# STUDENTS' PERCEPTION AND SATISFACTION ON VIDEO-BASED PLATFORM DURING COVID-19

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## A REPORT

# SUBMITTED TO

Universiti Tunku Abdul Rahman

in partial fulfillment of the requirements

for the degree of

BACHELOR OF INFORMATION SYSTEMS (HONOURS) BUSINESS INFORMATION

# SYSTEMS

Faculty of Information and Communication Technology

(Kampar Campus)

DEC 2022

# UNIVERSITI TUNKU ABDUL RAHMAN

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# **DECLARATION OF ORIGINALITY**

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# ACKNOWLEDGEMENTS

I want to show my gratitude and appreciation to everyone who helped, directly or indirectly, with the completion of this senior project. Without help, it would be impossible to finish this research or thesis.

First and foremost, Dr. Abdulkarim Kanaan Jebna, my FYP supervisor, has my sincere gratitude and appreciation. Throughout this investigation, he had consistently offered his moral support, direction, inspiration, tolerance, and dedication. He has been a huge help in guiding me and resolving the majority of problems I ran across while carrying out the study.

Additionally, I would want to thank my family, especially my parents, for their understanding, love, warmth, and beautiful encouragement. Last but not least, a particular thank you to all of my friends for their ongoing support and assistance, especially to a select group of students and friends as well as my seniors who helped me and provided their support while carrying out the study.

# ABSTRACT

Since of its flexibility, ease, and accessibility, learning on video-based platforms has become the standard for the majority of students in Malaysia, and these students are now progressively adjusting to this type of learning environment. In order to continue operating, many educational institutions and organisations have been forced by the introduction of the global pandemic Covid19 to adopt an online video-based platform learning strategy. To ensure academic success and the desire to continue studying, online students' perception and satisfaction are crucial. This research is crucial for people, especially university students, to identify and develop the best solutions to improve student happiness and perception of the learning environment on online video- based platforms at Universiti Tunku Abdul Rahman. This study's goal is to discover the factors that influence Malaysian students' opinions of and satisfaction with the online video-based learning environment. The variables in this study are satisfaction with the video-based learning environment, perceived usefulness, perceived ease of use, actual use and attitude toward use. The targeted respondents (UTAR students) provided a total of 250 sets of valid responses, which were gathered via a Google Form. To further analyse and add to the findings and conclusion of this research issue, the data was analysed using the Statistical Package for the Social Sciences (SPSS) Version 27 and SmartPLS. The results unequivocally demonstrated that the elements of perceived utility and actual use are highly influential in determining how Malaysian students feel about online video-based learning platforms. The results of this study showed that the most important aspect affecting students' perceptions of and satisfaction with A video-based learning environment online's perceived and real usefulness. On the other hand, based on other criteria including attitude toward use and perceived ease of use, there was no statistically significant difference in the student's perspective and satisfaction with the online video-based learning platforms. Additionally, the consequences and restrictions of the study are further discussed and explained. In order to help future researchers who are interested in the topic of the satisfaction of the online video-based learning environment do comparable research, recommendations are also being made.

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# LIST OF ABBREVIATIONS

PEOU	Perceived Ease of Use
PU	Perceived Usefulness
AU	Actual Use
ATU	Attitude Toward Use
UTAR	Universiti Tunku Abdul Rahman
TAM	Technology Acceptance Model
SPSS	Statistical Package for the Social Sciences

# Chapter 1 Project Background

# **1.1 Introduction**

As a means of reducing the amount of one-on-one interaction that takes place in conventional classroom settings, higher education institutions have recently become more enthusiastic about the use of online learning. Since COVID-19 has spread over the world, many countries have instituted preventative measures, including limits on migration, the imposition of order, and the establishment of social distance. Before the population obtains access to the vaccination, these are the steps that can be taken to stop the domination of the virus spreading throughout the community. whereas the community is breaking the cycle of virus transmission and pursuing their studies at a higher-level Institutions are unbreakable. Online education has progressed to the point where it can now serve as a replacement for continuing the lecture while maintaining social distance and maintaining movement control order. Teachers and students may now connect with one another to the development of technology, and since everyone is involved, dialogue within the educational community is now both possible and simple to do.

