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Work from home and employee's productivity:

An empirical study of employees in the telecommunication sector in Colombo district

(During the corvid-19 pandemic)

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WORK FROM HOME AND EMPLOYEE'S PRODUCTIVITY:

AN EMPERICAL STUDY OF EMPLOYEES

IN THE TELECOMMUNICATION SECTOR IN COLOMBO DISTRICT

(DURING THE CORVID-19 PANDEMIC)

Research Project

By

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Management Research Project

An Independent Research Report
Submitted to the University College of Dublin
In partial fulfillment of the requirements for the degree of
B.Sc. in Management

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Dublin

Declaration

I declare that all materials and information's are included in this report is the result of my own work and that due acknowledgement have been given in the bibliography and references to all sources be they printed and personal.

Signed:

Prabodhi Kanchana Goonathilake   Date: 10th July 2021

Certification

This is to certify that the research report submitted by P. K Goonathilake a student of BSc in Business Management of Sri Lanka Batch 23 on "An Empirical Study on The Effectiveness Of Employee's Productivity Due to Working from Home in The Telecommunication Sector in Colombo District (During The Corvid-19 Pandemic)"

I hereby recommend that the research project was prepared under my supervision by Mr. Sanath Wickramasinghe.

Is accepted as a partial fulfillment as per the requirement of the Bachelor of Science in Management.

Signed: …………………………….   Date……….

Research Supervisor.

Mr. Sanath Wickramasinghe

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CHAPTER 1 - INTRODUCTION

1.1 Background of the study

The main purpose of doing this research was to study the effectiveness of employee's productivity due to working from home in the Telecommunication Sector in Colombo District (During the Corvid-19 Pandemic)"

Michie and Sheehan (2005) defines that Strategic Human Resource Management (SHRM) is the pattern of scheduled HR tasks and deployments intended to enhance an organization to gain its aims. Some also argues as per Dessler(2011) that "Strategic HRM means creation and implementing of practices and policies of Human Resource which generates the behaviors and capabilities of employees that an organization requires to achieve its strategic goals". Employee's productivity is an important human resource function, as every other aspects of the company depends on it, if employees are not working effectively and efficiently then it is a disadvantage for the company. With the Covid 19 pandemic, everyone had to switch to working from home concept, with that employee's productivity has decreased as per some researchers and also the productivity has increased according to some evidence found.

With the COVID-19 pandemic overtaking the world, countries all around the world have imposed different degrees and amounts of lockdowns. Approximately one-third of the world's population was under some form of lockdown (Kaplan et al., 2020).
In any firm, employee productivity is a critical measure. It is determined using a ratio that compares the amount and quality of goods and services provided to consumers to the quantity and quality of labor expended (Avelini Holjevac & Vrtodusic Hrgovic, 2012, p. 41). Work from home, also acknowledged as teleworking or telecommuting (referred to as WFH), is when employees working from his or her house rather than an office.

1.2 Problem Statement

Telecommunication sector is one of the largest industries that generate big amounts of incomes and one of the most profitable sectors in Sri Lanka, with that the companies the researcher has chosen of Dialog Axiata is the Sri Lanka's top ranked number one telecommunication partner ,with that Airtel too has enhanced their business than previously with the introduction of new technological improvements .

With the Covid 19 situation, Sri Lanka was lockdown in last year March , with that the most effected sector was the telecommunication sector ,as all the workers had to start working from home ,only having with their laptop in front of them , with that employee's productivity has affected both in positive and negative ways . As a former intern at Dialog Axiata, the researcher too had to work from home, and therefore, had to undergo work from home experience . So, as a result, the researcher was not productive when working from home, because, as a beginner in the career life the researcher was not able to get the expected experience in working with other employees . In addition, the researcher was not able to socialize with other staff members and learn new things while gaining, immediate advice on the way of work has been done.

Further, when considering the **research gap**, there are less availability of research currently for this area, specially in Sri Lanka, there is no research that has been done considering the employees productivity in this pandemic situation when they are working from home. Therefore, with the experiences the researcher gained and since there less availability of research articles, this research was decided to be done by the researcher.

Therefore, with this experience, the researcher wanted to investigate further how working from home effects the employees' productivity, aiming employees in Dialog and Airtel companies in Colombo District in Sri Lanka.

1.3 Research Objectives

This aim of this study is to find out the relationship between of high-performance work systems and the organizations performance.

- To analyze the effect of working from home and employee's productivity during the Covid-19 pandemic period.
- To identify the positive effects of WFH and productivity during the Covid-19 pandemic period.
- To determine the negative effects of WFH and productivity during the Covid-19 pandemic period.
- Recommendations to improve the productivity of employees in this Covid-19 pandemic situation.

1.4 Limitations of the study

The study aimed at the common problem that most of the organizations with the current covid situation, but the current study was conducted only taking two companies of Dialog Axiata and Airtel in Telecommunication sectors, and also, aiming only the Colombo District employees who does their jobs with the concept of WFH(Work from Home). Therefore, it is difficult to conduct this research on the entire Telecommunication sector .

