THE IMPACT OF VIRTUAL MEETINGS ON THE FUTURE OF BUSINESS TRAVEL

AN EXPLORATIVE STUDY OF BUSINESS TRAVEL BEYOND COVID-19

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Bachelor Thesis

Stockholm School of Economics

2021

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Abstract:

COVID-19 has created a crisis which is still present in the travel industry and in particular in the business travel segment. The pandemic-induced migration of communication from face-to-face to digital formats has led many to question the necessity of business travel in relation to the functionality of virtual meetings. This constitutes unprecedented uncertainty of future business travel, which this thesis addresses through studying Swedish industrial companies. Using a grounded theory approach, factors influencing companies' choice of either videoconferencing or face-to-face business travel are explored and put in relation to each other. The grounded theory is derived from interviews with professionals involved in travel planning at major Swedish industrial companies to map out what factors are at play in the selection process and how the companies themselves believe business travel will develop. The resulting theory indicates that many activities will remain digital as a consequence of rationalization and new habits - even after COVID-19 restrictions are lifted - while some types of travel will return. Internal meetings in particular are expected to be conducted virtually to a high degree in the long run, while senior meetings or activities that are physical in nature are expected to return to travel.

Keywords:

 Business travel, Virtual meetings, ICT, Grounded theory, COVID-19

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Definitions

FTF: face-to-face (FTF) is a communication form where two persons or more are interacting being physically present in the same place.

ICT: information communication technology (ICT) refers to technology for communication of information in audio, text and/or video, such as phone calls and videoconferencing.

Videoconferencing: videoconferencing (sometimes termed as "virtual meetings", "video calls" and "digital meetings") is a form of ICT where two persons or more interact virtually through simultaneous audio and video, commonly using web cameras on laptops.

Travel volume: number of booked trips.

1. Introduction

"My prediction is that over 50% of business travel (…) will go away"

- Bill Gates (CNBC, 2020)

After decades of growing international travel, the spread of COVID-19 in 2020 paralyzed the entire travel industry on a global scale. With authorities imposing travel bans and physical distance restrictions, going to work in the office was no longer an option and even less so travelling to other locations. European air traffic virtually disappeared as flight volumes dropped by more than 85% in April 2020 year-on-year (Eurocontrol, 2021). The global travel and tourism industry suffered losses of nearly US$4,5 trillion and 62 million job in 2020 (WTTC, 2020). Although all types of travel were affected, the business travel segment was among the worst affected. Counting from April 1st, business travel spending was down by 68% in 2020 compared to the corresponding period the previous year (GBTA, 2020). Needless to say, the travel industry as a whole faces unprecedented difficulty, with uncertain outlooks indicating a slow recovery (IATA, 2020; Eurocontrol, 2021).

Uncertainty is even more dire in the business travel segment. The pandemic forced organizations worldwide to avoid going to office if possible, resulting in a large migration to virtual work platforms. Activities that were previously not deemed appropriate for the virtual format has for more than a year been conducted virtually, and people not used to or unwilling to utilize virtual meetings have been forced to adapt.
Many believe that the prolonged period of distance working has established new routines and habits among individuals and companies. Subsequently, there are widespread beliefs that virtual meetings have effectively substituted a significant share of previous business trips. Thus, the pandemic has not only paralyzed the business travel industry; it has potentially changed how companies perceive travel needs and remote meetings, perhaps permanently.

1.1. Background of the problem area

1.1.1. Business travel up until COVID-19

Business travel is concerned with people traveling for work-related purposes, distinct from leisure travel that concerns for instance vacations and visiting friends and family. Traveling for business is a long-established phenomenon; since the days of empires like Greece, Rome and Persia people have travelled for trading, continuing into the age of colonialization. In the 1950s, however, the contemporary form of business travel emerged and exploded in terms of volume. Demand for international business travel rose with a growing global population and economy as well as an accelerating globalization. Supply advancements such as airplane innovation and more affordable fares met the increasing

demand and made business travel accessible for a wider audience (Swarbrooke & Horners, 2001). Traveling as part of or directly related to work has been an increasingly common duty in the work market since then. Global business travel spending has been rising steadily during the last decades, including a doubling in the years 2000-2019 (Statista, 2021; GTBA, 2019). Companies and organizations grow to new locations, manage relationships with stakeholders, connect with potential customers and attend conferences away from the normal office, often requiring managers to temporarily relocate to attend meetings or other activities physically. Business travel of today is often of international character and covers large geographical distances, making air transport the only viable option in many cases (Swarbrooke & Horners, 2001).

The travel industry is a fundamental part of the global economy, contributing with 10,3% of the global GDP and employing 1 in 10 workers worldwide in 2019 (World Travel & Tourism Council [WTTC], 2020). For many actors in the travel industry, business travel is the bread and butter. For instance, business travelers account for only 12% of total airline passengers but generate up to 75% of the profits. For high-end hotels worldwide, corporate travel makes up around 70% of the revenue. In addition, connected services such as cars rentals, restaurants and airports are to a large degree reliant on income from business travelers (McKinsey, 2020). All in all, business travel accounted for over one fifth of the global travel and hospitality spending in 2018 while being significantly less than one fifth of the travelers. The segment is thus an important source of profitability for actors across the industry (WTTC, 2020).

Economic downturns and disruptions

Historical data of outbound flights, segmented by leisure and business purpose passengers, also point to business travel volume as particularly sensitive to economic downturns. In European countries such as Germany, United Kingdom and Spain, outbound business travel volumes declined more severely during economic downturns such as the 2008 financial crisis than leisure travel, suggesting that business travel historically has been rather volatile (McKinsey, 2020).

Both segments are however sensitive to extraordinary events. The 2001 September 11th events in USA caused airline passenger numbers to dramatically fall by 50%, which was followed by proposed layoffs across the industry. The negative fallout was not limited to airlines though, as also hotels, plane manufacturers, and other connected services suffered from severe revenue drops (Goodrich, 2002). Epidemics have also proven to bedevastating to travel figures - the SARS outbreak in 2003 caused a decrease of 70% flight arrivals in Asia, even in countries where the outbreaks were very small or non- existent (WTTC, 2003). Air traffic and revenues were however generally back to previous levels within a year of the previous negative events (IATA, 2006, 2020).

1.1.2.   Birth and rise of videoconferencing applications

Videoconferencing, or communication through simultaneous audio and video, is not a novel technology. Development of such technology had begun as early as the 1930's (Odgen, 2006; Schnaars & Wymbs, 2004), but technological limitations and lack of necessary infrastructure development hindered it from becoming a useful tool for the public. Although new digital innovations significantly improved user friendliness and availability during the 70s and 80s, videoconferencing use was still limited (Noll, 1992; Boyle et al., 1994) and up until the beginning of the new millennium, videoconferencing had not become the disruptive tool many expected it to be (Lipartito, 2003).

Later developments of the technology have changed the momentum. One of the more important factors was the integration of videoconferencing functions into desktop applications in laptops and computers (Davis, 1999), reducing the dependence on dedicated videoconference rooms. For businesses, the possibility of live display of work applications and files during the session constituted a significant progress towards converting videoconferencing into a valuable work tool. Moving beyond the early concept of a telephone call with added pictures of a face, videoconferencing applications were increasingly adhering to practical business needs. Apart from the video images, participants could now, for instance, share PowerPoint slides and Excel sheets within the video call, increasing the usefulness for companies. Combined with improved internet infrastructure and integrated webcams in most PCs, videoconferencing was becoming a potent work tool available for the masses (Denstadli et al., 2013).

Already before the pandemic, videoconferencing tools had gained traction in many companies. Global videoconferencing market had grown to USD 5,32 billion prior to the pandemic and forecasts were north of 10% annual growth for the coming years (Fortune Business Insights, 2020). One global survey from 2020 showed that 66% of large European corporations were using virtual or hybrid meetings regularly to some extent (Amex, 2020). When the pandemic hit and worldwide restrictions were put in place, many organizations saw no other option than to swiftly move most, if not all, operations online. User numbers skyrocketed over the course of a few months, and the largest videoconference providers multiplied their user base within a few months. For instance, Microsoft Teams grew from 20 million daily active users in 2019 to 115 million in 2020 and Zoom grew from 10 million daily meeting participants in 2019 to more than 300 million in April 2020 (Microsoft, 2020; Zoom, 2020).

1.2. Purpose and research questions

While organizations have had no other choice than to suspend most travel and move communications to virtual platforms during the pandemic, questions are being raised by organizations and travel providers when, if at all, business travel demand will return. These questions form the foundation of this thesis. The purpose is to explore what type of business travel will return and what business travel could be more likely to remain digital, as well as the underlying drivers of such development. This is done through exploring what determines preference for each medium with following application to different types of business travel activities. Preferences of today could then give indications on how companies will choose to conduct activities in the future, when they are no longer restricted to only digital mediums. This aim is formalized by two research questions:

- *R1: What are the factors influencing the choice of virtual meetings or business travel?*

- *R2: What could be the implications of these factors for different travel purposes?*

1.3. Research gap and expected contribution

The prolonged time during which virtual meetings have essentially substituted business trips is the foundation for many questions. What travel do companies need to return to and why are largely unexplored questions given the novel and unprecedented conditions in the tracks of the pandemic. Factors that were previously influencing organizations' selection of either virtual or FTF meetings could have been altered or even erased by the pandemic. For instance, commonly stated reasons for avoiding virtual meetings such as habit or lack of technical infrastructure, prevalent in existing literature (Haynes, 2010), are likely less relevant today. The substitutionary function of virtual meetings of this period contrasts existing literature, which suggests that ICT implementation seems to increase, not decrease, net travel volume (Haynes, 2010; Mokhtarian, 2000; Mokhtarian & Meenakshisundaram, 1999).

To summarize, it is plausible that the pandemic has altered the conditions and the decision factors behind selection of business travel FTF or virtual meetings. Business travel has, unlike other areas within travel and tourism, not attracted much attention by academia. This leaves a largely unexplored area, reflected in the substantial uncertainty in the industry and among businesses presently rethinking their corporate travel. This thesis will help to map out and explain possible developments in the novel environment. Given the large uncertainty surrounding the fallout of the pandemic, the explorative nature of the study could furthermore generate indications on interesting topics and areas for further research.

1.4. Delimitations and scope

To be able to thoroughly address the research questions, a set of delimitations have been made for the study. Narrowing the scope helps to increase the depth of the analysis and to ensure that the study is indeed practically possible to carry out given the limited timeframe of the bachelor thesis format.

The first limitation concerns the type of travel studied. The study's scope of business travel is travel that is conducted by an individual or group on behalf of a company with a work-related purpose. For the purposes of the thesis, the business traveler remains a business traveler for the whole duration and does not "convert" into a leisure traveler until the trip is over, which is a prevalent feature in tourism literature. Additionally, commuting to and from offices - commonly held as a form of business travel - is excluded from the study due to the different natures, frequencies and corresponding decision factors involved in commuting and other types of business travel.

The second delimitation concerns transportation method: This study is only concerned with air travel. Again, this delimitation is done due to the different natures of air travel compared to, for instance, train travel, which would demand a wider scope including choice of transportation mediums, diluting the level of analysis.

