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Challenges Faced by Mandatory-Working From-Home Start-up Teams

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Abstract

The ongoing Covid-19 pandemic has created a novel and unique situation forcing start-up teams to mandatory-work-from-home (MWFH). With everyday life coming to a halt, start-up teams suddenly adjust their ways of working and transform to virtual means of teamwork performed from home environments. Given the novelty and uniqueness of the situation, MWFH has yet to be academically explored within the context of start-up teams. The purpose of this thesis is to explore the challenges that start-up teams face with MWFH. By adopting an inductive approach, seven start-up team cases were researched. Through eight semi-structured interviews with individuals within start-up teams, the transition to MWFH and the period during Covid-19 were benchmarked against the period before the outbreak of Covid-19. A thematic analysis of the findings identified a framework of 15 challenges across six categories. The empirical findings show that start-up teams face challenges regarding (1) community building, (2) high degrees of uncertainty, (3) workspace, (4) virtual structures to communicate and collaborate, (5) evolving leadership styles, and (6) merging home-work life. Though highly dependent on one's situation, MWFH forced new ways of working within start-up teams in terms of structured routines in communicating and collaborating. Establishing a sense of community to stay connected from a distance, and evolving leadership to facilitate trust, performance, and motivation, and creating the appropriate space to work from home shape MWFH start-up teams. The framework of challenges that start-up teams face provide a starting point for future academic work to explore further MWFH and expand this academic phenomenon.

Key terms: Virtual Teamwork, Covid-19, Start-up, Mandatory-Working-From-Home, Challenges

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1. Introduction

The recent outbreak of Covid-19 has presented new challenges for teamwork. Covid-19 has accelerated the transition of conventional at the office work to virtual teamwork. As the world went into lockdown, many of the tasks, workers, organizations, and businesses were forced to work from home and collaborate and communicate in a virtual environment. The shift towards a new phenomenon, mandatory-work-from-home (MWFH) teams, is influencing how individuals interact with one another within a team. Exploring the challenges that MWFH teams faced can present insights into how it impacts innovation driven by start-ups.

1.1. Start-up teams

Start-ups have gained increased popularity in the past decade as they are the drivers of innovation within many industries. They continue to challenge large corporations through disruptive and continuous innovation leading to shorter business lifecycles. More than ever, industry players have to focus on innovation to remain competitive and secure future survival (Porter & Ketels, 2003; McGrath & Gourlay, 2013). We can understand start-ups as firms that are in their early stages of development and growth and use undefined processes in their quest to find a repeatable and scalable business model (Kolz et al., 2014; Blank & Dorf, 2012). When start-ups successfully create disruptive innovation, substantial credit is often granted to the lone genius lead founder (Kolz et al., 2014). However, the substantial majority of start-ups are founded and managed by teams (Beckman, 2006). In line with Carland and Carland (2012), who suggest there strong evidence that start-up teams are common and play an important role in the performance and development of start-ups. Teams leading start-ups have been referred to by different terminology throughout the academic world, such as new venture teams, entrepreneurial teams, top management teams, and founding teams. For this thesis, the concept of teams will be interpreted as being responsible for the leadership and management of start-ups. Therefore, the term start-up team is broadly defined as “two or more individuals who commit to each other to create a new firm” (Brattström, 2019, p. 6).

1.2. Accelerating virtual teamwork

With Covid-19 accelerating the transition of working conventionally at the office towards work-from-home (WFH) or ‘mandatory-work-from-home’ (MWFH), the importance of examining the challenges that come forth in this transition is critical in understanding how start-up teams can best support the transition and continue to facilitate innovation. We can define WFH as having to work remotely and virtually, migrating the work environment to the confinement of the home office (Kniffin et al., 2020). And MWFH can be understood as being involuntarily forced to WFH (Kniffin et al., 2020).

Emerging changes in the daily routines are shaped by the digitization of everyday routines where virtual meetings through video calls, for example, shape the way individuals communicate and collaborate. Moreover, leadership and virtual teamwork contribute to the changes in practices. Factors such as well-being, loneliness, social distancing, and health indirectly impact team dynamics. Challenges faced in collaboration, communication, performance, and leadership influence virtual teamwork dynamics.

1.3. Covid-19 significance statement

Covid-19 presented challenges within the workplace, transforming how we understand and conceptualize our everyday working life. Countries such as the United States, Brazil, Russia, and India face the highest cases of Covid-19 (Elfleir, 2020). Drastic measures implemented at the beginning of the pandemic have slowly started to impact businesses, both socially and financially. The unexpectedness of the unique situation of Covid-19 has put companies in a position of uncertainty. With little to no knowledge on previous experiences on how to deal with a pandemic of such scale has led companies to either shut down or reassess their strategy.

To accommodate the increasing tensions amongst businesses, the European Union has instrumented a recovery plan with EUR 672.5 billion in loans and grants for European Union countries to reform and invest (European Parliament, 2021). Additionally, EUR 100 billion is budgeted to allow “companies to keep their employees” (European Parliament, 2021). As stated by the WHO (2021), returning to the office is a procedure that needs thorough planning with preventive measures to minimize the spread of the virus. Making the workplace ready for

employees to return or find new ways of working are crucial to prevent the further spread of the virus.

The severity of the situation has also influenced everyday life, bringing everything into the confinement of the home and moving routines to virtual environments. Children being taught in virtual classrooms and employees conducting their weekly meetings through virtual e-communication platforms. The sudden disruption in the home-work life has also accelerated the transition of digitalization of the workplace. The context has presented an opportunity to explore the professional transition of conventional teamwork to remote virtual teamwork.

1.4. Aim of the study

This thesis aims to explore the challenges faced with MWFH within the context of start-up teams. Through a multiple case study research based on semi-structured interviews within start-up teams, this thesis explores the lived experiences of the challenges of virtual teamwork in MWFH teams. Given the recent impactful and continuing development of Covid-19, there is little to no theoretical research that examines the impact that Covid-19 has had on start-up teams. In particular, the challenges that start-up teams currently and will face due to the shift to MWFH teams. Insights into these challenges can allow a deeper understanding of the experiences of MWFH teams and implications for the creation of innovation in many industries. Therefore, this thesis aims to answer the following question:

What are the challenges that start-up teams face with mandatory-work-from-home?

1.5. Thesis outline

This thesis will continue exploring and review the existing literature on start-up teams, teamwork, virtual teamwork, and MWFH in chapter two. Chapter three provides further detail into the chosen methodology, research design, and sampling criteria. Thereafter, the empirical research findings will be presented in chapter four, which are in-depth analyzed and discussed in light of the existing academic literature. Chapter six will conclude this thesis, provide detail in research implications, and suggest recommendations for future research.

2. Theoretical framework

The following section will dive deeper into the existing literature on start-up teams and MWFH. Little academic research is available on MWFH teams within the context of start-ups. The majority of the existing literature focuses on teamwork, virtual teams, WFH, and entrepreneurial change management. Therefore, the following chapter will provide a deeper understanding of the current available academic literature and conceptualize the aforementioned theoretical themes, providing the opportunity to create connections and links.

2.1. Entrepreneurial change management

Start-up teams act on changes within dynamic, complex, and uncertain business environments (Haynie et al., 2010). Hitt et al., (1998) add that as a result of this type of business environment, start-up teams have to continuously revise every aspect of their ventures, such as strategic decisions, organizational structure, company culture, communication systems, and asset deployment. Managing a start-up team is thus about managing change (Brattström, 2019). Following, Haynie et al. (2010) argue that an entrepreneurial mindset drives change management within start-ups. It connects to cognitive adaptability, referring to the ability of start-up teams to be flexible, dynamic, and self-regulating their cognition within the external entrepreneurial business environment. The model of entrepreneurial mindset developed by Haynie et al., (2010) builds on the assumptions that adaptability is a key success factor within entrepreneurial tasks (Ireland et al., 2003; Shepherd et al., 2007) and that the business environment of start-up teams are paired often with high degrees of uncertainty, dynamism, and novelty (Shane and Venkataraman, 2000).

The model consists of five steps that form the causal chain of an entrepreneurial mindset. Step one: *why am I going to do this*, referring to the interaction of the environment and entrepreneurial motivation (Haynie et al., 2010). Entrepreneurs understand and interpret the external environment, forming the foundation for the development and evaluation of strategic alternatives that aim to achieve desirable entrepreneurial outcomes. The second step: *can I do this*, refers to metacognitive awareness that represents a general level of awareness an entrepreneur has concerning their cognition regarding a specific entrepreneurial task (Haynie et al., 2010). These tasks include the recognition, evaluation, and exploitation of opportunities

intending to create novel goods and services (Shane and Venkataraman, 2000). The third step: *how do I do this*, refers to metacognitive resources, including an entrepreneur's experience and knowledge (Haynie et al., 2010). Within this step, the entrepreneur accesses their expertise, skills, and experiences to formulate a strategy for approaching the entrepreneurial task (Flavell, 1987). The fourth step: *what alternatives do I have*, refers to the metacognitive strategy in which an entrepreneur evaluates multiple, alternative options to process the entrepreneurial task (Haynie et al., 2010). The final step: *is this working*, refers to establishing monitoring and feedback mechanisms in which an entrepreneur (re-) evaluates and adapts its motives, metacognitive resources, and metacognitive strategies within the dynamic, complex, and uncertain business environment (Flavell, 1987; Haynie et al., 2010).

2.2. Conceptualizing teamwork

A definition of teamwork, as defined by Mayo (2020), can be understood as the “coordination of expertise and other resources” (Mayo, 2020, p. 53). To conceptualize teamwork, Haas and Mortensen (2016) present four enabling conditions that contribute to how well individuals and teams as a whole can communicate and collaborate. The first enabling condition is a compelling direction (Haas & Mortensen, 2016). Individuals within a team are inspired and motivated to achieve a shared or individual goal. With a shared goal, a foundation for effective teamwork is established, contributing to intrinsic and extrinsic team goals (Haas & Mortensen, 2016). The second described enabling condition is a strong structure. With a common goal, establishing a strong structure is conducive to executing teamwork well. High-performing teams include various skills that generate a diversity of knowledge within teams (Haas & Mortensen, 2016). Collective knowledge is grounded in the transactive memory of individuals that make up a team, establishing a strong foundation for collaboration and communication. Based on these skills, a structure and allocation of roles can “discourage destructive behavior and promote positive dynamics” (Haas & Mortensen, 2016, p. 73).

With an established strong structure, the “maintenance of norms, roles, and interaction patterns in ... teams” (Ilgen et al., 2005, p. 523), assisting in generating collective knowledge amongst individuals within the team. By focusing on the knowledge each team member has, a stock of knowledge and specialization in certain areas contributes to teamwork performance (Ilgen et al.,

2005). Human capital is thus an essential contributing factor for teamwork, as it is a means of “production and ... additional investment [to] raise ... productivity” (Gabrielsson & Politis, 2012, p. 51). A supportive context is the third enabling condition contributing to the promotion of positive teamwork. Having the right support system enables team effectiveness (Haas & Mortensen, 2016). By reinforcing good performance through a reward system, providing access to data, offering training, and material resources, a supportive context where individuals in a team establish a feeling of reassurance. The last enabling condition described by Haas and Mortensen (2016) is a shared mindset. With the digitalization of communication mechanisms and the increase in remote working, a shared mindset in teams is important. Thus, potency plays an important role in the enabling condition of a shared mindset, as it too contributes to the collective efficacy in teams (Ilgen et al., 2005).

