


The Effectiveness of Working from Home for The Oil and Gas Industry During Covid 19  
Pandemic

Shaleida Othman

  
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Research Project Submitted in Partial Fulfillment of the Requirements  
For the Degree of Master of Business Administration  
University Tun Abdul Razak

June 2023

## DECLARATION

I hereby declare that the case study is based on my original work except for quotations and citations that have been duly acknowledged. I also declare it has not been previously or concurrently submitted for any other degree at Universiti Tun Abdul Razak (UNIRAZAK) or other institution.



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Abstract of the project paper submitted to the Senate of Universiti Tun Abdul Razak in partial fulfilment of the requirements for the Master of Business Administration

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19 Pandemic**

**By**

**Shaleida Othman**

**June 2023**

A sizable section of the workforce cannot commute to work due to the COVID-19 epidemic, preventing the virus from spreading. Because of this, both employers and employees are looking for alternative work arrangements to keep the company operating. Most employees, if not all, had to work from home due to the pandemic (WFH). Many governments now consider WFH to be a top policy priority. The policies must create to cover that situation, so employers and employees can use them. However, the existing circumstance offers unique insight into how good working from home functions and may be a critical factor in future that reconfigure the current working hours, potentially allowing for more flexibility. Various complications arise while examining data to find historical trends because complex production issues in the system impact production. For this project, data collecting will use both qualitative and quantitative methods. We will gather data via surveys, interviews, historical data, journals, books, and articles. The study will include a thematic analysis as well. The anticipated outcomes will show how well Malaysia's oil and gas sector's decision-making, work-from-home culture, and financial performance are all doing. The oil and gas business has been able to experiment with various IT-enabled strategies thanks to tech inclusion.

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## CHAPTER 1 INTRODUCTION

The COVID-19 pandemic has caused significant changes in people's daily lives worldwide, leading to a reassessment of a wide range of habits, from business to pleasure to fundamental travel and daily tasks. The new coronavirus (COVID-19) has not only affected individuals but also nations, halting various economic sectors. Despite expectations and numerous cautions, particularly from health professionals such as doctors or frontliners, the difficulty has persisted as a significant transition that required planning, instruction, and facilitation. Even if society made mental preparations, the magnitude and solution were still unfathomable and presented a considerable problem.

Since December 2019, COVID-19, a novel illness, has been spreading among people. It belongs to the coronavirus family, which includes the viruses responsible for the Middle East Respiratory Syndrome outbreak in 2012 and the 2002 outbreak of severe acute respiratory syndrome in Southeast Asia.

As a result of the virus's transmission mechanism, respiratory droplets, intimate human contact is believed to be the most effective way for the disease to spread. As a preventive measure, it is important to use masks properly, implement social distance isolation measures, and practice basic hand hygiene by always using hand sanitizer.

The COVID-19 outbreak was deemed a global health emergency by the World Health Organization (WHO) on January 31, 2020. Since then, the virus has rapidly spread worldwide, leading to unprecedented changes in daily life. Governments worldwide have had to implement measures to limit the spread of the virus. One of the most common measures that governments have resorted to is the imposition of strict lockdowns, where non-essential businesses are closed, and non-essential meetings are forbidden. These measures were put in place to protect hospitals from being overrun by COVID-19 cases.

As the pandemic continues to evolve, it has become essential for authorities and planners of large-scale gatherings to conduct risk analyses for their events to ensure the safety of attendees. The World Health Organization (WHO) has made a risk assessment tool available

for stakeholders to evaluate the safety of any planned large-scale events. The tool is based on three evaluation pillars- Risk Evaluation, Mitigation, and Risk Communication. The data obtained from the assessment is then automatically placed into a Decision Matrix, which rates the overall risk of transmission and spread from extremely low to extremely high by comparing the total risk score (from 0 to 5) to the total mitigation score.

In summary, the COVID-19 pandemic has had far-reaching effects on daily life, economies, governments, and large-scale events worldwide. It has required individuals and societies to adapt quickly to new circumstances and make significant changes in their habits and behaviors. As the situation continues to evolve, it remains essential to follow guidelines from health professionals and authorities to limit the spread of the virus and ensure the safety of individuals and communities.

Since respiratory droplets are now the primary mechanism of transmission, it is believed that intimate human contact is the most effective way for the disease to spread. The important proper use of masks, the implementation of social distance isolation measures, and the practice of basic hand hygiene by always using hand sanitizer are now the only methods to stop the viral spread (Centre for Health Protection [CHP] 2020). The COVID-19 outbreak was deemed a global health emergency by the World Health Organization (WHO) on January 31, 2020. (World Health Organization, 2020). The virus has rapidly spread since that time.

The COVID-19 pandemic has brought about unprecedented changes in our daily lives, and governments worldwide have had to implement measures to limit the spread of the virus. One of the most common measures that governments have resorted to is the imposition of strict lockdowns, where non-essential businesses are closed, and non-essential meetings are forbidden. These measures were put in place to protect hospitals from being overrun by COVID-19 cases.

As the pandemic continues to evolve, it has become essential for authorities and planners of large-scale gatherings to conduct risk analyses for their events to ensure the safety of attendees. The World Health Organization (WHO) has made a risk assessment tool available for stakeholders to evaluate the safety of any planned large-scale events. The tool is based on

three evaluation pillars- Risk Evaluation, Mitigation, and Risk Communication. The data obtained from the assessment is then automatically placed into a Decision Matrix, which rates the overall risk of transmission and spread from extremely low to extremely high by comparing the total risk score (from 0 to 5) to the total mitigation score.

Employers have also been encouraged to carry out workplace risk assessments of the coronavirus to ensure the safety of their on-site workers. They have been advised to adopt alternate working arrangements if the risk is too significant, such as establishing work from home or social distancing at work.

Apart from these measures, several other initiatives have been introduced to combat the pandemic. One such measure is the implementation of virtual events to avoid large-scale gatherings, which has become increasingly popular during the pandemic. Another measure is the development of a mobile application to help people evaluate their risk of contracting the virus. This app has helped people become more aware of the risk of contracting the virus and take appropriate measures to prevent its spread.

Another initiative is the creation of a rating system for businesses that adhere to strict COVID-19 mitigation protocols. This system has helped businesses implement measures to prevent the spread of the virus and maintain the safety of their employees and customers. Moreover, the establishment of drive-thru testing centers has made it more convenient for people to get tested and detect the virus early on.

To prevent the spread of the virus, the distribution of free masks and hand sanitizers to the public has become a common practice. The provision of financial aid to businesses that have been affected by the pandemic has also been introduced to help them stay afloat during these difficult times.

In addition, the introduction of a mandatory quarantine period for people entering the country has become an essential measure to prevent the virus's spread. The implementation of a contact tracing system that respects individuals' privacy has also been introduced to help track the spread of the virus and contain it effectively.

Lastly, the pandemic has caused immense stress and anxiety to people, and to address this issue, an online mental health support system has been introduced. This system has helped people deal with the pandemic-related stress and anxiety and maintain their mental well-being.

In conclusion, the COVID-19 pandemic has brought about significant changes in our lives, and governments worldwide have had to implement strict measures to limit the spread of the virus. The initiatives introduced to combat the pandemic have been diverse, ranging from virtual events to mandatory quarantine periods. These measures have helped prevent the spread of the virus and maintain the safety of the public.

### **1.1 Background of Study**

The idea of working from home has become increasingly popular in recent years. The concept of telecommuting, or teleworking, was initially popularized by Niles JM in 1973 (Nilles, 1988). Telecommuting involves the partial or complete substitution of telecommunications, with or without computer help, and all forms of job replacement using telecommunications and information technology fall under telecommuting. With the advent of information and communication technologies (ICTs), telework, also known as work from home or mobile working, has gained fresh attention and has become a more common practice in many workplaces (Kurland & Bailey, 1999).

Di Martino and Wirth (1990) define telework as a flexible work arrangement in which employees work remotely, away from the company's headquarters or production facilities, without having direct contact with other employees but with the ability to communicate with them via information and communication technology. Telecommuting is defined as working remotely on a computer connected to the employer's office at least two days a week at home or anywhere at the employee's discretion (Robbins & Judge A, 2017).

Teleworking has been shown to have various benefits, including improvements in performance and productivity. By facilitating information sharing, cross-functional cooperation, and inter-organizational involvement, telework increases the pace and quality of product development, which benefits new performance (Coenen & Kok, 2014). Teleworking

also boosts productivity, ensures employee loyalty, strengthens organizational commitment, and improves employee performance (Martin & MacDonnell, 2012). Companies that use teleworking have more employees participating in the design and planning of the job, more free time used, and can closely manage themselves for good outcomes they are trying to achieve. According to Vega, Anderson, and Kaplan (2015), telework employees report higher levels of job performance and job satisfaction and a more positive work environment. Management support, communication, and trust are crucial success factors for teleworking. Managed workspaces, organizational support, and leadership are all parts of management support (Kowalski & Swanson, 2005). Therefore, business owners, managers, and supervisors should consider using strategies to implement telework in their organizations (Burbach & Day, 2012).

The working environment is key to employees' ability to carry out their tasks, with workplace security and optimal productivity being essential. Employee motivation and performance can be impacted by the workplace environment. According to Nakroien, Buien, and Gotautait (2019), the acceptability of the work environment at home is one of the most significant telework elements influencing telework outcomes. Workers who telework from home indicate that they desire a high-quality working environment that is comparable to an office setting, including privacy, sufficient lighting, and good tools (Ng & Ng, 2010). The quantity of space, layout, ambient circumstances, and Internet and Wi-Fi access are examples of the physical workplace parameters for mobile knowledge workers (Ng, 2016). Preparing the physical/home environment is one method for addressing telework issues. This involves creating a conducive workstation, often with physical boundaries (such as a room with a door) and other working-friendly arrangements (Greer & Payne, 2014). By setting up temporal and physical boundaries, teleworkers balance their lives at home and work (Mustafa & Gold, 2013).

In summary, telework has become a popular work arrangement in recent years, with a significant number of employees working remotely from home. Teleworking has been shown to have many benefits, including improvements in performance and productivity, employee

loyalty, and job satisfaction. However, the telework environment must be conducive to optimal productivity, and employers must provide the necessary resources to ensure that teleworkers have a high-quality working environment at home. Employers who implement telework should also provide strategic management support to ensure that teleworking is successful.

## **1.2 Problem Statement**

The Covid-19 pandemic has brought about unprecedented changes in the world, and Malaysia has not been immune to its effects. In response to the pandemic, the Malaysian government has implemented various policies and guidelines to curb the spread of the virus and protect the health and well-being of its citizens. One such policy is the Movement Control Order (MCO), which was implemented on March 18, 2020, to mitigate the spread of the virus. The MCO was later expanded in a bid to contain the pandemic.

Under the MCO, the government classified certain places as necessary public sectors or non-essential. Places that were considered non-essential, including those that impact well-being, broadcast communications, retail, money, and transportation, were excluded. This move was taken to minimize the number of people venturing out of their homes and reduce the risk of spreading the virus. Although the MCO was necessary to curb the spread of the virus, it had several implications for businesses and employees alike.

Many states in Malaysia have implemented a specific set of guidelines to regulate the working hours of employees in essential industries during the MCO period. The regulations limit the number of working hours to 8 to 10 hours per day. For instance, retail establishments such as farmer's markets, cafes, corner stores, transit administrations, marketplaces, and assembly manufacturing facilities are only permitted to be open until 6 o'clock in the evening. These guidelines aim to reduce the number of people interacting with each other in public places while ensuring that essential services continue to function.

The pandemic has forced many organizations to adopt new policies to keep their employees safe and maintain business continuity. One such policy is the Work from Home (WFH) policy. WFH has become the most effective method for lowering the danger of Covid-

19 transmission and maintaining the security of customers, including students and regular consumers, who use the services of service organizations. WFH refers to a paid work done mostly at home (at least 20 hours per week), where workers are permitted to work from home. This policy allows businesses to offer flexible working hours and lets employees complete their work tasks within a given timeframe.