The last delimitations concern the studied companies. The study focuses on companies based in Sweden for practical reasons, as the authors are based in Sweden. Furthermore, the scope only includes private companies since underlying motivations and factors are likely to differ from other types of organizations. The study is further delimited to companies within the industrial sector. This delimitation was done in connection with the initial literature review and expert consultations and is justified by the different travel patterns that exist within companies in the industrial sector compared to, for instance, retail or consultancy companies. Finally, the study scope only includes companies that have operational presence outside the Nordic countries, meaning offices, production plants or other types of permanent presence. This delimitation is motivated by literature which indicates that geographical dispersion of organizations increases the needs and relevance of business travel.

The resulting scope is therefore Sweden-based private companies with global presence within the industrial sector. These companies have international supply chains and customer networks, making them historically reliant on business travel for both communication and operations. The problem area of business travel and virtual communications is particularly relevant for this group of actors, making them an appropriate scope of the study.

2.   Literature review

2.1.   Needs behind business travel

Business travel occurs as a response to the necessity to satisfy communicational needs. These transpire in various contexts such as internal meetings, board meetings, customer relations, conferences, product or project initiation and general employee mobility. In this following section, the factors influencing communication needs will be presented in the respective contexts.

Growth of the necessity for correspondence can be connected to the increasing number of companies with greater geographical distances between business parties (Amin, 2002; Torre & Rallet, 2005) and between branches within the same company itself. Geographical remoteness can be said to affect both the internal (Hildrum, 2007) and external communication needs through interactions with project teams and clients, which contribute to the demand of business travel (Haynes et al., 2005). The rise in distance has been facilitated by the development of transportation infrastructure and ICT advancements, which has resulted in the choice of the communication medium gaining further prevalence.

It is precisely this interaction that may be observed when studying multi-unit companies, where the cost-effectiveness of the ICT tools employed enable a rapid increase in the number of such companies (Ota & Fujita, 1993), while at the same time increasing the necessity for connection between branches. The factors that will determine the medium and frequency of communication, in this case, are the company's division of work and hierarchical structure (Brousseau & Rallet, 1997). In general, we can argue that the advancement of multi-unit companies, a flat hierarchy and employee autonomy each contribute to an increased need for internal communication (Aguilera, 2008). At the same time, a hierarchical position is also directly linked to the likelihood of travel as higher positions are often linked with the need to travel (Arnfalk & Kogg, 2003). Looking at the size and sector of a given firm, the likelihood of business travel occurring increases in larger companies and is particularly prominent within the manufacturing sector (Hugoson, 2001). Furthermore, the need for flexibility and innovation also affects a given company's internal relationships (Andersson and Karlsson, 2004), which holds especially true of co-operating firms, which are often located remotely from one another (Andersson & Ejermo, 2005). In such instances, depending on the complexity and perceived importance of the project, business travel can become a necessity. Moving away from the internal project teams, the interaction with clients considerably influences the need for communication as well. This interplay may be concerning standards and customization of delivery of goods and services (Ughetto et al., 2002), where the higher the degree of customization or quality standards, the more considerable the need for communication becomes (Aguilera, 2008).

Finally, attendance at conferences and trade shows is another factor contributing to the necessity of business travel (Ramirez-Pasillas, 2006). In 2003, approximately 20% of Swedish long-distance business travel was motivated by conferences, while customer contact and meetings constituted about 50%. A more recent study of European business travel has been made by American Express in 2019, with its results shown in table 1.

Table 1. European business travel by meeting purpose (share of total spending)

Internal meetings	23
Senior Leadership/board meeting	17
Customer meetings	17
Conference/tradeshow	16
Product launch	14
Employee incentives	13
	(%)

Source: Amex Global Meetings Forecast 2020 (2019)

2.2. The relationship between ICT and travel

Researchers have long been interested in how the use of one communication medium affects the other. Previous studies have discussed four possible relationships between ICT and business travel – neutrality, substitution, generation and modification (Mokhtarian & Meenakshisundaram, 1999; Saffo, 1993; Salomon, 1986).

A relationship of *neutrality* refers to independence, meaning that increased usage would have no impact on travel. One example of this would be when ICT and travelling are used for entirely different purposes, and no cross-use is possible.

A *substitution* relationship exists when one is chosen instead of the other, with the underlying assumption that ICT allows for virtually conducting tasks previously done in-person (Aguiléra et al., 2012). Assuming a substitution relationship to travel, increased ICT use would result in a net reduction in travel volume.

Generation is instead a relationship of stimulation and generation of more communication. Such a relationship means that increased use of ICT generates increased international travel. For instance, ICT could enable managers to set up international partnerships not previously possible, which would generate increased travel demand for a firm. Previous research has shown that the most frequent flyers have also been the most positive towards ICT use (Kogg & Arnfalk, 2003). Mokhtarian argues that in the long-term, generation (complementarity as termed by Mokhtarian) is a more likely relationship than substitution:

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> "*(…) the substitution effect is more likely to be short-term and direct and to occur within the boundaries of the process being studied, whereas the complementarity effect is more likely to be long-term and indirect and to occur outside the scope of the studied process.*" (Mokhtarian, 2000)

The last relationship outlined by previous research is *modification*. Modification exists when both communication methods are used – and would have been used in either case – but the use of one channel alters how the communication in the other channel is used (Mokhtarian & Meenakshisundaram, 1999). A modification relationship between ICT and travel will primarily result in an altered character of the conducted travel rather than a net reduction in travel volume. Furthermore, some have argued that even if substitution does occur, the inherent desire to travel will offset the resulted volume reduction by increasing travel volume in other areas (Salomon, 1985). As technology develops, modification is the relationship type that has the most potential of changing the way companies conduct internal and external communication (Haynes, 2010).

Scholarly consensus on which relationship is closest to the real world is not clear. Early research presented ICT as an emerging replacement of FTF meetings, making a case for the substitution relationship (Geels & Smith, 2000). In light of the simultaneous growth of both ICT use *and* international travel during recent years, substitution was increasingly seen as an insufficient explanation (Denstadli et al., 2013; GBTA, 2019). Haynes (2010) argued that the initial phase of ICT adaptation might be characterized by substitution, while in later phases interdependencies develop and change the relationship into one generation or modification (Haynes, 2010). Salomon et al. (2010) concluded that although many companies saw ICT as a travel substitute, it was in practice used as a complementary communication method to increase productivity and efficiency (Salomon et al., 2010). On the whole, recent research indicates that ICT enables and modifies business travel rather than producing net reduction in travel volume.

2.3.   Factors influencing the selection of ICT or FTF meetings

As international travel has grown and ICT has advanced, research has shown a growing interest in what factors are at play in the choice between FTF and ICT meetings.

2.3.1.   Media richness theory

One prevalent theory – the *media richness theory (MRT)* – suggests that the most crucial determinant of meeting channel is the information complexity and the media richness (Potter, 2004; Trevino et al., 1987; Short et al., 1976). The media richness refers to the possibility for simultaneous subtle information cues, quick feedback, and personal interaction. FTF interaction therefore constitutes the richest media, whereas e-mail is a low richness media. Video calls can be considered relatively rich media since they include simultaneous video and provide instant feedback, yet not as rich as FTF interaction.

Advocates of the media richness theory argue that the complexity of the information to be exchanged determines the media selection. An example of complex information is non-structured and ambiguous information (Larsen et al., 2007). Another example is tacit knowledge such as competence and skills as well as personal information on what tasks need to be carried out and in what particular way (Aguilera, 2008). For instance, the sharing of know-how information was positively correlated to the regularity of FTF meetings (Lethiais & Aguilera, 2007). Advocates of MRT argue that complex matters are more effectively dealt with FTF meetings due to ICT being unsuccessful in conveying the fulldepth of this information. At the same time, routine, simple tasks can be handled by mailor phone.

Although media richness theory has enjoyed popularity among researchers in the area, it has not gone without scrutiny, with some scholars claiming MRT has weak empirical support. Dennis & Kinney (1998) found that less richness led to slower decisions for less equivocal tasks than for complex tasks, contrary to the theory predictions. Suh (1999) conducted a similar study reaching the same conclusion. Denstadli et al. (2012) have also voiced concerns about the theory's underlying technological determinism, the underlying assumption being that each media channel will affect the user in a predetermined manner.

2.3.2. Social aspects

Other scholars have focused on the social aspects of choice rather than the communication content and media richness. The *social influence theory* instead suggests that the choice of media is highly dependent on the habits and social norms of the users - the choice depends not only on media features, but also on the user's past experiences with it (Fulk et al., 1990). Moreover, the choice is influenced by attitudes held by others towards a specific medium (Bijker & Law, 1992; Haddon & Silverstone, 1996). It follows that a social influence approach would expect the use of ICT to differ across organizations and teams according to the prevailing social norms. Additionally, live meetings are preferred when interacting with parties external to the firm, irrespective of ICT availability, as these can be perceived as a sign of interest (Arnfalk & Kogg, 2003). This also highlights the importance of FTF meetings in generating mutual trust during the initial phase of interaction, resulting in potentially more efficient mediated communication after the initial contact (Gallaud & Torre, 2005; Vecchi & Wickham, 2006). This trust-based relationship could also explain why digital teams also require FTF interactions (Arnfalk & Kogg, 2003).

2.3.3. Other perspectives

In addition to complexity and social aspects, other scholars have emphasized the meeting purpose as a main selection factor. Survey results from Lu & Peeta (2009) indicate that business travel is chosen for meetings that are assumed to require FTF interaction, like negotiations, product demonstrations and event participation. In comparison,

videoconferencing is a viable option for information exchange, management meetings and consulting (Lu & Peeta, 2009). Looking at the intra-firm distribution of travel as per organizational areas, sales, marketing, technical and management departments seem to have a higher tendency to travel than to videoconference (Arnfalk & Kogg, 2003). The mode of work has also been suggested to play a role, especially when it comes to innovative projects. In these cases, the less standardized a project is, and if the relative number of information mediators involved is low, the more need there is for FTF relations (Hildrum, 2007). The perceived importance of an interaction has also been pointed out as an influential factor, predicting that communication deemed business-crucial will to a greater extent result in business travel (Gaspar & Glaeser, 1998).

2.4. Benefits and drawbacks of virtual teams

Virtual meetings have gained recognition and are more widely used over time. This may be attributed to the following advantages that they provide:

Virtual meetings are facilitated through ICT tools, meaning the connection within teams is technology-driven and considerably cuts down on expenses associated with travel as well as travel time itself (Bergiel et al., 2008).

Cost savings do not end with those tightly connected to business travel itself; instead, they can also be found in the reduced interruption of workflow caused by fewer FTF meetings (Opper & Fersko-Weiss, 1992).

Digital teams allow for wider recruitment opportunities and can enhance the companies' talent acquisition (Snyder, 2003). The pool of potential employees expands due to not having geographical restrictions imposed by FTF structure. Additionally, modern workers are reluctant to relocate due to the perceived stress associated with it (Lipnack and Stamps, 2000) and associated costs (Joinson, 2002).

Cross-team functionality and flexibility also become improved through digital means, as it allows for better utilization of workers, allowing them to participate in multiple projects regardless of geolocation (Hertel et al., 2004).

Free from the restrictions of proximity to one another, virtual teams can also achieve a higher degree of diversification and heterogeneity, allowing for improved creativity and innovation. This diversification is especially applicable to employees with physical disabilities, as a virtual workplace is far more accessible to these individuals (Bergiel et al., 2008).