2.3. Virtuality of start-up teams

Virtuality is a multifaceted phenomenon (Kniffin et al., 2020) where more than two people collaborate “interactively to achieve common goals” (Hertel et al., 2005, p. 71) in virtual environments. The concept is multifaceted and is continuously redefined as external and internal factors shape the discourse of the phenomena. The shift towards virtuality has fundamentally impacted how start-up teams communicate, collaborate, interact, or purchase/sell products and services (King et al., 2002). It has forced a transition towards e-entrepreneurship in which start-up teams vastly rely on technology-based communication to reach common entrepreneurial goals (Matlay, 2003). Only a few studies examine the impact of virtuality on start-up teams (Ruso & Roman, 2020). Nonetheless, the abundance of academic findings on virtual teams in a general context can deepen the understanding of the impact of this phenomenon on start-up teams.

What stimulates the transformation towards virtuality is e-commerce, big data, digital technologies, and for example, artificial intelligence (Verhoef et al., 2019). Digital transformation of the workplace, described by Savić (2020), is a mindset in which “abundance, growth, agility, comfort with ambiguity, ... collaboration, and diversity” (Savić, 2020, p. 103) are prominent. The digital mindset presents how the “power of technology can democratize” (Savić, 2020, p. 103) actions and interactions within teamwork. Hertel et al., (2005) present three

forms of virtual teams defined by the levels of interaction amongst the members involved. The first form is telework. Telework supports the workplace in information and telecommunication services (Hertel et al., 2005, p. 71). The second form Hertel et al. (2005) presents are virtual groups, which are teleworkers who report to the same manager. Another form is virtual communities, which consists of “larger entities of distributed work in which members participate via the internet” (Hertel et al., 2020, p.71). The difference between virtual teams and communities is that teams are situated within an organization and follow an already implemented structure (Hertel et al., 2020).

2.3.1. Communication

In virtual teamwork, conducting communication is conducted through electronic mediums from different geographical locations (Hertel et al., 2005; Kniffin et al., 2020). New technologies assisting in the collaboration of individuals within teams have shown that communication can enhance performance and generate greater awareness of group work (Mayo, 2020, p. 54). Cant and Wiid (2016) confirm that within the context of start-up teams, information and communication technologies are crucial for the success of a start-up. Effective communication amongst team members arises when the resources to do so are available, such as internet connection, devices such as laptops, and software programs such as Microsoft Teams and Slack. Mayo (2020) describes effective communication as the sharing of information in a timely and valuable manner. Nonetheless, Cant and Wiid (2016) warn that one of the main challenges of virtuality within start-up teams is the lack of knowledge in using information and communication technologies. Despite this, Mayo (2020) argues that communication facilitates adaptive performance when virtual team members learn to cope working remotely and can accommodate the minimal available resources.

2.3.2. Collaboration

One of the foundations of virtual teamwork is the collaborative spirit amongst members within the team. Characterizing teamwork is characterized by effective coordination of expertise and communication (Mayo, 2020). The act of collaboration is defined as the ability to work effectively with different members of a team across various units, professions, organizations, and hierarchically (Mayo, 2020). Teams are highly dynamic and complex entities, conceptualizing

how coordination and collaboration assists in the engagement of members can lead to a better understanding of how virtual teams can adapt and engage to perform effectively. As Morrison-Smith and Ruiz (2020) highlight, virtual teams communicate and collaborate through informal and formal meetings using technologies to accommodate the missing face-to-face contact. Highlighted by Cleary et al., (2018), socioemotional communication is important for successful virtual collaboration.

2.3.3. Performance

In virtual teamwork, the performance of individual members in teams is crucial for establishing positive team dynamics. Performance within an organization is “partially predicted by the background characteristics” (Jin et al., 2017, p.743) of team members. These characteristics can affect organizational outcomes. Team characteristics that influence performance are, for example, team composition, size, and heterogeneity of the team (Jin et al., 2017). Enhancing performance is linked to adaptive performance, which in turn can produce reflective communication in which the effectiveness of sharing knowledge and innovative work “processes across boundaries ... when one entity communicates to another” (Mayo, 2020, p.54). The Global Entrepreneurship Monitor suggests that greater access to information and communication technologies may improve the innovativeness within start-up teams (GEM, 2018). Jelonek (2015) confirms and adds that these technologies decrease a start-up operating cost and allows start-ups to function on a larger scale than before.

2.3.4. Leadership

Leadership is an essential contributing factor to effective virtual teamwork. A mechanism introduced by Mayo (2020) suggests that leaders can use the “start of a shift, procedure and week,... [to] establish a mutual understanding, create a team orientation and clarify roles” (Mayo, 2020, p.55). Leadership is understood as an individual who shares an understanding of the situation and can demonstrate effective management. The role of a leader is to set expectations, assisting in coordinating and facilitating communication amongst members. Leadership within a team is critical, especially during the transition to virtual work environments. Simplicio and Nwachukwu (2018) emphasize the need for management support within start-up teams to transition successfully towards virtuality. Ifinedo (2011) stresses that the main barriers to

accepting new technologies to support virtual teamwork are management support, perceived benefits, and external pressure. The factors that influence the barriers are software, internet costs, management attitude towards virtual work, knowledge of the information, and communication infrastructures.

Important within leadership is building a sense of trust amongst the members of the team. As Ilgen et al., (2005) emphasize that for team members to trust the team and the management, the team as a whole must feel like there is collective efficacy, group efficacy, and team confidence; and that members feel safe within the work environment, this either being the face-to-face or virtually. Inclusivity from leaders is thereby vital for members to feel safe to participate (Mayo, 2020). Further, iterating the point, Cleary et al., (2018) mention that a transformational leadership style can “inspire team members, enhance ... creativity, and facilitate ... engagement” (Cleary et al., 2018, p. 312). Matlay and Westhead (2005) found in their study that virtual start-up teams expressed strong feelings of belonging to a ‘virtual community’ and claimed to have a ‘virtual trust’ in collaboration amongst team members.

2.4. Mandatory-working-from-home

Within the current context of Covid-19, the immediate shift towards involuntarily working from home has drastically impacted how individuals, teams, and organizations function. Voluntarily working from home (WFH) was a common practiced phenomenon with the rise of globalization and digitalization and can be defined as working from anywhere (Alemdia et al., 2020). Some prefer WFH as it allows them to be more productive. It allows for complex tasks to be executed remotely with little to no interaction among members. Examples of WFH are virtual work, e-work, e-commuting, mobile work, and digital nomads (Savić, 2020). With a digital influence, this transformation of conventional working at the office to WFH is facilitated with mediums that make it is possible for WFH.

The based difference between WFH and MWFH is on the uniqueness of the context in which work is conducted (Kniffin et al., 2020). Covid-19 has accelerated the sudden transition to remote working, impacting how start-up teams communicate and collaborate. Virtual teamwork thus becomes a means of way in which start-ups now continue to conduct everyday routines. MWFH is a sudden involuntary shift towards being forced to WFH due to the restrictions and

lockdowns in many countries. With restrictions, many are confronted with challenges that they would normally not encounter and generates a transition that is abrupt and unforeseeable influencing the way start-up teams suddenly have to communicate, collaborate, and perform (Kniffin et al., 2020). MWFH creates a transition from face-to-face contact to video calls for short discussions and questions. Instead of sitting together across from each other around a table, MWFH teams sit alone at the kitchen table or the home office and connect through virtual mediums. Feeling isolated, having minimal interpersonal contact, miscommunication, role ambiguity, and conflicting commitment goals (Hertel et al., 2005) can arise, challenging the team's way of conducting their work.

2.4.1. Home-life

The unique context in which teams transitioned to an at-home work environment due to Covid-19 has raised challenges such as the fundamentals of having a working space, separating work and nonwork, and forced confinement (Kniffin et al., 2020) suddenly become concerns within households. A “diversity of work arrangements” (Kniffin et al., 2020, p.66) will arise as individuals find ways to adapt to the sudden change. Routines start to collide, generating an absence of separation between work and home life. With the distraction of children staying at home, requiring time from their parents makes it very difficult to accommodate the sudden needs of the household. Time allocation becomes an essential factor that can also influence the execution of virtual teamwork. From once having to commute, employees now walk across the room or down the hallway. The transition between the two domains (Kniffin et al., 2020) influences employee performance, including the overall team performance. The transition of individuals who had to “learn to share a reduced space with their relatives” (Alemdia et al., 2020, p.98) influences their work and home life, thus their performance.

Distance is a contributing factor that blurs boundaries between home and work life. As defined by Morrison-Smith and Ruiz (2020), we can conceptualize distance as a geographical, temporal, or perceived concept. The concept of distance hinders the awareness about different team members, trust, technical competencies of team members, management of the team, and the alignment of incentives and goals (Morrison-Smith & Ruiz, 2020). As a result, distance can lead to an inability to observe team members' progress and quality of work, generating potential

negative biases (Morrison-Smith & Ruiz, 2020). Specifically for MWFH teams, geographical distance is applicable because these teams conventionally worked in one location.

Due to the pandemic, teams are dispersed geographically in a neighborhood, city, or country. With geographical distance, the ease of communicating and collaborating can lead to miscommunication amongst members as knowledge sharing is another step necessary to overcome virtually. Information can, thus, become incomplete and creating disarray of general knowledge amongst team members. With distance, there is also a risk of an increase in privacy invasion and automated monitoring (Kniffin et al., 2020), as virtual video conference calling invites team members into each other's homes. The boundary between the work environment and home becomes pervasive.

Another critical challenge faced by virtual MWFH teams is communication. As many teams have had to drastically shift their interactions, facilitating effective communication within virtual MWFH teams is essential. With potential delays in communicating, tensions amongst members can arise, leading to conflict build-up and a lengthier time to resolve problems. Especially when WFH, effective communication is essential in indicating when employees are available or not. With conventional routines in having lunch or coffee breaks, the importance of advocating and allocating time to take breaks is essential.

2.4.2. Technology dependent

Digital transformation has contributed to the possibility of WFH. We can understand digital transformation as a multidisciplinary phenomenon that “includes changes in strategy, organization, information technology, supply chains, and marketing” (Verhoef et al., 2019, p. 2). Technologies have made collaborating remotely more efficient but have simultaneously produced the act of sharing information and knowledge a lot more complex as there are multiple levels of being able to do so. However, with new technologies used to accommodate the lack of face-to-face contact, team members can be confronted by inexperience in programs such as Zoom or Slack. It can lead to collaboration becoming difficult because of distance, taking substantial time to get used to these new ways of working together (Morrison-Smith & Ruiz, 2020). What once “naturally flowed in the same physical space” (Alemia et al., 2020, p. 97) has now become a barrier for some.

2.4.3. Socioemotional influences

Covid-19 has generated an interesting debate regarding the impact MWFH has on the socioemotional influences of virtual teamwork. Virtual teamwork can raise questions on how “emotions, such as anxiety and stress, can best be communicated and regulated” (Kniffin et al., 2020, p.66). A challenge faced by MWFH teams is the impact virtuality has on the perception of social cues of human interactions (Egea, 2007). Due to the virtuality of teamwork, team members can become disengaged due to decreased social interactions (Morrison-Smith & Ruiz, 2019), consequently isolating themselves. Social cues, such as verbal, social, and status cues, become difficult to identify because the environment has shifted, creating a shared space that can present difficulties in collaboration and communication (Egea, 2007). Both the formal and informal languages used in a conversation create boundaries, creating rules of interaction amongst team members. The lack of social and emotional awareness of other team members can delay collaborative work.

