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The Disappointing Romance - A Story of Virtual Teams in the Workplace.

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Abstract

Since the mid 90s, globalisation has been an unstoppable trend in the world. To cope with the fast-changing international operations, virtual teams (VT) have been widely used. This study takes place in the context of IKEA in Sweden and is built on semi-constructed interviews and on-site observations. We have adopted the qualitative and abductive approach to interpret the underlying dynamics of VTs and the understanding from VT members upon this team setting. This study aims to analyse the idealistic view of VTs and discuss if VTs can be seen as teams. Our contribution is to provide a new perspective on VTs, in contrast to the mainstream literature under the functionalistic approach.

Keywords: virtual teams, teams, IKEA, interpretative study, qualitative study, future work setting, non-instrumental study, grand expectation, critical review

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Chapter 1 - Introduction

In the opening chapter, we will first introduce the concept of virtual team (VT) by providing an imaginary prologue. Then, the root and the common understandings of VT will be presented, which lead to the background information about VT in globalisation. Drawing upon this information, we spot a research gap and formulate our research question. This chapter will end with a thesis overview.

1.1 - Prologue

Imagine yourself sitting in front of the Great Wall in China, talking to your colleagues, sitting in front of the Eiffel Tower in France and another one is just coming back from his fika break in Sweden. You attend a meeting as a hologram in the US in the morning to discuss the next project steps with your colleague, at the same time as he is driving home from work in Australia. Apart from the hologram which might be in its development, the rest of the imagination is already possible in the real world. It is no longer a science-fiction to be able to communicate and collaborate with your colleagues overseas. Our private and working life are getting more digital and VTs seem unstoppable and are nowadays being taken for granted by most of the organisations. Despite the trend of VT, we would like to remain reflexive on how this team setting actually works. Therefore, this thesis aims to reflect upon the VT setting in workplaces. We are interested in investigating what the underlying phenomenon is and what practices we need to take care of.

1.2 - Background

Throughout the last decades, a transformation of the working conditions has occurred. Nowadays, working together on the same project, does not mean to be necessarily located in the same office (Johnson, Beyerlein & Beyerlein, 2009). Before this distributed working condition gets popular in the current decade, the concept of VT has its origin from the late 1980s and early 1990s. At that time, companies have begun to adopt empowered and self-managing work teams

to reduce bureaucracy and expedite decision making time and flexibility. Due to the globalisation in the middle of the 90s, big corporations started to employ organisational members from different parts of the world, increasing the demand of geographically distributed teams (Ebrahim, Ahmed & Taha, 2009). With the advances in technology, geographically distributed teams can collaborate via digital communication tools and form VTs (Kirkman et al., 2002). Yet, it is not only the advances in technology that cause VTs' popularity, there is another reason behind the trend of VT in organisations.

VTs are increasingly used due to globalisation, which integrate the economic activities such as trading, production and recruiting over the globe (Al-Rodhan & Stoudmann, 2006). Globalisation enables companies to have a wider option to expand internationally through merger and acquisition, joint venture, etc. (Kozlowski & Bell, 2013). The distributed locations of employees around the world encourages organisations to implement VTs since travelling for every meeting or having expatriates in all functions might not always be possible. Moreover, in order to understand the customer needs and behaviour in other countries, local expertise is needed (McDonough, Kahn & Barczak, 2001). Indeed, Bell and Kozlowski (2002) propose that the more specific and niche the expertise is, the greater likelihood that the expertise can be found overseas. VTs hence provide organisations another way to acquire talents around the globe and facilitate them to work with colleagues who are located in another part of the world. In short, on one hand VTs allow organisations to survive and operate in the globalisation while on the other hand, VT can be a catalyst of globalisation as it facilitates organisations to capture international growth and opportunities. Therefore, VTs seem to be the suitable way to work in globalisation.

Even though VTs have been widely used in the commercial world and received increasing attention from researchers, it seems that practitioners and scholars have not reached a consistent understanding of VTs (Jimenez et al., 2017). Different authors have their own criteria of VT, for example, some of them claim that a VT needs to be geographically distributed (e.g. Dafoulas & Macaulay, 2002; Maznevski & Chudoba, 2000; Peters & Manz, 2007); and members of a VT need to share a common goal (Rezgui, 2007). In addition, because of the geographically distributed characteristic of VTs, team members will mostly communicate via digital tools such

as telephone, email and video conferencing and they have limited face-to-face interactions (Bal & Teo, 2000; Dulebohn & Hoch, 2017).

Among various description of VTs, we find that Dulebohn and Hoch (2017) have the elaboration which includes almost all the aforementioned characteristics. They claim VT setting as “work arrangements where team members are geographically dispersed, have limited face-to-face contact, and work interdependently through the use of electronic communication media to achieve common goals” (p.569). Additionally, we also agree with Bal and Teo (2000) that VTs are usually not permanent and involve cross functional collaboration, which are similar to the ‘project teams’ in Kozlowski and Bell’s (2013) typology on teams. Drawing upon these understandings, the major characteristics of VTs are that (a) team members do not work in a co-located office, instead, they work geographically distributed with limited face-to-face interactions; and (b), team members heavily rely on technology to communicate. Further literature review on teams and VTs will be presented in Chapter 3.

1.3 - Research Gap

In the study of VTs, we have identified that VT scholars mostly focus on the functionalistic approach of this team setting. Functionalistic approaches aim to explain what needs to be done and what tools and prerequisites are needed for VTs in order to function well. The approach focuses on aspects such as a well-functioning technological infrastructure shall be given in order to communicate flawlessly, project processes shall be regularly checked and controlled in order to ensure an efficient outcome. These researches are more seen to be the ‘best practices’ or the ‘recipes’ to solve the challenges or the problems within the VT setting. We spot a research gap that not much research has been done with the interpretative approaches. The interpretative approaches are more human centred and focus less on the structural and operational factors. These approaches analyse the sense making and the dynamic behind VTs and VT members. We see this research as a contribution because VT setting seems to be a new unstoppable trend under globalisation. Before we fully implement VTs into our future workplace, there is a need to first understand what the concept is. We aim to contribute the academic sphere by questioning and challenging the underlying assumptions in the existing literatures and concepts of VTs.

1.4 - Research Purpose

This thesis aims to provide a new perspective on VTs to both business practitioners and academic researchers. We provide the reader with an empirical study to a multinational company which uses VT setting. In terms of business practitioners, the trend of VT seems to be unstoppable under globalisation, and thus we see a need to have a deeper understanding of this emerging work setting for the future workplaces. For the academic world, we find that most of the research adopt a functionalistic approach and there is a limited amount of interpretative research upon VTs. Hence, we intend to explore this research gap by providing an interpretative research to understand the underlying dynamics and challenges of VTs. By understanding VTs, we will reflect upon some of the romantic and idealistic assumption of VTs and question to what extent can VTs resemble teams. In short, the thesis tries to unpack and reflect the concept of VT by understanding its dynamic by an interpretative approach.

1.5 - Research Questions

In light of the above, our research question is:

1. What is the underlying phenomenon of virtual teams in the workplace?
 - a. to what extent can a virtual team be seen as a team?

1.6 - Outline of the Thesis

The **first chapter** of our thesis has given a broad overview on the concept of VTs, and our research purpose and question. The **second chapter** will state the methodology we adopt in our research. The philosophical groundings and research approach will be discussed, followed by the method in data collection and analysis, and the limitations of this thesis. The **third chapter** gives an in-depth literature review upon the concept of teams and VTs. In the review of VTs, we categorise the literatures under the functionalistic and the interpretative approach. The **fourth chapter** presents our empirical findings. In order to illustrate it as a story, we use a metaphor of a cruise, thanks to a quote from our interviewee in describing in getting VT members “*on-board*”. The **fifth chapter** will analyse the empirical findings together with the literatures review. The chapter will also discuss the research questions. The final chapter, **chapter six** will conclude the thesis and provide some suggestions for future research and practitioners.

Chapter 2 - Methodology

In this chapter, the methodology we use in writing this thesis will be elaborated. The chapter will begin with the philosophical groundings and research approach behind the whole thesis. Then, the methods we use in data collection and data analysis will be presented. The chapter will end with the limitation of our methodology and a summary.

2.1 - Philosophical Groundings

Before answering the research question that we have presented in the Chapter 1, we will first clarify the approaches we have adopted in understanding VTs. By clarifying the philosophical groundings in this paper, we aim to answer and explain the question ‘How can we understand virtual teams (VT)?’

There are various philosophical paradigms to understanding a concept and each paradigm has its assumptions. One of the paradigms is positivism, which assumes that researchers can use objective data collection method to discover and understand the concrete reality (Prasad, 2005). Positivists consider data as something that “exists, and already there” (Alvesson & Sköldbberg, 2018, p.21) waiting for the researchers to collect and systematise. However, we disagree with the assumption of positivism in this research context. We assume that the understanding and the underlying pattern in a specific VT highly depend on its context such as organisational structure and team member’s relationship. In the other words, we believe that there is neither an objective truth nor a definite pattern in VT.

In accordance to this assumption, we follow the social constructionism in writing this thesis. Social constructionism sees the reality as complicated and unstable because it is co-constructed through language and social interaction but not something given by the nature (Alvesson & Sköldbberg, 2018). It assumes that there is neither an objective reality nor truth existing and waiting to be discovered by researchers. Instead of discovering an objective and stable reality of

VTs, we will understand VT through social interactions such as language and symbols that our interviewees use to make sense of VTs.

Apart from different paradigms in understanding how reality is constructed, there are also different methods in discovering the reality. According to Alvesson & Sköldberg (2018), two common ways to discover reality are induction and deduction. The former departs from a number of observations and assumes that the connection or pattern behind these observations could be considered as reality or knowledge; while the latter deduces the theories to explain a certain observation. Yet, in this research, we have taken the abduction method. According to Alvesson & Sköldberg (2018), abduction method has “certain characteristics from induction and deduction” (p.4). Abduction shares a similar characteristic as induction, in which both methods begin with empirical material. Yet, abduction has another characteristic which induction does not possess – abduction takes theoretical preconceptions into account. The acknowledgement of theoretical preconceptions constitutes the similarity between abduction and deduction. However, unlike abduction which begins with empirical material, deduction starts with researchers’ hypothesis. In short, with the abduction method, the interpretation and analysis of empirical materials will be combined with the previous knowledge of the researchers.

In this thesis, we start with collecting the empirical data and then analysing and theoritising them with our previous knowledge and theories from our education in organizational studies. We acknowledge that our preconceptions influence the interpretation towards the empirical findings. Hence, we consider this thesis as an abduction study.

2.2 - Research Approach

Due to the fact that we consider this research following the abduction method and a social constructionism paradigm, we believe that subjective reality can only be understood through the interpretation of the empirical materials. Hence, qualitative approach has been used in this thesis rather than quantitative approach. Qualitative study recognises the ambiguity of reality and allows researchers to begin the study from the research subject’s perspective, that is, the context where the researchers and empirical materials are situated; while quantitative study begins with a central focus on researchers’ preconception on theories and ideas (Alvesson & Sköldberg, 2018).

According to Denzin and Lincoln (2005), qualitative approach involves interpretation to the world in its natural setting. The role of qualitative researchers is to transform the world into visible by data collections tools such as interview, recordings and field notes, in addition to researchers' interpretation to the empirical materials. The reason we have chosen to conduct a qualitative study is that it aligns with our philosophical assumption that the reality is socially constructed and therefore, a study of reality would be a study of the empirical site and its actors in their natural setting.

Within the interpretative tradition, we want to focus on the hermeneutic tradition, which is focusing on "textual interpretation" and "making the obscure more obvious" (Prasad, 2005, p. 31). We will comprehend the texts, which are interview transcriptions and the written interview observations. We will follow the school of thoughts that hermeneutics is both faithful and suspicious. On the one hand with the hermeneutics of faith, we carefully investigate and understand the interpretation of these texts by understanding the organisational context behind, such as the policy, system and value. While on the other hand, we follow the hermeneutics of suspicion by reviewing the text in a critical way and that some of these texts and phrases are artefacts with an underlying purpose (Prasad, 2005, p. 34). By reviewing both the interview transcriptions and observations, we will be sensitive towards contradictions between interviewees' statements.

In addition, the corporate documents such as an employee handbook will be studied in order to understand the wider context of the organisation including values and policies. The study of text and its wider context helps us to understand and allows us to move back and forth in the hermeneutic circle. The concept explains that text cannot be comprehended without its wider context and vice versa (Prasad, 2005). In sum, we will deploy hermeneutic circle by reading between the lines of the interview transcription and observation regarding employees' interpretation of VTs; we also aim to understand VTs better by integrating them into the wider context, including but not limited to IKEA's culture, norms and structure.