The dissemination of information to students in the form of lectures, tests, projects and assignments, and presentations utilising technological instruments such the internet, satellite power, and interactive network systems is a typical aspect of online video-based tutoring and studying. In other words, this type of teaching and learning is based on the use of videos [7]. Video-based education and knowledge is an approach that enables educators and students to conduct teaching and learning sessions at any location and at any time, even when they are not physically present in a classroom setting [25]. A study found that using an online learning platform is one of the best strategies to improve the general standard of the teaching and learning process [23]. This is especially true in the present 4.0 industrial era.

Students at all of the nation's institutions of higher education have access to video-based teaching and learning approaches, allowing them to continue with their coursework as usual and avoiding falling behind in their classes while the current.

academic semester is still in session, 39 educational establishments were shut down, which had an impact on an estimated 421 million students, and 22 nations made the decision to reduce some of the domestic study programmes they offered [14]. Because the COVID-19 epidemic has become so widespread, Malaysia is not exempt from participating in the video-based teaching and learning sessions that are being held in this situation.

There are a number of video-based systems that can be used for this purpose, including Google Classroom, Microsoft Teams, WebEx, and various platforms through other social media, like WhatsApp, Telegram, and YouTube [9]. Due to the fact that every university has its own learning management system (LMS), the pandemic situation that occurred today required the utilisation of applications and technologies that had been more comprehensively updated to ensure the success of synchronous (synchronous) and asynchronous teaching and learning activities.

## **1.2 Problem Statement and Motivation**

This abrupt change has left everyone, including the institution's management, the instructors, and the students, with a significant challenge. It is imperative that all institutions of higher learning, especially Universiti Tunku Abdul Rahman (UTAR), be well-prepared for any and all eventualities at all times. Video-based learning is offered in a limited number of public universities in Malaysia; the vast majority of educational establishments in the country are private. It is only possible to include a limited number of programmes and classes, in addition to specific topics [1]. However, every single public and private institution of higher education in the world will be forced to renounce their conventional techniques for face-to-face instruction due to the widespread COVID-19 outbreak.

After the nation went through the various phases of the covid-19 wave, it was believed that students were becoming increasingly capable of adapting to the video- based learning environment that has been adopted over the past several months. This change in environment has taken place over the course of the past several months. There is no room for debate regarding the fact that the faculty has a considerable influence on the level of success or failure that the teaching and learning process enjoys [8].

Some educational institutions were compelled to temporarily lock their doors due of the COVID-19 epidemic. Many colleges and institutions no longer provide face- to-face (FTF) training. The impact on educational institutions will be the reverse given how important social distance is at the moment. Education organisations are looking for other solutions to this problematic scenario. In order to prevent interfering with education, this closure encouraged the growth of online education and e-learning.

This emergency decree would force educational institutions that were already resistant to change to accept the new technology. It was difficult for educational institutions to manage the existing situation; professional education, particularly medical education, was extremely challenging. To evaluate the perception and satisfaction of the video-based platform employed and to analyse the learning results for them, it is important to take into account student preparation both during and after this process. This research attempts to provide an answer to the following issue while taking into account the current exploration holes:

- *RQ1:* Are there any significant difference between courses (IT-Specialist and Non-IT) in terms of how students actual use video-based learning platforms?
- *RQ2:* What are the TAM variables that affect how students perceive and satisfaction about video-based learning platforms?
- **RQ3:** How does "course difference" affect the correlation among the perceived usefulness and actual use of video-based learning?
- *RQ4:* To what extent are students satisfied with COVID-19's online video-based platform learning?

Even though there have been numerous studies on the use of online video-based learning platforms for learning, what makes this research intriguing and significant is how it focuses on showcasing/highlighting user perception and satisfaction of video-based learning platforms as well as assessing the effectiveness of distance learning as a whole. As a result, it is anticipated that the research's findings will serve as a kind of framework or guide for future research. A similar evaluation/assessment tool for the platform of applications used in the lecture interaction/process can be used with this study. The findings of this study may have a big impact on choosing the best video-based learning platform to enhance efficient/effective learning.

## 1.2.1 Motivation

As a result, this study will examine how well students are using the video-based platform they have been using for COVID-19 in terms of perception, satisfaction, and motivation. In other words, by comprehending the level of perception, contentment, and motivation of students, one may develop an online learning approach that performs well while also boosting their experience and satisfaction in their learning sessions.

#### **1.3 Research Objectives**

This research has three primary objectives;

- 1. To investigate the moderating impact of "Course Difference" on the relationship between perceived usefulness and actual use.
- 2. To investigate how university students' use of video-based learning platforms relates to the four components of the TAM modal framework.
- 3. To assess student actual using levels while utilizing a video-based learning platform during the Covid-19 period.