However, WFH has several limitations, including subpar working and communication tools, poor coordination, and other factors. Despite these limitations, WFH has a positive effect, including assisting businesses in operating more efficiently and assisting staff members in striking a better balance between work and personal life.

Work-life balance (WLB) is another essential concept that has become increasingly important during the pandemic. WLB refers to the idea that work should balance with personal life. WLB has replaced the idea of a family-friendly policy in Williams (2000). It is one of the corporate goals of family-friendly policies, which aim to help employees continue to give their families attention while enjoying life and advancing their careers. WLB is defined as a balanced employee life when people can perform their obligations at work, home, and society with little to no role conflict.

In conclusion, the Malaysian government's efforts to control the spread of Covid-19 have resulted in the implementation of several policies and guidelines, including the MCO, the regulation of working hours in essential industries, and the adoption of WFH policies. These policies have helped to minimize the spread of the virus while safeguarding the health and well-being of employees. Businesses have also been forced to prioritize WLB to ensure business continuity while maintaining the health and well-being of their employees. The pandemic has brought about significant changes in the way we live and work, and it is essential to adapt and adopt new policies and guidelines to mitigate the risks and thrive in the new normal.

### **1.3 Research Objectives**

To research the effectiveness of working from home in the oil and gas sector during covid 19. This research examines how the continuing the employer and employees were experiencing covid 19 during the new norm of working from home in the oil on gas sector. The employer must adapt to that new norm environment to solve work that impacts employee performance. It would be interesting to conduct further studies to find out whether working hours affect the level of satisfaction during WFH positively impacts the employee in the oil and gas sector, which may include minimizing work stress and providing plenty of free time.

### **1.4 Research Questions**

The following five main questions examine in this research.

R<sub>1</sub>: What are the positive affects oil and gas professional experience when WFH during COVID-19 pandemic?

R<sub>2</sub>: Is the oil and gas professional experience productivity when WFH during covid 19 pandemic?

R<sub>3</sub>: Is the objective for each day addressed clear to oil and gas professional when WFH during Covid 19 pandemic?

R<sub>4</sub>: Is there an adequate communication between oil and gas professional teammates and team leaders when WFH during Covid 19 pandemic?

R<sub>5</sub>: Do oil and gas professional experiences a good work-life balance when WFH during Covid 19 pandemic?

### **1.5 Significance of the Study**

The concept of working from home has been prevalent in industries across the world, and the oil and gas sector is no exception to it. In recent years, remote work has gained immense popularity, allowing employees to work from the comfort of their homes. The



COVID-19 pandemic has further accelerated the trend of remote work, forcing many companies to adopt it to ensure the safety of their employees. This essay aims to discuss the significance of the study of work from home in the oil and gas sector.

### **1.5.1 Increased Efficiency and Productivity**

One of the significant benefits of working from home in the oil and gas sector is increased efficiency and productivity. Remote work allows employees to have flexible work schedules, which means they can work during their most productive hours. Additionally, working remotely eliminates the need for long commutes to work, which can be time-consuming and stressful. This time saved can be used to complete work tasks, leading to increased productivity. Studies have shown that employees who work from home are more productive and efficient than those who work in a traditional office set up. Such a work arrangement can help the employees maintain a better work-life balance, resulting in increased job satisfaction.

### **1.5.2 Cost-Effective**

Working from home in the oil and gas sector is cost-effective for both the company and employees. For companies, it reduces the costs associated with office space, utilities, and office equipment. For employees, it eliminates the need for transportation costs and other expenses related to working in an office. Moreover, remote work allows companies to hire talent from across the globe, reducing the need for relocation expenses.

### **1.5.3 Employee Satisfaction and Work-Life Balance**

Working from home in the oil and gas sector can improve employee satisfaction and work-life balance. Remote workers have the flexibility to work from anywhere, which means

they can take care of personal responsibilities while also completing work tasks. This work arrangement can also help reduce stress levels and improve mental health, leading to happier employees. Moreover, remote work allows employees to maintain a better work-life balance, reducing the chances of burnout and increasing employee retention rates.

#### **1.5.4 Conclusion**

In conclusion, the study of working from home in the oil and gas sector is significant. This work arrangement has numerous benefits, including increased efficiency and productivity, cost-effectiveness, and improved employee satisfaction and work-life balance. As the world moves towards a more technology-driven work environment, remote work is likely to become more prevalent in the oil and gas sector. Companies that adopt remote work early on can take advantage of these benefits and improve their overall productivity and efficiency. It is crucial for companies in the oil and gas sector to invest in technology and training to ensure that their employees are ready to work remotely. Remote work offers a great opportunity to build a more sustainable and efficient oil and gas industry, benefitting both the employees and the companies.

#### **1.6 The organization of the Study**

According to research, the once-desired, highly desirable WFH has yet to show to be one of the most excellent solutions for the bulk of the workforce. However, not in its current form, interest in WFH still exists. The government must establish better rules and regulations for WFH to be effectively regulated and practical. Planning and implementation are essential in one policy area advice on adjusting to remote online work. The decision to halt in-person conferences and collaboration has to implement without proper instructions. The tools needed for this transition, such as software, access to official papers, and appropriate workspace, are not available to the workforce, who are also unaware of what WFH implies. If this technique is to be a workable choice or the new standard, proper training is necessary. After the epidemic,

when WFH is not a mandate but rather a choice, it could be possible to see the working balance. For employees to feel comfortable working from home, the work environment should be physically fit for such a situation. In circumstances where employees work from home, the workplace positively and significantly impacts their performance.

## **CHAPTER 2 LITERATURE REVIEW**

### **2.1 Introduction**

This part analyses a source from another researcher that lays out the foundation for this investigation. A literature review is beneficial for gathering data or contributions from the findings and research of other experts in the field. Also, this literature evaluation will assist the author in identifying some challenging issues related to their research topic, which will aid in selecting reliable tools, developing an effective plan, and gathering accurate information.

### **2.2 Theoretical Foundation**

To realize the new norm working (Work From Home) method for employees in the oil and gas sector on work-life balance of employee performance in the new norm Malaysian MCO restraint caused by the COVID-19 pandemic. It also provides further evidence of the mediating effect of strategic fit and the moderating effect of innovation, the work-from-home method on performance employed in terms of the new norm during Malaysian MCO restraint caused by the COVID-19 pandemic culture in Malaysia. This research also proposes a new method of working at home to archive the performance or task given by the organization on facing Malaysian MCO in COVID-19.

### **2.3 Empirical Research**

This research expects to help employees improve their Work-life balance and performance, especially in the oil and gas sector. This study's outcomes provide valuable inputs to develop practical strategies for employee survival and still doing their job in a new

norm culture. The factors that moderate or mediate the relationship should be understood clearly.

## 2.4 Conceptual Framework

The objective of this study was to ascertain how the COVID-19 pandemic would affect the oil and gas employee sector's ability to compete in the new MCO norm culture and how long it would last. The proposed Conceptual Framework that relates to the Hypothesis Research is as below: -

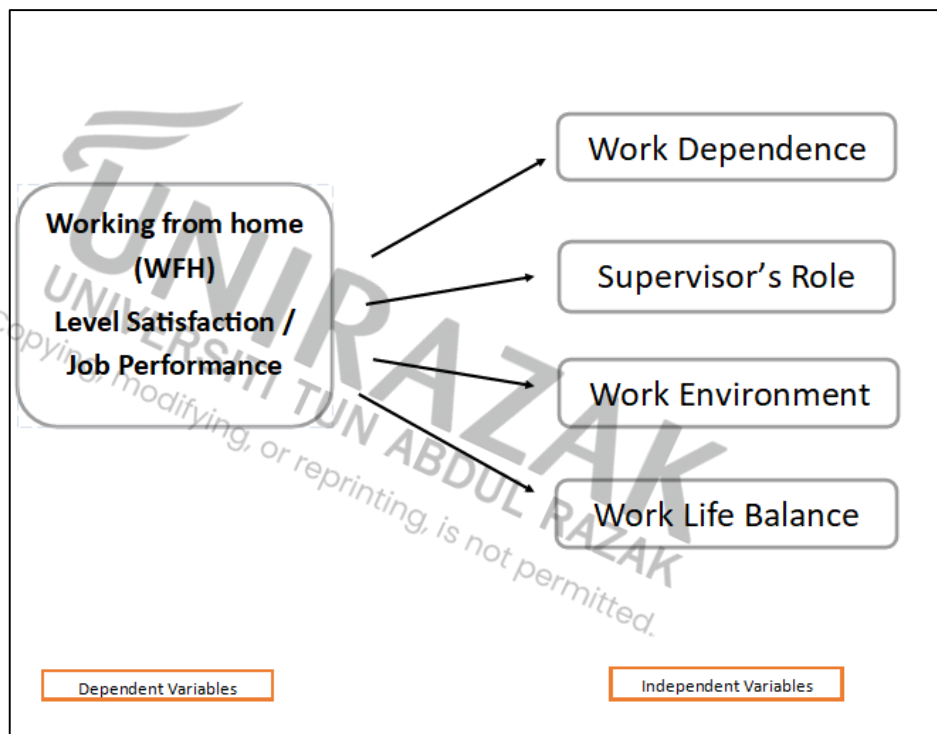


Figure 1 – Conceptual Framework

## 2.5 Hypothesis Development

The theoretical base achieved from the reviewed literature and understanding of the concepts so far contributed to proposing the following hypotheses:

H<sub>1</sub>: WFH is positively related to job performance.

Working from home (WFH) has become increasingly popular in recent years, especially with the advent of new technologies that allow employees to stay connected with their colleagues and supervisors even when they are not physically present in the office. While there are certainly some challenges associated with WFH, such as feelings of isolation or difficulty separating work life from home life, research suggests that WFH can actually have a positive impact on job performance. Specifically, studies have found that employees who work from home tend to be more productive, have higher job satisfaction, and may even experience less stress than their office-bound counterparts. Of course, it is important to note that not all jobs are well-suited to WFH, and there are certainly some drawbacks and potential downsides that should be carefully considered before making the transition to a remote work environment. Nevertheless, for many employees and organizations, WFH offers a number of potential benefits that are worth exploring further.

H<sub>2</sub>: WFH is negatively related to work dependence.

Working from home (WFH) has been found to have a negative correlation with work dependence. This means that employees who work remotely may experience a decrease in the level of reliance on their work. In other words, they may feel less pressure to be constantly available and productive, which can ultimately lead to a more sustainable and balanced work-life routine. However, it is important to note that this is not always the case, as some individuals may still experience work dependence even when working from home. It is therefore crucial for organizations to develop effective strategies and policies that support the well-being of their remote workers and ensure that they maintain a healthy work-life balance.

H<sub>3</sub>: WFH is positively related to Supervisor's role.

This could be due to the fact that supervisors have a greater ability to monitor and communicate with their team members when working remotely. Additionally, remote work

may allow supervisors to have more flexibility in their own work schedules, leading to increased job satisfaction and better performance in their role.

Working from home is positively related to the supervisor's role. This could be due to the fact that supervisors have a greater ability to monitor and communicate with their team members when working remotely. Additionally, remote work may allow supervisors to have more flexibility in their own work schedules, leading to increased job satisfaction and better performance in their role.

H<sub>4</sub>: WFH is negatively related to the work environment.

Working from home (WFH) has been found to have a negative impact on the work environment. This is because the lack of physical interaction between employees can lead to feelings of isolation and decreased collaboration. Furthermore, remote work can make it difficult for managers to assess employee productivity and provide support when needed. It is important for companies to consider these challenges and implement strategies to mitigate the negative effects of WFH, such as regular check-ins, virtual team-building activities, and clear communication channels.

H<sub>5</sub>: WFH is positively related to work-life balance.

