interviewee is “not sure that I always want to avoid it” (P4). Only for one of the meeting leader it is “not a huge problem” (P7) and repeats several times that he “never experienced it as a problem really” (P7).

5.3 Negative Effects of Electronic Multitasking

One of our first questions concerned the effects of electronic multitasking on the meeting process. We consider this an important question to justify our research. The huge amount and variety of impact factors that have been described by our interview partners shows the relevance of managing electronic multitasking.

5.3.1 Loss of Focus

Every leader talks at least once about the loss of focus when engaging in electronic multitasking. Multitasking individuals are less focused (P2, P7) and it steals the attention of the attendee on the meeting (P2, P3, P5). Another respondent talks not only about a loss of focus but a change of focus. He sees “a high risk that they are changing the focus on more other things [...] and will be more and more out of the scope” (P1). Although multitasking participants are physically present, two respondents notice that “they are not as present mentally” (P3) and “people that could be participating, or contributing, are not contributing, because they are mentally somewhere else” (P6). Another problem is “if you’re not focused then the agenda can’t go” (P3). Especially “if it takes control over the meetings so to speak and then your call, text message, or email are more important and makes you lose focus” (P7). Furthermore, the meeting leader emphasises the importance of focus. It was also stated that there are situations “when you really need the focus” (P4). One respondent concludes that “especially when you are having a very important question or tasks to deal with, and it's an important group, it's decision makers, they are really those who has the power to make decisions in special questions or tasks or so, and they are not really there, then it's very frustrating” (P5).

5.3.2 Missing Information

In terms of the transmission and retention of information provided during the meeting, we collected two contrary findings. One leader has the opinion that electronic multitasking “defects the information, you don't get the right information because you, that is impossible. You can't have all the facts in the right way” (P5). This interview partner even states “that’s very dangerous [because] they missed it and they don't know” (P5). Also the meeting leader is in uncertainty whether information has reached the recipient. She complains that “sometimes you don't even know if they heard what you said” (P5). In contrast, the other interviewee does not have any problems to communicate important information and states “during 15 minutes it's not that someone comes in, never looks up, and leaves the room without, I mean that does not happen. You get the key points, the key points gets through” (P7). However, he admits that in general participants miss information and “that really happens a lot. Not in the entire meetings but I mean in terms of it happens but not for important stuff but I see it happen
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When we asked him whether this happens due to electronic multitasking he answers “most of the time. Only. I would say so basically only because of that” (P7).

5.3.3 Engagement
For some meeting leaders the engagement of all meeting participants is of importance. One of them is very clear and gives the following statement: “If I am the organiser of the meeting I want to have the attention to know that they are listening, if they are thinking about what I'm saying or contributing. [...] I want 100 % focus” (P3). When we asked him whether he feels that participants do not contribute when they are not fully focused, he answers: “Less, let's say” (P3). Another respondent says that “there is no interaction” (P5) when participants engage in electronic multitasking. Likewise, a third interviewee explains that “when you are looking at your laptop, you are not participating in the meeting” (P6). He even experiences negative emotions and complains: “I get annoyed when I need someone to contribute. And they are not contributing because they are somewhere else” (P6).

5.3.4 Unreflected Discussion
Statements regarding the quality of discussion in meetings are also related to the previous effects of losing focus, missing information and limited contribution. The three leaders that mention this aspect all have the opinion that electronic multitasking eventually turns discussions into a superficial exchange of different viewpoints instead of an in-depth debate. The first respondent describes the situation in the following way: “Not really listening and becoming more like ‘I have something I want to tell during this meeting, I have an opinion’ or ‘I have a standpoint that I would like to mark in this meeting, I want to drive the issue’ or something like that. So, being receptive to other person's input. I think you lose that if you are doing something else and waiting for the time to tell your stuff” (P4). The second leader suspects that “there will be a lot of very fast conclusions and you don't take the time to think, to reflect, you're almost ready with your answer” (P5). She comes to the conclusion that the decision “is not grounded. It's always moving on the surface” (P5) and explains further that “the information you get and the reactions you get in yourself, in your mind, it's not that good, and not so good quality in that as if you were really listening, and really looking, and really participating” (P5). Finally, the third leader who is mentioning poor discussions gives the following opinion: “In general I think you need to think, not just say things. because you can always say like, this sounds good, good idea. But that is not why you are at the meeting. [...] The discussion becomes less valuable I think” (P6). Furthermore, he disregards it as a contribution if participants say something every now and then “because if you contribute you have to like reflect, add some value. And it is harder if you are not like, if you are not zoomed into the discussion. It's more difficult” (P6).

5.3.5 Distracting Others
Another effect of electronic multitasking that has been mentioned by almost every leader is distraction. Multitasking participants distract other attendees and “sometimes people talk about it that it is irritating” (P5). One leader mentions that electronic multitasking even leads to negative emotional reactions because other participants might get angry (P1). He further explains that depending on “how much it will distract all other people” (P1) he will consider which action to take. Similar to the arising anger, another respondent explains why there might be tension between the participants. Electronic multitasking ‘has a tendency to irritate the other participants. Because you think that ‘ok, a guy or a girl just looks at his smartphone, chatting with his friends, she
is not really focused’. Maybe, that's not the case. Maybe this person is fully focused, fully like doing something. asking, participating, taking part. But the other four in the meeting have the perception or they made up their minds” (P2). Also another leader mentions the uncertainty of participants whether the multitasking individual is engaged in meeting-related or private activities. He describes that “you lose concentration and people watching, contributing to the meeting, become insecure of your participation” (P6). Furthermore, the interviewee mentions that not only other participants might be distracted but also the meeting leader herself. He states: “That makes me annoyed” (P6) and refers to the situation in which he needs “someone to contribute. And they are not contributing because they are somewhere else” (P6). Another leader also states that he is affected by multitasking participants and says that “it is disturbing if I talk to you and you look at the phone more, which is really disturbing” (P7). Only one meeting leader seems to be indifferent about this aspect. However, his statement concerns a specific individual so “in the case of him I have gone used to it. So I am not distracted by him” (P3).

5.3.6 Perceived Incivility
One specific negative emotional reaction is perceived incivility when individuals engage in electronic multitasking during meetings. One interviewee indicates the following: “I can see that people around me don't care about what is said. Then I wonder why are they here” (P5). Another interviewee states more directly that “it is like a bit of looking non-respectful or something like that” (P4), whereas one respondent concludes that “if you focus on the device I think you're actually talking about a rude cause, like bad behaviour. [...] It's just important to show people respect and if you're at a meeting be engaged in the meeting and it basically comes down to, maybe it's just an issue of respect” (P6).

5.3.7 Chain Reaction
During two interviews it has also been mentioned that multitasking individuals might trigger a chain reaction in the sense that other participants might adopt the same behaviour and start multitasking if they observe it by others. As one respondent states “it has more effects on other people, they might pick up their phone and check something because that guy is doing things like that” (P4). The second interviewee uses the metaphor of throwing “a stone and the waves” (P1) continue circularly.

5.3.8 Ineffectiveness and Inefficiency
Although we asked the interviewees specifically about the potential impacts of electronic multitasking on the meeting process, hence the efficiency, some answers concerned the outcome of a meeting. One leader believes that electronic multitasking “makes the meeting less effective” (P6). He differentiates between the situation in which electronic multitasking is or is not impairing the goal achievement, which also relates to effectiveness. He states: “I don't care when it doesn't hinder me from reaching my goal” (P6). However, since it is the leader's “responsibility of reaching the goal of the meeting” (P6) the leader has “to do something about it [...] when electronic multitasking becomes a risk” (P6). In terms of efficiency one leader gives the following response: “I think it's making the meeting less efficient as a whole I would say” (P4). One interviewee experienced a decreased speed of the meeting process. The respondent believes that “it makes the process much more slow” (P2). Only one leader has a contrary view and sees a positive effect on the meeting process. He explains that in his company they “do multitasking all the time just to be more efficient” (P7).
5.4 Limiting Negative Effects

In one of our key questions we asked the meeting leaders how they limit electronic multitasking during their meetings. We asked several follow-up questions to probe their approaches. Thus, we gained a big and diverse amount of data.

5.4.1 Rules

One of the most frequently mentioned aspects were rules that restrict the use of electronic devices during meetings. One leader explains the process of setting rules in the following way: “I try to, when we start a project, when we start a series of meetings to set off rules. So, these are the kind of meetings we are gonna have together [...]. I would like, when we are in this room together you know like 15 minutes, I’d like phones to be switched off, laptops to be closed” (P2). Another respondent is also very clear and tells how she sets rules in her company: “I have told my staff that it is not ok to take calls or to send emails during the meeting. They must go out or they must wait for the pause or something. [...] These are my own rules” (P5). When we asked whether she states these rules very clearly for each meeting she answers: “No, not for each meeting. When it's my people, they know. And I don't have to repeat it every time” (P5). Similarly, another one explains: “Normally, if I have a workshop I don't point the rules out. Then I expect them to know them already from the regular meetings” (P3). In the case of this leader the rules are specific company guidelines. However, he also has his own approaches and states that it is important “to be very clear and specific [...] This is what we are supposed to deliver. Please follow the rules [...] I'd say, as a meeting organiser I am the one who is responsible. It's my rules and it's my meeting” (P3).

Two other meeting leaders seem to be not that strict in the implementation of rules. One of them explains his approach like this: “Always when I start a new project, I’m more like, hard to say, this is the rule. [...] And there are always bullets: no telephones on the meeting [...] And then, if they can’t handle it, then I give more freedom or do other things [...] if I go and get too hard at this, it could be a clash back of the people. ‘I will not work, I will go out, I will not work with you and your project’” (P1). Hence, when setting rules our interview partner makes sure not to offend anybody (P1). Similar to the first leader, the second leader also talks about some inconsistency between setting and actually implementing his rules. To the question of whether she has her own rules she answers: “Yes, in principle (laughter). Yes but no, they are not enforced. The rules are not always set, and the rules are not always enforced” (P6). He further elaborates on the situation when he sets basic rules: “Sometimes when I feel that it's very important that everyone contributes, I basically say: 'Don't multitask. Put your devices away.' But that is often because it is very important. Then you have a meeting where it is very important that everybody contributes. And then you just put things away” (P6). Furthermore, “in some cases we have like, as part of the agenda, we have a statement saying ‘no computers’” (P6).

Another respondent has one rule: “Never use it in a customer meeting” (P4). However, in internal meetings he has “no, not that strict” (P4) rules. Nevertheless, later the respondent acknowledges that “turning off the sound and turning off the announcements of new information if you turn it off, then you don't know it's there. It might have been a message but I don't know it, then you don't get this desire to know” (P4) and pick up the phone.
5.4.2 Negotiate Rules

An important consideration seems to be the discussion of rules prior to their implementation. One of the leaders explains in detail how she starts a series of project meetings and talks to the team members: “We try to focus on timeline or schedule or budget or whatever and how do you like us to interact together? Ok, I would like this and this and this, ok. [...] Is that ok for you? And most people say: 'Yes, that's ok with me.'” (P2). She also renegotiates the rules in case people do not respect the rules (P2). She explains that negotiated rules are well respected: “If we've agreed on rules, most people say, ‘oh yes I'm sorry’” (P2) in case they forgot to follow the rule and the leader has to confront the person. In terms of negotiating rules, a similar approach is sometimes applied by another leader: “Normally I don't present the rules. Then I give the question to the audience. ‘Ok, what rules should we have today?’ You write them down on the whiteboard and they start to ‘perhaps turn off the phone is good’ (gesture: writing down) ‘no laptops is good’ (gesture: wiring down). [...] And then I also try if you go for lunch and if somebody has not followed the rules then after lunch you can ask the audience: ‘are we following our rules?’ and then (gesture: some people are getting embarrassed)” (P3). A third interviewee states that the implementation of rules requires consultation with the managers: If “I begin to think that this [electronic multitasking] is a problem I must put it on the table and discuss it” (P5).

5.4.3 Exception

Each of the leaders also told us that there are exceptions or situations in which they do not consider electronic multitasking as a problem. However, the majority only refers to phone calls. Usually meeting participants tell the meeting leader before the meeting that they might have to answer the phone (P1, P2, P3, P5). Another leader mentions that it is important to inform all the surrounding people: “If they are expecting something that just cannot wait, they will announce it: ‘I'm gonna answer the call if this person or company or whatever calls during the meeting, I'm excusing myself.’” (P7). For one respondent the issue has to be important and explains: “If they say ‘I have to keep my phone on because I'm expecting an important phone call’, that's fine. That's no problem. But I want to know it beforehand” (P3). Also for a third leader answering the phone is no problem in case it is an important private call: “Of course, if the doctor is gonna call you or if you are like have a child that is in the hospital, or you know, I mean keep your phone on then. [...] I wouldn't force anyone to that. [...] If you can give like a motivation, or motivate why you want to have your phone on. That's not a problem” (P2). The same rationale is used by another leader: “People are sending electronic messages so often so when someone finally makes a phone call it's really something else. Then it's usually something quite important. You need to take some action now. Otherwise, they would send a message” (P4).

However, for many leaders it is important that the participant taking a call is leaving the meeting room (P1). “It's basically most of the time allowed to walk out of the meeting to walk out of the room and take the call” (P7). Another respondent handles such situations in the same way. When a participant's phone is ringing “they look at it what is coming, and then they put it away, and they perhaps say ‘wait’ or they say ‘I'm sorry I must go out’” (P5). Only one leader mentions that he would update the person who left the room to take a call: “If the circumstances are that someone has said ‘I have an important call coming in’, when the person comes back into the room, and something important has been said, then I think it's polite to inform ‘while you were gone this happened’” (P6).
5.4.4 Direct Confrontation

With regards to implementing the rules all meeting leaders seem to be pragmatic and just point it out if participants do not follow the rules. The same holds true in case there are no specific rules, but the meeting leader requires full attention of every participant. “You can say to people: ‘Stop, don’t answer the telephone. Now we have a meeting’, [...] Sometimes I said: ‘Please, let’s focus on the subject’” (P1). Another leader also suggests: “I can direct my speech to them. I can ask: ‘Is this very urgent what you’re doing?’ And they must answer. And if they say: ‘No, I was just’ then I say: ‘Please put it away’. [...] I also have asked: ‘Are you interested or are you not?’ [...] I always remark if someone is just looking at these iPhones” (P5). One leader would address the multitasking person by asking for the reason: “I see you have your laptop on. Why is that?” (P2). However, she “would not discuss that during a meeting” (P2). However, they also state that it is important to intervene “in a kind manner of course” (P2) or “in an open, positive way” (P1). One leader clearly states that it is the meeting leader’s responsibility to act in that way. He states: “It is also up to I’d say to the meeting organiser to pinpoint those persons. And say ‘please close your laptop’ and they normally do so it’s not a problem” (P3). This leader prefers the approach of talking directly to “somebody who is not paying attention” (P3). He believes that “there is nothing else to do than to point it out” (P3). In addition, one interviewee considers it important to talk to the person directly during the meeting, “because I think if you talk after the meeting, then you have had. [...] If I would need your contribution then we have to stop and like, ‘this is not working’” (P6). Hence, for him it depends on the situation and whether there is a necessity to intervene. “Depending on if I become annoyed. Then I just say: ‘Stop, please stop doing this’ [...] And when it gets in the way of the goal of the meeting, then you have to say: ‘Put your laptop away’ or ‘Put your phone away or, maybe you shouldn’t be here’” (P6). Another aspect he mentions is that this action sends a signal to other participants: “Sometimes you want to make a statement to the rest of the group. So, you use like ‘Please take your computer away’, and the person becomes offended. [...] But the main intention is not offending the person. But it's like sending a message. I'm like (gesture: scanning the people)” (P6).