2.3 - Data Collection

Firstly, the data collection of our research begins with semi-constructed interviews and on-site observations. We have held the interview with open and unframed questions about interviewees' working tasks and collaborations with their colleagues. The aim to ask open and unframed questions is to allow the flexibility for each interviewee to tell their own story (DiCicco-Bloom & Crabtree, 2006). We have conducted seven interviews, with VT members of different projects located in Sweden and Germany. An interview is conducted via video conference with an interviewee located in Germany; the rest are done face-to-face in the IKEA office. These interviews last approximately for one hour and are recorded by smartphone upon interviewees' agreement. We have anonymised our interviewees' names in order to embrace an open and honest discussion.

While one of us mainly leads the interview, the other will observe the interviewees and ask follow-up questions. In the follow up questions, we ask the interviewees to give both their personal opinions and understandings of some particular concepts such as the VT settings, in order to understand how they make sense of them. The interviews also arouse our awareness to the wider context of our empirical site, such as company value, policy and structure. Since we aim to follow the hermeneutics circle, these understandings on the wider context are particularly important in order to interpret the text describing the VT and vice versa.

Additionally, both of us will exchange and note our observations after each interview. We focus on interviewees gestures, way of speaking and facial expressions. Besides these observations, we pay attention on the surrounding in the company site – where have the interview taken place, how was the company atmosphere, any changes from the last interview, etc.

Secondly, we transcribe all the interview recordings into texts. We listen and transcribe them word by word, indicating long breaks or hesitations, verbalizing sounds as well as laughing sequences or significant lowered voice. As none of the interviewees and interviewers are native in spoken English, we have slightly rephrased some words in the transcriptions, such as 'yeah', 'em' and repetitive words, in order to enhance the readability of the transcription without changing the original meaning.

2.4 - Data Analysis

After the collection and transcription of data through interview and observation, the next step is to review and analyse the empirical data. We follow Strauss and Corbin (1998) three stages coding practice, which might be the most commonly used method in qualitative social science research (Alvesson & Sköldbberg, 2018). As described by Strauss and Corbin (1998, p.3), coding is “the analytical processes through which data are fractured, conceptualised, and integrated to form theory.” The practice firstly begins with the *open coding*, in which we read through the transcription, identify and make sense of the key concepts and terms mentioned by our interviewees. Secondly in *axial coding*, we make connection of the themes that we identify in the previous stage and create sub-categories. Sub-categories are formed with an acknowledgement that the connections of concepts are influenced by our preconception of organisational studies’ theories. In this stage, we constantly place the interview quotes into a self-designed grid which consists of the emerging sub-categories that we identify. This grid helps us to get an overview of the overlapping and connecting themes mentioned by our interviewees. Lastly in *selective coding*, we integrate the overlapping and connecting themes, and search for the underlying patterns and contradiction. The *selective coding* stage helps us to identify core themes and hence to theoritise them in our research. Even though Strauss and Corbin (1998) have named the practice under three stages, we agree with Styhre (2013) that coding is a nonlinear process. Therefore, we constantly review the self-designed grid and categorise them repetitively into the emerging pre-concepted themes.

2.5 - Credibility and Limitation

Although qualitative research recognises researchers’ biases to interpret the research subject’s perspective, it can be tendentious (Stake, 2010). In order to avoid over-interpretation of the empirical materials, we consistently remain reflexive towards our interpretation on the language and symbols we have collected. We try to keep a distance between the research and the empirical site by avoiding categorising statements that are not completely elaborated or explained by our interviewees into concepts or frameworks. By asking similar questions to every interviewee, we remain cautious on arising similarities and contradictions of their answers in order to increase the

credibility and validity of the research. In addition, we have highlighted the following limitations in our research.

Firstly, the choice of interviewees is pre-selected by our point of contact, and they are all working in VT under similar business function. Even though the interviewees hold various hierarchical positions and years of experience, we acknowledge that the limited number of interviewees can be a limitation to generalise our findings to all VTs. Moreover, our short research period of four months hinders us to build a trustful relationship with our interviewees, which might obstruct a more honest and open conversations.

Secondly, due to confidentiality, we cannot shadow any of our interviewees in their work day. Our understanding towards VTs is only obtained by the scheduled interviews. We acknowledge that the scheduled interviews are less natural and spontaneous than shadowing as interviewees are being set 'on-stage'. In addition, we only rely on voice recording tools which limit a repetitive observation towards interviewees' gestures and emotions.

2.6 - Chapter Summary

To summarize, this second chapter has addressed the methodology adopted in the thesis. As presented in the short introduction in the beginning, we outline the philosophical groundings and research approach behind the research. We focus on a social constructionism and an abductive paradigm with the aid of the qualitative and the hermeneutics approach to interpret our empirical materials. Then, we have described how data is being collected and analysed. Moreover, the acknowledgement towards the credibility and limitations in our study has been declared.

Chapter 3 - Literature Review

This chapter will present the theoretical concepts behind this research from the existing literatures. To begin with, we will start with the concept of teams in organisations. Then, virtual teams (VT) will be introduced in the functionalistic approach with the Input-Process-Output framework (IPO framework) and then we will give a brief review on VT in the interpretative approach. The chapter will end with a summary.

3.1 - Team

To understand the concept of VT, this subchapter will first start with a discussion on the definition of teams. According to Forsyth (2009) and Kozlowski and Bell (2003), teams can be defined as a group of people who have individual roles to perform certain goals. Within a team, team members are highly coupled through both task-oriented and social interactions. They are interdependent as each members' performance will affect the others'. Moreover, Forsyth (2009) emphasises that a team should have developed a shared team identity among members to pursue a common goal.

The term 'teams' and 'groups' are often interrelated in literatures, yet Katzenbach and Smith (1993) separate these two concepts by explaining that group results are more individually accountable while team results are more mutually accountable among team members. Although we acknowledge Katzenbach and Smith (1993) that the level of accountability could distinguish team and group, the accountability towards team or group results is not our research focus in this thesis. Hence, we share the same view as Guzzo and Dickson (1996) and Kozlowski and Bell (2003) that the term 'teams' and 'groups' will be interchangeable in this thesis.

Noting that the ubiquity of teams in our society might lead to a vague and broad research area, we follow a typology of teams in order to narrow down our research topics. Teams can be categorised into different types, namely production, service, management, project, action and performing, and advisory (Kozlowski and Bell, 2003). In this research, we will focus on project

teams in organisational settings which are “temporary entities that execute specialized time-constrained tasks and then disband” (Kozlowski and Bell, 2003, p.7). In particular, we will focus on project teams in the virtual setting, which the concept will be explained further.

Merely assembling several people into a team does not make a team works. Effective team work requires collaboration among team members towards a certain goal as the aforementioned definitions of teams suggest. Our literature research has identified that the following factors could affect team members collaboration and hence crucial for teams:

Identity

One of the important factors which facilitates teamwork and members’ collaboration is that team members share a strong and common identity. Identity can be considered as “how individuals or groups of people understand and define themselves” (Alvesson, 2004, p.190). According to Alvesson (2004), the identity of a person or a group is a reflection of oneself in answering the question “Who am I?” By constructing an identity, people can define who they are and who they are not. Identity can be constructed through language describing the reality, and the comparison and interactions with other people and groups. The comparison helps to distinguish a group from another and helps people to position themselves in the society. Identity also assists people to reduce uncertainty in self-concept and enlarge self-enhancement (Chao & Moon, 2005).

While the comparisons and the social interactions can help to constitute identity, and answer the question ‘Who am I?’, the answer of this question will affect individual’s decision making, prioritisation and motivation (Alvesson, 2004). The reason behind is that people constantly tend to make-sense and behave in a consistent way in order to align with the conception of who they think they are. To establish and maintain their identity consistently, people will interpret reality in a particular way to align with their identity (Mills, 2003; Weick, 1995). A specific identity will hence affect the understanding of a particular message and the logical deduction of it when making decisions (Mitchell, Rediker & Beach, 1986; Shannon & Weaver, 1949).

In addition to the influence on decision making, a strong and coherent identity can serve as a basis for social relations, which is particularly important in handling work tasks and social

relationship at workplace (Alvesson, 2004). As it will be explained later, social relationship at the workplace is crucial in building trust in order to facilitate team collaboration. By serving as a basis for social relations, a strong common identity can build trust among team members. This has been confirmed by Brewer and Miller (1996, cited in Hinds & Mortensen, 2005) who state that if a shared identity is salient, team members tend to be more loyal, trustful and thoughtful about the welfare of the team. With a strong shared identity, individuals can characterise themselves with their teammates as a unity of ‘we’ versus the individuals outside of the team as ‘them’ (Rousseau et al., 1998). Being identified in a team or having this ‘we’ feeling, it is experimented that people tend to exchange resources such as information more frequently (Gaertner, Dovidio & Bachman, 1996). Moreover, Kogut and Zander (1996) propose that a shared identity does not only promote social interaction and collaboration, it also establish rules of coordination in guiding how team members learn. In short, a strong shared identity increases the tendency to exchange information and build trust, which will reduce the communication cost and enhance collaboration.

Trust

Trust is defined as a “psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another” (Rousseau et al., 1998, p.395). It is neither a behaviour nor a choice, but a psychological condition. According to Williams (2007), trust can facilitate team collaboration by increasing risk sharing and information flowing among team members. There are several scholars also agree that trust is an important element for team members to collaborate, particularly in newly formed team (e.g. Awe, 1997; Glacel, 1997; Handy, 1995; Senge, 1994).

In psychological terms, trust can be established under two conditions – risk and interdependency (Rousseau et al., 1998). Rousseau and colleagues (1998) firstly explain that if the team work exists uncertainty and risk, team members will expect the others to perform in an appropriate way. On contrary, if the team operates in a context with complete certainty, no trust is needed. Secondly, they elaborate that team members’ interest, such as rewards, needs to be interdependent and cannot be achieved individually. Otherwise, trust is again not necessary as

individual rewards can be obtained without any reliance on the others' performance. In short, trust can be developed through formal collaboration in the workplace.

Apart from formal collaboration which will commonly appear in project teams in an organisational setting, there is another way of building trust namely informal social interactions. Informal social interactions might depend on the possibility and frequency for team members to socialise. Trust could be built from interpersonal interaction such as personal conversation and storytelling (Holton, 2001). In the other words, trust can be developed through social interactions among team members by daily non-work-related, informal conversation, corridor talk or greetings in pantry, etc. As a result, Holton (2001) suggests that in order to build trust through informal interactions among team members, it is important to ensure that adequate time and space is assigned for team members to have conversations. Building up on the personal social relationship established from caring talks or pantry greetings, the intimacy and trust among team members can trigger and enhance more critical conversations as team members are able to respect and understand each other better (Comstock and Fox, 1995 cited in Holton, 2001).

With an ongoing dialogue with sufficient depth, trust and open communication can be nurtured (Nevis, DiBella & Gould, 1995). Team members who trust each other have a higher tendency to rely on each other and to exchange feedback more openly and critically, which will enhance team collaboration. Hence, Jarvenpaa, Knoll & Leiden (1998) argue that trust can reduce the use of authoritative control. Instead, team can achieve in self-control with the increased confidence and secured relationship.

Meaning Alignment

Apart from having a shared identity and trust, it is also important for team members to have a meaning alignment. Meaning alignment has been widely mentioned by scholars in different wordings such as shared context (Bjørn & Ngwenyama, 2009; Hinds & Mortensen, 2005), same rhythm (Ancona & Chong, 1996, cited in Hinds & Bailey, 2003) or mutual understandings (Fussell & Krauss, 1992). We have integrated these wordings as meaning alignment, which can be understood as a context in which team members share a common ground of understanding

and interpretation on information, work process, work tools and events (Bjørn & Ngwenyama, 2009; Hinds & Mortensen, 2005).

Meaning alignment in the organisation can be sourced in three levels: the lifeworld, organisational structure and work practice (Bjørn & Ngwenyama, 2009). The lifeworld meaning alignment in organisation is built on the interpretations of the members and the collective experience they shared. According to Gioia (1986) and Schütz (1982), the lifeworld is bestowed by people's memories and it can be considered as a frame-of-reference to interpret meanings. Hence, it is often related to an alignment of deep-rooted belief of individuals, originated from the organisational culture, values and taken-for-granted assumptions (Ngwenyama & Klein, 1994).

Comparing to the lifeworld alignment, the organisational structure meaning alignment is more visible. It comprises explicit organisational structure such as policies, norms and symbol (Gioia, 1986). The meaning alignment from the organisational structure is constantly changing since it will be reshaped by ongoing social interaction and negotiation upon the “emergent regularities” – rules, policies, norms, etc., whenever there is a new work pattern (Klein & Truex, 1996, p.265). The third kind of meaning alignment emerges from work practice, specifically common languages. These common languages are developed by daily work or professional backgrounds such as abbreviation and jargons respectively. Similar to meaning alignment from the organisational structure, the alignment from the work practice is frequently developed. It changes based on new languages from work-oriented and social interaction in workplace such as corridor talks or text documents such as emails, memos, meeting minutes, etc. (Bjørn & Ngwenyama, 2009). These three levels of meaning alignment provide a context that affect how team members make sense and socialise, and thus they are crucial to team collaboration (Weick, 1993).

