Employee Motivation in Remote Work

Intrinsic Motivation and Self-Efficacy’s Role in Employee Motivation for Remote Environments

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Preface

This thesis was performed at Linköping University for our Bachelor of Business Administration. The research process was arduous, but it provided us a great opportunity for growth and experience. There were many occasions where obstacles have hindered the progress of the thesis; however, we were able to overcome these challenges thanks to the many people involved throughout the writing of this thesis.

We would like to first thank our supervisor, Réka Andersson, for assisting and guiding us during the development of this thesis. Only through her constructive feedback and critical inquiries were we able to fully realize its potential.

Moreover, we would like to thank the participants of our research from both companies. Without their contribution, we wouldn’t have been able to successfully perform our study. Special thanks to those that have provided us the opportunity to communicate with the employees that we did not have prior access to. Only through them was it possible to obtain enough participants for this study’s empirics.

Finally, both of us would like to thank our family and friends that have continuously given us support throughout this bachelor thesis. With their support, we were encouraged to continue the thesis process despite the difficulties.

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Abstract

Information technology (IT) has enabled organizations to implement significant, beneficial traits of virtual organizations into their own structure such as the ability to work remotely. However, due to the COVID-19 pandemic, the business world was forced to shift towards a virtual environment where remote working has become the new norm. Thus, this study seeks to contribute to the understanding of motivation and self-efficacy for workers in this relatively new environment. This is guided by three main research questions: (1) What are the aspects of intrinsic motivations that employees feel affect employee motivation in a remote work environment?, (2) How do employees perceive incentives and other extrinsic motivators within the remote work environment?, and (3) In which possible ways does an employee believe self-efficacy has altered due to remote work? Self-determination theory (SDT) and self-efficacy were utilized as the main theoretical tools to examine the motivation of remote workers within the engineering industry along with inductive reasoning. Data for this qualitative study was gathered through the conduction of seven semi-structured interviews on two engineering companies, which are identified as Sim Co. and Mech Co. It was found that extrinsic motivators within the more autonomy supportive environment—that is remote work—will not be as influential and prominent from the individual’s perspective. Hence, supporting an individual’s perceived locus of causality (PLOC) and intrinsic motivators will be much more beneficial to motivate remote workers. It was also observed that project burnout and personal disinterest continues to conflict with remote workers as the separation between work and personal life may be an issue for the individual. Vicarious experience and physiological and emotional states were primarily affected for the interviewees during the transition to remote work. This led to a change in self-efficacy for the individual along with competence and autonomy. This research has concluded: (1) remote employee motivation is influenced more by intrinsic motivations rather than extrinsic motivations similar to the in-office environment, and (2) self-efficacy judgment was affected in two components by remote work—vicarious experience and physiological and emotional states.
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1. Introduction

1.1 Background

With the development of information technology (IT), the distribution of information and tasks assigned to workers has become almost instantaneous. This has opened up new avenues as IT has enabled dispersed individuals within an organization to collaborate and complete their respective tasks relatively efficiently and effectively. A completely virtual organization, where the company operations are wholly on the internet, is now feasible. Instead of adopting a complete virtual structure, some organizations have simply integrated aspects of virtual organizations within their framework—namely remote work. This study defines the term “remote work” as the occurrence of an employee who works at a location where they lack direct supervision and physical contact with the line manager or project manager—a derivation of Sandy D. Staples’s definition (2001). With 35.2% of employees switching to remote work (Brynjolfsson et al., 2020) at the start of COVID-19, businesses must explore ways in which they motivate employees in a remote workplace environment.

The value present in this study stems from the new understanding of intrinsic and extrinsic motivation in a remote environment due to the differences in social context and organizational setting. This difference would cause the regulatory process to vary from a non-remote work setting. Even though the goal contents are similar, the effective motivators would differ because of the altered regulatory process. For instance, there was a study that examined the perspective of teachers within a remote educational environment (Orsini & Rodrigues, 2020). The study concluded that management should support autonomy, competence, and relatedness for educators to promote job motivation. This is due to different regulatory processes and different goal contents requiring different degrees of need satisfaction (Deci & Ryan, 2000). Therefore, this study would understand the effects of a remote work environment on the degree of need satisfaction.

The development of information technology has benefited businesses and allowed employees to work remotely within a virtual organization. With the increasing usage of remote work, discussions concerning employee motivation in a remote setting
have come to the forefront. Therefore, this study incorporates self-determination theory (SDT) as the main definition of motivation to explore remote employee motivation and their experiences. Overall, the study will present a new understanding of employee motivation for a remote work environment through the use of SDT as the motivational theory.

1.2 Current State of Knowledge

Although employee motivation has been explored in the physical office setting, the research area should be broadened to account for other possible work environments. Since motivation is affected by the environment an individual (employee) works in, current literature should explore the differing perspectives of a remote and in-person work setting. As can be seen with the COVID-19 pandemic, there will be times of crisis where a remote (virtual) work environment becomes predominant due to necessity. Hence, it is of concern to understand employees’ experiences within this environment for better management practices or self-motivating purposes.

Within the current state of knowledge, employee motivation was explored through self-determination theory (SDT) in multiple settings. Furthermore, researchers have explored SDT’s relationship with other motivational concepts while identifying the relation between the intrinsic and extrinsic motivations (e.g. Deci & Ryan, 2000). Intrinsic motivation is concerned with the interests of the task, connectivity, and inherent autonomy of an individual. Meanwhile, extrinsic motivation relates with rewards, self-worth, values, and internally integrated autonomy (Deci & Gagné, 2005).

Self-determination theory has been applied to employees in the workforce, education, and athletes (Deci & Ryan, 1985a). In the workforce, SDT has been applied to explore employee motivation and its effects on the company. For instance, an article examined the relationship between an employee’s psychological need satisfaction and organizational citizenship behavior (OCB)—defined as the discretionary actions not directly recognized by a reward system but promoting an effective functioning organization (Wörtler et al., 2020). The study concludes that the relationship between psychological need satisfaction and OCB are enhanced when the basic psychological needs are satisfied. Furthermore, SDT in work organizations led to findings regarding
how intrinsic motivation enhances or lessens based on the actions taken by a managerial role. For example, early experiments have illustrated that monetary rewards undermined people’s intrinsic motivation when presented in an intrinsically interesting activity (Deci & Ryan, 2000). In the educational field, a study made use of SDT in their theoretical framework and examined teachers’ responses through a questionnaire. It concluded that the “teachers’ autonomous causality orientation, perceived job pressure, and perception of a student's self-determined motivation influenced their need satisfaction” (Chian et al., 2020). Meanwhile—in the athletic field—SDT was applied in the exploration of athletes’ motivation to identify a link between an athlete’s motivation profile and enjoyment, effort, frequency of attendance, attitude, intention to continue, and satisfaction (Karageorghis, Terry, & Vlachopoulos, 2000).

Despite the expansive theoretical work and the studies in workplace environments, there is still a gap of knowledge when applying SDT to a remote workplace environment.

1.3 Problem Statement

With the COVID-19 pandemic, businesses continue to struggle as they are forced to shift towards a virtual environment for health safety. According to the article COVID-19 and Remote Work: An Early Look at US Data, the sample workforce (n = 25,000) most commonly commuted to work despite the pandemic. However, the second most common response was workers who switched from commuting to working at home. With 35.2% reportedly switched to working at home and 15.0% already working remotely, it is suggested that about half of the workforce are currently in a remote workplace environment (Brynjolfsson et al., 2020). As a result, the prevalence of employee motivation in a remote workplace environment—that is already volatile, uncertain, complex, and ambiguous (VUCA)—remains one of the most prominent issues for organizations and their wellbeing. Thus, to somewhat remedy this issue, this study looks into motivators within the inherently autonomous workplace of a virtual setting through the examination of the employees’ perspective. Furthermore, this research accounts for self-efficacy—a person’s perception of their own ability to complete a specified task (Bandura, 1978).
Although there is a myriad of studies that defines concepts included within SDT that aids in the broader understanding of motivational theory (e.g., Deci & Ryan, 2000; Deci & Gagné, 2005) and its influence within a non-remote work setting (e.g., Gong et al., 2016), there is a lack of its application within a remote work setting (e.g., Orsini & Rodrigues, 2020). However, due to the COVID-19 pandemic, more articles have been touching upon the topic of remote workplace environments, but these new literature look into the management control practices rather than employee motivation. This research seeks to understand the potential effects on employee motivation by a virtual organizational environment, and bridge the informational gap where employee’s experience on motivation hasn’t been explored within a remote workplace environment.

1.4 Aim & Research Questions

This study aims to contribute to the understanding of motivation in a remote workplace environment from the perspective of employees within the engineering industry of the United States. The aim of this research will be guided through three primary research questions:

- What are the aspects of intrinsic motivation that employees feel affect their motivation in a remote work environment?
- How do employees perceive incentives and other extrinsic motivators within the remote work environment?
- In which possible ways does an employee believe self-efficacy has altered due to remote work?

These questions elaborate on an employee’s perspective of motivation, in a remote workplace environment, according to SDT. With the three research questions, the study would contribute another perspective for self-determination theory to better understand the elements of motivations that become present within a remote workplace environment.
2. Theoretical Frame of Reference

As indicated previously, this research utilizes self-determination theory (SDT) as the main motivational theory. In SDT, it defines motivation as a culmination of both intrinsic and extrinsic components. This contrasted the drive theories, which based their motivational theories on physiological drives—like food, shelter, and sex—to define human behavior (Deci & Ryan, 2000). The idea of the motivational theory was to expand on intrinsic motivations and their relations with extrinsic motivations played an important role in an individual’s overall motivation. Mentioned in Deci and Ryan’s *Intrinsic Motivation and Self-Determination of Human Behavior*, SDT consists of three sub-theories: (1) cognitive evaluation theory (CET), (2) organismic integration theory (OIT), and (3) causality orientations theory.

2.1 Cognitive Evaluation Theory


The first proposition introduces perceived locus of causality (PLOC), which states that external events will impact the individual’s intrinsic motivation according to PLOC. Simply put, PLOC is the degree in which a person believes that their actions were of their own (internally) or because of externally motivated behavior (Brown, et al., 2007). Further research conducted by Brown, et. al. on PLOC clarifies the possible impacts that personality has on internal PLOC and its positive influence on performance through a Singaporian study (2007).

The second proposition explains the individual’s psychological need to be competent and how events that increase their perceived competence level will in turn increase intrinsic motivation. Conversely, the opposite holds true; events that decrease perceived competence will be a detriment to intrinsic motivation (Deci & Ryan, 1985a).

The final proposition elaborates on the three aspects of events that regulate behavior: (1) informational, (2) controlling, and (3) amotivating. The informational
aspect addresses the self-determining function of the event, thus enabling intrinsic motivation and creating an internal PLOC. On the other hand, the controlling aspect accounts for the external pressure that regulates behavior an individual experiences and reduces intrinsic motivation while creating an external PLOC. As a result, there will be either extrinsic obedience or disobedience. The final aspect, amotivating, influences the individual to perceive that they are incompetent and therefore diminishing intrinsic motivation (Deci & Ryan, 1985a).

Essentially, CET laid the foundation of SDT as it accentuated a person’s need for autonomy and competence (Deci, 1975; Deci & Ryan, 1985a). This is important for this study as it details how to define an intrinsically motivated behavior from an extrinsically motivated behavior. In this study, the PLOC of the interviewee would generate their perspectives on autonomy and competence within a remote workplace environment. However, CET lacked the process of internalization—the unconscious process of converting a regulated behavior (by attitudes, values, or regulatory structure) into a self-determined behavior. This encapsulates the organismic integration theory of SDT.

2.2 Organismic Integration Theory

Internalization is the essential element of organismic integration theory. It is broken into three main phases: (1) introjection, (2) identification, and (3) integration (Deci & Gagné, 2005). Within the first phase, introjected regulation occurs as the external regulation still controls the person’s behavior and has not been assimilated. Simply put, the behavior is carried out simply for contingent self-esteem, that is to avoid feeling guilty or unworthy. The sequential phase is identified by regulation. This is where the external regulation is somewhat integrated within the person as they believe that the regulated behavior coincides with their self-image and purpose. It is now a ‘moderately autonomous motivation.’ In integration, the regular behavior is now self-determined; it has become an autonomous, integral part of their identity and is reflected throughout the person’s life (Deci & Ryan, 1985b; Deci & Gagné, 2005; Brown, et al., 2007). The three main phases are used in the study to further understand
what degree of extrinsic motivations affects the interviewee. This clarifies the regulatory styles that an employee may encounter in a remote workplace environment.

2.3 Causality Orientations Theory

The last essential element of SDT is the causality orientations theory; a person’s tendency to experience social contexts as either (1) autonomy supportive (autonomy oriented), (2) controlling (control oriented), or (3) amotivated (impersonal oriented). It is important to note that every individual has a portion of autonomy, control, and impersonal orientation within them (Deci & Ryan, 1985a). Autonomy orientation considers behavior to be initiated by internal events to one’s sense of self or environments that are informational. Aptly put, the autonomy orientation is where an individual makes choices to advance towards a self-regulated goal. Control orientation views behavior to be initiated by external events to one’s sense of self or environments that are controlling—the individual has a lack of choice and is pressured towards the action. The final orientation, impersonal orientation, regards behavior to be erratic and independent from the cause. In other words, the individual feels like he or she is unable to affect the outcome and the environment is uncontrollable. The idea of CET is to identify the strengths of each orientation within the individual and predict the behavior through the strengths of each orientation (Deci & Ryan, 1985a). This is important to note in this study as the social environment of remote work is predominantly autonomy supportive. Thus each employee will react differently towards the virtual environment, which will be one of the themes for the interview process (Deci & Ryan, 1985b).

2.4 Intrinsic & Extrinsic Motivation

This research breaks intrinsic motivation down into three primary categories: (1) autonomy, (2) competence, and (3) relatedness (Deci & Ryan, 2000). Autonomy can be defined by an individual’s desire to self organize their experience and behavior. As previously mentioned, PLOC is a major influence along with interpersonal trust for autonomy. Competence relates to an individual’s propensity to affect the environment and the valued outcomes within it. Relatedness represents an individual’s need to feel connected to others in a social context. For extrinsic motivators, it will be separated into
four categories (as explicated upon by other researchers): (1) external regulation, (2) introjected regulation, (3) identified regulation, and (4) integrated regulation. This will be invaluable to the research as these were the three coding categories of intrinsic motivation and the four coding categories of extrinsic motivation to examine the interviewees’ verbatim. This will aid in the understanding of motivation in a remote work environment while allowing the answering of the study’s first two research questions.

