Knowledge Transfer and the Remote Worker: A Case Study into Simplifeye's Remote Sales Team

Research dissertation presented in partial fulfilment of the requirements for the degree of Msc in International Business Management

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CANDIDATE DECLARATION

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I certify that the dissertation titled: Knowledge Transfer and the Remote Worker: A Case Study into Simplifeye's Remote Sales Team submitted for the degree of: MSc in International Business Management is the result of my own work and that where reference is made to the work of others, due acknowledgment is given.

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Acknowledgments

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I. Introduction

In March of 2020, due to the ramifications of the global pandemic, many organizations were forced out of their traditional office settings and into a remote work setting for the first time. Despite this dramatic and immediate increase in the number of remote workers around the world, remote work is not a new concept. In 1998 it was estimated that 4 million people were working at least partially in a remote setting in the European Union (Hislop *et al.*, 2008). This number has only continued to grow. In September before the outbreak of Covid-19 62% of employees in the United States between the ages of 22 and 65 claimed to work remotely at least some portion of during their work week (Owl Labs, 2019). Following the outbreak of Covid-19 organizations like Microsoft and Salesforce have declared that they will be working in a remote setting (Paayal Zaveri, 2020).

Remote work is here to stay in the modern workplace. Organizations get the benefit of cutting costs on rent and electricity, while employees gain the flexibility to work from where they please and have a more flexible work-life balance(Buffer, 2019). It seems like a win-win for all parties involved. Before organizations, and employees decide to commit to the remote work setting all angles of the remote work debate need to be considered. This study will look at how individuals, teams, and in turn organizations knowledge transfer process is affected by working in a completely remote setting. This study will do so by looking empirically at the experience of the SaaS organization Simplifeye's sales team.

I. I Research Objectives

The research conducted in this study is focused on achieving three objectives. The first objective is to critically analyze the three major characteristics of the remote worker, and identify if the characteristics of the remote worker in the literature (Taskin and Bridoux, 2010) (Chao *et al.*, 1994) are representative of the experiences of the remote worker at Simplifeye. Secondly, this study will look at how the knowledge transfer process of knowledge transmission, knowledge absorption, and knowledge utilization (Thomas Davenport and Lawernce Prusak, 1998) is affected by being in a completely remote setting as compared to the traditional office setting. Lastly, this study hopes to point towards potential ways to mitigate remote works effect on knowledge transfer and point to ways the management team can protect in aid in knowledge transfer in the remote setting.

II. Literature Review

II. I Knowledge

Researching knowledge as a competitive advantage for individuals and companies alike emerged with the work of Peter Drucker's The Post Capitalist Society (Peter F. Drucker, 1994). In this book, Drucker places knowledge alongside land labor and capital as factors of production. He then argues that it is the key factor of production in the modern economy. This work sparked an increase in academic research surrounding the knowledge-based view of the firm (Nonaka, 1994). This has lead to the emergence of knowledge being held as the leading source of competitive advantage in the knowledge-based economy (Jasimuddin and Zhang, 2014).

Knowledge types are referred to as a spectrum that rarely occur in absolutes. This spectrum stretches from explicit knowledge to tacit knowledge(Polanyi, 1966) (Griffith *et al.*, 2003) Explicit knowledge is knowledge that is easily transcribed or verbalized (Spender, 1996). Due to these characteristics, it is the form of knowledge that is easiest and most common to transfer from an individual (Spender, 1996). On the other end of the continuum resides tacit knowledge. Tacit Knowledge can only be learned by personal experience and is rooted in action, commitment, and involvement in a specific in context (Nonaka, 1994)(Polanyi, 1966) Tacit Knowledge is innate and requires personal experience for its creation and potential transference(Tsoukas, 2005) In this way tacit knowledge is much more difficult to transfer (Polanyi, 1966) The overlapping area between explicit and tacit knowledge is referred to as implicit knowledge. Implicit knowledge shares characteristics between both tacit and explicit knowledge. It is tacit in the sense that it is difficult to articulate and is formed over a shared mutual experience. It is explicit in the sense that the knowledge is or could be chronicled in written language. However, this process has not been achieved yet (Leonard and Sensiper, 1998). In this way, implicit knowledge is considered more explicit.

II.II Knowledge Transfer

Knowledge is not a tangible object, and thus can be transferred from one individual to another without the knowledge of leaving the host (Castillo, 2002). The passing of knowledge from one individual to another is referred to as knowledge transfer (Roberts, 2000) (Taskin and Bridoux, 2010). Knowledge transfer is a cognitive process that requires the sender of the information and its recipient to have similar cognitive abilities and share a

close relationship (Raghuram, 1996). Knowledge transfer is achieved through different functions depending on the knowledge's nature. The transfer of implicit knowledge to explicit knowledge is referred to as externalization (Nonaka, 1994) The transfer of tacit knowledge takes two forms socialization and articulation (KÖGL and SILVIUS, 2019). Socialization is the transference tacit knowledge to another person in the form of tacit knowledge. This transfer occurs through a personal exchange and a mutual shared experience(Nonaka, 1994). Articulation is the transfer of tacit knowledge to explicit knowledge. Articulation is achieved through the transcription of knowledge. In articulation the experience does not need to be shared (KÖGL and SILVIUS, 2019) (Nonaka, 1994). These forms of knowledge transfer are a result of knowledge transfer between individuals. When the knowledge transfer differs when it occurs in a group setting. This is because the group and the individual learn differently. As a result, different terminology needs to be used. Codification is the process of documenting the individual's knowledge so that is accessible within the organization without the original host. This can be either knowledge that was originally explicit or implicit (Hansen, 1999). Personalization is the process of one individual passing information from one individual in the group to another. Without the individuals within the group, the knowledge is no longer accessible (Hansen *et al.*, 1999). This collective knowledge transfer can be implicit to tacit. Some researchers have argued that the transfer of tacit knowledge is impossible without significant loss to the recipient (Tsoukas, 2005). Other researchers state that complete knowledge transfer is possible through a continuous process (KÖGL and SILVIUS, 2019). Multiple systems have been proposed as potential methods of stages of knowledge transfer.