Virtual meetings thus hold many advantages and can be useful for companies to save costs and increase productivity, well-being and diversity. This also comes with drawbacks, though. One issue is the lack of experience or the general lack of computer-related skills. This issue is particularly attributable to older managers and team leaders

(Lipnack and Stamps, 2000). Even employees more accustomed to technology may require training and guidance. The shift to the virtual setting requires a great deal of understanding of its unique implications and necessary prerequisites (Snyder, 2003).

Virtual meetings are not universally applicable to all environments. Certain companies may struggle to implement this medium or find it ill-fitting. According to Joinson (2002), industries within manufacturing may find digital teams particularly challenging: *"any type of work that's very sequential or integrated can pose problems for virtual teams"*. Furthermore, certain groups of employees can experience the virtual setting as ill-fitting and undesirable. This is particularly true of people stimulated by interaction with others and who may require support to remain active and engaged members of the team. This is closely connected to the difficulty to build trust virtually compared to FTF (Joinson, 2002). Finally, digital teams are to a higher extent characterized by asynchronous contact, despite simultaneous communication opportunities. As such, individual and cultural differences regarding communicational style, motivation, and readiness to disclose information gain increased prevalence (Gudykunst, 1997).

3. Method

This part of the thesis will outline the study's methodology and its role in answering the research questions. The qualitative nature of the study and the selection of the grounded theory approach will be evaluated, ending with a review of the validity and reliability of the chosen method.

3.1. Research approach

The choice between business travel and remote work in light of recent developments in the ICT area as well as the unprecedented pandemic-related conditions is a relatively unexplored domain in academia. To meet the ambiguity surrounding the future of corporate travel, the study adopts a qualitative and explorative approach. The selection of an explorative approach is motivated by the general uncertainty associated with research of future developments and implications. An explorative approach can be helpful in navigating this uncertainty and contribute towards clarifying possible long-term implications of the current situation and underlying reasons by contextualizing the challenges companies face. Given the lack of pre-existing data, new concepts and categories are generated as a result of the data collection, making a qualitative approach more suitable (Bryman & Bell, 2019). Since respondents are naturally more knowledgeable about their company's specific needs and conditions, respondents' answers are likely to contain elements beyond the authors' questions or cover different topics. Through a qualitative approach, those initially unknown elements can be captured and incorporated into the study.

3.1.1. Ontology

Ontological considerations concern the question of reality and what assumptions the study is built upon in relation to the nature of the observed phenomenon. This choice will influence formulation of research objectives and the employed research method.

In these regards, the present thesis is firmly placed within the objectivist ontology as it sees the topic of this study as an independent reality existing irrespective of the role of observers. Additionally, the adopted view of business travel is that of an activity corresponding to the existing organizational needs. Consequently, these needs stem from the economic activities of the studied companies and have to be satisfied irrespective of the act of observation.

Furthermore, through objectivist lenses, organizations may be prescribed a reality by enforcing rules, regulations and tasks to individuals involved. The acceptance of such characteristics would then reinforce the existence of companies as a reality external to the participants and researchers.

The argument for considering business travel through objectivist ontology is that it is a function within an externally existing social entity with its standardized procedures, chain of command and constraining forces. Regardless of the participants, the needs leading to business travel will arise and will be facilitated through defined channels and occur in a controlled environment that the subjective perception of involved members cannot influence (Bryman & Bell, 2019).

3.2. Data collection

The data collection is executed with individuals in positions connected to business travel decision-making or planning. With rather specific areas to cover comprehensively, the semi-structured interview approach has been deemed more appropriate than an unstructured one (Bryman & Bell, 2019).

Prior to designing the semi-structured interview questions, the authors determined a set of research objectives outlining which information was needed to answer the research questions. These objectives were presented to three experts from different actors and refined based on their feedback. The construction and trial of these research objectives could be described as a form of *theoretical sampling*, which allowed the authors to develop the data collection design to address the research questions more accurately (Bryman & Bell, 2019).

3.2.1. Interview guide

The semi-structured interviews were carried out using an interview guide based on the research objectives. It consisted of topics that the authors asked the respondents to evaluate and was shared in the form of a PowerPoint presentation during the interview. This was done to increase the dependability of the research and convey to the respondents the flexible format of the interview (Bryman & Bell, 2019). The content of the guide has been continuously developed throughout the consultations with industry experts and revisions of the literature. The guide itself has been sectioned according to the identified areas of interest.

The initial section aimed at establishing an open setting and introduced the researchers and the study to the respondent as well as inquire about their position in the firm and relation to travel. This was carried out in order to increase dependability and confirm that the respondent's functions are within the delimitations of the present study.

In the following section questions connected to digital medium usage were presented, both in retrospective and current context. This was done to obtain a baseline against which the developments of the pandemic could be compared. Throughout this process the travel patterns, use of digital media as well as attitude towards it have been explored in relation to specific business activities.

The third section of the guide presented the respondent with three distinct scenarios

where decisions had to be made with regards to the presented activities: conference, customer contact and internal meeting. These scenarios were to take place in 2026, encouraging the respondents to think beyond the immediate effects of the pandemic. For each scenario, factors were altered – one by one or in groups – to explore their importance in the decision-making process. Such examples were distance, novelty, criticality and seniority of contact to name a few.

These scenarios aimed at identifying the future possible preferences of communication medium choice. In the final part of the interview, we aimed to touch on topics such as globalization, international presence and sustainability. It is important to note that the guide was present to support the interviewing process and was not exhaustive. The respondents were not shown the guide itself. Instead, a PowerPoint presentation was shared, indicating the broader areas of interest and allow for greater degree of flexibility.

3.2.2. Interview place

The interviews were carried out using video calls via Microsoft Teams. The use of digital means comes with some notable advantages. Interviewers and interviewees save time and convenience compared to physical interviews (Deakin and Wakefield 2014; Hanna 2012; Weinmann et al. 2012). Especially the built-in and readily available screen-sharing and recording functions have contributed considerably to the efficient conduct of interviews. An additional advantage of the interviewing medium is the opportunity to store the recorded files automatically and exclusively on servers provided for such purpose. Thus, researchers could ensure compliance to applicable GDPR regulations.

3.3.   Data analysis

3.3.1.   Grounded theory

Providing an exhaustive account of what grounded theory is could prove to be problematic as there is a variety of researchers' perspectives on the topic, its application, level of prescription, and the development of this qualitative data analysis method. In the most recent embodiment of grounded theory, it has been defined as a "*theory that was derived from data, systematically gathered and analysed through the research process. In this method, data collection, analysis, and eventual theory stand in close relationship to one another*" (Strauss and Corbin, 1998: 12). Conceptually speaking, grounded theory refers to the process where theory emerges from the data and to the circularity of this relationship between accumulation and analysis of data (Bryman & Bell, 2019).

The tools employed in the formulation of grounded theory are theoretical sampling, coding, theoretical saturation and constant comparison.

As described by Glaser and Strauss (1967: 45), theoretical sampling refers to the continuous combination of data collection, coding, and analysis in tandem. This is executed to generate an emerging theory that is further refined by an iterative process and is an ongoing procedure that aims to refine the emerging theory to the highest possible grade. The refinement does not necessarily occur through variations in sample; in this case, it has been done through adaptation of method, research questions and specific interview questions.

The theoretical sampling employed in this study has been focusing on the initial data gathering process through literature reviews and background data, which has led to the primary research areas and objectives. Following this stage, industry experts have been consulted to maximize accuracy in emerging concepts. As a result, research focus has been delimited, which in turn has allowed for more thorough coverage of the available literature in parallel with the execution of initial interviews.

Theoretical saturation is tightly interconnected with the process of theoretical sampling. It refers to the continuation of the sampling until the following conditions are satisfied: No new information is emerging in association to a studied category, the categories themselves are sufficiently and diversely matured, and the connections between these categories are ascertained and developed (Strauss and Corbin, 1998: 212). Saturation can be understood as the point where no new aspects of emerging theories are discovered, or there are no new elements of the categories to be described and explored.

The final tool of the grounded theory approach is the constant comparison - a critical part of the analysis method as argued by Glaser and Strauss (1967). Often viewed as an inherent part of the method, this addresses the closeness between data and the theory to

assure a stable and constant connection between the concepts and categories. More precisely, it directs the researcher's attention to the importance of comparison of concepts assigned to a specific category. This is important in order to be able to facilitate the illustration of the emerging theory at a later stage. A memo can be composed for the purpose of not losing these contrasts throughout the coding phase (Bryman & Bell, 2019).

3.3.2. Coding

Qualitative research and its rich, unstructured data is reliant on *coding*, which holds especially true for grounded theory. Coding refers to the breaking down of information into its elements of comprise, which are subsequently provided with new labelling. This action occurs simultaneously with the data gathering process (Charmaz, 2000: 515), the two practices feeding into each other. Notably, coding in grounded theory emerges through ongoing interpretations of the researchers instead of being predetermined (Bryman & Bell, 2019). This gives way to a sense of fluidity when handling data, allowing for revision of the assigned labels. Re-labelling has been executed both jointly and individually by the co-authors as a step in the circulation of data during analysis.

In terms of coding practices, the following can be established:

- *Open coding*: during this initial phase, the collected complex data has been debunked into smaller individual factors, acting as indicators of researched phenomena. Following a thorough analysis, the factors have been grouped forming the first-order constructs.

- *Axial coding*: is the process throughout which the individual concepts have been categorized. Subsequently, these categories form the drivers of choice of communication medium and represent a higher level of abstraction of the first-order constructs.

3.3.3. The grounded theory process in practice

The coding has been initiated early to contribute to the understanding of the information and further develop and specify critical questions, enhancing the theoretical sampling process. Early transcripts and memos helped uncover the key concepts raised by the respondents. These same concepts formed the backbone of the established categories and contributed to the formulation of the theory. The grouping of concepts and categories was conducted on the basis of similarity in their higher abstractions.

The reviewing process was executed both on the raw data and the codes themselves by both authors to secure a corresponding understanding of the material. This has been carried out continuously throughout the data gathering process to ensure thorough coverage of the emerging concepts.

3.3.4. Criticism of grounded theory

Criticism of the grounded theory as a whole is presented by Bulmer (1979), who questions researchers' ability to disregard their prior knowledge of theories applicable to the studied context in the initial stages of the grounded theory. These risks creating a researcher bias skewing the data towards prior knowledge. In this regard, the current topic has been chosen based on researchers' curiosity and interest rather than previous knowledge, since the subject was new to both authors. The benefit of this is that there is a lower degree of conditioning.

Critique has also been raised towards the coding process and is connected to potential fragmentation of the data (Coffey and Atkinson, 1996), meaning that environmental factors and context may be lost in the process of coding. The full recollection of what respondents have expressed may therefore not be represented by the individual codes. To alleviate this issue, the codes have been established both on a case-to-case basis and the group of respondents as a whole. This has allowed for a comparison past the categorization phase, allowing for identification of possible gaps.

Another critique is presented by Cornelissen (2017), namely that the inclusion of quality checks and focus on factors may diminish the theorizing process of qualitative research leading to possible loss of data richness. However, it is essential to note that adequate theorization may be achieved given proper reflection stages past the coding phase.