Further, only the Colombo district employees are targeted here, so most of the rural area employees who work in the Telecommunication sector and work from home are not considered at all, as they are the most affected party here with the lack of facilities .

The study was conducted based on the white-collar workers or the executive level employees only . Therefore, the common source can be there and also, the responses may be varying form situation to situation. The perception will not be the truth in this scenario.

Working From Home concept may has an impact on employee's productivity, but it is not only one factor that affected on the productivity.

1.5 Chapter Summary

Chapter 1 will be providing the introduction to the study, this will include a brief description about the problem and the current situation, objectives of the research, why this study is important and the limitation of the research .

CHAPTER 2 – LITERATURE REVIEW

2.1 Introduction

This section is an overview of prior studies on employee productivity and work from home. It also illustrates how the two variables could be linked together.

With the start of the COVID-19 pandemic, one important shift in how people work has been the compelled adoption of WFH on a larger scale. Organizations from all across the world. Employees all around the world have been compelled to take the option, and they have been put into a new situation. Working from home offices is commonplace (Davis et al., 2020). Many business executives believe that after the epidemic, a large number of employment will become WFH positions permanently (Davis et al., 2020; Kovar, 2020). In the context of a future when WFH adoption is expected to rise, it is critical to understand the organizational and home elements that influence an employee's work performance. Organizations may innovate and reduce the impact of the forces by understanding the numerous factors that an employee must confront during WFH.

As a result, evaluating employee productivity seeks to improve organizational efficiency by maximizing revenue for businesses with a finite number of employees (Cho & Erdem, 2006).

This chapter covers a wide range of social assistance companies and literature on work from home with related to employee's productivity.

2.2 Work from Home

Working from home (WFH) has become the new method of working for lots of employees and throughout the world as a result of the COVID-19 widespread. As a consequence of the epidemic, various workers and companies were forced to transition to isolated work for the first time, with little or no preparedness. According to early estimates from Eurofound1, about 50% of Europeans worked from home (at least partly) as a result of the pandemic, compared to just 12% previous to the catastrophe. These figures are now similar, with many employees and companies likely to choose WFH even after the epidemic.

Before this pandemic situation, distant working or working from home has not been a common practice (Kossek & Lautsch, 2018). Although the number of employees working from home at least half rose from 1.8 million in 2005 to 3.9 million in 2017, the US Community survey found that remote work accounted for just 2.9% of the overall US employment at that time (2017). Around 2% of Europe's workers were mostly televised from home in 2015. (Eurofound, 2017).

In fact, remote work is a 'comparably rich luxury' (Desilver, 2020), for example, higher-income employees (almost 75% of workers from home make more than $65,000 annually) and white-collar workers (e.g., over 40 percent of teleworkers are executives, managers, or professionals).

As a result, generally workers had minimal isolated working practice prior to COVID-19, and neither they nor their employers were prepared to support this practice. Now, the extraordinary COVID-19 epidemic in 2020 boasts forced millions of individuals throughout the world to work remotely, accidentally resulting in a de facto worldwide remote working experiment (Kniffin et al., 2020). Almost overnight, working from home has turn out to be the "new usual."

As condemned in Bailey and Kurland (2002). "The occasional, uncommon way in which WFH is done, presumably has made silent many alleged that individual-level consequences for the mass of the teleworking populace," (p. 396). To put it another way, there might be significant variations in individual consequences between individuals who perform work from home regularly and individuals who do it not often, which could have an impact on the practice's outcomes.

2.3 Employees Productivity

Employee productivity is an essential management subject that has gotten a lot of attention from academics and is seen to be a key factor in achieving organizational success. To ensure long-term performance, it is critical to understand the major elements that affect productivity. Increasing staff productivity has always been one of the most essential goals for many businesses. This is because higher levels of employee productivity give a variety of benefits to both the company and its employees. Higher productivity, for example, contributes to favorable economic growth, high profitability, and improved social advancement (Sharma & Sharma, 2014). Furthermore, increased productivity tends to optimize organizational

competitive advantage by lowering costs and improving output quality (Baily et al., 2005; Hill et al., 2014; Wright, 2004).

Employee productivity is a topic that has only lately arisen in the literature and is quite important. Previous study on the subject of employee productivity in service environments, for example, has been largely ignored (Brown et al., 2009; Filitrault et al., 1996). As a result, defining and measuring staff productivity has proven difficult. For example, despite existing implications that it might vary on the kind of company, the standard definition of productivity has mostly focused on the ratio between input costs and output value. Hence, this study to investigate more on the impact of employee's productivity while employees are working at home instead of their workplace or the usual offices in the telecommunication sector targeting employees in Colombo District in Sri Lanka.

The desire to increase staff productivity is one of the most pressing challenges confronting most businesses today. Employee productivity is a measurement of a worker's or a group of workers' efficiency. In reality, productivity is a factor that has a direct impact on a company's profitability. (Sels et al., 2006; Gummeson, 1998)

Measuring employee's productivity

The term "productivity" refers to a performance indicator that is used to determine how efficient a company's manufacturing process is over a specific time period. It may be used to assess the effectiveness of human or machine capital.