The most prevalent is a three-step process that includes knowledge transmission, absorption, and utilization(Thomas Davenport and Lawernce Prusak, 1998). In simple terms, knowledge transmission is the teaching of the information from one individual to another. Absorption is the internalization or comprehension of that information. Utilization is the use of that knowledge in a practical circumstance. The knowledge transfer process is not complete until the knowledge is used (Thomas Davenport and Lawernce Prusak, 1998)

II.III Remote Work Literature
Remote work is most commonly defined as professional activity that is performed remotely from the location where the result of the work has to be delivered either on a part-time or

full-time basis and requires the use of ICTs (Taskin and Bridoux, 2010). This definition effectively creates a continuum for remote work. This continuum commonly is labeled from traditional work at one extreme and telework on the other with a variation of the term flex work in the middle. A continuum is utilized for characteristic of remote work (Daniels *et al.*, 2001)Different research has identified multiple characteristics of the remote worker. Daniels et al proposed five characteristics in their study. These five are location, extent of information and communication technology (ICT) utilized, communication with others external to the organization, communication with others internal to the organization, and knowledge intensity.

Alternatively, Chao proposed frequency of work away from the traditional office setting, location of work, and perception of opportunity rather than a constraint as the three defining factors of remote work (Chao *et al.*, 1994)

It is argued in the literature that all knowledge-based work in the current workplace is not possible without the ICTs in use. Alternatively, it is the use of some ICTs such as customer resource management, and plain text e-mail that causes implicit knowledge to be forced to explicit knowledge(Griffith *et al.*, 2003). For this reason, it has been included as a key factor of knowledge transfer in remote work for this study. However, Griffith also proposes that as when a high level of ICTs are used tacit knowledge transfer amongst team members drops. In Griffith's study, the ICTs being used are primarily texted based. One of the key emerging findings in the case study will be the emergence of video ICTs as a way to combat these difficulties.

In comparing the literature the overlap of the frequency of location and time working with team members have significant overlap and have will be combined into one. Frequency regards the amount of time spent working outside the traditional office (Taskin and Bridoux, 2010). Location refers to where the work is being done. This could be at a home location, a work center, working from the client's office location, or a mobile traveling representative (Chao *et al.*, 1994). However, this study is focused on the isolation of teams and the effects on knowledge transfer, so the physical location and they reoccurrence of working in that setting is not a defining factor of the remote worker. Rather it is the time physically spent with team members in a similar location. Thus the frequency of shared physical location will be the characteristic of the remote worker used in this study.

The final factor of remote work used for this framework is the level of communication with internal team members. This factor predominately emerges in the work of Hislop. Who utilizes the frequency of communication with internal members of the organization and frequency of communication with external members of the organization as two defining characteristics of the remote worker (Hislop *et al.*, 2008). However, during this case study, it was found that communication with external contacts to the organization went unaffected as the workers transitioned to the remote workplace. Therefore, only the frequency of communication with team members will be used as a characteristic of the remote worker during this case study.

II.IV Remote Work Effects on Knowledge Transfer

Some researchers have proposed that is more difficult to transfer tacit knowledge in more remote teams than less remote teams (Griffith *et al.*, 2003)) (KÖGL and SILVIUS, 2019) (Hislop *et al.*, 2008). The reasons behind these difficulties differ within the literature. One of the reasons proposed is that for tacit knowledge transfer participants must share a task (Leonard and Sensiper, 1998). This research will investigate to what degree this is possible in a remote setting.

Another factor proposed is that reluctance to share knowledge with those who do not share a relationship (Chao *et al.*, 1994)(Chao *et al.*, 1994). Organizational Socialization is critical to knowledge transfer in any setting This includes organizational goals and values, a common language or an understanding of specific jargon, and an understanding of organizational traditions, customs, and stories (Chao *et al.*, 1994)However, the development of organizational socialization may be limited in a remote setting (Griffith *et al.*, 2003). Additionally, this must develop organically amongst the team. If it is forced team members will be reluctant to share their knowledge (Grudin, 1987). Team members must trust each other and believe that they will not be replaced for knowledge transfer to occur. Trust is included as one of three deterrents to knowledge transfer in both remote and traditional office setting teams (Foss, 1996).

One of these biggest issues for researchers examining knowledge transfer has been an inability to fully measuring it the process of knowledge. As well as the existence of knowledge in an individual(Richards and Busch, n.d.). As has been discussed in the

literature knowledge is intangible and can reside in multiple places, so we cannot physically measure it. What we can measure is the actions of knowledge transfer(Cabrera *et al.*, 2006).