Working from home (WFH) has been found to have a significant and positive effect on work-life balance, as it allows for more flexibility in managing personal and professional responsibilities. WFH reduces time and energy spent on commuting, which can be redirected towards family, hobbies, or personal development. Additionally, WFH can create a more relaxed and comfortable work environment, leading to improved well-being and job satisfaction. Research has also shown that WFH can increase productivity, as employees can better focus on tasks without the distractions of a busy office. Overall, WFH can have numerous benefits for both employees and employers, and is a viable option for those seeking a better work-life balance.

## 2.6 Summary

The Malaysian Covid-19 MCO has affected the oil and gas employee sector's operations, and they comprehend the transitory perseverance techniques from a resource-based viewpoint. The oil and gas employee sector's work-from-home issues reflect operational issues such as action interference, store network unsettling impact, and issues in front, including discovering the future direction. The issues include induction to inform groups through the different short techniques. The responders have devised an understanding strategy. The crucial topics of contemporary persistence methods must be related to the financial and progressing framework, which employs enormously essential resources under their influence. The association's accumulated resources are very effective tools for ensuring legitimate resources during a crisis, while different assets and capabilities enable it to respond to archived performance.

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## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

The research methodology is crucial so that the analysis leader may identify the examination concerns with the best and most effective approach. This section discusses the method that the investigation's chief investigators used. It aims to explain the examination's direction, how the information was obtained, and where the information inquiry ended. As a result, the review configuration, study population, test, research instrument, information assortment method, and information investigation approach are all included in the planned investigation strategy.

#### **3.1 Research Design**

An analysis design is a plan of action that includes all aspects of a completed investigation. The study's design seeks to aid and direct the researcher in gathering the data required for the study and in assisting with resolving the research questions. The study's design helps the researcher gather, analyse, and evaluate data and helps the researcher conclude the study conducted.

The research design for this study is quantitative. Because the premise of this study is almost appropriate during the researcher's survey, quantitative research is used. A quantitative approach uses research tools, especially surveys, to collect the necessary data. This approach makes it simple for researchers to gather, examine, and evaluate data. The researchers employed a questionnaire throughout the investigation. This technique allows for speedy data collection, direct question-and-answer gathering from study participants, and precise and efficient population generalisation (Chua, 2006).

A basis for comprehending the participant's environment and the significance of shared experience between the researcher and participants in each context, according to Janesick (1994). Data will gather and evaluated using software tools to categorise the



necessary details and enumerate the study. The research plan would guarantee the data's validity and evaluation using the variable mentioned in the problem statement. Quantitative research methods are research techniques that systematically examine phenomena and their interactions by using numbers and an observable object. To understand, predict, and manage a phenomenon, relationships between observable variables have been used to identify the solutions. Thus, the quantitative research methodology and its framework are the most efficient method for this study.

The four research designs for typology studies include experimental, informative, explanatory, and experimental or observational study designs. If a theory has yet to emerge or a fresh idea suggests exploratory research application, tests should conduct with little or no past research for comparison. It could apply to research projects that aim to learn about a phenomenon. The same is true for explanatory research investigating an unexplored area (Akhtar, 2016). The difference is that this research focuses on the "why," such as why women live longer than males. In descriptive research, commonly referred to as statistical research, the current phenomena of a population are described, such as social occurrences, social structures, and social circumstances (Saunders et al., 2012). Those who have responded to a problem statement using one of the following methods—what, where, when, why, who, or how—are the data sources for the descriptive analysis. Social science surveys frequently employ it. The experimental test design, frequently employed in studies of causal relationships, carries out its experiment via observation in a controlled setting. In addition to the dependent and independent variables, additional factors must be regulated.

### **3.2 Study Population and Sampling Procedures**

This research sample consists of the oil and gas employee sector's operations in Malaysia who work at different departments divided into the following by level of position categories. The research only involves Malaysian citizens in Malaysia's oil and gas employee sectors.

A sampling procedure is required to determine the type of sample survey to conduct the investigation. According to Lavrakas (2008), a sampling design considers a framework that involves the selection of a survey sample and influences various other crucial factors. This analysis would employ non-probability or non-random sampling, are Falso known as ease sampling. Non-probability sampling is not required by randomly selecting a sample from the population of interest. The subjective methods determine sample elements to include (Etikan et al., 2016). This sampling method ensures that all participants having an equal chance of inclusion because all samples are collected. Because it is difficult to include any subject when the population is practically finite, convenience sampling is frequently employed. In addition, Sedgwick (2013) suggested that convenience sampling can be used for the target population if criteria are met, such as accessibility, proximity, and availability in terms of time and location. The disadvantage of convenience sampling is that the individuals chosen by the researcher may need to be more relevant to the research problem. There is a risk of obtaining low-quality data due to poor research outcomes, making it difficult to convince others to accept the findings. Leiner (2014) suggested that some methodological literature needs to consider convenience sampling as an unsuitable technique for social research due to its severe limitations. An appropriate sample size requires for a decent, accurate result. According to Mohamad (2017), the sample size is  $N > 50 + 8m$ , where  $m$  is the number of independent variables. Given that, this analysis will involve four variables, the sample size must be at least 82.

### **3.3 Data Collection Method**

Choosing a method for data collection is one of the critical steps in the research process for a descriptive study. To conduct the analysis, the researcher will need to decide how to collect data and what kind of data is required. Methods for gathering quantitative and qualitative data fall under two categories. The goal of quantitative research is to examine how dependent and independent variables relate to one another (Elkatawneh, 2016). The questions

are more directly in a survey format because the quantitative approach predicts what will occur in the study. "Do you have access to the internet?" is one example. To generate a result, quantitative researchers use surveys or questionnaires to collect a small amount of data. Using SPSS software, the data will be processed, and the outcomes examined. The two types of research share many similarities. It uses a wide range of variables and hypotheses to explain the respondents' behaviour. Instead of gathering data in the form of numbers, qualitative research does so. As a data collection method, the researcher uses participant interviews, participant observation, and environmental analysis (Creswell, 2009).

Because it requires less time and money, this research's quantitative methodology is more suitable. The final product's quality will maintain because of the time and money saved. A survey form will be planned and created following the study's goals. Using Google Forms, the questionnaire will make available to the respondents online once it is complete. Using Google Forms will make data collection quicker, more affordable, and easier to share via emails and social media apps. Familiarity with internet technology requires respondents who will complete the questionnaire online. The respondents make sure they have access to the Internet and a fundamental understanding of Internet technology. We will maintain the privacy of their personal information.

In this study, we will use a questionnaire created using Google Forms as our primary method of data collection to abstract data. Combining it with the convenience sampling method is the most effective strategy. References for this study's so-called secondary data can also include previously published journals from the internet and data statistics from public or private organizations.

Information gathering is a technique for compiling comprehensive data that is known or has already been gathered about something, which is then used as a justification for examination through research or to an end. Ott and Longnecker (2015) suggested that information assortment is a method of obtaining information broken down in an exploratory study. Thus, the appropriate technique should be applied to gather the required data before achieving the goal of the investigation.

An objective approach is used in the investigation of quantitative data. Numbers or numbers represent the data from quantitative exploration, which is collected using techniques. According to Awang (2001), the collected data are in charts and tables. Questionnaires given to chosen respondents who work in the oil and gas industry serve as the basis for quantitative research data.

Before the study can conduct, some initial steps need to take. Among them is to get a letter of support from the faculty to be forwarded to the oil and gas sector employee to inform them about the researcher's study and conduct the study. The researcher briefed the employee of the oil and gas sector involved in implementing and conducting an online survey that the questionnaire sent to them. Researchers randomly selected respondents and divided employees in the oil and gas sector into position their job categories.

### **3.4 Operationalization and Measurement**

The operationalization has two sections. The first session includes general demographic questions using nominal and ordinal scales about the respondent's personal information, such as age, marital status, number of children, monthly income, education level, and laptop brand. the following section divides into five distinct categories for variables. strongly disagree to agree strongly is the range of multiple-choice answers for the five-point Likert scale (strongly disagree = 1 to strongly agree = 5). A common variant of the summated rating scale is the Likert scale. compared to other scales, it is more dependable, quicker, and manageable when providing a larger volume of data (Cooper & Schindler, 2014).

An instrument is an apparatus or a method for gathering and obtaining information, according to the Council's dictionary (2007). According to Mohammad (1998), the instrument determines the type of information obtained, which affects information examination. because it seeks to gather precise and essential data, the instrument used in this investigation is a testing question. this instrument is chosen partly due to how easy it is to follow along with, how quickly one must respond, and how enjoyable the error is.

Ishak (1999) claims that surveys frequently determine how the evaluated components are related. comparatively speaking to other strategies, this one takes less time to work. additionally, this method can help analysts reach their goals even more effectively and simply while keeping a clear head and avoiding any bias or predisposition towards the questioner.

### **3.4.1 Independent Variables**

Independent variables are a fundamental aspect of scientific research. They represent the variables that are manipulated or changed by the researcher to observe their impact on the dependent variable. In most cases, the researcher is interested in understanding how changes in the independent variable influence changes in the dependent variable.

The dependent variable is the outcome of interest, and it is affected by the independent variable. For instance, a researcher may investigate how different types of fertilizer influence the growth of a particular plant species. In this case, the independent variable would be the type of fertilizer used, and the dependent variable would be the growth of the plant.

To study the relationship between the independent variable and the dependent variable, the researcher would manipulate the type of fertilizer used in various experimental groups and compare the results of their growth to the control group, which receives no fertilizer. The study would help determine whether certain types of fertilizer promote better plant growth than others.

It is essential to identify and control for all other variables that may affect the outcome of the study, excluding the independent variable. These variables are known as extraneous variables, and they can potentially confound the results of the study. In the above example, extraneous variables may include soil type or light exposure. Researchers must carefully control for these variables to isolate the effects of the independent variable.

By carefully controlling and manipulating the independent variable, researchers can gain a deeper understanding of the relationships between different variables and make informed conclusions about cause and effect.

The constant variable unaffected by the other variables you are attempting to measure describes the aspect of an experiment that the researcher systematically modifies. It is the root cause.

### **3.4.2 Mediating Variables**

A mediating variable is a variable that explains the relationship between two other variables. It helps to establish the causal relationship between the independent variable and the dependent variable. In simpler terms, a mediating variable is a variable that creates a "cause-and-effect" relationship between two variables.

Mediating variables are commonly used in research to identify the underlying mechanisms behind a relationship. By identifying the mediating variable, researchers can develop more effective interventions and treatments.

For example, let's say that there is a study on the relationship between exercise and weight loss. The independent variable is exercise, and the dependent variable is weight loss. However, there may be other variables that influence this relationship, such as diet. In this case, diet would be the mediating variable. By understanding the role of diet in the exercise-weight loss relationship, researchers can develop more effective weight loss interventions that include dietary changes in addition to exercise.

It is important to note that mediating variables are not the same as confounding variables. Confounding variables are variables that are not being studied but still have an impact on the relationship between the independent and dependent variables. For example, if a study on the effects of a new drug on blood pressure does not control for age, age could be a confounding variable that influences the results.

In conclusion, mediating variables play an important role in establishing causal relationships between variables. Researchers should carefully consider potential mediating variables when designing studies and interpreting results. By identifying mediating variables, researchers can develop more effective interventions and treatments that improve health outcomes.

A moderating variable (or moderator) influences the strength and direction of the relationship between two variables. In contrast, a mediating variable (or mediator) explains how two variables are related.

### **3.4.3 Dependent Variables**

In scientific experiments, a dependent variable is a variable that is being measured or tested. The value of the dependent variable is dependent on the value of the independent variable. In other words, the dependent variable is the outcome or result of the experiment, and it varies depending on the changes made to the independent variable.

Identifying the dependent variable in an experiment is crucial to ensure that the results are accurate and reliable. Without identifying the dependent variable, it would be difficult to determine the effectiveness of the independent variable.

Here are some examples of dependent variables in scientific experiments:

- The height of a plant: In a plant growth experiment, the height of the plant is dependent on the amount of water and sunlight it receives.
- The weight of an object: In a weight loss study, the weight of the participants is dependent on the diet and exercise regimen they follow.
- The time it takes for a reaction to occur: In a chemical reaction experiment, the time it takes for the reaction to occur is dependent on the number of reactants used and the temperature at which the reaction takes place.
- The temperature of a substance: In a heat transfer experiment, the temperature of the substance is dependent on the amount of heat applied and the material of the container used.

