UNIVERSITI TEKNIKAL MALAYSIA MELAKA

THE USE OF DIGITAL TECHNOLOGY AMONG UNIVERSITY STUDENTS IN MELAKA

MEOR AHMAD AZAMUDDEN BIN AMARAN

B061910186

UNIVERSITI TEKNIKAL MALAYSIA MELAKA (UTeM)

THE USE OF DIGITAL TECHNOLOGY AMONG UNIVERSITY STUDENTS IN MELAKA

MEOR AHMAD AZAMUDDEN BIN AMARAN
B061910186

Report submitted in Partial Fulfilment of the Requirements for the Award of Bachelor of
Technology Management (High Technology Marketing) with Honours

Faculty of Technology and Technopreneurship Management Universiti Teknikal Malaysia
Melaka

2023

DECLARATION OF ORIGINAL WORK

"I hereby declare that the work of this exercise is mine except
for thequotations andsummarize that have been duly
acknowledge."

Signature : *Azam*

Name : MEOR AHMAD AZAMUDDEN BIN AMARAN

Date : 15th January 2023

SUPERVISOR DECLARATION & APPROVAL

I certify that this thesis entitled "**THE USE OF DIGITAL TECHNOLOGY AMONG UNIVERSITY STUDENTS IN MELAKA**" was prepared by **MEOR AHMAD AZAMUDDEN BIN AMARAN (B061910186)**. I have declared hereby that I / we have read this thesis is adequate in terms of scope and quality which fulfil the requirement for award of Bachelor of Technology Management (High Technology Marketing) with Honours'

SIGNATURE: _____

NAME OF SUPERVISOR: ASSOC. PROF DR. HASLINDA BINTI MUSA

DATE: 30th JANUARY 2023

SIGNATURE: _____

NAME OF PANEL: DR. SITINOR WARDATULAINA BINTI MOHD YUSOF

DATE: 30th JANUARY 2023

DEDICATION

I would like to dedicate the appreciation to beloved parents who supported me from spiritually and financially. A special thanks to my supervisor and panel who guidedme throughout this research and thanks to my friends that helped and assisted me throughthe journey of research.

ACKNOWLEDGEMENT

First of all, I am Meor Ahmad Azamudden bin Amaran who is one of the final year students at Universiti Teknikal Malaysia Melaka (UTeM) by following the Bachelor of Technology Management (High Tech Marketing) with honours I would like to express my deepest appreciation to my supervisor, Prof. Assoc. Dr. Haslinda binti Musa, with her guidance and guidance, I was able to complete my final year project titled the use of technology among university students in Melaka. I am also very grateful to her for giving a lot of encouragement and guidance throughout my final year project by giving comments and advice.

Next, not forgetting my parents who have always given encouragement and support in terms of mental and financial since I started studying until now as my final year. Without their continuous support, I may not have been able to complete this final year project successfully. Hopefully with the prayers of both my parents, I hope to be able to achieve the success that almost all students dream of, which is to finish the studies they have undertaken.

Finally, I would like to thank my university friends who have given me a lot of help and support when I needed it and when I had problems. Without their help, there is no way I could complete this final year project on time and as well as this. I appreciate them very much and will never forget their services and help towards me.

ABSTRACT

This study was conducted to determine the use of digital technology among university students in Melaka. The active use of digital technology can help university students in navigating the realm of education and their daily lives. However, the practice of digital use of technology should be used as best as possible. This is because digital misuse of technology will be detrimental and impact students. there is no doubt that the skills in the use of digital technology will be billed and demanded because of the era of digital use that is growing and used in every university as well as in the world of work later after students successfully graduate from university. In this study, researchers find out what are the factors of the use of digital technology among university students in Melaka.