One way to identify knowledge transfer and knowledge existence is through the recipient's utilization of the knowledge (Thomas Davenport and Lawernce Prusak, 1998). This makes knowledge utilization the final process of the knowledge transfer process. By witnessing the utilization of the managers and organizations can be sure that the knowledge now resides in that member.

II.V Conceptual Review

This case study on the sales team at Simplifeye will critically analyze the three characteristics of the remote worker which include the usage of ICTs, the frequency of a shared physical setting, and the frequency of communication with team members (Chao *et al.*, 1994) (Hislop *et al.*, 2008) (Taskin and Bridoux, 2010). It will then look at what impact positive and negative these three factors have on the three steps of the knowledge transfer process, knowledge transmission, knowledge absorption, and knowledge utilization (Thomas Davenport and Lawernce Prusak, 1998).

III. Research Methodology and Methods

III. I Introduction

This study was conducted as an insider for a case study. Within this study, seven employees of Simplifeye's sales division were given a qualitative style interview. The interviews conducted lasted approximately thirty minutes for each interviewee. During the interview, each participant was asked questions regarding their experiences working in a traditional office setting and working in a completely remote setting. The questions focused on the effects on Knowledge Transmission, Knowledge Absorption, and Knowledge Utilization.

III.II Research Method Selection

This study was an insider case study of Simplifeye's sales team. Brannick and Coghlan define insider researchers as undertaking research in and on their organizations while a complete member, which in this context, means both having insider preunderstanding and access and wanting the choice to remain a member on a desired career path when the research is completed (Brannick and Coghlan, 2007).

I conducted this research as a complete member, meaning that I am fully part of the organization during the study and will continue to be part of the organization after the study was completed (Brannick and Coghlan, 2007). By conducting the study in this manner, I approached the study through a subjectivist lens. The situation that each participant was subjected to was similar in that all were in a traditional office setting then forced to enter a remote setting due to the global outbreak of Covid-19. This study focused not on what happened to the participants, but their experiences that followed and that they continue to experience today.

This study involved a qualitative survey of the seven participants asking them similar questions to one another then asking them to further expand on certain experiences. This was the best method for this study as it is based on the social experience of the participants, and a deeper insight was needed to collect the necessary data.

As qualitative research, it was necessary to have a close relationship with the data. As such, I recognized that my findings would be impacted by my biases and experiences. Despite my closeness to the data collected, I made a conscious effort to allow the theory's in the data present themselves with substantial evidence.

III.III Justification for My Use of Insider Case Study

Some scholars have found Insider Research as a problematic approach. Some would disqualify the method because it is perceived not to conform to standards of intellectual rigor. After all, insider researchers have a personal stake and substantive emotional investment in the setting (Alvesson, 2003; Anderson & Herr, 1999; Anderson, Herr, & Nihlen, 1994).

Additionally, critics of insider researchers argue that the study is inherently biased due to the researcher's to the organization they are empirically observing. Critics of Insider research argue that it is a difficult position to place the researcher as both employee and researcher (Morse, 1998). As the researcher, it must be acknowledged that my experiences within the organization do an effect on my findings.

Others have argued that what provides strength to the method is the increased value of the benefits of studying one's own company (Brannick and Coghlan, 2007). It was important for me to acknowledge my biases before entering the study. I attempted to eliminate my pre-

conceptions of the experience of each participant and develop my theories based on the data provided by each participant. This is ultimately impossible for me to achieve, but rather than being a detriment to the study it was a significant benefit. Participant's appeared to have felt more comfortable expanding on their experience because we had shared them to some degree. This allowed us to enter deep conversations from the beginning. Additionally, as I researcher I was able to ask them to expand further on answers participants answered vaguely. Extracting valuable insight that may have gone missing by a true outsider.

Simultaneously, I was one of the members who joined the Simplifeye team in June. So while I had shared experienced with the team and a connection that allowed for a greater in-depth interview, when discussing their experience in the traditional office I had no preconceived theories or experiences that would have affected my study.

Additionally, an insider case study proved to be beneficial to the organization as the findings are actionable to the organization. Though the scope of the study is focused on one company and their experience. The findings may have a direct impact on the organization in the future. Since the data was collected later conversations have occurred between team members that they believed wouldn't have happened without the study starting the conversation. Additionally, the findings can be applied to the specific situation.

One factor that was considered in the selection to do an insider case study was the state of the business climate in the time when the study was conducted. During the duration of this study, many companies around the world were forced to a remote environment due to the spread of the Coronavirus. This caused extreme difficulties with sourcing a company that would allow for an outsider case study. Companies were unable to bring in their employees let alone an outsider, and in a time of uncertainty, they were hesitant to open their doors. By looking internally to my own company, I was able to conduct a study with access that was unlikely to occur in another organization.

III.IV Research Design

This study was conducted as a qualitative interview with seven members of the Simplifeye sales team. Each member was interviewed separately. None of the participants had any knowledge of the other participant's answers or who else would be included in the study. This was felt to be important as Executives, Managers, and Employees all participated. The

question asked were broken into there categories. Use of ICTs, frequency of shared setting, and frequency of communication with other team members. Within those three categories, the questions then focused on the three steps of the knowledge transfer process. Knowledge transmission, knowledge absorption, and knowledge utilization. The questioned were placed into categories for the benefit of the organization, but the data collected overlapped multiple categories.