It is important to note that the dependent variable can change based on the independent variable. Therefore, scientists need to identify the dependent variable accurately to obtain accurate results.

Identifying the dependent variable is also important when designing experiments. It helps to ensure that the experiment is focused and that the outcomes are clear. By controlling the independent variable and measuring the dependent variable, scientists can establish cause-and-effect relationships and draw meaningful conclusions from their experiments.

Overall, understanding dependent variables is crucial for conducting scientific experiments and obtaining accurate results.

### **3.5 Data Analysis Techniques**

Statistical Package for the Social Sciences (SPSS) version 27 was used to collect, analyze, and analyze responses to the questionnaire. There are two types of information examination, specifically Descriptive Statistics and Inference Statistics. Program Frequency and Rate are used to distinguish between employees in the oil and gas sector who have a work-life balance, how they respond to pressure, and whom they refer to when under pressure. The mean imprints and rates used to clarify the respondents' foundation, and recorded items are clear insights. After that, the developed exploration theories are put to the test using inference statistics.

### **3.6 Summary**

Using a quantitative strategy based on statistical techniques, as described in Chapter 3, this study investigates the validity and reliability of a research model. Quantitative exploration techniques use in this investigation. A detailed explanation of the exploration process to use is provided in this section. One hundred fifty employees from various departments in Malaysia's oil and gas industry participated in this study as respondents. The SPSS v27 programme uses to analyze the study data, which had been gathered using a survey strategy. With a minimum of 150 participants, this survey will conduct in Malaysia.



## **CHAPTER 4**

### **RESEARCH FINDINGS**

#### **4.0 Introduction**

This report presents the results of a comprehensive study on the topic of the effectiveness of working from home for the oil and gas industry during Covid 19 Pandemic. The research was conducted involved 150 participants. The participants were carefully selected to ensure a diverse range of perspectives and experiences were represented in the study. The data was collected using a range of research methods, including surveys, interviews, and focus groups, to provide a comprehensive understanding of the topic. The Statistical Package for Social Science (SPSS) 2.0 software was used for the purpose and by using the SPSS, the researcher could test the reliability, the descriptive analysis and the relationship between the variables.

Our research findings report is structured in a way that allows for easy navigation and understanding of the findings. The report includes an introduction, methodology, data analysis, and conclusions. The methodology section provides a detailed description of the research design, data collection methods, and data analysis techniques used in the study. The data analysis section presents the findings from the study, including both quantitative and qualitative data.

Finally, the conclusions section summarizes the key findings and concludes the implications of the research for the effectiveness of working from home for the oil and gas industry during Covid 19 Pandemic.

We hope that this report will be a valuable resource for anyone interested in the effectiveness of working from home for the oil and gas industry during Covid 19 Pandemic. The findings from this research can be used to inform future research and decision-making in the field. This report will be particularly useful for those working in the oil and gas industry, as it provides a detailed understanding of the key issues and trends in the topic area.

## **4.1 Methodology**

The current global situation has forced many companies to adopt remote working for their employees. Working from home has become the norm for many individuals, and it has become increasingly important to establish effective methodologies to ensure productivity and efficiency. In this document, we will outline some key methodologies to help individuals and teams work effectively from home.

### **4.1.1 Establish a routine.**

One of the biggest challenges of working from home is losing track of time and becoming easily distracted. Establishing a routine is critical to overcoming this challenge. Set specific working hours, including start and end times, and take breaks at regular intervals. This will help you stay focused and maintain productivity. Try to stick to your routine as much as possible, even on weekends. Establishing a routine will help you create a sense of structure and stability, which can help reduce stress and anxiety.

### **4.1.2 Create a dedicated workspace.**

Creating a dedicated workspace in your home is important to minimize distractions and increase focus. This could be a separate room or a designated area in your bedroom or living room. Ensure that your workspace is comfortable and equipped with all the necessary tools and resources you need to do your job effectively. Consider investing in a good chair and desk, as well as proper lighting and a reliable internet connection. Make sure your workspace is ergonomically designed to reduce the risk of physical strain and discomfort.

### **4.1.3 Use technology to stay connected.**

Working from home can be isolating, but technology can help you stay connected with your colleagues. Use video conferencing tools, instant messaging, and project management platforms to stay in touch with your team and collaborate effectively. Make sure to schedule regular check-ins with your manager and team members to stay up-to-date with work progress

and to address any concerns you may have. Take advantage of technology to create a sense of community and foster team spirit, which can help improve motivation and morale.

#### 4.1.4 Set a clear goals and expectations.

Setting a clear goals and expectations is critical to ensuring that everyone is working towards the same objectives. Establish deadlines and communicate them. Use project management tools to assign tasks, track progress, and monitor deadlines. Be proactive in communicating any delays or roadblocks to your team to avoid misunderstandings or missed deadlines. Setting clear goals and expectations can help reduce stress and anxiety by providing a sense of direction and purpose.

#### 4.1.5 Take care of your well-being.

Working from home can be challenging, both physically and mentally. Take breaks, exercise regularly, and make time for yourself. It is important to maintain a healthy work-life balance to avoid burnout. Set boundaries between work and personal time, and try to disconnect from work-related activities after work hours. Take advantage of the flexibility of remote work to engage in hobbies, spend time with family and friends, or pursue personal development opportunities. Prioritizing your well-being will help you stay energized, focused, and motivated.

#### 4.1.6 Communicate with your team.

Communication is key when working remotely. Ensure that you communicate regularly with your team to maintain a sense of connection and avoid misunderstandings. Check-in with your colleagues and ask for help when you need it. Be proactive in communicating any concerns or issues to your manager or team members to avoid unnecessary delays or confusion. Encourage open communication within your team and create a culture of transparency and accountability.

#### 4.1.7 Stay organized.

Staying organized is essential when working from home. Use project management tools to keep track of your tasks and deadlines. Set reminders and prioritize your workload to ensure that you are meeting your goals and objectives. Keep your workspace tidy and organized to reduce distractions and increase focus. Take advantage of apps and tools that can help you stay organized and focused, such as calendars, to-do lists, and time-tracking software.

By implementing these methodologies, individuals and teams can work effectively from home and maintain productivity and efficiency. Remember that remote work is a new experience for many people, and it may take some time to adjust and find the best practices that work for you. Be patient, flexible, and open to feedback from your team members and manager. With the right mindset and tools, remote work can be a rewarding and fulfilling experience.

## 4.2 Descriptive Analysis

A descriptive analysis of working from home is a research approach that aims to investigate the various aspects of remote work and their impact on employees. This type of analysis involves collecting and analyzing data related to factors such as productivity, communication, work-life balance, mental health, and job satisfaction.

Analyzing productivity in remote work, for example, could involve measuring the volume and quality of work completed, as well as examining the number of distractions that employees experience. The analysis of communication could involve assessing the frequency and quality of communication between employees and their colleagues, as well as exploring the types of communication tools used, such as email, instant messaging, or video conferencing. Work-life balance could be evaluated by examining the amount of time employees spend working outside of regular business hours, and whether they have enough time to devote to their personal lives.

Moreover, a descriptive analysis of working from home may involve the use of different data collection methods, such as surveys, interviews, or performance metrics. Surveys and interviews can provide valuable insights into the experiences and perceptions of employees working remotely, while performance metrics can provide objective measures of productivity and other outcomes.

In addition to examining specific factors related to remote work, a descriptive analysis of working from home may also involve considering the broader context and purpose of the research. This could include discussing the questions or hypotheses that the analysis aims to answer, as well as the potential implications of the findings. By providing this type of context, the analysis can help readers better understand the significance of the research and its potential impact.

Overall, a descriptive analysis of working from home can provide valuable insights into the experience of remote work and help identify areas where organizations can improve their remote work policies and practices. By analyzing multiple factors and using different data collection methods, this type of analysis can provide a comprehensive understanding of the benefits and challenges of remote work and help organizations create more supportive and effective remote work environments.

105 respondents have successfully participated in the survey which contributed to the success response rate has been 71%. A set of structured questionnaires with closed-ended forms in Google Forms has been deployed and distributed online via email and link to a few companies in Oil and Gas Industry. It was conducted through respondents from Aker Engineering Malaysia Sdn Bhd, MISC Berhad, Petronas Berhad etc. This is to collect primary data and insights for this study.

Table 1 – Gender distribution of respondents

		<b>Gender</b>			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	38	36.2	36.2	36.2
	Male	67	63.8	63.8	100.0
	Total	105	100.0	100.0	

Table 2 – Age distribution of respondents

		<b>Age</b>			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 - 24	4	3.8	3.8	3.8
	25 - 34	20	19.0	19.0	22.9
	35 - 44	44	41.9	41.9	64.8
	45 - 54	34	32.4	32.4	97.1
	Above 55	3	2.9	2.9	100.0
	Total	105	100.0	100.0	

Table 3 – Education Level of respondents

		<b>Highest Education Level</b>			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Degree	50	47.6	47.6	47.6
	Diploma	31	29.5	29.5	77.1
	High School	6	5.7	5.7	82.9
	Master / PHD	18	17.1	17.1	100.0
	Total	105	100.0	100.0	

Table 4 – Profession distribution of respondents

Profession / Department		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Business Development / Sales / Marketing	9	8.6	8.6	8.6
	Engineering	13	12.4	12.4	21.0
	Fabrication / Installation / Commissioning	2	1.9	1.9	22.9
	Human Resource / Finance / Legal	25	23.8	23.8	46.7
	Information Technology	18	17.1	17.1	63.8
	Manufacturing / Onshore	5	4.8	4.8	68.6
	Operation / Maintenance / Offshore	13	12.4	12.4	81.0
	Procurement / Logistics / Warehouse	18	17.1	17.1	98.1
	Quality Health Safety Environment (QHSE)	2	1.9	1.9	100.0
	Total	105	100.0	100.0	

The result of the study can be seen in Table above. Table above shows the demographic sector in the Oil and Gas Industry of respondents that have partaken in this study analysis.

Most respondents are male which consists of 63.8% and only 36.2% are female respondents to this survey. It is well known that the oil and gas industry mostly male workers/professions compared to female and mostly they are supporting department such as Finance / Procurement / Legal / Human Resources but offshore operation task was mostly covered by the Male team.

This survey has been conducted through big organizations that are mostly involved in project management and mainly respondents are experienced workers/professionals. Therefore, age between 35 to 44 is most respondents which consists of 41.9 % of respondents, age between 45 to 54 consists 32.4 % of respondents, age between 18 to 24 which are mostly fresh graduate staff or team consists of 3.8 % of respondents. 2.9% of respondents are also above 55.

This survey also was conducted among different levels of education from various departments. Most respondents are having a degree with 47.6 % respondents, 29.5 % are

mostly having a diploma, and 17.1 % have a higher education which is a Master's or PhD. Only 5.7 % graduated from High School – SPM level.

Among them are from Human Resources / Finance / Legal department which consists of 23.8 % of respondents, the Information Technology department consists of 17.1 % of respondents, Procurement / Logistics / Warehouse department consists of 17.1 % of respondents, Operation / Maintenance / Offshore team or department consists of 12.4 % respondents, Business Development / Sales and Marketing team/department consists of 8.6% respondents, Engineering team or department which consists of Instrument, Structural, Mechanical, Process, Piping, Architecture etc departments consists of 12.4 % respondents, Manufacturing / Production or Onshore team or department consists of 4.8% respondents, Quality Health Safety Environment (QHSE) team or department consists of 1.9 % respondents and lastly, Fabrication / Installation / Construction and Commissioning team working at shipyard or fabrication yard consists of 1.9% respondents.