## **1.4 Project Scope and Direction**

To provide a clear picture to the management and administrators of the university on perception and satisfaction toward video-based platform learning among students as virtual learning during the covid-19, it is important that this study be conducted. The significance of this is demonstrated by it will provide a clear picture. This study will provide information to the para filters so that they can prepare more thoroughly for the possibility that a teaching process and video-based learning or online learning will need to be implemented in the future. This information will be based on the findings that were obtained quantitatively.

This study is the level of student perception to engage directly in video-based platform learning refers to three main aspects of knowledge, satisfaction, and motivation if wants to expand the learning and teaching methods online. In addition, this study provides information to management university academics so that they can be more aware of the issues highlighted in

it. In light of the study of student perception and satisfaction for the use of a video-based platform, which is still novel, this study will contribute to the study of pertinent literature the use of cutting-edge applications and technologies in education with a view to the study of student perception and satisfaction. In addition, this research will help with the study of pertinent material the use of the latest applications and technologies in education in view of the study of the use of the latest applications and technologies in education in view.

#### **1.5 Hypotheses Development**

- H<sub>1</sub> The perceived ease of has a positive impact on the actual use of video-based learning platform.
- H<sub>2</sub> Attitude toward use has a positive impact on the how easy it is to use video-based learning.
- H<sub>3</sub> There is a positive relationship between perceived usefulness and attitude towards using online video-based learning platforms.
- H<sub>4</sub> There is a positive relationship between perceived usefulness and actual use of online video-based learning platforms.
- H<sub>5</sub> There is a positive relationship between actual use and attitude toward to use using online video-based learning platforms.
- H<sub>6</sub> Course differences (IT students & Non-IT students) moderates the relationship between actual usage of the technology and how effective video-based learning.

## **1.6 Contributions**

These findings may serve as useful references for anyone who intend to make contributions to future Studying how course variables affect the relationship between perceived usefulness and actual use in the growing field of video-based learning. It is also proposed that future academics look at how students feel about participating in video-based learning and how satisfied they are with it, particularly investigation of the moderating impact of "Course Difference" as there have been no other studies made before this. In conclusion, the findings of our research have the potential to be useful to policy decision makers in order to assist the educational growth of their constituents.

# **1.7 Definition**

#### 1.7.1 Video-based learning

Simply put, learning that utilizes videos is referred to as video-based learning. Learning no longer requires the physical presence of a teacher and students. Video-based learning is one learning strategy that supports this newly identified global dimension of learning. Given that these video tutorials are available for free online, their designers must design lessons that are more simply understood, have higher retention rates, and have less opportunities for deviation. To get the best results, their movies should have appealing graphics, crystal-clear audio with excellent intonation, and error-free content .

## 1.7.2 Perceived Usefulness

Explains how much a person thinks that using the system will improve their work performance, such as whether it will enable them to finish a task more quickly [54].

## 1.7.3 Perceived Ease of Use (PEU)

refers to how much effort a person must do to use the technology, either physically or mentally [54].

#### 1.7.4 Attitude Toward Using

Envisioned as a mindset toward using a system that influences whether someone is accepted or rejected as a result of using technology at work. Other experts have highlighted that one factor that affects a person's conduct is their mindset [55].

#### 1.7.5 Actual Use

The endpoint where humans use technology is the actual system use. An aspect that influences people's use of the technology is their behavioral intention [55].

#### **1.7.6** Course Differences

Some of students, like those from FICT, were categorized as academics studying information technology (IT), while others, particularly those from faculties like FBF, FAS, FEGT, and others, were categorized as academics studying non-information technology (Non-IT) [56].

# **1.8 Conclusion**

A summary of the students' perception and satisfaction on video-based platform during covid-19 is provided in this chapter. For this research, the relationships between the The conceptual framework proposal's variables served as the basis for the development of the study questions and hypotheses. Additional details about the conceptual framework that has been proposed and the literature review of the variables are provided in the following chapter.

# CHAPTER 2 Literature Reviews

# **2.1 Introduction**

Despite the wealth of research on either the challenges faced by online video-based learning systems or the utilization of such systems by various individual [16], students' perceptions of a system that focuses largely on the video assets used for learning are fairly sparse. But before we get to it in this section, let's quickly review the scant works that are currently available in this area, namely the utilization of movies and similar video/visual assets for online learning.