Keywords: *digital technology, use of digital technology, digital technology factor, universities student in Melacca, artificial intelligence.*

iv

ABSTRAK

Kajian ini dijalankan untuk mengetahui penggunaan teknologi digital dalam kalangan pelajar universiti di Melaka. Penggunaan teknologi digital secara aktif dapat membantu pelajar universiti dalam mengharungi alam pendidikan dan kehidupan seharian mereka. Namun begitu, amalan penggunaan teknologi digital harus digunakan sebaik mungkin. Ini kerana penyalahgunaan teknologi digital akan merugikan dan memberi kesan kepada pelajar. tidak dinafikan kemahiran penggunaan teknologi digital akan ditagih dan dituntut kerana era penggunaan digital yang semakin berkembang dan digunakan di setiap universiti mahupun dalam alam pekerjaan nanti setelah pelajar berjaya menamatkan pengajian di universiti. Dalam kajian ini, penyelidik mengetahui apakah faktor penggunaan teknologi digital dalam kalangan pelajar universiti di Melaka.

Kata kunci: *teknologi digital, penggunaan teknologi digital, faktor teknologi digital, pelajar universiti di Melaka, kecerdasan buatan.*

TABLE OF CONTENT

viii

CHAPTER 1

INTRODUCTION

1.1   INTRODUCTION

The use of digital technology by university students is covered in the first chapter of this research study. In this chapter, the researcher also details the background of the study, the statement of the research problem, the research question, the research objective, the scope of the study, the significance of research and the summary for this chapter.

1.2   BACKGROUND OF STUDY

According to (Elizabeth et al, 2022), access to lecture materials, communication, and evaluation procedures are all increasingly controlled digital for everyday interactions with university-related information. This clearly states that the need to use digital technology among university students is not only for entertainment and communication, but in education and learning to access education and scientific materials from the portals provided as well as from other open sources. Skills in using and managing data with digital technology will be a necessity in the future. According to the (Ransome & Jean 2020) state that a number of research have looked into the elements that affect the adoption, upkeep, and usage of such technologies as well as their impact on student engagement and learning results. The incorporation of digital technology has reportedly superseded conventional learning environments in educational settings, according to (Alham 2021).

According to (Elizabeth et al, 2022), students, especially those leaving home, have technology tools to learn and emerging technological requirements. Authors are aware that social media, in particular, plays a significant role in students' social and academic identities and is crucial at key transition points (Dyer 2020; McLaughlin and Sillence 2018), but it is less clear how students gather digital data, how they feel about it, and the extent to which these feelings change over the course of their degree. This can be related to university students who have just entered the university world, finding and collecting authentic and true data and information is a challenge for them because there is no specific class and education on how to collect data and information accurately. Furthermore, managing digital data can be difficult for students, who find the process frustrating in the face of crowded information spaces, according to (Elizabeth et al., 2022). Survey studies by (Alon, Forkosh-Baruch, and Nachmias, 2020) also revealed that students frequently perceive a discrepancy between their actual Personal Information Management (PIM) practises and their ideal practises.

The digital technology is not use only for education among university student. (Wen, Yu Hong, and Lia 2021) claim that interactive technology (such as the Internet, social media, video games, etc.) is a crucial component of modern daily life, especially for young people. This is

largely because of the prevalence of smartphones, increasingly immersive video games, and constant access to the Internet. Entertainment is also important for university students while they are tired doing course work and studying. Digital technology also offers a variety of entertainment such as video games to play, social media to socialize online as well as music players to listen to music and more. Access to all of these can be connected not only using a computer but can be accessed using smartphones, tablets, and compatible devices that support the software. According to (China Internet Network Information Center, 2019) A recent survey in China found that more than 175 million Chinese teenagers have access to the Internet, and half of them spent more than two hours online each day.

From the perspective of the country, Malaysia has long been in the forefront of the digital transition, according to Thoughts by Bernama from September 2022. The obstacles associated with digitalization have been solved throughout the years by expanding countrywide connectivity, improving the flow and processing of data, and creating strong links between cutting-edge technology. Based on MDEC website on July 2021, there are various efforts carried out by the government in improving digital technology in the country for the benefit of the people including university students. One of them is an investment worth almost RM50 billion by the Malaysia Digital Economy Corporation (MDEC) which focuses on various purposes[1]. One of them is the creation of 50,000 high-value jobs in the MSC. This shows the importance of skills in the digital use of technology will be an important factor for university students after completing their studies. Employment opportunities will require digital technology skills as a prerequisite and added value to graduates for employment.