Further research by Sandy D. Staples indicated that frequent communication between employee and manager is associated with higher levels of trust, which generates a greater level of connectivity provided to the remote worker (2001). Hence, employees who communicate frequently with their managers will have a stronger intrinsic motivation of relatedness. This is an aspect that this study incorporates to determine intrinsic motivation for employees in the remote environment.

The basis of the four categories stem from the self-determination continuum, which shows the varying degrees of self-determination between amotivation and intrinsic motivation as seen in Figure 1 (Deci & Ryan, 2000; Deci & Gagné, 2005). This figure describes amotivation as the absence of self-determination while intrinsic motivation is invariably self-determined. The self-determination continuum also helps define the relation of the type of regulatory process, locus of causality, and type of motivation.

2.5 Self-efficacy

The last aspect of motivation that this study would like to investigate is self-efficacy. Referenced from Sandy D. Staples, John S. Hulland, and Christopher A. Higgins’ model theory for self-efficacy, self-efficacy was defined according to Albert Bandura’s four components: (1) performance accomplishment, (2) vicarious experience, (3) social persuasion, and (4) physiological and emotional states (1999).

Accordingly, this study refers to performance accomplishment as past successful completions of projects that lead to higher levels of proficiency regarding similar tasks. This aspect will be utilized in this study as successful completion of remote projects and tasks will lead to higher mastery of working remotely, which will increase the individual’s motivation of completing assigned remote work. The second component, vicarious experience, explains how the observation of successful and related activities (i.e. modeling) correlates to a higher self-efficacy. This can be achieved in the remote environment through the implementation of remote training and control of an employee’s device to illustrate possible methods for success. Social persuasion will be identified as moments where an individual believes that they can manage a task through coaching and constructive feedback. Finally, this research defines physiological and emotional states of self-efficacy as the natural biological reactions and sentiments that may impact performance and perspective on assigned activities. For instance, in the remote environment, certain employees may become stressed due to technology issues with servers or their personal work setup. Coupled with project deadlines, this will lead to poorer performance throughout assigned tasks and projects due to anxiety (Higgins, Hulland, Staples, 1999).

2.6 Limitations of SDT & Self-efficacy

Although SDT and self-efficacy are sound theories, a major limitation (criticism) needs to be addressed. As explained by “The Challenge of cross-Cultural Psychology: The Role of the Indigenous Psychologies,” there is a tendency for research to not account for varying contexts due to ethnocentrism (Kim, U., Park, Y., & Park, D., 2000). This issue is prominent within the construction of SDT and self-efficacy as it derives that the three components of intrinsic motivation (autonomy, competence, and
relatedness) and the four essentials of self-efficacy (performance accomplishments, vicarious experience, social persuasion, and physiological and emotional states) are needed and equal for all. Simply put, its construction universalized the psychological needs of humans. This is a major issue as SDT and self-efficacy research was created through the studying of participants in the United States (Deci, E. L. & Ryan, R. M., 1985a). In other words, SDT and self-efficacy’s formulation was built on an individualistic culture.

To somewhat remedy this issue, contextualist and integrationist researchers have conducted research in other countries to verify the universality of SDT and self-efficacy. For instance, the publications of *International Journal of Psychology* and *Journal of Educational Psychology* have examined the application of these two theories within Korean students (Kim, U. & Park, Y., 2006; Hyungshim, J. et al., 2009). This is significant as South Korea practices a collectivistic culture instead of an individualistic culture. Moreover, South Korea perceives a variety of topics differently, such as educational growth, discipline, parental role, emotional support, and external expectations compared to the United States (Kim, U. & Park, Y., 2006).

It was discovered that autonomy and competence do indeed play a major role within the South Korean context. Conversely, it was illustrated that relatedness did not play a major role for the South Korean students and motivation. The authors inferred that this is because teachers are typically perceived as respected elders and the classes in South Korea are simply for competence and education rather than for the social interactions (Hyungshim, J. et al., 2009). Therefore, it must be recognized that this study is conducted in the United States and results may vary for another country because there exists a different culture.
3. Methodology

This study adopts a qualitative approach for the purpose of exploring employee motivation within a remote environment using SDT as the motivational theory. A qualitative approach was chosen for this study as its main concern lies in employees’ personal experience within the remote environment; there is a focus on the words of the participants rather than numbers. As a result, the study becomes interpretive in nature as it attempts to relate its theoretical framework to the empirics (Bell, Bryman, & Harley, 2019). Furthermore, SDT has influenced the theming of the questions and the verbatim coding as this study takes on an approach by relating the responses with the theoretical framework.

SDT utilizes past theories and research—predominantly studied within a physical setting—as guidance for the exploration of employee motivation. Therefore, this study uses inductive reasoning overall as it seeks to create a general, plausible explanation of motivation for remote workers in relation to self-determination theory (Bell, Bryman, & Harley, 2019). As mentioned prior, extensive studies and research were already conducted on motivation within in-office environments. The methods of this study use a qualitative interview for the collection of responses. Hence, this study relates responses with SDT—an already established theory—to draw a likely conclusion of how motivation is experienced by remote workers (engineers) through their responses.

3.1 Semi-Structured Interview

The qualitative collection tool that was used is a semi-structured interview. It is important to note that the semi-structured interviews were conducted virtually through the use of the communication software, Zoom, for health precautions. A semi-structured interview was chosen for this research because it provides a flexible interview process where the interviewees can provide an in-depth perspective whilst emphasizing what they view as important to explain or understand events, patterns, and forms of behavior (Bell, Bryman, & Harley, 2019). Moreover, it allows possible digressions from the interview guide at hand that might arise due to the nature of open interviews. This will
provide another perspective while the focus is still centralized on employee motivation in a remote workplace. Allowing for variations in the responses may produce insights that we may have not considered; however, there may be potential external influences that affect their responses. Therefore, the semi-structured interviews allow the observation of common patterns and derive possible conclusions that relate with the theories. It is essential to note that the derivation of possible conclusions and theories will originate from interpretations; both from the researchers’ perception on verbatim and the interviewees’ perception of the question.

The respondents of the interviews were employees within two companies that have transitioned to a remote environment due to COVID-19. With the two companies utilizing a full remote workplace environment, the employees being interviewed can provide thorough responses about their experiences of motivation within a full remote workplace setting.

3.1.1 Interview Guide

The construction of the semi-structured interview guide contains four themes. The first theme is formally noted as Work Experience. This theme aims to understand an employee’s experience with a remote work setting and sentiments they would attach to it. There are two sub-themes for Work Experience: History and Work & Life Balance. This will describe the employee’s self-efficacy judgement; thus providing possible discoveries of self-efficacy applications in a remote workplace environment. The second theme is identified as Remote Work Environment and will guide the employee towards responses related to the regulatory process and autonomy. The sub-themes include Performance in Remote Environment, Communication Channels, Supervision, and Incentive Motivators. The third theme is Transition to Remote, and it explores the employee’s views on the transition from in-person work to remote work. The sub-themes consider the differences and potential problems an employee may face during their transition (i.e. Differences and Problems & Obstacles). The interviewees would express their opinions on which work environment they prefer and elaborate on reasons why their motivations might have fluctuated. The last theme is titled Other and is reserved for additional questions that don’t relate with previous themes. Because of
the semi-structured nature, questions not previously accounted for may arise in the interview or potential items that need to be addressed. The interviews themselves were conducted through the use of the communication software, Zoom, for health precautions. Table 1 provides the themes and sub-themes of the interview guide and example questions that were used.

**Table 1: Interview Questions**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
<th>Example Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Experience</td>
<td>History</td>
<td>How long have you been in your respective industry?</td>
</tr>
<tr>
<td></td>
<td>Work &amp; Life</td>
<td>In which ways have you communicated with coworkers outside of working hours?</td>
</tr>
<tr>
<td>Remote Work Environment</td>
<td>Performance in Remote Environment</td>
<td>Explain a moment in which you put off completing an assigned task.</td>
</tr>
<tr>
<td></td>
<td>Communication Channels</td>
<td>What forms of communication do you typically use with co-workers?</td>
</tr>
<tr>
<td></td>
<td>Supervision</td>
<td>In which ways have your supervisor given constructive feedback on an assignment?</td>
</tr>
<tr>
<td></td>
<td>Motivators</td>
<td>How often are you driven by incentives rather than your core beliefs, for accomplishing a task?</td>
</tr>
<tr>
<td>Transition to Remote</td>
<td>Differences</td>
<td>Compared to in-person work environments, would you say you’re less or more motivated within a remote workplace environment? Why?</td>
</tr>
<tr>
<td></td>
<td>Problems &amp; Obstacles</td>
<td>How has anxiety and stress impacted your performance for remote projects?</td>
</tr>
<tr>
<td>Other</td>
<td>Additional Questions</td>
<td>In which ways could your company have motivated you during remote work?</td>
</tr>
</tbody>
</table>
3.2 Selection of Companies & Respondents

The respondents of the interviews were employees within two companies that have transitioned to a remote environment in March 2020 due to COVID-19. Both companies operate in the engineering industry but differ in terms of specificity. The first company operates within the IT engineering industry and utilizes agile methodology. On the other hand, the second company provides services in the mechanical engineering industry with a traditional methodology that incorporates a small amount of agility. Contact with the participants was performed through a bottom-up procedure because they were approached directly (email) instead of through management.

The first company will be identified as Sim Co., which has 40 office locations and approximately 12,000 professionals globally in numerous countries such as Belgium, Serbia, etc. The respondents of Sim Co. reside in the North American division of a global engineering and smart production system integrator provider for the supply chains of the manufacturing industry. As previously mentioned, Sim Co. utilizes agile methodology within their work environment and uses organic management control systems. This company emphasizes horizontal communication, cooperation, and flexibility. The four participants of Sim Co. will be denoted as Interviewee A, Interviewee B, Interviewee C, and Interviewee D. Table 2 provides further information.

**Table 2: Interviewees of Sim Co.**

<table>
<thead>
<tr>
<th>Sim Co.</th>
<th>Job/Role</th>
<th>Length of Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewee A</td>
<td>Senior Simulation Analyst</td>
<td>1 hour, 4 minutes</td>
</tr>
<tr>
<td>Interviewee B</td>
<td>Senior Simulation Engineer</td>
<td>1 hour, 18 minutes</td>
</tr>
<tr>
<td>Interviewee C</td>
<td>Senior IT Solutions Analyst</td>
<td>56 minutes</td>
</tr>
<tr>
<td>Interviewee D</td>
<td>Simulation Engineer</td>
<td>1 hour, 10 minutes</td>
</tr>
</tbody>
</table>

The second company will be identified as Mech Co. and is headquartered in the United States (Illinois). Mech Co. produces and provides mechanical seals to clients
along with turbomachinery. The company employs 5,800 professionals and the participants of this research are level two mechanical engineers within the North American Division. Mech Co. incorporates a mixture of traditional methodology and aspects of agility in their drafting phase of the mechanical seals. Furthermore, Mech Co. adopts a mechanistic management control system as the company focuses on supervision, hierarchic communication, and specialized responsibilities. The three participants of Mech Co. will be denoted as Interviewee X, Interviewee Y, and Interviewee Z. Table 3 provides further information.

Table 3: Interviewees of Mech Co.

<table>
<thead>
<tr>
<th>Mech Co.</th>
<th>Job/Role</th>
<th>Length of Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewee X</td>
<td>Mechanical Engineer II</td>
<td>1 hour, 1 minute</td>
</tr>
<tr>
<td>Interviewee Y*</td>
<td>Mechanical Engineer II</td>
<td>1 hour, 43 minutes</td>
</tr>
<tr>
<td>Interviewee Z</td>
<td>Mechanical Engineer I</td>
<td>1 hour, 2 minutes</td>
</tr>
</tbody>
</table>

*Interviewee Y’s interview declined recording; extra time needed for documentation

These two companies were chosen primarily because they are both within the engineering industry. Not only did this industry align with our primary field of study, it was also impacted by COVID-19. This meant that the employees transitioned to remote work within a similar time frame and have a similar amount of experience spent working remotely due to the pandemic. Although the two companies chosen do indeed have varying expertise in the engineering industry, we wanted to compare and contrast SDT and self-efficacy of both companies’ remote work setting to draw stronger conclusions.

The interviews were recorded and transcribed for future reference with the exception of one interviewee. This interviewee—who will be later identified as Interviewee Y—opted out of being recorded due to uncertainty and nervousness. To somewhat remedy this, we listened to her request of not wanting to be recorded. As a result, the interview took approximately one hour and 43 minutes due to the extra documentation process for the responses. The documentation process entailed the recording of the responses after each statement of the questions in a shared word processor (Google Docs). Thus, the recording of the responses were done to our utmost
ability to match the statements as perfect transcription was not possible without a recording. The transcription of the six employees and documentation notes of the one employee, who denied being recorded, was referenced throughout the thesis process. The transcription was then used to aid in the verbatim coding to relate verbatim with four major categories and its sub-categories. The analysis of the responses through the verbatim coding will help identify how an interviewee views motivation in a remote workplace; of which, would aid in the answering of the research questions while defining the remote worker’s motivation.

3.3 Verbatim Coding Process

The verbatim coding contains four major categories: (1) intrinsic motivation, (2) extrinsic motivation, (3) amotivation, and (4) self-efficacy. For intrinsic motivation, sub-categories include the three psychological needs: (1) autonomy, (2) competence, and (3) relatedness (Deci & Ryan, 2000). This was decided as the interest and enjoyment of the task stems from the fulfillment of these three needs. The verbatim of extrinsic motivation consists of primarily four central sub-categories: (1) external regulation, (2) introjected regulation, (3) identified regulation, and (4) integrated regulation. It is important to note that subcategories two through four are phases of internalization (Deci & Gagné, 2005). This was done to categorize the extrinsic incentives present in the organization and structure the interview to acquire responses related with the regulatory process. Possible codes for self-efficacy are based on the four sources of judging self-efficacy: (1) performance accomplishments, (2) vicarious experience, (3) social persuasion, and (4) psychological and emotional states (Higgins, Hulland, & Staples, 1999). This allows us to create a general perspective that aligns with how motivation is defined in the self-determination theory.