A big part of the socioemotional challenges faced by MWFH teams is the factor of social distancing and loneliness. With social distancing, humanly interactions become more restricted, such as giving a handshake. As a consequence of MWFH, the psychological impact of this can influence how teams work. The social and emotional needs of individuals are less visible, therefore, inadequately meeting their personal needs (Kniffin et al., 2020). Loneliness becomes as a cause a leading factor to “strong negative relationships to employees’ affective commitment, affiliative behaviors, and performance” (Kniffin et al., 2020, p.68). The health and well-being of individuals are impacted, posing a challenge for positive virtual teamwork dynamics. Individuals can face deteriorating conditions in their mental health with a risk of encountering burnout, chronic stress, and feelings of exhaustion (Kniffin et al., 2020). Contributing to this is the constant news of Covid-19, distressing the consequences of the ongoing pandemic. And as a repercussion of the current context, a rise in job uncertainty and lack of resources can pressure individuals and teams to perform at their best. However, the uncertainty creates a cycle in which the different challenges influence each other, making them interdependent.

2.4.4. Trust

Trust is another component essential in achieving successful teamwork however it imposes challenges within virtual teamwork. Trust can be understood as having accordance, honesty in

discussing commitments, and does not take advantage of others' opportunities (Morrison-Smith & Ruiz, 2020). Building trust amongst members becomes difficult when working remotely in virtual environments. Distance, technological disruptions, and team culture can hinder trust-building in collaborative teamwork. Emphasized by Morrison-Smith and Ruiz (2020), trust has an immense impact on team performance and is considered a binding factor in collaborating. When the trust is broken amongst team members or the lack of trust, the performance of individuals within teams can impact the performance of a team in general, influencing the team culture and team dynamics. In virtual teamwork, trust-building is more challenging as there is no face-to-face opportunity to build that trust, leading to virtual means of connecting with people.

With MWFH teams, trust in technology is also crucial because of the vitality of working from a distance and remotely (Hacker et al., 2019). Overcoming challenges related to technology can allow MWFH to become more resilient. With interruptions and disruptions in technology use, trust in using mediums such as video calls or laptops can diminish the trust in these technologies. Hacker et al. (2019) highlight trust as a central part of virtual teams overcoming technological barriers. Misinterpretation of messages and a wrongly sent email, team members are aware of the technology mishap and therefore are not highly concerned. The challenge is for MWFH teams to find ways to overcome technological mistrust and generate a sense of virtual trust. However, Hacker et al., (2019) note that the core of the technology mistrust is not the tool but how the context and the team members accustom to the technology. With cybercriminals exploiting Covid-19 to target victims (Waizenegger et al., 2020), start-ups are confronted with having to secure a virtual environment where team members are situated in different locations. If MWFH teams are not prepared for the technological challenges and I.T. support can take longer due to virtual and remote working.

2.4.5. Leadership

Covid-19 has shifted the role of leadership, making it a critical component in virtual teamwork. Understanding the current situation in which some employees WFH can facilitate the adaptation of both the individual and the team overall (Mayo, 2020). Working virtual can conceal the social cues that are present in the traditional working setting. It makes it difficult to distinguish the hierarchical structures within the team. The unique context that Covid-19 presents has challenged teams to shift leadership styles and design managerial structures that are essential in

collaboration and communication within the team. With the workplace moving to virtual environments, the efficient digitization of teamwork and management leadership is important for positive virtual teamwork. As stated by Alemdia et al., (2020), companies will need to overcome the challenge of restructuring, despite the complexity of coordinating the transition. With the challenge of managing teams that are temporally and geographically distributed, collaborative work and communication become increasingly difficult. It is challenging because effective leadership is dependent on “quality interactions that are more difficult across distance” (Morrison-Smith & Ruiz, 2020, p. 13).

Another challenge faced in leadership, specifically virtual leadership, is motivation and spirits amongst virtual team members. In the current context of conducting virtual teamwork, the lack of control over the situation can lead to a lack of control over the execution of teamwork, and how team members collaborate and communicate with each other (Kniffin et al., 2020). Looking at leadership from a virtual perspective, it is crucial that leadership within virtual teams facilitate knowledge sharing and building shared mental models (Morrison-Smith & Ruiz, 2020). Leadership can lead to an increased influence in interpersonal team dynamics that build trust and adaptive performance amongst members, leading to positive teamwork.

2.5. Mandatory-working-from-home start-up teams

Given the breadth and novelty of the ongoing Covid-19 pandemic, no academic literature exists that assesses the challenges faced with MWFH within the context of start-up teams. As examined, the field of study in virtual teamwork is complex and is constantly evolving as information and communication technology develops. Covid-19 has forced drastic changes in the organizational structure, processes, and culture through governmental restrictions forcing start-up teams to MWFH. It impacts how start-up teams collaborate to generate disruptive innovation and reach the common entrepreneurial goals because the traditional possibilities to work in person are restricted. Nonetheless, start-up teams continuously revise every aspect of their venture because of changes within the dynamic, complex, and uncertain business environment (Haynie et al., 2010), start-ups are about managing change (Brattström, 2019). Haynie et al. (2010) argue that the entrepreneurial mindset drives change within start-ups connecting to cognitive adaptability. The challenges start-ups face with MWFH and overcoming these challenges may

provide essential insights to all future strategists. Scholars have suggested that “the successful future strategists will exploit an entrepreneurial mindset...the ability to rapidly sense, act, and mobilize, even under uncertain conditions” (Ireland et al., 2003, p.989).

The academic literature provides some insights into what challenges MWFH teams face in a generic context. Furthermore, existing research also indicated what challenges and benefits start-up teams face with virtual teamwork. For instance, the literature argues that trust is an essential component in achieving successful teamwork. It has an immense impact on team performance and binds collaboration together in teams (Morrison-Smith & Ruiz, 2020). Building trust within virtual environments is hindered through distance and technological disruptions. Trust-building within MWFH teams in a start-up setting is more challenging as there is no face-to-face opportunity to build that trust, leading to virtual means of connecting with people (Morrison-Smith & Ruiz, 2020). Nonetheless, Matlay and Westhead (2005) found in their study that virtual start-up teams expressed strong feelings of belonging to a ‘virtual community’ and claimed to have a ‘virtual trust’ in collaboration among team members.

Damanpour (1991) has demonstrated a positive relationship between levels of innovativeness and internal communication within organizations. Internal communication within organizations is argued to facilitate the creation of innovative ideas. MWFH teams are forced to solely communicate and collaborate using technologies to accommodate the missing face-to-face contact (Morrison-Smith & Ruiz, 2020). Kniffin et al. (2020) argue that collaboration with technology tends to lack richness in communication which escalates teamwork problems quickly and hinders the innovation process within start-up teams (Damanpour, 1991). MWFH teams differ from virtual teams because government restrictions force team members to WFH (Kniffin et al., 2020).

Besides the transition to virtual teams, individual team members are confronted with sudden socioemotional changes due to Covid-19 because of the sudden involuntary nature of the situation. The social and emotional needs of individual team members are less visible when working virtually, potentially leading to negative influences on the collaboration and communication of the team (Kniffin et al., 2020). As a result, team members can become disengaged due to decreased social interactions (Morrison-Smith & Ruiz, 2019). MWFH teams rely increasingly on strong leadership to manage team communication, collaboration, and

performance. Looking at leadership from a virtual perspective, it is crucial that leadership within virtual teams facilitate knowledge sharing and building shared mental models (Morrison-Smith & Ruiz, 2020). Leadership can lead to an increase of influence in interpersonal team dynamics that builds trust and adaptive performance among members, leading to positive teamwork.

In sum, the outbreak of the Covid-19 pandemic has led start-ups to make a rapid transition towards MWFH. This transition required start-up teams to change to virtual teamwork and adjust their means of collaboration, communication, trust-building, performance measuring, and leadership. Besides the virtuality of teamwork, MWFH teams have to work from home and deal with additional socioemotional factors, consequently because of factors attributed to Covid-19, such as social distancing, loneliness, and concerns about health and well-being. The majority of academic research on start-up teams is focused on factors influencing start-up performance. Little academic research has been conducted to this date that provides deeper insights into the challenges and barriers start-up teams face and deal with as a result of MWFH. Researching this topic is of significant importance because these insights may guide both start-up teams and future strategists to adopt an entrepreneurial mindset that allows them to rapidly sense, act, and mobilize within uncertain and fast-changing environments triggered by the ongoing Covid-19 pandemic (Ireland et al., 2003).

3. Methodology

The paper aims to offer rich and in-depth insights into the complex social challenges faced by start-up teams in transitioning to MWFH. The following chapter describes and justifies the research design of this thesis. This chapter encompasses the research design, case selection, data collection, and data analysis and interpretation. Lastly, a brief overview discussing the limitations presented.

3.1. Research design

Given the uniqueness, uncertainty, and breadth of impact of the ongoing pandemic, existing literature on the research topic offers no plausible answers specific to our research question. Therefore, a qualitative inductive research approach is adopted that aims to provide a description, extend knowledge and build a theory upon existing literature within the phenomena of start-up teams and MWFH (Eisenhardt & Graebner, 2007; Kidder, 1982). Since the situation of MWFH within the start-up teams is new, unique, and complex, the chosen approach is a multiple case study approach. The pandemic is still unfolding, and the situation in which MWFH teams operate is highly subjective to changes made by local government restrictions. The thesis, therefore, explores a particularly unique situation that is complex and highly dynamic. Teams within start-ups are complex and dynamic as they constantly revise every aspect of their venture due to the changing environment in which they operate (Haynie et al., 2010).

This thesis will apply a multiple case study approach because of the novelty, uniqueness, complexity, and dynamic nature of MWFH within start-up teams. With a case study, the research explores the informant's experiences of the challenges they faced with MWFH. A case study is a research strategy that “focuses on understanding the dynamics present within single settings” (Eisenhardt, 1989, p.543). With MWFH teams being a recent development enforced by governmental restrictions due to the outbreak of Covid-19, little published academic work is available that provides rich and in-depth insights into the teams transitioning to MWFH (Kniffin et al., 2020). Furthermore, start-up teams are considered unique because they constantly need to adapt to the context they operate in (Haynie et al., 2010). In combining the two phenomena, the context provides an opportunity to explore and understand the insights and experiences of the

challenges faced by start-up teams with MWFH. With a case study, experiences can be explored and will provide supporting evidence for the research topic.

3.2. Case selection

As the aim of this thesis is to offer rich and in-depth insights into the complex, unique, and different challenges that start-ups face in the transition towards MWFH, theoretical sampling is applied. This case study focuses on generating data from individual participants that engage within start-up teams and have experienced the transition towards MWFH. The unit of analysis is start-up teams, with interviews providing an opportunity to explore the lived experiences of the participants. The following selection criteria have been utilized to select appropriate cases in line with the purpose of this thesis.

- The start-up team is in the early stages of development and growth and uses undefined processes in their quest to find a repeatable and scalable business model (Kolz et al., 2014; Blank & Dorf, 2012).
- The start-up team consists of two or more members and the individual participants have a direct influence on the decision-making process in which the start-up team continuously revises every aspect of their venture within the dynamic, complex, and uncertain business environment (Hitt et al., 1998; Haynie et al., 2010).
- The start-up team was founded before the outbreak of Covid-19 in Europe (March 2020) and individual informants are required to have engaged in the start-up team for at least during the period between March 2020 and May 2021 (date of the interview). Participants within each case have thus experienced the sudden involuntary shift towards being forced to work from home due to the restrictions and lockdowns put in place by local governments. With the restrictions, participants were confronted with challenges that they would normally not encounter, influencing the way they have to communicate, collaborate, and perform within the start-up team (Hertel et al., 2005).

To establish a holistic and in-depth understanding of the research problem, numerous highly involved and knowledgeable informants that view the situation from different perspectives were chosen (Eisenhardt & Graebner, 2007). Collecting data from multiple informants builds confidence in the findings and increases the likelihood of discovering valuable unexpected

findings (Eisenhardt, 1989). The initial selection process of identifying informants was conducted through Google searches as well as personal networks. Start-up teams were approached through email with a question to participate in this research and the information sheet and consent form (Appendix A and B). Ten start-ups were emailed of which seven responded. Eight informants from different hierarchical levels, functional areas, and various start-up teams located in four different countries were selected. An overview of the cases and selected participants are given below in table 1.