Another leader would first try to use a more subtle way of confronting. He would “try to like ‘zzzz’ (sibilant) and then I mean try to get eye contact or whatever I don’t do anything else” (P7). In the next step he would talk to the person: “I mean if I see that I am losing you and I want everyone to, I mean you have to be focused now and listen to this, I would probably say it. But if it would be a problem really then you would ask them ‘please put down your laptop because we need to focus more’” (P7). Another interviewee would not necessarily talk to the specific person and just “ask to focus” (P4). He elaborates: “If we are involved in a discussion and you start to do something else then I would ask: ‘Could we focus on this discussion?’. [...] If I feel that now we have no discussion then I just bring it up that we need to focus” (P4). Furthermore, he refers to a decision making situation: “Just to get the commitment for the decision. I would ask the question: ‘Can we decide this now? Are we ready to decide it?’ or something like that” (P4). However, he also points out that this situation is quite rare: “I think it works quite ok actually. It is not necessary to do very often. [...] People might have a look like this (gesture: checking smartphone under the table) but they won't use their laptops and things like that. If we are going to make some kind of decision it's really not happening” (P4).
5.4.5 Confrontation Afterwards

As previously mentioned, one of the leader does not consider it effective to confront a multitasking individual after the meeting since the behaviour already impacted the meeting. Other leaders have a different opinion and sometimes talk to meeting participants after the meeting or during a break to avoid further multitasking activities. Especially “if it's becoming too much, you approach the person” (P7) and “if it happens a lot with one person in every meeting, then you have to talk to that person and say: ‘ok what is the deal here? You don't agree on this, do you? And why is that? Should we change the rules or what should we do?’” (P2). One leader states that he actually avoids a confrontation during the meeting: “I will always try to take it between four eyes. So not everyone knows he has done something wrong. I don't need to rub it on his face, but I can take it afterwards: ‘Please remember next time. I will hope you will do what I said’” (P1). An alternative would be “to talk to the person during the break. If it's possible” (P1).

One leader even avoids any confrontation with one particular person because of the following reasoning: “I have one specific person in mind but I have never confronted him because he wouldn't listen and he one step above me. But I know if I point it out nothing positive would come out of it. It would be the same next meeting because but more awkward. And he is not a man who is very fond of; not conflicts, but he doesn't like these kind of” (P3). Also in the company of another leader there is one difficult case: “I can't educate him. But I guess, he is a critical person, we need him also, his knowledge, and we can't kick him out” (P1). During the interviews it has been repeatedly mentioned that there are individual differences in the sense that some people generally “tend to focus more on their own work than on the meeting” (P3) and that “they are very difficult to change” (P5). One leader notices that “this is typical for one person” (P1). Hence, “it depends on the people. Some people always multitask, some people they respect the rule. And it doesn't matter how many times you said it. Some people doesn't learn about it. That’s for sure. [...] But some people will never follow the rules” (P1). Therefore, in some cases any rule and confrontation might not be successful.

5.4.6 Role Model

Besides enforcing the rules towards the meeting participant, some leaders are aware that they act as a role model and also have to follow the rules or enact the organisational culture. One of them describes his behaviour in the following way: “I try to go ahead of showing this is the culture. I will not take the telephone. If I start to do it, then the participants would wonder ‘he can do it, why shouldn’t we do it?’ [...] I always have it on silence and ‘I will call you back’ as a quick answer. This is multitasking, but I focus on this 5 seconds and then go back” (P1). Similarly, another interviewee might pick up the phone and explains: “When I lead a meeting, I have it on like this (mute, visible on the table) and I would look and if there is like the major customer, if that one would call I would make the same [as other colleagues]. I would say: ‘Sorry, we need to postpone for a while, I will just take this call’. [...] If it’s no customer at all, then I will ignore it or my manager. I mean, that's an internal call that's perfectly ok. But it's more like the way we need to treat the customers. [...] But I don't check emails or thing like that, because if it would be very important, someone would make a call” (P4).

According to the interviewees’ descriptions, in some companies it is not acceptable to pick up the mobile phone at all. Nevertheless, the leaders admit they accidently do not respect the rules because they have forgot to switch off their phone. However, when we
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asked them how they have reacted or whether they have answered the phone they affirm: “No, really I don’t answer. I say: Sorry, I forgot to switch my phone off” (P2) or “No, I just turn it off and say sorry” (P3). Especially one of the leaders emphasises the importance of being a role model and concludes: “Leading by example. and I don’t think it’s not different like be good human. Be a good human being, I think it’s basically what it’s about. So I would rather focus on that like what is a good behaviour” (P6).

5.4.7 Involvement

When reviewing the meeting literature several authors name interaction between the meeting participants as an important feature of meetings. This might be impaired when people are not involved in the discussion and engage in electronic multitasking. Therefore, we specifically asked the interviewees how they ensure everyone’s involvement. Although one of the participant does not know what to answer in the first moment, he explains that each person is naturally involved since everyone has to provide prepared input to the meeting. His words are: “I don't think we have any specific actions to bring people to interact. Other than normally you have these recurring meetings then you have different responsible persons for each point, for each agenda point. So the responsibility goes around the table. [...] So you know for each and every point you have to prepare something” (P3). The same way of involvement is taking place in the meetings of another leader: “Everyone has to make a comment. And you can go around: ‘What do you say about this, and what do you think about that?’: You can make people listen” (P5).

One of the respondents adopts a quite elaborated approach to ensure that everyone is participates in the discussion and makes a comment. He explains it the following way: “Sometimes I try to make sure that we are having a partner in crime who helps me engage. It depends a little on the meeting set up. When we have larger formal meetings, in general we try to think about involving each and every member of the meeting, and I think that is a pretty good way. Like if you have a decision to be made, so ‘what’s your opinion, what’s your opinion, what’s your opinion?’ Because then you have the mindset that I will get this question. And that’s a fairly good way. [...] We [partner in crime and leader] help each other. I take notes, I have the agenda. And the other man, he makes sure that the people participate by asking questions, like ‘what is your view on this?’” (P6).

Three other leaders encourage involvement by means of flipcharts, whiteboards and posted notes or make subgroup meetings. The first leader describes: “I often do some work cafe. It's an old method. You take a flipchart, you have three questions, and you divide it in three groups. Then the three groups give some answer on the subjects” (P1). The second leader has various ideas to involve all participants: “Mainly, if I have a project meeting and people like standing up and just using a whiteboard and pen or some posted notes or something like that […] You can ask them to think stuff for themselves, writing post it’s putting up on boards. You can ask them to discuss things together two and two, in smaller groups, small kind of mini-workshop things. 5 to 10 minutes just to keep the focus and to change the rhythm of the meeting. […] So, mixing up like: someone standing there and talking and mixing that up with small kind of workshop stuff and then go back again, have a two minute break” (P2). Similarly, another leader uses “a lot of whiteboards for writing and sketching, because whiteboards normally during work meetings are crucial” (P3). However, he would like to introduce digital whiteboards, which are called smartboards: “I think it would be the
perfect thing when you have these work meetings when you can write on the board and move it around. [...] You can store it better” (P3).

5.4.8 Language

Three of the leaders comment on the idea to tell jokes to get the participants’ attention and avoid electronic multitasking. One of them indicates that “you can tell jokes, you can tell stories” (P2) and the second also states that “sometimes you can make a joke. You can say: ‘Oh I see you are searching for more facts about this’ (laughter). So you make a sort of joke about that so they must be a little bit ashamed. So there is some to do that people don't feel so easy in the moment. Because that makes them to think: ‘next time I don't want to have this anymore, so it's better I don't do this’” (P5). The third leader takes a critical view of this approach: “I seldom find it funny. It always becomes a joke on someone else’s behalf. So it's better not to comment. [...] So that's why I think you should be a little careful when you like joke or put the blame on someone else” (P6).

5.4.9 Flexibility

The need of some flexibility when managing electronic multitasking is already indicated in the description of different meeting types. Several times the meeting leaders distinguish work meetings in which electronic multitasking is considered useful and expected from shorter information meetings in which electronic devices are not useful. Hence, “it kind of also depends on what kind of meeting you have. [...] And maybe it doesn't have to be excluded totally from the meeting, and discuss: ‘Ok, if we are electronically multitasking during a meeting, what is ok to do, do we agree upon this approach’” (P2). Likewise, another respondent concludes that a leader should have a variety of approaches available and use them accordingly to the participants and situation. He explains: “I find my way of trying to get as efficient as possible for meetings. But as seen it from the many years I have worked, you can't always. If you want to have really effective meetings all of the time, I don't think you can't find such a situation, it will be really hard. [...] It's depending on what tactic you have. Due to the group, due to the situation, due to the task. So it's more like a toolbox. You need to be more flexible. You need to find a way of solving something you can't go straight ahead, you need to adapt. Always adapt, adapt, adapt” (P1).

5.4.10 Ignoring

During three of the interviews the leaders described some situations in which they consciously ignore if participants engage in electronic multitasking. They describe various reasons. One interview partner considers the fact that some individuals engage in electronic multitasking during the meeting as necessary evil and therefore has to ignore it. This happens in the following situation: “It is very much about which people do we need in the meeting. If someone is called for the meeting, because he or she is very experienced or something like that, but not really playing an active role in the meeting but is there for being able to consult and things like that [...] I probably need to accept it [electronic multitasking], because otherwise I would get a decline on the meeting. It's a bit tricky but I think that's the case” (P4). At the same time he views the possibility to multitask beneficial “usually I think it's the other thing to be able to engage the people in the meetings, because it's quite normal that people have like many meetings during the day and they still have to do a lot of tasks, running some tasks, and the benefit of allowing it [electronic multitasking] would be that it's possible to actually gather the meeting” (P4). Otherwise “they would need to decline if they are not allowed
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to. Which means that we can have that meeting first on Friday instead of already now. [...] I think, that is one benefit for the meeting. It is possible to hold the meeting” (P4). He concludes “the longer the meeting, the more difficult it is to gather the people naturally.” (P4).

Another respondent ignores the multitasking participant “as long as it doesn't take me further away from my goal, I feel that it’s your problem that you are multitasking, but mine. [...] I don't care when it doesn't hinder me from reaching my goal” (P6). Also in the case of having participants in the meeting only for political reasons to make a decision and to ensure everyone's commitment, their contribution is not important. Hence if they engage in electronic multitasking the leader ignores it: “Sometimes, this it's a very difficult situation because sometimes in a meeting you actually want the people there more to be able to say: ‘But you were at the meeting’. And I couldn’t care less if the person decides to concentrate on other things, it's his or her problem. So then I don't care. ‘But you were at the meeting when we made this decision, it is your problem. If you don’t recall the discussion.’ So sometimes it doesn't matter actually. [...] We are about to make a decision, and you decide to multitask. As long as you stand behind the decision being made, keep on multitasking (laughter). It doesn't matter” (P6). Finally, one leader even talks about resignation after he has tried to make people focus: “Sometimes if you have done something for fifty times, sometimes you stop doing that because it takes my energy. Why should I bother to do it?” (P1).

5.5 Enhancing Positive Effects

Apart from the negative effects, we also explored possible positive effects of electronic multitasking and how meeting leaders enhance those.

5.5.1 Useful Applications of Electronic Multitasking

Some of the interviewees indicate that getting in touch with a colleague outside of the meeting can impact the meeting positively. Meeting participants can for example “ask some special question or double check is this correct” (P1) or “ask this question to someone else” (P4). As part of this, the respondent states that it sometimes happens during meeting that they realise “if we only knew that, then we could continue the discussion” (P4) and “then we make a chat or something” (P4). The interviewees indicate different ways of getting in touch with another person during a meeting, which can be “chatting” (P1, P7), “email” (P7) “call someone” (P1, P7) or use “instant messaging” (P7) and “text messaging” (P7). One interviewee explains that it can be even expected to multitask electronically in meetings: “That's fine and expected” (P7). However, a problem with trying to get information from a person outside the meeting is indicated because “even though you can try to do multitasking with the person, but he doesn't answer” (P1).

Besides getting in touch with a colleague, most of the interviewees state that looking up information electronically can be a benefit of electronic multitasking. Hence, one interviewee stresses that “it's important to see the instruments as a tool to find information” (P4) and they can be used for “searching for information” (P7). Looking up information can help to answer questions that appear during the meeting: “they [the meeting participants] have the PCs and use some multitasking due to some questions and they go and answer it” (P1) or “for example, we are discussing some topic and some technology comes up and then ‘how about that?’ ‘could we have a look at that quite quickly?’ and then someone displays” (P4). Furthermore, it is indicated that
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electronic multitasking can be used “if you have something on your laptop that adds value to the discussion” (P6). What a meeting participant has on her laptop could be “wikipedia” (P4), “google” (P5), “in an email or calendar” (P4), or “a document” (P5). One participant values this quantity of information sources by indicating that in meetings they are “collecting from all other sources to collect all the information, to combine the info” (P1). He also connects the use of electronic multitasking for finding information with solving problems: “we are more problem-solving or identify that if lots of people looking on different view of the information, then together we can get some conclusions” (P1). Furthermore, “it can be good if you have some meetings and we need to solve a problem” (P1) and “to find solutions, then it is really good” (P1). Similarly, when asked if the other participants are affected if a person is engaging in electronic multitasking, he explains “Well, not if it’s an internal meeting where we are working, kind of in a working environment” (P7). He moves on saying that “a very, a large extent of the work we do is electronic, we get data all electronically, and even from an audit tax, accounting perspective, it’s just digital (laughs), so we just look at the computers all the time. So you, it's just an effective way of working” (P7).