Finally, in many cases, the focus in applying grounded theory is often shifted towards meticulous creation of concepts and their categorization, to the point where it may be challenging to identify the theory put forward. To avoid this pitfall, the authors have opted to formalize the theory by parallel comparison to existing theories.

3.4. Quality of research

3.4.1. Validity

External validity in qualitative research could be understood in terms of generalizability across contexts and constitutes a problem area for qualitative research due to the limitations in sample size (Bryman & Bell, 2019). The study is delimited to a specific sector and type of organization due to differences in travel patterns across these dimensions. This naturally complicates generalization to other types of sectors or organizations with other attitudes towards corporate travel. The grounded theory does however ensure *ecological validity*, defined as the degree to which the findings are applicable in everyday settings or the "natural habitat" (Cicourel, 1982). The study and theory originate precisely from data of respondents' everyday situation and thoughts that come from open conversations with authors intervening as little as possible, rather than questionnaires or direct questions. The naturalness of the data thus enhances the

study's ability to actually explain the phenomena in an everyday setting (Bryman & Bell, 2019).

Internal validity refers to the degree of compatibility between the collected data and the developed theory (Bryman & Bell, 2019). Also in this respect, the ecological validity helps to ensure that the data is as genuine as possible. The selection of grounded theory means that the developed theory is entirely based on this data, providing for an enhanced internal validity.

3.4.2. Reliability

External reliability in qualitative research refers to the replicability of the research, which is potentially problematic for qualitative studies as it is impossible to replicate the study including the social setting and circumstances (Bryman & Bell, 2019). Through describing the process - from sampling and theory construction - as thoroughly as possible, the authors have attempted to facilitate replication and secure external reliability. It is still worth to have in mind that the grounded theory as such is dependent on researchers' ongoing considerations, which are inherently difficult to exactly replicate.

Internal reliability concerns to which degree the researchers agree with one another on perception of data (Bryman & Bell, 2019). The two researchers behind this study have had ongoing discussions and reviews of both collaborative and independent analyses, until the data and concepts were understood in similar fashion. This applied also to later phases of the research, as ongoing refinement and discussion of data is an inherent part of the grounded theory.

4. Empirical results

This section will present the results of the empirical study. First, descriptive information of the data sources and the context in which it was collected will be provided. After that, presentation of the empirical results will follow, leading up the theory proposition in the next section.

4.1. Data description

10 interviews were conducted with professionals with roles relating to central travel planning and sourcing. 8 respondents held titles of "Global travel manager" or close variants, 1 respondent held the title "Executive assistant", and the last respondent held the title "Purchasing manager". Table 2 describes the represented company sizes in terms of number of employees and revenue. Since one fundamental requirement of the study was participant anonymity, no specific company figures can be disclosed since they could help identify participating companies. In terms of data, the average interview length was 60 min and generated 98 pages of transcribed material.

Table 2. Respondent company size by revenue and number of employees 2019

Variable	Mean	Median
Revenue (million SEK)	106 500	89 000
Number of employees	33 000	30 000
N=10		

4.1.1. Data collection context

The interviews were conducted in a way such that respondents could answer either for themselves personally, on behalf of their company, or both. This was done to allow respondents to reason more freely and develop nuances that are valuable given the explorative nature of the study. Furthermore, most of the data was generated through open-ended questions, aiming for the respondents' spontaneous, own reasonings and standpoints. This means that although some categories are more frequently mentioned, it does not necessarily mean that less frequent categories are irrelevant since factors were not controlled with all respondents. Rather, lower frequency likely means less top-of-mind.

4.2.   Data presentation

The empirical data - the transcribed interview material – will be presented in groups. These groups constitute higher levels of abstractions of interview answers that have been grouped together according to similarity. In other words, answers that delve on the same or similar factors are presented as a category. This way, the presentation of the empirical results can be more concise and constitute a logical predecessor to the model proposition without losing the details and high-resolution picture of the data. The frequency of each mentioned category is derived from the fraction of all respondents that have mentioned answers relating to the specific category.

The results will be presented in two parts, where the first part concerns factors in favor of FTF meetings and the second part presents factors in favor of virtual meetings.

4.3.   Preference for FTF meetings

Meeting structure

Meeting structure concerns the compositions and formal structure of the meeting. 5 respondents (50%) mentioned that a higher number of meeting participants, functional variety of the participants and/or meeting length increases the preference to have the meeting in FTF format. Participation and participant overview were also pointed out as problematic in virtual meetings compared to FTF ones. For instance, one respondent stated:

> "[*…*] *my experience is that people interrupt each other, which might cause other participants to remain silent when they should have voiced their opinion. Then, you might not get all the input in a virtual meeting compared to a physical meeting.*"

Task complexity

Task complexity refers to the processing difficulty of the information communicated. New information, overarching concepts and issues that deal with many areas were mentioned as examples of what could elevate communication complexity and increase preference for FTF meetings. 5 respondents (50%) brought up issues regarding task complexity as factor for preference for FTF meetings.

> "[In virtual meetings] *it is harder to get an overview and understand overarching concepts*"

Communication nuances

Nuances in the communication was put forward by 8 respondents (80%) as an important preferential factor in choosing the FTF format. Such nuances could come from meeting people in the appropriate environment, cultural differences in interaction and physical

cues including body language. Communications where such nuances are important will be prioritized for FTF meetings. For instance:

> **"***It is important to meet the customer in the environment: that we meet on the site, that we talk to the workers, get an idea of what the problem is... You do not get that in a virtual meeting in the same way* […]"*

Spontaneity and cross-departmental communication

A lack of spontaneity in the virtual setting was brought up by 6 respondents (60%). Virtual interactions are perceived as having less room for spontaneity and being selective and narrow in the communication relative to FTF interaction. Also, cross-departmental information was described as less likely occurring in and less suitable for the virtual format, likely a consequence of the lack of spontaneous conversations off-meetings.

> *"We cannot forget how important it is, the chit-chat before a meeting by the coffee machine* […] *since we nowadays can choose whom we are meeting with and such. This significantly limits how a company can work cross-function* […]"

Innovation and creativity

2 respondents (20%) mentioned that FTF formats worked better for generating innovative or creative ideas to tackle different issues. New ideas, initiatives or approaches are perceived as more easily generated while being physically present with each other, likely closely connected to the more open and spontaneous opportunities associated with FTF encounters.

> *"Above all, when you work with more creative or complex issues, it is not as effective to do them virtually compared to sitting in the same room* […] *you might sit in a meeting and not come up with a solution, but when you run out and have a chat by the coffee machine, people open up and start thinking in different ways* […]"

Relationship building

One of the most frequently brought-up necessities of FTF interactions was relationship building, which was brought up by 7 respondents (70%). Respondents described difficulties building trust virtually, lack of physical and social cues as well as separation of personal and work-related conversations as examples of why FTF contact was important in establishing new contacts.

> *"A physical customer meeting is very important for the creation of relationships. Not least due to the cultural differences in how business is done."*

Global presence

The global presence of the studied companies has some inherent features which was brought forth by 4 respondents (40%) as more suitable for FTF contact. These issues included difficulties in scheduling company-wide virtual meetings due to time zone differences, cultures where FTF contact is an essential part of doing business, and other differences in culture-related conditions to virtual meetings.

"[with regards to sales] *I believe that a lot is very culturally dependent as well* […] *we* [in the West] *could have a negotiation virtually, while in the Middle East you meet face-to-face, drink tea and then do business.*"

Physical character of activity

Tasks that are physical in nature were mentioned by 7 respondents (70%) as demanding travel. Mentioned occasions were equipment installations and service, supplier reviews, manufacturing process controls, among others.

"*We have some parts of the business that simply cannot be done virtually. As a manufacturing company, a lot* [of our activities] *is related to production processes which are very important for us, where you must be physically present. This is not limited to the actual manufacturing, but also* [...] *supply review and control.*"

External demands

5 respondents (50%) pointed to external demands as drivers behind preference for travel. Respondents pointed out that FTF contact might be demanded by a customer, supplier or other stakeholder, and that they see themselves obligated to comply with their requirements.

"*If the customer requests a physical meeting, then we will have a physical meeting. It is entirely dependent on what type of meeting is requested.*"

4.4. Preference for videoconferencing

Interaction purpose

Interaction purpose refers to the objective behind the meeting and represents a category mentioned by all respondents (100%) as a driver behind choosing virtual meetings. The respondents stated that internal meetings are effectively handled in the virtual format. This is especially the case concerning global teams where regular contacts are carried out virtually. Similarly, supplementary interactions with external parties can be handled digitally as well.

"*[...] salary discussions, customer events, have moved to digital*"

Interaction simplicity

This concept denotes the simplicity of the information to be conveyed and has been mentioned by 3 respondents (30%). Respondents perceived that when handling previously known information, digital meetings would be preferred. The same applies to explicit information.

> *"I believe many of these simpler* [FTF] *meetings will be avoided."*

Interaction frequency

According to 6 respondents (60%), regularly occurring contacts that follow certain regularity are well suited to virtual meetings. Also, the virtual format is preferred in the case of high frequency contact needs.

> *"Maybe half of the meetings can be done virtually,* [or] *two thirds virtually and you make sure to meet* [FTF] *once or twice per year"*

> *"I do not believe that the meetings* [FTF] *will be as frequent"*

Meeting efficiency

Digital meetings are perceived to be more focused on the task at hand as there are less distractions. Virtual meetings are easier to set up compared to physical ones and the participants are reached easier. Meetings are perceived as more likely to start on time, and participants are expected to be more prepared on the topics to be discussed. Responses relating to meeting efficiency have been mentioned by 8 respondents (80%).

> *"You still get things done* [digitally] *and do not need to meet* [in person].*"*

> *"*[...] *there are less distractions* [in digital meetings], *despite that we are at home now and around family. You are more efficient in these regards"*

Cost efficiency

Half of the respondents (50%) refer to virtual meetings as offering cost saving opportunities through omission of travel.

> *"Half a billion is a lot of money* [...] *so economics* [cost] *matters, absolutely."*

Time efficiency

The meetings conducted are more time efficient given absence of travel time and ability to conveniently alternate between meetings through the videoconferencing tool. As with cost efficiency, this concept has been noted by half of the respondents (50%).

> *"You free up a lot of time for your work when you do not need to travel* [...] *you have better opportunities at having a typical workday, during which you can do other things than loafing* [around] *at a hotel."*

Sustainability

An often-voiced reason behind digitalization is sustainability. 7 respondents (70%) mentioned that virtual meetings provide a possibility to reduce climate footprint related to travel while also conveying climate awareness internally and externally.

> *"[...] we are going to travel more sustainably [...] we will travel less"*
> *"[...] sustainability is an extremely important factor, and more and more big companies work actively with this"*

New technical conditions

8 out of 10 respondents (80%) mentioned factors relating to new technical conditions. As a result of unified videoconferencing platforms across companies, videoconferencing is more accessible, and people are more used to it than before. Furthermore, investments into IT infrastructure and expansion of the functions of virtual meetings platforms have increased the usability and functionality.

> *"[...] everyone needed to work with this, to launch a new technological platform globally has never gone this fast [...]"*

New expectations

8 respondents (80%) have expressed preference for virtual meetings thanks to new expectations. Customers and suppliers are perceived to no longer demand FTF meetings to the same extent as previously, short and long-term. Employees no longer expect to have to travel on business trips in functions that have successfully transitioned to the virtual format. Thus, business trips have come under increased scrutiny both in terms of criticality and need. Furthermore, employees are accustomed to being available online and being able to reach colleagues on videoconferencing platforms.