Productivity may be stated as output generated divided by input given, which is a relatively simple calculation. It is expressed mathematically as,

$$\text{Employee's Productivity} = \frac{\text{Output}}{\text{Input}}$$

Because it is used in so many various types of operations to measure production efficiency, the idea of productivity is both significant and fascinating. Each productivity ratio might have an unusual input that is different from the others. As a result, despite the fact that the fundamental formula is the same, the productivity ratio for different types of output seems to be different.

Typically, a worker's productivity is measured in comparison to a national average of employees doing similar work. It may also be measured in terms of how many units of a product or service an employee handles in a certain period of time (Piana, 2001). Many studies have concentrated on one or two methods of measuring productivity, and because there are so many diverse methodologies, comparing the results may be difficult (Nollman, 2013). Overall, there is a lack of a standardized and effective approach to measure production.

2.4 Impact of Working from Home on Employee's Productivity

During a pandemic, each country's capacity to WFH differs. Around 40 percent of occupations may possibly be completed from home in the United States (Dingel and Neiman, 2020) and European nations (Barrot et al., 2020), but only about 29.6–31.2 percent in underdeveloped countries. Approximately 16.67 percent of all jobs may be performed remotely on a global scale (ILO, 2020). Regardless of its capacity meant for broad use, its efficiency benefits during the COVID-19 disaster were mixed.

 Another study has found lower worker productivity (Morikawa, 2020), whereas a further analysis in the United States suggested a modest reduction in productivity (Afshar, 2020). According to several qualitative surveys conducted among Indonesians, "WFH during the pandemic was more stressful than expected, resulting in lower productivity" (Mustajab et al., 2020; Putro and Riyanto, 2020). Other studies, on the other hand, have found that Indonesian employees have higher job satisfaction and motivation, which improves telework performance (Putra and Riyanto, 2020; Susilo, 2020). In other countries, Danish workers said they completed more work than those who worked on-site (Ipsen et al., 2020); a poll of US recruiting managers found a similar effect (Ozimek, 2020).

WFH has become a common trend among existing workers. The benefits of WFH include a flexible schedule, transportation expense savings, and a improved work-life balance, but there are also drawbacks such as poor motivation and productivity, potential information safety issues, and so on (Purwanto et al .,2020). For example, for WFH, resulted in 56 percent of 1014 respondents reporting lower productivity and weight.

2.5 Positive impacts of WFH on employee's productivity

 Working from home has by tradition been supposed to be a keyway to improve a person's work-life balance since it allows them to care for family members (Ammons and Markham, 2004; Johnson et al., 2007). WFH is seen as an important advantage for those employees, women and men, who desire to stop and spend longer time with their families (Madsen, 2003).

It stresses the importance of employment replacement by online communication and technological devices that once relied on printed materials as well as in-person conversations. Working from home increases the load on the monitor and the use of electronic devices while the effort to read and write activities based on paper and documents reduces, which eventually enhances productivity as prints are no longer needed.

As a result, WFH encourages individuals to utilize more technology to aid their job, such as electronic gadgets and online communication tools, increasing the importance of human-computer contact. Work from home employees can connect with one other online with to advanced technologies. As a result, when working from home, activities dependent on electronic devices have become a frequent and more productive approach to accomplish work.

Another research suggests that the workload of industry employees is decreased, despite the fact that their daily job is done at the office. "Less projects, fewer workers, less payables and receivables," according to the responses, and "some documentation must be completed when we are allowed to return to the office."

- **Time Management abilities**

Timelines and autonomy were highlighted as important advantages of telework, especially for families of small children (Gurstein, 2001; Morgan, 2004). (Ammons and Markham, 2004). Increased independence enhances job satisfaction leading to greater productivity for employees (Harpaz, 2002). (Morgan, 2004; Pratt, 1999). 1999. On the other hand, teleworkers work hours longer than non-teleworkers (Hill et al., 2003). The success of telecoms operators relies on operating during high efficiency hours is seen in Baruch, 2000; Martin and MacDonnell, 2012).As a result, strong time-planning abilities are regarded a key resource for increasing efficiency when working from home (Harpaz, 2002).

Teleworkers have reduced commute time to and from work, which has resulted in lower travel costs (Tremblay and Genin, 2007). This ability to save money on travel expenditures may also contribute to teleworkers' happiness with their jobs. However, completing WFH has undoubtedly saved more time; most employees are aware of this situation, in which going to and returning home from work takes around three hours. WFH allows them to split or designate three hours for office work or family duties for married female employees, allowing them to spend more time at home.

- **Can take care of family members.**

Television work from home allows people to combine work with the ability to address family issues (Ammons and Markham, 2004; Johnson et al., 2007) and to balance work and time for families. We think that the capability to care for children and other family members (such as parents with disabilities) is an essential resource for telecommunications workers and leads to positive results such as perceived telework advantages and pleasure at telework.