All participants were asked the same core questions. In some cases, participants were asked to clarify their answer further, or follow up questioned were asked if there was the potential for additional insight to be provided. Each interview was conducted and then recorded using Zoom. Then the audio was transcribed into text utilizing Zoom's transcription software. The transcripts were then edited manually to ensure accuracy. The following questions were asked of every participant:

General Questions

1. What is your name?
2. What is your role at Simplifeye?
3. How long have you been at Simplifeye?
4. Where are you working from currently?

Category 1 ICTs

1. What technologies does your team utilize to communicate with one another?
2. How has your technology utilization adapted from a traditional team to a remote team?
3. How does the team pass along experience-based information in the traditional office settings?
4. How do you pass along the information that you cannot write down to your team members?
5. How does the team pass along experience-based information in the remote setting?

Knowledge Absorption

6. How has do you know your team members have learned from your experience
7. Are you able to learn from your team members experiences over Zoom?
8. Have team members being able to use other's experiences to improve their work

Knowledge Utilization

1. Do you feel you/ your team is your team able to take the information they gain from non-face to face communication and implement into their work?

Category 2 Frequency of Location of team

Knowledge Transmission

1. Can you describe your team's current setup?
2. Describe your team's daily processes in the traditional work setting
3. Describe your team's daily processes in the new remote setting
4. Does the location of your work affect your effort to share your experiences with your team members?
5. What impact did your time in the office have on your relationship with your team members?
6. What impact has your time away from the office had on your relationship with your teammates?

Knowledge Absorption

1. Do you feel you/ your team can learn from one another the same way remotely as they do in the office?
2. How do you go about learning new processes from your team members?
3. In what ways has switched to a remote setting effected your and your team's ability to learn from one another?

Knowledge Utilization

1. In a perfect world would you prefer your team in a traditional office setting or a remote setting and why?

Category 3 Frequency of Communication with Internal Team Members

Knowledge Transmission

1. How often does your team communicate with one another?
2. How has the rate of communication been altered during transitioning to a remote setting?
3. Does the team have words or traditions you feel are unique to the company or the team?
4. Have any new traditions developed during your time working remotely?

Knowledge Absorption

1. Do you find it more difficult to share your experiences with team members who you haven't worked with in person?
2. Are you less likely to share or ask about experiences with people you haven't met in person?

Knowledge Utilization

5. How has the rate of communication been altered during transitioning to a remote setting?

Following the seven interviews, the answers to all the questions were added to one document so they could be analyzed together, and key trends could begin to emerge. This also allowed for data outliers to become starker. The data was then grouped again into the three categories, and the propositions made in the findings section were formulated.

III.V Justification for Size and Interviewee Selection

Seven interviewees were selected to be interviewed. This number was deemed to be substantial due to the size of Simplifeye's sales team. There were twelve members of the sales team who have experience both the traditional office setting and the remote setting, six of these twelve were selected to be interviewed. These six included the Vice President of Operations, both Sales Managers, and three Account Executives. They were selected to provide insight from an executive, managerial, and employee perspective. As well as a range in perspective of tenure within the company. Tenure of the interviewees ranged from three years to two months. By interviewing half of the sales team with a range of tenure and position an in-depth knowledge base was able to be formed, with no new significant insights provided if interviews continued.

Additionally, six new hires were added to the sales team in June 2020. These team members provided a different perspective to the rest of the team. One of these team members was interviewed for this study. Although new hires provided a different perspective, the focus of this study was to focus on the differences in knowledge transfer in the remote and traditional office settings. Without having the traditional office setting experience their contribution to the study was limited. Thus, it was concluded that one interview would be substantial.

IV. Presentation of Findings

IV. I Introduction

Table 1

Participant	Title	Tenure	Worked in the Office Setting Before Remote Setting	Gender
Dylan Kayser	VP of Operations	2 Years 4 Months	Yes	Male
Alexa Figliulo	Sales Manager	3 Years	Yes	Female
Millie Blumka	Sales Manager	1 Year 10 Months	Yes	Female
Austin Frank	Account Executive III	11 Months	Yes	Male
Hassiem Williams	Account Executive I	1 Year 7 Months	Yes	Male
Matt Lieberman	Account Executive II	1 Year 1 Month	Yes	Male
Colin McNeely	Sales Development Representative	3 Months	Yes	Male

The findings section has been formulated from the data provided in the seven interviews conducted within the sales team at Simplifeye. During the interviews, the interviewees were asked about their experience in a new remote setting. From the data they provided proposals have been formulated on the three factors of remote work, usage of ICTs, frequency of communication, and frequency of setting, affect on the knowledge transfer process which includes, knowledge transmission, knowledge absorption, and knowledge utilization.

Three main findings were formulated regarding **the usage of ICTs**. First, it was found that in modern traditional office place ICT usage is at a high level daily because of this there is not an abnormality in the usage of ICTs to the remote worker, nor did they see an increase in their ICT usage in the remote setting. Secondly, it was also found that by implementing video conferencing ICTs throughout the day an office-like atmosphere can be created amongst the sales team despite the disparity in location. Third, the managers of teams can utilize ICTs to witness the knowledge transfer process between team members despite being in a remote setting. Overall, the utilization of ICTs in a remote setting doesn't hinder

the tacit knowledge transfer process. Rather, it has made it possible to complete all three phases of the knowledge transfer process in the remote setting.