Another mentioned application of electronic multitasking is taking notes on an electronic device. The majority of the participants agrees that “taking notes” (P1, P2, P3, P4, P6) can be a useful application of electronic multitasking. However, one interviewee stresses that other attendees have to be informed and “most people say that they are taking notes from the meeting” (P6). The content of notes can be: “write down who is responsible or what should be done until next meeting” (P3) and “actually doing the minutes during the meeting” (P4). However, “usually it is sufficient if one person takes the notes” (P4), which “is normally the meeting organiser” (P3). Similarly, another participant indicates that “I take meeting notes” (P6), while others “always have one of those [the meeting participants] they make turns to have the notes, making the notes” (P5).

5.5.2 Actively Encouraging Electronic Multitasking

Even though the interviewees indicate that there might be some positive effects, only some of them actively encourage the meeting participants to start multitasking: “If it's like a work meeting then definitely. Then we need to bring information on the computers, so that I would encourage if we have to solve problems in the meeting. Then we probably need to use computers” (P3). Examples for how our interview partners would encourage their participants to engage in electronic multitasking are: “Please ask someone, that person, if we could get that information” (P4) and “We must look at that” (P5). In fact, the interviewees are lacking ideas how to enhance electronic multitasking. While one participant says that he does not have anything he “thought of with what I can come up right now at least” (P3), another one perceives it as “perhaps not so much explored” (P4). Instead, positive electronic multitasking can be happening without active encouragement. One participant states that getting in touch with a person outside the meeting is “just happening because we've been working with this project for three years. In the beginning we perhaps talked: 'could you check with these people?' But now we check simultaneously without saying. It maybe depends on the maturity of the group” (P1). Other interviewees emphasise that they “are not encouraging this” (P3) and “if this situation arises [information from a person outside a meeting is needed] it's sometimes better to reschedule the meeting, because in general you need the
person's contribution, so it's not only the fact, maybe it's the view on the facts or something like that” (P6).

5.5.3 Preconditions of Useful Electronic Multitasking

To allow electronic multitasking to contribute to meetings, many of our interview partners express that it has to be related to the meeting and “it is pretty clear that it's not supposed to use it for different subject than the actual meeting” (P3). Similarly, another interviewee expresses that “unless for expecting a call and someone and that adds to a meeting that we couldn't be without” (P7). One reason is that “they [the meeting participants] are still here mentally, but it is more difficult when you do something else during the meeting in parallel” (P4). Similarly, “note taking, it doesn't take my mind off the meeting. So, in that sense, when I like, ok, let me write down what you said, I write, this doesn't not make me moving my area of focus from you to this device, but I'm not switching context” (P6). Hence, when electronic multitasking is meeting-related, “you are talking about the same thing. Everyone is engaged in the same task, in the same, you know” (P5). One participant concludes that “if you are not moving your mind away from the meeting, I couldn't care less” (P6).

5.5.4 Short Break

Sometimes the meeting leaders describe a short break that is taking place while electronic multitasking is happening: “You must sit still and wait until the answer is done. So you don't have some three of the people searching for something and we, we go on” (P5). Another interviewee confirms that “it becomes actually a quite short break in the meeting” (P4), for example “If it is asking some colleague a question, then it would it be more like 'Now I put the question to his or her, so let's wait until I get an answer' and then we discuss and then 'ah, the answer came here’” (P4). Hence, they “don’t proceed” (P5).

5.5.5 Sectioning of Meetings

Apart from pausing the meeting, the interviewees describe that it is advisable to have different phases of a meeting to make use of the positive effects of electronic multitasking in these parts. One participant, for example, “realised after a while that it was better to have a short meeting, and then people sitting in office like landscapes, where you sit in one cubicles” (P2). She describes a meeting format they used to have for one project when they “started with this 15 minutes meeting where we discussed what has happened this week” (P2) and afterwards, “we like made a kind of that environment for Thursday afternoons. So they [the meeting participants] were sitting together in the meeting rooms, doing their own things, working with the project, but with the topic they were working. Then they were close to each other, being able to ask each other questions” (P2).

Another participant stresses that he “would divide decision making from discussions as a first step” (P4) because “you really not want people to think on other things” (P4) and “it's much easier to get the group concentrated on the decision making” (P4). More generally, he tries “to put the most important stuff [...] as early as possible” (P4). Hence, he tries “to separate it [decision-making] from pure discussions where we perhaps elaborate, evolve and really having no end result during the meeting” (P4). This results in having “two different topics” (P4) during the meeting. If a decision has to be made in the meeting, he explains further that “I prefer to make proposals in advance and then people prepare themselves and then we have short debate on that and
if necessary or go to decision” (P4). Similarly, he sees the need to “show that time clearly, now it's the time to really be here” (P4). Something similar is proposed by a second interviewee. She suggests “perhaps you have to have the meeting in another way. That you have a sort of start where you have a discussion without that [electronic multitasking], and then you have a pause. And then you have a sort of finding solutions, where you have sort of free time for using these facilities [electronic devices]” (P5). However, she clarifies that “it must be in the right place, in the right time” (P5).

### 5.6 Organisational Guidelines

During the interviews, we also investigated the existence of formal company guidelines regarding multitasking and how meeting leaders can use these formal policies to manage electronic multitasking in meetings.

#### 5.6.1 Existence of Formal Guidelines

All interviewees except for one clearly state that their company does not have formal guidelines or policies (P2, P4, P5, P6, P7). Two of the respondents indicate critique on formal guidelines because “as a meeting organiser I am the one who is...it’s my rules and it’s my meeting” (P3) and “it could be that you're not taking your responsibility as a meeting organiser. You are not living up to the expectations. So the best way to interact I think is to be well prepared” (P6).

Only one respondent says that his company has clear guidelines. He answers “yes” (P3) to the question if the guidelines are actually written down and describes them as a “strict rule” (P3). The agenda described by P3 can be found in appendix 4. The policies have “started at the head of the plant. The plant manager wrote them down first. And then my department has spread them” (P3). He also mentions that they have the guidelines “as a standard agenda” (P3). Like that, “the rules are always visible” (P3). They include that “Meeting starts and ends on time”, “Mobile phones are on mute during meeting”, “All attendees prepare their input before meeting” and “If not able to participate, inform rest of team ahead of meeting” (see appendix 4). The interviewee adds that “the rules specifically state that you are not allowed to use the computer. You are not allowed to use the cell phone. And you are not allowed to leave the meeting, etc.”. Hence, the policies “are discouraging because they say ‘no laptops’ and ‘no phones’” (P3). The respondent clarifies that he actually uses the guidelines because “if I run the meeting with the laptop then I have the agenda and the rules are always visible. And you just click each link for the subject and then you come back to the agenda and then you see them. Or we have like the pulse meeting which is not electronic and you still have the agenda on the board outside so you can see them” (P3). When asked which electronic devices the guidelines refer to, he clarifies that “it only stipulates smartphones and laptops. There are basically no tablets, nobody has it” (P3). With regards to the guidelines he describes, the interviewee also indicates how respected they are. He “would say we have a pretty good discipline” (P3) and that “it works really good” (P3). However, he also makes clear that “they know them [the guidelines] in advance and they follow them sometimes (laughter), most of them time” (P3), that “not everyone follows them. That’s the truth but that’s how it is” (P3) and repeats “No, not everyone follows them. It is fun to make the rules but it is not as fun to follow them” (P3). Related to this, he has “one specific person in mind” (P3), but he has “never confronted him because he wouldn't listen and he is also above me” (P3).
5.6.2 Advantages of Formal Guidelines

The respondent who describes potential formal guidelines for his company sees an advantage of them for the meeting leader "to get the help to think what is beneficial for the meeting result" (P4). Even though the companies of the other interviewees do not implement formal electronic multitasking policies, many of them can also see advantages of formal guidelines. One participant suggests that "if you're new it could be very good, it's depending on how experienced you are” (P1). The other interview partners stress that “it's easier if you have more formal rules and guidelines for this” (P2) because “you can say I agree or I disagree. Because informal rules are really hard to agree or disagree on” (P2). Another interviewee agrees that “it is easier to come from the top management, because everybody looks to the management and if they do it differently then it's a problem” (P3). However, two interviewees makes clear that when you have company guidelines, “as a meeting leader it is good to make your own judgements as well” (P4) and when “you have policies and guidelines, it's on the paper. You also do it, not only to see it and read it, you need to use it” (P1).

5.6.3 Potential Company Guidelines

Considering the advantages of implementing formal company guidelines with regards to electronic multitasking, two participants would actually like to install policies. Asked if he would like to have some guidelines, one participant answers "Yes, yes" (P6) and clarifies that they “should discourage electronic multitasking” (P6). Another interviewee has “never thought of it, but probably some quite few but quite clear guidelines could be wise actually” (P4). A third one believes that the guidelines “should be enough of the info, but not too much. But what is enough is hard to say” (P1). This is because he thinks that “if you have too much guidelines on everything the people are drowning in the information” (P1). In contrast, one interview partner believes that “the informal ones are working. […] I wouldn't see any use for formal ones right now” (P2). Similarly, the participant who describes that his company actually has formal guidelines thinks that “it works really good” (P3) and that the rules “are pretty good. They look almost the same since 2010. We changed them a little but I think they are effective” (P3).

5.6.4 Ideas

Especially because some of the respondents whose companies do not have formal guidelines see advantages in implementing some, it is interesting to look at the ideas our interview partners describe for potential policies. Most interviewees struggled to generate new ideas for company policies. However, one interview partners gives the following suggestions: “if you expect an important phone call, announce it beforehand’, [...] ’please announce if you need to do some other stuff while you are here”’ (P4), or state in advance “that ‘well I can participate here and consult if you like but I need to do this stuff because I have something I send off at 2 o’clock’, for example” (P4).

On the contrary, two of the interviewees propose to implement guidelines that are only indirectly related to managing electronic multitasking: “By focusing on electronic multitasking for example I feel that you are taking responsibility away from the meeting organiser. So if we were to have a policy guideline I would like to start out with a clear agenda and a clear goal for the meeting. And then I think you could have like a note about rules of engagement. I think that would be the proper way to address” (P6). His reasoning behind this is that it is “the meeting organiser's responsibility to have a
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crystal clear view of what do I want to accomplish. So don't talk about rules of engagement and avoid talking about responsibility of the meeting organiser I think would be stupid” (P6). Similarly, another participant would like to have a guideline that suggests to “keep the meeting as short as possible’. I mean the tools usually suggest one hour if you just create a meeting and book. ‘Use 30 or 40 or 15 minutes if that is what's needed’, ‘try to actually plan the meeting in duration as well’” (P4).

More broadly, one participant stresses that “if it would be a big problem, we would probably have a more strict policy” (P7). In terms of developing policies, one interview partner states that “the discussion is most important” (P5) and she thinks that the company “could discuss that [formal guidelines] but we must think about what is important, and why do we have these” (P5). She emphasises as well that it is good “to use them [the formal guidelines] [...] when you have new employees coming. [...] Because that's supposed, that's a good way to do, when you are new in the company, and we do the introduction” (P5). Hereby, it is possible to “tell them 'why? Why is it so important?’ Because otherwise you don't understand. It's only a rule” (P5).

5.7 Organisational Culture

Besides formal guidelines, we also investigated the organisational culture around electronic multitasking, especially when there was no formal policy existing.

5.7.1 Organisational Culture of Electronic Multitasking

Even though most companies do not seem to have organisational policies regarding electronic multitasking, some meeting leaders state that there is a company culture of electronic multitasking. To the question if all project managers think similar in his company and if they maybe use similar rules, one respondent answers that “yes, most of us do” (P2). Likewise, another participant says: “I think we do quite similar” (P4), while a third one believes that her behaviour serves as “an example and it's a sort of way of doing things” (P5). In contrast, one participant emphasises that in his company “I feel that we have different views on this and depends on the meeting organiser” (P6) and replying to the question if there is a shared mindset in the company, he answers: “No” (P6). A few of the interviewees explicitly talk about culture because “company culture would be, I would say, it would be, we don't do it in customer meetings” (P4). The same respondent explains for meetings where they are “talking about something quite important it might be considered as an informal rule not to use it but not formally stated” (P4). While one interview partner clarifies that “I don't think we have that culture in our company” (P5), another mentions a culture indirectly related to electronic multitasking in meetings as “just basic code of conduct and always professional behaviour” (P7). He explains further that “It's the code of conduct of just being respectful of who is talking right now, and what topic is and so on” (P7). The same interviewee indicates that the meeting participants “would not answer [their phones]. But everyone would bring their [smartphone], for whatever reason (laughter)” (P7) to clarify that “it's implicitly allowed” (P7).

To respond to the question if the company culture is rather discouraging or encouraging electronic multitasking, two participants “think it is probably more negative” (P4) and “more discouraging” (P2). On the contrary, two participants describe their company’s culture as encouraging: “we encourage to use electronic devices” (P1) and “encourage I would say” (P7). However, company cultures also acknowledge that “you need to be really focused on things. You can't do multitasking without thinking, paying attention to
what you are discussing” (P1). Similarly also in another company, “no one is allowed to let their attention to the meeting go” (P5).

5.7.2 Accepted Electronic Multitasking Behaviour
Three of the interviewees mention types of electronic multitasking behaviour that seem to be accepted in their companies’ meetings like “sometimes you need the phone or you need the laptop” (P3) or “for taking notes. So if you know most people either use their laptops or an iPad or something like that for taking notes” (P2). One participant distinguishes work meetings from meetings with a customer by saying that “in a work and not a client delivery type situation where you are only like the team members, that would be allowed” (P7) and in a “work meeting then it's ok” (P7). In these work meetings, “it's basically most of the time allowed to walk out of the meeting to walk out of the room and take the call” (P7). He even mentions the company culture that “You're expected to multitask to get things done faster” (P7) but then limits it again according to the type of meeting because “if we have like a monthly reporting meeting or whatever, or a planning meeting or so, typically the only one who would have an electronic device of any kind would be the leader of a meeting. [...] All others would be without computer at least” (P7).

5.7.3 Leader Opinion of Organisational Culture
Three of the respondents explain that they are content with their company cultures. For example, one participant states that she is “pretty fine with the way things are within my company right now” (P2). Similarly, another interviewee says that they “don't have any real problems with it” (P7) because “it's just common sense as well” (P7). However, “if it would be a problem we would probably fix it” (P7). One interview partner is aware that there might be changes of the company culture needed in the future: “it works with us now today. But I think that [...] the culture is changing all the time. The young people coming in” (P5). Hence, she thinks that she has to “take this as a task you have to work with more, because I think that it's growing another way” (P5).

5.8 Recommendations
At the end of our interviews, we always asked the interviewees for recommendations for other managers. This served as a summary to capture what our interview partners believe the most important aspects of managing electronic multitasking in meetings are.