3.4 Ethical Considerations

For ethical purposes, this study followed the three basic ethical principles for research of the United States indicated in the Belmont Report: (1) respect for persons, (2) beneficence, and (3) applicable justice (Ryan, et al. 1979). Respect for persons dictates that the researcher should respect the autonomy of the person and their opinions
whilst also refraining from any manipulation. Furthermore—regarding beneficence—an ethical study is also one that does not harm the participants and reduces any possible distress to create an overall benefit when contributing to the area of research. The last component, applicable justice, is concerned with treating all participants equally.

All three basic principles were adhered to during the conduction of this study. The autonomy of all participants was respected as participation was completely voluntary. We respected the participants’ responses and opinions throughout the interview process whilst abiding to their statements regarding the recording and publishing of the research. As noted priorly, if it was not permitted to record, transcription occurred during the interview session (if permitted) along with written notes. For instance, we simply took notes during the interview of Interviewee Y as she opted out of being recorded. Furthermore, no physical, emotional, or career harm was done to the participants and all responses were weighted equally.

This study also incorporated the following: confidentiality, and informed consent. The participants were reassured that their information would remain private and confidential. The companies’ names were undisclosed along with the employee names for information privacy. The participants were also notified that the interview would be recorded for ourselves to prevent misinterpretation in the dissertation. Collection bias was avoided along with improper use of the gathered information to maintain legitimacy.

For compliance, this research ensured that the participants consented prior to the publishing of this study. Particularly, consent was obtained verbally for this study after the participant was informed of the aim and purpose of the research. Moreover, the participants were informed of the main themes of the topic along with how their responses will be used for this dissertation. Prior to the interview questions, the purpose of recording was explicated along with a statement on this study’s publication in two main clauses:

- For our purposes, we will be recording this interview to minimize misinterpretations within our research and for transcription for later use in the thesis. So is the recording of this interview for empirics fine for you? If not, will you permit documentation of this interview in place of the recording?
The results of this study will be published by Linköping University in their E-Press. Your name and company name will not be disclosed in any form to the readers. Is this okay with you?

3.5 Validity & Reliability

A semi-structured interview is the qualitative tool being employed for this thesis. The structure of this qualitative tool provides an opportunity for the individual to elaborate on a given situation while allowing the interviewers to ask for clarifications to probe for a deeper understanding. Moreover, a qualitative interview can investigate topics that can’t necessarily be observed—such as motivations—and enables the researchers to maintain a specific focus (Bell, Bryman, & Harley, 2019). Other benefits include how the respondents can lead the interview which allows for an in-depth discussion about the focus of the research. These benefits validate the responses received from the semi-structured interview as an acceptable qualitative tool to conduct research on employee motivation.

The reliability of the semi-structured interview is illustrated throughout Empirics and Analysis as verbatim was heavily referenced through the usage of quotes. Hence, the observations made from these statements are therefore reliable, since the observations are supported by the quotations. Furthermore, an interview guide was utilized throughout the interview process for reliability. The interview guide created a structure that applied to all respondents equally—each respondent is asked the same primary questions that relate with the topic. However, due to the semi-structured nature, questions or potential items differed between respondents because interviewees can steer the direction of the topic. The statements may also be embellished or over-rationalistic because the participants may want to hide thoughts or present their past activities in an elevated manner (Bell, Bryman, & Harley, 2019). Since the statements come from the perspective of the interviewees, these liabilities are concerning to the reliability of these methods. To mitigate these liabilities, the interview was conducted to create discussion instead of isolating the respondent’s perspective.
4. Empirics

This chapter examines the patterns that arose from the interviewee’s responses in the semi-structured interview. The empirical findings will be respectively categorized according to the following themes: (1) Work Experience, (2) Remote Work Environment, (3) Transition to Remote Work, (4) Inherent Want for Growth, and (5) Inherent Interest. This categorization was created to fully understand the interviewee’s perspective in regards to the specified areas.

These themes were either explicitly present in the interview guide or implicitly present through the various responses from the interviewees. Work Experience categorized responses regarding the participant’s history and their work and life balance. It is significant to note that themes two and three relate to the participants’ experiences with remote work and may overlap when discussing the overall effect the remote work has caused. However, each theme examines a certain aspect of remote work in-depth. Remote Work Environment pertains to the interviewee’s perspective on the elements of a remote work setting. These elements include supervision, communication channels, motivators, and their perceived performance. Transition to Remote Work categorizes responses related to problems or obstacles in remote work. This theme seeks to highlight the differences between an in-office work environment and a remote work environment, including the individual’s personal work setup. Personal Work Setup was a theme that captures the responses that reference the at-home office and personal facilities used to create an atmosphere. Responses in this category explored the individual’s participation at creating a remote work environment. The last two themes, Inherent Want for Growth and Inherent Interest, categorized responses that delved into the interviewee’s core beliefs. These themes seek to find whether or not there exists a pattern of internal drives steering the interviewee’s action. For the purposes of analyzing later, the empirics were categorized to identify key aspects that relate with the theory.
4.1 Work Experience

The first section of the interview discussed the topic of the interviewee’s experience and the sentiments they’ve attached to a remote work setting. The primary focus of this section was to understand the history of our respondents throughout their career. This portion also seeks to explore the anxiety or stress of respondents in a remote work setting and their remote work and life balance. Lastly, Work Experience will delve into the individual’s performance accomplishments and how they perceive their own efforts on projects. The individual’s responses on physiological/emotional state and performance accomplishments will be used to understand the respondent’s self-efficacy judgement.

4.1.1 Work History

Looking at the history of our respondents, it has become clear that many of them have a high degree of competency within their given field and some have stated a desire to learn more in order to enhance their disciplinary knowledge. For Sim Co., three of four employees interviewed had a senior position. All interviewees had a background in Industrial or Mechanical Engineering and most had obtained at least one certification for their given field. Table 4 elaborates on the respondents’ history.

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Main Field of Study (FoS)</th>
<th>Secondary FoS</th>
<th>Years in Current Industry</th>
<th>Certifications</th>
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</thead>
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<td>N/A</td>
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<tr>
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<td>Industrial Engineering BS</td>
<td>Electronics &amp; Computer Engineering</td>
<td>3</td>
<td>SAS® Enterprise Guide® Certification</td>
</tr>
<tr>
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<td>12-13</td>
<td>A+, Network+, Storage+, Security+, Microsoft Azure Certification</td>
</tr>
<tr>
<td>Interviewee</td>
<td>Field of Study</td>
<td>Certification</td>
<td>Experience Level</td>
<td>Specialization</td>
</tr>
<tr>
<td>-------------</td>
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<tr>
<td>D</td>
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</tr>
<tr>
<td>Z</td>
<td>Mechanical Engineering</td>
<td>N/A</td>
<td>1.5</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Note: Interviewee C did not achieve any formal university degree.

4.1.2 Company Values

Sim Co. facilitates a positive environment, as encapsulated by Interviewee D, that values “a growth mindset and teaching yourself new things” while emphasizing the delivery of quality work for the client, development of personal skills, and collaboration. This was further elaborated upon by Interviewee B. He explained, “The project managers understand that we have a delay and there is nothing we can really do about it, so the only thing we can do is push the deadline a little bit further.” Through this positive environment, the interviewees of Sim Co. are able to cultivate their own professional skills through a process that emphasizes the delivery of quality products. Another value that Sim Co. incorporates into its work environment is support and openness. As Interviewee A stated:

_For Sim Co.’s work culture, if you need help there is someone to help you [...] We’re always there and have each other’s back. If I had an issue or a problem with something, there are team members or people from other projects that are willing to help explain a couple of things out of their time and to help out._

We found that the environment aligns with all four interviewees at Sim Co. as they also value professional growth, openness, and quality over professional stagnation, impetuosity, and quantity. For instance, Interviewee B incorporates quality decision-making into his own personal life as he believes that rational decision-making is an integral part of who he is.
Conversely, Interviewee X emphasized that—due to the competition in the mechanical seal industry—Mech Co. has created an environment for the past three years that has solely “focused on getting things out on time” with little regard to employee stress and happiness. All three interviewees of Mech Co. had qualms regarding this new direction of Mech Co. Interviewee Y summarized, “I think it is more important that we make a good product and that my coworkers are happier doing their job instead of being under the gun constantly.” In other words, the interviewees of Mech Co. did not personally align with the company’s values unlike the interviewees at Sim Co.

4.1.3 Work & Life Balance

As remote work has pushed work experience into homes, it felt necessary to understand how the interviewees felt working at home. Looking at the work and life balance of the interviewees, all four employees of Sim Co. have reported that there was an issue in creating boundaries that separated their professional life from their personal life. Interviewee B said:

*Sometimes it’s hard to separate your work life from your personal life. It’s different. You know when you have to go and drive to your office/work, you feel like there is a specific point in time where you know you have to start working and there is a specific point in time where you have to stop working and drive back home. You can leave your laptop in your cube or office and that’s it, that is the end of the day.*

The same sentiments can be seen in Interviewee D’s statement:

*I would say that I’m significantly more productive, which I would’ve never guessed. ‘Cause I basically work and sleep in the same room, so there is no separation between work and sleep. I find myself actually working more. I’ve been working more, but I found myself just as stressed as beforehand.*

From both of these responses, it can be seen that the typical 9-5 work day didn’t draw a boundary. Instead, work was intertwined with their personal life due to the schedule flexibility of remote work. However, Sim Co. has always been flexible in regards to scheduling and allows the employee the choice of when they will work. Interviewee A explained:
With the type of work that I do and the company I work for, if you have a doctor’s appointment, or say some people have to pick up their kids, it’s understandable and fine. There is no real pressure to be at work from 9 and leave at 5 and always be on. So they’ve been very lax at letting us kinda do what we want and set our own schedule.

Simply put, Interviewee A never had difficulties in isolating his professional life from his personal life with flexible schedules to be in the office. However, with the transition to remote work, he now describes issues in creating a separation and living a remote lifestyle. Interviewee A explained, “It was like the laziness of it due to waking up late and adjusting to it. [Now you must] set your plan at the time you wake up and how long you will work.” Essentially, the extra flexibility given to the interviewee’s schedule from remote work had also allowed a temptation of procrastination.

For Mech Co., the flexibility and the implementation of remote work into their daily life hasn’t gone too smoothly for Interviewee X. He elucidated:

Initially, it tremendously helped with stress and sleep schedule [...] Now that I got used to the routine, staying up until 1AM playing video games, it got a lot worse. Since then, I guess I have been a bit lazier in the mornings due to not needing to commute anymore. Now that I have to go into work for over 3 days, I feel exhausted and can’t do that anymore.

Like interviewees of Sim Co., there is a blurred line between professional and personal life. In Interviewee X’s case, the personal life had overtaken the professional life and made it difficult for Interviewee X to complete his task. This contrasted with the interviewees of Sim Co. as professional life escaped into personal life. Moreover, Interviewee X seems to have a slightly diminished work ethic in comparison to the interviewees at Sim Co. This may be due to a lack of flexibility in the work schedule at Mech Co. as there has been no mention of an adaptable schedule from the employees. Hence, Interviewee X may not be as accustomed to flexibility as employees at Sim Co.

4.1.4 Job Training

Lastly, the interviewees were asked about the forms of training that they have received during their career at the company. From most of the interviewees, the training
was received within an in-office work setting and the type of training involved learning the current company software through teachings by experienced employees. A few have received some training in a remote work setting, but the training was relegated to sending in materials. As Interviewee D explained, “I got sent, essentially a book of materials to read up on the software we use for all these models. And I sorta just started teaching myself the rest.” This form of training forgoes interactions between a mentor and a trainee, but this may be because Interviewee D was brought in as a new hire. Mentoring or any form of on-the-job training was rather difficult to see during remote work and didn’t appear often in the interview. The only example of job training occurring remotely came from Interviewee Z—who received the training to learn about the processes and advanced tasks for his job. Interviewee Z said, “The training was done through either Zoom or Teams, but it’s still the same idea.” The effectiveness of the training wasn’t discussed in the interview; however, this statement provides an instance where training was done remotely.

4.2 Remote Work Environment

This section explores the general remote work environment that the interviewees interact and participate in. One of the focuses of this section was to detail the interviewees’ interactions and experiences with incentives and supervision. Another part of this section’s scope is the integration of motivators within the remote workplace. Not only will this aid in identifying the level of freedom given to the interviewees, it will also assist in how communication between coworkers or supervisors depict the level of relatedness.

4.2.1 Communication Channels

According to all interviewees, the most frequent form of communication present in a remote work environment was Microsoft Teams. Through the utilization of the texting, voice, and video calls that are featured in the communication software, both companies are able to hold meetings and upkeep communications between co-workers. Communication among co-workers typically entailed a voice call for in-depth discussions while text messages were reserved for brief questions. There were
occasional meetings with managers to evaluate performance and well-being checkups as well. For example, Interviewee C explained:

[I meet with] coworkers practically daily. My supervisor we meet for our biweekly. So we have two sets of meetings, we have our biweekly status meeting for everything I am working on and the weekly one-on-one where we just talk about general stuff about me.

The performance evaluation meetings with managers occur just as often for the interviewees of Mech Co. For example, Interviewee Z said:

Pretty much [my meetings] are competence development and performance evaluations. But some of them are like catch up meetings to kind of see what everybody is doing and what's going on with the project. I would say the majority of my calls with my manager have to do with the current project that I'm working on.

The meetings between coworkers seem to be daily and are mainly work-related with the occasional casual conversation mixed in. The type of meetings that occur between the interviewees and their bosses are usually about performance evaluations and well-being checks—as seen with Interviewee Z and Interviewee C respectively. The relationship seen through the use of communication software will help judge an individual’s sense of relatedness within the remote workplace. After all, it can be seen in the respondents’ perception of connectivity with their supervisor and co-workers through the communication channels of a remote work setting. It is important to note that connectivity has been impacted by the remote setting. Interviewee D stated:

I would say I feel less connected. I would feel more connected if I was in the office the whole time. I guess I would say it is a proximity thing. If you are around people all the time, even if you just see them, you’re generally closer with them. I would say we have a relatively close team. Most of our interactions are done through video call which is kind of different from just being in person.