- **In case of illness ,working from home is efficient.**

Teleworkers have the capability to WFH in the event of illness as a benefit (Johnson et al., 2007). Working from home in the event of illness is a viable substitute to office presenteeism, which is described as "attending work when ill" (Johns, 2010, p. 521). Individuals who must meet their job commitments under any circumstances are likely to be less stressed as a result of the telework option. As a result, we view this aspect as a valuable resource for boosting teleworker happiness.

- **Flexibility for working at home.**

Telework reduces this element because a working place usually represents an employee's standing in a company. There is a substantial link between the workplace and employee productivity and health (De Croon et al., 2005), An inefficient work environment has a detrimental impact on employee productivity (Bailey and Kurland, 2002), whereas a well-organized work environment may be regarded a valuable productivity resource. Work ergonomics and work circumstances, such as noise, temperature, and others, impact employee job satisfaction, according to Morgeson and Humphrey (2006). Consider the appropriateness of a home office as a valuable resource for increasing telework productivity and happiness.

- **Work life balance**

Gender problems in teleworking have been a source of consternation. Ladies benefit telework compared to males (Belanger, 1999; Mokhtarian et al., 1998) because it allows them to care for their home and children. Women perceive teleworking as having more benefits than males (Mokhtarian et al., 1998), and beyond encouraged by suppleness and enhanced self-sufficiency when working from home (Chapman et al., 1995) since it allows them to schedule their work and family time (Lim and Teo, 2000). Moreover, all employees agree that they have a lot of high-quality family time when they are part of WFH, especially as they can spend more time with their families without leaving work, even if they sometimes have to split their attention between interacting with their families and completing the job they do.

2. 6 Negative impacts of WFH on Employee's Productivity

Many employees, particularly new home-based workers, reported a change in workload at home and a loss in productivity Lindley, D. (2020).. The loss of productivity will result in not only a reduction in employee wages (Pandemic programming,2020), but also a financial loss for firms, as well as the whole industry and national economy. Many studies have been conducted to investigate the many elements that impact WFH production. For starters, interruptions from family members are a major source of productivity loss for parents, particularly women (Gorlick. A, 2020). In addition, the absence of in-person cooperation caused by home-based employment may reduce creativity and innovation (Gorlick. A, 2020).

Frequent disruptions ,doing work for than the required hours , on the other hand, have a negative influence on a person's work-life balance (Bailey and Kurland, 2002; Johnson et al., 2007). As a result, one of the most significant problems for teleworkers is balancing work and family commitments. Employees' happiness with telework and overall productivity may suffer as a result of this. Although earlier research has found that teleworkers had better job satisfaction (Pratt, 1999), the experiences of pleasure are unclear as well as understudied.

Meanwhile, it has been suggested that WFH may contribute to an increase in mental health problems as a result of workplace transmission and work relationship limitations (Gottlieb et al., 2020),(Lam et al., 2020), which drain productivity. Furthermore, many businesses lack adequate strategies plus reserves toward enable back home-centred job (Ralph et al, 2020), which is a key cause of employee productivity loss.
WFH promotes people to use more technology for their work, such electronic devices and internet tools, which raise the importance of interactions between human and computer.
Due to the extreme technical problems mentioned by the respondent, including such 'slower home-technology, wi-fi difficulties, only one monitor,' 'less efficient due to available technology,' 'WIFI troubles have been working from home that I'm not working, 'WIFI problems working from home that I do not know at work,' etc. In consequence, future research should focus on how to overcome these problems and enhance interactions between the human computer to increase WFH productivity.

Distractions from family, particularly childcare and housekeeping, are also a major cause of lost productivity. "More interruptions at home," "As the schools and daycare are closed, I need to do parenting, teaching, and spend much more time having to clean and sterilizing," "Household demands, childcare, childhood education," "Involvement with personal life (household, family matters, etc.")," and "I'd rather work at the office," were some of the responses. So, balancing the employees work life with the family life has been a critical issue, which caused to lower employees' productivity, when they are working from home.

- **Less support from supervisors**

Teleworkers have less visibility and are less supported by their bosses (Cooper and Kurland, 2002). Therefore, more telecommuters work from home, less likely employees are to receive support from the others, especially their executives (Lapierre et al., 2015).

- **Less communication with co-workers**

The major cause for the decline in productivity is a technological issue. For starters, distant communication's poorer productivity leads to decreased production. Because of the limitations of face-to-face meetings, the results reveal that in-individual meetings had the maximum productivity throughout routine work out and the lowest possible efficiency during this pandemic situation. Shifting to virtual discussions, the employee's productivity drops compared to having meetings face to face in office hours physically, indicating the productivity is not the same as meeting physically. Teleworkers' organizational identification is harmed by an absence of familiar relationship with coworkers and community engagement, which limits affiliation with goals and objectives of the companies (Ammons, Markham, 2004) .Work from home employees might experience feelings of separation from their coworkers (Bailey and Kurland, 2002). Lowered interaction with coworkers might also remain viewed the same as a work requirement, resulting in poorer job satisfaction and perceived development prospects.