Participant one mentions the possibility to “Combine different roles and divide it in different responsibilities” (P1). Hence, he tries to get help from a colleague to talk to one individual whom he could not change in his multitasking behaviour. He tried “to say to the other one [a colleague]: ‘Please try to learn him, learn him to do the right thing, so that he doesn't do all the multitasking’” (P1). Another suggestion he makes is “coaching him [a Junior Project Manager]” (P1). During the meeting, he stresses to “say [if a participant is engaged in multitasking] in a polite way on a meeting” (P1). However, at some point when he has pointed out to focus “for fifty times sometimes you stop doing that because it takes my energy. Why should I bother to do it” (P1). He then says tries do “as quickly possible meetings” (P1).

In contrast, the second participant believes “it's about the guidelines, setting rules, discussing it, and maybe maybe it doesn't have to be excluded totally from the meeting, that and discuss ok if we are electronically multitasking during a meeting, what is ok to do, do we agree upon this approach” (P2). Her reasoning for the importance of
discussing the topic is that it “has a tendency to irritate the other participants. Cause you think that ok, a guy or a girl just looks at his smartphone, chatting with his friends, she is not really focused” (P2). But “Maybe, that's not the case” (P2) because “they don't know what she is doing” (P2).

The third interviewee also refers to rules by stating that “I go back to my rules. To be very clear and specific. This is how this meeting is supposed to be done. So these are the rules. This is what we are supposed to deliver. Please follow the rules. And I think to be clear that's important” (P3).

Quite differently from just stating rules, for participant four it “is most important to separate the decision making, where you really not want people to think on other things. The time when you really need the focus, if you show that time clearly, now it's the time to really be here, then we are going to do some discussions” (P4).

Participant five repeats the positive side of electronic multitasking because “it's important to see the instruments as a tool to find information, then communication is good” (P5). However, “it must be in the right place, in the right time, and you must have agreed about that” (P5).

Similar to considering the right time and the right place, participant six feels that “the most important thing I feel is understand the context you are in. So if you're in a meeting, you're in a meeting. [...] I think it's just important to show people respect and if you're at a meeting be engaged in the meeting and I think it basically comes down to, maybe it's just an issue of respect” (P6). Hence, he “would rather talk about that than the electronic device. Like behaviour, attitudes” (P6) and he “would rather focus on that like what is a good behaviour” (P6). Within this, it is very important for him to “Talk about it” (P6), to “be upfront the values and attitudes” (P6) and to “be a good human being” (P6).

1 For participant seven we are lacking the answer to the last question because the interview was interrupted due to unexpected circumstances.
6 Data Analysis

In the following, we will use the thematic networks we derived from the empirical findings to analyse our qualitative data. In total, we developed six global themes about managing electronic multitasking behaviour in meetings, both about leader actions as well as about company guidelines and culture. Hence, the themes are all related to answering our research question. The names of the overarching global themes are: Rules, Active Behaviour, Applicability of Electronic Multitasking, Design Characteristics, Company Guidelines, and Organisational Culture. An extensive overview of these networks including all organising and basic themes can be found in appendix 3.

6.1 Rules

The first global theme is called “Rules” and consists of four organising themes and their basic themes. The organising themes are: Set Rules, Ban Devices, Negotiate Rules, and Role Model. All of them relate to the rules a leader can set for a meeting, as well as how they are enforced. This theme does not include rules set by a company, these will be explored later.

Our interview partners mention a variety of rules that they are implementing. It is important to note that these rules relate to the leaders’ own approaches, and not to company guidelines (P3, P5). As part of setting rules, it seems to be important to state these rules clearly (P6), especially when starting a new project (P1). The literature also suggests setting clear rules, for example at the beginning of a meeting (Benbunan-Fich & Truman, 2009, p. 141; Dietel et al., 2011, p. 1278; Pearson, 2013). However, it is not necessary to repeat the rules in every meeting (P3, P5, P6), for example when you have recurrent meetings because “it’s my people, they know. And I don’t have to repeat it every time” (P5). Another leader refers to workshop meetings when stating that he does not point them out in every meeting because “I expect them [the meeting participants] to know them already from the regular meetings” (P3). We recommend that a leader should make rules clear, but if the meeting attendees already know them, he does not have to repeat them.

In terms of enforcing the rules, one leader expresses that he is not always strict with actually enforcing the rules that he has set (P6). In our opinion, this is contradictory to the advice to be clear about rules because it takes away the reason why rules are set. We therefore believe that the rules should be enforced if a leader has set them. However, there might be some exceptions to the rules that have to be acknowledged. These will be explored in chapter 6.3. Another aspect of rule enforcement could be to pay special attention to the prosecution of rules when a complex and important topic is being discussed. This is due to the fact that cognitive limits are more likely to be exceeded when conducting complex tasks (Sweller et al., 1998, p. 290; Adler & Benbunan-Fich, 2015, p. 437). Hence, electronic multitasking in complex situations would more likely result in performance decreases than, for example, when simply sharing information in a meeting.

Specifying the rules that can be set, one leader explains that “it is not ok to take calls or to send emails during the meeting, they must go out or they must wait for the pause” (P5). She therefore seems to differentiate between particular electronic multitasking
behaviours. Hereby, she is reflecting the results of the literature that different behaviours have divergent levels of perceived incivility. For example, taking or making calls and sending text messages or emails in a meeting are never or rarely perceived as acceptable (Washington et al., 2014, p. 57). Furthermore, these are behaviours that 70% of the respondents of another study would not perform during a meeting, which is reinforcing that the majority of people does not accept these behaviour during a meeting (Bajko, 2012, p. 9). On the contrary, browsing the internet and simply bringing phones to the meeting were perceived as less uncivil than taking and making calls as well as sending messages (Washington et al., 2014, p. 55). We suggest that leaders should acknowledge these differences instead of simply restricting all types of electronic multitasking. This is also due to the possible positive effects of it, which will be explored in the section chapter 6.3. However, trying to treat all the different multitasking behaviours differently might result in very complicated rules. One approach that keeps the rule that is set simple, but still ensures the usefulness of electronic multitasking could be to state the following: “don't use laptops or computers if it's not related to the meeting” (P6). This specification relates to the idea of compliant multitasking suggested by Benbunan-Fich (2012, p. 16). According to her, distracting multitasking is the opposite of compliant multitasking and potentially deviates the participant from the goals of a meeting (Benbunan-Fich & Truman 2009, p. 139). Hence, we consider it as important that the leader recognises possible meeting-related applications of electronic multitasking when setting rules in meetings.

Rules that a leader implements can not only be related to different multitasking behaviour, but also specifically concerned with banning different devices. Imposing technology restrictions is also mentioned in the literature (Benbunan-Fich & Truman, 2009, p. 141). Some respondents see the possibility to ban mobile phones completely (P1, P6) or ask for the phones to be “switched off” (P1, P2). A softer approach a leader can use with regards to the use of mobile phones is to request “turning off announcements” (P4). Similarly, it is an option to ask the participants to put it on mute, for example when they would like to have access to their calendars or similar applications (P1). However, when it is very important that everybody contributes to a topic, it could be more useful to ask the participants to “put your devices away” (P6), hence banning a device completely, and not just simply asking to put it on mute. A similar approach is suggested in the literature, which is to generally ask the attendees not to use their mobile phones during the meeting (Böhmer et al., 2013, p. 342). Considering that there are positive effects of electronic multitasking and exceptions to the rules (see chapter 6.3), we think that the way devices are banned has to be reflected upon by the leader. For example, if it is important to be accessible to clients (P4, P5), participants should probably be allowed to bring phones and they should not be switched off.

With regards to laptops, only one leader suggests a rule specifically to this type of device. She sometimes asks for “laptops to be closed” (P2). Hence, it seems as if most interviewees focus on imposing restrictions on mobile phones instead of other devices. The tendency of our interview partners to focus on banning phones, instead of laptops could be explained with the help of the literature because smartphone use in meetings is much less considered appropriate than laptop use (Bajko, 2012, p. 7). Nevertheless, a reason for banning laptops could be that there are too many tasks unrelated to the meeting a participant can accomplish and make attendees fade away from the meeting (P5). This would result in losing their visual and cognitive focus on the meeting, which
is an important feature of meetings (Goffman, 1963, p. 89). Indeed, only 13 % of the participants of a study used their laptops for meeting-related multitasking (Benbunan-Fich & Truman, 2009, p. 140). However, a similar result has been presented for using smartphones, for which the percentage of conducting meeting-related tasks is even lower with 8 % (Iqbal et al., 2011, p. 892). Hence, the likeliness is high that the majority of the meeting participants use their electronic devices for tasks not related to the meeting, indifferently of the type of device. In contrast, if laptop use is meeting-related, there is a high acceptance towards it (Bajko, 2012, pp. 7-8). The high acceptance of meeting-related multitasking with a laptop might be due to the value a laptop can add to a meeting, such as taking notes (Dietel et al., 2011, p. 1275) or looking up information (Kleinman, 2007, p. 2503). Hence, we suggest that a leader should not ban laptops if there is a value for the meeting in using the laptops that exceeds its negative effects. As neither laptops nor smartphones seem to have a high value in very short meetings (P2), it is very likely that their positive effects do not exceed the negative effects here. Hence, they should be banned in very short meetings.

Another approach related to setting rules is to negotiate these rules with the meeting attendees, instead of simply stating the rules as a meeting leader. Hence, the rules can be discussed, for example at the beginning of the meeting (P1, P3), or when starting a project or a series of meetings (P2). Therefore, negotiating rules could be a preferred approach when having recurring meetings. Our interviewees emphasise that “you must have agreed about that [the rules]” (P5), or that the meeting leader could at least ask if the participants agree with her rules (P2). Negotiating the rules for the meeting has the advantage that the leader can follow up if not everybody has acted in accordance with the rules that were set together (P3). Also, if not everybody is following the rules, the meeting leader could discuss this with the whole group and try to re-negotiate them (P2). Negotiating the rules of electronic multitasking for a meeting therefore has the potential to create commitment for the rules among the meeting participants. Furthermore, discussing the rules sharpens the perception of attendees what others think about the use of electronic devices during meetings. As this perception influences their own multitasking behaviour (Stephens and Davis, 2009, p. 75), it is a valuable approach to help the attendees act in accordance with the meeting rules.

Our interview partners regularly mention the importance of meeting leaders behaving in the way they expect their meeting attendees to behave. The suggestion to act as a role model is also made in the literature (Pearson, 2013; Washington et al., 2014, p. 62). This would avoid that the participants think: “he can do it, why shouldn’t we do it?” (P1). The literature argues the same way because participants’ observations of the multitasking behaviour of others influence their own use of electronic multitasking (Stephens and Davis, 2009, p. 75). Hence, the leader has to “go ahead of showing this is the culture” (P1) and should be “leading by example” (P6). We conclude that the leader’s behaviour should reflect the rules that have been set.

6.2 Active Behaviour

The second global theme that we have derived from the data is called “Active Behaviour”. It includes all active behaviour a meeting leader can use to manage electronic multitasking behaviour of participants, including Direct Confrontation, Confrontation Afterwards, Language, Involvement, and Ignoring.
Direct confrontation is an approach that a leader can use in case she wants to stop an individual from multitasking. It is suggested by all of our interviewees. According to P3, it is the meeting leader’s responsibility “to pinpoint those persons” by asking them to close their laptops (P3). Similarly, respondents point it out directly if somebody is engaging in electronic multitasking (P3, P5, P6, P7). There are two situations in which this approach has to be applied. Two interviewees explain that they only approach a multitasking individual during the meeting if it becomes a problem (P3, P7). Similarly, another respondent stresses that only if the meeting goals are impaired or he needs everybody’s focus he points out to “put your laptop away or your phone away” (P6). A meeting leader can also ask the participant if she is not interested or stress that the topic being discussed is very important (P5). If the participant cannot justify her multitasking behaviour, then it has to be stopped (P2, P5). Also, the meeting leader can try to get eye contact (P7) or to ask for focus in general (P1, P4) to make clear that it is important for the discussion that everybody pays attention (P4).

The approach of directly confronting multitasking individuals seems to be successful. Two interviewees state that it has been sufficient in the past to directly confront a multitasking individual in a meeting (P3, P4). One participant even believes that there is nothing else to do than to directly point it out (P3). However, this interviewee and his company have very clear meeting rules with regards to electronic multitasking. Hence, everybody knows about the rules, which might make it easier for him to directly confront a participant. In fact, two of our interview partners indicate that having agreed about the rules makes it easier for a meeting leader to confront a multitasking individual (P2, P3). For this reason and those mentioned earlier, we suggest that it is advisable to negotiate rules or at least state them clearly. A further advantage of a direct confrontation is that the leader can send a signal to all other meeting participants (P6). Directly pointing at somebody who is engaging in electronic multitasking can therefore avoid others starting to do multitasking like a chain reaction. Hence, we suggest to intervene as soon as possible, which can avoid that attendees get the feeling that rules do not have to be respected. However, there might be a problem with directly pointing at somebody. Even if it is not the intention to offend somebody by directly pointing at her, this might happen (P6). Therefore, it is crucial to be aware of this and to confront a participant in a polite manner (P1, P2). Especially if rules have agreed upon before, the risk of an attendee getting offended is minimised because he knew the rules and did not act accordingly. We therefore believe that direct confrontation, if used politely, is an effective approach to manage electronic multitasking, especially if rules have agreed upon before. Nevertheless, if there is a risk that somebody gets offended and the leader would like to avoid this, it might be more advisable to talk to a multitasking individual after the meeting.

As compared to the approach of directly confronting multitasking individuals during the meeting, some leaders see the possibility to talk to an attendee who is multitasking in the meeting during a break or after the meeting (P1, P2, P7). The reasoning behind this approach is to avoid that the other participants get to know that the multitasking individual has done something wrong and not “rub it on his face” (P1). We suggest that confrontation afterwards is preferable if the leader wants to avoid blaming somebody in front of all the other participants or if there is a high chance that a participant could be offended when confronting him directly in the meeting. However, one of our interview partners believes that it is too late if you confront somebody after the meeting, because it has probably already have had a negative impact on the meeting (P6). Hence,
confrontation afterwards is not advisable if the multitasking behaviour has a big negative impact on the meeting.

Two interviewees indicate that they use this approach if a certain person is constantly engaging in electronic multitasking (P2). Indeed, there seem to be some individuals who have a preference for electronic multitasking, hence showing polychronic behaviour (Bluedorn, et al. 1992, p. 17). Three of our interview partners repeatedly stress that there are individuals who tend to multitask (P1, P3, P5). This is usually “typical for one person” (P1) and results in the participant being more concentrated “on their own work than on the meeting” (P3) and “very difficult to change” (P5). We therefore believe that confrontation afterwards is helpful when somebody is constantly multitasking because it can be more deeply discussed than during the meeting.