> *"[...] it would almost seem strange if we said* [to customers that] *we put our employees on a trip... customers might re-evaluate their choice* [of our company]*"*

Productivity evaluation

Increased and changed productivity evaluation of business travel was talked about by 8 respondents (80%). New evaluation mentalities have emerged for business travel, where it is looked at in relation to virtual meetings. An important point of comparison is the potential for added value provided by FTF interactions, and whether it justifies the incurred additional costs. This is done on a wider scale compared to before, which is indicated in the occurrence frequency of the concept.

"Before you could travel to the other side of the world because it was a large customer, it was necessary to do such trips. Today, I do not believe we will conduct such trips."

"No one wants to travel anymore, not even to Europe, for a 2h meeting. There has to be added value"

Network maintenance

The stage of the relationship is important according to 3 respondents (30%) for determining the communication medium. For well-established relationships the digital medium is preferred. This holds in case there are little to no changes in the relation and irrespective whether the connection concerns external or internal parties.

"[...] if I already know them well and they know me, then [meetings] *can be replaced by a digital meeting."*

Employee work-life balance

There is an added degree of flexibility for both employees and executives, as mentioned by 7 respondents (70%). This is especially pronounced with regards to private life. There is certain degree of overlap between this concept and time efficiency; however, in this case the focus is directed towards convenience rather than time saved itself. Additionally, the added stress associated with business travel is avoided.

"[...] one week you are in China and the next week in Lund and the third, down in USA… [It] *is extremely strenuous."*

"You log out at 5 pm and spend the evening with your family."

4.5. Company beliefs on future development

Before proposing and applying models of selection of FTF or virtual interaction leading into travel implications, empirical results on what the respondents themselves believe will happen is presented. These data refer to perceived likely net travel effects of the rapid videoconferencing implementation, what travel purposes respondents believe will be more, or less, relevant in the future, and if business travel might change in other aspects. This data was collected for later comparison with the proposed selection models and complementing them in answering the research questions. Therefore, the answers have not been categorized into higher abstraction levels, unlike the empirical results relating to why and when one medium would be preferred instead of the other.

4.5.1. Net travel reduction

All respondents (100%) stated that they believe that after restrictions are lifted, travel volumes will still be reduced on a structural basis in their respective company compared to pre-pandemic levels. Having learnt and gotten used to the technology, established routines, and seeing that many tasks evidently can be conducted adequately without physical presence are frequently stated reasons for this reduction. Many respondents also connected this with increased management attention on savings on travels that have been possible, without seeing any significant decrease in quality:

> *"I believe that* […] *the management team has opened their eyes to the travel costs, as well as the climate footprint."*

> *"Of course, we who work with travel and are responsible for it now see a completely different opportunity to raise these questions* [with management]."

Not all activities are believed to be as affected though. Travel which relates to business-critical activities are stated by all respondents to be prioritized for FTF travel. Physical installation, service or maintenance of equipment, supply reviews, start-up meetings and connecting with potential new customers are common examples of what constitutes business critical. Some activities, however, respondents explained would still be conducted or attended physically but with reduced number of company representatives travelling; conference attendance was a frequent example of where this effect would be prevalent.

4.5.2. Internal meetings and follow-ups

In particular, respondents (90%) pointed out internal meetings as the single largest area of structural travel reduction. Internal meetings were described as a frequent purpose of travel before the pandemic; while some respondents did not measure travel by purpose, most were convinced they constituted a substantial share of the pre-pandemic travel volume, with one respondent quoting a 70% share of the total company travel volume. These costs have now been saved while business has continued as usual, leading some respondents to question the value of internal business travel:

> *"For me to travel and meet my team 5 times a year… That feels completely wrong since it is purely internal; I am not selling anything!"*

Different types of follow-ups where there is an existing relationship were also largely believed to have forever been moved to the virtual format, much for the same reasons as why internal meeting travel is believed to decrease. These follow-ups could be internal, for instance to coordinate and report in connection with a project, but even follow-ups with external parties where there is an existing relationship were widely thought to be moved to virtual meetings to a high degree. Occasional FTF contact was claimed to be maintained but with lower frequency.

4.5.3. Multi-purpose travel

When mentioning that travel frequency will decrease compared to pre-pandemic conditions, 3 respondents (30%) also reasoned that the remaining travels will need to serve more purposes than previously. Trip durations would subsequently be longer and/or connected with more scheduled activities to increase the perceived efficiency of time and money spent on each trip.

4.6. Empirical deviations

The introduced models of preference are developed from abstractions of 10 interviews analyzed together and are meant to explain prevalent underlying factors. However, some empirical data deviated from the rest and contradicts the theory in one way or another. To show possible shortcomings of the theory for the reader or future developments ofthe theory, the most important deviation is presented below.

One respondent stated that videoconferencing provided sufficient information on physical cues such as facial expressions and body language, and that this ultimately worked as well virtually as physically. The same respondent also said that these cues were important for the business relationship, which could very well be handled virtually. This contradicts other answers stating that communication nuances are lost in the virtual setting.

5.   Theory proposition and implications

Based on the empirical material, the theory has been constructed in accordance with the methodology outlined in section 3.3. Early in the data collection, the authors concluded that there is an opportunity for clear distinction between the drivers of physical and digital medium and that the two are not necessarily interchangeable or clear-cut opposites of one another. To not lose valuable nuances of this and to faithfully represent the individual circumstances surrounding each concept and category, a decision was made to outline the theory using two focused models rather than one general model. This also contributes to visual clarity and facilitates comprehension of the implications later on.

5.1. FTF driver model proposition
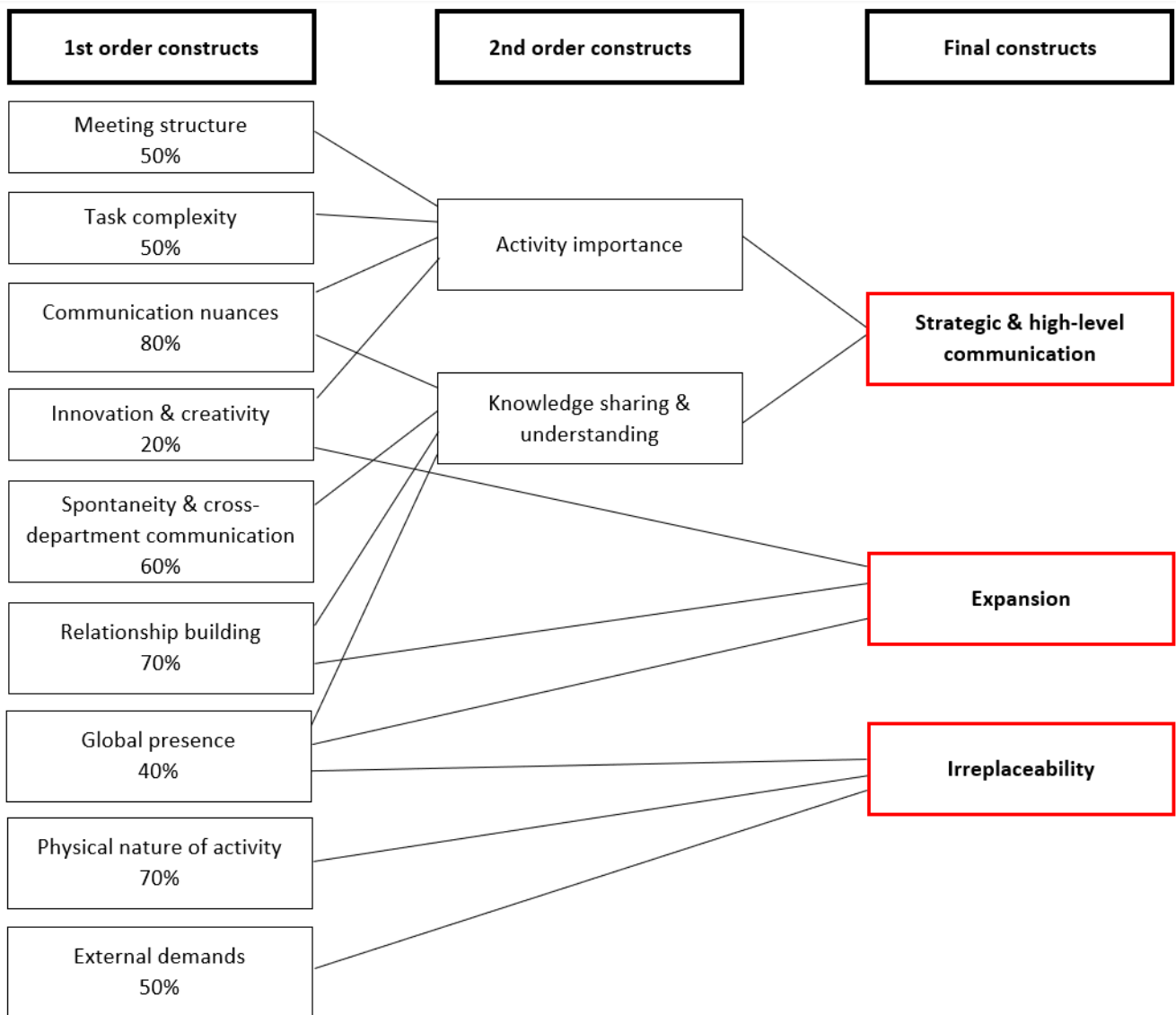
Figure 1: The FTF communication preference model

Activity importance is a second order category emerging from the combination of four distinct concepts as can be observed in Figure 1. *Meeting structure* is one element, where a larger meeting involving a higher number or variety of stakeholders indicate higher meeting importance. *Task complexity* contributes to the perceived importance, as complexity of new, unstructured, or multi-disciplinary information is often tightly associated with importance in the data. Importance of *communication nuances* is naturally rising with the importance of the activity. Activities of high importance also tend to demand *innovation and creativity* forgenerating solutions rather than established routine procedures to a higher extent.

The accurate perception and sharing of such communication are in turn captured by the category *knowledge sharing and understanding*. This category is made up by *nuanced*

communication together with *spontaneity & cross-departmental communication* and *relationship building*. Respondents have described spontaneous encounters as vital for knowledge-sharing both internally and externally, which is also facilitated by various communication nuances involved in FTF contact. These nuances have proven to be important also for the thorough understanding of a communication, where being in the appropriate environment and/or physical cues are examples of important nuances. Naturally, *relationship building* also plays an important role in sharing knowledge and further facilitates thorough understanding. The same can be stated with regards to *global presence,* as cultural patterns might be influential both in understanding and sharing information accurately.

As further observable in Figure 1 there are a total of three final constructs within the model, which represent the highest level of abstraction. *Activity importance* and *knowledge sharing & understanding* together comprise the final, higher order construct, namely *strategic and high-level decisions*. Such decisions incorporate both the structure and complexity of tasks that require FTF as well as the importance of understanding and ability to communicate the information to others. Thus, the degree to which an activity is perceived as high-level and of strategic character will drive the need for FTF interactions.