These thoughts are echoed by Interviewee X as well. He clarified, “Communication with my supervisor decreased. Contacting him through a call is a giant pain, because I can’t tell when he’s busy.” The amount of disconnect may also vary between users because it depends on the individual’s ability to use features of the communication
software and adapt to the differences of communication. Understanding an employee’s sense of relatedness will help examine the individual’s intrinsic motivation.

4.2.2 Supervision

Furthermore, the interviewees were questioned about the supervision they found themselves in during a remote workplace environment. Identifying the degree of supervision will aid in defining the style of regulation that the interviewees encounter in a remote work setting. For all interviewees, there was a moderate amount of supervision from their managers or superiors. For interviewees from Mech Co., this was inferred through their frequency of evaluations and required reports per project, which occurred a couple of times during a month. Regarding the amount of project evaluations, Interviewee X explained, “[I have a project evaluation] everytime I have a project. So if I have those 12 projects, every project is checked. It is just company and engineering policy.” The project-based evaluations are seen throughout all interviewees affiliated with Mech Co. and describe similar evaluations on their work. For interviewees from Sim Co., it was inferred that supervision was moderate because employees provided their current progress in the daily meetings—due to the agile project methodology Sim Co. uses. This was seen in Interviewee B’s statement:

I have never been asked to write a report because one of the things that we have is every single day, first thing in the morning, we report our status. What it is that we are working on and whether we have any roadblocks and what not. Rather than needing to write reports, we communicate verbally every morning. In those meetings, we have the project manager and the head of the simulation practice usually (at least two or three times a week). And obviously, our boss is there so they are very well aware of what we are working on.

Similarly, Interviewee C also attends daily meetings and check-ins similar to the other interviewees at Sim Co. However, he must also perform more formal biweekly meetings unlike the others.

It is significant to note that Sim Co. allows the employee the freedom of organizing an approach to their work while the managers simply supervise just their
actions. Conversely, Mech Co. has managers more involved in the direction and actions undertaken by the employee.

Another important point of supervision covered in this section was the feedback that the interviewees received for the tasks they’ve completed or are currently working on. In the interview, it was discovered that there are more instances of constructive feedback than there was negative feedback or punishments from their respective bosses. Most feedback was done in the efforts to improve the competence of the employee.

Regarding his supervisor, Interviewee B expressed:

*Usually what he likes to do is take control of my screen, and take control of my computer, and start fixing stuff himself. But he does that with everyone. That is his way of teaching us and coaching. Sometimes if he feels like there is a topic of main interest to everyone, he will just maybe reserve an hour or two and have everyone in the team join that meeting. Then, he will teach us the concept.*

Moreover, another form of constructive feedback—for Interviewees A, B, and D of Sim Co.—was designing test suites for their written code. Priorly, the supervisors designed the test suites for the interviewees. Now they design it on their own to test their logic in code. Interviewee B construed:

*Anytime we write a new method or update something in the logic, we [now] have to write tests and make sure the tests are passed. We are never given any hard deadlines as long as we keep developing stuff. Obviously, for the main project, we do have a deadline.*

Similar statements are expressed amongst other interviewees from Sim Co. since they work within the same department and receive feedback from the same supervisor—except for Interviewee C, who worked independently as he is IT support.

In Mech Co., employees receive constructive feedback along with their evaluations from their supervisors. Interviewee X explained:

*My manager went through checking all my documents that I had completed for him. There were a lot of markups on there. [...] I had a call with him after he was done checking my work. He then explained his reasoning behind the remarks that he left related to my work. This helped me grow and understand how to move forward.*
Simply put, the constructive feedback—represented in Interviewee X’s statement—was used to cultivate the interviewee’s development of skills. However, not only do employees at Mech Co. receive feedback specifically from their supervisors, they also obtain feedback through the constructive criticisms of the drafting phase and (completed) project review from higher ranking engineers. For instance, Interviewee Z elucidated that he has received feedback from higher ranking engineers to aid in the “develop[ing] of the[ir] skills.” In fact, he stated, “I think every criticism I’ve received while working with my coworkers counts as coaching.” Through both Interviewee X and Interviewee Y’s statements, it’s seen that the interviewees believe that they can manage the tasks better with constructive feedback.

For negative feedback, less of the interviewees have actually experienced any forms of punishments. Negative feedback can influence the employee into performing the intended behavior by attaching shame or guilt on actions the company deems unsatisfactory. At Mech Co., Interviewee X encountered negative feedback from his supervisor when he failed to complete a failure analysis due to uncertainty regarding test runs. Interviewee X commented, “My supervisor told me this: ‘pay attention, learn more of this stuff because you will do more stuff like this.’” When asked how the feedback affected him, Interviewee X elaborated, “There is shame attached because I have been at my present job for about 2 years and I didn’t know about this.” From this statement, Interviewee X’s perspective with negative feedback didn’t improve or develop skills, but brought attention to the skills he was lacking. Another instance of negative feedback comes from Interviewee C on one of his first projects. He was placed in charge of migrating the separate Microsoft Tenants—being used by separate departments—into one Microsoft Tenant so that the company organization isn’t wasting resources on software already owned. In regards to the completion of this project, Interviewee C said:

*I did not communicate as well as I should have had with the management team, and I received feedback in regards to that. Not [my manager]—who was a bit nicer about it—but there were some managers who were very unhappy with how the migration was handled. They told me directly.*
Just like Interviewee X, they have attached some shame to the behavior that they had shown during this project. However, Interviewee C—regarding the feedback—clarified:  

'It motivated me a little bit. For me, whenever I get hit with doubt, it kinda breeds more doubt. That is one of my personal issues—it can spiral very quickly. But, with the support of not just my direct boss but other people giving me feedback, it stopped my doubt. When we actually started seeing the benefits and how it improved work at the office, it really motivated me to keep going.

Although the initial reaction to the negative feedback was demoralizing, encouragement and constructive feedback from others served as a motivator for Interviewee C. This indicates that negative feedback wasn’t just treated as a deterrent of bad behavior but a source of an opportunity to develop the interviewee’s proficiency and suggest areas of improvement.

4.2.3 Performance in a Remote Environment

Inquiring about the interviewee’s performance helped broaden the understanding of their competence and what they’ve accomplished within a remote work environment. Furthermore, the individual’s reflection on their performance helped bring out responses that identified their position on self-efficacy judgement. None of the employees from Sim Co. or Mech Co. have said they provided unsatisfactory performances and most have stated they adequately performed their tasks in their autonomous environment without direct supervision. Interviewee C responded that 80-90% of his projects have succeeded within the remote work environment. Due to both his current position and the remote environment, he elaborated:

'I get a lot of leeway to implement what I think makes sense and what I think the company needs. My manager gives me a wide latitude to work independently so a lot of the projects I have been able to work on are things that I have been interested in and are also beneficial to the company.

The interviewees were also questioned moments where the source of a delay in task remained the same in the remote environment. Three of the four interviewees of Sim Co. responded that the prioritization of tasks was a major cause of delay for certain
tasks due to similar workloads despite the transition. For instance, Interviewee C elucidated:

Some of my project activities became less of a priority because one of the newer tasks that I was assigned was related to a project with a pretty big client. Making sure that that project was delivered successfully was more important than some of the things I was working on first.

Because major sources of delays typically come from prioritization of higher tasks, interviewees would likely see delays as an external circumstance. In other words, the interviewee felt that they weren't in control of the events and there was no way to prevent the delays. However, two employees revealed that procrastination—an internal issue that affects an individual’s performance—was an issue both prior and during remote work. Interviewee X stated:

Procrastination is an issue. Coming out of a project, I am kind of beat and burnt out, which makes me not want to work on any other projects. This can snowball into a cycle of procrastinating and working really hard. This would happen within two projects.

In Interviewee X’s statement, it presents this cyclical state of delays and overworking. However, he would further explain, “Usually if there is a delay, it is because of the long checking process and [unfair] deadlines.” This statement depicts that Interviewee X considers delays being externally caused instead of internally caused.

4.2.4 Motivators

The last key aspect of this section dealt with the possible internal and external influences that the interviewees have experienced within their current remote work environment. It is significant to note that the interviewees expressed more internal pressures than external ones within the autonomous, remote environment. In fact, six employees stated that they feel like they are more driven by their own core beliefs rather than any external elements currently. For instance, Interviewee A remarked:

Ever since I started working remotely, I have been kind of wanting to work more because I am at home. I’d say personally, I want to make sure that the things I finish are the tasks that I want to finish for that day. Work from home makes
Interviewee C surmised, “So when I set a time for myself to get something done, I like to get it completed to really get the sense ‘I can do this assignment, task, subject, etc.’” For instance, Interviewee C completed an exam for his Microsoft Azure Essentials certification on his own personal time.

However, there was one employee that expressed the opposite. This employee was Interviewee X, who held the sentiment that he was driven more by external elements—such as incentives—for his current position at Mech Co. He elucidated:

As long as all things are fair, I am not driven by incentives only. But when things are not fair and the reward for work [isn’t fair], I am driven by external things such as incentives or monetary things.

In other words, Interviewee X’s incentive-driven perspective is mainly due to the notion that Mech Co. is not amending work dissatisfaction, fair promotion, and workload. Hence, Interviewee X felt “desire to do well for the company for profit went really down” as he is only working due to “fear of being laid off” and his own competence development.

Starting with the internal influences at Sim Co. for remote work, half of the interviewees (Interviewee B and Interviewee D) expressed their fear of being seen as the ‘bottlenecks’ of their respective project teams. As explained by Interviewee D:

You don’t want to become the bottleneck. You want to complete your work, but if you become the bottleneck, there is a lot of pressure. Everyone is waiting on me. So you want to avoid being the bottleneck at all costs.

Simply put, this internal pressure occurs when you are not able to keep up with your own individual pace of work and the fear of disapproval from colleagues. Interestingly, Interviewee Y and Interviewee Z of Mech Co. conveyed the very same worries. Interviewee Y articulated that—as a mechanical engineer—gets assigned these “smaller projects” from manufacturers. Since the manufacturers also have a deadline with their clients, it “puts stress on me because they need something for us, [which] weighs on my own project deadlines.” Moreover, she elaborated:
Unfortunately, there are times where they try to push their deadline onto us to complete their project [while] also requesting aid throughout the process. I just don’t want to be the one causing a delay for any of their projects and mine.

In fact, Interviewee Z addresses the very same point in his work with small collaborative work rather than the manufacturing works. Interviewee Z conveys, “It’s kind of just stressful because there is someone else relying on your work to finish their own work. It seems like you’re the bottleneck in the whole system of completing the whole product.” In other words, both employees of Mech Co. faced this fear of being a hindrance of progress for projects.

Interviewee X revealed another form of internal pressure for projects: the want to complete challenging projects. He clarified, “If a new challenging project has come up, I will try much harder to prove to my manager that I can do a certain job very well so they will keep me in consideration of promotion or for more difficult projects. A Drive to push forward.” It is significant to consider that Interviewee X’s drive falls into a similar category mentioned in the prior paragraph. That is, to gain approval from his manager for the completion of a challenging product.

It is important to note that Sim Co. has recently incorporated compensation for overtime pay in March 2020 while also sometimes providing monetary bonuses towards their employees for the completion of milestones despite being paid by salary. As noted by Interviewee C:

We get bonuses if we are doing our performances. Like I received a bonus at the end of last year because everybody was pretty satisfied with my work. The company had also sent out gift cards to everybody for doing certain things.

However, when the employees of Sim Co. were questioned if they would perhaps be compelled to attain these overtime incentives in return for extra work, all of them declined. Interviewee A encapsulated this by stating:

The overtime pay doesn’t make a difference. The money is secondary, you know [...] The main incentive is to finish the project and have something good. Money is nice, but it is not the driving factor. It is mostly the responsibility of if we are behind, we will work the extra hours incentive or not.
Simply put, the employees of Sim Co. are not incentivized to work overtime. The monetary incentives were placed to tempt employees into working overtime or finishing a project at the given deadline. Instead, the extra compensations serve as a minor supplement for the employees; it is simply a nice thing to have if it happens to occur naturally.

Contrastly, Mech Co. has not implemented any form of compensation for their employees during remote work. Despite the complaints from employees, Mech Co. refuses to implement monetary compensation due to the notion that its employees are salaried. When inquired whether or not they would work extra hours or over-perform for bonuses, all employees of Mech Co. resoundly said yes. Interviewee Z commented upon this whilst comparing it to his past company:

\[
\text{If [Mech Co.] provided bonuses and compensation, yes. My old company gave us overtime. I was more than happy to work overtime to complete any and all projects. Regardless of the fact that my managers and coworkers were much better, just because they gave us overtime when we had to do extra work, we were way more motivated to do that extra work.}
\]

In fact, Interviewee Y comments upon this lack of overtime pay and how there is no reason to work for Mech Co. past her indicated hours: “Once 5 o’clock hits, unless it is a super big emergency, I will log off and stop working because they don’t pay me to do work over that.”

### 4.2.5 Personal Work Setup

Throughout the interview, five of the interviewees (Interviewee A, B, X, Y, and Z) noted personal work setup’s importance within the remote work environment for motivation. Hence, it was necessary for the study to dedicate a subsection to present these responses. The respondents’ statements on personal work setup were either obtained through the additional questions section of the interview or organic questions that arose from the process itself.

Despite Mech Co. providing employees with two monitors, Interviewee X still bought extra items for his personal work setup to keep himself organized. Interviewee X explicated that he bought extra monitors for his personal work setup because he believes
that if he doesn’t have the “proper equipment to do the proper kind of work”, then he would be “less motivated to do the assigned work.” Similarly, Interviewee Z expressed the same sentiments. He stated:

*I find them useful as it makes it easier for me to start my work so workflow is easier. On my desk as well, just in case I need it for anything or just for background music like Spotify.*

Interviewee Y even noted, “It's kind of just the atmosphere in general because it feels like I have my own personal office here so I am more motivated to work.” It seems—from the interviewees’ perspectives— that having the ability to create a more personalized work environment can facilitate an environment that is more comfortable overall (in comparison to in-office) for the individuals at Mech Co. As a result, it was much easier to be productive for the interviewees. Likewise, at Sim Co., the employees expressed similar thoughts as well. For instance, Interviewee A indicated that having a proper worksetup (e.g. more monitors) made his life much easier as he is “able to multitask much better if needed—especially when [he is] developing code.”