According to (Abid et al, 2021), digital learning is an excellent way to reduce costs, more effectively use resources, encourage sustainability, and increase both reach and impact for both students and educators. This is true of both handouts and books, which use less paper, as well as the time savings and convenience of research. Therefore, with the use of digital technology by university students can save costs for students. That said, not all university students come from rich families. All works and materials and data can be stored digitally or on cloud storage. Also, the environment also benefits because of the reduction in the use of paper by university students.

1.3   PROBLEM STATEMENT

Before deciding on the title of this research study, the researcher discovered a number of issues. The researcher has studied and checked out various studies and pieces of study from both open-access sites and the university library. and discovered that the study on digital technology use is the best option. It is based on the following problem statements.

According to (Lydiah, 2020) technology advances swiftly, therefore the research only represents findings from one context and time and cannot necessarily be transferred to future situations and eras. Thus, there is no study related to the use of digital technology among university students in Melaka. This results in no reading resources that can be used as a reference in the future related to the digital use of technology. The time and place is also just from a different time and culture location that is not the same as Melaka. Every year, technology advances and changes with the emergence of new technologies. University students who do not use digital technology in accordance with the circulation may be at a loss and fall behind in education or skills that will be needed over time.

Previous research that track assessments over time are required, per (Ruth Pat et al., 2020), in order to better understand how the pandemic has affected students' challenges and academic limitations. Covid-19 affects university students from various angles including the way students learn, the way students socialize, the way students interact with each other and the way students use digital technology. No research has been done on how digital technology use changes among university students after the end of Covid-19. During Covid-19 according to (Rahul, Neena, and Abhipsa 2020), practically all regions have enacted lockdowns due to the pandemic's spread, most individuals are now using the internet and internet-based services to communicate, engage, and carry out their work duties from home as a result of the lockdown. After Covid-19, there is no study on whether digital technology is still used by university students even though restrictions like during Covid-19 have been restored as before. The digital advantage of technology should not be used by university students just like the Covid-19 epidemic. It can continue to be used because of the existing and available technology.

According to the EduSpiral website, in May 2019, "recruitment businesses and analysts have stated that fresh graduates' starting salaries have plummeted because they lack digital skills in an increasingly competitive market and a difficult economy." This demonstrates how firms are accepting graduates with digital abilities as one of the qualifications for employment. There is no study on the factors influencing digital technology use among university students to determine the degree to which students apply and use digital technology. According to the New Strait Times website in March 2022, graduates now need to add digital skills in order to overcome problems. Before, abilities like communication, problem-solving, and interpersonal were necessary in order to secure a job. This shows that digital technology skills are very important among university students.

According to the website Techwire Asia in August 2022 by Aaron Raj and the Coursera Global Skills Report from 2021, "Malaysia is placed 46th overall, considerably behind the two higher-ranked ASEAN members, Singapore (10th) and Vietnam (20th). According to this survey, Malaysia is losing ground in terms of digital literacy." The country's future will be affected by this because every university student has been cautioned that their digital technology abilities lag behind those of other ASEAN nations. Malaysia should require university students who will enter the workforce to have a strong set of digital skills as part of its plan to become a developed nation. Digital technology skills should begin in the educational sphere, or at the university level as students, when they are in the field of higher education.

According to the problem statement from the prior study, no research has been done on the use of digital technology by university students, particularly in Melaka. The youth, especially university students, are the nation's future prospects, thus a study on digital use is required to be able to recognise and identify the determinants of use and the degree of digital use among students for the benefit of university students.