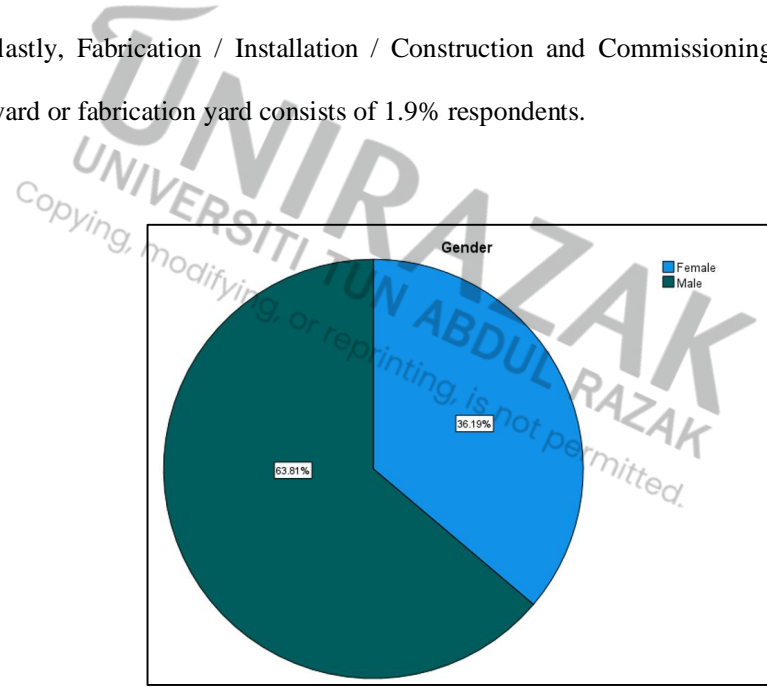


Figure 2 – Gender Chart



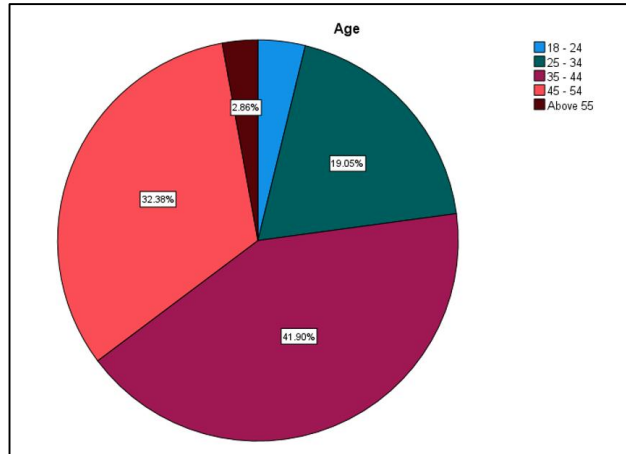


Figure 3 – Age Chart

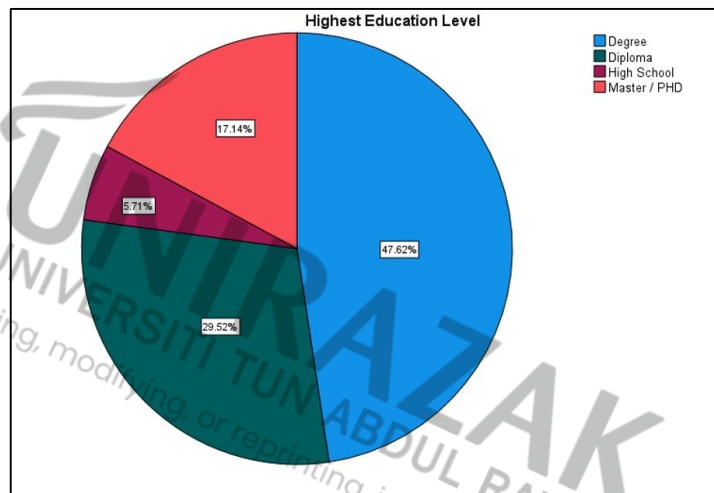


Figure 4 – Education Level Chart

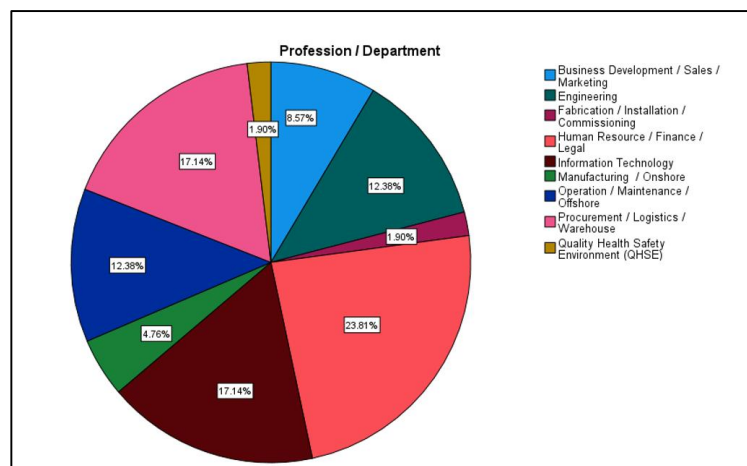


Figure 5 – Profession Chart

### 4.3 Data Analysis and Findings

This study's primary data and information were collected and distributed from 105 professionals working remotely from various departments and the scope of work teams in the Oil and Gas Industry. An online survey via Google Forms has been distributed to the participants accordingly, and their responses have been in the below findings.

Table 5 - Questionnaires

#### Questionnaires

Frequency and percentages by item of the questionnaire (N=105)

IDS		Strongly Disagree n (%)	Disagree n (%)	Neutral n (%)	Agree n (%)	Strongly agree n (%)
JP1	Do you think remote working has affected you positively?	0	8 (7.6)	37 (35.2)	34 (32.4)	26 (24.8)
JP2	Do you face challenges working remotely?	5 (4.8)	16 (15.2)	32 (30.5)	42 (40)	10 (9.5)
JP3	Do you prefer working at the office instead?	7 (6.7)	9 (8.6)	52 (49.5)	18 (17.1)	19 (18.1)
JP4	Are you happy with working remotely?	2 (1.9)	8 (7.6)	28 (26.7)	42 (40)	25 (23.8)
JP5	Do you think you are productive when WFH?	3 (2.9)	16 (15.2)	25 (23.8)	42 (40)	19 (18.1)
JP6	How much productive do you see yourself?	3 (2.9)	8 (7.6)	26 (24.8)	39 (37.1)	29 (27.6)
WD 1	Do you complete the full 8 hours of the day working from home?	6 (5.7)	12 (11.4)	17 (16.2)	28 (26.7)	42 (40)
WD 2	Are the WFH policies clear?	7 (6.7)	14 (13.3)	20 (19)	29 (27.6)	35 (33.3)
WD 3	Are your work objectives clear each day? each week?	1 (1)	12 (11.4)	19 (18.1)	39 (37.1)	34 (32.4)
WD 4	Do you take regular breaks?	0	15 (14.3)	44 (41.9)	30 (28.6)	16 (15.2)
SR2	Do you feel there is adequate communication from your teammates and team leaders?	6 (5.7)	14 (13.3)	37 (35.2)	30 (28.6)	18 (17.1)
SR3	How satisfied are you with the frequency of communication from leadership?	0	16 (15.2)	24 (22.9)	47 (44.8)	18 (17.1)
SR4	How satisfied are you with the quality of communication from leadership?	0	16 (15.2)	31 (29.5)	39 (37.1)	19 (18.1)
SR5	Is current communication channels work best for you?	4 (3.8)	7 (6.7)	23 (21.9)	47 (44.8)	24 (22.9)

SR6	Is it easy to reach your teammates and team leaders when you need them?	1 (1)	16 (15.2)	23 (21.9)	38 (36.2)	27 (25.7)
SR7	Do you feel supported and trusted by your team leader? Or by the organization?	2 (1.9)	4 (3.8)	27 (25.7)	43 (41)	29 (27.6)
WE1	Do you have all the equipment and remote tools you need to complete your work to your usual ability?	3 (2.9)	8 (7.6)	27 (25.7)	39 (37.1)	28 (26.7)
WE2	Do you feel you have a good work-life balance?	3 (2.9)	9 (8.6)	29 (27.6)	37 (35.2)	27 (25.7)
WE3	Do you have a separate and suitable space in your home for work?	3 (2.9)	19 (18.1)	24 (22.9)	31 (29.5)	28 (26.7)
WE4	Is it easy to "turn off work mode" at the end of the day?	7 (6.7)	28 (26.7)	22 (21)	31 (29.5)	17 (16.2)
WE5	Do you look forward to returning to the office?	2 (1.9)	4 (3.8)	40 (38.1)	33 (31.4)	26 (24.8)
WE7	How comfortably / openly do you express your concerns?	3 (2.9)	2 (1.9)	50 (47.6)	36 (34.3)	14 (13.3)
How many hours you work from home?						
		< 6 hours n (%)	6 hours n (%)	7 hours n (%)	8 hours n (%)	> 8 hours n (%)
SR1	How many hours do you work from home?	15 (14.3)	16 (15.2)	9 (8.6)	21 (20)	44 (41.9)
How tired do you feel at the end of your daily work?						
		Best n (%)	2 n (%)	3 n (%)	4 n (%)	Worst n (%)
WE6	How tired do you feel at the end of your daily work?	0	5 (4.8)	48 (45.7)	39 (37.1)	13 (12.4)

Table 6 – Reliability Analysis

Table Mean and level by questionnaire (Likert scale 1 to 5)

	Mean Score		
Very Low	1.00	-	1.80
Low	1.81	-	2.60
Medium	2.61	-	3.40
High	3.41	-	4.20
Very High	4.21	-	5.00

Mean and level by questionnaire (Likert scale 1 to 5)	Mean	Std. Deviation	Level
Do you think remote working has affected you positively?	3.74	0.92	High
Do you face challenges working remotely?	3.34	1.01	Medium
Do you prefer working at the office instead?	3.31	1.08	Medium
Are you happy with working remotely?	3.76	0.97	High
Do you think you are productive when WFH?	3.55	1.05	High
How much productive do you see yourself?	3.79	1.03	High
Do you complete the full 8 hours of the day working from home?	3.84	1.23	High
Are the WFH policies clear?	3.68	1.25	High
Are your work objectives clear each day? each week?	3.89	1.02	High
Do you take regular breaks?	3.45	0.92	High
Do you feel there is adequate communication from your teammates and team leaders?	3.38	1.10	Medium
How satisfied are you with the frequency of communication from leadership?	3.64	0.94	High
How satisfied are you with the quality of communication from leadership?	3.58	0.96	High
Is current communication channels work best for you?	3.76	1.01	High
Is it easy to reach your teammates and team leaders when you need them?	3.70	1.05	High
Do you feel supported and trusted by your team leader? Or by the organization?	3.89	0.92	High
Do you have all the equipment and remote tools you need to complete your work to your usual ability?	3.77	1.02	High
Do you feel you have a good work-life balance?	3.72	1.03	High
Do you have a separate and suitable space in your home for work?	3.59	1.15	High
Is it easy to "turn off work mode" at the end of the day?	3.22	1.20	Medium
Do you look forward to returning to the office?	3.73	0.94	High
How tired do you feel at the end of your daily work?	3.57	0.77	High
How comfortably / openly do you express your concerns?	3.53	0.86	High
How fast is your internet connection?	3.02	0.88	Medium
Regarding working remotely, how well is your connection with team members?	2.94	0.78	Medium
How is your working area?	3.00	0.88	Medium
Job Performance	3.58	0.43	High
Work Dependence	3.71	0.78	High
Supervisor's Role	3.67	0.76	High
Work Environment	3.57	0.74	High
Work-Life Balance	2.99	0.71	Medium

#### 4.4 Summary of Reliability Analysis

Reliability analysis is a statistical tool used to evaluate the reliability and consistency of a system or process. It helps in analyzing the performance of a system or process over time

to determine its level of reliability. This analysis can be used to identify potential failure points and to design systems and processes that are more reliable and efficient.

