

**THE INFLUENCE OF DIGITAL TECHNOLOGY TOWARDS THE WORKING  
ENVIRONMENT OF TEACHERS IN MELAKA.**



**UNIVERSITI TEKNIKAL MALAYSIA MELAKA**

**SUPERVISOR & PANEL DECLARATION/APPROVAL**

I/We hereby declared that I/We had read through this thesis and in my opinion that this thesis is adequate in terms of scope and quality which fulfil the requirements for the award of Bachelor of Technopreneurship.



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**THE INFLUENCE OF DIGITAL TECHNOLOGY THAT EFFECT THE WORKING  
ENVIRONMENT OF TEACHERS IN MELAKA.**

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**THE THESIS IS SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF BACHELOR OF  
TECHNOPRENEURSHIP**



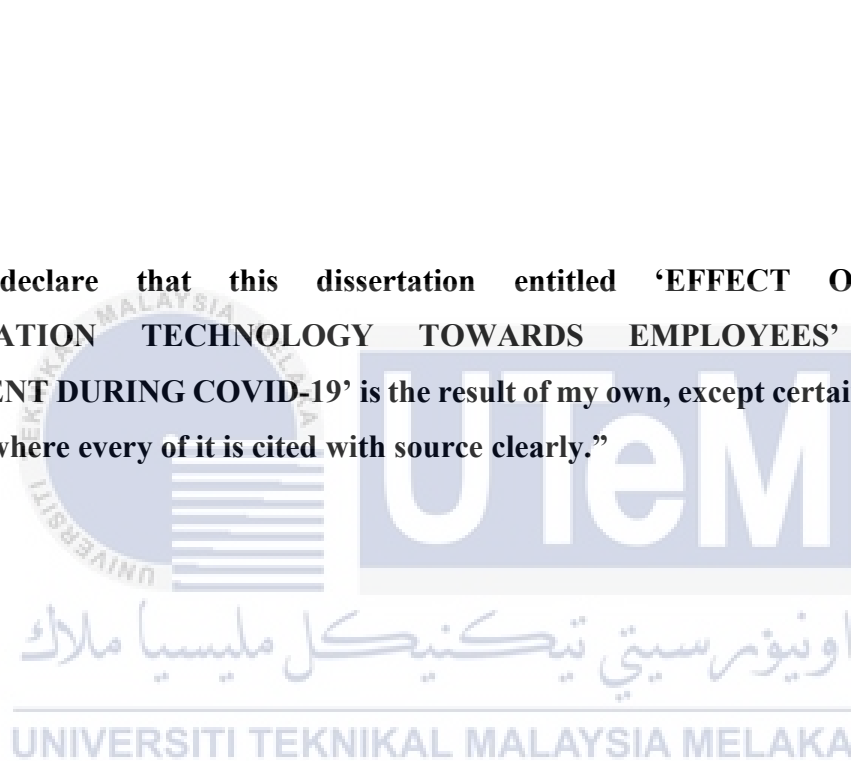
**UNIVERSITI TEKNIKAL MALAYSIA MELAKA**


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**DECLARATION OF ORIGINAL WORK**

**“I hereby declare that this dissertation entitled ‘EFFECT OF DIGITAL COMMUNICATION TECHNOLOGY TOWARDS EMPLOYEES’ WORKING ENVIRONMENT DURING COVID-19’ is the result of my own, except certain explanations and passages where every of it is cited with source clearly.”**