Furthermore, Interviewee B noted:

*Well, if you are going to be working remotely, the most important thing is your setup. I had to buy an additional monitor [...] I think that is really important to have the proper setup so you can perform at home and be motivated to do so. If I didn’t really have a good setup, I wouldn’t want to work as much.*

With similar sentiments being expressed by interviewees of both companies, it can be inferred that having a more personalized work setup will aid productivity through the creation of a work environment that specifically caters to the needs of the individual. Therefore, a personalized work setup will facilitate more desire to perform remote tasks.

Both Interviewee A and Interviewee B noted how having a proper work setup has also allowed their meetings to be much more efficient. For example, Interviewee B noted, “*Usually what he likes to do is take control of my screen, and take control of my computer, and start fixing stuff himself. But he does that with everyone.*” In other words, having a proper personal setup has also provided an improved method of competence development. Interviewee B perfectly encapsulated:
I think the setup is the main factor for you to work at your full potential. I remember one of my previous coworkers would only have his work laptop, reviewing reports all day long. He was a director so he didn’t need to do anything technical [...] So if you are a technical guy, your setup is important. If you are more of a business guy, then your setup doesn’t really matter.

4.3 Transition to Remote Work

This third section explores how the interviewees transitioned into a remote work setting while identifying the differences between an in-person workplace environment and a remote workplace environment. Since the pandemic forced most companies into a remote workplace environment, understanding the employees’ perspectives on the transition will help judge what has influenced their motivation. Furthermore, this section seeks to discover if the interviewees have been faced with a feeling of amotivation while working at home through the utilization of questions that explore the problems or obstacles the interviewees faced while in a remote workplace environment.

4.3.1 Background in Remote Work

For some background knowledge, each individual was inquired about when they had transferred into a remote workplace environment. For both companies, Sim Co. and Mech Co., the employees have transferred into a remote workplace in March. To further understand the interviewees’ experience with the transition into remote work, they were asked if they felt more adept at remote work than prior. Six of the seven interviewees indicated that they felt more proficient at remote working than prior—with the exception of Interviewee X who stated that his adeptness stayed approximately the same. Interviewee D said:

*How you communicate is different. I feel like there is an expectation of some amount of face time that you need to get a point across or to deliver a message. [...] I would say now I have found a balance of when to make a call and talk to someone versus when to text or email them. And how to make it just as meaningful as face-to-face time.*
However, it must be mentioned that Employees B and Interviewee C had previously worked in a remote workplace environment before this transition. Interviewee B noted:

*I actually had to collaborate a lot with engineers overseas. So even though I was working from the office, I still needed to collaborate with other countries like China, Korea, Taiwan, or the Philippines. Somehow my previous work experience already felt remote so I feel that for me, specifically, I don’t have any issues working at home.*

In other words, the interviewees perceived level of proficiency rose as they became accustomed to the remote work experience and environment. This will help provide insight on how the interviewees view their own levels of competence personally.

The last needed background knowledge is concerned with any additional training that the interviewee may have received due to the transition into remote work. Through all the interviewees, it seems that neither company had assigned any sort of training to prepare their workers for the transition into a remote workplace environment.

4.3.2 Differences and Obstacles

Regarding the interviewees’ experiences in their transition to the remote environment, the first subject discussed the differences in the working experience between an in-office setting and a remote setting. This study broached the topic through the asking of questions that identified the main motivators of the two environments and the drawing of comparisons. When comparing the sources of motivations, Interviewee Z had said “It is identically the same. At the end of the day, it is the same but just from a different location. I mean I work from home but the deadlines are still deadlines. They don’t really change.” Without considering the changes in the environment, it seems that the employee experience within a remote workplace environment is similar in nature to an in-office workplace environment. The only change was how an employee behaves and delivers the actions according to the same motivation.

It is important to consider that Interviewee B had mentioned the forgoing of numerous activities due to the transition to remote work such as getting lunch with coworkers and other company activities. However, Interviewee B was an outlier of the
seven interviewees as the rest have stated that their main motivation(s) haven’t changed when transitioning to remote work.

With the same sources of motivations, it can be seen how certain motivational influencers interact with the two work environments. Therefore, it was necessary to inquire which environment the interviewees felt more motivated to understand whether they preferred a remote or in-office environment. In response to this question, Interviewee C said:

*I would say maybe a little less motivated working remotely. It does take a toll, even after collectively working remotely for almost five years. It can get a little hard especially if you fall into a rut of not reaching out to coworkers enough, not having enough engagement with management.*

With Interviewee C’s statement, it seems that the lack of communication can be a form of a demotivator for an individual. However, Interviewee C was the only interviewee to indicate that he felt less motivated in a remote work setting. Interviewee A, D, and X articulated that they felt approximately the same amount of motivation between the two work environments. Interviewee D stated:

*I would say I am probably just as motivated or more productive. I think that is the better word (productive). Just because there was so much time that was cut-out, that I was wasting beforehand going into work that would drain me.*

This indicated that Interviewee D has the same motivations in play, yet he can become more productive due to the subtraction of daily commutes and other activities by just staying at home. Similar sentiments are expressed by the other employees. Lastly, Interviewee B, Y, and Z indicated that they felt more motivated within a remote workplace environment. Each employee used similar reasoning to enforce why they believed remote work was more motivating than in-office work. This could be encapsulated in Interviewee Z’s statement:

*I am more motivated in the remote work environment. The convenience factor is the big one for me. The fact that [I] don't have to get up early, drive, sit in traffic and save more money [is] a motivation in itself.*

This reasoning is similar to the interviewees that have stated there was no difference in motivation. However, the conveniences of working at home are seen as a positive
influence on motivation. Regarding the responses to a question—“Compared to in-person work environments, would you say you’re less or more motivated within a remote-workplace environment?”—a single interviewee stated that he felt less motivated while three interviewees felt no differences. Meanwhile, three interviewees indicated that they felt more motivated.

Examining further into an employee’s experience, interviewees were asked about their organizational citizenship behavior (OCB). Most of the interviewees have reported very little to no interactions with OCB in their respective companies. An example of OCB in the remote workplace comes from Interviewee X, who said:

*Originally, there were projects that involved a lot of people. Instead of emailing files to people constantly, I just made a One Drive folder. Since then, my senior manager has taken the initiative to do the same thing, but very specifically within Teams.*

Furthermore, Interviewee Y stated, “I mean, I sometimes organize the cloud space that we all share so it makes life easier for everyone.” This shows that there were times that an employee increased the company productivity through activities unrelated to their job. The interviewee that had the most notable OCB was from Interviewee D. He was “involved in several community service organizations for the company, [which] were basically clubs in the company where you donated your time to help some cause or essentially do pro bono.” Due to the transition to remote work, Interviewee D stated he has forgone these activities. He articulated:

*There aren’t many opportunities to do that unless it is me going out. I definitely went out of my way to help my friends and team complete things, but in terms of doing things specifically for the company, I actually don’t think I have done that remotely. I don’t think there has been an opportunity.*

Now that the company organization has temporarily shifted towards a virtual organization, there are difficulties performing or identifying OCB duties.

There were issues in the translation of certain training sessions as well (from in-office to virtual). Prior to remote work, Sim Co. sometimes had the new hire shadow a developer to understand the logic flow of programming and scripting. For instance, Interviewee A stated:
When I started, I didn’t have any type of true training [...] I just watched and shadowed other developers working on the program and kind of learning from them. My project leader gave me small tasks to get better at the program. In other words, Interviewee A observed an experienced programmer to develop his own knowledge while also building confidence through the completion of smaller assignments after shadowing. However, this training session did not translate well to the remote environment for Sim Co. Instead of having Interviewee D virtually and remotely watch an experienced developer program, Interviewee D simply studied materials sent by Sim Co. Interviewee D explained:

*It was in the middle of the pandemic, so I had like a week of training in the office. So I got sent, essentially a book of materials to read up on the software we use for all these models. And I sorta just started teaching myself the rest.*

This section also covers any problems or obstacles that were present during the transition into remote work. These obstacles could range from tech issues to personal issues that may have hindered an employee’s performance. For instance, Interviewee X said:

*In the beginning we had a lot of VPN issues, server issues, tools going down, things taking too long to save. So I lost days of work because I wasn’t able to save it. I worked on it all day and it didn’t save and then I had to go all the way back to do everything again.*

Regarding its effects on his motivation, Interviewee X’s elucidated that it actually lowered his motivation as he “would just slack off until the next day and try again” if his progress is lost for the day due to tech issues.

These aren’t the only obstacles discussed during the interview. Two interviewees of Sim Co. (Interviewee B & Interviewee D) and two Interviewees of Mech Co. (Interviewee X & Interviewee Z) expressed that project burnout was a common issue that occurred for them during remote work. Interviewee B recapitulated:

*It all comes down to burnout. Sometimes you work too much and when that happens, if you have been working a lot of extra hours for two weeks, then by the third week you aren’t going to be as productive as before.*
Within the remote environment, it seems that there hasn’t been a work threshold established—how long an individual should work for—because the work schedule is somewhat more fluid than the set hours in the office. Hence, the individual may overwork themselves to the point where they need to take a break. This may be caused due to the environment having a different regulatory style than what the individual is used to.

Because remote work takes place at home, the forms of distractions an employee may encounter should be accounted for. These distractions can be represented by outside interferences or temptations that may prevent an employee from engaging in work. Interviewee X stated:

*Definitely a lot easier to get distracted because I am at home. I have 50 things to do; I have my bed, musical instruments I can play, or have a computer to play video games on, a cat, things like that. They will definitely distract me. And there are no supervisors to really look over me to get something done.*

Despite the various distractions that Interviewee X has provided in the statement, he describes that these distractions won’t matter as long as the tasks are accomplished. Interviewee X further explained:

*Even though everything needs to be checked by the boss before it goes to the client, it is more autonomous in terms of you are expected to meet the deadline. Nobody is going to be on you. If you don’t meet the deadlines, you will get into trouble or you will be screwed.*

Other distractions mentioned by the interviewees were about cohabitators being loud or interacting with them during working hours. Understanding what may cause employees to shift their focus away from their work and the degree of effect allows the study to identify an individual’s willingness to engage in work.

The last topic in this section identifies the affliction of anxiety or stress on the interviewees that originate from remote work. Specifically, the aim was to explore the interaction of anxiety and stress with the interviewees’ performance on assignments. For the interviewees, most have responded that they don’t have any anxiety that would have arisen from working at home. Interviewee Z emphasized:
It wasn’t too stressful to the point where it actually made my motivation go down. It was also due to the fact that when we started work from home, the amount of work also went down at the same time. There was a good transition period because we also didn’t have as much work.

From this statement, it could be recognized that stress wasn't an issue in a remote work setting and the transition to remote work didn’t present any difficulties. However, there were examples of how stress differs from the two workplace environments. This can be summarized through Interviewee D’s statement:

*Stress and anxiety are the reason why I deliver the work. I think they are about the same but now drag on a little longer. Now there is no cut-off time. I feel like when I was in the office my work was so tied to the time that I was with my team in-person. I was forced to deliver in a tighter time-frame and a little bit more relaxed after work. Whereas now, it kind of blends into everything [...] it carries with you for longer periods of time.*

These statements provide detail into the emotional state that the interviewees have during their remote work. However, every individual might provide a distinctive perspective on their experience with stress and anxiety since the person may interact with the environment differently based on their personal behaviors.

### 4.4 Inherent Want for Growth

Despite not having a main section (on the interview guide) based solely on internal drives that influences the interviewees, there were responses that relate employee interactions with internal drives within the additional questions segment of the interview. This section will describe patterns that have shown up and the effect it has played on the internally driven motivations.

At Sim Co., competence development and growth is a major company value within its work culture. Hence, there is a drive for the employees to learn new topics or further develop their skills. As Interviewee B explicated:

*For me, I feel that even if there is nothing to do, you are still getting paid. So you better be working on time. There is always something to do. If it isn’t work*
related, you can always try learning something new, that would be a good use of your time. You are getting paid to learn.

However, Interviewee D reveals that there is likely a balance between the minimum pay and the learning experience. He elucidated:

*I would say it is less about money and more about learning certain topics that I am interested in—software development or statistics. There is probably a balance between my motivation in terms of what is acceptable for me to be paid (a minimum) and what I am learning. What I am learning is more of a motivation for why I stay working at where I am.*

At Mech Co., there is an emphasis on growth but to a lesser degree in comparison to Sim Co. Although there are “learning projects and research specific projects” as stated by Interviewee Z, the company is currently exchanging quality and learning with quick delivery of products (as priorly stated in Work Experience). Interviewee Y succinctly described this as the company being “too big on prioritizing the work experience rather than the work being done.” However, its employees still have the self-driven need to grow professionally. Interviewee X reminisced:

*5 years ago, I wouldn't have cared about money. It was all about learning, learning, learning. You know, become a better engineer. Become the best engineer you can be. Now it is still that but now I just want to be the best engineer I can be to get paid more.*

Although Interviewee X’s reasoning for wanting professional growth did change, his drive for growth did not.

### 4.5 Inherent Interest

Another influence that pushed interviewees to further engage in work was the inherent interest of their jobs. In other words, where the activity itself becomes an employee’s interest instead of the monetary or social gains they could make from it. An example comes from Interviewee C’s innate need to find a task that challenges him. Interviewee C explained, “*For me, it is having something to do that is interesting or challenging. If I am bored of the work I am doing, then I become very indifferent to*
getting it done.” From this statement, it can be inferred that an activity becomes interesting when the task satisfies an individual’s need. Similarly, Employee B clarified:

*If I like what I am doing, I will be motivated. If I don’t like it, then it doesn’t matter what the company tries to do, I won’t get motivated. I just have to like what I am doing. It doesn’t matter if they tell you there will be a bonus [...] Motivation is just about the job that you are doing is something you like; if you don’t like it, it doesn’t matter if you work remotely or not.*

For Interviewee B and Interviewee C, their need was to be challenged and grow their disciplinary knowledge.

Other instances of work being interesting comes from a statement by Interviewee Z. Interviewee Z expressed that his main motivator has to:

*Mostly do with the interest in what I do. [...] This job in itself is very interesting to me and the work I do is very interesting to me. [...] The thing is, the way our work is, at least what the work that's given to me, changes every now and then so it isn’t the same. You're not doing the same exact thing every time, and I think that keeps it kind of interesting and also just working in a group dynamic and some projects.*

For Interviewee Z, he finds his job interesting because of the variations in the tasks he performs rather than the pay associated with the completion of the tasks unlike Interviewee X.
5. Analysis

This chapter of the thesis will discuss how the interviewees’ verbatims relate to the theoretical framework that is SDT and self-efficacy. Hence, this chapter will be separated into four main sections: (1) Self-Motivation in Remote Work, (2) Environmental Motivation, (3) Lack of Motivation, and (4) Perception of Self. These sections will contribute answers to the research questions by analyzing all parts of the self-determination continuum (Figure 1), from intrinsic motivation to amotivation, and identifying the individual’s self-efficacy judgement.