Looking at the category *expansion*, it is formed by *innovation and creativity*, *relationship building* processes and the *global presence* of a firm. Expanding the business involves establishing new contacts (external or internal), expanding the business through innovation, and management of inevitable elements of being globally present. Such elements could be cultural differences in various forms and difficulties scheduling meetings across time zones. The data therefore suggests that engaging in expansion increases the need for FTF contact.

Finally, there is the category *irreplaceability,* incorporating the concepts *physical nature of activity*, *global presence,* and *external demands*. This category embodies the degree of replaceability of an activity, which is determined by various factors. Activities that demand physical presence, such as installation or service of equipment, are not yet possible to conduct virtually. Cultural differences in business might require FTF contact in some form. Even within cultures, customers, suppliers, or other key stakeholders might still demand FTF contact.

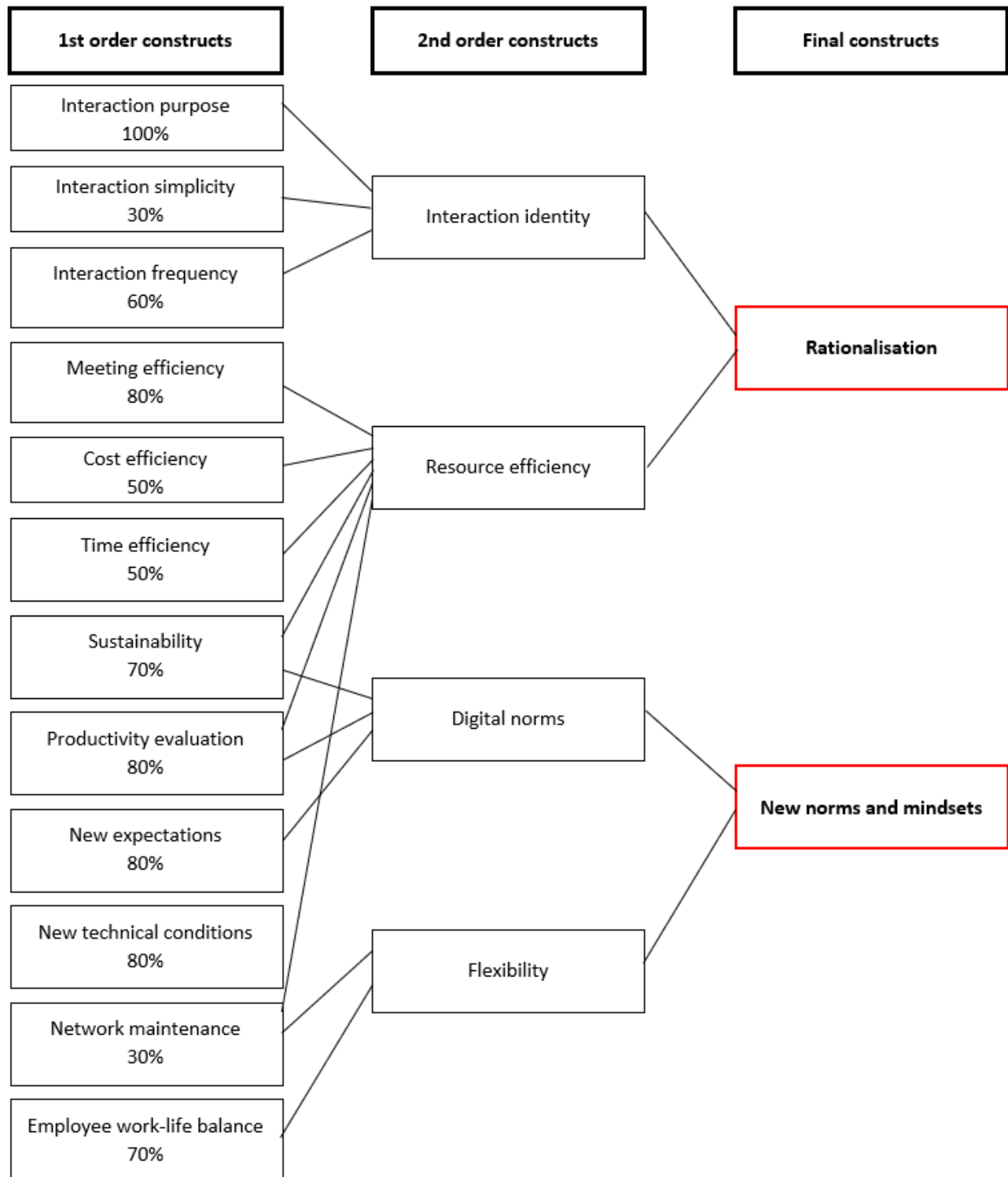## 5.2. Videoconferencing driver model proposition

Figure 2: The ICT communication preference model

Figure 2 represents the model detailing the drivers behind ICT preference for interaction, as observable, there are a total of four second order constructs built up by several first order ones, which ultimately form the two final constructs identified in the present study. The model structure itself is reminiscent of the one presented in Figure 1 making comparison between the two and side-by-side practical application suitable.

Interaction purpose, simplicity and *frequency* together build the category *interaction identity*. These three aspects are describing the characteristics of the interactions in which virtual meetings have worked well and are preferred. Supplementary, regular, delimited and/or frequent interactions characterize a lot of internal meetings according to respondents, which looks to drive preference for virtual meetings.

Resource efficiency encompasses *meeting, cost* and *time efficiency*, as well as *sustainability* and *network maintenance*. This category includes the resource-related considerations connected to cost, accessibility, and employee time. To exemplify, cost savings, easy and efficient setup, and omission of travel time each speak in favor of digital meetings. Sustainability is improved with decreased travel volumes and thus tightly interconnected with resource efficiency. Finally, well established relations have been experienced to be handled well virtually, again referring to efficient use of resources.

Interaction identity and *resource efficiency* together construct the overarching third-order construct: *rationalisation*. This entails the process through which the choice of virtual meetings, based on the subcategories, is extended throughout the firm as a whole.

More abstract aspects are captured within *digital norms*. This category includes expectations from employees but also management who question the necessity behind travel. The way productivity is judged is central in the consideration whether travel is necessary. Maintenance of networks appears again as a factor, as more established connections are not as expected to be attended physically as before the pandemic by all stakeholders. Furthermore, sustainability is also represented, as employees and external stakeholders increasingly expect companies to reduce their carbon footprint.

Flexibility encompasses *network maintenance* and opportunity of *employee* benefits in terms of *work-life balance*. *Flexibility* refers to the part of relationship management not captured by either resource efficiency or digital norms. Instead, it focuses on the act of maintenance itself as well as the option of choice rather than underlying implications captured previously. Furthermore, the added adaptability of digital platforms and reduction of stress due to omission of travel are factors with the potential to enhance employee and executive well-being.

Flexibility and digital norms are combined into a final construct: *new norms and mindsets*. This ultimately stands for new evaluation mindsets for travel needs in relation to the possible gains through digitalization, encompassing an increased degree of

scrutiny towards FTF meetings. This shift together with new routines and expectations established during the pandemic both drive preference for virtual meetings.

5.3. Practical implications

A suitable starting point for application of the developed theory is the business travel purpose distribution given in Table 1, generating implications based on the industry standard definitions of purpose. Below, implications will be outlined for each travel purpose using the grounded theory and the respondents' own thoughts on future development.

Internal meetings

The grounded theory quite clearly indicates that internal meetings will remain reliant on virtual meetings long-term. Increased demands for resource efficiency and the regular, task-oriented nature of many internal meetings make these types of meetings a suitable target of rationalization. New routines and norms have been established during the pandemic as employees and teams are now used to the virtual format while technical conditions have been set. Particularly follow-up meetings and other operational meetings are indicated to remain digital to a high degree for their regularity and frequency. This is in line with the respondents' opinions on future developments which reinforces the prediction of a substantial travel volume reduction for these meetings.

Senior leadership/board meeting

Senior leadership and board meetings are a form of internal meetings conceptually speaking but are generally associated with high importance content regarding for instance strategy and expansion. Such topics involve more complexity and cover more areas than the typical internal meeting, which the theory indicates are drivers for returning to FTF meetings. Travel volumes for these types of meetings are therefore not expected to be particularly affected negatively by virtual meetings implementation long-term.

Customer meetings

When applying the theory to customer meetings, it makes sense to distinguish new or potential customers with short or no established relationship from regular customers with an established relationship. The theory makes a distinction between relationship building and maintenance; if a customer meeting serves to maintain relations or follow up on an established project or similar, the meeting is indicated to remain virtual, resulting in a travel volume reduction for meetings of this type. If the customer meeting instead is with a potential or new customer and/or entails new information, negotiation or getting to know each other, FTF will be preferred, and travel volume recovery is more viable.

The customer meetings category also incapsulates travel for operational reasons, such as installation or maintenance of physical equipment. Given the industrial scope of the study, such travel has been deemed critical and non-replaceable by the respondents,

leading to the conclusion that a quick travel recovery is to expect for these activities once restrictions are lifted. For the customer meetings category as a whole, though, a travel volume reduction is indicated due to the virtual meetings preference in meetings with customers with established relationships.

Conference/tradeshow

Generally, physical attendance at conferences is more evaluated according to the shifted mindsets of management on factors like cost and time efficiency, elevating the thresholds for physical attendance and lowering travel volumes long-term. Conferences exist for various purposes though, again leading to a need to distinguish between them. For instance, the theory indicates that conferences oriented towards connecting suppliers and customers will be attended physically thanks to the importance of relationship building. However, this indication should be seen in light of respondents' own thoughts where they stated that while they would resume physical attendance to conferences deemed important, the outgoing delegations would be smaller. Even for these conferences, then, a long-term travel reduction is to be expected.

Product launch

Product launches and demonstrations have been described as critical for the respondents given their industrial focus. The theory thus indicates that travel for FTF attendance will return for these activities. Additionally, respondents have stated that in most cases the virtual format is not even an option for these purposes given their physical nature, solidifying the verdict of travel recovery.

Employee incentives

Employee incentives travel principally refers to attending conferences and team building travel. Conferences have been analyzed previously in this section, and conferences that have been attended with explicit or de-facto incentive purposes follow the same reasoning made there. Team building, such as kick-offs and similar, have a more mixed outlook. They invariably involve relationship building and facilitate internal communication later on, but also factors like cost efficiency and sustainability can be expected to influence the decision. The theory does not give an unambiguous indication as to whether these activities will be more or less affected in terms of travel volume than the other travel purposes.

6.   Discussion

6.1.   Conclusions

The aim of the thesis has been to address the two research questions established in the first section. Below follows a summary on how the thesis addresses those questions.

R1: What are the factors influencing the choice of virtual meetings or business travel?

The grounded theory and its two complementing models of preference aims to map out the factors influencing corporate choice of virtual meetings or FTF business travel meetings. Preference for virtual meetings will be driven mainly by rationalization gains and new norms and mindsets established during the pandemic. Preference for FTF and business travel is instead driven by a communication's importance, expansion, cultural aspects of being a global actor, among other factors outlined in the models. This part of the thesis is the authors' attempt to address R1.

R2: What could be the implications of these factors for different travel purposes?