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## **DEDICATION**

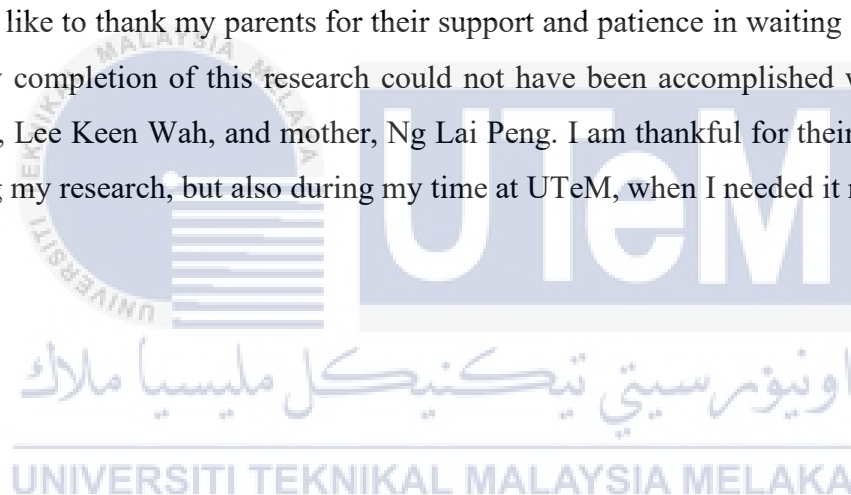
I would like to express my dedication by appreciating my beloved family members who support me in education aspect as well as motivated me to achieve my degree level. I would like to express my deepest gratitude to my supervisor for my final year project, Dr Murzidah binti Ahmad Murad who has helped me to understand my assignment and helped me to grow even further. They have been provide me with full support and advice throughout this research. I am able to finish this research in short amount of time with everyone's helping hand.

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## **ABSTRACT**

Communication technology has a heavy impact towards employees working environment during covid-19 period. Communication technology is technologies that help people to gather information, learning new AI as well as connect themselves with other people far away despite the location and time. Examples of communication technology are computers, the internet, television, radio, phones, and podcasts, etc. There are four main impacts that cause the use of digital technology such as working from home due to the covid-19 and digital technology has enable the method of working from home. Secondly, communication conflict happened without proper contact with employees which cause quite a misunderstanding which make the working environment bad. Therefore, there is a need of using communication digital technology. Thirdly, technology adaptation which how an employee is able to adapt to new environment of working using digital technology. Lastly, the efficiency of using digital communication technology. In this research, quantitative research method will be chosen, and survey (google form) will be given to specific number of respondents regardless the location and time. The finding of this study will contribute to employer that want to expand their company or having communication conflict. This finding of the study will also help entrepreneur to understand the importance of using digital technology during covid-19 as many businesses are down because lack of adaptation skill and knowledge.

**Keywords: communication technology, work from home, communication conflict, technology adaptation, efficiency, quantitative method, covid-19, working environment.**

## **ABSTRAK (BAHASA MALAYSIA VERSI)**

Teknologi komunikasi mempunyai kesan yang besar terhadap persekitaran kerja pekerja semasa tempoh covid-19. Teknologi komunikasi ialah teknologi yang membantu orang ramai mengumpul maklumat, mempelajari AI baharu serta menghubungkan diri mereka dengan orang lain yang jauh walaupun lokasi dan masa. Contoh teknologi komunikasi ialah komputer, internet, televisyen, radio, telefon, podcast, dan lain-lain. Terdapat empat impak utama yang menyebabkan penggunaan teknologi digital seperti bekerja dari rumah akibat covid-19 dan teknologi digital telah membolehkan kaedah bekerja dari rumah. Kedua, konflik komunikasi berlaku tanpa hubungan yang sewajarnya dengan pekerja yang menyebabkan salah faham yang menyebabkan persekitaran kerja tidak baik. Oleh itu, terdapat keperluan untuk menggunakan teknologi digital komunikasi. Ketiga, adaptasi teknologi iaitu bagaimana seseorang pekerja dapat menyesuaikan diri dengan persekitaran baharu bekerja menggunakan teknologi digital. Akhir sekali, kecekapan menggunakan teknologi komunikasi digital. Dalam penyelidikan ini, kaedah kajian kuantitatif akan dipilih, dan tinjauan (borang google) akan diberikan kepada bilangan responden tertentu tanpa mengira lokasi dan masa. Dapatan kajian ini akan menyumbang kepada majikan yang ingin mengembangkan syarikat mereka atau mempunyai konflik komunikasi. Dapatan kajian ini juga akan membantu usahawan untuk memahami kepentingan menggunakan teknologi digital semasa covid-19 kerana banyak perniagaan mengalami kejatuhan kerana kekurangan kemahiran dan pengetahuan penyesuaian.

**Kata kunci: teknologi komunikasi, kerja dari rumah, konflik komunikasi, penyesuaian teknologi, kecekapan, kaedah kuantitatif, covid-19, persekitaran kerja.**



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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

The research commences with chapter one which explain on the background of the study related to the effect of improvement of technology towards employees' working environment. Followed by the development of problem statement, research questions, and research objective, scope, limitation of research, significant of study and an overview of the study.