There are several methods for conducting reliability analysis, including failure mode and effects analysis (FMEA), hazard analysis and critical control points (HACCP) and reliability-centred maintenance (RCM). Each method has its strengths and weaknesses and the choice of method depends on the specific needs of the system or process being analyzed.

FMEA is a proactive approach to reliability analysis that involves identifying potential failure modes and their effects on the system or process. The analysis then focuses on identifying and controlling hazards that could affect the safety and quality of a product or process. RCM is a data-driven approach that uses historical data and predictive models to identify potential failure points and optimize maintenance schedules. Reliability analysis is an important tool for ensuring the safety, efficiency, and effectiveness of systems and processes in a wide range of industries, including manufacturing, healthcare, transportation, and energy. By identifying potential failure points and designing systems and processes that are more reliable, organizations can improve their bottom line and enhance customer satisfaction.

Reliability analysis plays a critical role in reducing the risk of system failure and downtime, which can have significant financial and operational consequences. The analysis helps organizations identify potential failure points and prioritize maintenance and repair activities to minimize the risk of system failure. This, in turn, ensures that systems and processes are functioning at optimal levels, reducing downtime and improving efficiency.

Moreover, reliability analysis has become increasingly important in the context of Industry 4.0, which is characterized by the use of advanced technologies such as the Internet of Things (IoT), artificial intelligence (AI), and machine learning (ML). These technologies enable organizations to collect vast amounts of data on system performance and use this data to optimize maintenance schedules, predict failures, and improve overall system reliability.

In conclusion, According to Sekaran et al. (2011), a score for a questionnaire less than 0.6 is considered bad, with 0.6 being Cronbach's alpha coefficient size as a general guideline

#### 4.5 Kolmogorov-Smirnov Test

The Kolmogorov–Smirnov test is a statistical test that is used to compare two datasets to determine if they are drawn from the same distribution or not. It is a nonparametric test that does not make any assumptions about the underlying distribution of the data.

The Kolmogorov–Smirnov test is widely used in various fields, including finance, engineering, and statistics, to compare two datasets when the underlying distribution of the data is not known or when the data is not normally distributed. This test is especially useful when dealing with small sample sizes, as it is less sensitive to outliers than other statistical tests.

The Kolmogorov–Smirnov test works by comparing the empirical distribution functions of the two datasets. The empirical distribution function is a step function that represents the proportion of observations in the dataset that are less than or equal to a particular value. The test computes the maximum difference between the two empirical distribution functions and compares it to the critical value of the Kolmogorov–Smirnov distribution. If the maximum difference is greater than the critical value, then the null hypothesis that the two datasets are drawn from the same distribution is rejected.

There are several variations of the Kolmogorov–Smirnov test, including one-sample, two-sample, and goodness-of-fit tests. Each variation is used to test a different hypothesis. The one-sample Kolmogorov–Smirnov test is used to test whether a sample comes from a specific distribution. The two-sample Kolmogorov–Smirnov test is used to test whether two samples come from the same distribution. The goodness-of-fit test is used to test whether a sample comes from a specific distribution, but without specifying the parameters of that distribution.

The Kolmogorov–Smirnov test is a powerful nonparametric test that is widely used to compare two datasets and determine if they are drawn from the same distribution or not. It is a valuable tool for researchers and analysts who need to compare datasets without making assumptions about their underlying distribution. With its various variations, the Kolmogorov–Smirnov test can be used to test different hypotheses and is especially useful when dealing with small sample sizes.

In conclusion, the Kolmogorov–Smirnov test is a versatile statistical tool that allows for the comparison of datasets without requiring any assumptions about the underlying distribution. It is widely used in various fields and is especially useful when dealing with small sample sizes. The different variations of the test make it possible to test different hypotheses, making it a valuable tool for researchers and analysts.

Table 7 – Kolmogorov Smirnov

Table Tests of Normality Kolmogorov-Smirnov

	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Job Performance	0.138	105	0.000
Work Dependence	0.107	105	0.005
Supervisor's Role	0.109	105	0.004
Work Environment	0.122	105	0.001
Work-Life Balance	0.174	105	0.000

Chart histogram and normality curve

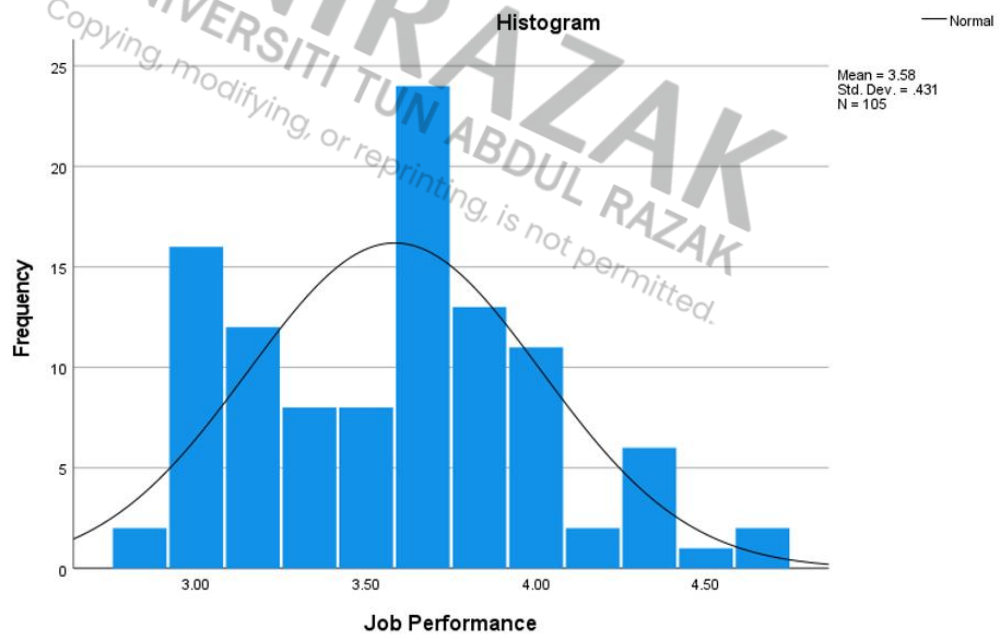


Figure 6 – Job Performance Curve

**H<sub>1</sub>: WFH is positively related to Job Performance.**

With the recent shift towards remote work due to the COVID-19 pandemic, the idea that WFH is positively related to job performance has become even more relevant. The flexibility of working from home has allowed employees to better balance their work and personal lives, leading to increased job satisfaction and motivation. In addition, the absence of a commute has allowed for more time and energy to be dedicated towards work.

Moreover, WFH has also shown to have a positive impact on mental health. A study conducted by the University of Arizona found that remote workers reported lower levels of stress and burnout compared to those working in an office. This can be attributed to the ability for remote workers to better control their work environment and take breaks when needed.

Overall, the evidence suggests that WFH can have a significant positive impact on job performance, employee retention, job satisfaction, and mental health. As more companies consider implementing remote work policies, it is important to recognize the potential benefits of WFH and explore ways to support employees in this new work environment.



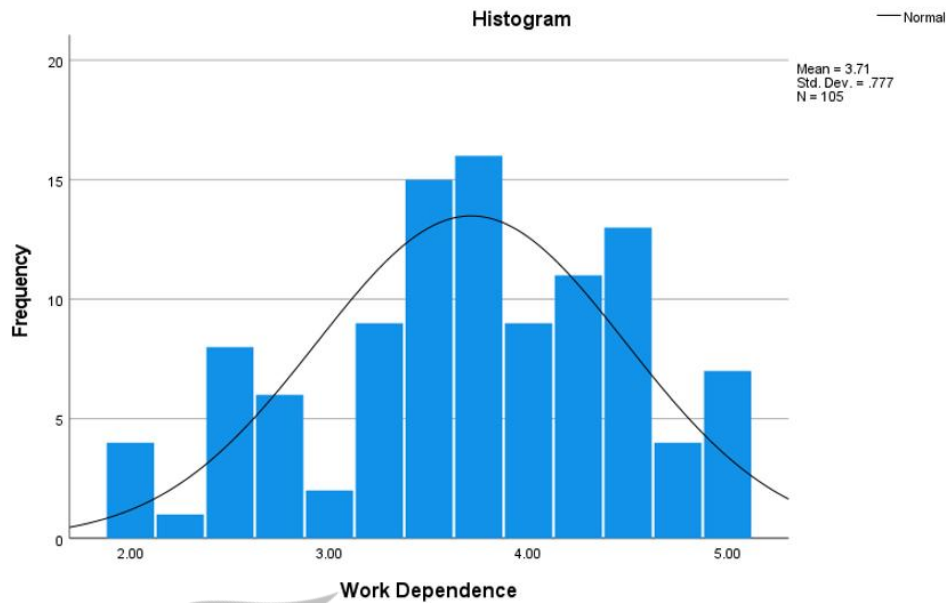


Figure 7 – Work Dependence Curve

**H<sub>2</sub>: WFH is negatively related to work dependence.**

Recent studies have shown that working from home (WFH) can have a significant impact on work dependence. When employees work from home, they may feel less dependent on their work than those who work in a traditional office environment. This can be attributed to several factors such as the lack of face-to-face interaction with colleagues and managers, the greater flexibility and autonomy that comes with working from home, and the reduced pressure to conform to office norms and expectations.

Moreover, working from home can lead to improved work-life balance, reduced stress levels, and increased productivity. Employees can save time and money on commuting, have more control over their work environment, and enjoy more time with their families. This has been found to lead to increased job satisfaction and motivation, which in turn leads to better job performance.

On the other hand, working from home can also present challenges such as difficulties in communication and collaboration with colleagues, blurred boundaries between work and personal life, and potential distractions from household responsibilities. However, with the

right tools and strategies in place, these challenges can be managed effectively, and the benefits of WFH can be maximized.

In conclusion, while WFH has been found to have a negative correlation with work dependence, it is important to weigh the benefits and drawbacks of both WFH and office work and make a decision based on individual preferences, job requirements, and organizational culture. With the right approach, WFH can be a viable and productive option for employees and organizations alike.

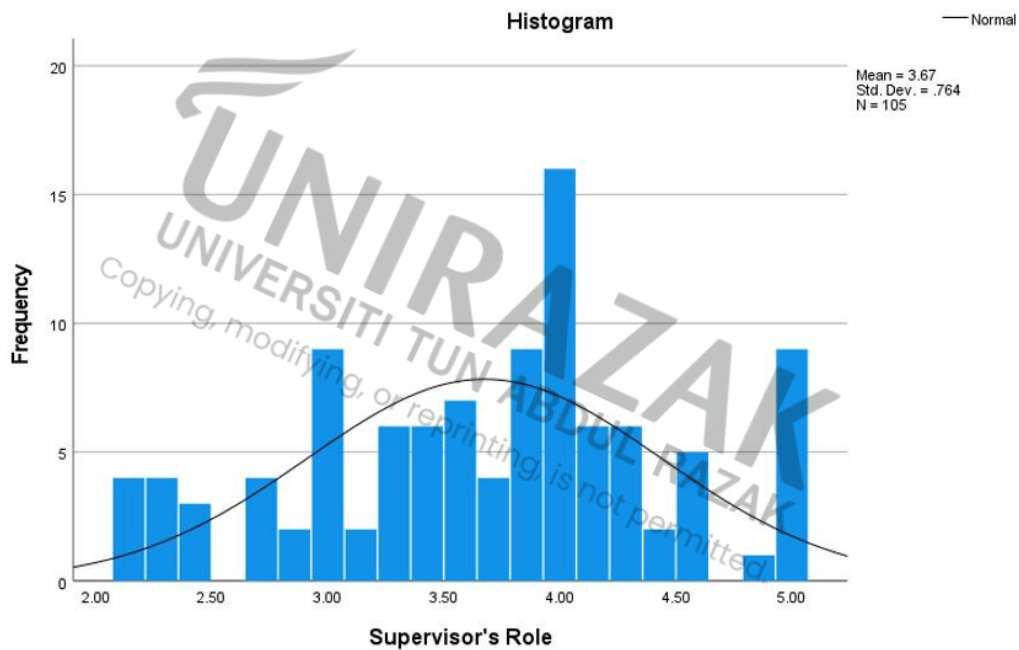


Figure 8 – Supervisor's Role Curve

### H<sub>3</sub>: WFH is positively related to Supervisor's role.

Working from home (WFH) has become increasingly popular in recent years. Many studies have found that WFH can have a positive impact on the productivity and job satisfaction of employees. One factor that can contribute to this positive impact is the role of the supervisor. When supervisors are supportive and provide clear guidance, employees working from home are more likely to feel connected to their team and motivated to meet their

goals. Additionally, supervisors who are skilled in remote management can help to overcome the challenges that can arise when working from home, such as feelings of isolation or difficulty balancing work and personal responsibilities. Therefore, it can be said that a strong and effective supervisor is an essential component of successful WFH arrangements.