- **Demotivated employees**

WFH staff express less work performance, this reflects problems with attitudes towards "the image of the residence as a place to stay." Nevertheless, whenever working at home, sometimes people lack concentration about whether to work, unwind, as well as enjoy the benefits of the periods of isolation and social stratification needed to prevent COVID-19 spreading.

- **Multitasking can be a challenge.**

 Some female informants, particularly those who are married and have children, say they have difficulty dividing household tasks with their husbands, such as childcare, cooking, and other chores, because their husbands are unable to perform these tasks and household assistants, who normally perform these tasks, are forced to temporarily leave during the COVID19. Furthermore, this dual function and duty does not apply to couples who are able to split responsibilities with their respective spouses, which actually makes the atmosphere at home more amicable and team-like.

- **Additional Costs**

To this issue, all respondents indicate noted, whenever they do WFH, a great several of the bills they spend, such as the increases in electric, internet and digital fees, is vary and those in their profession at a workplace where almost all funding is undoubtedly supported by the employers.

2. 7 Recommendations to improve Employee's Productivity when Working from Home

As discussed previously, the researcher has identified both the positive and negative impacts of WFH on Employee's Productivity . Below are some recommendations to improve Employee's Productivity in this Covid Pandemic situation .

- **Setting a clear communication strategy**

A major element here is a lack of appropriate and timely crisis communication, which has an impact on how your employees view your company's crisis preparation. When a crisis occurs, companies prefer to concentrate their resources on external rather than internal communication. Even while external communication is critical, you must prioritize your employees.

- **To create an environment of trust in leadership.**

Employees want to hear words of encouragement and support from the company's leaders, as well as a deeper understanding of the crises' impact on the business. To provide the experience that employees demand and deserve, leaders must be real and honest. Allow your employees to participate in the discussion to improve the employee experience even more. Allow them to interact with the information presented by the leaders and offer their thoughts and concerns, if feasible. Remember that one of the most recognized and desired corporate characteristics among workers is openness.

- **Make your company's vision clear.**

If the company is concerned about your workers' engagement and productivity while working remotely, the best thing you can do is assist them better grasp your vision. Most employees believe that if they had a better understanding of their company's goal, they would be more productive. As a result, communications about your company's goal and vision need to be more visible, and your employees need to pay attention to them. On the other hand, huge corporations with personnel all around the world may find it difficult to do this.

- **Assist employees in staying in touch with their coworkers.**

It is now all about collaboration rather than individual effort. When employees are not physically connected, however, this becomes much more difficult. Collaboration on projects becomes more difficult when communication is limited to digital means. Connecting your workplace, on the other hand, is not only about improving cooperation. It also entails including your whole team in daily corporate discussions. This type of communication should not be one-sided. Instead, encourage two-way dialogues in which employees are encouraged to speak out and offer their opinions on critical issues.

2.8 Chapter Summary

Generally, telecommuters are much more satisfied and efficient than conventional employees (eg Pratt, 1999), per the previous research, (e.g. Baruch, 2000; Golden and Veiga, 2008). But telecommuters could have lesser career prospects, because they are less noticeable (e.g. Khalifa and Davison, 2000; Maruyama and Tietze, 2012). The causes for these telework results were nonetheless mysterious. Our study aimed to identify variables which impact the outcomes of each television service, including telework happiness, perceived career possibilities and teleworking advantages, and organisational performance like effectiveness stated by employees.

The results from this study empirically corroborate the theoretical claims of Makarius and Larson (2017) on the significance of the role of the supervisor in creating telework in businesses. Support from supervisors was highly linked to anticipated job possibilities and trust from supervisors showed an extensive history of overall television satisfaction.

Researchers found that the productivity of telecommuters increases as a consequence of less time spent communication with staff, which may be seen as an argument against social isolation of telecommuters which is often stated as a disadvantage in telework (Baruch, 2001; Wilson and Greenhill, 2004). There is no noticeable influence on television results because of the opportunity to examine working papers from home. Access to work papers may be regarded a hygienic element, but not as an extra resource, given technology development in companies. As a result, it has no effect on positive work results. Another key conclusion of our study is that the ability to work when unwell enhances teleworkers' happiness with their jobs.

CHAPTER 3 - METHODOLOGY

3.1 Introduction

With the present Covid-19 pandemic scenario, the problem that was selected to do the research study was "The impact of Work from Home on employee productivity in the Telecommunication industry, in Colombo District." In order to give a solution for a situation, information and data should be collected in order to evaluate the situation. Therefore, gathering data is an important task. To complete such a task, it is necessary to discuss issues that have contributed to the problem, such as the research strategy, the nature of the study and the depth to which the researcher is studying, and the time periods that were considered when studying the above problem and analyzing the collected data. This chapter will go through the data gathering methods that were employed, as well as whether the data was quantitative or qualitative.

This chapter involves a systematic overview of the study's chosen methodology. It begins by describing the research design chosen, followed by the research methodology used to conduct the study, which includes sampling procedures and techniques, data creation, data collecting, and statistical techniques used to evaluate the data obtained.