### 1.2 Background of Study

Technology has been constantly improving and making out life easier each day. It is undeniable that technology lift our workload as well as rapidly increases our productivity. Despite of the convenience that the technology given to us, we cannot ignore the fact technology slowly replacing human workforce. During the outbreak of covid, many people lost their jobs and many big companies especially tourism companies such as flight airline and hotels since government restricted contact with other countries. Wayne F Cascio (2016) stated that 'With the rapid rate of development and ever-increasing reliance on technology, it is without a doubt that organization need to adapt alongside with the technology to survive.'

This research is mainly about how digital communication technology can cause impact to employees' working environment. Technology has been improving in every different age and era. This is an infuriated fact that cannot be change because humanity is constantly evolving ever since they were born. Currently, most of the work are fully technology-orientated or being replaced by technology because it can easily increase the productivity and the efficiency of a product.

Most of the companies had replaced their working environment style by using technologies such as laptops and mobile phone with internet access. This definitely decreased the workload and make employee and employer's work more convenient and efficient because employees are able to work regardless their location as long they have internet connection. Many companies adapted work from home strategy during covid-19 pandemic by using online meeting platform such as Webex, Microsoft Team, Google Meet, etc. Lina Vyas and Nantapong Butakhieo (2013) says that work from home bring huge motivation on worker and their efficiency of work and life domains, such as flexibility are at their highest peak. Balazs Aczel (2014) mentioned about working from home provides numerous obvious advantages, like not having to commute, managing domestic obligations and family needs more easily, better control over time usage, and less distractions.

There is an undeniable connection between working environment and online technology improvement since almost all the companies around the world uses online technology to work regardless of what type of work form such as retail store, management, logistic, etc. Therefore, one must adapt to the situation in order to success which mean that every company should change their working style based on the development of the technology to reach their goal and success. Ramiro Montealegre (2016) stated that living in a global world where technology, especially information and communication technology, is changing the way businesses create and capture value, how and where we work, and how we interact and communicate.

As Murray (2015, p. 6) contends, ‘These developments are accelerating us toward a new industrial revolution. Corporate executives that are astute understand that they must either find out how new technologies will revolutionize their company or risk being disrupted by those who do.’ Therefore, head of the organization should exercise to scout latest technologies that are available in the market to further help their company to improve based on the global situation or market in order to survive in the business.

Amit Prasad (Oct 2018) mentioned that technology aids in the organization of the company. Project Management Software aids in the creation, delegation, review, and evaluation of tasks. Employers and supervisors may simply monitor workplace operations, ensuring that everything stays on track. It establishes accountability, efficiency, and timely completion of duties allocated to individuals. Many new devices and software are now available in the modern workplace to improve productivity and efficiency. Project Management Software aids in the improvement of the quality and quantity of work, as well as risk assessment by raising a red flag if a job deviates from the plan, potentially resulting in project failure. Space management software aids in the organization of your office, resulting in better space usage.

### 1.3 Problem Statement

It is obvious that after the outbreak of covid-19, everyone has been using online technology more frequently compared to old method. There are many problems arise regarding the online technology since everything were new and many companies need to adapt new method of working during the covid-19. Therefore, it heavily impacts the working environment of the employees because they will need to adapt to new things that they never learn before especially old employees.

Online working has become a norm for everyone, and it is the only way to continue working during the pandemic. Despite of that, Malaysia currently is opened to work in public but there are many companies still adapt to working from home which using online platform or using their online technology such as software in their laptops. The problem is, can all employees adapt to this new environment so that it can continue contribute to their company?

It is hard for old employees as they are not expert in technology but in fact good at practical work. They are all accustomed to old working method and environment. If they were unable adapted to this new environment, they were unable to survived in the new working environment. This is a huge advantage for youngster as they are very well-versed at online technology as they learn and use it in their everyday life.

Currently, many companies started to use online platform such as Webex, Microsoft Team, and Google Meet. Employees may feel lectured rather than engaged. If team communication devices are used, there may be a lack of questioning, tone, body language, and excellent discussion. This will result in a superficial discourse, which will have an effect on employee engagement. Young individuals have been shown to be at ease with text-based communication. However, they lose their capacity to talk spontaneously as a result of this. Face-to-face communication is needed for organizational effectiveness, especially in managerial and leadership roles.