Additionally, three propositions where formulated surrounding the **frequency of a shared physical setting.** First, that knowledge transfer had become more difficult in a larger group thus the importance of small groups and one on one sessions has risen. Secondly, the in the moment or passive knowledge transfer is less likely in the remote setting. Therefore, without a frequent common setting knowledge transfer has to be done purposely. Third, knowledge absorption is more difficult without a common setting. Overall, the decrease in frequency of a common setting in the remote worker has the largest and the most negative effect on the remote worker.

Finally, three propositions were formulated on the **frequency of communication** amongst team members effect on tacit knowledge transfer. First, in a remote setting, the frequency of communication did not significantly decrease communication amongst individual team members. In fact, for some, it increased. Secondly, small groups allowed for the frequency of communication to stay close to that within the office. Third, without having the prior frequent communication in person it is less likely that the knowledge transfer process will begin, and knowledge absorption will occur. Overall, the Simplifeye team did not believe the quantity of communication had been significantly affected but the quality had. This was the larger effect of the knowledge transfer process.

IV.II ICTs
IV.II.I Introduction

Of the seven interviews conducted all seven cited that the two technologies they use to communicate with one another daily were Slack and Zoom. Slack is a text-based office communication tool. Matt referred to slack as a tiny informal e-mail. Slack allows for conversations between the entire office, groups, sub-groups within groups, and one on one conversations. Communication on Slack is primarily text-based. Additionally, images are used to communicate in the form of Gif files. Slack does have a voice call feature that is utilized for one on one communication audio communication. However, the sales representatives interviewed stated that they rarely used this function. The two sales managers interview said they will use it periodically for one on one messages they could not clarify in a text format.

Zoom is also used daily amongst the sales teams at Simplifeye. Zoom is a video conferencing tool that allows for oral and visual communication. Simplifeye's two sales teams stay in zoom meetings with one another throughout the day. The audio function is turned off, unless they are in one of the three-team check-ins they have throughout the day. Even when audio is off during the day the video remains on.

Also, the two sales managers both stated that they used Aircall daily as well. Air Call is the tool the sales representatives use to make phone calls to potential and existing customers. Air Call records every conversation that is had on the software. The managers utilizing these recordings to identify potential learning opportunities and witness first-hand the completion of the knowledge transfer cycle, knowledge utilization.

Table 2

ICT	Who Uses it	How is it Used	Frequency
Slack	Entire Company	Text Primarily Audio Rarely	Periodically Throughout the Day
Zoom	Sales Team	Video and Audio Primarily Text Rarely	Constant Usage Throughout the Day
Aircall	Sales Team	Audio Only	Internal Usage is Weekly
Google Hang-Out	Executives and Managers	Video and Audio Only	Periodically as Management sees fit

IV.II. Knowledge Transfer and ICT Usage

A key characteristic of the more remote worker in the traditional literature was a heavy usage of ICTs, in contrast to the traditional office worker who does not utilize ICTs often(Chao *et al.*, 1994) (Griffith *et al.*, 2003). This study sought to examine this proposition empirically through the context of the case study, Simplifeye. Alternatively, in the interviews conducted with the Simplifeye team members, for the six members who had worked in the traditional office setting with Simplifeye, they reported that ICT usage in the office and the remote setting were nearly the same. The team reported using ICTs daily in the office setting before switching to the remote setting. Austin claimed that this was due to the ease of communication that ICTs provide even in the office setting. Rather than getting out of

their seats or yelling across a room a Slack message allowed team members to communicate throughout the day without significant disruption. Dylan was able to confirm the feelings of the other six interviewees that ICT usage had not dramatically increased since moving to the remote setting stating that message transmission rates within Slack have remained constant.

The familiarity with ICTs could be one of the reasons why all of the interviewees said that they felt that they were able to share their experience-based knowledge through the ICTs. The shift away from the traditional office in-person communication might not have been as dramatic, because the communication methods have not changed. They have only been altered slightly.

Zoom usage however went from never being used in the traditional office setting to being used constantly every day. The increased usage of this ICT has not hindered tacit knowledge transfer rather it is one of the largest benefits and possibly the only way knowledge transfer in a remote setting is possible. Dylan the Vice President of Operations decided to implement the all-day Zoom meetings. This was different than the typical scheduled Zoom meeting. These Zoom meetings created a virtual meeting place, where employees could be in the same "room" as each other without being in the same physical location. The Zoom office calls also differed from the typical Zoom meeting because there was no set presenter. Conversations in these calls form naturally just as they would in a typical physical room. Dylan implemented the all-day Zoom meetings because he felt that the time spent around each was the number one thing the team lost was the office setting. The use of ICTs especially Zoom has recreated an office setting despite the disparity of location. To the degree that Austin stated that when I think of social settings now I think of zoom team meetings and virtual connections now. Matt agreed with Austin's remarks stating that when he thinks of the office he thinks of eight to ten people on the screen rather than sitting in a room with his co-workers.