3.2 Research Philosophy

Important assumptions about your view are contained in the research philosophy you choose. These assumptions will serve as the foundation for your research strategy and the methods you use to carry it out. As Johnson and Clark (2006) point out, as business and management researchers, we must be conscious of the philosophical commitments we make through our research strategy choices, because they have a major influence not just on what we do, but also on how we interpret what the researcher is looking at.

3.3 Research Approaches

The research approach is a strategy and technique that includes everything from general assumptions to specific data collecting, analysis, and interpretation procedures. As a result, it is based on the type of the study topic of the article, which is the "Impact of Working from Home on Employees Productivity in the telecommunication sector targeting Colombo District, at this Covid-19 Pandemic Situation". The approach for this research is deductive approach as this research involves deducing a hypothesis, which means the relationship of the two variables of this research, where the Work from Home as the independent variable and Employees Productivity as the Independent variable.

3.4 Research Strategy

A research strategy is a key method to doing research to address a topic. For this research, the strategy used is the Case study method . Case study is defined by Robson (2002:178) as "a research method that comprises an empirical analysis of a particular current phenomena in its real-life setting employing numerous sources of data."

For this the researcher uses mixed method ,where both qualitative and quantitative data is collected from the sample.

3.5 Time of the study

This research is a cross- sectional study because this is done at one particular time only. Also, the research is done for academic purpose as a requirement for the bachelor's degree program at University College Dublin(UCD). This study did not take much longer to be done as the guidelines for this research completion is limited compared to a other researches.

3. 6 Unit of Analysis

A scientific research project's most basic component is unity of analysis, which varies based on the research topic and the nature of the study design. During the succeeding data analysis step, the unit of analysis corresponds to the level of data collection. The researcher gathered essential data and information from the participants in this investigation. As a result, the unit of analysis is a sample of all executive level workers at Dialog Axiata and Airtel in the Colombo District, with a focus on the Sri Lankan telecommunications sector.

3.7 Research Framework and Hypotheses

The researcher proposes a conceptual framework which illustrates the relationship between working from home and employee's productivity. The given framework has two main concepts: which are work from home and employee's productivity. The figure 1.1given below shows the conceptual framework of this study.

Work from Home concept	→	**Employee's Productivity**
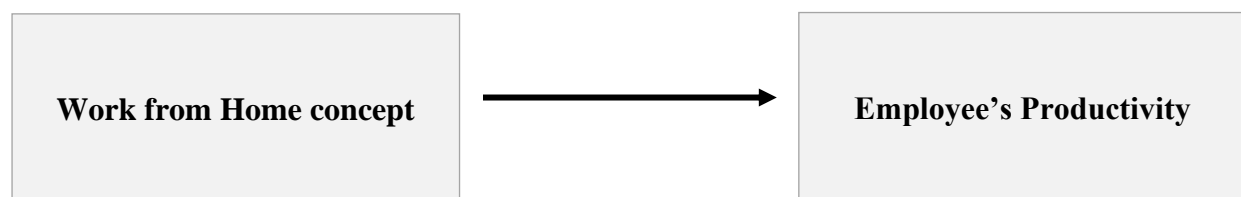
Figure 1 The Conceptual framework of this study

Figure 1.1: The Conceptual framework of this study

As shown in the above figure 1.1, The employee's productivity has been identified as the dependent variable and Work from home concept has being identified as the independent variable. Based on the conceptual framework, the hypothesis could be tested as follows,

H0: There is an impact on employee's productivity in Colombo district, when employees work from home in telecommunication sector , during this Pandemic situation.

H1: There is no impact on employee's productivity in Colombo district, when employees work from home in telecommunication sector, during this Pandemic situation.

3.8 Research Population and Sample

A population, according to Dayarathna (2016), is the whole group of persons or things that are the center of attention in a specific research endeavor, while a sample is a subset of the population. The sample method is random sampling were randomly picked employees from the population are chosen. The population in this study are executives' employees from Dialog Axiata and Airtel Sri Lanka.

Company (Executive Employees)	Population	Sample Size
Dialog Axiata PLC	500	25
Airtel Sri Lanka	300	15
Total	**800 Employees**	**40 Employees**

3.9 Methods of Data Collection

Gathering of information is the constant procedure and evaluation of information on variables of interest which enables researchers to answer questions of study, test hypotheses and evaluate results. The aim of any data collection is the acquisition of high-quality evidence that can be converted into a comprehensive data analysis to provide a convincing and credible answer to the questions posed. Whatever the subject matter of the study or selected data (quantitative or qualitative) technique of defining data, correct data collection is essential for research integrity.

As qualitative and quantitative approaches data can be organized. The researchers utilize a diverse collection of data methodologies in order to acquire the data from the selected organizations, by means of both quantitative and qualitative methods.

A combination of qualitative and quantitative data, processes, and methods for research into a cohesive study framework is applied. Mixed approaches may be a blend of multiple techniques employed in a study or at different periods as well as qualitative and quantitative methodologies. Mixed methods are a combination of several strategies that collaborate to build on strengths while reducing the

disadvantages of a single research strategy. This data collection and evaluation approach can assist to increase the validity and reliability of research.