Table 1: Overview of the cases and individual participants

Title/position	Start-up case	Industry	Geographical location	Number of full-time employees	Year of establishment
Head of people and culture	A	Public relations and communication	The United Kingdom	20	2018
Senior account executive	A	Public relations and communication	The United Kingdom	20	2018
Co-founder and CEO	B	Sports	Denmark, Bangladesh	9	2020
Co-founder and COO	C	Marketing and sales	Denmark	40	2020
Co-founder	D	Music /teaching	Sweden	2	2011
CEO	E	Co-working and think tank	Sweden	5	2014
Co-founder	F	Design	The Netherlands	2	2020
Co-founder and CEO	G	Real-estate	The Netherlands	7	2016

3.3. Data collection

In line with the purpose of this thesis, semi-structured interviews were found the most appropriate method to collect data through conducting online interviews using the platform Zoom as a technology program of choice. The reason for this method of interviewing is because interviews provide more in-depth empirical data which generates evidence on the topic that is highly episodic and infrequent. Interviews also provide an opportunity to connect with the informant, gathering both verbal and physical signals. With Covid-19 restrictions still in place and having to work virtually, the situation allows contacting start-ups beyond Sweden because of the virtual possibilities of reaching out to start-ups in different countries.

According to the interview guide (Appendix C), there were three periods: Before the outbreak of Covid-19, the transition period, and during Covid-19 (current situation). The pre-Covid-19 period functioned as a comparative benchmark for each case to clearly distinguish differences in experienced challenges as a result of transitioning to MWFH. In-depth interviewing of the three periods provided “open-ended, detailed exploration of an aspect of life” (Charmaz & Belgrave, 2012, p.3). The research topic provides an opportunity for the informants to share their personal experiences and opinions, thus avoiding group biases. Connecting to the grounded theory, which is in itself an “inductive, comparative, iterative, and interactive method” (Charmaz & Belgrave, 2012, p.2), in-depth interviewing and the grounded theory encompass both flexibility and control. To limit bias while conducting the interviews, the questions were not guided towards an answer but very much open-ended. The interviews were recorded via Zoom recordings for transcription using the online software program Trint. Conducting the interviews through the platform Zoom provides the experience of working in a virtual setting.

3.4. Data analysis

To analyze the collected data, an initial approach of thematic analysis was used. The approach allows for the flexibility to make sense of the theory and collected data (Bell & Bryman, 2019). In the interviews, overarching themes started to appear, allowing for the categorization of concepts to take place (Bell & Bryman, 2011). In the thematic analysis, different codes are generated for an understanding of the experiences of virtual teamwork within start-ups (Bell & Bryman, 2019). The data derived from the interviews were firstly divided into eight coded

concepts that became apparent, highlighting excerpts within the transcript that provide an insight into the lived experience of MWFH during Covid-19.

With the collected initial eight identified concepts, the authors were able to identify six aggregated dimensions within the generated concepts. These concepts are culture, routines, technology, workspace, emotions/personal, management, productivity, trust. Following the initial steps of analysis, Gioia et al., (2012) note that doing qualitative research, interviewing, and analyzing data is conducted in conjunction. Apparent terms, codes, and categories can become visible as informants start to share information (Gioia et al., 2012) and can emerge early on in the interview. The data collected were analyzed using the qualitative strategy from the '1st and 2nd order analysis' as the second step of data analysis (Corley & Gioia, 2004). In the 1st-order analysis, terms will be brought up by informants, leading to vast themes. As Gioia et al., (2012) argue, there could be between 50 and 100 1st-order categories that can arise from the first few interviews. Similarities and differences will become apparent amongst the categories, further labeling descriptors.

Following the 1st-order of analysis, the 2nd-order concepts connects the concepts to theory to suggest themes that could help describe the phenomena (Gioia et al., 2012). These concepts are investigated further in aggregated dimensions. Six overarching aggregated dimensions were found during the analysis. With a set data structure, we can configure our data (Gioia et al., 2012), providing a graphical representation of key terms, concepts, and aggregated dimensions to make sense of a phenomenon. With a data structure, the progression of analysis demonstrates a clear understanding of how raw data is transformed into sense-making information that can be used to support the theoretical framework.

3.5. Limitations of the methodology

For this thesis, the authors acknowledge that there are limitations to what is possible and can be achieved within the given time and financial scope. With Covid-19 being the main limitation to how this research is conducted, the authors aim to accommodate what is possible within the restrictions.

3.5.1. Research design

In general terms, the limitation of a case study research approach is that there is a lack of control over the individual variables, thus lacking the ability to trace casualties (Eisenhardt, 1989). Nonetheless, a case study approach is considered the most appropriate research strategy within the start-up context of teams. Despite academic efforts to explain start-ups within this context, individual organizations acknowledge being inherently different in organizational structure, processes, and culture. Therefore, the authors consider it incorrect to generalize findings of a unique organization to the context of the team as a whole. Another identified limitation is that the majority of existing literature on virtual teamwork is focused on teams in the health sector. Even though the authors can consider this an advantage because it provides an opportunity to research a gap, it is concurrent a limitation for this research because there are limited academic papers related to start-up teams working virtually during Covid-19.

3.5.2. Case selection

The key limitation in the selection of the cases is the limited willingness for participation in this research from multiple informants per case. It was only possible to get two informants from one start-up team. Whereas for the other seven start-up teams, one informant was interviewed. The number of informants per start-up team has limited the generation of rich and in-depth data from multiple perspectives. Data of each start-up team is thus dependent on individual variables, opinions, and experiences (Eisenhardt, 1989). The consequence of this limitation is that the generated data cannot be generalized for the case of research.

3.5.3. Data collection

The main limitation for researching start-up teams is that each start-up team is inherently unique, and the outcome is thus context-dependent. Furthermore, research in the challenges that MWFH teams face is also limited, as this phenomenon is unique to the context of Covid-19. Due to Covid-19, a limitation in conducting research will be a challenge many virtual teams face as well, which is that the research and online conducted interviews. The consequence of this is that the social and emotional cues are not as evident as in-person interviews.

3.6. Ethical considerations

A consent form and information sheet were shared with the informants before the interview concerning the anonymity and confidentiality of the interview and the scope of the research. It should be noted that issues of confidentiality and anonymity can present difficulties in qualitative research (Bell & Bryman, 2011). The consequence of being insufficiently careful about the sources' anonymity inflicts damage upon the informants, potentially putting their reputation at risk (Bell & Bryman, 2011). These steps were put in place to allow informants to feel more flexible in their answering.

4. Findings

The following chapter focuses on the empirical findings from the eight conducted interviews, following the ‘1st and 2nd order analysis’ data structure. The data findings are from the eight informants working in seven different start-up settings across four countries in Europe. The chapter is structured per aggregated dimension, derived from unique dimensions that were identified from the interview transcripts. The 2nd order concepts are based on reoccurring concepts from the interviews followed by the 1st order analysis quotes. There are 15 specific identified challenges that became apparent from the experiences of the informants.

4.1. Difficulties of building a community

The first challenge for this dimension is establishing and maintaining a community in start-up teams while MWFH. As mentioned by several informants, it became a task and routine to build a company culture. It was difficult at times because of the distance and lack of face-to-face contact. Before Covid-19, one informant said that the start-up founder emphasized the importance of team culture, *“the team culture before lockdown, it [is] always been something our founder has really emphasized and is really, really important to us, even from the beginning.”* With the majority of informants working remotely, being able to witness and understand what every team member is doing also became more hidden, influencing the overall team dynamic. Work became a lot more hidden even though it moved to virtual grounds where everyone had access. Continuing the challenge of establishing a virtual community, one informant highlights that within their start-up, employees felt lonely in their roles because they were working socially distanced and virtually. An informant said that they also faced this challenge and tried reaching out to their employees to see what they could do. *“We had email threads like this is how we see the situation and this is what we can do. Does anyone have any tips for best practices?”*

Following this, a second finding that became apparent was the underlying tone of togetherness. Most informants highlighted that they perceived the situation as both an individual and a team challenge. An informant said it was difficult to build a sense of togetherness because *“you had people on this side that were very, very careful and, ... they were like really panicking around the situation. Then you had the other side, people who did [not] really care.”* On the contrary,

another informant observed that there was *“a similar sense of we [are] in this together and sort of we [are] helping out that I sensed during and also the fear amongst the [employees].”* With this, a divide became present, and it was difficult to build that sense of togetherness where the divide was not only physical but also emotional. The informant also raised the question, *“how can I put us together at the same time will not be just dividing us physically because this is the last thing we need. We need some physical division for a short period of time, but we shouldn’t divide ourselves on a community base or as human beings.”* Considering contrasting perspectives that present challenges for how individuals feel within a team, some informants worked from the office as it *“stimulates when there are other inspirational people [are] around and everyone just does that thing.”* Smaller teams, according to one informant, do not present a huge *“need for work[ing] from home,”* and they thought *“[it is] [your] own responsibility.”*

The challenge of establishing a sense of togetherness is influenced by the difficulty of establishing a physical space to develop and nourish community building. With the context of Covid-19, finding a space to build a community either remotely or socially distanced presented challenges for some informants. In particular, a specific finding was that the informants located in Sweden mentioned that they established physical spaces that provided members of the community and team members to come together within safe proximity. With the possibility to meet in person but with the necessary safety measures, the challenge arose for these two informants of how they could best accommodate the situation and how they could facilitate the physicality of building a community. An example is that informants who worked in co-working spaces had a more challenging time creating a sense of team dynamic or company culture. As an informant noted, *“people came and left alone and there was a lot of things happening within ... our own organization in the co-working space.”* On the other hand, an informant highlights that within their company, *“some teachers in our facilities ... were welcoming people because ... if you want to get away from the streets, come to our basements.”* As identified in the findings, community building is a challenge, in particular, when MWFH.

4.2. High degrees of uncertainty

Inevitably, the context of the Covid-19 pandemic presented the challenge of overcoming the aggregated dimension of uncertainty. During the lockdown, governments implemented

restrictions and recommendations, affecting the uncertain feelings amongst some informants. And when restrictions and recommendations were intensifying, *“most business would close... and private business should work from home.”* An informant said they *“actually closed down for two weeks because ... [they] had no idea how to do it.”* They continued by saying that *“every employee [had] to plan their schedules. So they worked a lot more.”* For some informants, home-life, in particular, changed as their teams transitioned to MWFH teams. The overarching atmosphere amongst the informants was that during the transition, uncertainty was felt.