Some of the interviewees have mentioned the use of jokes to confront participants with their multitasking behaviour. For example, “you can tell jokes” (P2). Joking would lead to the individual feeling “a little bit ashamed” (P5). Consequently, they would probably not engage in the same behaviour again (P5). However, one respondent indicates that he would not make jokes about the multitasking individual because you are pointing the finger at somebody and “it always like becomes a joke on someone else’s behalf” (P6). We recommend that the appropriateness of joking depends on the meeting leader and how the meeting participants would react. Besides making jokes, telling stories is mentioned as a valuable approach to get attendees’ attention (P2). Maybe this approach could be a more indirect approach than making a joke on somebody else’s behalf to keep participants engaged in the meeting.

Participation and engagement of meeting attendees have been described as crucial factors of meetings (Geimer et al., 2015, p. 2023; Sonnentag 2001, pp. 13-14; Van Praet 2009, p. 94). More importantly, fostering interaction can even aid in limiting electronic multitasking. This is because it makes people more focused, more involved, and hence less tempted to engage in electronic multitasking. When we asked how our interview partners encourage the interaction of participants, they mention several approaches. One aspect that can already be initiated before the meeting to ensure the involvement of all participants is to “have different responsible persons for each point, for each agenda point” (P3). Another technique an interviewee mentions is to “have a partner in crime” (P6). For this approach, the meeting leader agrees with a participant to be the “partner in crime” before the meeting. By asking questions to the other participants, the “partner in crime” will then make sure that everybody says their opinion before a decision is made (P6). Similarly, the meeting leader can directly ask every participant for a comment by asking them questions on their opinion. By using this technique, “they [the participants] must listen” (P5). Iqbal et al. (2011, p. 894) have suggested similar techniques. Instead of having rigid rules to manage electronic multitasking, the meeting leader should rather engage in process-related behaviour such as walking through the audience, mentioning people by name, and creating tasks. Interviewees also indicate the use of different means such as whiteboards and posted notes (P2) as well as smartboards (P3) to foster the involvement of attendees. Similar to this, one interviewee suggests to “change the rhythm of the meeting” (P2) by having mini-workshops. For the purpose of changing the rhythm, other methods such as work cafés (P1) and standing up for a while when using posted notes or whiteboards (P2) can serve as well.
Most of the behaviours that our meeting leaders describe to foster involvement are process related behaviours. Instead of stating their opinion, they encourage others to talk and interact. This is consistent with the literature because procedural leader behaviour supports participation of attendees (Bens, 2012, p. 9; Malouff et al., 2012, p. 45). Hence, we suggest that meeting leaders should concentrate on procedural behaviour to engage their participants. This will help to avoid attendees losing focus and consequently getting engaged in electronic multitasking.

Even though electronic multitasking behaviour of participants can have negative effects (Lyons et al., 2010, p. 11; Wasson, 2004, p. 56), our interviewees sometimes prefer to ignore this behaviour. One respondent indicates that he does not always want to avoid electronic multitasking because otherwise it might not be possible for all important people to attend because they might be too busy (P3). Hence, it might be necessary for a meeting leader to accept electronic multitasking to a certain extent if this is the only way the meeting can actually take place. The literature confirms that managers can attend more meetings if the meeting leaders accept multitasking behaviour to a certain extent (Dennis et al. 2010, p. 865). Another participant indicates that he stops to fight against this behaviour after a while if there is an individual whose behaviour is difficult to change (P1). This refers back to polychronic participants who tend to engage in electronic multitasking. Instead of talking to this person after the meeting, as suggested above, it seems as if a meeting leader might sometimes prefer to ignore the behaviour of this person because “it takes my energy” (P1).

Another reason for ignoring multitasking behaviour is the fact that sometimes they have to invite people for political reasons to the meeting, “to be able to say but you were at the meeting” (P6). Hence, this individual’s active contribution is not needed, which makes it less important if she engages in electronic multitasking. The leader describes that he does not care about somebody engaging in electronic multitasking as long as this person “stands behind the decision being made” (P6). He adds that he also does not mind electronic multitasking if it does not impair reaching his goals of the meeting (P6). Hence, there seem to be situations when electronic multitasking does not hinder meeting effectiveness enough to take action and limit it. However, we believe that meeting leaders should be very careful with ignoring electronic multitasking behaviour of participants because it can have negative effects such as distracting others (P5), chain reactions (P1, P4), missing key information (P5), and inefficient meeting processes (P2). Hence, if ignoring a multitasking individual, it can affect the meeting negatively, and should therefore be used cautiously.

6.3 Applicability of Electronic Multitasking

The third global theme is labelled “Applicability of Electronic Multitasking”. It includes five organising themes: Encourage Electronic Multitasking, Secretary, Multitask Together, Exception, and Flexibility. They include situations in which electronic multitasking is acceptable or beneficial as well as approaches how to encourage this behaviour.

As described in the theme about rules, we suggest to explicitly restrict the use of electronic devices to meeting-related activities. There are three main purposes to engage in electronic multitasking that we have revealed from both the literature and interviews that we consider useful and therefore should be encouraged. First, several leaders encourage multicomunication to get in touch with colleagues external to the meeting.
and ask for information or validate decisions (P1, P4, P7). Hereby, possible communication means are calls, emails and chats. This approach is consistent with factors revealed by the studies of Dennis et al. (2010, p. 873) and Stephens (2012, pp. 204-214). The authors indicate seeking clarification and informing in terms of receiving information as major factors of multicommunication in meetings. Third, participants could be encouraged to engage in electronic multitasking to look up information either on the internet or in supplement documents (P1, P4, P5, P6, P7). This matches again with existing literature that suggests using laptops due to the availability of information (Kleinman, 2007, p. 2503). Third, taking notes is considered as a useful application of electronic multitasking, which will be elaborated upon later in this chapter.

Especially in meetings where solutions are elaborated upon collectively, the mentioned meeting-related activities should be encouraged (P3) by simply asking meeting participants to get in touch with the responsible person or to look up information. On the other hand, it has also been stated during our interviews that these actions do not always have to be encouraged, because it is “just happening” (P1). Hence, we argue that electronic multitasking can also be encouraged in an indirect manner by allowing it and not banning devices from the meetings. In any case, there are several aspects that have to be taken into consideration with the application of this approach. When getting in touch with a person outside the meeting, she might not answer (P1) or waiting for the answer might delay the meeting process. Furthermore, a simple delivery of facts from external might not be sufficient. Instead, the person who is providing the information from outside is required for a discussion or further explanation of the fact (P6). In this case it is better to reschedule the meeting (P6). Finally, it has to be mentioned that meeting-related activities have a higher likelihood of being beneficial for the meeting process compared to unrelated multitasking activities. Nevertheless, also compliant multitasking is affected by the limits of cognitive capabilities (Kahneman, 1973, p. 137). Hence, we have to emphasise the importance that the leader has to find the right balance between encouraging electronic multitasking and keeping the negative effects in mind.

As previously mentioned, taking notes with a laptop is another beneficial meeting-related activity (Dietel et al., 2011, p. 1275). However, it seems to be sufficient to appoint one participant who is taking the notes and shares them afterwards (P4). Also the leader could be the one in charge of keeping the minutes (P3, P6). Hence, related to the approach to ban unnecessary devices, we suggest assigning this task to one participant or the meeting leader. At the same time, the risk that electronic devices are used for other activities than taking notes can be avoided since devices can be excluded when only one person is taking the notes. Furthermore, when participants “put their eyes at the screen, they are stuck there” (P2). This risk can also be eliminated by having one responsible for taking notes.

From the previous discussion it is evident that there are limited approaches to actively encourage electronic multitasking. Sometimes, the meeting leaders prefer to pause the meeting for the time required to engage in meeting-related electronic multitasking activities so “it becomes actually a quite short break in the meeting” (P4) and they “don’t proceed” (P5). The leader announces that external information has to be collected by looking it up or chatting with a colleague (P4). Then the responsible participants accomplish this task while the meeting pauses. Hence, the attendees are “multitasking together” without the risk to miss any information. It could be argued that
“multitasking together” cannot be considered electronic multitasking anymore, which we define as simultaneously participating in a face-to-face meeting and using one or more portable electronic devices for activities related or unrelated to the meeting (Lyons et al., 2010, p. 7; Stephens & Davis, 2009, p. 66; Wasson, 2004, p. 54). Since the meeting pauses, individuals are not simultaneously engaged in two tasks. Nevertheless, based on our findings we argue that it is an effective approach to both avoid potential negative effects and make use of positive applications of using electronic devices during the meeting. At the same time, this approach would lead to an active involvement of meeting participants. Still, caution is advised with regards to the length of such multitasking slots. Since “you must sit still and wait until the answer is done” (P5) “multitask together” might slow the meeting process down.

Electronic multitasking can also be applied in exceptional situations. However, the finding that the majority of meeting leaders makes an exception of rules in case a participant receives an important phone call is somewhat surprising considering the literature. Studies show that making or answering calls is perceived as rarely or never acceptable by more than 70 % of respondents (Bajko, 2012, p. 9; Washington et al., 2014, p. 57). However, these findings could be qualified. Besides the importance of the phone call the meeting leaders add two crucial conditions to allow exceptions. First, an expected phone call has to be announced beforehand together with a reasoning to answer the call (P1, P2, P3, P5, P7). This is consistent with the literature that suggests letting meeting attendees know about the urgency of it (Pearson, 2013). Second, in case the announced call comes in and is answered, the person has to leave the meeting room (P1, P2, P7). Due to the potential distraction of other meeting participants, this is essential (P1, P5, P6). On these conditions we view exceptions as part of an appropriate management of electronic multitasking. Furthermore, we consider it a valuable suggestion to update the person who is coming back from the phone call about important issues that have been discussed in the meanwhile (P7). Since many of the interviewed leaders work in consultancies, they also mention that answering customer calls is more important than an internal meeting (P2, P4). Hence, exceptions have to be contingent on the company’s customer focus, or more generally on the importance of the call.

The empirical findings and literature indicate that flexibility is required in the management of electronic multitasking. Indeed, this approach can also be seen as an overall recommendation of how to choose between the different provided approaches. The need of flexibility in the leader's choice of approach is evident in several aspects. First, literature suggests that there are both negative and positive effects of electronic multitasking (Lyons et al., 2010, p. 11; Wasson, 2004, p. 56). A limited focus on either side would be short-sighted. Also our interview partners acknowledge that the behaviour does not always have to be avoided (P2, P4). Second, leaders consider different meeting types in terms of duration and purpose when deciding how to manage electronic multitasking. Several leaders state that they consider the use of electronic devices more valuable in longer workshop meetings (P2, P4, P7) compared to shorter decision-making meetings (P4, P5). Similarly, electronic multitasking happens less during activities that require a high degree of attention such as idea generation or problem-solving (Wasson, 2004, pp. 54-56). Third, as previously described, there are reasonable exceptions to which a leader should react flexibly. Fourth, the meeting leader’s approach has to be contingent on the participants’ multitasking ability (Wasson, 2004, p. 54). While in one company it is a usual behaviour that happens “all the time
just to be more efficient” (P7), several of meeting leaders do not attribute a multitasking ability to their participants (P1, P2, P5). Indeed, according to the literature, multitasking can lead to individual performance degradation (Krishnan et al., 2014, p. 193).

All the mentioned aspects emphasise the importance of flexibility when managing electronic multitasking. One of the interviewees summarises that the leader has to be flexible “due to the group, due to the situation, due to the task” (P1). Hence, we advocate that the leader has to adapt her approach of managing electronic multitasking to contextual factors such as meeting task, meeting situation and participants’ ability to multitask.

6.4 Design Characteristics

The fourth global theme “Design Characteristics” comprises different approaches a meeting leader can use to set up the meeting and impact the electronic multitasking behaviour of participants. As described, design characteristics can be either installed before the meeting, or used while the meeting is in progress. In total, this global theme consists of seven organising themes, which are called: Agenda, Break, Goal Clarity, Length, Meeting Size, Relevance of Topic, and Sectioning of Meetings.

One design characteristic that seems to be important for influencing electronic multitasking behaviour is the agenda that is used for a meeting. In general, the literature stresses the importance of having a written agenda and actually distributing it before the meeting to increase perceived meeting effectiveness (Geimer et al., 2015, p. 2023; Leach et al., 2009, p. 68). Several participants support the importance of using clear agendas (P3, P4, P6). Two of them actually hand the agenda out before the meeting. One of them as “a part of the meeting notice” (P6) and the other one to enable the participants to prepare the agenda point they are responsible for (P3). By doing so, they also avoid the criticism of participants that they cannot prepare for the meeting (Geimer et al., 2015, pp. 2019-2020). The interviewees’ reasoning for using an agenda is that it helps to focus people and to clarify to the meeting participants when it is crucial to be mentally engaged with the meeting (P3, P4). Hence, they try to avoid that participants engage in electronic multitasking behaviour when it is crucial to pay attention. Therefore, we argue that the use of a clear agenda has the potential to limit electronic multitasking. This is supported by the statement “if it is organised in the right manner I think it’s possible to avoid it [electronic multitasking] partially I think. Depends on how the agenda is set up and how clear that is” (P4).

Agenda use is described as being especially important for decision-making meetings (P4). The literature suggests that meetings often serve for complex processes such as decision-making or problem-solving (Romano & Nunamaker, 2001, p. 2). Managing electronic multitasking by the use of an agenda therefore seems to be crucial in complex meeting situations. Furthermore, using an agenda is described as being the same for every meeting (P3, P6). Hence, we believe that it helps to have a similar structure for every meeting to give orientation to the meeting participants because it “makes it easier for people to see how long you are supposed to be on one subject” (P3). By using an agenda, a meeting leader can therefore structure the process of a meeting and through that limit electronic multitasking behaviour. However, just using an agenda does not necessarily improve meeting effectiveness. Rather, it has to be actually followed to have a positive effect (Nixon and Littlepage, 1992, p. 366). Therefore it is a design characteristic the meeting leader should also manage during the meeting process. This is
supported by some of our research participants who indicate that the agenda should always be visible (P3, P4). Hence, we suggest that an agenda should be actively followed and kept visible during the meeting to avoid electronic multitasking. Furthermore, it is best if the agenda is distributed before the meeting to allow the attendees to prepare themselves.