The usage of ICTs has kept the door open for tacit knowledge transfer to occur by providing the ability to communicate in multiple ways with teammates. for verbal communication throughout the day. Hassiem mentioned that he will Slack colloquies throughout the day, but when he needs to clarify their message, they get into a zoom meeting to critically engage each other in verbal and visual context. Thus opening up two additional lines of

communication that allow knowledge transfer to potentially transfer at a higher rate. Equally important as important is the non-verbal communication. Hassiem mentioned that over Zoom he gets the energy from other colleagues even when he cannot hear them. He feels like they are close because he can see their hand movements, posture, and body language. By utilizing audio and video tacit knowledge can still transfer from team member to team member in an efficient manner. All seven interviewees state they could share their experiences and learn from others experiences through Zoom or other ICTs. Additionally, with the usage of monitoring ICTs like Aircall the managerial team was able to witness the knowledge utilization and the competition of the knowledge transfer process.

One of the major concerns raised in the knowledge transfer literature is the ability to measure when the process has been completed (Thomas Davenport and Lawernce Prusak, 1998) (Richards and Busch, n.d.) (Benjamin Martz and Shepherd, 2003). Organizations only know that knowledge that has been shared with an individual has been fully transferred once they start to utilize the new knowledge in their daily activities. During Simplifeye's transition to the remote office setting, they became aware that one of the drawbacks would be the ability to share experiences in real-time. This was especially true for team members who can't help each other throughout the day. Because of this team members have increased difficulty sharing valuable information with teammates. Ultimately, without the traditional office, they are unable to identify what other team members don't know.

Additionally, the three managers interviewed stated that by utilizing the ICTs that record such as Aircall or Zoom they could monitor the work of their employees and identify if they were utilizing the new knowledge that managers and other teammates were attempting to share. Millie stated that rather than hoping to hear the utilization of techniques that she was attempting to teach her team in real-time she could utilize the recordings to gather concrete evidence who had learned the new techniques and who needed more work. Millie also stated that by utilizing recordings individuals could learn from their own experiences. In a sense growing their tacit knowledge without need that knowledge to be transfer from another teammate. However, it is not possible to listen to every call for every person. Millie and Alexa mentioned that they monitor key data points such as meetings created, meetings, held, and new accounts as an indication that the knowledge they wanted to transfer to there teams were being utilized. This likely puts a much larger emphasis on the role of the

manager in the remote setting. Not only to identify what knowledge needs to be shared with what team member but monitoring the completion of the knowledge transfer process.

IV.II.III Conclusion

From the seven interviews conducted it became apparent the literature on remote work and ICT usage was accurate in some ways and inaccurate in others. ICT usage did rise (Hislop *et al.*, 2008), however, what the literature has failed to capture is that in the traditional office setting ICT usage is already at a high rate thus the increase is insignificant, and it does not appear to have a negative effect on workers ability to transfer tacit knowledge as Griffith suggested (Griffith *et al.*, 2003). From the experiences of those interviewed, it appears that for knowledge transfer to be possible in a purely remote setting the usage of ICTs is needed by adding video and audio-based ICTs the office setting can be closely replicated. Overall, based on the experience of those interviewed a higher use of ICTs benefited the knowledge transfer process in a remote setting.

IV.III Frequency of Shared Physical Setting
IV.III.I Introduction

The frequency of setting a physical setting refers to how often team members share a common working location. Simply put, how often are team members working in the same building. For the Simplifeye sales team before March 16, 2020, the entire team was in the same office setting every day. This meant that the entire team was in a traditional office setting for the entirety of their working experience at Simplifeye. On March 17, 2020, the team switched to a completely remote setting and none of the team has shared a common physical setting for a workplace once during that duration.

On June 15, 2020, the Simplifeye team expanded adding six new sales team members to a second office location in Indianapolis, IN. These new members have been in a completely remote setting their entire tenure with the company. None of the new hires have ever shared a common setting with any of their team members.

IV.III.II Knowledge Transfer and Frequency of Common Setting

During the duration of the interviews, a clear consensus emerged that a lack of a common setting was the biggest drawback of transitioning to the remote setting. First, all the interviewee's mentioned that they missed the social setting of the traditional office place. On further questioning, it became clear that not only were team members missing out on

the social aspects of a common setting, but it was having a major effect on the team's knowledge management process.

It was mentioned by every interviewee who had worked with Simplifeye in a traditional office setting that they believed that they were learning less from teammates in the remote setting. Dylan stated that not being in a common setting has had the biggest impact on team members ability to learn from one another. Two reasons were commonly cited by the interviewees as to why they believed they were learning less. First was the ability to passively transfer knowledge amongst team members. Austin stated:

"We have an open floor plan office so I can hear the people making pitches next to me. I can hear my managers coaching my teammates. You pick up a lot just by being next to people. Being virtual we don't get that because we aren't in a room where you can hear and listen to one another all day."

Even without working in the traditional office setting Colin, who was part of the team brought on in June, feels like he is missing on an important piece of learning from his teammates. When asked if he thought he was able to learn from his team members effectively in a remote setting he stated:

If we could have seen people work, how we should work and hear them in their day today. I felt that that would have been very helpful.

The other hindrance to the knowledge transfer process is the collective learning moment, or as the owner of Simplifeye Dr. Ryan Hungate refers to it as the AHA Moment. During our interview, Hassiem said that being in the same office you can speak with them and ask questions in the moment, but you lose that once you are in a remote setting.

The passive knowledge transfer is not commonly emphasized in the literature reviewed as a key factor in the knowledge transfer process for remote workers. However, it is the view of all of the interviewees that this was the largest effect on their ability to learn and teach one another.