To facilitate meaning alignment in an organisational context, Hinds and Mortensen (2005) suggest that spontaneous communication is the key. It is because spontaneous communication is more flexible and casual that it allows open and unframed conversations which might be important for meaning management at a moment when there is confusion. Moreover, some scholars (e.g. Hinds & Mortensen, 2005; Tyre & Von Hippel, 1997) claim that co-located team members will have better meaning alignment as they share rich visual and sensory data. These

data can help them to observe symbols with embedded clues and overhear others' activities in the background, which give them a better understanding upon team members' tasks and struggle. Without an appropriate meaning alignment, teams have a greater likelihood to have conflicts and misunderstanding; divergent thinking can hence result serious breakdowns in collaboration (Cramton, 2001; Hinds & Mortensen, 2005; Jehn, Chadwick & Thatcher, 1997).

Even though we have presented some important factors which might enhance teamwork and collaboration among team members, we do not attempt to provide a recipe to grant a successful team collaboration in all context. Indeed, Hinds and Bailey (2003) argue that most of the research on team assume that team members are co-located and communicated face-to-face. By sharing the same understanding as Marks and Mathieu (2001) that the nature and condition of the team activity can also affect the teamwork. We believe that teams, when operating in different context, will require different preconditions to perform. Hence, the next subchapter aims to provide a review on teams in a virtual context – virtual teams (VTs).

3.2 - Functionalistic Literature Review on VTs

After understanding teams in chapter 3.1 and VT's definitions, origins and trends in chapter 1.2, this subchapter aim to present a review on the functionalistic literatures explaining how VTs work and the factors affecting their effectiveness. We will present our review based on a popular framework namely the Inputs-Processes-Outputs (IPO) Framework and it is widely used by scholars to study VTs (e.g. Dulebohn & Hoch, 2017; Martins, Gilson & Maynard, 2004; Hiltz, Johnson & Turoff, 1986; Powell, Piccoli & Ives, 2004). Even though the IPO framework is popular in VT research, it is worth noting that the framework is originally designed to analyse traditional co-located teams' performance and effectiveness (Hackman & Morris, 1975; McGrath, 1964). In the other words, these scholars who use the framework to analyse VT have an underlying assumption that VT is a kind of teams. With an awareness to this assumption, the rest of this subchapter will review some of the current literatures by categorising them with the IPO framework. The IPO framework is composed by: inputs, team process and emergent states, moderators and outputs (Dulebohn & Hoch, 2017; Martins, Gilson & Maynard, 2004; Powell, Piccoli & Ives, 2004).

Inputs

Literatures on VTs' input factors those which focus on the characteristics of team design and team composition of VTs. Even though we have labelled team design as one of the input factors, it represents several characteristics of the VT. For example, team design can be referred to team size. There are some scholars claiming that an increased team size of VT will have negative impact on team members communication. That is because there is often only one team member talking at the same time while the others are just listening. Consequently, by being passively involved, the listeners might lose interest (Riopelle et al., 2003). Meanwhile, there are some literatures arguing that the increasing team size in VTs can generate more ideas (Gallupe et al., 1992; Valacich, Dennis & Connolly, 1994).

Another research area on team design is the team composition – the possibility that VT members can interact face-to-face. Research suggests that VT members with higher interaction and periodic face-to-face meeting facilitate relationship building and sensemaking, and hence performance (Gibson & Cohen, 2003; Kirkman et al., 2004).

Team Processes

According to Marks, Mathieu and Zaccaro (2001, p.357), team process is defined as “the means by which members work interdependently to utilize various resources... to yield meaningful outcomes.” Alternatively, team processes can be considered as the way to transform input to output in a team. The authors categorise literatures about team processes into three types – planning processes, action processes and interpersonal processes.

Planning processes include mission and goal setting, and strategy formulation (Martins, Gilson & Maynard, 2004). Researchers have found that VTs with a clear and settled goal have a better team cohesion, team commitment, collaborative climate, perceived decision quality and more decision alternatives (Huang et al., 2003). Nevertheless, Blackburn, Furst and Rosen (2003) argue VTs might encounter more difficulties in setting goals than co-located teams do. Therefore, they suggest that preliminary face-to-face meetings for VTs members will increase its performance.

Action processes concentrate on the team dynamics, which are occurring during VTs' operation (Martins, Gilson & Maynard, 2004). Within the research of action processes, the communication and collaboration of VTs are gaining the most attention from researchers. VT research on action processes compares between teams who are operating digitally and face-to-face. For example, Sproull & Kiesler (1986) compare email and face-to-face communication and find that there are weak social context cues in email communication and hence it will be more difficult to reach a consensus in decision making. Recent research done by Dulebohn & Hoch (2017) claim that collaboration and communication is more difficult in VT as team members will have to tackle a lower engagement from team members, difficulties to share responsibility, and challenges in monitoring and managing VTs. The overall frequency of communication, as concluded by some literatures, are less in VTs than face-to-face (e.g. Bhappu, Zellmer-Bruhn & Anand, 2001; Hiltz, Johnson & Turoff, 1986).

The interpersonal processes in VT literatures centred on the informal communication between VT members, interpersonal trust and shared team identity (Martins, Gilson & Maynard, 2004). Research shows that VT's communication tends to be more task-oriented and informative rather than informal social exchange and relationship building. This phenomenon causes VT members to have a weaker social bonding than members who co-located (McDonough, Kahn & Barczak, 2001; Powell, Piccoli and Ives, 2004). As mentioned in chapter 3.1, unless interpersonal relationship is built, trust between VT members is difficult to establish (Holton, 2001). Yet, building trust in VTs could be difficult due to a lack of frequent face-to-face interactions and observations of team members (Handy, 1995; Kirkman et al., 2002). Literatures also suggest that without trust among VT members, information sharing is difficult which leads to a negative and decreasing performance (Hsu et al., 2007; Ridings, Gefen & Arinze, 2002). Therefore, scholars suggest that preliminary face-to-face meetings can assist in building up social relationships, which can enhance team performance (Robey, Khoo & Powers, 2000).

The final factor which the mainstream literatures deal with in the interpersonal processes is the shared team identity. Despite the fact that VT members are distributed in different locations and often being isolated with other team members, some literatures suggest that if team members can foresee themselves working together with their colleagues in the future, there is no significant

impact on team identity (Spears, Lea & Lee, 1990; Walther, 1997). However, some other argue that VT members share limited amount of contextual information and experience less memorable events in same physical location; thus, they will have a stronger identity attached to their ‘local’ subgroup rather than the identity with their VTs (Charlier et al., 2016; Finholt & Sproull, 1990).

Moderators

As defined by Dulebohn and Hoch (2017), moderators in the IPO framework influence the input-process pathway and the process-output pathway. There are a few moderators being researched in the VT field, for instance VT task type (Straus & McGrath, 1994) and task complexity (Bell & Kozlowski, 2002). Despite the variety of research in moderators, the key moderator being investigated in modern research is virtuality. In their journal review, Gilson and colleagues (2015) find that virtuality is widely used to describe geographic dispersion and technology usage of the VT. However, since most of the co-located teams nowadays also use technology such as email and telephone to communicate, Dulebohn and Hoch (2017) suggest that VT research on virtuality should centre on geographic dispersion rather than technology use (e.g. media richness, task-technology fit, etc.).

Factors in geographic dispersion include geographical distance, time difference and site configuration (O’Leary & Cummings, 2007). Bell and Kozlowski (2002) explain that the actual geographical distance – number of kilometres, is not as important as the effect brought by this distance. They argue that VT members with greater geographical distance will have less chance to meet face-to-face than those who are situated in the same countries but different offices. The chance to meet face-to-face is the factor that matters. Moreover, Grinter, Herbsleb and Perry (1999) argue that VTs with greater time zone difference will suffer from an increase of cost, especially in terms of members’ frustration and communication inconvenience. The differences in time zone lessen the chance for team members to share a complete overlapping business hours, and hence the communication between members in different locations.

Last but not least, the factor under geographic dispersion is the site configuration. Site configuration can be divided into coordination complexity, awareness to the isolated member and intragroup conflict (O’Leary & Cummings, 2007). The coordination complexity, as

explained by the authors, is that the larger variety of locations that team members are situated in, the more difficult they can be managed. In other words, a team with ten team members situated in two offices (e.g. 9-1) is easier to be managed by ten team members located in four offices (e.g. 3-3-3-1). In addition, research has shown that isolated members who are located in the satellite offices often received less attention from other members and being surprised by the decision making (Grinter, Herbsleb & Perry, 1999). Due to the fact that workers in remote site inevitably miss the ‘offline’ and informal conversation which are held in pantry and corridors. Additionally, they will receive slower information updates than team members situated within the same office. This isolation effect in the uneven distributed team can result in an intragroup conflict, which fuel to the creation of subgroups. Armstrong and Cole (2002, p.169) describe the creation of subgroup as “colleagues at one office site described as *us* and group members at distant sites labelled *them*”. The differences in identity towards subgroups might lead to conflicts and hamper team cohesion and collaboration.

Outputs

Outputs of the IPO framework is commonly defined as the outcomes, deliverables, performance and team satisfaction (Dulebohn & Hoch, 2017; Powell, Piccoli & Ives, 2004). Literatures regarding VT outputs can be categorised neither into affective or performance outcomes (Martins, Gilson & Maynard, 2004). The former concerns about team members satisfaction while the latter focuses more on VT effectiveness such as time to complete the task, quality of decisions, quantity of generating ideas, etc. The outputs of VTs are inconclusive among research since outputs are highly dependent on the combination inputs, processes and moderators. For example, McDonough, Kahn and Barczak (2001) have found that co-located teams will perform better than VTs as the former will have better social interactions; yet, some researchers show that VT will perform better in terms of idea generation (Gallupe et al., 1992; Valacich, Dennis & Connolly, 1994). Since outputs can be measured in various means and they are not a main focus in this research, we will not cover in detail in the literature review.

Advantages of using VTs

The virtual teams survey in 2016 have revealed that VTs seem to become ubiquitous, in which 85% of 1372 business respondents are situated in 80 countries and work in a VT setting. Further,

the majority of employees, 63% work on one or three teams simultaneously. Moreover, the aspect of multi-cultural collaborations has significantly increased, as outlined in the report, over half of VT members are from different cultures. (RW³ Culture Wizard, 2016).

Referring to the aforementioned survey which exemplifies the highly amount of people working in a VT setting. It highlights the request and the growing need for VTs in our globalised world. Literatures list a number of advantages of VTs and this team setting seems to be very promising. As mentioned in the VTs survey above, the majority of people can work together across geographical borders not only in one project, but more than one. It is described that VTs are productive (RW³ Culture Wizard, 2016). Alongside with many other authors, Dulebohn and Hoch (2017) mention the possibility to recruit team members regardless geographical borders. Not only can VTs enable 24/7 productivity due to the given advantages of the time zones, the authors also mention the possibility to save cost such as money and time on travel expenses or relocations. In addition, VTs provide the possibility to share knowledge across the globe. Another benefit of the VT setting, outline by DeRosa and Lepsinger (2010), is that VTs are able to adapt better to the shifts in the marketplace and the changing customers' needs. Furthermore, DeRosa and Lepsinger (2010) emphasize that the striving advances in technology, which make communication easier, is beneficial for organizations to save costs and work efficiently. Cost is saved under the aspects of travel-expenses and rents for expensive office overheads. Beside the above mentioned operational benefits, DeRosa and Lepsinger (2010) also focus on the personal benefits for employees. VTs are seen as a new flexible way to work. Employees are given the possibility to manage their time individually. This high level of given flexibility and autonomy might lead to a better work-life balance. Consequently, VT members are described to be more productive (DeRosa & Lepsinger, 2010). With all the benefits, VT setting seems to be the new revolutionary way to work.

3.3 - Interpretative Literature Review on VT

According to our literature research, we find that most of the literatures regarding VTs can be considered as functionalistic, which focuses on the strategies and factors that hinder and improve the VTs' effectiveness. Yet, there are difficulties in finding literatures which inherit the interpretative approach. The interpretative approach centres more on how research subjects make

sense of a certain situation and the social reality behind (Prasad, 2005). According to the author, interpretative research asks less about ‘what’ needs to be done in a situation, but more on ‘how’ research participants understand the situation. As we consider our research adopting the interpretative approach, there is a need to explore literatures of VTs in this approach. Therefore, we will present some limited interpretative literature on VT we have found as follows.