Despite having such convenient of technology given to the employees, they tend to exploit the advantage of the convenient of online technology by taking their leisure time doing their work. They do not engage or motivate doing their work because they have extra time to do their job. Despite the additional freedom provided by working from home or freelancing in the gig economy, some people are working longer hours, well beyond their normal working hours, on weekends, or even when unwell.



Because employees may work from anywhere at any time, it takes longer to complete tasks. They may feel as if you never leave the workplace if work from home. It might feel hard to ever truly be off the clock when carry a computer in their pocket that is continuously connected to their work email. Workers are continually drawn back to their duties by flashing, buzzing, and "pinging" signals. This mindset does not lead to improved performance; rather, it leads to fatigue, sleep deprivation, and even mild melancholy. When employees are unable to disconnect, their performance suffers as a result of the stress of always being in work mode.

Digital technology is very convenient but not everyone has the access to use it. For example, software like adobe illustrator needs to be subscribe yearly which need to be pay to use. Therefore, everyone must at least be affordable to buy the subscription in order to use the online technology software.

Wages aren't keeping up with productivity, which is increasing at an exponential rate. Expectations for continued production are unchanged. This might make employees feel like they're always behind, even while their job improves thanks to better online technology. They may believe that online technology is transforming everything around them while they remain unchanged.


This is causing concern about the future workplace and whether people who may one day be replaced by technology will still have jobs. Certain positions have already vanished. A single individual may administer a piece of software instead of a whole department. Entire professional pathways may become outdated in the future.

#### 1.4 Research Questions

The research questions proposed in this study are as below:

1. What is the significant factor influencing the use of digital technology?
2. What are the reasons that causes increase or decrease in efficiency of the employees' work?
3. What is the limitation of a digital communication technology?
4. What is inter-relationship of digital technology that enable the adoption of new method of working environment

#### 1.5 Research Objective

- 
1. To determine the factors of utilization of digital communication technology
  2. To identify the most significant factor of utilizing digital communication technology in the working environment
  3. To determine the limitation of digital communication technology.
  4. To determine the relationship between factor of using digital technology and communication conflict in workplace.

## 1.6 Scope of Study

This research is mainly about how technology improvement can cause impact to teachers' working environment during covid 19 and how will they adapt to the situation by using advanced technologies that are available. Questionnaires is distributed through google form to everyone who are currently working.

## 1.7 Significant of Study

'With great power comes with great responsibility' can inter-relate with technology and employees which they should not misuse the technology in an inappropriate way for their own self-benefit. Technology has been improving to enhance the quality life of human and as well as productivity in the industry. Technology changes everyone's life as the reliance of technology is simply as important as their daily needs. This research may provide some insight of technology influence the working environment of employees which manager is able to use to adapt or understand more about different methods that can be use in future for their business and their employees.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

A literature review is a search and evaluation of the existing literature in the selected topic area or subject. It summarizes the current state of knowledge in the field of the subject or issue. The reason of writing a literature review is that I can further refine my research finding by creating more advanced questions to obtain more information and answers that helps to complete this research. There are many studies out there can be used as reference in order to define online technology and working environment which definitely benefit to everyone. In this research, it is about the effect of online technology towards employee's working environment during covid-19. Hence, all the literature are related to the scope of this research.

#### 2.2 Digital communication technology, teachers, and employees.

Digital communication technology is basically digital technology which defined as a worldwide computer network made up of linked networks that use standardized communication protocols to provide a range of information and communication services (Oxford dictionary). Teacher is defined as a person who teaches, especially in a school (Oxford dictionary) Employee is defined as a person who works for a pay or compensation, particularly at a non-executive level (Oxford dictionary). Digital technology can refer to software, information, multimedia as so on.

## 2.3 Working environment

The employee's work environment might be anything that surrounds him and influences how he executes his tasks. Working environment, according to Alex S. Nitisemito (1992), is both an external and internal situation that can impact working spirit and result in quickly completed projects. A respectable working environment, according to Sedarmayanti (2003), is one in which people can execute their duties in an optimal, secure, healthy, and comfortable manner.