Combining these factors means that knowledge transfer when team members do not frequently have a common physical setting is more difficult. However, some of the interviewees made it a point to say it was not impossible. Alexa said that in her team the

biggest effect on her team's knowledge transfer process is that to share your tacit knowledge it must be done purposefully. Austin concurred with Alexa's statement saying that unless he sets up a meeting or enters a meeting with the idea to share his experience it won't happen. Millie shared the opinion saying that her team must go out of the way if they want to learn from one another. This was a detail highlighted in the literature as one of the problems in remote work, and it has been affirmed by the Simplifeye team. Leaders in a remote organization need to encourage the processing and sharing of information or it will not occur (Hertel *et al.*, 2005).

This puts a larger responsibility on the team's management to get a conversation started, and put the team in a situation where the knowledge transfer process can begin. The two manager's both emphasized this in their interviews. Millie stated:

"I select the recordings and show the examples in our group meetings rather than the teaching moments coming from the team members."

Alexa agreed saying:

"Being remote makes me as a manager make more of an effort to transfer the (tacit) knowledge it had increased my managerial work."

The team members agreed Matt stated that his relationship with his manager has become much more intense because in the remote setting it is the only line of communication that remains open throughout the day. This is even more true for team members who are newly starting their role. Colin relies on his manager for every aspect of his day from setting his schedule to his daily tasks.

Knowledge Absorption is also greatly affected by the infrequency of a shared setting. This effect was stated by the team members who worked in the traditional office setting before going to the remote setting. Most emphatically by Matt who said that:

"I have been doing this for 6 months and it is inherently more difficult to learn from everyone. When you are sitting next to someone in the office you are feeling their energy and you are just trying to grab a little piece of that. Remotely that's much more difficult."

Austin and Hassiem shared Matt's opinion that it is much more difficult to absorb information in the remote setting, but they do believe it is possible. Austin said:

"It is possible to learn from one another over the zoom call, but it is much harder. It becomes your responsibility to take it in there is no one there to hold you responsible."

Interestingly the managerial team didn't think that the infrequent setting had as large as an impact as the team members stated. Dylan said that he believes team members must be learning in the remote setting because they have had their highest producing months. Dylan credits this to recruiting team members who are adaptable and can get the job done regardless of the situation.

This difference in opinion between team members and management leads me to believe that while the performance of the team hasn't been affected negatively yet. Unless they can increase the frequency of the common workplace setting in the near future the team's performance will begin to suffer.

IV.III.III Conclusion

Overall, remote work decreasing the frequency of common settings has the largest effect on the knowledge transfer process. The most affected area is the team's ability to passively transfer and absorb knowledge. Although, knowledge transfer is still possible it takes a dedicated effort for team members to transfer knowledge amongst each other. A process that is even more difficult unless the managerial team provides a setting where teammates can transfer knowledge amongst each other.

IV.IV Frequency of Communication Amongst Team Members
IV.IV.I Introduction

The frequency of communication includes conversations between individuals, teams, and the entire sales division. When Simplifeye's sales team was in a traditional office setting the two teams meet twice a day to discuss their daily experiences and grow relationships. After moving to a remote office setting in March these meetings were increased to three times a day. Alexa and Millie said they feel this would help keep communication lines open amongst the teams. Another factor to consider is that as the sales division moved to a remote setting, they decided splitting into two smaller teams would be beneficial. As will be discussed further this has hampered the communication between members not on the same team, but the increased frequency for team members who are now on the same team.

IV.IV.II Frequency of Communication and Knowledge Transfer

The literature review suggested that the team transitioned into a more remote setting the communication amongst team members would begin to decrease. However, for Simplifeye's sales team this does not appear to be the case. Some of the participants reported an increase in communication frequency with their immediate team members. Hassiem mentioned that he would go out of his way to speak with team members to communicate with them in the remote setting whereas in the traditional office setting he knew he would have an opportunity to see them later in the workday. Matt agrees with Hassiem that with his team members and those he was close with his communication frequency was up, but with those he was more likely to have casual conversations with around the office his communication levels were down. Austin shared Matt's opinion stating that anyone who relied on random office communication or "water cooler talk" to communicate with his communication levels decreased.

All seven interviewees mentioned going out of their way to talk to team members daily. It appears that most of the communication with team members was more out of isolation rather than necessity. Hassiem put it the most bluntly stating:

"I would say I communicate with individuals more actually just to keep my sanity."

The interviewees held the common opinion that the increase in communication is likely short-term, and if they did not return to a traditional office setting soon, their increase in communication would likely fall off. The sales team members who had transitioned from the office setting to the remote setting reported that they felt they were becoming more introverted over time. They felt that this trend would only continue at team members roles change and individuals were added or subtracted from their teams.

One factor that may be contributing to the increase in communication frequency in the remote setting is the division of the teams into smaller team groups. Millie and Alexa, the two sales team leaders, said that because they are communicating daily in their smaller team groups, they felt that conversations, one on one and in the team format were holding at a similar rate. Austin mentions that while his communication amongst the entire office may be down his communication with his team was certainly up. Dylan believes that the sales team and Simplifeye size overall has been an advantage.