Furthermore, a positive relationship between WFH and supervisor's role can lead to the development of trust and effective communication, which is crucial for remote workers. A supervisor who can communicate expectations and provide regular feedback to their team can help build a sense of accountability and trust, which ultimately leads to better performance. In addition, supervisors who are accessible to their team and can provide support when needed can help remote workers feel more connected and engaged with their work.

It's important to note that the positive relationship between WFH and supervisor's role is not just limited to remote work. The role of the supervisor is important in any work environment, but it becomes even more critical in a remote work setting. With the increase in remote work due to the pandemic, the role of the supervisor has become even more crucial to ensure that employees feel supported and are able to perform their jobs effectively.

In conclusion, the positive relationship between WFH and supervisor's role is an important factor to consider when implementing a remote work policy. Employers should prioritize the development of strong and effective supervisors who can support and manage remote workers effectively. This can lead to increased productivity, job satisfaction, and ultimately, the success of remote work arrangements.

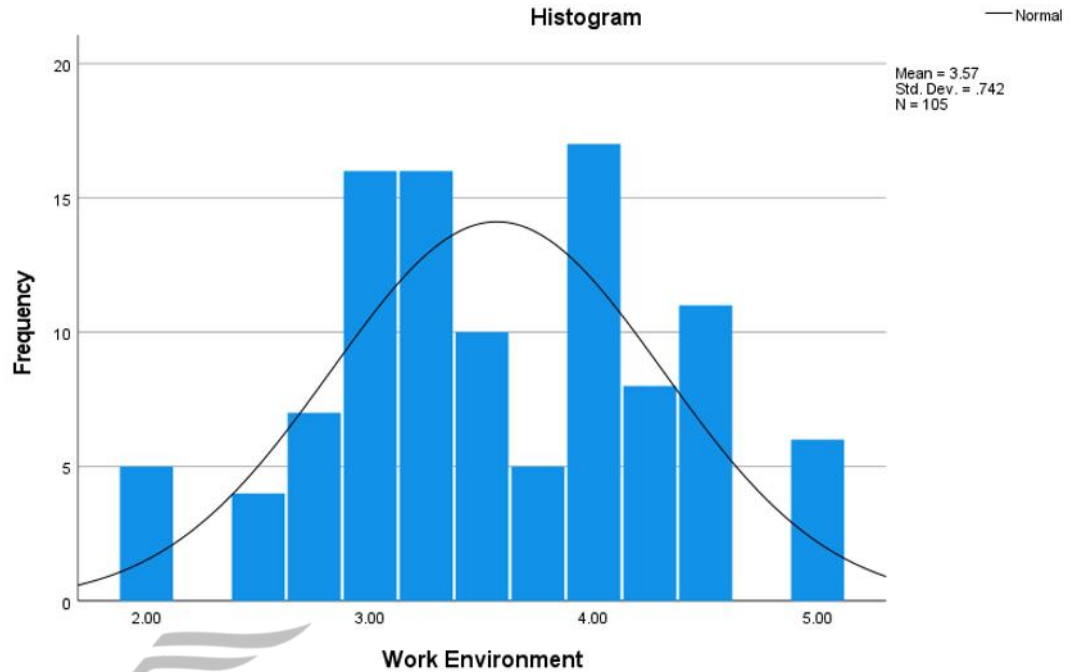


Figure 9 -Work Environment Curve

**H<sub>4</sub>: WFH is positively related to the work environment.**

In today's world, where technology has advanced, working from home (WFH) has become a feasible option for employees across many industries. The benefits of WFH are countless, one of the most significant being its positive impact on the work environment. WFH can help foster a more positive and productive work environment, and here's how.

Firstly, WFH enables employees to create a workspace that is comfortable and conducive to productivity. With the ability to customize their workspace, employees can create an environment that suits their needs, whether it be a standing desk, a comfortable chair, or a quiet room. This can lead to a more relaxed and stress-free work environment, which can ultimately result in improved job satisfaction and better overall performance.

Secondly, WFH can help to reduce distractions and interruptions that may occur in a traditional office setting, allowing employees to focus more fully on their work. With fewer colleagues stopping by to chat, fewer meetings to attend, and no commuting time, employees can concentrate more effectively on their tasks at hand. This leads to higher-quality work, increased productivity, and job satisfaction.

Moreover, the flexibility offered by WFH can lead to a better work-life balance, which can have a significant impact on an employee's overall well-being. With the ability to choose their working hours, employees can better manage their time and take care of personal responsibilities, such as childcare, without compromising their work. This results in a happier, healthier, and more productive workforce.

Lastly, WFH can help to reduce the carbon footprint of an organization. Without the need for employees to commute to work every day, there is a reduction in carbon emissions, which is an excellent benefit for the environment. This can also lead to cost savings for both the employee and the organization.

In conclusion, WFH is positively related to the work environment in many ways. It can create a more comfortable and productive workspace, reduce distractions and interruptions, provide a better work-life balance, and reduce the carbon footprint. By embracing this model, organizations can create a more positive and productive work environment for their employees.

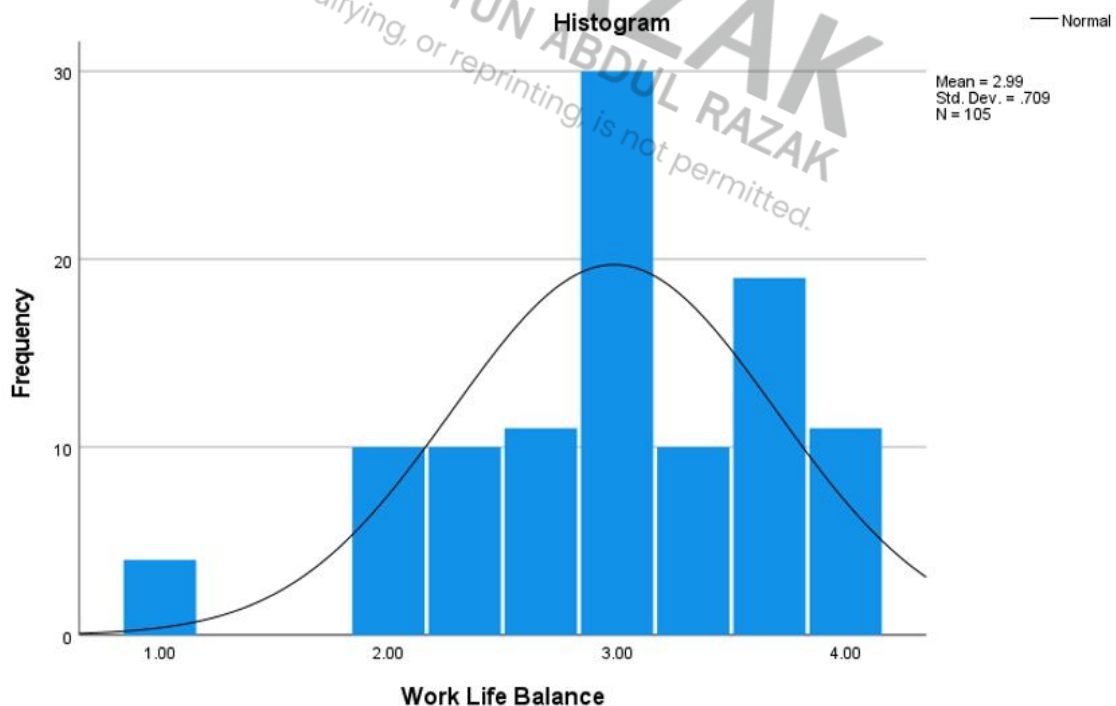


Figure 10 – Work Life Balance Curve

**H<sub>5</sub>: WFH is positively related to work-life balance.**

In addition to the benefits mentioned earlier, WFH may also result in higher productivity. When working from home, employees may experience fewer interruptions, leading to greater focus and concentration. Furthermore, the elimination of a daily commute can give employees more time to complete work tasks, leading to greater efficiency.

Another advantage of WFH is that it can lead to cost savings for both employees and employers. For employees, the cost of commuting can be significant, including expenses such as gas, tolls, and parking fees. By working from home, these costs can be significantly reduced or eliminated altogether. Employers may also enjoy cost savings by having a smaller physical workspace, as fewer employees are present in the office at any given time.

Moreover, WFH has also become increasingly popular due to the COVID-19 pandemic. With the need to practice social distancing, many companies have had to quickly adopt WFH policies to keep their employees safe. As a result, WFH has become a new normal. Despite the challenges that come with this new way of working, many employees have appreciated the flexibility and work-life balance that comes with WFH.

Overall, the benefits of WFH are numerous. From improved work-life balance to greater productivity and cost savings, it is clear that WFH is a practice that is here to stay. As more and more companies adopt WFH policies, it is important for employees to understand the benefits, as well as the challenges, that come with this new way of working.

#### 4.6 Correlation Analysis

Table 8 – Pearson Correlation

Table	Pearson Correlation	
	Job Performance / Level Satisfaction	
	r	P
Work Dependence	0.54	0.001*
Supervisor's Role	0.43	0.001*
Work Environment	0.47	0.001*
Work Life Balance	0.57	0.001*

\*Significant Correlation P<0.05

#### 4.7 Discussion of Correlation Analysis Summary

Variable	Pearson Correlation	Discussion
Work Dependence	0.541	<p>There was a high relationship between work dependence between Level of Satisfaction / Job Performance through Work from Home (WFH) in Oil and Gas Industry as <b>indicated</b> by the value of the Pearson Correlation Coefficient of 0.541.</p> <p>It shows that work dependence are one of the most influential factors in working from home in Malaysia by the Oil and Gas Industry. Work dependence is more on the type of work/task delegated daily or weekly. Type of work dependence is more whether the task assigns onshore/offshore work period/task.</p> <p>Therefore, Hypothesis 2 (H2) was not acceptable.</p> <p>It has contributed positively if job tasks delegate with the correct work target.</p>

Variable	Pearson Correlation	Discussion
Supervisor's Role	0.434	<p>There was a moderate relationship between the Supervisor's Role between Level of Satisfaction / Job Performance through Work from Home (WFH) in Oil and Gas Industry since it indicates by the value of the Pearson Correlation Coefficient of 0.434.</p> <p>It shows that Supervisor's role can be the least influential factor in working from home in Malaysia by Oil and Gas Industry.</p> <p>Therefore, Hypothesis 3 (H3) was acceptable.</p> <p>It has contributed positively depending on the supervisor's task delegation.</p>
Work Environment	0.467	<p>There was a moderate relationship between Work Environment between Level of Satisfaction / Job Performance through Work from Home (WFH) in Oil and Gas Industry as indicated by the value of the Pearson Correlation Coefficient of 0.467.</p> <p>It shows that Work Environment can be a less influential factor in working from home in Malaysia by Oil and Gas Industry compared to Supervisor's Role.</p> <p>Therefore, Hypothesis 4 (H4) was not acceptable.</p> <p>It has contributed positively depending on the work environment - most employers will arrange a good work environment to help better and give a positive impact on employees.</p>
Work-Life Balance	0.574	<p>There was a high relationship between Work-Life balance between Level Satisfaction / Job Performance through Work from Home (WFH) in Oil and Gas Industry as indicated by the value of the Pearson Correlation Coefficient of 0.574.</p> <p>It shows that Work-Life Balance can be the most influential factor in working from home in Malaysia by Oil and Gas Industry compared to Work Dependence.</p> <p>Therefore, Hypothesis 5 (H5) was acceptable.</p>



Variable	Pearson Correlation	Discussion
		It has contributed positively to employees who can have a work-life balance in managing personal issues and professional life.