Besides using an agenda, scheduling breaks is often mentioned by participants (P1, P2, P4, P6). These can either be scheduled beforehand (P1, P6) or can be decided upon during the process of a meeting (P1, P2, P4). Hence, it is one of those design characteristics that the leader can also make use of during a meeting, for example when she realises that “people are losing interest” (P2). Again, taking a break is considered in connection with avoiding the meeting participants to lose focus (P2, P4), or regaining their attention when they are doing electronic multitasking (P1). Therefore, we realise that breaks are a crucial characteristic in meetings to manage electronic multitasking behaviour. This is especially true for long meetings (P1, P6). Another advantage of taking breaks is that meeting attendees can use this time for example to answer emails (P4, P6). Pearson (2013) supports the use of breaks to allow participants to answer emails or make important phone calls. Hence, they can satisfy other needs, which could arise from a high workload or an office culture of always being available. Consequently, they are able to focus again on the meeting after the break.

Reaching a common purpose is an important aspect of various meeting definitions (Cohen et al., 2011, p. 96; Geimer et al., 2015, p. 2017; Romano and Nunamaker, 2001, p. 1). It is therefore seen as the meeting leader’s responsibility to focus the meeting discussion on the meeting goals (Geimer et al., 2015, p. 2023). P6 has the same opinion by stating that “my responsibility is reaching my goals for the meeting” (P6). Hence, a meeting leader has to engage in behaviour that will result in achieving the meeting goals. This is similar to the claim of the literature that meeting leaders should engage in process behaviour such as encouraging goal focused communication (Bang et al., 2010, p. 260; Lehmann-Willenbrock et al., 2013, p. 383). In general, more than half of our interview partners stresses the importance of having clear goals and stating them at the beginning of the meeting (P1, P3, P4, P6). Depending on the interviewee, this seems to be especially important in short (less than one hour) meetings or decision-making meetings in order to focus the meeting participants, and consequently avoid electronic multitasking (P3, P4).

The participants of our study regularly mention that they try to keep the meeting as short as possible (P1, P2, P3, P4). Again, the length of the meeting seems to be related to the focus (P1, P3) of people. “More than one hour is too much. Then you cannot focus” (P3). One respondent considers that keeping a meeting short is especially important when making decisions (P4). The literature does not suggest a specific duration of meetings that should not be exceeded. It only advises starting and ending the meeting on time to improve meeting effectiveness (Geimer et al., 2015, p. 2024; Leach et al., 2009, p. 68; Nixon & Littlepage, 1992, p. 366). We suppose that it would be difficult to estimate an universally appropriate meeting duration because the perceptions of meeting lengths are different. For example, one interviewee understands from short meetings to be 15 minutes (P3), another one to be up to 2 hours (P5). Because it is challenging to estimate an absolute meeting length, we recommend that every leader should keep the meeting as short as possible. Apart from simply shortening the meeting time, another powerful means to avoid electronic multitasking is to combine a stand up
with a short meeting format. This is “because standing on your feet, you don't see the people doing like this [gesture of typing on an electronic device] when you're just 10 minutes around” (P4). Hence, it might be a valuable approach to be more tested in practice.

One of our interview partners indicates that “a group is working as it’s best when it’s like 5 to 7 people” (P2). Additionally, participants chatting with people outside the meeting leads to virtually having some more people in the meeting because they “take energy and focus from the person that is supposed to be in the meeting” (P2). In general, it sometimes seems to be necessary to schedule a second meeting if there are “too many or too few” (P1) people in the first meeting. Similarly, a study by Böhmer et al. (2013, p. 345) has shown that the meeting size is positively related to the amount of internet browsing of meeting participants. This is supported by Cardon and Dai (2014, p. 14) who have found evidence that the frequency of mobile phone use is higher, the bigger the meeting size. As there seems to be a relation between the amount of people in the meeting and electronic multitasking behaviour, we recommend keeping the number of people in a meeting as small as possible.

The meeting size is closely related to the relevance of the topic for meeting attendees. Many of the respondents refer to the importance of the right people attending the meeting to ensure the relevance of the topics for all attendees (P1, P2, P3, P6). Consequently, they state that participants should not accept an invitation in the first instance if they think that the meeting is irrelevant for them (P6). Also in the literature it is mentioned that a low relevance of the meeting content is negatively perceived by meeting participants (Geimer et al., 2015, p. 2022-2023). The consequence of a low relevance for attendees’ work is that they use electronic multitasking to make better use of their time (Iqbal et al., 2011, p. 892; Kleinman, 2007, p. 2503; Wasson, 2004, p. 55). This is supported by two of our interviewees. First, one respondent suspects that “he [the meeting participant] will be more and more out of the scope if it [the meeting] doesn’t discuss something that he really thinks is relevant” (P1). Second, another interview partner thinks the same way because “when you think that meeting is like 'ok, I'm done, that's not my point, that's not my issue' you do something else and get of focused” (P2). Overall, it can therefore be seen that the meeting leader should maintain the relevance of the meeting content throughout the whole meeting process and only invite those people who are needed for the meeting, as suggested by different authors (Allen & Rogelberg, 2013, p. 560; Cohen et al., 2011, p. 101; Geimer et al., 2015, p. 2023; Weisbord & Janoff, 2007, p. 16). Hence, the design characteristic “relevance of topic” is a structural component that can also be influenced during the process of a meeting.

As described earlier, leaders sometimes need to ignore electronic multitasking behaviour during the meeting process. This is due to the fact that it is sometimes necessary to invite people for political reasons (P1, P6) or because they are needed for consultation without actively participating in the whole meeting (P1, P4, P6). Hence, not the whole content is automatically relevant for them and they would be more likely to engage in electronic multitasking. We suggest that if people are invited for consultation, the meeting leader should consider to invite them only for the parts of the meeting they are really needed to avoid them engaging in electronic multitasking. This is important because their behaviour can distract other meeting participants (P5; Tang, 2005, p. 1).
Finally, some of the meeting leaders we interviewed suggest a design characteristic that has, to our knowledge, not been mentioned in the literature. In order to both embrace and avoid electronic multitasking, three of our respondents suggest sectioning the meetings (P2, P4, P5). This is described as starting with a short discussion or the most important topics such as decision-making. This first phase would be without electronic multitasking (P2, P4, P5), followed by a phase when meeting participants are implicitly allowed (P4) or even encouraged to use their electronic devices (P2, P5). In the first phase, people could then focus on complex and important issues, whereas the second part would serve to create ideas, elaborate and work with the project, and at the same time using electronic devices (P2, P4, P5). Hence, if meeting leaders acknowledge the positive aspects of electronic multitasking, they can balance negative and positive effects by sectioning meetings. If decisions are to be made or very important topics have to be discussed, electronic multitasking is seen as negative (P4). On the contrary, if ideas and solutions have to be found or (project) work is being discussed, electronic multitasking can be used positively, as indicated in chapter 6.3.

6.5 Company Guidelines

The fourth global theme, “Company Guidelines”, has two organising themes: Existing Guidelines and Ideas for New Guidelines. They are related to aspects of official policies regarding the use of electronic devices in meetings. When investigating the individual approaches used by meeting leaders, company guidelines cannot be ignored since they are part of the leader’s context that influences the management behaviour.

In our data set, we only have one company with existing company guidelines. This is in line with the study by Dietel et al. (2011, p. 1281), in which the majority of companies does not have any policies. This interviewee explains that their guidelines have been implemented as a clear, written and fixed element of the meeting agenda by the plant management. The guidelines encompass the following rules: “Meeting starts and ends on time”, “Mobile phones are on mute during meeting”, “All attendees prepare their input before meeting” and “If not able to participate, inform rest of team ahead of meeting” (P3). The guidelines “are in the agenda, so of course they are very visible” (P3). During presentations the agenda is displayed before each new point. In recurrent meetings in the morning a printed copy of the agenda is “on the board outside so you can see them” (P5). In addition to the guidelines on the agenda the leader states that the policies also stipulate two more aspects: “You are not allowed to use the computer. [...] And you are not allowed to leave the meeting” (P3).

It can be seen that the different formal guidelines include various aspects that we have mentioned before in our analysis concerning the actions a meeting leader can take to manage electronic multitasking. We argued that a meeting has to be conducted in a timely manner, that there could be rules with regards to specific devices, and that it helps if participants get involved and prepare something for the meeting. The fact that electronic multitasking “has been decreasing” (P3) since the guidelines were introduced supports the effectiveness of the guidelines. Since these company guidelines “work really good” (P3), we believe that it is valuable for other companies to consider implementing policies. Indeed, also other leaders without any policies regarding the use of electronic devices in meetings acknowledge that company guidelines are a valuable support for the leader (P1, P2, P4). When asking our interview partners whether they would like to introduce guidelines, two of them agreed (P4, P6). Similarly, a study reveals that 52 % of employees would like to have company guidelines (Dietel et al.,
2011, p. 1281). Even though we believe that companies could implement formal guidelines, we want to emphasise that strict company guidelines will probably have some exceptions. This is similar to what we have described in chapter 6.1 for setting rigid rules. Also one of the interviewees indicates that “as a meeting leader it's good to make your own judgements as well” (P4). We therefore recommend that a company that is implementing guidelines should leave some freedom to their meeting leaders to react flexible to different situations. Furthermore, it seems to be important to discuss potential guidelines thoroughly before implementing them (P5). We follow this suggestion because we think that, by discussing the issue with many different meeting leaders it is likely to develop guidelines that can be used by all of them, and fit to as many situations as possible.

Some of the meeting leaders who stated that they could imagine implementing formal guidelines had ideas that can be used to discuss and consequently introduce policies. Potential ideas are related to both communication and design characteristics. One leader suggests that the meeting participant should announce before the meeting if she is forced to engage in electronic multitasking (P4). From our analysis of exceptions to the rules and needing the right people in the meeting, this could be the case when an important phone call has to be answered, or if the participant is only present for consulting reasons and has to accomplish other tasks in the meantime. Instead of focusing on stating explicit company rules related to electronic multitasking, another respondent suggests that leaders should be required to have a clear agenda and goal for the meeting (P6). Also a third leader refers to the design characteristics of meetings and recommends companies to guide meeting leaders to plan the duration of a meeting properly, with the aim to keep it as short as possible (P1). These suggestions are related to the argument that it is important to improve the meeting itself such as encouraging interaction (Allen & Rogelberg, 2013, p. 546; Malouff et al., 2012, p. 45), and to advise the leaders “on how to conduct a meeting” (P6). Hereby, rules on electronic multitasking would become secondary (P6). We agree that this type of approach is useful because, as described in the chapters 6.2 and 6.4, involving participants, having a clear agenda as well as a clear goal helps to keep attendees focused. Hence, it would help to limit electronic multitasking.

When implementing new guidelines, we agree with a suggestion of one interview partner who proposes to explain the reasons for guidelines to employees so that they understand them (P5). In order to familiarise new employees immediately with the company guidelines, she also proposes to explain them already during the introduction for new employees (P5). She considers it as especially valuable when young people are joining the company whom she sees as more attached to their electronic devices (P5). Two other respondents agree that electronic multitasking is much more common to younger people (P2, P7). Hence, the approach of introducing new employees to the company guidelines seems to be a relevant way of implementing company rules.

Like our interview partners, we acknowledge the usefulness of company guidelines. However, we see the need to point out several issues. Since we gained an overall picture of the variety of potential approaches we criticise that the existing guidelines are mainly discouraging and formulated in a negative way. This would again neglect the potential positive effects of electronic multitasking. However, as most companies do not have company guidelines yet, we suggest that meeting leaders take on responsibility in managing this behaviour by adopting the remaining approaches. The same accounts if a
Data Analysis

company does not want to implement formal rules, then meeting leaders will also have to find their ways of managing electronic multitasking.

6.6 Organisational Culture

In the following, we will present the collected approaches regarding the culture of electronic multitasking. The global theme “Organisational Culture” encompasses descriptions of potential organisational norms and consists of two organising themes: Accepted Behaviour and Mindset. It includes what types of accepted and not accepted electronic multitasking behaviour could be governed by the norms as well as new ideas for a company culture that the interviewees suggest. Since organisational norms are a factor influencing electronic multitasking (Stephens & Davis, 2009, p. 75), the implementation of an organisational culture regarding electronic multitasking is an effective approach to manage this behaviour. Also several of our interview partners express that their existing company cultures are sufficient right now (P2, P5, P7). However, they add that the culture might have to be adapted to the change of increased electronic multitasking (P5) or in case it becomes a problem (P7).

Similar to the previously discussed approaches, an organisational norm seems to be that electronic devices are only used in case of meeting-related activities (P3, P5) so that individuals do not lose focus (P1, P7). Research also shows that the use of electronic devices in meetings is only acceptable if the person is engaged in meeting-related activities (Bajko, 2012, pp. 7-8). Hence, we suggest enacting a culture that restricts electronic multitasking to meeting-related tasks. Furthermore, it is beneficial that the participant is encouraged to clarify for what activity or reason the electronic device is used (P2).

Two leaders encourage the culture of being always available (P4, P5), which is especially important in the service industry (Cameron & Webster, 2011, p. 767). Hence, participants bring their mobile phones to be able to answer important calls during the meeting. Indeed, all six interviewees working in the service industry stress the importance of answering client calls (P1, P2, P4, P5, P6, P7). A study by Kleinman (2007, p. 2503) also shows that such culture of constant availability influences meeting participants to engage in electronic multitasking. Furthermore, a study of Bajko and Fels (2013, p. 4) reveals an increase in the acceptance of smartphones by companies in recent years. This indicates that such culture is widely spread due to the increased acceptance of mobile phones. However, Cameron and Webster (2013, p. 367) also recommend that the expectation of constant availability should only be encouraged with regards to customer or client contact. We therefore conclude that in less service oriented companies the culture of being always available should be discouraged to avoid potential negative effects of multicommunication.

Another company encourages an organisational norm for efficiency (P7). Electronic multitasking is expected and leads to a frequent occurrence especially in work meetings. Reinsch et al. (2008, p. 399) indicate that such norms result in multicommunication and an acceptance of divided attention. Nevertheless, it is important to always engage in respectful and professional behaviour as a basic code of conduct (P7). In contrast to the various accepted behaviours, not accepted behaviour is mainly dependent on the meeting type. In customer meetings (P4, P7) or important internal meetings (P4) a discouraging culture is prevalent. There are also meetings in which only the meeting leader brings a device (P7).
Overall, there is a shared mindset with regards to the organisational norms in the interviewees’ companies (P2, P4). In three companies a discouraging culture of electronic multitasking is adopted (P3, P4, P5). Another company is mainly encouraging electronic multitasking as their organisational norm (P7). Only one leader doubts that there is a shared mindset towards electronic multitasking within the company (P6). As described at the beginning of this chapter, organisational norms can be a very effective approach of managing electronic multitasking. We therefore recommend fostering a common culture to provide optimal guidance for meeting participants.