As a result, numerous studies have classified the workplace as hazardous or conducive (Akinyele, 2010; Chaddha, Pandey, and Noida, 2011; Yusuf and Metiboba, 2012; Assaf and Alswalha, 2013). According to McGuire and McLaren (2007), the physical environment of an organisation, particularly its layout and design, can influence employee behaviour in the workplace.

Chandra Sekhar Patro (2020) stated that the surrounding conditions in which a person works and operates are referred to as the work environment. Tansif Ur Rehman stated that working environment refers to the geographical location, social traits, and working circumstances in which people carry out their duties.

Mary Stack Kohn (2017) proposed that the good or negative encouragement or help from coworkers, department chairmen, building level administrators, and/or district level administrators is known as the work environment. It also considers any feedback or coaching that participant may have received, their resistance to change, any supervisory or administrative sanctions, and any positive or negative personal outcomes related to the implementation of the PD program's instructional techniques into the teachers' classroom instruction.

## 2.4 Importance of digital technology

The internet has become an inevitable part of our everyday lives. Appropriate internet use makes our lives easier, faster, and simpler. For personal, societal, and economic growth, the internet provides us with facts and numbers, information, and knowledge. The internet may be used for a variety of purposes; however, how we utilize it in our everyday lives is determined by our needs and objectives. Emily Drago (2015) mentioned that throughout her research, she found out that out of 100 respondents, all of them own a smartphone or tablet which uses online technology.

Digital technology constantly assisting businesses in cutting expenses and more effectively advertising their products and services (Anandarajan, Simmers and Igbaria, 2000). Furthermore, the Internet is being utilised to help businesses operate better (Lim, 2002). This is consistent with Paragian (2014), who noted that the Internet is used for more than only social communication, but also for promotion and marketing. It has been proven that the number of firms and online businesses in Indonesia that have formally promoted their products and services through their own official, selling, auction, and social networking sites, such as Facebook, Twitter, and Instagram, has increased significantly. (Hidayat, 2014). Anvil Gurung (2009) stated that employees used the Internet to search for information available on the Internet. Employees are able to obtain various of types of information for working purposes.

The utilization of digital communication technology has transformed the way that businesses operate, enabling faster and more efficient communication, enhanced collaboration, and the ability to work remotely. These benefits have the potential to drive significant increases in productivity and competitiveness (Smith ,2019).

## 2.5 Types of digital technology

There are many different digital technologies in fact everything online is considered as online technology. Marcia Håkansson Lindqvist (2019) stated that social media, online gaming, multimedia, and mobile phones are examples of digital technologies. They are digital tools, systems, devices, and resources that produce, store, or process data.

### 2.5.1 Information technology

Rich Castagna and Stephen J. Bigelow (2016) stated that information technology is the use of computers, storage, networking, and other physical equipment, infrastructure, and procedures to produce, process, store, protect, and share all types of electronic data is referred to as information technology (IT). IT is often utilized in the context of commercial operations, as opposed to personal or leisure technology. IT for business includes both computer technology and telecoms.

### 2.5.2 Hardware

Maria Petrescu (2016) stated that hardware is made up of physical machinery, equipment, and gadgets. While Kris Swen Helge (2022) propose that a hardware is an electronic system's machinery, wires, and other physical components. Laptops, tablets, smart phones, and personal computers are examples. Hasan Tinmaz (2019) stated that is a generic name for physical computer hardware that may be used to run computer programmes or regulate network traffic.

### 2.5.3 Website / Domain

Tom Carlson (2020) stated that website is a collection of interconnected online pages that provide information about a certain topic and are delivered from a single web domain. A home page is the first file on a website that is maintained by a person, group, or organisation. Md Shamim Hossain (2021) stated that a website is a collection of connected web pages, with or without multimedia, that are often identified by a universal domain name, or URL, that is published on a web server. The website may be accessed through the public internet or a private LAN (local area network).

### 2.5.4 Software

Miroslav Škorić (2014) proposed that software is a collective term for several types of computer programmes. Operating systems also known as 'system software,' such as device drivers, basic setup programmes, and end-user programmes are all examples of software (applications). Celia Soares (2020) stated that software is a collection of data or computer instructions that inform the computer how to function through its own language and is a set of instructions that may be stored and processed by hardware.