3.10 Types of Data Collected

There are two sorts of data collecting methodologies, according to Sekaran (2006): primary and secondary data collection.

The main information is data collected on a first-hand basis. The primary information still to be revealed is more trustworthy, genuine, and objective. As original information was not changed or modified by humans, the validity of this data is higher than the secondary data. Primary techniques for collecting data are used to utilize questionnaires and to conduct interviews with the sample size determined to collect data directly.

Secondary data is information that is not directly related to the primary data. Secondary data is information gathered from a source that has previously been published in some manner. Any literature study review is based on secondary information. It is collected for another cause by someone else (but being utilized by the investigator for another purpose). Similarly for this research as well all the information in the chapter 2 which is the literature review, is gathered from secondary data sources such as Published journal articles, reports, websites, eBooks, magazines that are already recommended .

3.10.1 Questionnaire method

This is the first method used to collect data from the sample, it is quantitative primary firsthand data.

A questionnaire is a kind of research tool that includes questions and other suggestions to collect information from interviewees. They are often not constructed to analyze the answers statistically, even though this is frequently the case. Galton created the questionnaire by Sir Francis (1822 - 1911). There is a difference between questionnaires that measure individual variables and questionnaires that add questions to a scale or index. And the questionnaire will be distributed to the relevant

employees as a google form, once the link of the questionnaire is shared with each employees, they can access the link and fill it.

The questionnaire for this research will have 4 main parts to be answered by employees.

Part	Focused area
Part 1	Employees basic information Age, Designation, Marital Status
Part 2	Questions related to Working from Home experiences and to rate from a scale about the WFH experiences
Part 3	Questions related to productivity side of the employees
Part 4	A comment section to include any further opinion or thoughts by the employees related to this experience.

Reasons for selecting questionnaire method.

Below are the reasons why the researcher decided to choose questionnaire method.

- Questionnaires offer several benefits compared to other types of surveys in that they are inexpensive, does not have much work compared to an oral or phone assessments. Also, frequently include homogenous responses that will make data collection easy.

- In a brief time period at a comparatively low expense, significant volumes of data may be acquired from a big number of people. So therefore, at this Pandemic situation this method is effective as there is no need to physically visit the organizations and collect information individually.

- The findings of the surveys can typically be quantified quickly and simply, either by a researcher or by using simply a google form ,which gives instant results.

- When data is quantified, it may be compared to other studies and used to track change. Also, because this study has two hypotheses, this technique makes it easy to separate out the link between the Work from Home(WFH) variable and the Employee Productivity variable.

3.10.2 Interviews method

This is the second method used to collect data for the research, here qualitative primary data can be obtained.

In a research, interviewing is asking questions and receiving responses from participants. Individual, face-to-face interviews, and face-to-face group interviews are some of the several types of interviews. The use of the telephone or other electronic devices to ask and answer inquiries is possible (e.g., computers). There are three types of interviews as structured, Semi-structured and unstructured interviews.

With this pandemic situation it is impossible to have face to face interviews by visiting each randomly selected employee, therefore the best way of having interviews is through telephone conversations , zoom meetings , WhatsApp, or Viber calls with the selected employees.

When it comes to the interview type, the researcher decided to conduct a structured interview, It is referred to as interviewer-administered questionnaires because they use questionnaires based on a planned and 'standardized' or same set of questions. You read each question aloud and then record the response on a pre-coded timetable. Each responder is asked the identical questions to set by the questioner.

The interview matters are usually written ahead of time and include a restricted number of response options. There is limited space for diversity in replies, and the interview guide contains just a few open-ended questions.

Reasons for selecting Interview method.

Below are the reasons why the researcher decided to choose questionnaire method.

- • Interviewers who are essentially taught to follow the interview or questionnaire instructions may effectively carry out organized interviews. Structured interviews do not need the interviewer to establish a relationship and can produce consistent data which can be comparable across a group of persons.
- One structured interview may give the same amount of precise data as four unstructured interviews, making your data gathering process not only more accurate but also more efficient.

- Also , if an answer is not clearly mentioned by the employees , then the researcher can double check it by asking it again, so therefore, it is easier to double check if there are any clarifications of specific answers need to be made.
- Further, this method is chosen by the researcher because other than the structured questions asked in the interview, the researcher can also get answers with more details so that it would be easier for the researcher to conclude at the end of the research.

3.11 Chapter Summary

This chapter devoted to explaining the research design including type of the research, research setting, time of the study and unity of analysis. The chapter future explains the population and sampling method, data collection methods and the reasons for selecting the data collection methods of Questionnaire and Interviews methods for this research.

The sample size of this research is 40 employees , taken from both Dialog Axiata and Airtel Sri Lanka, Next the method of data collection is mixed method, where one method from each of the types of quantitative and qualitative method is selected.

Further, as for the primary research date , with the use of the mixed method, two data collection methods are selected, as Questionnaire method and Interview method.