Grouping some people in a VT setting does not imply that a VT has been formed. According to the qualitative study from Sarker, Lau and Sahay (2001), a VT has its life-cycle and stages before they can be considered to be a VT. Stages include initiation, exploration, integration and completion. In the initiation stage, it is claimed that VT members will experience a high level of ambiguity regarding their understanding on roles, norms and goals. Next in the exploration stage, VT members shall develop more understanding on their roles and norms. This will start shaping the team identity but in this stage VT members will differentiate themselves between intra- and inter-located VT members. Undergoing the integration stage, VT members will have a clearer picture on their roles and establish a common identity and norm with their distributed teammates. Last but not least, VT members will go through a completion stage which characterises the closure of the project and thus the VT. Even though Sarker, Lau and Sahay (2001) adopt qualitative and interpretative approach, their research participants are students instead of business practitioners, which might lessen the validity in business world.

Similar to Sarker, Lau and Sahay (2001), interviewees in the study by Aripin, Mustafa and Hussein (2011) claim that VT members’ relationship is hindered by the VT settings. For example, the setting obstructs them to meet face-to-face and it leads to a difficulty in recalling memories about social interactions. Thus, it is stated that VT setting has its difficulties in establishing trust among VT members. Although we have presented some literatures which adopt the interpretative approach, there is a lack of interpretative research for the VT and this constitutes a research gap for this thesis.

3.4 - Chapter Summary

This chapter has begun with the literature reviews on teams. We have found three factors that affect team effectiveness and team members collaboration as mentioned by literatures. These factors, namely, identity, trust and meaning alignment will influence the team relationships among team members and facilitate a group of people working as a team. Then, we have presented the functionalistic research upon the VT concept. Most of the functionalistic literatures can be categorised under the IPO framework which suggests how a VT can perform better. Some of the functionalistic research also claim that VT can be advantageous for teams to operate under the globalisation. We have closed this chapter with a limited but important review on research adopting the interpretative approach. This approach focuses more on how VT members understand and make sense of the setting rather than finding strategies to overcome VT challenges. As we consider this thesis as a qualitative and interpretative research, a lack of existing literature under this approach offers a research gap for our study.

Chapter 4 - The Discovery Journey of a Cruise

The empirical materials chapter aims to demonstrate how our interviewees perceive VTs based on the interview quotes in our transcriptions. Inspired by the statement “*on-board*” by an interviewee, we will use a metaphor of a cruise to present our findings in a story. The chapter begins with a presentation of how our interviewees recognise VTs as an inevitable trend, how VTs form and operate. We will then introduce some of the benefits of VTs mentioned by our interviewees. Additionally, two dominating challenges we have identified in the study are presented. The chapter ends with a short summary.

4.1 - The Background of the Cruise and the Crews

To begin with, we will deliver some basic information about IKEA, our empirical site, in order to provide a better understanding of the company. IKEA is a multinational, privately owned retailer company for low price, ready-to-assemble furniture and interior design. It is founded by Ingvar Kamprad in 1943 in Samåland, Sweden. The IKEA group consists of more than 415 stores in 49 countries with 194,000 employees in 2018. Since the early 1980s, IKEA has started to expand globally, with 1200 furniture suppliers and 11 franchises operating in different continents around the globe (IKEA, 2018).

The globalised operation of our empirical site arouses our interests to study how organisational members work and collaborate. We interviewed seven employees, who are situated in Sweden (six) and Germany (one), and investigated how they collaborate. The following part will provide some basic background information about the interviewees’ education background and working experiences. A summary of their anonymised name and job title can be found in Table 1.

We interviewed seven team members, who have worked from 1 to 35 years at IKEA and their age is ranging from 35 to 45 years. Their job positions include Management Trainee, Business Architect, Product Owner, Project Leader, Change Management Responsible and Deputy Manager. Our interviewees operated in VTs, in which their team members are geographically

distributed around the globe, mostly in Sweden, Germany and the US. In addition, they mostly communicate via digital tools. The majority of interviewees have graduated with a Bachelor degree. Additionally, some of them has graduated with a Master degree in Information Technology, Service Management, Business Administration or Economics, predominantly at the Swedish universities. Some interviewees worked previously together in the projects within IKEA but some do not know each other.

Anonymised Names	Job Titles
Andrew	Change Management Responsible
Chloe	Management Trainee
Catherine	Project Leader
Fabian	Deputy Manager
Ken	Business Architect
Pamela	Product Owner
Steve	Business Architect

Table 1: Interviewee list with interviewee names (anonymised) and job titles

4.2 - Understandings of the Cruise Operation

As presented in the introduction and the research question, we aim to understand how the chosen interviewees in IKEA understand and operate in the VT setting. We began our interviews with a question asking them to describe their work and how they collaborate. The following quotes will firstly describe the international scale of our empirical site and the need to use VTs. Secondly, quotes related to team settings in global operation will be presented.

Firstly, the interviewees started with a short description about IKEA as a global company with geographically distributed offices:

*“It’s a very global company, it means that we’re **not always based in the same location**, we work across different offices”* Catherine, Project Leader

*“Teams that I work with, I would say **80% or 60% are based out in the world**, 25% are located in Sweden and some are in Germany”* Ken, Business Architect

Referring to these quotes, due to the global scale operation of IKEA, the teams are located in different offices around the globe. The global distribution of workers leads our empirical site towards a formulation of teams which work in the different offices and communicate digitally – as known as VTs. The following quote by Ken explains VTs as:

*“(VTs) I think it is **kind of needed**...because it’s not probably easy to have everyone in the same office”* Ken, Business Architect

It is therefore interesting to understand how teams are created and arranged within this global setting. The following quote will explain how Catherine as a Project Leader forms the teams in this global arrangement:

“Yes, I belong to a team called project office and then practically we’re almost like internal consultant. Someone comes and asks, I have this project which will last two years, approximately, we need this and this competence. We need someone who has a bit of experience in IT, [someone who has] a bit of experience in logistics or someone [who] has very good communication skills...”

Interviewer: *Do you recruit team member globally?*

Yes, exactly. The best one.” Catherine, Project Leader

A quote from a Business Architect, Steve, further characterized the VTs:

*“These [virtual] teams are **quite loosely organized**. Some people are sitting here... some in other countries like Sweden. They are **having a certain role, position or a certain task**.*

*Geographically they are not present, but they have a **mandate**”* Steve, Business Architect

VTs appeared to be quite loosely structured, team members have certain roles, different positions, tasks and decision mandates. Further, interviewees frequently mentioned the need to communicate within the VT. In order to interact, collaborate and communicate with each other, the VT members are using digital communication channels. The following quotes exemplifies the use of these communication tools:

“I meet minimum, I think 3 times per day via Skype [a video conferencing tool] (hesitant) I would say from 30 minutes to two hours per call” Steve, Business Architect

“We have Skype for our company, which is similar to Whatsapp [an instant messaging tool]. And I use it a lot” Chloe, Management Trainee

Additionally, Fabian, the Deputy Manager agreed with both of them by saying that digital communication is used frequently in IKEA and not “*something special*” anymore thanks to the technological advances:

*“So the **maturity [of technology] also improves more and more...** from the beginning when you have all kinds of issues of dialling in... also trying to find a space where you can have that call...now, it will be different, **people get used to it... It works quite neatly... not necessary to have very special, expensive room somewhere to make that happen... [digital communication] is used a lot**”* Fabian, Deputy Manager

Digital communication tools such as video conferencing seem to be a usual practice in the workplace nowadays, especially in VTs. The technology becomes a part of the daily work, and so do the problems brought by the technology. During our interview, we experienced a

connection problem which delayed our call for 20 minutes and shortened the interview. Also, Chloe encountered a technical problem on her laptop that she was hindered to work for a few days. Despite the technical problems, some of our interviewees highlighted the benefits of using VTs, which will be presented in the next subchapter.

4.3 - The Honeymoon Cruise Line

Our interviewees cited a number of benefits in the VT settings, which will be mentioned in the following part:

*“I don't need to be based in this office, I can be **working from anywhere**. The work concept also starts changing. It's not any more necessary that you have this face-to-face interaction than that you need to be located in one office for group base. You can work remotely”*

Catherine, Project Leader

Catherine described the advantage of being highly flexible in geographically distributed teams that she *“can be working from anywhere”*. Further, she underlined an ongoing change in the work concept, that there is no longer an office needed. We further asked her personal opinion towards this change in the working concept:

*“Yes, I like the ability to just **work in your pyjamas**. Let's just say that it's a little bit closer to what we do in university, right? and you're **responsible for your own time** into the time management and then as long as the work is delivered then...everything is fine... Being on public transport or driving in traffic and... getting to work, taking lunches... take up more time. ”*

Catherine, Project Leader

“I really think taking the train or driving by car to the next office it is not more convenient”

Steve, Business Architect

Referring to the selected quotes, our interviewees had described two benefits of VTs. Firstly, VTs offer a high flexibility and autonomy to organize the work location and work hours, in which VT members can work anywhere anytime. Secondly, VTs provide a time and cost saving

possibility as VT members need not to spend time in preparing and commuting to work. Nonetheless, Steve did not elaborate why commuting to another office is less convenient. It can be critically asked if it is a personal preference or a work-related benefit. It appeared that our interviewees considered VT setting as a way in creating a better work-life balance and being autonomous. The flexibility could be seen as a factor to motivate and engage employees as they offer autonomy and freedom. Apart from personal preferences, the following quote by Steve exemplifies the advantage for IKEA:

“Especially if you have several meetings in a row so you can login and logout. This is also quite nice to change topics between the meetings” Steve, Business Architect

Steve mentioned that he can easily switch from one meeting with the Swedish team to another meeting or call with the German team, in a VT setting. This possibility to quickly switch from one meeting to another can be seen as efficient, because it can avoid physically travelling to these meetings, which saves both time and money. Further, companies can reach out and recruit talents based on project required competencies from everywhere in the world, with reference to Catherine’s quote mentioned in chapter 4.2 that she recruits the *“best ones globally”*. A summary of the romantic views on VTs can be found in Table 2 on page 47. Despite having these benefits, the next subchapter will focus on the downsides and challenges of virtual teams.

4.4 - The Emergent Icebergs

After presenting the benefits mentioned by our interviewees, this subchapter will summarise the most frequently mentioned challenges in our empirical story, and both are equally important and interconnected.

Meaning Alignment Challenge

Firstly, we have asked Catherine if there are any salient difficulties to work in a VT:

*“I spend a lot of time within this role **aligning with people**. So, everyone that has an interest in the project has to **be updated**, based on where they are in the organization and their mandate and for sure they have to **be on-board** into where we are actually doing. So that's one part,*

*making sure that everyone is actually saying the **same picture** and then another part is actually making sure that **the work is moving** and it's being executed”.*

Catherine, Project Leader

In this quote, she mentioned the intensive and high amount of time spending on aligning people. Aligning, expressed in this quote meant both, firstly to update the project progress to every person, who is involved in the process. Secondly, to clarify and to catch up some uncertainties in order to strengthen the common goal or picture. Catherine expressed that everyone should have the same understanding. Guaranteeing that everybody understands the common goal, they are required to be “*on-board*”. The expression “*on-board*” is highly symbolic. This metaphor might represent a complete crew, which should be sailing a same cruise and collaborate.

Yet, aligning team members may be difficult due to three factors, namely, geographically distributed team members, time zone difference and large team size. They will be presented as follows.

Geographically Distributed Team Members

Firstly, meaning alignment can be challenging because of the geographical distribution of VT members:

*“So usually I spent my **first half of the day working with emails and meeting people** that are based in Sweden and then having Skype calls with Germany and then the rest of my day after **2 pm is spent working with North America**. So having Skype calls with them and meetings with them”* Catherine, Project Leader.

As exemplified in the quote from Catherine, she spent the whole day having meetings with team members. Meaning alignment leads to the fact that project leaders need to spend time in communicating more often to distributed members in order to create a common sense. Pamela then strengthened this phenomenon:

"I guess everyone in IKEA does (being very busy). But that's the way it is. There are a lot of meetings. I know that tomorrow, for instance, I have full day of Skype meetings"

Pamela, Product Owner

Referring to the quotes, it seems as if having many meetings is kind of an established fact. Even though we have acknowledged that there could be many reasons causing the high number of meetings, aligning the meaning among VT members appears to be one of them. The statement *"that is the way it is"* resembled the number of meetings as an acceptable norm within the company. According to our quotes, VT members need to communicate often to update and interact with each other.

Different Time Zone

Secondly, meaning alignment is particularly challenging when members are situated in different locations around the world. It implies not only of working across geographical borders but also across time zones. Referring to Ken's aforementioned quote, that his colleagues is *"80% or 60% [are] based out in the world"*, revealed the challenge of different time zones to overcome. He explained further that:

*"I was working offshore in India and it's quite hard to work with a 12-hour time difference. **It doesn't work.** I mean, there's hardly any value. A quick phone call in the morning and in the evening and then we had to deliver, this could be quite challenging"*

Ken, Business Architect

Catherine's quote agrees with Ken by saying that:

"If you have maybe I don't know three developers scattered around the world working over three different time zones and then someone managing them from a fourth location. I think you lose very much this feeling of "Hey, I can get this to work, you can look at my screen."