# 2.2 Past Studies/Research

Numerous research has recently focused on the amount of online student learning. Students, particularly those enrolled in higher education institutions, are among the populations most impacted by the COVID-19 epidemic [9]. This is because face-to- face learning sessions were initially substituted with online learning sessions in order to give continuity and effective continuous education. As a result of the current position and condition, the majority of institutions, both domestically and internationally, are starting to adopt online learning sessions as a wonderful solution to ensure that students can enrol in such courses. In order to stop the spread of the COVID-19 epidemic among university students, the University of Cambridge, for example, is the first university in the United Kingdom to participate in teaching and full online learning for the 2020–2021 session [13].

By cutting student enrolment in online course participation from 8% in 2000 to 20% in 2008, [19] demonstrate the increased student acceptance of teaching platforms and online learning. This update demonstrates that students are prepared to embrace new standards during continuous instruction on existing platforms. Additionally, a study conducted by the Arthur M. Blank Babson College Entrepreneurship Center against 2800 institutions of higher education also revealed comparable revenue when the number of students enrolling in online specialties increased dramatically in 2013 from 411 to 701 million students [26]. It demonstrates how students typically receive in- depth instruction using a number of important platforms, including Google Classroom, Microsoft Teams, Webex, and others.

The usage of educational films in various contexts and locations has steadily increased with an increase in worldwide Internet connections, however this growth is fragmented and lacks any definite implementation strategy from either instructors or educational managers [16]. Recent years have seen a significant increase in the usage of educational films as an extra teaching tool, notably in MOOCs and blended learning environments [24]. Additionally, several of the top colleges in the world now provide video lectures online. From the perspective of the student, there are numerous reasons why they should watch videos relating to the material they are learning, from doing so to increase their knowledge and understanding, develop better study habits, and make up for any missed lessons [25].

Video lectures can provide students with additional material that accelerates their pace of learning in addition to the conventional textbooks utilised in the classroom [16]. Due to the fact that it gives students a concrete cognitive representation of the subjects they study in their normal courses, video content has been used most frequently in recent studies to encourage active learning. In reality, utilising video resources, a number of researchers have imitated a lab experiment or provided some useful demonstrations [33]. Because movies can convey subjects that are normally challenging to express through text or images, students frequently have good opinions of them [19].

A distinct image is presented by the findings of a few studies [19], which show that the use of video content is not thought to be advantageous for pupils. Similar studies by

[50] have demonstrated that students frequently skip watching films, which has a detrimental influence on their academic performance and learning outcomes. This means that little information is provided about how students view and use video technology in all of the works previously mentioned, which either focus on the design principles or the benefits and drawbacks of using videos for online learning and in order to guarantee the practicality and success of using these techniques, content is required. Since using videos is the only option during the COVID-19 era due to the actual closure of educational institutions, it is vital to research the usage of video-based learning in order to enhance instructional materials.

Additionally, the Ministry of Higher Education (KPT) has stated that all universities in the nation, both public and private, should conduct educational activities and online learning until

the end of the year, which is December 2020, in accordance with the Movement Control Order announced by the government in an effort to stop pandemic transmission. This is because Malaysia in particular is currently in the transition phase between online learning with face-toface instruction/learning.

The sense of and enjoyment from using video-based platforms for lessons, particularly those involving students from higher education institutions, have recently been the subject of various studies [19]. Using five key dimensions—self-learning, student control, computer and internet effectiveness, self-efficiency communicating online, and willingness to learn [15] assess the degree of student perception and satisfaction. In order to determine how well students are accepting the usage of video-based teaching and learning platforms, this study will concentrate on students' perspective, satisfaction, knowledge levels, and motivation.

# 2.3 Limitation and Delimitation

One of the restrictions found in this study is the time factor. The researcher must reduce the quantity of targeted respondents included in this research due to the limitation in order to produce research rapidly. Therefore, the results of the study may be influenced by the use of a small sample size of 250 individuals intended to represent the entire community. The study's dependability and accuracy, which might be used as a future reference for academics who want to do research on how individuals perceive and feel about the online learning environment, would actually be improved by a larger sample size, which would produce more accurate results.