1.4   RESEARCH QUESTIONS

The following research questions are those that have been identified by the researcher from the problem issues that have been found to obtain the objectives of the study and determine the use of digital technology among university students in Melaka:

1. What are the factors that make digital technology use by university students in Melaka?

2. Why digital technology use among university students in Melaka?

3. What are the main factors of digital technology being use among university students in Melaka?

1.5   RESEARCH OBJECTIVES

Digital technology has grown by leaps and bounds from year to year. Not taking advantage of these advances will only harm the available technological resources. This study was made to find and identify some of the following objectives:

1. To investigate what are the factors of the use of digital technology among university students in Melaka.

2. To analyze the use of digital technology among university students in Melaka.

3. To identify the main factors in the use of digital technology among university students in Melaka.

1.6   RESEARCH SCOPE

The study will concentrate on universities in Melaka. Malaysia Multimedia University (MMU) Melaka, University Teknikal Malaysia Melaka (UTeM), and University Teknologi Mara (UiTM) Melaka are the three universities in Melaka. The selection of these three universities is based on the ranking of the 20 best universities 2022 in Malaysia located in Melaka. UiTM is ranked number 2, MMU is ranked number 15 and UTeM is ranked number 17. The position of this university is taken based on the official website of 4Uni on 2022. Students from these universities would be the responders for this study. The survey will be conducted using a quantitative research technique. UTeM has two active campuses, the Kampus Induk in Durian Tunggal and the Kampus Teknologi in Ayer Keroh. Meanwhile, UiTM has three campuses in Melaka, namely Kampus Bandaraya Melaka, Kampus Jasin dan Kampus Alor Gajah. MMU is located in Bukit Beruang. Total number of student of these three university are 29,315 students. MMU student are 4,700 students, UiTM are 12,259 students and UTeM are 12,356 students. The information on the number of students is based on the official portals of these three universities in 2022.

1.7   SIGNIFICANCE OF RESEARCH

In this investigation, university students in Melaka's use of digital technologies is examined. When the researcher does this investigation, there are two areas that will gain:

1.7.1   Academic research

This research examines the use of digital technology among university students in Melaka and specializes in the factors of use as stated in the objective study. The academics who read this study obtain data and information about the use of digital technology used by university students in Melaka to conduct further research or assist in the academic studies being carried out by the academics. This study was conducted covering three universities in Melaka, if the academics are outside the Melaka area, this can help from the findings of the study and scholarly sources of reading.

1.7.2 Government

To the government, this study can help identify the main factors and use of digital technology among university students in Melaka. The government can improve infrastructure and digital technology facilities as well as increase the digital advancement of technology in the country for the use of university students. At the same time, from this research as well, the government can see the extent to which the digital use of technology is used by university students and may give some initiatives to increase the digital use of technology among university students in Melaka.

1.8   SUMMARY

In conclusion, this chapter explains the background of study, problem statement, research question, research objective, research scope and significance or research related to the researcher's study. Among the objectives of the study are to investigate what are the factors of the use of digital technology among university students in Melaka, to analyze the use of digital technology among university students in Melaka and to identify the main factors in the use of digital technology among university students in Melaka.

CHAPTER 2

LITERATURE REVIEW

2.1   INTRODUCTION

The second chapter is a review of the literature for key terms in this study. All of these important terms are explained in detail, with previous findings, information, or data used to back up the statement that is related to the specific term. This chapter contains some definitions of digital technology and example of digital technology. The whole structure for this study will be revealed to readers at the end of this chapter.

2.2 DIGITAL TECHNOLOGY

In September 2019, the Department of Education of the Victoria State Government defined digital technologies as electronic tools, systems, devices, and resources that produce, store, or process data. Examples that are widely recognised include social media, online gaming, multimedia, and mobile phones. Since it encompasses a variety of technologies that are employed digitally, the term "digital technology" is fairly wide. Digital technologies are described as including hardware like laptops and tablets, tools like cameras, calculators, and digital toys, systems like software and apps, augmented and virtual reality, and less tangible forms of technology like the Internet on the website of The Australian Research Council in May 2022.

According to Hernández-Sellés et al. (2019), interactions between and within student groups are positively correlated with the usage of online collaboration tools (virtual campus, chat, and discussion forum). An example of how cutting-edge technology may improve social presence is the usage of VoiceThread, an online service that also allows students to record narration in presentation slides while they upload Power Point (Thompson et al., 2017). The use of digital technology among university students is very beneficial to students. In April 2020, the World Economic Forum voiced concerns about how university students used digital technology to complete their education. Many people across the world are questioning if the acceptance of online learning will continue to endure post-pandemic and how such a shift will effect the global education sector in light of this abrupt move away from the classroom. According to (Fiona, Peter, and Rovincer, 2018) digital technologies provide potential that support mixed, online, and mobile learning. Regarding their applicability and acceptance at higher education institutions with limited resources, however, nothing is known. Digital technology helps university students a lot in doing research at the university as well as connecting between instructors and students digitally. In November 2021, the Australian College of Skills and Education said that able to make better judgements faster. User will be able to benefit from enormous datasets if they place data and analytics at the centre of their digital transformation journey.