Catherine, Project Leader

Even though sharing screen can be done in most of the videoconferencing tools, Catherine mentioned that with VT members situated in different time zones, spontaneous interactions are less possible. In short, the quotes by Catherine and Pamela revealed that a working day in a VT is packed with meetings to inform and align people in the team. Not only the fact that VT members need to communicate very often can be seen as challenging, the situation can be more difficult to manage across different time zones.

Large Team Size

Thirdly, meaning alignment is difficult when team size grows. Our interviewees mentioned during the interview:

*“Everyone should be involved, every individual is important, and then we do this together... Yeah, I would say that’s the goal to be more efficient to work... But I see that it is very hard in this organization where there are **so many people involved** so I really much appreciate this part when I’ve been working quite isolated because then you can work like that. You don’t have that many of them **dependencies and this bureaucratic way of working**”*

Pamela, Project Owner

*“There are many, **many people involved** and many views upon certain things. But of course, if you always have these hot potatoes changing plans and this makes of course the life of an architect **more difficult**, because you build your plans and ideas on many assumptions and the assumptions are constantly changed. So this is sometimes **very annoying**”*

Steve, Business Architect

As mentioned by Pamela in the first quote, everyone should be involved as everyone is equally important. This common understanding of employees’ inclusiveness is one of the IKEA value which is explicitly cited in the company handbook stating that *“Everyone is important, everyone is heard and everyone contributes.”* According to our interviews, the value is frequently mentioned as an important aspect of IKEA’s culture. Due to the value that everybody is important, everybody needs to be involved in the processes.

However, the value that everyone needs to be involved can be “*very annoying*”. As exemplified in Steve’s quote, the more people involved in the process, the more opinions exist, which makes the planning process more difficult. Further, constant changes require a constant adaptation of VT members’ understanding towards new processes and directions, and this might cause frustration and uncertainty. Moreover, Pamela mentioned that oversized team will create a higher interdependency among team members, since reaching a decision needs more members to acknowledge and agree upon. The high interdependency with team members creates bureaucracy as she mentioned. Moreover, the growing team size causes another challenge. The large team size leads information sharing among team members difficult, as exemplified by Steve in the following quote:

*“If you are talking up to 50, 60 or 70 people plus it is always hard to **share information** and that everyone is working in the **same direction**, especially if things are changing quite quickly”*

Steve, Business Architect

Further he elaborated:

*“[Meaning alignment] really **takes time**...first A, B, C...then C got already the old news...A, B, C are discussing 20 minutes what is right or wrong...then you have already missed up to 20 or 40 minutes synchronizing the different views, if you have a good way to **share information**, then of course you can avoid these problems...”*

Steve, Business Architect

In these two quotes, Steve mentioned that the information sharing in a larger group, say up to 50 members, are both difficult and time consuming. This is especially salient in a culture that everyone needs to be informed and taken care in the project. He also stated that to provide timely information to VT members takes time as there is always someone being outdated by the emerging decision in another discussion.

Based on the previous quotes, meaning alignment in VTs is difficult because of their geographical distance and time zone differences. The alignment is even more challenging when

team size grows. Keeping everyone “*on-board*” requires constant information sharing among team members and this is time consuming.

It Takes Time to Align

As a result of the aforementioned three factors, meaning alignment is claimed to be time consuming. The following part illustrates the time consuming challenge within VT which is caused both by alignment and communication with team members:

*“I meet minimum I think 3 times per day via Skype... and sometimes it is just to quickly prepare something, **to align a few open points**, and sometimes it would be **several presentations running in such a call, running different issues** where everybody needs to **be aware of what is ongoing on certain areas**. So sometimes these meetings are from 30 minutes to 2 hours”*

Steve, Business Architect

*“For instance, tomorrow I have full day of Skype meetings... that's of course not very good because you **get tired** of just sitting by the phone all day”*

Pamela, Product Owner

Steve’s work day can be packed with a maximum of three calls, with each call lasting from 30 minutes to two hours, consequently, he could be in a virtual meeting for six hours per day. Further, this quote represents that he spends the majority of his working time in meetings. Pamela also expressed her displeasure of getting tired by sitting and calling people the whole day.

In summary, as presented in our findings, VT members are required to communicate frequently to align meaning. Meaning alignment is described by our interviewees that it aims to get everyone “*on-board*” and understand the project process, events, information, etc. Some factors such as geographical distribution of team members, time zone difference and team size will cause difficulties to establish meaning alignment in VTs. These factors result VT members to spend more time in meetings, which might cause frustration. In the other words, to ensure meaning alignment in VTs is time consuming.

Relationship Building Challenge

Apart from meaning alignment challenge, our findings suggest another dominating challenge in VT setting, namely relationship building challenge, which will be exemplified in the followings. As aforementioned, VT members are geographically distributed and most of their communication happens via digital communication channels. Yet, our interviewees revealed that they preferred to meet face-to-face. Pamela showed her preference towards physical meetings by saying:

*“I tried to get **as much physical** as possible. But, then the person in X (company site) we always have Skype”* Pamela, Product Owner

We asked Steve and Chloe’s personal opinion about the team setting:

*“But sometimes **it's nice to sit in one room** and you can use the Whiteboard quite **easily** and also **have a good dialogue** to talk about open issues very convenient... I tried to make the team **meetings in person** that we also have the possibility to spend some time on other things or to have good discussion not only within the meeting but **as well be there, be present**”*

Steve, Business Architect

*“If it is someone you know, or have met many times, I don't mind that much in Skype. But if it is someone I haven't known, I really **prefer meeting face-to-face to get to know each other**. It's **different**.”* Chloe, Management Trainee

Interviewees distinguished working remotely in VTs and physically together. Even though they acknowledged the possibilities of working remotely, interviewees tried to meet as much face-to-face with their colleagues as possible. Steve mentioned the personal presence and good dialogue can only be granted in face-to-face meetings. The following parts will address the factor behind their preference to meet face-to-face rather digitally.

The Lack of Personal Connection

We have identified the factor, which makes our interviewees prefer meeting face-to-face than digitally, is that the VT setting is lacking personal connection:

*“You really need to **connect** and project to people who believe in you that this will actually happen. I think since we are all human beings, it is **difficult to get this connections or emotions over Skype** or Facebook, I think this is difficult but maybe that is my age”*

Andrew, Change Manager

Andrew mentioned the essence and the necessity of creating a connection towards people. He said that it is important to touch upon people’s feelings and emotions. He stressed that this emotional connection is not possible to be created via digital communication tools like Skype or computer cameras and screens. Yet, how can a personal connection be created? Steve explains:

*“But if it comes to this remotely or digital way of working you get the view and the information in the meeting but **you don’t get what is going on to the way to the coffee machine** or what is the talk after the meeting. Within the meeting they are saying “jaha” (a confirming expression) and everything is clear but then you are leaving the meeting and then the commitment is gone (laughing). This is of course sometimes a challenge **if you are not present or on-site**”* Steve,

Business Architect

Steve mentioned the importance of the interpersonal touch created by the “*coffee machine talk*” in the pantry. These informal discussions allow sharing of feedbacks or opinions towards work events. Opinions and commitments are claimed by Steve to be more easily exchanged and reinforced informally. The importance of face-to-face meeting is agreed by Catherine:

*“[When] you're working on a project then it depends also on the **personal connection**... it's always nice when you see [team members] face to face because I would ask over for a coffee or lunch...to say, okay, my bike had a flat tire this morning, like the things that allow for **personal connection**”* Catherine, Project Leader

Catherine emphasised the importance of sharing personal stories in order to build up a personal connection. These informal meetings may foster a more personal relationship than calls via digitised communications tools as claimed by Steve and Catherine.

Interviewees stated that meeting face-to-face is different from meeting via digital communication tools. Nevertheless, they had difficulties to describe precisely the differences between meeting people in person versus meeting people via Skype. Some interviewees described that it is more “easy” to meet face-to-face, some slightly mentioned that “*the instant feedback*” can be received after a physically meeting. Fabian mentioned:

*“We always be in situations where we drive difficult tasks...so you still have this **human understanding** [in the face-to-face meetings] ... and I think that's a **big challenge sometimes in a digital meeting**... to really feel if [team members] really understand... just a little bit of humour relief... [virtual communication] is not as rich that I can really master... I would be more fluent, but not native...When you really want to communicate important messages, then definitely face-to-face. I mean it **becomes a little richer**”*

Fabian, Deputy Manager

*“If I write something, it **might sound a bit harsh**, but if I just pick up a phone and ask... I can get listening into their feedback and I can have a discussion”* Pamela, Project Owner

Fabian and Pamela both mentioned the richness of communication media. Fabian explained that meeting face-to-face is richer than meeting digitally; whereas Pamela elaborated that even though she cannot meet her teammates physically, she prefers to use phone calls, which allow her to express emotion easier, rather than plain text in emails.

To summarize this part, it seems as if digital communication channels just offer a shallow or superficial exchange in communication, which leads the difficulties to get to know a person. Not only due to the fact that the VT members are geographically distributed worldwide, their teams are also arranged ad hoc for just a specific project. Hence, relationship building appears to be even more difficult. However, our interviewees also expressed the importance to know the team

members before working in VTs. Meeting face-to-face is claimed to be a better way to understand each other and the emotions behind. Meeting people face-to-face make them feel more ‘present’ than meeting online. Interviewees described that the face-to-face communication is a richer way to communicate than digital communication as the latter could cause some misunderstandings. Without frequent face-to-face interactions and consequently personal connection, our interviewees further express the incurred problems.

The Lack of Trust

The first problem we have identified in the interviewees is the difficulty to build trust in VTs. Andrew pointed out the trust problem by saying that *“because I don’t know you, I don’t trust you.”* It seemed for Andrew that personal relationship and trust are interrelated and intertwined. Fabian explained the importance of trust in teams:

*“You do **not only obey and follow** direction but you see that yes, this is the person advocates – my needs my vision...to **trust this person** to represent me and my organisation... That must be important, we are all humans... that you **trust each other**”*, Fabian, Deputy Manager

Fabian elaborated that trust is salient in an organisation as people need to trust each other when achieving their own needs and visions. As mentioned previously, in order to establish trust, the personal connection is important. Yet, relationships are built by the exchange of personal stories and informal meetings which seem to be challenging to build via digital communication channel. The lack of personal connection does not only affect trust among team members, but also seems to cause a lacking sense of belonging.

Lacking Sense of Belongings

The second problems with the limited and superficial personal connection is the lacking sense of belongings to a team. Steve claimed that:

*“I must say **I am completely used to it** to work remotely with people on X (his project). You do not really have a need to have a team. Of course, I am a team player and I like to work in teams but **I don't really need a team from the belonging perspective**”* Steve, Business Architect

Chloe added:

"I don't belong to a team, we [as Management Trainees] don't have team meetings, the work is so independently. But I don't have one team. It's more like I partly belong to a team"

Chloe, Management Trainee

As the VTs are arranged and composed according to the project needs, the teams are not stable over time. They are more ad hoc arranged and team members might even belong to more than one team. Hence, Fabian explained:

*"If you are more in a traditional setup (non-VT) where your competence is owned within a team, line team, but your daily work is done within another space, maybe even in other office. So it's a bit of a struggle. The **sense of belonging has been difficult**, you have your line manager and you have your responsibility there but your daily work is with other people"* Fabian, Deputy Manager

Fabian described the struggle of not having a stable team. On the one hand, VT members have their own line manager according to their job position. On the other hand, most of their daily work has been spent with the VT members. Thus, sense of belonging is hard to establish. He further explained:

*"I think there are benefits to both setups (virtual and non-virtual) and I think the one that has been proven the **most efficient** and where people are **happier** is actually the one they can stay within."* Fabian, Deputy Manager

Fabian showed his preference towards non-VTs as he claimed that these stable teams work more efficient and are happier. Not only does a shallow personal connection cause a lack of trust and sense of belonging, it also forms subgroups and isolation within the VTs.