The themes presented in the analysis will help answer the research questions and contribute to the field of research. The first theme of the analysis, Self-Motivation in Remote Work, seeks to understand the employee perspective of internalized drive for the pursuit of a goal. Self-motivation relates to intrinsic motivation since both are about the internal initiative to achieve a goal. Meanwhile, the analysis of Environmental Motivation allows for a deeper understanding of the employee’s perspective on the remote work environment and its effect on their motivation. Specifically, it seeks the company’s implementation of extrinsic motivations in the remote work environment and how the employee interacts with the extrinsic motivators. The third section is denoted as Lack of Motivation. It delves into the negative effects of the remote environment on employee motivation whilst exploring the lack of motivation. This leads to the possible sources of amotivation within a remote environment, which influences the employee’s perspective on both intrinsic and extrinsic motivations. Lastly, Perception of Self will look at how the employee perceives their ability to perform their job. Using self-efficacy theory, this theme will explore any alterations on self-efficacy judgement from the transition to remote work.

5.1 Self-Motivation in Remote Work

Exploring the interviewees’ self-motivation discovers the possible intrinsic motivations that are present in employees within a remote work environment. Self-motivation are actions taken by an individual that were caused by internal reasons. To understand an individual’s self motivation, the first part of the analysis takes a
careful look into the intrinsic motivations presented in the interviewee’s responses. In the Empirics, self motivation was discussed in the categorical themes of Work Experience and Remote Work Environment. The responses come from the employee’s perspective and are examined for connections to the three categories of intrinsic motivation: (1) autonomy, an individual’s desire to self-organize their experience; (2) competence, an individual’s ability to affect their environment and outcomes; and (3) relatedness, an individual’s need to feel included in a social context (Deci & Ryan, 2000).

5.1.1 Autonomy in Remote Work

The first category of intrinsic motivation, autonomy, was seen through the responses which regarded supervision and how the interviewees integrated remote work with their personal lives (Deci, 1975). The results suggest that the interviewees experienced moderate supervision during their remote work. Sim Co. enforced supervision through the daily meetings that detailed an employee’s current progress while Mech Co. enforced supervision through the frequent evaluations of an employee’s completed projects. However, it is important to note that—due to remote work—there is a greater level of autonomy allowed to employees of both companies in comparison to the office environment. For instance, Interviewee A is able to choose when he wants to go eat lunch (no set time) and Interviewee Z is able to play music while working or go for a walk to refresh himself. However, the differences between the two companies are found with how they allow their employees to operate. The interviewees of Sim Co. have expressed how they operate on a flexible schedule where the employees have more control over the project approach. Furthermore, their bosses are understanding and allow for the pushback of deadlines due to external circumstances. Essentially, Sim Co. allows the employees a degree of freedom for organizing an approach to their work while the supervisors simply oversee their actions. Therefore, Sim Co. has created an autonomy supportive environment that gives employees a sense of choice. Employees then generate a predictable behavior that aligns with Sim Co.’s interests, so it can be assumed that the employees have an autonomy orientated PLOC (Brown, et al., 2007). On the other hand, Mech Co. have more inflexible deadlines and the managers would
become more involved with the approach to the project. Interviewee X has mentioned that as long as it is finished before the deadline, then the work can be done whenever it is possible. However, Interviewee X has also stated, “Usually if there is a delay, it is because of the long checking process and [unfair] deadlines.” Hence, these deadlines may have been the reason why the work ethic has decreased because the inflexible deadlines could interfere with an employee’s personal life and cause the employee to feel less motivated. Examining the environment Mech Co. has created, it is clear that it leans towards a controlling environment despite the autonomy supportive nature of remote work due to the lack of direct supervision. The employees weren’t aligned with Mech Co.’s environment because their PLOC must focus on either autonomy or impersonal orientation (Brown, et al., 2007). Within these two perspectives, Sim Co. clearly allows a higher level of autonomy than Mech Co. and is able to benefit from this option due to the autonomously supportive environment. In a remote workplace, where direct supervision has decreased, focusing on the employee’s autonomy orientated PLOC will help strengthen an employee’s intrinsic motivation.

5.1.2 Competence in Remote Work

The second category, competence, was found in responses that dealt with work history and how they perform at work (Deci & Ryan, 1985a). In the Empirics, under Work Experience, it is indicated that the interviewees are well-versed in their specific industry and field of study. Six of seven interviewees have attained at the very least a bachelors within their respective field with the exception of Interviewee C. However, Interviewee C has been in the IT support field for 12-13 years—first starting as an IT help desk technician after attending technical school. Hence, Interviewee C has a lot more work experience than the other interviewees. Moreover, four of the seven employees have completed some form of certification training. Therefore, the interviewees have somewhat high levels of formal competence. With these responses, we formulate that there may be a specific competence for the autonomous, remote environment itself. Hence, we identify this competence as remote working competence. We think that remote working competence has three main concepts: (1) the ability to concisely state your intended message, (2) the ability to balance and utilize the proper
communication channel (text messages, voice calls, video calls, etc.), and (3) the ability to self-motivate yourself. In terms of remote working competence, all employees began remote work in March 2020 due to COVID-19. As they began to only use remote work due to the pandemic, their remote working competence grew. As previously noted, six of the seven interviewees have felt that they have improved their ability to remote work. The interviewees’ responses—especially Interviewee D—revealed that there was a need to acclimate to the more text-based and voice-only work environment. In other words, the remote environment requires the competence to successfully convey thoughts in a succinct manner and finding the balance between the various forms of communication. Moreover, Interviewee A’s comment revealed another key skill that the remote work environment warrants: self-motivating. He stated, “It was like the laziness of it due to waking up late and adjusting to it. Set your plan at the time you wake up and how long you will work.” Simply put, this means that one must be able to take the initiative to begin and finish an assigned task within this autonomous environment where there is a lack of direct supervision. This skill has a major role in remote working competence. It is important to note that some of the interviewees already had developed some remote working competence such as Interviewee B and Interviewee C. Thus, they only had minor improvements in remote working due to past experience within this environment. Meanwhile, Interviewee X indicated that his remote working competence stayed the same despite working remotely for the first time in March 2020. This may be due to the idea that Interviewee X has a high perception of self-efficacy.

5.1.3 Relatedness in Remote Work

The third category, relatedness, is explored in the responses that details communication channels and their interactions with co-workers (Deci & Ryan, 2000). As discussed in the Empirics, under Remote Work Environment, the most frequent form of communication was Microsoft Teams. In a remote workplace environment, Microsoft Teams was used to hold meetings and provide communications between co-workers. The communication software’s texting and video call were the replacement for the in-office general meeting and in-person conversations. For both companies, conversations over Teams were primarily work related yet in a less formal tone. This
suggests camaraderie between the co-workers, which established an informal yet professional clique. Relatedness can then be seen in the connection that respondents feel through the communication channels of a remote workplace environment. However, there was a strain on relatedness that can be seen with the use of communication software. As Interviewee D had mentioned, “I would say I feel less connected. I would feel more connected if I was in the office the whole time. I guess I would say it is a proximity thing.” Simply put, Interviewee D felt that the relationship was almost distant due to the differing locations of the employees and there being no physical interactions within a shared environment. It was almost a virtual relationship. Relatedness can also be seen in response to one of the questions—How would you categorize your ‘closeness’ with your supervisor? Every interviewee answered that they felt rather close with their current supervisor. A general description seen amongst the interviewees was that the relationship was professional, but there were some occasions of friendly exchanges. However, the strain on relatedness can also be seen with the interviewee’s interactions with their supervisor. As explicated by Interviewee X, communication with his supervisor decreased because “[he] can’t tell when he’s busy.” Furthermore, Interviewee X detailed the ease of communications that an in-office workplace environment provides. These instances of communication within a remote work setting showcases how the sense of relatedness decreased compared to an in-office work setting. Therefore, an employee’s sense of relatedness has lowered in a remote workplace environment. Hence, as relatedness positively correlates with an individual’s intrinsic motivation, a lower sense of relatedness may weaken the employee’s intrinsic motivation.

5.1.4 Intrinsic Motivation in Remote Work

Through the analysis of self-motivation in the interviewees, the perceived intrinsic motivations affecting employee motivation can be understood in a remote work environment. For autonomy, interviewees expressed statements that aligned towards an autonomy orientated PLOC. Therefore, an autonomy supportive remote work environment would benefit their motivations (Deci & Ryan, 1985a; Brown, et al., 2007). Regarding competence (Deci & Ryan, 1985a). Another focus of the analysis was to
judge the growth of their remote working competence. It was found that most interviewees have expressed a more developed remote working competence in comparison to their remote working competence in March 2020. Assuming their formal competence remained the same, the overall competence of the interviewees are greater and would also benefit their motivation levels. The last component, relatedness, was present in the communications through software such as Microsoft Teams. However, relatedness in a remote environment was presumed to be lower than an in-office environment according to the participating employees of both companies (Deci & Ryan, 2000). According to the respondents, their intrinsic motivation has increased within a remote work environment because of the support in autonomy and competence. Thus, employee motivation would be positively affected by intrinsic motivations present in a remote work environment.

5.2 Environmental Motivation

Next, the analysis of environmental motivations will try and understand any patterns of externally motivated behaviors seen through the responses of the interviewees. Since environmental motivations are considered an external influence, extrinsic motivation and its four categories can be applied to distinguish the motivated behaviors through the responses. The examination of the responses was done to understand which regulatory style is utilized within the autonomous remote environment; in addition, comparisons with the regulatory style were drawn within the typically controlled office environment. As priorly defined within Theoretical Framework, the regulatory styles will be identified as external regulation, introjected regulation, identified regulation, or integrated regulation (Deci & Gagné, 2005). Understandably, the regulatory style may differ between the two companies as they enforce different regulations. Therefore, this section will analyze which regulatory style the companies use and draw similarities for the remote environment. It should be denoted that the verbatims used are primarily from Remote Work Environment and Transition to Remote Work within Empirics.
5.2.1 Sim Co. Regulations

At Sim Co., employees still encountered some forms of external regulation (Deci & Gagné, 2005) despite being in a more autonomous-based environment. All employees of Sim Co. have to verbally report their status and progress to their supervisors due to their agile methodology. For instance, all four interviewees of Sim Co. participate in daily meetings that are held remotely to inform co-workers and/or supervisors about their current progress. It is important to note that supervisors at Sim Co. typically just oversee the projects rather than controlling the project direction taken by the employees. Specifically, Interviewee C had to present a PowerPoint on project statuses but must meet-up one-on-one with his supervisor daily like the others. Another form of external regulation that is implemented in the remote work of Sim Co. is monetary incentives. Prior to remote work, Sim Co. only had monetary bonuses for completing large projects within the initial deadline alongside gift cards for completing certain tasks. For remote work specifically, the company incorporated overtime pay as an external regulation of the remote employees to incentivize them to work longer hours if needed for project completion. The last formal external regulation that the interviewees of Sim Co. had to comply with was the main project deadline.

Introjected regulation (Deci & Gagné, 2005) had a presence in the pressure that the employees at Sim Co. felt. From the Empirics, interviewees (Interviewee B and Interviewee D) discussed how there was a fear of being the ‘bottlenecks’ of their respective project teams and delaying the project due to their actions. The internal pressure was a consequence of the interviewee being unable to keep up with their individual pace and fearing the disapproval from colleagues. This relates to introjected regulation because the source of the behavior comes from the worrying about hindering the project rather than a sense of obligation.

Identified regulation (Deci & Gagné, 2005) was explored in the discussions about the interviewee’s interaction with OCB and other values that interviewees deem important for the company. One value that was mentioned was the act of checking the logic of an interviewee’s work with their own tests for Sim Co. These values were seen in responses by Interviewee A and Interviewee B. Mentioned by Interviewee B, his supervisor would design a test suite to run through his work priorly. Now, Interviewee B
creates their own test suites to make sure the logic of his new method is able to pass through all tests. This relates with an identified regulation because it is a behavior controlled by the individual that deemed it valuable to the company. Within the Empirics, it was also noted that most interviewees had very little interactions with OCB. Some interviewees mentioned tidying up their work space or providing help to a colleague on a project that they aren’t affiliated with. These behaviors are also a form of identified regulation because the interviewee can attach a value to the company for these actions.

Like identified regulation, integrated regulation (Deci & Gagné, 2005) was derived by the interviewees’ fulfillment of OCB and stronger company value synergy in comparison to integrated regulation. One specific value that the interviewees resonated well with was supporting their colleagues, whether it is work-related or more personal. This can be especially seen in Interviewee D’s participation in numerous pro bono activities (i.e. clubs) at Sim Co. to help a cause (e.g. charity). Essentially, the interviewees felt like supporting colleagues and others is an integral part of who they are. In other words, these supportive activities are self-determined and autonomous as these are integrated—at least for Interviewee D—into their personal life. Unfortunately, due to remote work, these activities originating from integrated regulation are much more scarce due to a lack of opportunity in distributed workspace.

5.2.2 Mech Co. Regulations

As aforementioned, Mech Co. externally regulates (Deci & Gagné, 2005) its employees through written reports, monthly reporting of the completion of main projects, and checking of each digital design draft for any faults in calculation. The frequency of these reports were related to the projects the interviewee completed, and was stated to occur a couple of times a month. The evaluations done by the managers/supervisor would also take considerable time until they finish and tell the interviewees to fix their mistakes. Unlike Sim Co., Mech Co.’s managers are more involved in the direction of the project and the actions undertaken by the interviewees. All interviewees (Interviewee X, Y, and Z) expressed how they felt stressed by the inflexible deadlines that were set up to guide their progress. The external regulation of
deadlines forces the interviewees to engage in a behavior that becomes predictable. Although Mech Co. does not use monetary incentives, the interviewees have expressed willingness to achieve the incentives if the external regulations were to be implemented by the company.