The uncertainty of not knowing what was going to happen and how it would impact the business itself. One informant said, *“the transition was extremely scary because we could only think that we will go bankrupt, but it turned out to be not hard at all.”* Another informant mentioned, *“yes I had this fear but at the same time, there was no. I did [not] see any clear signs that it would [not] work out.”* The informants also acknowledged this uncertainty *“the people who were very careful and scared, you had to respect that fear.”* Another informant mentioned, *“being the owner of the company was a little bit scary. So it literally looked like the world had come to a stop.”* An informant highlighted that they *“could feel that things weren’t as normal”* and continued by wondering *“how this was going to impact [the] business.”* However, the findings also presented that even though the context was uncertain, the impact of Covid-19 had minimal impact on the business itself. One informant mentioned, *“our business model is quite an on-demand thing”* while another highlight *“we help companies sell ... and ... hard to sell during a pandemic... we thought it would be [hard] and that [is] pretty scary because if our clients can [not] sell, they do [not] want to sell, they do [not] want to spend money ... then we do [not] exist.”*

With this uncertainty as a general overarching sense, another challenge that arose is the formation of routines that could potentially alleviate the stresses around the uncertain context. As the findings presented, routines started to shift during the transition. During this phase, the management provided the option to work from home or in the office. The informants, who continued to work from the office, did feel an immediate difference in the weeks of nationwide lockdowns. An informant highlights, *“we typically have a business that everybody can work from home,”* so the routines and rhythms were moved to virtual environments so that those who decided to WFH could participate in the meetings. With routines shifting to WFH, stresses of

how to also deal with family and partners WFH routines. With their routines coinciding with the informants, at times the informants had to shift their ways of working presenting challenges and feeding into the feeling of uncertainty. One informant mentioned, *“we had a kitchen as well, but my girlfriend was usually studying there,”* and other notes, *“it can be a balancing act in terms of using the kitchen when somebody else is downstairs.”*

Productivity was an additional challenge connected to uncertainty. In particular, because both during the transition phase and during MWFH, the sense of uncertainty led to some informants mentioning that their mental well-being was influencing their productivity levels. In the initial phase, it was of utmost importance that the level of productivity and motivation was kept high to alleviate the stress of uncertainty. The majority of the informants mentioned a better structure because meetings were scheduled as part of the daily rhythms and routines. *“It [is] so important to just establish a well-organized functioning company, especially when you work virtually.”* Ensuring the people will continue to believe in their job is critical. *“Keeping people motivated is super difficult and something that leadership has really required since we do [not] see each other. So I keep finding ways that the team believes in the idea.”* To facilitate and accommodate the increase in uncertainty during the transition phase, in particular, the informants had to navigate the challenges of facing and overcoming the uncertainty of the business proceeding, the lack of initial routines during the transition phase, and the influence uncertainty had on the productivity of the team. As noted by one of the informants, it is important to remember that the situation is not ideal and only temporary.

4.3. The transition of workspace

One of the most evident changes in the shift towards MWFH is the change of the workspace. With a new spatial reality of working in a home environment, the challenge of remaining productive was felt by many during the transition phase of MWFH. Those working from home did not have a proper at-home office, influencing their productivity levels because there were distractions present. One informant said that *“the productivity dipped in and out.”* Another informant highlights *“I really enjoy working at the office ... I do [not] think I can be productive... I do [not] think anyone can even though they say that they can.”* The informant further elaborates by saying: *“I [am] very motivated when I [am] around people and when I hear*

people doing their job. That means that when I [am] working from home and everyone is working from home ... [it is] difficult to develop people [when] you don't know what they [are] doing ... That [is] why productivity-wise it was difficult to figure out what to do." Another influence on productivity was the perception to always be online, pushing team members to work longer hours impacting their productivity the next day. *"Not seeing people has impacted my productivity, impacted the way in which I can work [and] not being able to switch off properly means that maybe [I am] not working at full steam the next day."*

However, some informants highlighted that because they had the opportunity to work from home, the challenges experienced when working in the office were diminished. *"I did [not] feel like someone was peering over my shoulder and reading an email. I had more time to work on things to perfect it in my own environment, you know?"* A few said that because the office was open planned, it emotionally impacted their feeling of privacy. *"You can see everyone. You can see everything. So there was no privacy in that sense. I would say that was the challenge for me."* Even though the home office presented challenges, it was also evident that WFH at the same time increased the level of productivity for some. WFH provided more privacy and time to do work as they switched off and focused solely on work as it provided *"a little bit more privacy"*. But because it provided more privacy, there was a better focus present amongst a lot of the informants to finish off work and get the work done. One said that *"you can really knuckle down and focus on what you need to work on"* and another said *"sometimes need to just close yourself in a room, have quiet and really just focus on an article or a pitch or whatever it is they you [are] working on."* Many of the informants mentioned that they noticed that they were able to be more productive at home and that it showed in the progress of the start-up.

Having the right equipment for WFH presented challenges. One informant described their home layout as, *"I had a desk in the bedroom in the corner. It was pretty annoying, to be honest, not to have a real office because when you [are] working, and you [are] sitting in an office chair in your bedroom."* The informant mentioned that they had a small desk at home that was placed in their bedrooms or a confined small place. *"You have a small room, which was an issue during Covid-19."* Also noted by the informants is that the initial working space was not ideal for many as they suddenly had to shift from working at a work desk to a tiny bedroom or kitchen table with minimal space. One informant mentioned that the at-home equipment was impacting his

health. *“At the beginning of Covid-19, my chair was really bad. I actually got back problems just because I was sitting so much.”* Another informant mentioned the same thing, *“my original chair was [not] great, so just making sure that I [am] looking after my back and my body while working from home.”*

4.4. Structures of sharing information and communication

The following aggregated dimension touches upon the structural challenges that the informants came across in terms of information sharing and communication. The initial challenges that many informants experienced were bad internet and technological complications with the systems set in place to use for communication and collaboration while MWFH. Some start-ups already had implemented programs before the outbreak of Covid-19 that facilitated communication and collaboration within the team. Through research, they knew what program to use that could help facilitate the transition to MWFH. Some of these programs were more developed than others such as the usage of the management program Slack. The informants were technology-dependent either in terms of using the right management programs for communication or collaboration.

An informant recognized that the communication and collaboration amongst the team members could be better but, *“Slack has definitely become way more active than before.”* However, during the transition equipment was not directly facilitated for WFH, and as one informant noted it took up to two months to get a work laptop at home. Informants who worked initially from home had equipped themselves with the technology needed to work from home. Bad internet also influenced the way teams would communicate or collaborate. *“I think sometimes Wi-Fi is not great so halfway through your Team's call, your call is cut.”* Another technological challenge highlighted by an informant is that when the management system is down, you can not access any files or get into the contact database. *“Sometimes [the system] does [not] let you sync files, which is another annoying thing.”*

Following the technological challenges, how information is shared and perceived can present difficulties in teamwork. All the informants mentioned that before Covid-19, seeing people provided an opportunity to speak easily to other team members. Also, the importance of how to communicate while WFH was brought up. Clear and effective communication is important to

prevent frustrations from developing. One informant noted, *“if I do [not] exactly explain how a certain task needs to be done, people are not going to understand.”* indicating that the specificity of conveying a message was important to get the job done. However, it was also apparent that how a message is conveyed can be perceived differently than intended. One informant described their way of communicating as *“friendly and a bit vague, as opposed to very clear and indirect in a typically nice Swedish fashion.”* Another informant mentioned, *“I practiced being very specific about things different to explain different processes and something like that because I wanted people to get it the first time.”* Conveying the right tone as mentioned by one informant is important to bring a message across. *“Everybody works differently, what tone to take with each person. That [is] very different. Not everybody is going to have the same relationship with everyone, and that [is] fine.”* In the context of Covid-19, one informant reflects, *“I wish that I much earlier came out with a message of what I was doing, how I was communicating, what I was actually doing in the [office], to give a sense ... of safety.”* In finding the right voice to communicate virtually, a message can be better attained by those at the receiving end, eliminating any uncertainty.

Establishing a structure or system for communication has been a challenge for many of the informants. Informants noted that their companies grew in size during Covid-19, meaning that how they communicated and collaborated had to be a lot more structured. Over time, the technological dependency increased as teams were transitioning to MWFH. During the transition phase, new technologies were implemented, assisting in facilitating the transition. Programs such as Microsoft Teams, Slack, Jira, and simple email were used to facilitate communication and collaboration. One informant mentioned, *“we need this Slack workspace where you can easily communicate.”* An example is that Slack was used as a structure to interact and share information with others. *“These different channels helped a lot to structure communication, so you can communicate it with the people that you need to communicate with.”* During Covid-19, technologies such as WhatsApp and Zoom, and Facebook were used for communication and connection. *“We talk on Facebook”* one informant mentions.

With MWFH, constant virtual calls were becoming frustrating and were preventing team members from finishing their work. *“All the calls going forward, are all going to be on video, which can be a bit annoying.”* One informant noted *“it [is] just important to maintain your focus*

during the day, we moved everything to one centralized place so that, you know whether everybody in one place that was very important for us” and then another said, “We [have] had so many calls during the day that you can [not] get any work done.” However, with virtual connectivity, the frustration of being always online can be counterproductive for both the individual and the team. Within constant availability, some informants mentioned that they started to show their status availability. “You can put your status on do not disturb or busy or whatever, so everyone we really emphasize that it [is] important to first check peoples' status before reaching out to them.”

One informant said that because there was a tendency to always be online, the days became longer with longer hours behind the computer. “It felt like we were delivering a lot of big deliverables and kind of work under really tight deadlines, so it felt like we actually like working harder and longer, certainly, yet [it is] not always that you can clock off at six or eight and six.” Informants also started using their emails to manage their schedules because of the structure that was implemented before creating an unforeseeable overview. An informant highlighted that they “actually requested from my team that if they have anything they need to speak to me about to put it in email and send it that way.” Establishing structures to facilitate information sharing and collaboration is essential in facilitating WFH and allowing the business to continue.

4.5. Navigating leadership roles and management

The aggregated dimension, leadership, and management, presents challenges from both a managerial and employee perspective. With teams working virtually, the informants highlighted that establishing trust amongst the team members was challenging but highly essential. The underlying tone that trust increased during Covid-19 was very apparent. From an employee's perspective, an informant noted, “trust from your employer is everything you need to trust the working from home situation like you need to trust your employees.” Generating trust amongst virtual team members is also a structural challenge that from a leadership perspective can be a challenge. One, in particular, noted that virtual teamwork is “important in developing trust.” Trust is, therefore, a key aspect that highlights the concept that it is essential for leadership and management. “If you work from home, you have to trust each other that ... their [working], which you can rely on one, you have to rely on them.” One informant reflected that he could see

that by trusting the team they could see it in the start-ups' progress. *"I can see it in data even before they knew I would see it in data, which means that, yeah, definitely like trust is the main learning from all this 100 percent."* Contributing to the challenge of establishing trust, is that before the pandemic, interpersonal relationships are built through face-to-face contact, and with the transition to MWFH, these opportunities are more difficult. One informant noted, *"you [are] trying to navigate those interpersonal relationships as well between like the CEO/Founder and senior like senior management."*

During the Covid-19 pandemic, leadership became more flexible because the context demands leadership to take a stronger role, yet this poses challenges. One informant with a leadership role reflected by saying *"I think I became as a person, much more flexible in terms of if somebody is feeling a little bit I [will] or has some kind of cold, and could have been in contact with a person who has Covid-19, just please stay at home."* Another informant noted that *"I [have] definitely had to take a bigger role in that sense."* According to an informant, leadership was *"to set an example as well and to just provide reassurance and really provide that motivation and that encouragement."* The challenge of accommodating to the demand to be present yet flexible is a challenge for those with leadership roles. For example, an informant said that they did not want to micromanage and focus on the details and that from a managerial perspective wanted to focus on bigger decisions. *"[It is] been really tough...sometimes dealing with this occasion because I [do not] want to micromanage. But sometimes you could get in a conflict with yourself if you should micromanage or not because suddenly you can't see people and here tools like online tools."* Tools were used to assist in the change of leadership as one informant mentioned that they had *"introduced this task list in our sheet of tasks where we assigned it to either of us"* changing the dynamic of work and allocating of roles and responsibilities.

Also, with the context of Covid-19, the challenge to generate clear roles and responsibilities was felt. However, with virtual teamwork, it becomes hard to know what the tasks are of those in the team, changing the ways of working. *"Even if this is not my task, or [it is] not my responsibility, ... I felt like that I became that person for people and myself."* An informant noted that they defined roles and responsibilities through a playbook. *"We make playbooks for every role that people will read and understand."* With the challenges that performing leadership from a distance, roles and responsibilities evolved shaping team dynamics.