The Formation of Subgroups and Isolation

The third problem with the lack of personal connection is the formation of subgroups and the feeling of being isolated. Steve, who is located in a satellite office said that:

*“I have **the luck and the freedom**. I’m sitting in Germany. I’m more or less an **alien**, because all the others they are all sitting in Sweden. We are **isolated** a little bit but of course there **are few possibilities to join and participate [the meetings]**”* Steve, Business Architect

Although he enjoyed the luck and the freedom being separated, he identified himself as an “alien”, which lived on another planet. In addition, he felt that he had fewer possibilities to join and participate some meetings. He further expressed that:

*“We try also to be **independent** here in Germany with some decisions. We are somehow in some decisions dependent on Sweden or somewhere else”* Steve, Business Architect

Referring to these quotes, the VTs, which are geographically distributed and project based, had a tendency to aim for independence. Referring to Steve, some team members in Germany tried to detach themselves from the headquarters in Sweden, even though they belong to the same team in the same department. Steve emphasized in his quote that the detachment from other regions would make the decision process more efficient. In addition, the possibility to communicate digitally creates the following scenario in some of the meetings, as expressed in the following quote:

*“There is also definitely **a parallel slower communication happening**. I see in traditional meeting that people are multitasking... then it’s definitely going on that... you send an **email to chat with someone** and ask “What is this going on...?””*

Fabian, Deputy Manager

The “*parallel slower communication*” via another digital communication tools might hinder an open discussion in a VT. Instead, team members will express their confusion in another separate

communication channel during the meeting with their subgroup. Steve, who is located offshore, was often surprised by the loss of commitment after meetings:

“Sometimes it’s a challenge if you are not present or on site... Within the meeting... everything is clear but then you are leaving the meeting, the commitment is gone...you get the impression that everything is understood and then five minutes after the meeting... there comes an email saying “but no, we have discussed this and we are doing it in another way”

Steve, Business Architect

Steve explained that the agreement in VT meetings can be changed quickly by the team members who are co-located in another office. Without the actual presence in the meeting, he will miss the offline conversation regarding a decision making. Both Fabian and Steve’s quote revealed that a *“parallel slower communication”* is happening either online or offline in subgroups.

To summarise, apart from the meaning alignment challenge, relationship seems to be difficult to established in VTs without face-to-face interactions. The lack of physical meetings causes a lack of personal connection. A limited and superficial personal connection will hinder VT members to build trust among each other. Lacking personal connection and trust, VT members might separate themselves with the geographically distributed team members and feel isolated. The subgroup could be reinforced by private and exclusive communication either online or offline. A summary of challenges in VT setting is shown in Table 2 on page 47.

Even though the challenges of meaning alignment and relationship building in VTs seem to be problematic, one interviewee claimed that these challenges can be handled. The next subchapter will address the handling strategies mentioned by them.

4.5 - The Detour

Even though VTs apparently cause some challenges, Catherine suggested that these challenges could be managed. The following two suggestions will firstly present some strategies to cope with the meaning alignment challenges; and secondly, to overcome the relationship building challenge.

First, the following quotes will exemplify the strategy to ensure a better meaning alignment:

*“I also realized it's very good when you have something to share on the screen. So now I make **notes or slides for everything**, because it's easier for people to relate to something visual... I also make sure that after **every meeting to share notes with everyone**. It is like meeting minutes. It's **not very IKEA' ish** to do a lot of minutes and it's very much about conversation and not so much about note, but I experienced that after we started it then was **easier to follow up and not to have so many loose ends**, because we can also pick up the email from the last meeting and say this is what we said it in the last meeting, this is what we need to do, how much of this has been done and how much should we carry over to the next meeting.”*

Catherine, Project Leader

Catherine took notes and prepared slides for the team members in order to help them to refer to something visual. She recognised that it takes more time and effort for her work. Even if meeting minutes are not so “*IKEA' ish*” of working, she saw the benefits. According to the employee handbook we have obtained from interviewees, an IKEA way of working is to communicate informally and non-bureaucratically rather than formal documentation. Catherine explained the benefits of writing down notes and circulate them to align team members regarding to project progress – to keep everyone “*on-board*”. According to her, documentation keeps team members on track and they can see clearly the future steps which need to be taken.

Secondly, this part will describe how people manage to overcome the relationship building challenge. As mentioned before, relationships are difficult to establish via communications tools such as video conferencing tools or telephone due to the lack of personal touch. Catherine gave her suggestion to build relationship in VTs:

*“I was meeting the persons in person, so it was trying to book one to one meetings with A, one meetings with B and then you know 20 minutes or 30 minutes but just to build a relationship. I also travel to the US to meet the team and to Germany, because that's important. **You have to meet them once**. So, at least **you can get a feeling**, who is the person? Put a face on and also*

*understand the voice and the way they speak, because we have the cultural difference. And we also have different people express themselves differently. So I have a colleague that he's very quiet always on the course and I'm always worried that is it because he's afraid to say what he thinks or is it because it's not following. Then when I met him **in real life** and I realized he is just an introvert. He doesn't talk in general... but when he talks... He has something to the point to say” Catherine, Project Leader*

Catherine explained in her quote that it is very important to meet the persons at least once and optimally in the beginning of the project, to get to know a person and to establish a relationship. In summary, Catherine suggested handling strategies for the meaning alignment and relationship building challenges by increasing meetings, documentation and at least once face-to-face meeting. The following table (Table 2) will display the handling strategies.

Views	Our Empirical Story
The Romance of VTs	<ul style="list-style-type: none"> • Flexibility & autonomy • Saving travelling time & cost • Global talent acquisition
Behind the Honeymoon of VTs	<p>Two challenges:</p> <ul style="list-style-type: none"> • Meaning alignment challenge because of: <ul style="list-style-type: none"> • Geographical distribution • Time zone difference • Large team size → Time consuming • Relationship building challenge because of : <ul style="list-style-type: none"> • Lack of personal connection → Lack of trust → Lack of shared identity → Difficulties in meaning alignment <p>Handling strategies:</p> <ul style="list-style-type: none"> • Increase documentations • Increase meetings • Preliminary face-to-face meeting

Table 2 – The Romantic and Disappointing view of VTs

4.6 - Chapter Summary

In this chapter, we have presented our empirical findings regarding VTs. Firstly, we outline the interviewees' understanding of VTs. VTs are described as teams which team members are geographically distributed and communicate via digital tools. Secondly, we present the advantages mentioned by our interviewees. Benefits include autonomy and flexibility at work have given the possibility to VT members to plan their working time individually. Further, VTs seem to be time saving as team members do not need to travel. The last benefit mention is the possibility to recruit the most suitable members worldwide depend on project needs.

Despite the mentioned advantages, we have identified two major challenges with the VT setting. The first challenge is the meaning alignment challenge among team members. This problem is rooted from the geographical distribution of VT members, time zone difference and the large team size. Aligning meaning with these factors is claimed to be time consuming. The second dominating challenge is the difficulties to build up relationships with the VT members. Without a frequent face-to-face interaction, personal connection is weak. A weak personal connection will thus lead to a lack of trust among team members and the formation of subgroups within VTs.

Last but not least, one of our interviews suggested some handling strategies to overcome these two challenges. To facilitate everyone is "*on-board*" and ensure their understandings towards the project are aligned, she suggested that documentation such as meeting minutes, should be implemented. Moreover, to establish a relationship among VT members, she advised that face-to-face meeting should be at least organised once, preferably at the beginning of the collaboration.

Chapter 5 - Debunking the Cruise

The discussion chapter is based on the comparison of the empirical materials and the literature review. We aim to discuss our research question “What is the underlying phenomenon of virtual teams (VTs) in the workplace? Consequently, to what extent can a VT be seen as a team?” Firstly, we will examine the advantages of VTs mentioned by the literatures and our interviewees. The discussion is followed by the analysis of the implication behind the strategies in handling challenges incurred by VTs. Then, we will analyse how the ‘team thickness’ will influence VTs being considered as teams.

Since the mid-90s, globalisation has incurred both the opportunity and the pressure to organisations to operate globally. Organisations need to cope with the changing and emerging business markets and customer demands in different parts of the world. The global operations require expertise in local market and therefore these experts are commonly locating in geographically distributed offices (McDonough, Kahn & Barczak, 2001). Additionally, the aid of the advanced logistics arrangement and the technological advances expedite the trend of using VTs (Al-Rodhan & Stoudmann, 2006). Most of the multinational companies move from a traditional team setting, which is co-located, to a VT setting, which is geographically distributed and communicated via digital tools. Emerging from telegraphs to video conferencing tools, technologies enable organization members to communicate with each other on a global scale and expand their business internationally. Our empirical site, IKEA, is an offspring of the globalization, as described by our interviewees as “a global company” with operations and distributed offices around the world.

The transformation of the work setting from co-located teams to VTs also receives its popularity and attention among practitioners and scholars (Ale Ebrahim, Ahmed & Taha, 2009). Based on our research towards literature of VTs, we identify that most of the research adopt a functionalistic view on VTs. For instance, the extensive use of the IPO framework in the literature shows that researchers focus on the factors in granting a success in VTs. Factors such as team size (input), medium of communication (process), virtuality (moderator) and

productivity (output) are widely discussed by the mainstream literatures. Yet, we hope to provide a more interpretative and critical view upon VTs in this thesis, in order to understand how VTs actually operates.

5.1 - The Romance of VTs and Behind the Honeymoon

As presented earlier in the introduction of the discussion chapter, VT receives its popularity and attention from practitioners and scholars. Due to globalisation, VTs have been widely considered as the solution for the international business operation. In the following part, we will list the romantic and idealistic views of VT mentioned by our interviewees and literatures. Yet, every romance has its reality behind the honeymoon and the romance of VT is no exception. We aim to provide a critical view by analysing how the emerging deficiencies of VT could contradict their advantages.

The Romance of VTs

To being with, our empirical materials suggest that using a VT setting offers flexibility and mobility in the workplace. Interviewees expressed that with the aid of digital communication tools, they can login to work anywhere and anytime. For example, one of our interviewees enjoyed working in pyjamas at home rather than spending time dressing up, preparing lunch or commuting to work. The high autonomy given by the VT setting to arrange the work hours is appreciated. These idealistic benefits share a common understanding to our literature review. The research claims that employees in VTs can manage their time better, have a stronger work-life balance and the productivity will thus increase (DeRosa & Lepsinger, 2010).

Even though VTs might create flexibility and autonomy, which might enhance the work-life balance and increase productivity, we remain doubtful. The correlation between work-life balance and increased productivity is based on the assumption that both employers and employees possess a good technical infrastructure to work. Technical infrastructure such as a performing laptop and high-speed internet can influence the productivity and flexibility of a worker. Therefore, VT members will work with a high reliance upon technologies. In case technologies are not functioning, we doubt that productivity will increase. Moreover, if VTs can provide a work-life balance might vary between individuals. Some might find in the VT setting a

work-life balance because they can work from home in pyjamas, yet some in the VT setting might have a possibility to work 24/7. Work-life balance seems to be an individual concept which differs in the context. Therefore, we suggest not to generalise the assumption that VT creates a stronger work-life balance and an increased productivity.

Our empirical study also affirms with the literature that VTs can save the travel time and expenses in managing geographically distributed teams. An interviewee argued that taking a train or driving a car to another office for a meeting is not more convenient than to login and logout to different video conferences. This argument is supported by DeRosa and Lepsinger's research (2010) concluding that VTs can save travel expenses and office overhead cost, since members do not need to travel to meet colleagues and can work from home rather than a fixed office.

Although VTs are being claimed to be cost-saving in terms of travel expense and office overhead, we doubt if the cost-saving is so enormous. VT setting could also be costly that the company needs to ensure all employees are able to work from their homes in terms of technical infrastructure such as high-speed broadband as mentioned before. Furthermore, having a work-from-home option does not exclude having offices and providing office facilities for people who prefer to work at a proper workplace. Similar to work-life balance, preference on work location is also very personal which cannot be generalised.

The last advantage of VTs we have identified is the possibility to recruit the best people with a specific skill set for a particular project. Drawing upon the interviewees' explanation to the arrangement of VTs, we find that VT members are from different countries and they are formed on an ad hoc based according to the project needs. VTs dissolve the geographical boundaries and allow project leaders to find the most suitable person for a project over the world. This benefit is also acknowledged by the literature. It is stated that in order to understand local customer needs, it is more beneficial to have local experts on site. Indeed, the more niche the skills and knowledge are, the greater likelihood that specialists can be found overseas in the operating location (Bell & Kozlowski, 2002; McDonough, Kahn & Barczak, 2001). VTs provide an

opportunity for project leaders to recruit appropriate experts regardless geographical boundaries and manage them in a remote site.

Despite the acknowledgement to the possibility to recruit the best people regardless geographical borders in VTs, managing international workforce is easier said than done. For instance, international recruitment in new market is not costless as it often requires legal expertise in local employment laws. Moreover, we believe that humans are not machines that only possess a set of skill and can be deployed anywhere and anyway. VT members might have problem to interact and collaborate in VTs which will be explained further in the following parts.

The assumptions behind the presented advantages of VTs seem to be taken for granted in mainstream literature and practitioners. Yet, we remain critical upon these advantages and highlight the underlying assumption. The aforementioned discussion finds that VTs might not be as idealistic and romantic as claimed. Many of the assumptions behind these benefits cannot be generalised to each individual or company, and the advantages are context based. The following parts will discuss further how the incurred problems of VTs can even contradict its advantages.

Behind the Honeymoon

Although VTs seem to provide significant benefits as mentioned, they are not unproblematic. In the previous chapter in empirical findings, we have diagnosed two dominating challenges in VT, namely meaning alignment challenge and relationship building challenge. The challenges and their consequences, supported by the literature, will be discussed as follow.