### 6.7 Synthesis of Analysis and Theoretical Framework

The analysis of our data has produced various approaches a meeting leader can use to manage electronic multitasking behaviour in meetings, both in order to limit negative effects and to make use of positive effects. In figure 3, we have matched the global themes derived in the thematic network analysis with our synthesis of the literature introduced in chapter 2.3. First of all, we could show that company guidelines and organisational culture are a valuable approach to support the meeting leader in managing electronic multitasking in meetings. This is due to the fact that the social context is influencing the multitasking behaviour of meeting participants as well as the leader’s management of this behaviour. Second, we have derived various approaches the meeting leader can make use of during the process of a meeting to manage electronic multitasking. They are further explained by the thematic networks on rules, active behaviour, and the applicability of electronic multitasking. Finally, we have demonstrated that the design characteristics of meetings are used by a meeting leader both before the meeting and during the process of a meeting to influence the amount and usefulness of electronic multitasking.

![Figure 3: Approaches for managing electronic multitasking](image-url)
7 Conclusions and Recommendations

In this chapter we will commence with answering our research question by summarising the management approaches we have found. Moreover, we will present the theoretical contributions of this study as well as managerial implications. The chapter will conclude with limitations that we have encountered during our thesis work and ideas for future research to address the identified limitations.

7.1 General Conclusions

The purpose of this study was to gain a deeper understanding of how meeting leaders both limit the negative and encourage the positive effects of electronic multitasking. Therefore, we conducted a multiple case study executing seven semi-structured interviews to get an insight into the experiences and opinions of meeting leaders. The gained knowledge served as a basis to answer our research question: How do meeting leaders manage electronic multitasking in face-to-face meetings? The gathered qualitative data was analysed using thematic network analysis. This revealed the following six global themes: Rules, Active Behaviour, Applicability of Electronic Multitasking, Design Characteristics, Company Guidelines, and Organisational Culture. By using the thematic networks connected to the global themes, we were able to find answers to our research question.

Our study revealed that there are different approaches leaders are employing when managing electronic multitasking behaviour. They can be divided into two major sections. The first section concerns the leader’s own approaches and offers opportunities to set different types of rules, which the leader then also has to enact as a role model. Furthermore, it describes the behaviour a meeting leader can use during the process of a meeting either to prevent electronic multitasking from individuals or to limit it when it is happening. Also, we have found various situations in which a leader can employ or accept electronic multitasking to make use of potentially positive effects. Finally, the meeting leader itself can implement different design characteristics to either limit electronic multitasking as with goal clarity or to enhance positive effects, for example with sectioning of meetings. The second section of the different approaches relates to how the leader can make use of approaches originated in the company to manage electronic multitasking. This includes formal guidelines helping the leader to enforce rules as well as the company culture that supports to transmit a common mindset of accepted electronic multitasking behaviour in the organisation.

7.2 Theoretical Contribution

With this study we address several identified limitations and gaps of previous research on meetings leadership and electronic multitasking. Existing literature on meeting leadership has been mainly anecdotal. With our study we have been able to add findings based on empirical research to the literature. As electronic multitasking is an important aspect of managing meetings in nowadays’ world, our results contribute to the literature aiming at improving the leadership of meetings. As part of this, we identified the need to focus on structural and process-related meeting leader behaviours. Our findings suggest that design characteristics as part of structural behaviour are indeed important for meeting leaders to manage the process of a meeting. Furthermore, we found out various process-related behaviours meeting leaders are using when managing electronic
multitasking of participants, for example setting rules, creating exceptions for some multitasking behaviours, or directly confronting a multitasking individual. Moreover, we identified how company guidelines and culture can support a meeting leader in meetings. Hereby, we further complemented the meeting leadership literature.

Existing studies in the field of electronic multitasking have mainly focused on the participants of meetings. With this study we add the perspective of meeting leaders and, based on our empirical findings, we can provide different approaches to manage electronic multitasking. Hereby, we followed the suggestion by several authors to encourage flexibility when managing electronic multitasking. We did not bias our research to either positive or negative effects but probed for approaches to both enhance positive and limit negative effects of electronic multitasking. Our study complements existing literature since it is conducted in Umeå, Sweden as a new geographical area. Furthermore, we did not limit our research to a single device. Instead, our definition of electronic multitasking encompasses all portable electronic devices. This definition was the basis when conducting our interviews. Hence, respondents were free to include any device in their answers. During the interviews, laptops, smartphones and tablets have been mentioned as commonly used devices in meetings. As previously mentioned, the main purpose of this study was to gain a deeper understanding of the phenomenon electronic multitasking and the approaches of how to manage this behaviour. With this study, we conducted groundwork and built the basis for new theory and further research.

7.3 Managerial Implications

Overall, our results are very diverse. We discovered many different approaches that are both suggested by the literature and our interview partners. There are two common aspects when reflecting on all interviews. First, all respondents are very aware of negative effects of electronic multitasking. Second, all leaders seem to be content with the effectiveness of applied approaches to manage electronic multitasking, even though they manage it differently. Hence, there is no “one-size-fits” all approach. Rather, meeting leaders should adapt the applied approach to their context, which is characterised by three key aspects. First, meeting participants have different device preferences and multitasking abilities. Second, the prevalent company guidelines or culture might support the meeting leader in her own approaches. Third, the meeting type influences the applicability of electronic multitasking. Hereby, it is important to differentiate short meetings in which electronic multitasking should be limited and longer meetings in which the use of electronic devices could be valuable. The different approaches and the conditions under which to apply them have been discussed in-depth in the analysis chapter. They can be seen as a toolbox from which a leader has to choose a combination of approaches to ensure a balance between enhancing positive effects of electronic multitasking without risking negative effects.

Apart from the specific approaches, there are some general recommendations that have to be emphasised. Usually it is not comprehensible to other meeting participants whether an individual engages in multitasking activities that are related or unrelated to the meeting (Iqbal et al., 2011, p. 893). Therefore, the use of electronic devices by both the meeting participants and the meeting leader should be motivated in case of any activity. This motivation should be communicated to the surrounding participants. Overall, communication about electronic multitasking should be fostered in companies to exchange different viewpoints and management approaches. Also a discussion
Conclusions and Recommendations

between leaders and their meeting participants should be initiated to include their perceptions of electronic multitasking and talk about which behaviours are accepted and appropriate. As already indicated in the several indirect approaches of managing electronic multitasking such as involvement and using different design characteristics, it might be reasonable not only to focus the discussion on electronic multitasking but on more general approaches of how to improve meetings. Finally, to go one step further within the communication, discussion could be initiated about proper behaviour in the sense of being respectful and acting professional, instead of focusing on setting rules directly related to electronic multitasking.

7.4 Limitations and Future Research

There are some limitations to our study that we find important to point out. One limitation is that we based our analysis mainly on interviews, and one further company document. This was the meeting agenda provided by one company. However, this was due to the non-existence of formal rules and guidelines in the remaining companies, which made it impossible to collect further documents related to the management of electronic multitasking. Nevertheless, the richness of collected qualitative data through interviews is considered sufficient in the context of this thesis and served as an appropriate basis to answer the research question. However, creating a sample only with companies that actually have company policies might be valuable for future research to explore the possibilities of formal guidelines further.

Another limiting aspect is that it seemed to be very difficult for our interviewees to suggest positive effects. This might be caused by a respondent bias of professionals who tend to remember the negative effects of electronic multitasking (Cardon & Dai, 2014, p. 5; Kleinman, 2007, p. 2505). Future research could therefore use observations to directly discover how electronic multitasking is used positively. Another reason for our interview partners having problems with mentioning positive effects could have been that none of them was part of the Generation Y or Generation Z who tend to be more accustomed to the use of electronic devices. Hence, they might not consider electronic multitasking as natural as younger persons. This could have caused their negative perception of electronic multitasking. Hence, future research could specifically target younger meeting leaders to detect more positive effects.

Moreover, our respondents sometimes referred to external meetings, even though we clarified that we are only interested in internal meetings and repeated our meeting definition in case the interviewee got lost in her own thoughts. Hence, it was sometimes difficult to separate when the respondents referred to internal or external meetings and therefore, we tried to follow up if we were unsure during the interview if a respondent referred to external meetings. We realised that mainly the consultants in our sample struggled to distinguish between internal and external meetings. Hence, it could be valuable to compare companies from different industries. Similarly, future research could distinguish between different meeting types, as length (short vs long) and purpose (decision-making vs workshop) seem to have an influence on the way electronic multitasking is managed. Finally, we have indicated that improving a meeting in general might help to prevent electronic multitasking because participants would be more engaged in the meeting. Hence, it would be valuable to look deeper into indirect approaches of managing electronic multitasking behaviour such as encouraging the interaction of the meeting participants or improving the meeting process in general.
LIST OF REFERENCES


APPENDIX 1 – INTERVIEW GUIDE

<table>
<thead>
<tr>
<th>Name, Company, Position</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Interview No.</td>
<td></td>
</tr>
<tr>
<td>Time &amp; Date</td>
<td></td>
</tr>
<tr>
<td>Venue</td>
<td></td>
</tr>
<tr>
<td>Interviewer</td>
<td>Jana Hasenberg, Katharina Machovsky</td>
</tr>
</tbody>
</table>

Interview Preparation Checklist

- Questions have been prepared and are ready.
- A room has been reserved and timing of interview has been set with consideration to interviewee’s convenience.
- Venue and seating arrangements are prepared to make the interviewee feel at ease.
- Water and fresh glasses are available.
- All mobile phones, devices etc. are off and out of sight.

Interview Opening

- Introduce each other and fill out the table above.
- Ensure anonymity and confidentiality
- Clarify questions if necessary.
- Fill out consent form.
- Let interviewee know that the interview will now be recorded and switch on the recorder.
- Provide a brief overview of the purpose and content of the study. Avoid giving information that may influence the interviewee’s responses.

Introduction

- Define electronic multitasking:
  - Electronic multitasking means **participating in a meeting** and **at the same time** using one or more **portable electronic devices** such as laptop, smartphone or tablet for other activities. Examples are taking notes, looking up related information, answering emails, updating the calendar, chatting with colleagues.
- Define meeting situation by describing the following scenario: For this interview, we will be looking at **scheduled and internal face-to-face-meetings**. We are interested in the **viewpoint of you as the manager of a meeting**.
- Please think of **typical meetings** that you usually have when answering our questions. This excludes for example **crisis meetings or HR meetings**; and **includes meetings such as staff meetings, project update meetings and many more**.
QUESTIONS
1. Frequency and perception of electronic multitasking
(Simple warm-up questions)
   1.1. To what extent have you experienced electronic multitasking during your typical meetings?
   1.2. In your opinion, what impacts does electronic multitasking have on the process of the meeting?
      1.2.1. Follow-up: Do you also think electronic multitasking has positive/negative impacts?
   1.3. In your opinion, do participants interact differently when they are engaged in electronic multitasking?

If the perceived attitude of the interviewee towards electronic multitasking seems positive, ask first for positive effects.

2. Limit negative effects
   Refer back to examples the interviewee made before.
   Remind the interviewee of scenario (typical, face-to-face, internal, leader).
   Follow-up: Encourage to give actual examples.
   2.1. How do you limit the negative effects of electronic multitasking?
      2.1.1. Follow-up: e.g. prohibit use of portable electronic devices, limit use with regards to specific case (emergency, family, work-related, customer), joking
      2.1.2. Follow-up: Do you have any specific meeting rules to limit the electronic multitasking?
   2.2. Which actions do you take to avoid electronic multitasking and get participants’ attention?
   2.3. Which actions do you take to regain participants’ attention when they are engaged in electronic multitasking behaviour?
   2.4. Which actions do you take to encourage participants’ interaction?

So far you mainly focused on negative (positive) effects of electronic multitasking in meetings. However, in the literature there is evidence for both positive and negative effects of electronic multitasking. In the following we will talk a bit more about the positive (negative) effects.

3. Enhance positive effects
   Remind the interviewee of scenario (typical, internal, leader).
   Follow-up: Encourage to give actual examples.
   3.1. How do you enhance the positive effects of electronic multitasking?
      3.1.1. Follow-up: Information access, include employees external to the meeting (decision, information, opinion), taking notes, encourage EM if active participation is currently not needed.

Ask questions about organisational guidelines only in case they were not covered in the previous answers.

4. Organisational Guidelines
   Remind the interviewee of scenario (typical, internal, leader).
   Follow-up: Encourage to give actual examples.
4.1. How do your company guidelines regarding the use of portable electronic devices during meetings look like?

4.1.1. Follow-up: Are the guidelines mainly encouraging or discouraging the use of portable electronic devices in meetings?

4.1.2. Follow-up: Do the company guidelines differentiate between the different portable electronic devices such as laptops, smartphones and tablets?

4.2. To what extent do the company guidelines help you to manage electronic multitasking during your meetings?

4.3. Are the company guidelines sufficient/effective or would you like to have more/different policies?

4.3.1. What changes would you suggest?

We would now like to move away from the organisational guidelines and return to your own approaches to conclude our interview.

5. Best practice / recommendations

5.1. Do you have any ideas of possible approaches or methods to both support or limit electronic multitasking in meetings that you do not use yet?

5.2. Maybe one last question to sum up: do you have any recommendations for other managers?

Interview Close

- Ask the interviewee if he/she has any questions and provide responses to these.
- Describe the next steps of the study and offer to provide him/her with the outcome.
- Thank the candidate for participation and time.
APPENDIX 2 – CONSENT FORM

CONSENT FORM

Title of Project: Electronic Multitasking in Face-to-Face Meetings – Master Thesis

Name, position and contacts of researcher:
Katharina Machovsky, student at Umeå University:
Email - kael0051@student.umu.se; phone - 072 761 17 91
Jana Hasenberg, student at Umeå University:
Email - jaha0062@student.umu.se; phone - 070 488 43 01

Hereby I confirm that
- I have been informed about the topic of the study and have had the opportunity to ask questions.
- I have been informed that my responses will be treated confidentially and anonymously.

Furthermore, I agree
- to take part in the above study.
- to the interview being audio recorded.
- to the use of anonymised quotes in publications.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason.