4.6. Work-life balance

In the findings, the distinction between how the informants managed their work-life balance contrasted with how the team worked before Covid-19. Those who were able to establish a healthy work-life balance during Covid-19 illustrated that before the pandemic, their workdays *“maybe come up to 14 hours and sort of go to bed at about 10:30 - 11:00, start that process altogether.”* Some informants admitted that they did not have a great work-life balance and that it was difficult to switch off on the weekends. The informant said, *“[I am] thinking about work on the weekend or during my holidays, I find it very, very difficult to switch off.”* During the pandemic, one informant noted that it was during MWFH that once he started working he continued. *“When I work, I work, and I [do not] calculate just sitting in front of the computer.”* The iterated point by another informant who said that her private life had disappeared. *“The more time [time] went ... [into work], the more it disappeared, and there became no line between and still is. And [I am] trying to get it back.”* Also, the distinction between work and home is merging as one informant said, *“working remote, I think [it is] even worse because you feel bad and guilty all the time.”*

Following the merging of work and home-life, the pressures of being online and available also create challenges for creating a healthy work-life balance while WFH. On the emotional and personal side, some informants started to find the WFH situation annoying and began to frustrate them. The conception that they always needed to be online and available impacted their well-being. With things moving online, time management led to many working longer hours and always being online. It became almost normalized during the transition to work longer hours because there was nothing else to do. An informant said that *“if I really, really need to switch off, [I will] just tell people [I am] unavailable at this time, I [will not] be available.”* Because some informants mentioned that at some stage Zoom fatigue would influence their concentration as well as motivation. As the informant highlights, *“you can kind of get Zoom fatigue, it can be just overwhelming.”* Another one mentioned that it *“meant that people would get ... into web meetings all the time. And [it is] not that I [did not] want to do that, but it was just time-wasting ... [it is] not very efficient.”*

Table 2: Overview of aggregated dimensions of MWFH start-up teams

Period	1st order analysis	2nd order concepts	Aggregated Dimension
During Covid-19	<p>Team morale is important for team culture</p> <p>Lonely working at home</p> <p>Division both emotionally and physically</p> <p>Finding a space to get together safely</p>	<p>Culture</p> <p>Space</p> <p>Emotions/Personal</p>	Difficulties in community building
Transition	<p>Routines became more codified</p> <p>Home-life changed</p> <p>Scary to not know what's happening</p> <p>Uncertainty can lead to a lack of productivity</p>	<p>Trust</p> <p>Routines</p> <p>Productivity</p>	Degrees of uncertainty
Transition	<p>Continue working because there was nothing else to do</p> <p>Remaining productive is hard</p> <p>Always online and available</p> <p>More privacy to finish a task while WFH</p> <p>Having the right equipment at home is necessary</p>	<p>Productivity</p>	Work space
Transition	<p>Communicate things more effective</p> <p>Structures changed permanently due to Covid-19</p> <p>Technological difficulties can hinder progress in work</p>	<p>Technology</p> <p>Communication</p>	Structures of information sharing and communication
Transition +During Covid-19	<p>Trust increased during Covid-19</p> <p>Flexible leadership to be more adaptive</p> <p>Distinguishing roles and responsibilities</p>	<p>Trust</p> <p>Routines</p> <p>Management</p>	Leadership and management
During Covid-19	<p>Tendency to work longer because team is working longer</p>	<p>Emotion/Personal</p>	Work-life balance

To sum up the findings, the data structure presents six aggregated dimensions experienced by the eight informants who highlight the challenges of MWFH during Covid-19. With perspectives varying from having positive and negative experiences working from home, the unique situation in which teams found themselves.

5. Discussion

The following chapter will discuss the findings in further detail by connecting theory and literature to the lived experiences of the informants. From the derived data, the discussion will look at the six aggregated dimensions presented in the previous chapter and develop the phenomena further in light of the research question.

5.1. Importance of building a community

The recommendations and regulations imposed by governments to prevent further spreading of Covid-19 have created physical and social distance between individuals. It forced the abrupt transition towards MWFH and virtual teamwork, which has influenced the way teams to have to collaborate, communicate, and perform (Kniffin et al., 2020; King et al., 2002). The distance formed due to MWFH hinders the awareness of other team members, leading to the disengagement of individuals within the team (Morrison-Smith & Ruiz, 2020). Findings indicate that individuals within MWFH start-up teams experience a lack of face-to-face contact, social distance, and loneliness. Resulting in a critical challenge that hinders the building of strong company culture. The majority of informants expressed the need for a company culture with a strong communal sense, as the whole team will have to overcome the difficult period of the pandemic. Thus, findings suggest that start-up teams transitioning to MWFH have a strong need for a compelling direction (Haas & Mortensen, 2016). Teams with a compelling direction have commonly established goals that energize, orients, and engages individual team members. With consequential shared goals that serve the teams' purpose in transitioning to MWFH, individuals must be engaged in achieving this goal through intrinsic and extrinsic awards (Haas & Mortensen, 2016).

However, findings indicate that start-up teams experience a separation among individual team members as a result of the Covid-19 context. These findings contrast prior research on virtual teams that presented strong feelings of belonging to a virtual community (Matlay & Westhead, 2005). Distance and digital means of communication, as a result of MWFH, make teams prone to us versus them thinking and separation in the shared mindset of the team (Haas & Mortensen, 2016). As the virtuality of teams presents difficulties in collaboration and communication (Egea, 2007), several participants tried to build company culture by facilitating a physical space

following local regulations and recommendations. A new challenge was developed in which individual team members were divided based on their interpretation of Covid-19 recommendations and regulations, resulting in differences in individual behavior and perception of safety. The challenge to establish a sense of community and a strong company culture with a compelling direction and a shared mindset is considered crucial in transitioning towards MWFH. It alleviates negative socioemotional challenges such as loneliness which can cause strong negative relationships with other team members, affective commitment, and affiliative behavior and performance (Kniffin et al., 2020).

5.2. Unusual high degrees of uncertainty

Start-up teams work under uncertain, complex, and dynamic business environments searching for a repeatable and scalable business model (Haynie et al., 2010; Blank & Dorf, 2012). Managing a start-up is essentially managing change, thus continuously revising every aspect of their venture, including strategic decisions, culture, structure, and processes (Brattström, 2019; Hitt et al., 1998). However, the outbreak of Covid-19, followed by the transitional period towards MWFH, presented unusually high degrees of uncertainty for many informants. To manage a start-up team, routines are essential for creating rhythms that assist in standardizing and normalizing MWFH (Alemdia et al., 2020). Individuals within start-up teams were challenged to find the appropriate rhythm, and routines to facilitate MWFH while not knowing how potential sudden changes in government regulations and recommendations may affect these. While establishing new routines and rhythms for communication and collaboration may take substantial time (Morris-Smith & Ruiz, 2020). Some informants experienced the challenge to suddenly alter their ways of communicating and collaborating through technological means as they had no previous experience.

It is often the case in transitioning towards working virtually that the knowledge in using information and communication technologies lacks (Cant & Wiid, 2016). Nonetheless, effective communication is argued to facilitate adaptive performance among individual team members and thus influences transitioning to virtual teamwork (Mayo, 2020). Start-up teams need to overcome this challenge despite the complexity of coordinating the transition (Alemdia et al., 2020). This challenge is considered critical as effective leadership within start-up teams depends on the

quality of interactions (Morrison-Smith & Ruiz, 2020). Moreover, the researched informants mentioned experiencing a challenge in facilitating routines to alleviate stresses caused by the uncertainty of MWFH. Within the findings, it was apparent that mental well-being, motivation, and productivity were challenges that the informants experienced while MWFH. In relation to Egea's (2007) arguments, virtual teams have difficulty identifying the social, verbal, and status cues due to the virtuality of communication and collaboration a team can become disengaged, experience demotivation, and lack productivity (Morrison-Smith & Ruiz, 2020).

On the contrary, some informants did not experience unusually high degrees of uncertainty because they recognized that their business adapted to the demand fluctuations, not sensitive to crises, or designed as such that all team members could already work from home. It was evident that these teams had the necessary experience in working virtually (Cant & Wiid, 2016) and obtained a strong and adaptable team structure (Haas & Mortensen, 2016) to facilitate MWFH. Based on the findings, the challenge of high unusual high degrees of uncertainty is considered to be context-dependent, based on existing organizational structures, processes, and product or service design. Nonetheless, this challenge is considered crucial as it can pose barriers to effective virtual team collaboration and communication. Nevertheless, this challenge is considered crucial as it can pose barriers to effective virtual team collaboration and communication.

5.3. The workspace of the individual

Covid-19 and government response in terms of recommendations and regulations have crafted a unique and forced context in which teams suddenly have to collaborate. The context of MWFH challenges fundamentals in work, such as having a working space, separating work and nonwork, and forced confinement (Kniffin et al., 2020). Findings indicate that individuals within start-up teams face difficulties remaining productive in the MWFH context. The transition meant for many informants that they had to share a reduced space with relatives, which affected both private and work life, and their performance (Alemdia et al., 2020). Though dependent on one's home situation, informants faced distractions from their surroundings and experienced colliding routines within their household, which is in line with previous research on MWFH teams (Kniffin et al., 2020).

Individuals within start-up teams that transitioned to MWFH initially lacked a supportive context within the team (Haas & Mortensen, 2016). Material resources that support individuals to perform their work were not present during the transition period. Creating a supportive context for digital teams is considered difficult because the availability of supportive resources to conduct work is dependent on one's situation (Haas & Mortensen, 2016). Informants were also limited to their living situation and were forced to improvise their workspace in often unsuitable home environments. The sudden and often unexpected transition towards MWFH disabled start-up team managers to prepare for the transition and organize required resources (Haas & Mortensen, 2016). The transition to MWFH presented challenges in both being productive in the spatiality of the at-home office and having the right equipment for productivity and motivation affecting teamwork virtually (Kniffin et al., 2020).

5.4. Virtual structures to communicate and collaborate

Inherently connected to MWFH is the dependency on technology. With the contribution of digital transformation making WFH possible, we can interpret the impact technology has played amongst individuals within start-up teams transitioning to MWFH. The phenomenon presents a multidisciplinary perspective on how technology has the organizational structure of start-ups (Verhoef et al., 2019). The informants experienced technological challenges that impacted their way of collaborating and communicating. Visible challenges were inconsistent internet connections and complications with software programs that made conducting virtual teamwork difficult at times.

The latter seems to connect that it may take substantial time for individual team members to get used to virtual teamwork (Morrison-Smith & Ruiz, 2020). Knowledge of communication and information technology are known barriers in transitioning to virtual teamwork (Ifenedo, 2011). The technological challenges experienced were context-dependent as each case presented unique needs in terms of virtual collaboration and communication structures. Efficient digitalization towards virtual means of communication and collaboration structures is considered crucial as it forms the base for effective virtual teamwork (Alemdia et al., 2020).

Furthermore, conveying the right message and being efficient and effective in doing so is a challenge in itself. Even more so when face-to-face contact is lost. As Alemdia et al. (2020)

highlight, the natural flow of communicating in a physical space is moved to virtual environments creating barriers for teams to receive the conveyed message. As demonstrated by the informants, ineffective communication was experienced and led to miscommunication and frustration by those in conversation. Facilitating effective communication is considered a critical challenge faced in MWFH (Kniffin et al., 2020). However, it must be noted that teams used to (partly) work from home before the outbreak of Covid-19 did not experience such challenges. These findings add to the ongoing debate regarding the impact of MWFH on socioemotional influences within teamwork, as it is unknown how to best communicate and regulate emotions among MWFH team members (Kniffin et al., 2020).