Despite the increase in frequency in communication amongst team members, all participants who shared a traditional office setting stated that they were less likely to share tacit knowledge with team members who they did not share a traditional office setting with before going to a remote setting. Austin stated that the issue was not having a common shared experience. This is similar to the concept of organizational grounding in the literature. He said without having a shared experience it is impossible to relate to them. Matt agreed stating

"When you don't have a relationship (with a teammate) its hard to trust them with your experiences."

One thought was that quality relationships would be able to formulate over a zoom channel. However, these relationships despite being "the new normal" remain not as strong as relationships made in the traditional office setting. Hassiem stated that it was "strange" for him to create bonds with people over a camera. He felt that they are essentially strangers. Alexa stated that she believes that there is a threshold for how close individuals can get over a virtual setting. Alexa said that it is her job as a manager to format the team to help the team grow these relationships despite the infrequency in-person communication.

Interestingly both managers stated that they felt that the team members who have worked in a traditional office setting and those who have not do not have a different relationship with one another and would be just as likely to share their experiences as team members who had worked in the traditional office setting together before. Colin who has only worked in the remote setting shared this belief with management saying that he doesn't believe that the other team members who shared an office setting struggle to share their experiences with him.

In conjunction with the findings from the frequency of setting section that stated that in a remote setting knowledge transfer needs to become a more purposeful process, this would suggest that significantly less knowledge transfer occurs in the complete remote setting. Without team members who need the experience of the more tenured employees asking for them to share their experiences the transfer of the tacit knowledge will never occur.

IV.IV.III Conclusion

Overall, this points to the concept that in Simplifeye's 100% remote setting frequency of communication seems to have increased. However the frequency of quality communication seems to have increased significantly, and thus the knowledge transfer process is less likely to occur in the completely remote setting.

V. Conclusion and Recommendations

V.I Conclusion

By examining the experience of Simplifeye's sales team transitioning from a traditional office setting to a remote setting three trends in the remote setting became evident. First, the usage of ICTs has been inflated in the traditional office place allowing for the easy transition to a heavier reliance on the usage of ICTs in the remote setting. Additionally, by using ICTs that incorporate visual and verbal communication, like Zoom, daily allows tacit knowledge transfer to occur in a remote setting. This contradicts the literature which states that the teleworker will have a high increase in ICT usage (Hislop *et al.*, 2008), and that will in turn result in a decrease in tacit knowledge transfer (Chao *et al.*, 1994) (Griffith *et al.*, 2003).

The biggest impact on tacit knowledge transfer in a remote setting is the infrequency of a shared setting. This is largely due to the loss of passive knowledge transfer. The importance of passive knowledge transfer was as greatly emphasized in the literature as it was by the participants in the study, who collectively stated that this was the largest effect on their ability to pass and obtain knowledge to and from teammates. Due to the loss of passively transferring knowledge the knowledge transfer process becoming a more deliberate action(Hertel *et al.*, 2005). This means that managers need to be more involved in taking an active role in the developing situations for knowledge transfer to occur. Not only is knowledge transfer affected heavily by the infrequency of a shared physical setting knowledge absorption was as well.

Frequency of communication amongst team members at first glance increased amongst the sales team of Simplifeye in a remote setting, however upon further examination, while team members were communicating with each other more often the quality of their

conversations had decreased making it more difficult for knowledge transfer to occur in the remote setting.

V.II Recommendations

As a result of this study, two main recommendations have been formulated for future remote teams. First, when possible keep the standard operating procedures and lines of communication the same regardless of remote or traditional office place setting. From the experiences of the participants, the negative effects of remote work were mitigated to some degree by keeping familiar processes.

Secondly, organizations need to actively be aware of the loss of passive knowledge transfer. Additionally, they need to be aware that knowledge transfer is more difficult when in a remote setting. By being aware organizations can force team members into situations where knowledge transfer can still occur, despite it not occurring naturally at the same rate.

V.III Limitations of the Research

The most significant limitation of this study was the narrowness of the scope. By only incorporating the experience of a small team in one organization. In-depth and specific experiences were able to be discussed and analyzed at length, however, the findings may not apply to all organizations. The size of the team, the SaaS industry that Simplifeye works in, and other organizational traits may impact the applicability of this study to other organizations.

It also needs to be noted that is study was conducted during the pandemic of Covid-19. Simplifeye being forced to implement a remote work setting rather than it being agreed upon by the organization and the employees may have affected how the participants of this study viewed their experiences in the remote setting. It has been argued that the perception of the remote work by the employees will have a significant and negative impact on the team's ability and desire to transfer knowledge (Chao *et al.*, 1994). It may be considered that the team is more willing to adjust and make the attempt to keep the norms of a traditional office setting alive as the team enters a time of crisis such as a pandemic.

V.IV Potential for Future Research

As mentioned in the introduction of this study, as organizations are looking into making remote work a permanent part of their business model all aspects of remote work should be

taken into consideration. One of the factors that were commonly mentioned by all seven of the participants in this study was the effects both positive and negative that working in a remote setting has had on their mental health. Nearly all of the participants mentioned that they felt extremely isolated in their remote setting and this was having a negative impact on their health. While a couple of the participants mentioned that by eliminating their daily commute they were able to have more personal time and mental health was positively affected. This could be an interesting study to pursue further.

Another opportunity for potential research is to use the same framework used in this insider case study, but apply it to a team with a mix of completely remote setting workers, completely tradition office setting workers, and workers who spend time in both the traditional office setting and the remote office setting. Identifying how the effects on the knowledge transfer process differ.

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