Table 9 – Correlations Table

		Correlations				
		Job Performance	Work Dependence	Supervisor's Role	Work Environment	Work Life Balance
Job Performance	Pearson Correlation	1	.541**	.434**	.467**	.574**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001
	N	105	105	105	105	105
Work Dependence	Pearson Correlation	.541**	1	.441**	.452**	.579**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001
	N	105	105	105	105	105
Supervisor's Role	Pearson Correlation	.434**	.441**	1	.343**	.619**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001
	N	105	105	105	105	105
Work Environment	Pearson Correlation	.467**	.452**	.343**	1	.541**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001
	N	105	105	105	105	105
Work Life Balance	Pearson Correlation	.574**	.579**	.619**	.541**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	
	N	105	105	105	105	105

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### 4.8 Multiple Regression Analysis

Multiple regression analysis is a statistical method that allows you to analyze the relationship between a dependent variable and two or more independent variables. It is one of the most commonly used techniques in statistical analysis.

In multiple regression analysis, the dependent variable is predicted by a linear combination of the independent variables. The goal is to identify which independent variables have a significant impact on the dependent variable and to estimate the strength and direction of that impact.

Multiple regression analysis can be used in a wide range of applications, including marketing research, finance, economics, and social sciences. It is a valuable tool for understanding complex relationships between variables and making predictions about future outcomes.

To perform multiple regression analysis, you need to collect data on the dependent variable and the independent variables. You can then use statistical software to run the analysis and generate a regression equation. The equation will show you how changes in the independent variables impact the dependent variable.

Multiple regression analysis can be performed using various techniques such as ordinary least squares (OLS), stepwise regression, and hierarchical regression. OLS is the most commonly used technique because it is easy to interpret and provides unbiased estimates of the regression coefficients.

It is important to note that multiple regression analysis assumes a linear relationship between the dependent variable and the independent variables. If the relationship is non-linear, other statistical methods may be more appropriate, such as logistic regression or polynomial regression.

Moreover, before performing multiple regression analysis, it is important to check for multicollinearity, which occurs when the independent variables are highly correlated with each other. Multicollinearity can lead to unstable and unreliable estimates of the regression coefficients.

In conclusion, multiple regression analysis is a powerful tool for analyzing complex relationships between variables. By understanding the impact of different independent variables on the dependent variable, you can make more informed decisions and predictions about future outcomes. It is a valuable tool for data analysts, researchers, and decision-makers who want to gain insights into complex data and make informed decisions.

Table 10 - Model Summary of Multiple Regression

<b>Model Summary</b>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.647 <sup>a</sup>	.418	.395	.33542

a. Predictors: (Constant), Work Life Balance, Work Environment, Work Dependence, Supervisor's Role

Table 11 – Multiple Linear Regression Method Enter

Table Multiple Linear Regression Method Enter									
	B	Beta	P	95.0% Confidence Interval for B		Collinearity Statistics		R Square	Adjusted R Square
				Lower Bound	Upper Bound	Tolerance	VIF		
(Constant)	2.00		0.001*	1.59	2.41			0.42	0.39
Work Dependence	0.15	0.27	0.006*	0.04	0.25	0.63	1.59		
Supervisor's Role	0.05	0.09	0.360	-0.06	0.16	0.61	1.65		
Work Environment	0.10	0.17	0.073	-0.01	0.20	0.68	1.47		
Work Life Balance	0.17	0.27	0.020*	0.03	0.30	0.44	2.27		

Dependent Variable: Job Performance / Level Satisfaction

The Model Summary provides a comprehensive multiple regression model that takes into account the influence of all four independent variables, namely Work Dependence, Supervisor's Role, Work Environment, and Work-Life Balance on the level of satisfaction and job performance when working from home in the Oil and Gas Industry in Malaysia.

It is important to note that these four independent variables are inter-correlated. This means that they are not entirely independent, but rather they are related to each other in some way. The summary table shows that the correlation coefficient (R) between these four independent variables and the dependent variable was 0.647. This value indicates a positive and strong correlation between the independent variables and the dependent variable.

The R Square value provides insight into how much of the variability in the dependent variable is accounted for by the independent variables. This measure is particularly important in understanding the extent to which the independent variables contribute to the level of satisfaction and job performance when working from home in the Oil and Gas Industry in Malaysia.

By analyzing the Model Summary, one can gain a more comprehensive understanding of the factors that influence the level of satisfaction and job performance when working from home in the Oil and Gas Industry in Malaysia. The strong correlation between the independent variables and the dependent variable suggests that these factors are significant in determining the level of satisfaction and job performance in this industry.

Furthermore, the Model Summary serves as a useful tool for industry professionals and researchers to identify areas of improvement to enhance employee satisfaction and job performance while working from home. By examining the correlation coefficients of the independent variables, it is possible to pinpoint which factors have the greatest impact on job satisfaction and performance.

For example, if Work-Life Balance has a higher correlation coefficient than the other independent variables, it suggests that prioritizing work-life balance initiatives may lead to higher levels of satisfaction and job performance for employees working from home in the Oil and Gas Industry in Malaysia. Similarly, if Supervisor's Role has a higher correlation coefficient, it may indicate that enhancing the role of supervisors in managing remote teams can help improve job satisfaction and performance.

Overall, the Model Summary provides valuable insight into the factors that influence job satisfaction and performance in the Oil and Gas Industry in Malaysia. By understanding

these factors, industry professionals and researchers can develop effective strategies to improve employee satisfaction and job performance while working from home.

The R-value square of 0.418 obtained from the analysis of data collected from the Oil and Gas Industry in Malaysia offers valuable insights into the factors that contribute to job performance and level of satisfaction when working from home. This finding indicates that 41.8% of the variation in job performance and satisfaction levels can be attributed to the factor under investigation.

Understanding the factors that contribute the most to job performance and satisfaction levels when working from home is crucial for organizations that have had to shift to remote work due to the pandemic. By identifying these factors, companies can develop targeted strategies to improve the work environment and enhance employee performance and satisfaction.

It is worth noting that while the R-value square is a useful statistical tool to determine the relationship between variables, it is not the only factor to consider. Other factors such as work-life balance, access to resources, and quality of communication also play a significant role in determining job performance and satisfaction levels when working from home.

Overall, the R-value square of 0.418 serves as a starting point for organizations to evaluate the impact of specific factors on job performance and satisfaction levels when working from home. With this information, companies can develop effective strategies to enhance the work-from-home experience and improve employee performance and satisfaction.

## CHAPTER 5 CONCLUSION

### 5.1 Conclusion and Recommendation

In conclusion, from the result of this survey study, it can be concluded that the level of satisfaction and job performance is the most influential factor in working from home in Oil and Gas Industry in Malaysia. It can be proven by looking at the correlation analysis by SPSS v27 whereby the work-life balance stated 0.574. Work-Life Balance is the main and significant factor why people prefer to work from home. The second main factor is work dependence – depending on job task, work scope. Work Dependences are more likely which department you are assigned to. Some are service support which 90% is working from office and 10% from offshore platform. Therefore, they have no choice to work either from home or offshore platform (office). The Work Environment has become the third most influential factor to work from home in Oil and Gas Industry. Meanwhile, the least factor that contributed to influencing working from home is Supervisor's Role, because it needs to have good leadership to lead the employees with the correct work target/force.

As the world has become more connected and digitized, the concept of remote work has gained popularity across various industries, including the oil and gas sector in Malaysia. While traditional work arrangements have been the norm for this industry, the COVID-19 pandemic has forced companies to reconsider their approach to work and embrace remote work as a viable option.

One of the key advantages of remote work in the oil and gas industry in Malaysia is increased productivity. Employees can avoid long commutes and work in a more comfortable environment, leading to better focus and efficiency. Additionally, remote work offers greater flexibility, allowing employees to manage their time more effectively and achieve a better work-life balance. This can lead to higher employee satisfaction and retention rates.

Another benefit of remote work is cost savings, both for employees and the company. Without the need for office space and transportation, remote work can significantly reduce expenses. This can be particularly beneficial for companies operating in the oil and gas industry, where expenses related to equipment, maintenance, and transportation can be significant.

However, there are also challenges associated with remote work in this industry. Not all job roles can be done remotely, and there may be concerns related to communication, collaboration, and data security when working from home. These challenges can be addressed through proper communication protocols, regular check-ins, and the use of secure technology infrastructure.

In conclusion, remote work can offer significant benefits to the oil and gas industry in Malaysia, but it is not a one-size-fits-all solution. Companies must carefully evaluate the needs of their employees and the nature of their work to determine whether remote work is a viable option. With the right policies, resources, and support, remote work can improve productivity, reduce costs, and provide flexibility while maintaining the quality of work and the safety of employees.

Furthermore, remote work can also have a positive impact on the environment. By reducing the need for transportation, remote work can help to lower carbon emissions and reduce the carbon footprint of the oil and gas industry in Malaysia. This is particularly important in today's climate-conscious world, where companies are under increasing pressure to adopt sustainable practices.

Moreover, remote work can also help to attract and retain talent. With younger generations increasingly prioritizing work-life balance and flexible work arrangements, companies that offer remote work options may have an advantage in recruiting and retaining top talent. This

can be particularly important in the oil and gas industry, which faces a shortage of skilled workers and an ageing workforce.

However, it is important to note that remote work is not without its challenges. One of the main concerns is the potential for isolation and lack of social interaction, which can lead to decreased morale and mental health issues. Additionally, there may be concerns related to work-life balance, as some employees may find it difficult to disconnect from work when they are working from home.

In conclusion, while remote work can offer significant benefits to the oil and gas industry in Malaysia, it is important for companies to carefully evaluate whether it is a viable option for their organization. By addressing the potential challenges and implementing the appropriate policies and support, companies can successfully implement remote work and reap its benefits while maintaining the quality of work and the well-being of their employees.

As remote work becomes more prevalent in the oil and gas industry in Malaysia, companies need to stay up-to-date with the latest trends and strategies. One way to do this is by leveraging technology and digital tools to enhance communication and collaboration. For example, video conferencing platforms can help employees connect and stay engaged, while project management software can help teams stay organized and track progress.

Another important consideration is cybersecurity. With remote work comes an increased risk of cyber threats, such as phishing attacks and data breaches. Companies must ensure that their employees are trained on proper cybersecurity protocols and that they have the necessary infrastructure in place to protect sensitive information.

Finally, companies need to create a culture of trust and accountability when it comes to remote work. This means setting clear expectations for employees, providing regular feedback, and establishing metrics to measure success. By creating a culture of transparency and



accountability, companies can ensure that remote work is successful and that employees feel supported and valued.

In conclusion, remote work can be a viable option for the oil and gas industry in Malaysia, but it requires careful planning and execution. By considering the benefits and challenges of remote work, leveraging the latest technology and digital tools, and creating a culture of trust and accountability, companies can successfully implement remote work and reap its benefits while maintaining the quality of work and the safety of employees.



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**APPENDICES**



**APPROVAL PAGE**

**TITLE OF PROJECT PAPER: THE EFFECTIVENESS OF WORKING FROM  
HOME FOR THE OIL AND GAS INDUSTRY  
DURING COVID 19 PANDEMIC**

**NAME OF AUTHOR: SHALEIDA OTHMAN**

The undersigned certify that the above candidate has fulfilled the condition of the project paper prepared in partial fulfillment for the degree of Master of Business Administration.

**SUPERVISOR**

Signature :

Name :

Date :

**ENDORSED BY:**

Dean

Graduate School of Business

Date :