As the findings support, start-up teams that MWFH face the challenge of interpreting social cues and human interactions appropriately (Egea, 2007). Such interpretations of communications are crucial for teamwork within start-ups. Internal communication directly influences the level of innovativeness and facilitates the creation of novel ideas, which require adapting to the continuously changing business environment (Damanpour, 1991; Haynie et al., 2010). Morrison-Smith and Ruiz (2019) warn that with the effect of virtuality, individuals can become disengaged. Teamwork can delay work processes due to decreased interactions and the lack of social and emotional awareness (Egea, 2007). In contrast, some informants did not experience the aforementioned challenge as they already had effective virtual communication routines established within their start-up team. These teams are using an array of communication and information sharing software with predefined structures to facilitate effective team communication. It seems evident that these start-up teams possessed the enabling conditions required for virtual teamwork and were thus more successful in transitioning to MWFH (Haas & Mortensen, 2016).

The different communication and information sharing challenges faced by MWFH start-up teams suggest that adjusting to the unique MWFH situation demands time and can be paired with the great complexity of coordinating the transition (Alemdia et al., 2020). Logically, start-up teams with experience in virtual teamwork possessed the enabling conditions for WFH and therefore experienced fewer challenges in virtual communication and collaboration.

5.5. Evolving leadership styles

Leadership plays a critical role in facilitating and supporting teams transitioning to virtuality (Simplice & Nwachukwu, 2018). How leadership is performed evolves depending on the context was dependent on the context of the start-up team. During the transition phase, leadership was noticeably more present and essential in trust-building within MWFH teams. The transition towards MWFH has developed a need for a new way of performing leadership. The transition demanded a transformational leadership style because start-ups need to overcome the complex challenge to restructure team processes to virtual ones (Alemdia et al., 2020). This type of leadership can inspire individual team members, and facilitate team engagement (Cleary et al., 2018). As Mayo (2020) stated, leadership is critical in transitioning to MWFH because it provides a sense of reassurance for the employees and a form of structure and discipline. Participants illustrate that to have experienced the change of leadership style as a necessary yet tough challenge paired with uncertainty and the absence of knowledge on best practices within the unique situation of MWFH. Depending on the context of the start-up, different ways of executing leadership were presented.

In correlation with the adaptation of leadership styles in transitioning to MWFH, building trust is seen as a crucial and difficult challenge from both a managerial and employee perspective. Trust is created when team members feel collective efficacy, confidence, a sense of safety within their work environment (Ilgen et al., 2005). The lack of transparency in the progress and quality of work can result in the generation of negative biases and distrust from a management perspective (Morrison-Smith & Ruiz, 2020). However, virtual teams also have to trust the technology that facilitates virtual teamwork (Hacker et al., 2019). As adjusting to novel technologies that facilitate teamwork is demands substantial time and adaptive performance, teams face the challenge to avoid technological mistrust (Morrison-Smith & Ruiz, 2020; Hacket et al., 2019).

Adaptive performance of individual team members is crucial as the main source of technological mistrust is caused by how the context and team adapt to the novel technologies that facilitate virtual teamwork (Morrison-Smith & Ruiz, 2020; Hacker et al., 2019). Even though there was not a strong presence of negative perspectives and technological distrust from a managerial perspective, the findings do show there was a wariness of trusting the interrelationships amongst team members and management levels. Yet, the strong sense of togetherness amongst individuals

within the researched start-up teams did indicate that despite the distance, there was a sense of trust in the transition process and a trust in those who had decision-making power. These findings are in Matlay and Westhead (2005), who observed strong feelings of belonging to a ‘virtual community’ and the establishment of ‘virtual trust’ among virtual team members. With the opportunity less accessible to create a bond of trust due to the remoteness of working from home, team members are faced with the challenge of overcoming this. Despite the more challenging circumstances to build trust while MWFH, the majority of the participants did express feelings of togetherness and a sense of trust.

5.6. Balancing the merging of home-work life

With a year of getting used to MWFH, for many the work-life balance developed and evolved to accommodate the situation. During the transition phase, challenges between balancing work-home life started to emerge and carried on during the pandemic. Before the pandemic, some informants recognized and acknowledged that a balance between work and home life was non-existent for some who prioritized work. Analyzing the context in which the informants were working, it was apparent that the start-ups they work in were relatively young, and some being less than a year old. A part of the participants did not see the lack of work-life balance as a challenge, nor is this factor influenced when transitioning to MWFH. These informants thus differ from findings in other MWFH teams (Kniffin et al., 2020).

Nonetheless, during the transition period of WFH and throughout the pandemic, challenges of establishing a satisfactory work-life balance were difficult for other informants in start-up teams. As the transition towards MWFH started to push people into the confinement of their homes, slowing down led to people adapting their work routines. Informants faced the challenge of a blurring distinction between work and non-work. It is this fundament of work that is being challenged as a result of having to MWFH (Kniffin et al., 2020). When work routines start to collide with home routines, an absence of separation between work and private life is formed. Also, individuals that once have to commute, now step out of bed and walk to their workspace is often the same room or house which influences one’s productivity and thus performance (Kniffin et al., 2020).

On the other hand, start-up teams are adaptable and resourceful when it comes to the context in which they found the venture (Haynie et al., 2010). Informants have been shown to alter their routines in the transition period and throughout the pandemic in search of a work-life rhythm that worked best for them. Despite separating work from nonwork was a challenge, findings show evidence that informants utilized an entrepreneurial mindset in finding rhythms and routines to accommodate the new situation (Haynie et al., 2010). Informants were aware that the blurring line between work and private life, affecting productivity, motivation, and eventually the performance of the entire team.

Informants indicated the MWFH situation of individuals was understood by the management and rhythms and routines were established to facilitate the adaption to the novel situation (Mayo, 2020). Secondly, the informants felt empowered that they could make a difference in improving this situation and looking for solutions utilizing the network, knowledge, and expertise of the entire team to come up with possible solutions that were tried simultaneously (Haynie et al., 2020). Throughout the pandemic, the solutions were actively evaluated and adjusted in search of a tailored rhythm that countered the aforementioned challenge for the entire start-up team (Haynie et al., 2010).

The pressure of being always online was indicated to be an underlying factor influencing the work-life balance of the informants. With the constant pressure to be online, tensions amongst members can grow, building up conflicts that become lengthier to resolve (Kniffin et al., 2020). With work environments moving virtually physical distance between team members is created. This distance may lead to the inability to observe other team members' progress and quality of work which creates a potential negative bias (Morrison-Smith & Ruiz, 2020). It is thus evident that this potential negative bias pressured individuals within start-up teams to be constantly online to show that they are working.

5.7. Perspectives on MWFH

Covid-19 has generated a separation in perspectives among individual informants. How people think and interpret the situation is very much context-dependent yet, managing a start-up is about managing change (Brattström, 2019), and in the context of Covid-19, change is bound to happen. Haynie et al., (2010) state that start-ups are used to changing

environments that are dynamic, complex, and ever-evolving. Either in terms of how to take on government restrictions and recommendations or what form of working is best for the team and individual progress. Based on the findings, it is evident that the perspectives on the experienced challenges of the teams are very much specific to the individual, with different actions were undertaken by different informants. A few remained working from the office, while others experienced the transition of MWFH. Kniffin et al.(2020), argues that MWFH teams differ from virtual teams because there is that element of involuntarily WFH.

Applying the Entrepreneurial Mindset Model by Haynie et al., (2010) one can understand the reasoning behind the decisions of WFH or from the office and assess the adaptability. Step one; *Why am I doing this?* which refers to how the entrepreneurs interpret the external environment. Concerning the findings, the diction between those who continued to WFH and those from the office was based on country recommendations, influencing the decision-making process of some leadership, reasons that include that a small team, a young and healthy team, or having sufficient space at the office to facilitate distance. With start-up teams working in an uncertain business environment, the teams continuously assess their strategic decisions, structure, culture, communication systems, and asset deployment (Hitt et al., 1998). Step two of the model is *can I do this?* The level of awareness of the informants and those in leadership roles within the start-up had to evaluate the situation and exploit the opportunities that arose during Covid-19 (Shane & Venkataraman, 2000). Informants experienced this level of awareness because the majority of start-ups had been able to grow in size during Covid-19. One informant even adjusted the start-ups business model to accommodate the changing environment to exploit the opportunity of everything moving to virtual environments. Continuously revising aspects of the venture, contributes to the perception of the complex and dynamic environment in which start-ups work (Hitt et al., 1998).

Step three is *how do I do this* referring to the resources the entrepreneur has in terms of knowledge and experience (Haynie et al., 2010). As none of the informants experienced

the sudden change of environment due to Covid-19, the knowledge in knowing what to do and how to do it presents an interesting look into the challenge of deciding whether to WFH or work from the office. With their expertise, skills, and experience (Flavell, 1987), managerial roles had to make a decision. Connecting to the findings, those who remained working from the office, assessed their team and the skills and expertise to see if it was plausible to work from the office. As mentioned before, one informant saw their team as young and adaptive and therefore decided to give the team the option to WFH or to work from the office. However, another informant decided to close down the business for two weeks because they did not know how to go about the situation. With this in mind, step four, *what alternative do I have* refers to alternative options to process a task (Haynie et al., 2010). To refer to the previous example, the informant had to assess alternative ways to continue the shop. Those who MWFH had to figure out new strategic ways of continuing business and to continue to collaborate and communicate.

The final is step refers to the feedback mechanism that allows the entrepreneur to adapt their motives by asking: *is this working* (Haynie et al., 2010). It became apparent that some preferred WFH and others worked best in the office. One can argue that based on the context in which informants perform their tasks, it is “partially predicted by the background characteristics” (Jin et al., 2017, p. 743) of the team members. Participants that experienced the transition to MWFH had varying perceptions of enjoyment in working from home. Some informants mentioned disliking WFH as they could not be productive or felt lonely and frustrated. Findings seem to suggest that the period in which start-up teams were forced to work from home, made individual team members realize their personal preference in which environment with which routine they work best.

Given the fact that findings differ substantially among informants on this topic, one could argue that preference for the work environment is highly dependent on the individual and is influencing an individuals’ productivity, motivation, and performance (Kniffin et al., 2020). It seems that MWFH has opened up the debate on how work can most effectively be organized, challenging the general assumption that working in the office is best for

every individual. Based on the findings of this research, it could be argued that management within start-up teams should look at one's individual preference in terms of WFH, at the office, or in a hybrid form. The major challenge that is paired with giving such flexibility to individual team members is how to facilitate communication and collaboration effectively.

6. Conclusion

In the following concluding chapter of the thesis, three sub-sections will present final concluding insights into the research. The chapter will sum up the research aim with the main findings to support the purpose of the thesis. The next sub-section will present the limitations of the research, followed by suggested areas for future research.

6.1. Aim of research and findings

The thesis presents a deeper insight into the experienced challenges of start-up teams transitioning to MWFH due to the Covid-19 pandemic. With the unique environment in which start-ups for the last year had to work, understanding the challenges that teams experienced while MWFH can enhance our understanding of what it means to WFH within the context of Covid-19. The Covid-19 pandemic has instigated local governmental recommendations and regulations, creating an environment where businesses had to adapt and transform their ways of working, impacting the way individuals work together since everything became virtual. With an evolving context, teamwork is dependent on how teams collaborate and communicate, which is also influenced by the challenges that teams come across when the context in which they work changes. As Hitt et al., (1998) highlight, start-up teams have to revise every aspect of their venture according to changes in the external business environment, including their organizational structure. Therefore, Brattström (2019) argues that managing a start-up is about managing change which Haynie et al. (2010) connect to the entrepreneurial mindset, making start-ups adaptable and self-regulating. The virtuality of teamwork has led to the development of new phenomena such as e-entrepreneurship, where technology is the driving force to collaborate and communicate (Matlay, 2003).