Application of the theory can in turn give indications on how the choice will depend on activity purpose and type when companies are allowed to choose to travel again. Internal meetings are indicated to be most negatively affected in terms of travel volume, but with preference for FTF rising with the perceived importance. Travel for conferences and customer meetings are expected to decline as well, while product launches and tradeshows is indicated to be the least affected. The theory does not give a clear indication on employee incentive travel, though. When it comes to activity character, activities which have functioned well to conduct virtually have been identified as regular, frequent, and delimited communications are expected to remain digital due to the perceived efficiency gains. For activities dealing with complex, multi- disciplinary information or relationship building, FTF is preferred and is expected to drive business travel. This part of the thesis is the authors' attempt to address R2.

6.2.   Contribution

The grounded theory has overlapping areas with media selection theories outlined in the literature review. Media richness theory's indications on complex information requiring rich media channels – like FTF interaction - is in line with the FTF preference model which indicates that complex, multi-area information drives preference for FTF. Elements of the theories emphasizing the social aspects are also in accordance with the grounded theory. Past experiences with the virtual tools have given rise to new expectations from stakeholders and employees, contributing to new norms and habits that are important drivers for virtual meetings use. The importance of FTF interaction in the initial stage of a relationship is another common ground of the theories. The

grounded theory has ultimately turned out to be a combination of those selection models derived from a more contemporary empirical setting where complexity and social influence are just two elements of many. The grounded theory includes other elements, such as sustainability, cost, and productivity focus, that seem to have higher bearing now than previously. This is likely an effect of the pandemic, where travel has been reset and companies could rethink their resource allocation. The main contributions are thus a widening of the selection factor spectrum, and the highlighting of the fact that selection factor importance seems to be dynamic and shifting with trends.

6.3. Limitations

A limitation of the study is connected to the potential of generalizability. This limitation is inherently connected to the selection of the grounded theory and the subsequent delimited sample. Generalization across the scope – Swedish, industrial, global companies – might require modifications of individual drivers in the theory. For instance, service of equipment is a travel purpose that is quite specific to industrial companies, while a consultancy firm might have other specific travel patterns. Another example is Swedish cultural aspects that might differ from other countries and influence the choice of communication medium. These are aspects that could give rise to other selection drivers and reshape the theory. Generalization outside the scope was not the original aim of this study, however, given the unexplored nature of the study area. Still, it is worth to have this limitation in mind for application in other contexts. To increase the potential for generalization, a similar study could be done in another context, for instance with other organization types or sectors. Given the detailed outline of methodology, replication should be possible, although some social context-related factors might complicate a direct comparison.

The relative importance of the drivers within the theory are not laid out by the theory. The theory cannot explain which drivers are most important within a category or within a preference model; for instance, it is hard to judge how important cost savings are relative to the importance of relationship building for a given activity. The theory does include frequencies of the different categories, but as previously discussed they are more likely a proxy of how top of mind factors are rather than how relevant they are. As the focus of the study was to explore and identify the drivers, and later relating them to each other, this is an expected limitation given the study aim and design. To address this limitation, the theory could be applied in practice, or its factors compared in a study where more emphasis could be put into weighing them against each other. For such a study, the factors would need to be known, which is the gap this thesis is attempting to fill.

It is also worth mentioning the risk of losing nuances in respondents' answers in the coding process. This is raised as a critique to the coding process in the method section

and is something that the authors were aware of before initiating the data collection. Through creating a large set of categories and outlining answer details in the empirical results section, the authors have attempted to keep as much nuances as possible during coding and later during theory construction. It is possible that a more constructivist approach could capture and develop such nuances more efficiently, but such approach was not deemed possible given the aim of the study.

6.4.   Future research areas

Many of the limitations of the study are interesting areas of further research. There is potential to significantly boost theoretical saturation by expanding the study to other functions such as sales division, upper management, or the employees themselves. In the first case, there is potential for more detail on customer interactions, whereas including upper management may further specify considerations connected to business-critical functions, resource efficiency, and strategic considerations. Finally, employees who frequently conduct business trips may provide another perspective on the benefits and drawback of the respective medium than those planning the travel.

Furthermore, given that the present study concerns future choices of interaction medium, it would be interesting to follow up the theory's suggestions for two reasons. Firstly, it could confirm whether the selection process actually panned out under the constructed theory. Secondly, it could provide valuable feedback on the theory construction method itself, seeing what factors were over-or underestimated, what was missing, and how it could have been avoided.

A particularly engaging topic is a study focusing on the long-term effects of either FTF or virtual meeting reliance. Although companies see clear short-term benefits of switching meetings to digital formats, such as cost savings and sustainability gains, little is known of the long-term implications on productivity, company culture, and talent acquisition to name a few examples. The relevance of this issue is underscored by the many respondents who asked themselves these questions during interviews.

7. References

Aguiléra, A. (2008). Business travel and mobile workers. *Transportation Research*, Part A: Policy and Practice, 42 (8), 1109 – 1116.

Aguiléra, A., Guillot, C., Rallet, A. (2012). Mobile ICTs and physical mobility: Review And research agenda. *Transportation Research*, Part A 46, 664–672.

American Express, (2020). Global Meetings and Events Forecast, Retrieved: May 16, 2021, Available from: https://www.amexglobalbusinesstravel.com/de/meetings-events/meetings-forecast/#:~:text=Our%20global%20survey%20respondents%20are,experience%20and%20delivering%20experiential%20events

Amin, A. (2002). Spatialities of globalization. *Environment and* Planning, A 34, 385–399.

Andersson, M., Ejermo, E. (2005). How does accessibility to knowledge sources affect the innovativeness of corporations? Evidence from Sweden. *The Annals of Regional Science*, 39 (4), 741–765.

Andersson, M., Karlsson, C. (2004). The role of accessibility for the performance of regional innovation systems. *CESIS Electronic Working Paper Series*, 9.

Arnfalk, P., and Kogg, B. (2003). Service transformation – managing a shift from business travel to virtual meetings. *Journal of Cleaner Production*, 11 (8).

B., Huard, P., Orillard, M., Zimmerman, J., B., L'Harmattan, J., B., (Eds.), Economie de la Connaissance et Organisation. *Entreprise*, Territoires, Réseaux, Paris.

Bell, E., Bryman, A., Harley, B. (2019). Business research methods. Fifth edition edn. Oxford: Oxford University Press.

Bijker, W., E., Law, J. (1992). General introduction. In W. E. Bijker & J. Law (Eds.), *Shaping technology/building society: Studies in sociotechnical change*. Cambridge, MA: MIT press.

Bergiel, J., B., Bergiel, B., E., Balsmeier, W., P. (2008). Nature of virtual teams: a summary of their advantages and disadvantages. *Management Research News*, Vol. 31,No. 2, 99-110.

Boyle, E., A., Anderson, A., H., Newlands, A. (1994). The effects of visibility on dialogue and performance in a co-operative problem solving task. *Language and Speech*37, 1–20.

Brousseau, E., Rallet, A. (1997). Le rôle des technologies de l'information et de la communication dans les changements organisationnels. In: Guilhon, B., Huard, P

Orillard, M., Zimmerman, J., B., (eds), *Economie de la connaissance et Organisation; Entreprises, territoires, réseaux*, L'Harmattan, Paris, 199 Available from: https://www.researchgate.net/publication/297204591_Le_role_des_technologies_de_l'in formation_et_de_la_communication_dans_les_changements_organisationnels [accessedMay 16 2021].

Bulmer, M. (1979). Concepts in the Analysis of Qualitative Data. *Sociological Review*, 27, 651–77.

Charmaz, K. (2000). Grounded Theory: Objectivist and Constructivist Methods. In Denzin, N., K., Lincoln, Y., S., Lincoln (eds), *Handbook of Qualitative Research*, 2ndedn. Thousand Oaks, CA: Sage.

Cicourel, A., V. (1982). Interviews, Surveys, and the Problem of Ecological Validity. *American Sociologist*, 17, 11–20.

Coffey, A., and Atkinson, P. (1996). Making Sense of Qualitative Data: Complementary Research Strategies. Thousand Oaks, CA: Sage.

Cornelissen, J., P. (2017). Preserving Theoretical Divergence in Management Research: Why the Explanatory Potential of Qualitative Research should be Harnessed rather thanSuppressed. *Journal of Management Studies*, 54(3), 368–83.

Davis, A., W. (1999). Integrated Collaboration: Driving Business Efficiency into the Next Millennium. *Forward Concepts*, Tempe, AZ.

Deakin, H., Wakefield, K. (2014). Skype Interviewing: Reflections of Two PhD researchers. *Qualitative Research*, doi: 10.1177/1468794113488126.

Dennis, R., A., Kinney, T., S. (1998). Testing Media Richness Theory in the New Media: The Effects of Cues, Feedback, and Task Equivocality. *Information SystemsResearch*, 9(3), 256-274.

Denstadli, J., M., Gripsrud, M., Hjorthol, R., Julsrud, T., E. (2013). Videoconferencing and business air travel: Do new technologies produce new interaction patterns?. *Transportation Research*, Part C, 29, 1–13.

Denstadli, J., M., Hjorthol, R., Julsrud, T., E. (2012). Videoconferencing as a Mode of Communication: A Comparative Study of the Use of Videoconferencing and Face-to- Face Meetings. *Journal of Business and Technical Communication*, 26(1), 65-91.

Eurocontrol, (2021). What COVID-19 did to European Aviation in 2020, and Outlook 2021. *Aviation Intelligence Unit Think Paper*, 8. Retrieved May 16th, 2021 Available from: https://www.eurocontrol.int/sites/default/files/2021-02/eurocontrol-think-paper-8-impact-of-covid-19-on-european-aviation-in-2020-and-outlook-2021.pdf

Fortune Business Insights, (2020). Video Conferencing Market Size, Share & COVID-19 Impact Analysis and Regional Forecast, 2020-2027. Retrieved May 16, 2021, Available from: https://www.fortunebusinessinsights.com/industry-reports/video- conferencing-market-100293

Fulk, J., Schmidtz, J., Steinfield, C., W. (1990). A social influence model of technology use. In J. Fulk & C. W. Steinfield (Eds.), *Organizations and communication technology*,Newbury Park, CA: SAGE, 117-140.

Gallaud, D., Torre, A. (2005). Geographical proximity and the diffusion of knowledge: the case of SMEs in biotechnology. In: Fuchs, G., Shgapira, P., Koch, A. (Eds.), *Rethinking Regional Innovation*. Kluwer, Dordrecht.

Gaspar, J., Glaeser, E. L. (1998). Information technology and the future of cities. *Journal of Urban Economics*, 43, 136–156.

Geels, F., W., Smith, W., A. (2000). Failed technology futures: Pitfalls and lessons from a historical survey. *Futures*, 32, 867-885.

Glaser, B., G., and Strauss, A., L. (1967). The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago: Aldine.

Global Business Travel Association [GBTA] (2019). GBTA BTI™ Outlook Annual Global Report & Forecast: Prospect for Global Business Travel 2019-2023.

Global Business Travel Association [GBTA] (2020). GBTA BTI™ Outlook Annual Global Report & Forecast: Prospect for Global Business Travel 2020-2024.

Goodrich, J., N. (2002). September 11, 2001, Attack on America: Impact on Tourism Security. *Journal of Travel & Tourism Marketing*, 11(4), 1-12. Retrieved May 16th, 2021, Available from: https://doi.org/10.1300/J073v11n04_01

Gudykunst, W. (1997). Cultural variability in communication. *Communication Research*, Vol. 24, No. 4, 327-48.

Hanna, P. (2012). 'Using Internet Technologies (such as Skype) as a Research Medium: A Research Note'. *Qualitative Research*, 12(2), 239–42.