________________________________________  __________________________  __________________________
Name of Participant  Signature  Date

________________________________________  __________________________  __________________________
Name of Researcher  Signature  Date

________________________________________  __________________________  __________________________
Name of Researcher  Signature  Date
## APPENDIX 3 – THEMATIC NETWORK ANALYSIS

<table>
<thead>
<tr>
<th>Basic Themes</th>
<th>Organising Themes</th>
<th>Global Themes</th>
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<tbody>
<tr>
<td>Don’t use laptops for activities unrelated to the meeting.</td>
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<td></td>
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<tr>
<td>Don’t make calls/send emails during the meeting, wait for the break or leave the room.</td>
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<tr>
<td>I think it is important to state the rules clearly.</td>
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<tr>
<td>It’s my own meeting, it’s my own rules.</td>
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<tr>
<td>Set off rules when starting a project.</td>
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<tr>
<td>I don’t point out the rules over and over again in every meeting, the participants know them at some point.</td>
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<tr>
<td>In internal meetings, I am not that strict on setting rules as compared to customer meetings.</td>
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<tr>
<td>No mobile phones, switched off.</td>
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<tr>
<td>Mobile phones on mute and turning off announcements.</td>
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<tr>
<td>Put the devices away if everybody’s contribution is important.</td>
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<td></td>
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<tr>
<td>Laptops have to be closed.</td>
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<td></td>
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<tr>
<td>Agree about situations when electronic devices can be used beneficially.</td>
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<td></td>
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<tr>
<td>Discuss rules at the beginning of the meeting.</td>
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<tr>
<td>Renegotiate rules if they are not respected.</td>
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<td></td>
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<tr>
<td>Lead a meeting by example, show good human behaviour.</td>
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<tr>
<td>The leader has to go ahead by enacting the culture regarding EM.</td>
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<tr>
<td>The leader can take notes during the meeting on his phone.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pop-up messages or incoming calls don’t distract the meeting leader when taking meeting notes on the phone.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The leader should not answer the phone if it rings accidentally, and say sorry.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The leader should have the phone on mute and only answer if a major customer is calling. Otherwise the leader could tell the person calling that she will be called back later.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A leader does not have to check emails during the meeting because a person would call if it is sth. important.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If the EM impairs my meeting goals or I need everyone’s attention/focus/contribution, I have to say &quot;put your laptop away&quot; or &quot;put your phone away&quot;.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At the same time I am sending a signal to all other participants.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If the multitasking person has no excuse (important stuff to do) I ask him/her to put it away.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always when I notice EM I directly confronted them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is the meeting organiser’s responsibility to pinpoint the multitasking individual.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I try to get eye contact.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would ask to focus.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It has been sufficient to directly talk to the multitasking person.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In an open, kind manner of course.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I prefer to point it out.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confronting the person after the meeting is too late.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If it happens a lot you have to talk to the person.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I never confronted the person with a higher position, because it</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
would be the same next meeting but more awkward. I keep it between four eyes. Talk to the person during the break.

Don't make jokes on someone's else's behalf. You can tell jokes or stories.

Have a partner in crime to get people involved. Ask everybody for their opinion/comment. Each participant is responsible to prepare assigned point of the agenda. Change the rhythm of the meeting, have stand up, small workshops and groups, work cafés. Use whiteboards, posted notes, smartboards.

Sometimes you just need somebody in a meeting for political reasons and you don't care if they do electronic multitasking. As long as they stand behind the decision that has been made while they multitask, I don't care. If EM doesn't take me further away from the meeting goal, it is not my problem. After a while I don't bother anymore to fight against electronic multitasking.

Sometimes it is better to reschedule the meeting. We are not encouraging electronic multitasking. Please ask that person, if we could get that information. It's just happening, I don't need to encourage it anymore.

One of the meeting participants is assigned to takes notes. The meeting organiser writes down who is responsible/what should be done until next meeting. Double check during the meeting if electronically taken notes are correct.

You are still mentally there. We don't proceed with the meeting. It becomes actually a quite short break in the meeting.

If it's an important call, e.g from a customer or the doctor, it's ok. State beforehand and motivate if you are waiting for an important call. Leave the room when you are answering the call. If the person comes back into the room, we inform him if something important has been said. If it is a call and not an electronic message, it is usually important. We continue with the meeting when sb. has left for taking a call.

Managing EM depends on the situation, you need to adapt. Sometimes you have to accept electronic multitasking because otherwise people couldn't even attend. Doesn't make sense to always completely exclude electronic multitasking, because there might me an important reason for electronic multitasking. In short meetings, EM does not add value. In a work meeting or other types of meetings, electronic multitasking can be useful.

It is important to have a clear agenda. The agenda is the same in every recurring meetings. We have very strict and written agendas, minute by minute.
<table>
<thead>
<tr>
<th>Design Characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Break</strong></td>
<td>It is important to schedule breaks in long meetings to avoid electronic multitasking.</td>
</tr>
<tr>
<td></td>
<td>If people are about to lose their focus you have to take a spontaneous short break.</td>
</tr>
<tr>
<td><strong>Goal Clarity</strong></td>
<td>In decision-making meetings, I make the goals very clear.</td>
</tr>
<tr>
<td></td>
<td>It is very important to have a very clear purpose for short meetings.</td>
</tr>
<tr>
<td></td>
<td>It is important to have a clear goal for meetings.</td>
</tr>
<tr>
<td><strong>Length</strong></td>
<td>Make meeting as short as possible.</td>
</tr>
<tr>
<td></td>
<td>A meeting of more than one hour is too long.</td>
</tr>
<tr>
<td></td>
<td>Short meetings are better to be able to focus.</td>
</tr>
<tr>
<td></td>
<td>For decision-making, you need shortness to focus.</td>
</tr>
<tr>
<td></td>
<td>It limits electronic multitasking if participants if you have a short meeting where people are standing.</td>
</tr>
<tr>
<td><strong>Meeting Size</strong></td>
<td>Sometimes I needed a second meeting because the meeting group was too small or too large.</td>
</tr>
<tr>
<td></td>
<td>A meeting group is working best with 5 to 7 participants.</td>
</tr>
<tr>
<td><strong>Relevance of Topic</strong></td>
<td>Sometimes it is necessary for sb. to participate in the meeting just for political, decision-making or consultation reasons.</td>
</tr>
<tr>
<td></td>
<td>It is important to have interesting topics that are relevant to the participants.</td>
</tr>
<tr>
<td></td>
<td>Participants should not accept the invitation or leave the meeting if they feel they are not needed.</td>
</tr>
<tr>
<td></td>
<td>If a participant is working on sth. else during a meeting, she shouldn't be there.</td>
</tr>
<tr>
<td></td>
<td>If a key person is missing the meeting should be rescheduled.</td>
</tr>
<tr>
<td></td>
<td>If there are some people that are not needed for discussing an issue, then it is better to schedule a second meeting for this topic with the relevant people.</td>
</tr>
<tr>
<td></td>
<td>It is important to only have those people in the meeting who can contribute.</td>
</tr>
<tr>
<td></td>
<td>It is sometimes necessary for a meeting leader to accept electronic multitasking to gather the right people.</td>
</tr>
<tr>
<td></td>
<td>The longer the meeting, the more difficult to gather the right people.</td>
</tr>
<tr>
<td><strong>Sectioning of Meetings</strong></td>
<td>Have different phases: discussions without electronic multitasking, problem-solving with electronic multitasking.</td>
</tr>
<tr>
<td></td>
<td>Report status during meeting, solve questions and problems afterwards.</td>
</tr>
<tr>
<td></td>
<td>To ensure people's focus on important topics/decision making it should be separated from discussions/information sharing.</td>
</tr>
<tr>
<td></td>
<td>Use agenda to make clear when you really need people to focus.</td>
</tr>
<tr>
<td></td>
<td>Have 15mins for updating each other, then work in work environments/cubicles.</td>
</tr>
<tr>
<td><strong>Existing Guidelines</strong></td>
<td>The agenda is stating guidelines and therefore they are always visible.</td>
</tr>
<tr>
<td></td>
<td>We don't have formal rules, guidelines or policies.</td>
</tr>
<tr>
<td></td>
<td>It's most important to discuss it thoroughly before implementing</td>
</tr>
</tbody>
</table>

The agenda is always visible.
How the meeting is organised, e.g. how agenda looks like, can help to avoid electronic multitasking behaviour.
The agenda helps to focus people on the topic, especially in decision-making meetings.

It is important to schedule breaks in long meetings to avoid electronic multitasking.
If people are about to lose their focus you have to take a spontaneous short break.

In decision-making meetings, I make the goals very clear.
It is very important to have a very clear purpose for short meetings.
It is important to have a clear goal for meetings.

Make meeting as short as possible.
A meeting of more than one hour is too long.
Short meetings are better to be able to focus.
For decision-making, you need shortness to focus.
It limits electronic multitasking if participants if you have a short meeting where people are standing.

Sometimes I needed a second meeting because the meeting group was too small or too large.
A meeting group is working best with 5 to 7 participants.

Sometimes it is necessary for sb. to participate in the meeting just for political, decision-making or consultation reasons.
It is important to have interesting topics that are relevant to the participants.
Participants should not accept the invitation or leave the meeting if they feel they are not needed.
If a participant is working on sth. else during a meeting, she shouldn't be there.
If a key person is missing the meeting should be rescheduled.
If there are some people that are not needed for discussing an issue, then it is better to schedule a second meeting for this topic with the relevant people.
It is important to only have those people in the meeting who can contribute.
It is sometimes necessary for a meeting leader to accept electronic multitasking to gather the right people.
The longer the meeting, the more difficult to gather the right people.

Have different phases: discussions without electronic multitasking, problem-solving with electronic multitasking.
Report status during meeting, solve questions and problems afterwards.
To ensure people's focus on important topics/decision making it should be separated from discussions/information sharing.
Use agenda to make clear when you really need people to focus.
Have 15mins for updating each other, then work in work environments/cubicles.

The agenda is stating guidelines and therefore they are always visible.
We don't have formal rules, guidelines or policies.
It's most important to discuss it thoroughly before implementing
<table>
<thead>
<tr>
<th>Company Guidelines</th>
<th>Existing Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is possible to have the guidelines written on the Intranet.</td>
<td></td>
</tr>
<tr>
<td>We have written policies, they state that you are not allowed to use the computer</td>
<td></td>
</tr>
<tr>
<td>and the cell phone.</td>
<td></td>
</tr>
<tr>
<td>For one-time meetings, the guidelines are less present then for recurring</td>
<td></td>
</tr>
<tr>
<td>meetings.</td>
<td></td>
</tr>
<tr>
<td>The policy is discouraging electronic multitasking</td>
<td></td>
</tr>
<tr>
<td>It is easier for the meeting leader if there are electronic multitasking</td>
<td></td>
</tr>
<tr>
<td>guidelines from the top management.</td>
<td></td>
</tr>
<tr>
<td>If it was a big problem, we would probably make a policy.</td>
<td></td>
</tr>
<tr>
<td>The leader should not implement formal guidelines without reflecting upon them.</td>
<td></td>
</tr>
<tr>
<td>The guidelines were originally developed by the head of plant.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ideas for New Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>We could have guidelines on how to conduct a meeting: to have a clear agenda</td>
</tr>
<tr>
<td>and clear goal. It is only secondary to write down electronic multitasking rules.</td>
</tr>
<tr>
<td>We could use the introduction for new employees to also explain our electronic</td>
</tr>
<tr>
<td>multitasking guidelines to them.</td>
</tr>
<tr>
<td>It is important to explain the reasons for the guidelines so that people</td>
</tr>
<tr>
<td>understand them.</td>
</tr>
<tr>
<td>Ideas for guidelines are: &quot;announce beforehand if you are expecting an important</td>
</tr>
<tr>
<td>call and please announce if you have important other work to do while you are in</td>
</tr>
<tr>
<td>the meeting; and the meeting leader should keep the meeting as short as possible</td>
</tr>
<tr>
<td>and try to plan it's duration&quot;.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accepted Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have your smartphone with you and switched on if you need to be attainable, e.g.</td>
</tr>
<tr>
<td>by the customer.</td>
</tr>
<tr>
<td>Sometimes you need your phone, iPad or laptop, but then don't use it for</td>
</tr>
<tr>
<td>meeting-unrelated activities.</td>
</tr>
<tr>
<td>My company encourages the use of electronic devices, but you have to stay focused</td>
</tr>
<tr>
<td>on the meeting.</td>
</tr>
<tr>
<td>Participants should clarify that they use the laptop only for taking notes.</td>
</tr>
<tr>
<td>In a work meeting you would be allowed or even expected to do electronic</td>
</tr>
<tr>
<td>multitasking to solve problems quickly and to be efficient.</td>
</tr>
<tr>
<td>Be respectful and professional with the use of electronic devices.</td>
</tr>
<tr>
<td>Everybody assumes that if you answer a call during the meeting, it must be</td>
</tr>
<tr>
<td>something more important than the meeting.</td>
</tr>
<tr>
<td>It is not allowed to let your attention fade away from the meeting.</td>
</tr>
<tr>
<td>If we are talking about something very important, an informal rule is not to</td>
</tr>
<tr>
<td>do electronic multitasking.</td>
</tr>
<tr>
<td>Most of the time participants are switching their phones off.</td>
</tr>
<tr>
<td>In a monthly reporting or planning meeting, the meeting leader would typically</td>
</tr>
<tr>
<td>be the only one with a laptop.</td>
</tr>
<tr>
<td>I don't think that there is a shared mindset towards electronic multitasking</td>
</tr>
<tr>
<td>within the company, it depends on the meeting organiser.</td>
</tr>
<tr>
<td>There could be benefits of allowing electronic multitasking that are not</td>
</tr>
<tr>
<td>discussed.</td>
</tr>
<tr>
<td>I think there is a shared mindset towards electronic multitasking.</td>
</tr>
<tr>
<td>I believe that managers with a lower position follow the approaches that come</td>
</tr>
<tr>
<td>from higher position managers.</td>
</tr>
</tbody>
</table>
# APPENDIX 4 – COMPANY GUIDELINE

## Functional Management Meeting

**Frequency:**
- Place:
- Time:
- Responsible:

**Purpose:**
- Analyze last week's results compared to KPIs and initiate necessary activities.
- Lead and prioritize continuous improvements.

**Participants:**

**Rules:**
- Meeting starts and ends on time.
- Telephone set to silent during meeting.
- All attendees prepare their input before meeting.
- If not able to participate, inform rest of group ahead of meeting.

**Input:**
- Action plan, weekly analysis, Status of improvements, status of projects.

<table>
<thead>
<tr>
<th>Time</th>
<th>Agenda</th>
<th>Resp</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:15</td>
<td>Action plan</td>
<td>Chairman</td>
</tr>
<tr>
<td>09:20</td>
<td>Weekly analysis</td>
<td>All</td>
</tr>
<tr>
<td>09:40</td>
<td>Status of projects &amp; improvements</td>
<td>All</td>
</tr>
<tr>
<td>10:00</td>
<td>Other</td>
<td>All</td>
</tr>
<tr>
<td>10:05</td>
<td>Evaluation of meeting</td>
<td>All</td>
</tr>
<tr>
<td>10:10</td>
<td>How are we doing things about employees or other departments? How are we doing on items that did not feel OK? How has the conversation gone? Did we cover all items?</td>
<td>All</td>
</tr>
<tr>
<td>10:15</td>
<td>Close meeting</td>
<td>Chairman</td>
</tr>
</tbody>
</table>

**Outcome:**
- Updated action plan, new activities to correct any deviations