Meaning Alignment Challenge

In meaning alignment challenge, we find that VT members consume plenty of time of their work hours to communicate and synchronise their work pace towards the project progress and ensure everyone receives the same understandings towards the information. In order to do that, they often need to attend many meetings per day, mostly via video conferencing tools or phone. Meaning alignment could be challenging due to three factors – geographical distribution, time zone difference and the large team size of VT.

Firstly, if VT members are distributed in a large geographical distance, they will have less overlapped work hours than those who are co-located. For example, due to time differences and work hours, an interviewee in Sweden can only communicate with her teammates in US in the afternoon. Another interviewee who has been working in India recalled that working offshore with a huge time difference (12 hours for his case) is challenging and *“it doesn’t work”*. The time zone challenge can be related to the virtuality of VTs in the literature review. Literatures (e.g. Bell and Kozlowski, 2002; Grinter, Herbsleb and Perry, 1999) show that the geographical distance and the time zone difference limit the possibilities for members to meet face-to-face.

In addition, without a shared visual and sensory data in the same physical place, meaning alignment could be hampered (Hinds & Mortensen, 2005; Tyre & Von Hippel, 1997). These authors also state that meaning alignment requires spontaneous communication and instant feedback among team members. Spontaneous communication allows open and unframed conversation which also provides instant feedback among teammates. Meanwhile, an interviewee shared the same thought. She claimed that with teammates scattered worldwide, she lost the feeling of *“Hey, I can get this to work, you can look at my screen”*. This quote implies that in co-located teams, it might be easier to share the common understanding with their teammates as they can physically relate to the same visual aid. Also, it implies that even though possible screen sharing via some video conferencing tools, it is more complicated for spontaneous sharing due to the limitations in time zone and work hour differences in VT.

Secondly, a large team size of VTs also make meaning alignment difficult. Some of our interviewees expressed that when a VT grows into a larger size, they felt annoyed and tired. The more people get involved in a VT, the more people need to be taken care of, according to our interviewees. A dependency to other members in order to obtain and exchange information might obstruct flexibility and create hierarchy. Moreover, it seems in our empirical studies that large VTs need more time for meaning alignment as everyone has their opinions to express. It is because most of the digital communication in VTs will only have one member to talk at the same time (Riopelle et al., 2003).

Handling the Meaning Alignment Challenge

Nonetheless, the meaning alignment challenge is not unsolvable. One of our interviewees suggests that proper documentations such as having meeting minutes could help meaning alignment. Even though she admits that having meeting minutes, notes and slides take time to prepare, they help VT members easier to follow up on the project progress. This solution could be explained by the work practice meaning alignment. Bjørn and Ngwenyama (2009) suggest that text documents such as emails, memos and meeting minutes can help the exchange of a common language among team members. The shared common language, such as abbreviation and jargon, assists VT members to make sense of the discussions and the events. Without an appropriate meaning alignment, conflicts and misunderstandings arise and hence collaboration will be more difficult.

However, we challenge that the solutions to align VT members' understanding contradicts some advantages of VTs. According to the literature review and our empirical studies, the solutions to encounter the meaning alignment challenge are to have more meetings and documentations such as meeting minutes. Moreover, without the visual and sensory data which can be obtained in physical existence, VT members have limited possibility to overhear or exchange information informally. They can only rely on their project leaders and teammates to obtain the updated information. We argue that the increased documentation and dependency on team leaders or teammates recreates bureaucracy and hierarchy respectively. It counters VT's origin from empowered and self-managing work teams to reduce bureaucracy and expedite decision making process.

Also, although the use of VTs can provide autonomy on time management and flexibility towards work hour, VT members possibly need to spend more work hour and workload on having meetings and creating documents to make sure everyone is "*on-board*". In addition, documents and structured meetings instead of informal conversation reinvent formality which contradicts to the benefit of having flexibility as claimed by the literatures and our interviewees.

In short, the geographical distribution and time zone differences given by the nature of VTs, plus the increasing team size possibly cause the meaning alignment challenge. In order to manage this

challenge, the literatures and empirical materials both suggest that meetings and documentation can be the handling strategies. Yet, they increase the work hour and workload of VT members. On the one hand, documentations reproduce formality and bureaucracy, and contradict the advantage of being flexible in VT. On the other hand, without physical presence and sensory data, VT members have a strong reliance on their team leaders and members to share updated information in meetings and in documentation, which might possibly reinvent hierarchy.

Relationship Building Challenge

Apart from the difficulties in aligning meaning among team members, the empirical studies identify another challenge, namely the relationship building challenge. This challenge has its roots from the nature of VTs – the ad hoc project based setting, geographical distribution of team members and the lack of personal connection via the digital communication channel.

Firstly, as aforementioned, the VTs in our empirical site are usually formed according to the competencies needed in a specific project. VT members will usually work with their virtual teammates more than their colleagues in the line department they belong to. Additionally, VT members are most often located in different countries or regions. Hence, it is not uncommon that VT consists of a group of people who do not know each other before they collaborate. Literatures also suggest that VT are “temporary entities that execute specialized time-constrained tasks and then disband” (Kozlowski and Bell, 2003, p.7). This nature of project based VTs could possibly cause more difficulties in building up a shared team identity. Scholars (e.g. Spears, Lea & Lee, 1990; Walther, 1997) claim that VT members who project a future collaboration with their teammates, can build a shared identity easier. Yet, this prerequisite is hard to achieve in VT as VT members are ad hoc arranged, and they know that the existing VT will be disbanded when the task is accomplished. One of our interviewees supported this literature argument as he explained that with ad hoc project based VT setting, sense of belonging had been difficult to establish. It is because one will have his or her competency and line manager according to departments, but the daily tasks and responsibility are done with their VT members.

Secondly, it is not only the project based setting obstructs the building of shared identity and sense of belonging, the geographical distribution of VT members might also lead to separation of

identity and subgroups in VTs. We observe in our empirical study that VT members tend to distinguish their identity from those who are located in another office. For instance, one of our interviewees who was located in a satellite office, described himself as an alien; he and his teammates in the satellite office are trying to be independent from the headquarters. This can be seen as a creation of subgroup in VT. Indeed, some literatures also reveal and explain that VT members share less contextual experience and memory than co-located team members; hence, they will have a separate identity from the VTs and stronger identity attachment to the 'local' colleagues (Charlier et al., 2016; Finholt & Sproull, 1990).

Additionally, our interviewees expressed that meanwhile in a VT meeting, there would be a "*parallel slower communication*" happening. The parallel slower communication can appear during the meeting in another digital communication channel or offline in the pantry. For example, our interviewee mentioned that there is an enclosed communication between him and his colleague, instead of an open discussion with the whole group. We consider this parallel slower communication as an obstacle for open communication and information flow in VTs. An interviewee said that the decision and commitment can be altered and disappeared quickly after VT meetings. Grinter, Herbsleb and Perry (1999) state that isolated members in VT often receive less attention than non-isolated members who work in a same place, which supports our empirical story. Isolated members hence obtain information slower and often being surprised by the decisions made suddenly in headquarters.

Thirdly, the nature of VTs will limit the possibility to meet face-to-face. Due to the geographical distance, most of the communication in VTs will happen via digital communication channels. Even though these channels can save some travel expenses, we analysed that VTs incur some other costs including difficulties in relationship and trust building among team members and separated identity.

In terms of relationship and trust building, the majority of our interviewees agreed that it is easier to build these connections with team members if they are co-located and meet them face-to-face more often. It is because if they are present in the office with their team members, they will have more opportunity to conduct informal conversations. For example, they claim that it is important

to have “*coffee machine talk*” as non-work related personal stories such as “*my bike is having a flat-tire*” can be shared. The importance of social interaction in relationship and trust building has been recognised by some researchers, stating that trust can be partly built by the informal social interactions (Holton, 2001). These social interactions nurture respect and understanding in the team which serve as a basis for critical conversations (Comstock and Fox, 1995 cited in Holton, 2001). Since literatures suggest that digital communication tends to be more informative and task-oriented than face-to-face interactions, we suggest that the lack of social interactions in VTs could harm the relationship and trust among VT members.

Furthermore, the media richness of communication is crucial in building up trust and relationships. Our interviewees expressed that trust was more difficult to be built in digital communication than face-to-face communication as the former was lacking emotional exchange. The claims from our interviewees are supported by a literature, which argues that digital communication has weaker social context cues than face-to-face meetings (Sproull & Kiesler, 1986). As captured earlier in the literature review, relationship building and trust are essential for team collaboration.

The difficulties in building up a shared identity, personal relationship and trust in VTs, could possibly hinder the information exchange and communication in VTs. VT members might not rely and collaborate with each other as much as they will if they are co-located. However, similar to the meaning alignment challenge, the relationship building challenge could also possibly be settled. Researchers and an interviewee both recommend that, having preliminary face-to-face meeting during the beginning stage in the projects could facilitate VT members in building up personal relationships (Robey, Khoo & Powers, 2000).

Even though these challenges could possibly be handled, we argue that VTs might not be as cost-saving as described by literatures. Admitting that VTs can save cost such as travelling expense and office overhead, our research identifies that VTs incur some unquantifiable costs. These costs include difficulties of meaning alignment, separation in team identity and lack of trust in the team. They are not commonly mentioned and considered by literatures and practitioners, but these difficulties might cause serious collaboration problems in VT.

Lack of ‘Team Thickness’ Reinvent Bureaucracy and Hierarchy

Apart from some idealistic and romantic views upon VTs as suggested by our interviewees and the literature review, our study finds two dominating challenges incurred by the VT setting – meaning alignment and relationship building challenges. These two challenges consequently cause problems in teams including the lack of meaning alignment, trust and shared identity. In the other words, the VT setting influences the ‘team thickness’; for instance, VT members have difficulties to share similar understanding and identity, and they do not trust each other as much as those who work in the co-located teams. Without these shared beliefs and identity, normative control – a softer and more indirect form of control, might be less possible (Alvesson, 2004). When normative control is absent, organisational members cannot be influenced and monitored by ‘soft elements’ such as culture, value, trust and identity. Instead, the managers will rely more on structural control such as documentations, policies and meetings to closely monitor their team members.

With a thin ‘team thickness’ in VT, both our empirical materials and the literature review suggest managing the dominating challenges with the meeting minutes, a higher frequency of meeting and deliberate face-to-face meetings. However, as mentioned in literature review, VT is developed from empowered and self-managing work teams to reduce bureaucracy and hierarchy. Therefore, we argue that these handling strategies will reinvent bureaucracy and formality, which contradict the origin of VTs. Besides, the documentations hinder the flexibility and simplicity, which is not too “*IKEA’ish*”. IKEA has a strong culture in which employees are controlled under norms, trust and identity rather than rules, policy and documentations. The reinvention of bureaucracy and hierarchy contradicts the simplicity and informality of IKEA. Hence, we suggest that the trend and advantages of VTs cannot be taken for granted, especially for high-value company such as IKEA. A summary of chapter 5.1 has been shown in Table 3 on page 63. Even if VT seem to be an inevitable setting in the global business operation, we suggest a reflection upon this ‘holy solution’ as our research shows that VT not only could reinvent formality, bureaucracy and hierarchy, they can also be costly in terms of meaning misalignment and broken relationship.

5.2 - Being on the Same Cruise equals to Working Together?

Not only the VT setting is contradictory to what it meant to be, VTs could also be a counterforce of the teams. This subchapter will discuss to what extent VTs can be seen as teams. By comparing the empirical story with the related literature review, we will first discuss and compare the characteristics of teams and VTs. Then, drawing upon to the aforementioned challenges in VT setting, the assumption to see VTs as teams will be challenged.

What is Team and VT?

In order to discuss and compare the essence of teams and VTs, their common understandings from the literatures and our interviewees will be illustrated in the following. In our empirical materials, an interviewee described VTs as teams which are “quite loosely organized”, yet each VT member has a certain role, position or task in the team. Moreover, each member in a VT has his or her specialty and role within a team. Their roles and decision making processes are interdependent that they rely on team members’ mutual affirmation to continue. Not only our interviewees describe VT as a kind of teams, their descriptions of VT share some similarity with the explanation of teams stated in the literatures. According to Forsyth (2009), teams are groups of people who are having certain roles to achieve certain goals; meanwhile, team members are interdependent and interrelated. The claim and assumption of VTs as a kind of teams arouse our attention. Indeed, we find that this assumption is also shared by the mainstream literatures.

In the literature review, we find that most of the mainstream literatures regarding VTs can be categorised into the IPO framework. However, IPO framework has its origin to study traditional team’s performance and effectiveness (Hackman & Morris, 1975; McGrath, 1964). Traditional teams are teams which are co-located and meeting face-to-face more often than VTs do. Therefore, it could be problematic that scholars impose IPO framework to analyse VTs, as they simply assume that VTs have a same nature as traditional teams. Even though the definition as above mentioned by our interviewees and literatures outline the similarity between a VT and a team, we argue that VTs might not completely resemble a team. The following part distinguishes between VT and co-located team settings.