Haynes, P. (2010). Information and Communication Technology and International Business Travel: Mobility Allies?. *Mobilities*, Vol. 5, No. 4, 547–564.

Haynes, P., Vecchi, A., Wickham, J. (2005). Flying around the globe and bringing business back home?. In: *European Sociological Association Conference*, Poland.

Hertel, G., Konradt, U., Orlikowski, B. (2004). Managing distance by interdependence: goal setting, task interdependence, and team-based rewards in virtual teams. *European Journal of Work and Organizational Psychology*, Vol. 13, No. 1, 1-29.

Hildrum, J. (2007). When is frequent face-to-face contact necessary in innovation? A comparative study of two distributed product development projects. *Economics of Innovation and New Technology*, 16 (6), 467–484.

Hugoson, P. (2001). Interregional business travel and the economics of business interaction. *Dissertation Series*, no. 009, Jönköping International Business School.

International Air Transport Association [IATA] (2006). Solid passenger growth seen in 2005 - Efficiency remains the focus in 2006. Retrieved May 16, 2021. Available from: https://www.iata.org/en/pressroom/pr/2006-01-31-02/

International Air Transport Association [IATA] (2020). Outlook for Air Transport and the Airline Industry. Retrieved May 16th, 2021. Available from: https://www.iata.org/en/iata repository/pressroom/presentations/outlook/

Joinson, C. (2002). Managing virtual teams. *HR Magazine*, 47(6), 68-73. At: https://www.shrm.org/hr-today/news/hr-magazine/pages/0602joinson.aspx

Larsen, J., Urry, J., Axhausen, K., W. (2007). Networks and tourism. Mobile social life. *Annals of Tourism Research*, 34 (1), 244–262.

Lethiais, V., Aguiléra, A. (2007). Les relations de coopération inter-entreprises: TIC versus face à face. In: *International Conference on Online services*, Paris, 13–14 décembre.

Lipartito, K. (2003). Picturephone and the information age: the social meaning of failure. *Technology and Culture*, 44 (1), 50–81.

Lipnack, J. and Stamps, J. (2000). Virtual Teams: People Working across Boundaries with Technology. *John Wiley & Sons*, New York, NY.

Lu, J.l., Peeta, S. (2009). Analysis of the factors that influence the relationship between business air travel and videoconferencing. *Transportation Research*, Part A 43 (8), 709–721.

McKinsey & Co (2020*)*. For corporate travel, a long recovery ahead. McKinsey & Co *Travel, Logistics and Infrastructure*. Retrieved May 16th, 2021 Available from: https://www.mckinsey.com/industries/travel-logistics-and-infrastructure/our-insights/forcorporate-travel-a-long-recovery-ahead

Microsoft, (2020). Microsoft Teams reaches 115 million DAU—plus, a new daily collaboration minutes metric for Microsoft 365. Retrieved: May 16, 2021, Available from: https://www.microsoft.com/en-us/microsoft-365/blog/2020/10/28/microsoft- teams-reaches-115-million-dau-plus-a-new-daily-collaboration-minutes-metric-for- microsoft-365/

Mokhtarian, P., L. (2000). Telecommunications and travel. (Washington, DC: Transportation Research Board).

Mokhtarian, P., L., Meenakshisundaram, R. (1999). Beyond tele-substitution: Disaggregate longitudinal structural equations modelling of communication impacts.*Transport Research*, Part C: Emerging Technologies, 7(1), 33–52.

Noll, A., M. (1992). Anatomy of a failure: picturephone revisited. *Telecommunications Policy* 16 (4), 307–317.

Ogden, M., R. (2006). Teleconferencing. In: Grant, A.E., Meadows, J.H. (Eds.), *Communication Technology Update*, tenth ed. Focal Press, Oxford, 325–344.

Opper, S., Fersko-Weiss, H. (1992). Technology for Teams: Enhancing Productivity in Networked Organizations. Van Nostrand Reinhold, New York, NY.

Ota, M., Fujita, M. (1993). Communication technologies and spatial organization of multi-unit firms in metropolitan area. *Regional Science and Urban Economics*, 23, 695–729.

Potter, J. (2004). Theory of media literacy: A cognitive approach. Thousand Oaks, CA: SAGE.

Ramirez-Pasillas, M. (2006). Tradeshow fairs: hotspots for building temporary proximity and creating potential for firms upgrading. In: *Proceedings of the FifthProximity Conference*, Bordeaux, June.

Saffo, P. (1993). The future of travel. *Fortune,* 128(7), 112–119.

Salomon, I. (1985). Telecommunications and travel: substitution or modified mobility? *Journal of Transport Economics and Policy*, 19, 219–235.

Salomon, I. (1986). Telecommunications and travel relationships: a review. *Transportation Research*, Part A 20 (3), 223–238.

Salomon, I., Pliskin, N., Andreev, P. (2010). Review: State of teleactivities. *Transportation Research Part C: Emerging Technologies*, Volume 18, Issue 1,February 2010, 3-20.

Schnaars, S., Wymbs, C. (2004). On the persistence of lackluster demand – the history of the video telephone. *Technological Forecasting & Social Change* 71 (3), 197–216.

Short, J., A., Williams, E., Christie, B. (1976). The social psychology of the telecommunications. London, England: John Wiley.

Silverstone, R., Haddon, L. (1996). Design and domestication of information and communication technologies: Technical change and everyday life. In R. Silverstone &

R. Mansell (Eds.), *Communication by design: The politics of information and communication technologies*, Oxford, UK: Oxford University Press, 45-72.

Snyder, B. (2003), Teams that span time zones face new work rules. *Stanford Business Magazine*, May, 3-15, Accessed: May 16, 2021, Available at: https://www.gsb.stanford.edu/sites/gsb/files/2003May.pdf

Statista.com (2021). Business Tourism spending worldwide from 2000 to 2020. Retrieved May 16th, 2021, Available from: https://www.statista.com/statistics/1093295/business-travel spending-worldwide/

Strauss, A., Corbin, J., M. (1998). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. Thousand Oaks, CA: Sage.

Suh, S., K. (1999). Impact of communication medium on task performance and satisfaction: an examination of media-richness theory. *Information & Management* Volume 35, Issue 5, 3 May 1999, 295-312.

Swarbrooke, J., Horner, S. (2001). Business Travel & Tourism (1. ed.). Butterworth Heineman

Torre, A., Rallet, A. (2005). Proximity and localization. *Regional Studies*, 39 (1), 47–59.

Trevino, L., K., Lengel, R., H., Daft, R., L. (1987). Media symbolism, media richness, and media choice in organizations. *Communication Research*, 14, 553-574.

Ughetto, P., Besucco, N., Tallard, M., Du Tertre, C. (2002). La relation de service: une tension vers un nouveau modèle de travail? Revue de l'IRES 39 (2), 1–29.

Vecchi, A., Wickham, J., (2006). Clusters and pipelines, commuters and nomads: business travel in the Irish Software Industry. In: *Proceedings of the Fifth Proximity Conference*, Bordeaux, June.

Weinmann, T., Thomas, S., Brilmayer, S., Heinrich, S., and Radon, K. (2012). Testing Skype as an Interview Method in Epidemiologic Research: Response and Feasibility. *International Journal of Public Health*, 57, 959–61.

World Travel & Tourism Council [WTTC] (2003). Special SARS Analysis: Impact of Travel and Tourism (Hong Kong, China, Singapore and Vietnam reports). London: World Travel and Tourism Council.

World Travel & Tourism Council [WTTC] (2020). Global Economic Impact & Trends 2020. *Travel & Tourism*. Retrieved May 16th, 2021 Available from: https://wttc.org/Portals/0/Documents/Reports/2020/Global%20Economic%20Impact%2 0Trends%202020.pdf?ver=2021-02-25-183118-360

Zoom (2020). 90-Day Security Plan Progress Report: April 22. Retrieved: May 16, 2021, Available from: https://blog.zoom.us/90-day-security-plan-progress-report-april-22/

8.   Appendix

Interview guide used:

Ämne	Intervjuguide	
	Frågor	Follow-ups och checkmarks
Distansmöten/arbete	✓ Scenario 1 (se nästa bild) ✓ Scenario 2 (se nästa bild) ✓ Scenario 3 (se nästa bild) ✓ Vilken faktor skulle starkast motivera dig till att genomföra ett möte/aktivitet fysiskt?	❑ Typ av aktivitet ❑ Upplevd betydelse ❑ Geografisk distans ❑ Kostnad
Framtida resepreferenser	✓ Tänk att du fortfarande är i 2026. Har din inställning till resande i tjänsten ändrats sedan 2019? Är det något vi missat att ta upp?	❑ Frekvens? Fler men kortare resor? ❑ Färre men längre resor? ❑ Om längre tid där - för att göra vadå?
Globalisering	✓ Hur har pandemin påverkat er globala närvaro? Har det varit bra eller dåligt att ha en global värdekedja? ✓ Ser ni dessa effekter som långtgående eller kortsiktiga? ✓ Har er synsätt på internationella investeringar påverkats? ✓ Har ni i dagsläget en hållbarhetspolicy? ✓ Hur relaterar er hållbarhetspolicy till resande i tjänsten?	❑ Planerar de att kalibrera om verksamheten? ❑ Skifta fokus? Potentiellt köra mer lokalt eller flytta vissa element i kedjan närmare varandra? ❑ Hur ofta reser ni i syfte att besöka dessa platser? ❑ Formell eller informell? ❑ Är resande en del av policyn? ❑ Hur viktigt är resande relativt andra områden i policyn? *Antagande: för servicebolag är resande största delen av klimatavtryck → resande viktigt för minskning*

Distansmöte eller affärsresa – tre scenarier

Konferens/tradeshow

"Tänk dig 5 år framåt och ni ska delta i en industrikonferens. Ni tror att detta kan vara ett bra tillfälle för att få koll på utvecklingen i branschen, knyta nya partnerskap och visa upp era nya varor/tjänster. Skulle ni välja att närvara digitalt om möjligt eller resa dit?"

Spelar det roll om konferensen är i Sverige/utomlands?
Upprepad eller ny konferens för företaget?
Geografisk distans?

Kund(leverantör)kontakt

"Du är ansvarig för att schemalägga ett möte med en av era kunder för att förhandla framtida kontrakt om varu-/serviceleverans. Ni har haft ett långtgående samarbete vid det här laget och upprätthåller goda relationer. Hur sannolikt är det att du väljer att träffa representanter från företaget personligen?"

Påverkas ditt svar ifall det rör sig om en ny potentiell kund?
Om kunden ifråga är av särskild vikt för er verksamhet? Stor kund eller liten?
Om det istället rör sig om en leverantör till er? Geografisk distans?

Internt möte

Ni har en uppkommande uppdrag åt en samarbetspartner som ska utföras av ert branch office alternativt ett team/avdelning inom er verksamhet. Kvalitet är avgörande i frågan och ni vill försäkra er att allt utförs på bästa möjliga sätt. Därmed planeras en kontroll, som ska då ge er en precis bild av läget. Hur tänker ni utföra detta? Digitalt eller personligen, och varför?

Kan kontroll av material på distans ge en helhetsbild?
Kommer HQ framöver att delegera ansvaret till lokal aktör?
Sker det internt eller externt?