Introjected regulation (Deci & Gagné, 2005) was mentioned once, by Interviewee Z, as the pressure of co-workers relying on him. Similar to how Sim Co. interviewees’ described the pressure as a ‘bottleneck,’ Interviewee Z describes a fear of becoming the hindrance of the project and explains the experience as stressful. This is an example of an introjected regulation due to the focus on the worry instead of the individual’s innate sense of obligation. Unlike Sim Co., this regulation isn’t as prevalent amongst Mech Co. interviewees because they have mentioned how the pressure from deadlines is the most dominant pressure.

Identified regulation (Deci & Gagné, 2005) was seen in Interviewee X’s response where he created a One Drive folder so his colleagues can quickly access each other’s files as needed. This action aligns with Mech Co.’s value in efficiency and productivity. Although Interviewee X himself does not agree with the company’s forgo of employee happiness for efficiency, he still created the folder to facilitate efficiency in One Drive—at least until his supervisor implemented a shared folder in Microsoft Teams. Similarly, Interviewee Y organizes the current Microsoft Teams folder occasionally despite not agreeing with the company values either. Thus, these actions originated from identified regulation as they stem from company value despite having disagreements.

Integrated regulation (Deci & Gagné, 2005) wasn’t present in the discussion with interviewees of Mech Co. because there were no instances of having shared values or integrating OCB into their daily lives. Mech Co.’s values can be simplified into prioritizing quantity over quality which centered on producing as many acceptable seals as possible within a reasonable time. Interviewees have expressed that this focus led to a general state of unhappiness and creates stress due to the overwhelming amount of work. This caused the interviewees to separate themselves from the company values. Hence, Mech Co. has either failed to implement integrated regulation for their employees or has not attempted the implementation of integrated regulation.
5.2.3 Company Regulatory Style

Due to the autonomous nature and less direct supervision of remote work, external regulation was more lax for both companies. For Sim Co., they had used daily meetings along with flexible deadlines to regulate the progress of the project. Conversely, Mech Co. required written reports and inflexible deadlines to regulate the progress of the project. There were also no monetary incentives provided for Mech Co. interviewees, but Sim Co. interviewees were given the opportunity of obtaining the incentive. Both companies had similar introjected regulation, but Sim Co. interviewees have expressed more concerns of guilt rather than the sense of obligation to complete the deadlines. For identified regulation, both companies have seen an example of interviewees enacting behaviors they deem valuable for the company. However, Sim Co. has allowed their employees to become proactive in testing their quality because the environment encourages it. The last difference is seen with Sim Co.’s integrated regulation. Unlike Mech Co., Sim Co. interviewees have integrated the values and motives of the company into their own personal values and motivation. This encouraged the employees of Sim Co. to become more self-determined in their actions and behaviors.

Despite Sim Co. using more external regulations, Mech Co. relied more on external regulation since the other regulatory styles suffered due to the inflexible deadlines. That would mean that Mech Co.’s regulatory style is closely related to the external regulation and holds a more controlling environment. On the other hand, Sim Co. has created an environment that supports the employees’ autonomy and provides them with information when needed. It can be inferred that Sim Co.’s regulatory style is closer to identified regulation because they have created a somewhat internal perceived locus of causality that incorporates external regulation. From the two companies, it can be said that the interviewees are flourishing within Sim Co. ’s identified regulation while Mech Co.’s interviewees are suffering due to external regulation. Therefore, it can be concluded that a remote workplace environment should lean towards the internal side of the regulatory styles instead of being external.

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5.2.4 Extrinsic Motivation in Remote Work

Through analyzing the relationship between the interviewees and environmental motivation, the perceived incentives and other extrinsic motivators were revealed through the effects of the different regulatory styles. Discussed earlier in the analysis of environmental motivation, Sim Co. incorporates an internal regulatory style and Mech Co. has an external regulatory style. Sim Co. has a somewhat internal regulatory style because of their autonomy supportive environment and identified regulations. Mech Co. uses an external regulatory style because of their controlling environment and external regulations. As previously stated, a remote work environment is autonomy supportive. Therefore, an internal regulatory style would best suit remote work. This is seen in Sim Co. because the interviewees often participated in tasks that aren’t required as they believe it would benefit the company. Moreover, the interviewees embodied certain company values into their personal lives. Because of the internal regulatory style, the offer of incentives or other extrinsic motivators wouldn’t entice them to engage in further work. The interviewees of Mech Co. have expressed their distaste in the company’s external regulation because of the inflexible deadlines and frequent evaluations. From this analysis, the employee’s perception of incentives and other extrinsic motivators within a remote work environment aren’t as prominent as intrinsic motivation.

5.3 Lack of Motivation

In this part of the analysis, the study examines the lack of motivation that may be present in the interviewees during their time spent in remote work. In other words, possible sources of amotivation and its effect on an employee’s willingness to engage in work were studied (Deci & Ryan, 2000; Deci & Gagné, 2005). There were two sources of amotivation that was noticeably present in the interview—project disinterest and burnout. This was derived from the responses seen in Transition to Remote Work and Inherent Interest from Empirics.

5.3.1 Sources of Amotivation

The first source of amotivation originated from the inherent interest that the interviewees held for the project and the position itself. Priorly noted in Empirics,
interviewees from both Sim Co. and Mech Co. explained how monetary rewards and incentives will have a minimal impact on their motivation if the assigned project is of little to no interest for them—with the exception of Interviewee X. Instead, it was indicated that the inherent interest in the project and subject is what largely creates a drive for the interviewees to perform their assigned projects. Even within the remote environment, this very premise has not changed from the physical office environment. As Interviewee B stated, a majority of motivation is “just about the job that you are doing is something you like; if you don’t like it, it doesn’t matter if you work remotely or not.” In other words, this notion aligns with the very core of SDT. However, as remote work is largely autonomous and there is a need for the individual to take initiative (remote working competence), the absence of an interesting or challenging project is even more threatening.

Although project burnout often occurs in the office environment, it is not exclusive. In actuality, project burnout due to project overload does indeed occur within the remote environment. As expressed by both Interviewee B and Interviewee X, constant and prolonged remote project work will eventually facilitate indifference and absence of self-determination for remote workers—even if the individual generally enjoys their profession or assigned projects. This problem becomes more prominent in a remote workplace due to the blurred line between a professional and personal life. This led to work becoming an intrusive part of their daily lives as it slipped into their personal time. This is depicted best with Interviewee D’s work and life balance. Instead of working at the typical work hours, he judges his work time based on how much energy he has left. This often leaves Interviewee D feeling overworked and potentially leading to burnout. With project burnouts, the interviewees' willingness to continue their tasks lowered and their productivity suffered from it.

With these two recurring themes, it is highly emphasized that project assigning plays a large role in the motivation of remote workers. From this outlook, project burnout and the lack of inherent interest would indicate that the interviewee has leaned towards the impersonal orientation. Therefore, an interviewee’s behavior would become independent from the cause because they believe the environment has become uncontrollable. A remote workplace environment doesn’t have direct supervision and
relies on self-determination. If employees are experiencing amotivation at remote work, then the remote workplace environment is using a non-regulation regulatory style. When a company assigns too many projects to their employees, it has become reliant on the employee to enforce their own regulation to become productive for the company.

5.3.2 The Effect of Amotivation

In the analysis of the interviewee’s lack of motivation, there was evidence of detriments that affected both intrinsic and extrinsic motivation. As noted by the interviewees from both companies, personal disinterest for projects may conflict with extrinsic motivators such as monetary incentives. If an individual considers the assigned project as menial, then it is likely that this external regulation will have a negligible effect in getting them to finish the remote project. Instead, the project deadline will serve as the main ‘pressure’ for the individual to complete the task in time. The opposite holds true; if the assigned project is of interest for the individual, then the external incentives will typically serve as a minute motivator. This aspect of amotivation holds true for both the in-office setting and remote setting. Furthermore, project burnout (i.e. work overload) can be seen as a detriment towards the intrinsic side of motivation. Despite having inherent interest in a topic that the assigned project covers, prolonged work can impede on this interest and create less of a drive for the individual. It is of significance to note that with remote work, project burnout may be more enabled within this environment through the coalescence of both work and personal life. Therefore, the understanding of employee motivation in a remote workplace was achieved.

5.4 Perception of Self

Lastly, the analysis will explore the interviewees’ perception of self in a remote work environment. To understand how the interviewees would perceive themselves, the study looks at self-efficacy theory and Bandura’s four components of self-efficacy judgement (1978). Self-efficacy, in relation to motivation, plays a vital role in strengthening an individual’s intrinsic motivations. This is done through its influence on the individual’s perceived level of competence—the ability to carry out a task and successfully attain the wanted outcome. A higher self-efficacy judgement would then
entail a higher degree of autonomy since the individual will become more confident in their ability to make the proper decision without any form of supervision. This will be done by understanding how the interviewee perceives their own self-efficacy and relating their responses—originating from Remote Work Environment and Work Experience—to the four components of self-efficacy judgement: (1) performance accomplishment, (2) vicarious experience, (3) social persuasion, and (4) physiological and emotional states.

5.4.1 Performance Accomplishment

The first component, performance accomplishment, aims to understand the interviewee’s perspective on their level of proficiency and mastery of their discipline (Bandura, 1978). Responses related to performance accomplishment occurred during the interview guide’s section on performance. From the Empirics, all interviewees have responded that they have a high completion of projects during their time in remote work. In fact, they explained that they only delayed their project because of an external factor. This external factor is the need to prioritize other tasks with greater importance. Only two interviewees mentioned that procrastination was affecting their performance in accomplishing their tasks. However, it wasn’t a major detriment that delayed their tasks. Instead, procrastination was a byproduct of receiving too many projects, which facilitated project burnout. In other words, they view these delays as an external event that is outside of their control.

Not only was their task completion high, but their personal satisfaction of their performance was highly regarded as well. From all the interviewees, none have viewed their performance as unsatisfactory. Most interviewees articulated that they adequately performed their roles at the company within the remote work setting. Only two interviewees—both from Sim Co.—had described that they may have overperformed based on the observation of their activities in relation to their co-workers. With high performance satisfaction and high task completion, it can be noted that the interviewees have a generally high performance accomplishment. A high performance accomplishment entails that an employee will have a greater self-efficacy judgement.
5.4.2 Vicarious Experience

The second component, vicarious experience, seeks to understand how self-efficacy can be achieved through observing the successes of related activities (Bandura, 1978). Vicarious experience was explored during discussion of how the interviewee was trained at the company. Interviewee Z was the only interviewee who had remote job training that was conducted by an experienced co-worker. The training was done through a communication software for the purpose of teaching him new processes and advanced tasks. This relates to vicarious experience since Interviewee Z observed the experienced co-worker through the video meeting to build upon his own abilities. However, the effectiveness of the remote training wasn’t discussed during the interview so there aren’t any responses from the interviewee detailing their feelings towards remote training.

Besides direct training, there was another example of vicarious experience being used to develop the capabilities of employees. Interviewee B had mentioned that his supervisor tends to remotely control his computer to fix any programming errors or illustrate other possible logical solutions to the issue. Thus, Interviewee B’s perceived self-efficacy grew as he observed his supervisor program successfully with various logics. In other words, Interviewee B used his supervisor’s logic flow that was illustrated and modelled his own accordingly. Furthermore, Interviewee A primarily learned Plant Simulation from watching and shadowing other developers who were working on the program when he first started at Sim Co. With these shadowing sessions and modeling, his perceived level of self-efficacy increased along with his competence as he was able to complete the small tasks given by his project lead.

In comparison to the office environment, it is likely much more difficult to engage in activities that grow vicarious experience. Unlike the office environment, colleagues and supervisors are not physically co-located. In other words, it is much more difficult to observe and model accordingly. Hence, the remote environment lacks opportunities to increase self-efficacy through the means of vicarious experience. This is illustrated with Interviewee D, who was the most recent hire at Sim Co. (2019 hire). Although he was undergoing training by observing senior employees at Sim Co. and learning from them, he was forced to shift to remote work due to COVID-19. As a
result, Sim Co. simply sent a book of materials for software instead as the vicarious experience gained by virtual shadowing would not be worth it.

5.4.3 Social Persuasion

The third component, social persuasion, explores how an interviewee would feel more capable of achieving a task after receiving coaching and constructive feedback (Bandura, 1978). Social persuasion was seen throughout discussions about receiving constructive or negative feedback from their supervisors. It was discovered in Empirics that interviewees encountered more instances of constructive feedback than they did negative feedback or punishments. For instance, Interviewee B of Sim Co. stated, “Sometimes if [our supervisor] feels like there is a topic of main interest to everyone, he will just maybe reserve an hour or two to teach us the concept.” Essentially, the supervisor provided informative meetings to coach their respective employees about topics of interest. Through social persuasion, the competence of the employees allowed them to feel confident in their ability to handle future tasks.

At Mech Co., Interviewee Z detailed how he received constructive criticism over the projects that he had done and meeting with his manager for the reasons behind the remarks. Interviewee Z recalled, “This helped me grow and understand how to move forward. So the next time I’m in a similar situation and working on a similar project, I know why and what to do in certain situations.” Interviewee Z also remarked on how he receives constructive feedback from other high ranking engineers and described how this developed his skills in the profession. In Mech Co., social persuasion allows for employees to understand their mistakes and raise the individual’s competence in their discipline.

Another form of social persuasion can be explored in the interviewee reception of negative feedback. As previously stated, there were less occurrences of interviewees receiving negative feedback for both companies. However, Interviewee X and Interviewee C did encounter negative feedback as they were criticized for their poor performances on certain projects. Both have stated that they felt shame and doubt once they received the negative feedback. However, Interviewee C expressed that his motivation rose afterwards when he received support from his boss and co-workers.
This form of social persuasion aims to improve employees towards a better development by steering them away from unwanted behaviors. It seems that there appears to be no difference in social persuasion whether it is in an in-office workplace or a remote workplace.

5.4.4 Physiological and Emotional States

The last component, physiological and emotional states, identifies how an interviewee’s state of well-being may influence how they perceive their self-efficacy (Bandura, 1978). This was explored when discussing the work and life balance of the interviewee and how they reacted to anxiety or stress caused by remote work. At Sim Co., two of four interviewees (Interviewee B and Interviewee C) indicated that they felt that remote work had actually lowered their stress levels so they performed better. On the other hand, Interviewee A and Interviewee D indicated that the stress levels remained the same as the office. However—as stated previously in Empirics—Interviewee D felt that stress “blends into everything” when working remotely. This sentiment is reflected by all four interviewees of Sim Co. Meanwhile, the three interviewees from Mech Co. indicated that they were able to create a working schedule that separates professional and personal life through the alignment of work time with regular office hours. As a result, prolonged stress specifically from remote work did not occur (or at least as much) for the interviewees of Mech Co. Therefore, it seems like those who are able to create a strong work and life balance will be less stressed within the remote environment and personal life in comparison to working within the office.