The reasons why each of the method is selected is described in the previous parts of the research . When considering the secondary data, the literature review part as gathered mostly using secondary data types, for this, journal articles, magazines, websites related to the variables , reports, online publications, and the research textbook recommended by the lecturer was used to gather the secondary data.

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APPENDIX

APPENDIX 1 – Questionnaire distribute to the employees.

- Link to fill the Questionnaire.
Final Research Questionnaire (google.com)

Final Research Questionnaire

Impact of Work from home on Employee's Productivity in Telecommunication sector, targeting Colombo District survey

* Required

Employees personal Details

Age? *

| 18- 28   ▼ |

Designation *

☐ Manager

☑ Executive level

☐ Trainee

Marital status *

○ Married

◉ Single

○ Other:

Questions related to working from home

On a scale of 0-5, please rate how much do you like working from home? *

- [ ] 1
- [ ] 2
- [x] 3
- [ ] 4
- [ ] 5

Do you have all the support from your employer to work from home? *

- (•) Yes
- ( ) No

Do you have a team that supports you while working from home? *

- ( ) Yes
- (•) No

Do you feel comfortable while communicating with your team online?

- ( ) Yes
- (•) No

Clear selection

Questions related to employee's productivity while working from home

Do you have a quiet, distraction-free area at home that allows you to work efficiently?

- ⦿ Yes
- ○ No

Clear selection

Do you have a productive day while working from home?

- ○ Yes
- ⦿ No

Clear selection

Does the news related to Covid-19 affect your productivity?

- ⦿ Yes
- ○ No

Clear selection

Do you have good network connectivity while working from home?

- ○ Yes
- ⦿ No

Clear selection

APPENDIX 2 – *Supervisor Feedback Forms*

Meeting 01

NSBM GREEN UNIVERSITY TOWN – FACULTY OF BUSINESS
SUPERVISOR FEEDBACK SHEET

Candidate Name: Prabodhi Kanchana Goonathilake

Supervisor Name: Brgdr. Sanath Wickramasinghe
Meeting date 09/03/2021

Meeting No: 01

Supervisors' assessment about the student's current progress (Please circle/highlight)

Very Poor	Poor	**Neutral**	Satisfactory
Need to improve significantly, and to be committed towards research study. There are major issues in current work	Need to improve the focus but have done some work but not up to standard expected. Need to improve commitment	**Have done some background work. But less committed and need significant improvement in work**	Student have a satisfactory progress. Minor errors are there to improve

Feedback based on Work submitted.

- Research topic : An empirical study on the effectiveness
of employee's productivity due to working from home in the telecommunication sector in Colombo district (during the corvid-19 pandemic).
- Research proposal ; made changes to the research topic, included Colombo district in addition.

Signature of the supervisor:
Brgdr. Sanath Wickramasinghe

Meeting 02

NSBM GREEN UNIVERSITY TOWN – FACULTY OF BUSINESS
SUPERVISOR FEEDBACK SHEET

Candidate Name: Prabodhi Kanchana Goonathilake

Supervisor Name: Brgdr. Sanath Wickramasinghe
Meeting date 19/05/2021

Meeting No: 02

Supervisors assessment about the student's current progress (Please circle/highlight)

Very Poor	Poor	**Neutral**	Satisfactory
Need to improve significantly, and to be committed towards research study. There are major issues in current work	Need to improve the focus but have done some work but not up to standard expected. Need to improve commitment	**Have done some background work. But less committed and need significant improvement in work**	Student have a satisfactory progress. Minor errors are there to improve

Feedback based on Work submitted.

- Research topic : An empirical study on the effectiveness
of employee's productivity due to working from home in the telecommunication sector in Colombo district (during the corvid-19 pandemic).
- Literature review discussion

Signature of the supervisor:
 Brgdr. Sanath Wickramasinghe

Meeting 03

NSBM **GREEN UNIVERSITY TOWN – FACULTY OF BUSINESS**
SUPERVISOR FEEDBACK SHEET

Candidate Name: Prabodhi Kanchana Goonathilake

Supervisor Name: Brgdr. Sanath Wickramasinghe
Meeting date 02/07/2021

Meeting No: 03

Supervisors' assessment about the student's current progress (Please circle/highlight)

Very Poor Need to improve significantly, and to be committed towards research study. There are major issues in current work	Poor Need to improve the focus but have done some work but not up to standard expected. Need to improve commitment	Neutral Have done some background work. But less committed and need significant improvement in work	**Satisfactory Student have a satisfactory progress. Minor errors are there to improve**

Feedback based on Work submitted.

- Research topic : An empirical study on the effectiveness
of employee's productivity due to working from home in the telecommunication sector in Colombo district (during the corvid-19 pandemic).
- Methodology discussion

Signature of the supervisor:
Brgdr. Sanath Wickramasinghe

APPENDIX 3 – Plagiarism Certificate

Prabodhi Kanchana Goonathilake

CERTIFICATE
Of
AWARD

Plagiarism Certificate

Congratulations! You have successfully completed the Library Plagiarism Quiz and have scored 100%

Prog Space-BHBUS009-BSc Sri Lanka

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Friday, 7 February 2020

The end