2.3 DIGITAL TECHNOLOGY AS ENTERTAINMENT FOR UNIVERSITY STUDENTS

According to (Matthew, Adebowale, and Sarhan, 2017), cable TV providers may bring digital entertainment to homes. To employ a digital entertainment system, a home does not need to be entirely rewired. Now, students no longer need to go anywhere to find entertainment. They can access entertainment only through the devices they have either with or without an internet connection. it is very easy. According to Cheng and Wang (2021), the incorporation of entertainment design and digital technology enhances the fundamental value of information dissemination in the exhibition space itself, creates a better platform for information exchange, and benefits culture, education, and the industrial economy. Entertainment can be accessed based on the interests of the students themselves. It is not only entertainment in the country, it can also be accessed by students abroad. However, this also causes some effects such as uncensored content because it is on the internet. However, good entertainment can enhance creativity and fulfill human nature.

2.4 KNOWLEDGE AND DIGITAL SKILLS OF TECHNOLOGY BECOME AN ASSET OF UNIVERSITY STUDENTS

According to (Kira Allmann & Grant Blank, 2021) It's critical to comprehend the kind of digital abilities required to manoeuvre through this pervasive and complicated digital ecosystem. Research on the digital divide has, appropriately, continued to emphasise digital skills as access has increased. Skills and knowledge about digital technology can be obtained by university students in various ways either through learning or experience. There are many websites and videos on the internet that provide knowledge about digital technology from free to paid. Sometimes it is up to individual university students whether they want to improve their skills and knowledge or vice versa. According to Precious Azuonwu on Linkedin, 2022 "Companies now anticipate that the great majority of their employees possess the more advanced digital abilities necessary in the workplace. Our lives revolve on technology, and as our reliance on the internet and digital communications grows, we must stay up with the shifting skill requirements."

According to Mara (2022) claims that "Technology develops more rapidly the more people who are exposed to it. The culture of the picture interlaced with the oral and written belongs to the contrasts that stand out between students and how professionals educate " This explains that the more often and the longer a person accesses and uses digital technology, the more his skill in using it increases. (Digital Marketing Institute, 2021) claims "According to UNESCO, "a spectrum of abilities to use digital devices, communication apps, and networks to acquire and manage information" is what is meant by "digital skills." In order to engage in productive and creative self-fulfillment in life, study, business, and social activities, they enable individuals to create and share digital information, communicate and cooperate, and solve issues." Nowadays, technology digital skills become one of the skills that give value to university students not only for education but will be useful after the end of university education.

2.5   DIGITAL TECHNOLOGY AS COMMUNICATION TOOLS FOR UNIVERSITY STUDENTS

According to (Anabel, Molly-Gloria, and Barry, 2022) describe communication technologies as the hardware (such as computers, landlines, and mobile phones) and software (such as video chat, messenger, and social media) used by people and organisations to share resources like social support. Smartphone use among college students is more prevalent than that of other digital technology. This is due to the extensive feature set available on smart gadgets. They include things like editing, paying, reading and watching online, and communicating online. The students at Sheffield University, according to (Amine and Berkan, 2019), use their smartphones on campus for web browsing (88%), social networking (88%), accessing academic services (78%), and e-mailing (69%). Smartphone use is higher on campus than that of laptop, netbook, tablet/e-reader, iPod, and other mobile devices combined. Additionally, according to (Amine and Berkan, 2019), the continual connectivity offered by mobile devices facilitated interaction with the course material, communication with classmates and the teacher, and supported content collaboration in a situated and contextualised manner. Digital technology also allows university students to connect with each other without having to meet physically. It facilitates communication even with long distances and wherever they are.