5.4.5 Self-Efficacy in Remote Work

Understanding the interviewees’ perception of self gave insight into the exploration of self-efficacy in a remote work environment. From the employee’s perspective of the four components, it can be inferred that the interviewees have achieved a higher self-efficacy judgement. Performance accomplishments were at a high standard because of the high performance satisfaction and high task completion, but this may arise from the interviewees already being successful. Vicarious experience
had lowered in comparison to in-office work since remote work had lost opportunities in observing the successful completion of a task. Social persuasion remained the same because the supervisor’s coaching has translated well from in-office to remote work. Physiological and emotional states were overall improvements based on the benefits from working at home as all interviewees described how they felt less stressed. However, there is an issue of separating work-related topics from their own personal life, which can affect self-efficacy in an indirect way. Considering the four components, vicarious experience and physiological and emotional states were altered the most within a remote work environment. Depending on the individual's judgement on the two altered components, their self-efficacy will either be lower or higher in a remote work environment.
6. Discussion & Conclusion

6.1 Contribution to Field of Research

The purpose of the study was to identify and understand employee motivation in a remote workplace environment for the engineering industry located in the United States. The method used was a qualitative, semi-structured interview that explored topics that relate to the interviewee’s experience within remote work. This research aims to contribute a deeper understanding of employee motivation by providing an employee perspective for SDT in a remote workplace environment. From the current state of knowledge, motivation has been explored by SDT in multiple settings with athletes in sports, teachers in education, and employees in the workforce (Karageorghis, Terry, & Vlachopoulos, 2000; Chian et al., 2020; Wörtler et al., 2020). For employee motivation in the workforce, studies were conducted in a non-remote workplace environment in some countries. For example, in “The Different Relations of Extrinsic, Introjected, Identified Regulation and Intrinsic Motivation on Employees’ Performance,” the empirical study examined SDT in several Chinese companies (Gong et al., 2016). With the COVID-19 pandemic raising interests in remote workplace environments, there is a growing need to understand the potential effects a virtual organization has on employee motivation. One such effect discovered—because of the virtual organization—was the need to differentiate between an employee’s formal competence and remote working competence. This study bridges the informational gap by exploring an employee’s perspective on motivation in a remote workplace environment. Hence, it provides another perspective that broadens the understanding of employee motivation in relation to SDT.

6.2 Conclusions

Because of the recent pandemic and the development of information technology, remote work has become increasingly prevalent in businesses. With the increasing usage of remote work, businesses must understand how employee motivation is affected in a remote workplace environment to succeed. Therefore, this study sought to understand intrinsic motivation, extrinsic motivation and self-efficacy through the
examination of the respondents’ personal experiences and perceptions on remote working.

From the respondents’ perspectives on motivation in remote work, it is revealed that intrinsic motivation has been positively affected for individuals working remotely as the environment itself supports both autonomy and competence. Simply put, intrinsic motivators within a remote work environment will facilitate strong employee motivation.

Within the autonomously supportive remote work environment, the perception of incentive and other extrinsic motivators aren’t as prominent as intrinsic motivation for the respondents. Hence catering to intrinsic motivators and aligning with the PLOC of the individual would be more beneficial (applies to the office environment as well).

The respondents also encountered obstacles of employee motivation for both intrinsic and extrinsic motivations. Through project burnouts and personal disinterests, these representations of amotivation affected employee motivation in remote work. This issue may be even more prominent within the remote work environment because the separation of work and personal life can be difficult to establish, which can be seen by the respondents.

According to the participants’ responses, vicarious experience and physiological and emotional states had been altered due to their perceived self-efficacy judgement. Therefore, an employee’s judgement on these two components will affect their self-efficacy judgement in a remote work environment and in turn affect competence and autonomy. By exploring an employee’s perspective of motivation in a remote environment, this research has concluded two things: (1) employee motivation is influenced more by intrinsic motivations rather than extrinsic motivations similar to the in-office environment, and (2) self-efficacy judgment was affected in two components — vicarious experience and physiological and emotional states.

6.3 Generalizability

This study focused on a fully remote workplace and took responses from a limited number of respondents to draw out the employee’s perspective. The selection of these respondents was centered on the engineering industry of the United States.
Furthermore, both companies had transitioned from an in-office work environment to a remote work environment due to COVID-19. Therefore, the majority of interviewees have had a brief time with remote work and may not have a whole perspective for employee motivation in remote work. However, it does provide a greater perspective on the differences between the two environments.

With a greater focus on in-office and remote environments, the study doesn’t delve into other work environments such as a hybrid environment. A hybrid environment (both virtual and in-person) brings a greater amount of discussion that other researchers may explore. But for the purposes of this study, the potential participants must use a full remote work setting since that is the focus.

The research is limited with the company’s organization as overall employee competence and employee perception of autonomy may differ from other industries and organizations. Therefore, more research and study will be needed regarding SDT within certain environments.

Another topic of generalizability occurs with the sample size of the research. Due to a relatively small sample size, this study looks only at the perspectives of a few individuals instead of the entire workforce. It must be mentioned that the responses gathered in the empiricals represent the employee perspective in large companies located in the United States. However, the conclusions made from the study would be applicable for other industries looking into implementing remote work as possible motivators are generally relevant.

6.4 Further Research

There could be many more variables that may influence employee motivation within a remote workplace environment. Not all of the influences were accounted for within this study, since the focus was mainly on remote workers and their motivations. This portion of the thesis aims to describe areas where future studies may contribute to further research.

When conducting the interview and looking at the profiles of our interviewees, another question arose that differed from our original research question: How does gender and age affect employee motivation? The study was conducted over the
engineering industry; of which, the industry was primarily male. Amongst the sample of interviewees, only one was female and the responses were similar to other respondents. Hence, employee motivation can be explored in the cases of gender biases and how workplace discrimination can affect an individual’s motivation.

As for age, we noticed that the younger interviewees have a greater intrinsic motivation while the older interviewees mentioned extrinsic incentives as a source of motivation. One interviewee (Interviewee X) mentioned that he originally focused on gaining experience and becoming the best at his career. Now, his focus has shifted towards monetary gains instead with learning as a method of getting to the higher paying position. Therefore, further research could explore the effects of age on employee motivation and determine if there is a relation.

It is significant to note that SDT and self-efficacy are not the only theories that can be utilized to examine motivation in remote working. For instance, Herzberg’s motivation-hygiene theory and McClelland’s achievement theory can be used as theoretical tools to inspect motivation for remote workers from another perspective. Not only will this add more perspectives, it will increase the depth and richness to the field of study.

Further studies could be conducted and focused on the topic of personal work setup as it was only briefly covered for this dissertation. Its influence on motivation within a remote environment can be identified through the contrasting and comparing of the individual’s in-office setup. As mentioned priorly, other motivational theories can be used to identify the motivational influences of a remote worker’s personal work setup.

Other aspects that may require further research are the effects of management control practices on employee motivation. Although management control practices do indeed influence employee motivation, this study’s focus lies in employees’ personal experience with motivation in remote working. These management control practices relate to how the company creates their environment. Looking at causality orientation theory, it can be explored how management control practices can create either an autonomously supportive, controlling, or amotivated environment. Therefore, further research that solely studies management control practices that impact employee motivation is warranted.
7. References


## 8. Appendix

### 8.1 Interview Guide

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-theme</th>
<th>Questions</th>
<th>Reminders and additional information</th>
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<tbody>
<tr>
<td><strong>History</strong></td>
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<td>What is your main field of study and secondary if you do have one?</td>
<td>Time, date</td>
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<td>Which certifications do you currently hold?</td>
<td>E.g. CISSP, etc.</td>
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<td>How long have you been in your respective industry?</td>
<td>E.g. engineering, programming, etc.</td>
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<td>- What about other industries (if applicable)?</td>
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<td>What is your position currently in this company?</td>
<td>Official job title, how long was this position held</td>
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<td>- What do you do exactly for this position?</td>
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<td>During your career at this company, what forms of training did you receive?</td>
<td>E.g. observing a senior, having a mentor, ‘shadowing’</td>
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<td>- Did you experience any of these training sessions during remote work?</td>
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<td>In which ways have you mentored or led trainees during remote work?</td>
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<td><strong>Work Experience</strong></td>
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<td>In which ways working remotely affected your daily life?</td>
<td>Health, stress, sleep, etc.</td>
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<td>Have you been able to create a working schedule that separates your professional and personal life?</td>
<td>Certain clock-out times, personal office room</td>
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<td></td>
<td>In which ways have you communicated with coworkers outside of working hours?</td>
<td>competence development, performance evaluation, scrum, product owner, client, supplier meetings (negotiations)</td>
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<td></td>
<td></td>
<td>How often do you communicate with coworkers outside of working hours?</td>
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<td></td>
<td></td>
<td>- To what extent is the communication based around professional</td>
<td></td>
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<tr>
<td>Performance in Remote Environment</td>
<td>Remote Work Environment</td>
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<tr>
<td>How many times have you succeeded with the completion of a project in a remote work environment?</td>
<td>Distinguish between small &amp; large projects, milestones</td>
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<tr>
<td>- What factors were in play for you with your successful completions?</td>
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<tr>
<td>Explain a moment in which you put off completing an assigned task.</td>
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<tr>
<td>- What were the reasons behind this delay?</td>
<td>E.g. procrastination, too much work, priorities, etc.</td>
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<tr>
<td>- Have you felt that your performance on assigned projects were satisfactory or unsatisfactory?</td>
<td>Underperformed, overperformed, or adequately performed</td>
<td></td>
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<tr>
<td>- Explain why you perhaps felt that way.</td>
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<table>
<thead>
<tr>
<th>Communication Channels</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>What forms of communication do you typically use with co-workers?</td>
<td>Professional &amp; Casual Informal vs. Formal</td>
</tr>
<tr>
<td>What forms of communication do you typically use with your supervisor?</td>
<td>Written vs. Verbal Electronic vs. In-Person</td>
</tr>
<tr>
<td>How often do you hold meetings with supervisors?</td>
<td>Biweekly, monthly</td>
</tr>
<tr>
<td>- What about with coworkers?</td>
<td>Coworkers?</td>
</tr>
<tr>
<td>- What forms of meetings are they for supervisors?</td>
<td>Coworkers?</td>
</tr>
<tr>
<td>Do you feel like you relate and connect to your supervisors?</td>
<td>Professional, personal</td>
</tr>
<tr>
<td>- Why?</td>
<td></td>
</tr>
<tr>
<td><strong>Supervision</strong></td>
<td>How would you categorize your 'closeness' with your supervisor?</td>
</tr>
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<td></td>
<td>How often do you write formal reports to your supervisor in remote work?</td>
</tr>
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<td></td>
<td>In which ways does your supervisor evaluate your work?</td>
</tr>
<tr>
<td></td>
<td>How often does your supervisor evaluate your work?</td>
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<tr>
<td></td>
<td>In which ways has your project manager and line manager given constructive feedback?</td>
</tr>
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<td></td>
<td>- Could you perhaps explain your most memorable one?</td>
</tr>
<tr>
<td></td>
<td>Were there times you received a form of punishment for failing a task or project from a supervisor?</td>
</tr>
<tr>
<td></td>
<td>- How did this make you feel?</td>
</tr>
<tr>
<td><strong>Motivators</strong></td>
<td>Have there been moments where a manager or co-worker tried convincing you to further engage in work by appealing to your emotes?</td>
</tr>
<tr>
<td></td>
<td>- Has it worked?</td>
</tr>
<tr>
<td></td>
<td>Are there any incentives offered from your current company to accomplish a project at a certain deadline?</td>
</tr>
<tr>
<td></td>
<td>- What about working overtime?</td>
</tr>
<tr>
<td></td>
<td>- (X) If your company did provide these incentives, would you try to attain them?</td>
</tr>
<tr>
<td><strong>Transition to Remote Environment</strong></td>
<td>When did you transition to a remote work environment?</td>
</tr>
<tr>
<td></td>
<td>Do you feel like you are more adept at remote work than prior?</td>
</tr>
<tr>
<td><strong>Differences</strong></td>
<td><strong>What is your main motivator in an office environment?</strong></td>
</tr>
<tr>
<td></td>
<td><strong>What about your main motivator within a remote?</strong></td>
</tr>
<tr>
<td></td>
<td>- <strong>(X)What changed? What was the reason?</strong></td>
</tr>
<tr>
<td></td>
<td>** Compared to in-person work environments, would you say you’re less or more motivated within a remote-workplace environment?**</td>
</tr>
<tr>
<td></td>
<td><strong>Prior to the remote workplace, what have you done organizational citizenship-wise? Please list it out.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Would you say that your communication with your supervisor increased or decreased after the switch to remote work?</strong></td>
</tr>
<tr>
<td><strong>Problems &amp; Obstacles</strong></td>
<td><strong>What obstacles affected your motivation to complete your assignments with work?</strong></td>
</tr>
<tr>
<td></td>
<td>- <strong>Did the issues perhaps lower your drive to complete the task?</strong></td>
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<tr>
<td></td>
<td><strong>What forms of distractions do you experience typically within the remote work environment?</strong></td>
</tr>
<tr>
<td></td>
<td><strong>How has anxiety and stress from remote work impacted your performance on work (projects)?</strong></td>
</tr>
<tr>
<td></td>
<td><strong>What forms of training have you participated in due to the transition to remote work?</strong></td>
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<tr>
<td><strong>Other</strong></td>
<td><strong>Additional Questions</strong></td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>motivation in a remote work environment?</td>
<td></td>
</tr>
<tr>
<td>In which ways could your company (have) motivate(d) you during remote work?</td>
<td></td>
</tr>
<tr>
<td>Does your work setup serve as a helpful motivator for you?</td>
<td></td>
</tr>
<tr>
<td>What would you say is your main motivator for you to continue working overall?</td>
<td>Money, family, lifestyle, something to do</td>
</tr>
</tbody>
</table>