In attempting to navigate the phenomena, the thesis presents lived experiences of eight interviewed informants who experienced the transition from working in the office to MWFH in their respective countries. Some, however, continued to work in the office after a short period of WFH. Grounded in theory and academic literature, the thesis connects phenomena such as virtual teamwork and e-entrepreneurship with newly developed concepts such as MWFH. Virtual teamwork has become a reality for many, working remotely in virtual environments, navigating ways of collaborating, and communicating at a distance. How to maintain effective teamwork, is

a challenge that will continue to arise as the context is ever-changing and uncertain environment dependent on external factors in the different countries, making it difficult to generalize and also individualistic as everyone experiences WFH differently.

The thesis identifies six challenges. The first challenge is of establishing a sense of community and togetherness while working at a distance. The second identified challenge is that Covid-19 presented a sudden unforeseeable change to how the start-up teams collaborated and performed, leading to high degrees of uncertainty about how to accommodate to the context. The third challenge is the distance influencing how information is shared and structured. The fourth challenge is the workspace of the MWFH teams, impacting their productivity, collaboration, and communication. The fifth identified challenge is how to best perform the leadership role when WFH. The sixth challenge is that home-life merged with work-life, making it difficult to separate one from another. It is also apparent that there were different perspectives on WFH. Some enjoyed WFH because it made them more productive, and others experienced the opposite, facing barriers of not being able to be productive or motivated. With the findings from the conducted research, the authors have been able to address the following research question:

What are the challenges that start-up teams face with mandatory-work-from-home?

To summarize, the context of Covid-19 has presented several challenges for start-up teams that had to mandatory-work-from-home. New terms such as e-entrepreneurship, virtual teamwork, and MWFH teams give new perspectives on the new ways of working. The acceleration of digitalizing work due to Covid-19 has led to a faster transition to remote virtual teamwork. However, the challenges of these new forms of working are also difficult to overcome when a team is involuntarily working from home and confronted with a unique and new situation in which adaptive behavior and flexibility are necessary. New ways of working in terms of structured routines in communicating and collaborating, establishing a sense of community to stay connected from a distance, and evolving leadership to facilitate trust, performance, and motivation and creating the right space to work from home, shape teams. The phenomena of MWFH teams is unique because it is a phenomenon that is highly dependent on how the individual experiences the WFH situation. Some enjoy WFH and others prefer working in the office. As Ireland et al., (2003) state, with an entrepreneurial mindset, future entrepreneurs will continue to adapt and mobilize in uncertain conditions.

6.2. Implications of research

6.2.1. Implications of research

With the findings and analyzed discussion, the authors acknowledge the limitations of the research and the scope of the topic. In the process of case selection, the authors aimed to attain at least two or three informants per start-up team. As proved to be a lot more challenging than expected because of time constraints from both the team of interest and the author's side, one informant per start-up team was interviewed except one team from the United Kingdom. With an individualistic experience in participating in teamwork, the perspectives presented are from a personal point of view and, therefore, cannot be generalized for the perspectives of the whole team. When generalizing based on one perspective per team, the challenges experienced by the MWFH team become not representative, and the research loses its transparency. With one perspective per team, the challenges that are experienced are unique to the individual as the context in which each of these informants is working is specific to themselves because they are working from home. With an incomplete perspective from the team as a whole, the knowledge shared is limited and only provides so much depth into the team challenges as a whole experience and the individual. As presented in the findings, it was evident that the different perspectives of the informants also make it difficult to generalize the challenges as it is also context-dependent what challenges arise when MWFH.

6.2.2. Implications in practice

Two identified implications for future research have been recognized. The first implication for future research is that the experiences of the informants are very much context-dependent. Covid-19 presented challenges for the individuals that are linked to the recommendations and regulations of the various countries in which the informants live in. In one country, the recommendations could be more lenient than the other, presenting different challenges for the different informants. Thus, where the informants do their job is very much context-dependent which can change depending on the developments of government recommendations.

The second implication is that the thesis topic presents a new phenomenon within entrepreneurial research. The combination of researching start-up teams in the context of MWFH has not been researched extensively. There is a plethora of existing research that looks into teamwork

dynamics, virtual teamwork, and the virtuality of teamwork. But topics such as e-entrepreneurship and MWFH teams are yet to be developed and researched more. Because of this, the guiding questions are based on research on virtual teamwork and teamwork. Because this realm of study is ever-evolving and very much context-dependent, the academic literature available to provide specific theoretical support on the topic of MWFH start-up teams is limited and, therefore, can be difficult to ground in theory and literature. The authors recognize that they may have identified challenges that will prove inconsistent with future collected data on this topic. Nevertheless, the framework of challenges identified with MWFH start-up teams provides a starting point for future academic work that will explore this research topic further with different methodologies.

6.3. Suggestions for future research

In line with the conclusions of this thesis, three recommendations for future research are given. The first recommendation is to expand the methodological focus of this thesis. Keeping the limitation of the findings in mind, the data generated in this thesis represents mostly the perspective of one individual per start-up team. As the conclusions of this thesis show, findings illustrate unique individual lived experiences that translate into challenges faced with MWFH. It is recommended for future research to analyze multiple individuals within a start-up team. This will benefit academic literature on MWFH and start-up teams. As such, a holistic picture can be illustrated that represent start-up teams as a whole.

Secondly, throughout conducting this thesis the Covid-19 pandemic is still unfolding, making it impossible to conclude best practices in transitioning to MWFH within the context of a start-up team. Therefore, it is recommended for future research to reassess the transition of start-up teams to MWFH after the Covid-19 pandemic has passed to evaluate the best practices leading to optimal performance of start-up teams. It will contribute to the academic literature on e-entrepreneurship and virtual start-up teams and can provide guidelines to future start-up teams transitioning to (involuntarily) virtual teamwork.

Lastly, to draw further on the conclusions of this thesis, future research is recommended to identify the managerial challenges paired with hybrid forms of start-up teamwork in which virtual and traditional office work is combined. Individuals within start-up teams have displayed

varying preferences regarding WFH, work from the office, or a combination of both. Future research on this topic would continue the academic debate on the facilitation of flexible types of working that may positively influence individual team members' motivations, productivity, and performance.

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Appendix A: Consent form

Interview Consent Form

Supporting the thesis: Challenges faced by mandatory-work-from home start-up teams

I have been provided with information about *supporting the thesis: Challenges faced by mandatory-work-from-home start-up teams* and discussed with Jasper Wilmes and Sofie van den Berg who are conducting this research as a part of a Master's in Entrepreneurship and Innovation at Lund University, supervised by Anna Brattström and Diamanto Politis.

- I understand that, if I consent to voluntarily participate in this project, I will be asked to give the researcher a duration of approximately 60 minutes of my time to participate in the process.
- I understand that individual participants in this research remain completely anonymous and individual names will not be mentioned in the final thesis. The meeting will be recorded for transcription purposes.

By signing below I am indicating my consent to participate in the research as it has been described to me. I understand that the data collected from my participation will be used for the thesis.

Name:

Email:

Telephone:

Signed:

Appendix B: Information sheet

Information Sheet for Participants

By taking part in this interview, you are contributing to the master thesis titled: *Challenges faced by Mandatory-Work-From-Home Start-up Teams*, which is part of the Master's Program in Entrepreneurship and Innovation at Lund University-School of Economics and Management (Sweden). The authors of the thesis are students Jasper Wilmes and Sofie van den Berg, and the supervisor is professor Anna Brattström.

The thesis aims to explore the challenges faced by MWFH teams within the context of start-ups. Through conducting case study research based on semi-structured interviews within the context of start-ups, we aim to describe and explore the challenges and barriers of virtual teamwork in MWFH teams. In the following bullet points, we will enlist all the principles upon which the interview will be based, and in particular, all the **measures are taken by the researchers to guarantee the protection of the participants' privacy and anonymity**. We, therefore, encourage you to **read it very carefully before signing the consent form**:

- Participation in the interview is voluntary, and thus we express our gratitude for your time in advance.
- The interview will be approximately 60 minutes and will be conducted through a video call. Zoom is the preferred platform to use.
- The interview will be anonymous: the interviewers will not mention names or identity throughout the course of the interview.
- The interviews will be recorded with the aid of a voice recording program. The recordings are solely used by the researchers and for transcribing the interview.
- Other researchers or professors may have access to the collected data (in the form of transcriptions) if and only if they adhere to the measures taken by the authors aimed at guaranteeing your anonymity, as established in this document.

If any concerns or questions arise that you would like to ask, contact one of the researchers.

Thank you for your participation and for your time.

Jasper Wilmes and Sofie van den Berg

Appendix C: Guiding questions

Pre-Covid-19		Questions
1	Home life	<ol style="list-style-type: none"> 1. Can you describe your everyday routine from morning to end in a general sense? 2. How did you balance your work - home life? 3. Did you have a space to work from home? <ol style="list-style-type: none"> a. If yes, can you describe it? b. If no, did you work from home before?
2	Socio-emotional influences	<ol style="list-style-type: none"> 1. Were there moments when you felt lonely at the office at any point? <ol style="list-style-type: none"> a. If yes, how did you cope with that? b. If no, were there any other emotions? 2. Was there a feedback mechanism in place before the pandemic?
3	Technology dependency	<ol style="list-style-type: none"> 1. Were you dependent on working in the office? 2. How was technology facilitated? 3. What programs did you use for team collaboration and communication? <ol style="list-style-type: none"> a. Were they helpful? b. How much did you use them?
4	Leadership	<ol style="list-style-type: none"> 1. Describe the hierarchical structure of the office. 2. In what ways was this evident? 3. What were the procedures and routines in approaching a manager? 4. How was the relationship within your team?
Transition		Questions
1	Home life	<ol style="list-style-type: none"> 1. How was the sudden transition experienced at home? 2. (If with kids) How did they deal with the sudden change? 3. In what ways did you try to accommodate to the sudden transition? 4. Were there any steps you took to alleviate any initial stresses?
2	Socio-emotional influences	<ol style="list-style-type: none"> 1. How did you feel the team experienced the transition? 2. How did you experience the sudden transition? 3. In what ways did you try to create contact moments with the team? 4. Were there any initiatives from the corporate incubator to assist in well-being and team bonding?

		5. Did you notice any immediate differences in how team members changed their working habits?
3	Technology dependency	1. How were you facilitating technology wise? 2. What programs were implemented for the transition? 3. Did these programs help?
4	Leadership	1. During the transition phase, was there any visible leadership? 2. Did you have a feedback mechanism for yourself? 3. Was leadership important in the transition? 4. Were there any visible challenges that came up during the transition?
During Covid-19		Questions
1	Home life	1. Its been almost a year, how are you coping with home-life balance? 2. Are there any challenges you have come across? 3. Have you been able to overcome these at home challenges? 4. Would you prefer this way of working?
2	Socio-emotional influences	1. Have you experienced any challenges in terms of social or emotional connections while working at home? 2. What challenges have you come across in terms of well-being? 3. Have you incorporated any new routines that can help alleviate these challenges? 4. How has the team supported your or each other during the working at home moments?
3	Technology dependency	1. Has your team found a way to effectively communicate and collaborate? a. In what ways? 2. What would you have done differently?? 3. What are some challenges you still come across?
4	Leadership	1. Has there been strong leadership during the lockdown? 2. Has a sense of trust been build? 3. In what ways have leadership changed or stayed the same while working at home?