The first distinguishment between VTs and traditional teams, is that team members are not co-located and they are in geographically distributed offices. The literature review confirms the geographical distribution of VT members, therefore team members are having limited face-to-face interaction (Bal & Teo, 2000; Dafoulas & Macaulay, 2002; Dulebohn & Hoch, 2017; Maznevski & Chudoba, 2000; Peters & Manz, 2007). This statement is confirmed within our empirical study that the frequency to meet face-to-face is limited.

The second distinguishment is the communication channels among team members. Traditional team members communicate face-to-face, whereas VT members use digital communication tools such as videoconference, email and instant messengers to communicate. Our empirical materials suggest that interviewees most often meet digitally rather than face-to-face to collaborate and communication. The literature review confirms that VT needs to use digital communication tools in order to interact and work with each other (Bal & Teo, 2000; Dulebohn & Hoch, 2017). The technology becomes a salient component for communication and collaboration in VT. Unlike co-located team members, VT members cannot collaborate and work without digital communication tools.

Thanks to the characteristics that VT members are geographically distributed and communicating digitally, we have identified two dominating challenges, namely the meaning alignment and the relationship building challenge in the previous chapters. We argue that the results from these two challenges – meaning misalignment, lack of trust and separated identity among VT members, hinder VTs being considered as a team and this setting could possibly be a counterforce to the team construction.

To What Extent VTs Can Be Seen As Teams?

A team is supposed to have a shared identity

As exemplified earlier, due to the fact that VTs are often ad hoc project based and team members are geographically distributed, VT members might suffer from a separation of team identity. In terms of the ad hoc project based VT setting, one of our interviewees who is located in a satellite office described himself as an alien to the team; another interviewee agreed that building sense

of belonging in this setting is difficult. Besides, we analyse that there exist subgroups in VT, in which VT members identified themselves with co-located colleagues more than with the team they belonged to. The subgroup identity is also strengthened by the “*parallel slower communication*”. In short, it can be interpreted that VT members who are detached from their headquarters colleagues feel isolated to the team.

Yet, according to the literatures, one important factor which facilitates teamwork and collaboration is a common team identity. It is because team identity is a base for work-related and social interactions in the workplace (Alvesson, 2004). Without having a clear understanding to which group of people he or she belongs to, an individual might encounter uncertainty in positioning oneself in the society (Chao and Moon, 2005). With a shared identity, team members will have higher intention to exchange information and communicate with each other. Thus, the difficulty in building a shared team identity in VTs might harm team cohesion. It can be consequently asked that without a shared identity and team cohesion, how much can VT members simulate themselves as being in a team.

A team is supposed to have trust and social relationships

As mentioned in our literature review, many scholars concentrate on trust and relationship building in teams. Trust has been considered as an element for team members’ collaboration (Awe, 1997; Glacel, 1997; Handy, 1995; Senge, 1994). For example, Williams (2007) emphasises that trust facilitates team collaboration in terms of information sharing or risk taking. Holton (2001) states that trust is created by social interactions such as personal conversations and personal storytelling. With trust and social relationship being established, team members have more tendency to collaborate. However, the relationship building challenge highlights the difficulties in building trust and social relationship in the VTs. With a limited chance to communicate face-to-face, VT members most often communicate digitally. Digital conversation consists of work-related information more than private conversation like personal stories. The personal connection is therefore harder to reach in a VT setting. (McDonough, Kahn & Barczak, 2001; Powell, Piccoli and Ives, 2004).

Our empirical materials also suggest similar conclusion. Some interviewees claimed that in a VT setting, they missed the “*coffee machine talk*” and sharing of personal stories. Moreover, some other interviewees expressed that emotion exchange is difficult in VT as writing through emails or instant messages might sometimes “*sound too harsh*”. With a limited possibility to build personal relationship in VT, trust is therefore harder to build virtually than co-located. The possible absence of trust and personal relationship reinforce our doubt that whether VTs can be seen as traditional teams.

A team is supposed to have a meaning alignment

The last important characteristic of a team is that team members share a mutual understanding upon information, processes, goals and events (Bjørn & Ngwenyama, 2009; Hinds & Mortensen, 2005). With a proper meaning alignment, teams will have less likelihood to have conflicts and misunderstandings, which could cause serious collaboration breakdowns (Cramton, 2001; Hinds & Mortensen, 2005; Jehn, Chadwick & Thatcher, 1997).

As analysed previously, we find that meaning alignment could be challenging to reach in VTs due to geographical distribution, time zone differences and the large team size. Our interviewees emphasise that it is time consuming and frustrating to update each team member regarding the project progress and new information – to bring everyone “*on-board*”. Besides, with a huge time zone difference, the overlapping work hour between VT members could be limited. Information thus cannot be shared as spontaneous as the teams operating co-located. This will increase time to exchange feedback and make decisions. Due to the nature of VTs, we argue that VTs encounter more difficulties in aligning meaning than traditional teams and this argument might also suggest that VTs cannot completely resemble traditional co-located teams.

Drawing upon the important aforementioned factors of a team, we identify that characteristics such as the shared team identity, trust and meaning alignment are difficult to establish in VTs. The lack of ‘team thickness’ as discussed in Chapter 5.1 helps us to argue that if a team with VT setting can be assumed as being a team. Thus, we doubt if researchers and practitioners can conduct research on and implement VTs as if they are a traditional co-located team. The discussion chapter is summarised as follow:

Views	Our Empirical Story	Our Discussion
<p>The Romance of VTs</p>	<ul style="list-style-type: none"> • Flexibility & autonomy 	<ul style="list-style-type: none"> • Individualistic, cannot be generalised
	<ul style="list-style-type: none"> • Saving travelling time & cost 	<ul style="list-style-type: none"> • Assumption of good technological infrastructure
	<ul style="list-style-type: none"> • Global talent acquisition 	<ul style="list-style-type: none"> • Local legal expertise is needed
<p>Behind the Honeymoon of VTs</p>	<p>Two challenges:</p> <ul style="list-style-type: none"> • Meaning alignment challenge because of: <ul style="list-style-type: none"> • Geographical distribution • Time zone difference • Large team size → Time consuming • Relationship building challenge because of : <ul style="list-style-type: none"> • Lack of personal connection → Lack of trust → Lack of shared identity → Difficulties in meaning alignment <p>Handling strategies:</p> <ul style="list-style-type: none"> • Increase documentations • Increase meetings • Preliminary face-to-face meeting 	<ul style="list-style-type: none"> • VTs decrease team thickness (lack of trust, identity and difficulties in meaning alignment) • Handling strategies reinvent bureaucracy and hierarchy; increase workload and decrease flexibility; less normative control, more formality <p>! Contradict to the original intention of VT being flexible, empowered and self-managing</p> <p>! VT cannot be completely considered as teams</p>

Table 3 - Summary of Empirical Story and Discussion

Chapter 6 - Conclusion

In the final chapter of our thesis, we will first present a research conclusion, consisting of our research questions and the view upon them. Then, some suggestions for future research will be discussed, followed by the advices to practitioners who implement VT in their organisations.

6.1 - Research Conclusion

Since the mid 90s, VTs have received an arising amount of attention from researchers and business world practitioners. VTs are generally understood as teams which members are geographically distributed and communicating via digital tools (e.g. Bal & Teo, 2000; Dafoulas & Macaulay, 2002; Dulebohn & Hoch, 2017; Maznevski & Chudoba, 2000; Peters & Manz, 2007). VT setting is being described by the mainstream literatures that it can increase work autonomy, save costs and provide possibility to international talent acquisition (e.g. Dulebohn and Hoch, 2017; DeRosa & Lepsinger, 2010). The advantages are also recognised by some of our interviewees.

Despite the trend and advantages of VTs, the overall purpose of this research is to provide researchers and practitioners an understanding of underlying dynamics and challenges of VTs. We have provided an interpretative research to reflect upon VTs' romantic and idealistic view shared by the literatures and some of our interviewees. In addition, this thesis also question to what extent VTs can be seen as teams.

In terms of methodology, we have adopted a qualitative and abductive approach in this study, by conducting semi-structured interviews in IKEA, a multinational company which is using the VT settings. The empirical findings help us to identify two challenges – the meaning alignment challenge and the relationship building challenge, behind the romantic view of VT setting.

On the one hand, our empirical materials suggest that VT members often find it difficult and annoying to align meaning with the others. Ensuring a shared understanding upon information

and process takes time and energy. We have investigated that the meaning alignment challenge is fuelled by the geographical distribution and time zone difference among VT members, and particularly in a large team size. On the other hand, our research identifies that social relationship is hard to build and maintain in VT, due to the lack of face-to-face interactions. VT members rarely share personal stories in digital communication, instead, they only share work related information. Hence, a personal connection between VT members is hardly established. The lack of personal connection will hinder trust building, team identity formation and also create subgroups.

Nonetheless, our interviewees and the existing literatures have proposed some handling strategies to overcome these two challenges. Firstly, they propose that detailed documents and increasing number of meetings can facilitate everyone being “*on-board*” (Bjørn & Ngwenyama, 2009). However, we argue in the discussion chapter that these methods will cause VTs being less flexible, as well as reinvent bureaucracy and hierarchy. These complicated documentations and meetings are contradicting the original idea of VTs being empowered, self-managing and flexible (Ebrahim, Ahmed & Taha, 2009). Therefore, we conclude that behind the romantic view of VT setting, the emerging challenges and contradictory handling strategies might demean its idealistic facade.

Secondly, our interviewees and the literatures suggested that preliminary or periodic face-to-face meetings can help to manage the relationship building challenge (e.g. Gibson & Cohen, 2003; Kirkman et al., 2004; Robey, Khoo & Powers, 2000). However, we doubt if the ‘team thickness’ can be built and established with a constant lack of personal connection. Without the personal connection, ‘team thickness’ is reduced by the lack of shared identity, trust and meaning alignment. However, our literature review shows that identity (e.g. Alvesson, 2004; Kogut and Zander, 1996), trust (e.g. Awe, 1997; Glacel, 1997), meaning alignment (e.g. Cramton, 2001; Hinds & Mortensen, 2005) are some of the dominating factors for team members to collaborate. Therefore, without a stable ‘team thickness’, we challenge that VTs cannot be completely seen as teams.

Our arguments are not common in most of the VT researches as they have not questioned whether VTs can be considered as teams. There are some researchers with functionalistic view on VTs implement the IPO framework in their study to analyse VT (e.g. Dulebohn & Hoch, 2017; Martins, Gilson & Maynard, 2004; Hiltz, Johnson & Turoff, 1986; Powell, Piccoli & Ives, 2004). Yet, the framework has its origin to study co-located teams since the 60s. With our argument to the assumption that VTs might not be completely seen as teams, we doubt if researchers can simply impose frameworks that analyse co-located teams to the study of VTs. We suggest that some of the VT researchers should review and perhaps modify the literatures which VTs are being studied by co-located team frameworks.

To conclude, we address our research question by firstly arguing that the implementation of VTs might reinvent bureaucracy, which contradicts the flexible, empowered and self-managed origins of VTs. Hence, VT is not as romantic or idealistic as asserted by some literatures and interviewees. This team setting cannot be considered as the ‘holy solution’ for managing global business operations. Secondly, the challenges from VTs influence ‘team thickness’ so that we argue VTs cannot be completely perceived as teams; as the essential characteristics in teams such as identity, trust and meaning alignment are difficult to be established in VTs. Even though VTs might seem to be beneficial in some ways, this work setting has its problems and it needs to be further investigated.

6.2 - Suggestions for Future Research

Drawing upon our research, we have identified two aspects for the future researchers. The first aspect concern about the topic which can be investigated further in VT study. For example, we believe it will be interesting and useful to explore on how leaders manage VTs without a physical presence and with the difficulties in establishing normative control. Drawing upon this thought, how change management and knowledge management can be handled in VTs with a lack of personal connection?

The second aspect is in regard to the research approach on VTs. We encourage future researchers to use the interpretative approach in order to understand the VTs’ dynamic and what is actually happening in VT operations. Moreover, researchers should be reflexive and critical about the

assumption that 'VTs can be seen as teams'. Hence, when they are conducting research regarding VTs, frameworks like IPO which originates from the study of team should be evaluated and modified before being used.

6.3 - Suggestions for Practitioners

For practitioners who work in VTs, we have come up with two suggestions. Firstly, due to challenges and contradictions we have found in this thesis, we recommend practitioners to have a reflexive mind to constantly challenge and review the impact brought by VTs. Even though VTs are being seen as a trend or future work setting, practitioners should not see VTs as the 'holy solution' for international operations. Secondly, even if VTs are necessary, we suggest reflecting upon the ad hoc created team structure. VT member is advised to have regular team events, mingling and longer work collaboration period in order to build the personal connection.

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