On the other hand, the sampling site acts as the boundary for this inquiry. The majority of the respondents in this study are Malaysian, and the study specifically examines their participation in an online learning programme. Students from all over the world—not only those in Malaysia—must switch to online gaining knowledge as a result of the global epidemic COVID-19. In light of the aforementioned, the replies from other nations may have a significant impact on the survey's conclusions. This is because responders chosen from other nations bring a wider and more varied perspective and point of view to the online learning environment as a result of various cultural perspectives norms, attitudes, and behaviors. This makes it possible for academics to fully comprehend how satisfied learners are in online learning environments outside of the Malaysian context.

#### 2.4 Theoretical Research/Study Model

The Technology Acceptance Model (TAM) has been widely applied to comprehend the phenomenon of technology adoption, the desire to use information systems (IS), and associated developments ever since it was first proposed by [34] and [35]. TAM was first put forth by (Davis, 1989). The TAM is still one of the most well-liked ideas due to its adaptability, simplicity, and logical underpinning [35]. The degree to which a person feels utilising a certain system will improve his or her work performance and the degree to which a person believes using a particular system will improve the organization's bottom line are the two primary factors that TAM contends have an impact on the user's attitude.

In light of the fact that the goal of this study is to analyses the real-world application scenario of perception and satisfaction toward video-based platforms for educational purposes, this research makes use of a TAM framework that is coordinated. TAM is the source of the type of acceptance that technology provides. According to [34], there are two primary considerations that determine user satisfaction with regard to the utilization of any technology: the perceived value and usability of the technology, as well as the apparent simplicity of usage.



(Figure 2.1: Technology Acceptance Model (Davis, 1989))

## 2.5 Conceptual Integrated Study Model



(Figure 2.2: Conceptual Integrated Study Model adapted from TAM model)

The conception given above is based on [34] TAM theory, the research concluded that factors are favorably affecting students' satisfaction with video-based learning. Therefore, in order to analyze students' perception and satisfaction on video-based platform during covid-19, In this research investigation, the conceptual framework from the earlier study was used. A conceptual integrated study model is used to develop a questionnaire for this study that will assist the researcher in achieving the study's objectives. In order to ascertain the aspects of video-based learning that students thought were simple to use or helpful, as well as its impact on students, the external components in the aforementioned diagram will be used as a guide.

#### 2.6 Detail Hypotheses Development

#### 2.6.1 Perceived Ease of Use & Perceived Usefulness

The students' perception of utility is one of the most crucial factors that they care about deeply since their pleasure with video-based learning environment increases with perceived usefulness. Additionally, a student's involvement in video-based learning would be significantly impacted by how valuable they are judged to be [29]. Additionally, other studies have discovered an

association between students' degrees of enjoyment and involvement in video-based learning settings and perceived utility [30]. According to a study, the perceived utility of video-based learning among students is a key indicator of their efficacy and adoption [32]. According to [32], perceived usefulness has a favorable impact on students' satisfaction with using video-based learning and desire to continue using them.

That learner satisfaction, particularly among users who have a strong desire for cognition, is influenced and determined by their evaluations of the usefulness of the systems [33]. A videobased learning environment can provide learners great advantages and utility, including access to course materials from anywhere at any time, a high degree of flexibility, and an increase in performance and satisfaction with this method of learning [21]. Having said that, people are more inclined to adopt this particular learning style when they understand its advantages. In fact, it is logical to assume that these advantages would boost long-term usage intention and result in a high level of satisfaction among students who have enjoyed and positively evaluated the online learning strategy [21]. Based on the foregoing justification, the following is developed as the study's hypothesis:

- H1 The perceived ease of has a positive impact on the actual use of video-based learning platform.
- H2 Attitude toward use has a positive impact on the how easy it is to use video-based learning.
- H3 There is a positive relationship between perceived usefulness and attitude towards using online video-based learning platforms.
- H4 There is a positive relationship between perceived usefulness and actual use of online video-based learning platforms.

#### 2.6.2 Actual Use and Satisfaction of Video-Based Learning Environment

The degree to which a person really uses technology depends on their behavioral intent, attitude, sense of the usefulness of the technology, and perception of how easy it is to use [34]. However, [34] also suggested that there are other influences that might have an impact on how the system is actually used. Actual use can be determined by tracking the frequency and volume of user use of the system [35]. The majority of TAM research has utilized these measurements of system usage frequency and volume.

In general, those two complimentary theories propose that there are a series of causal linkages between what students perceive about using video-based learning systems and the actual use of those systems. According to the research, students' attitudes are influenced by their beliefs, and these attitudes change whether or not they intend to utilize a certain technology, such as a videobased system. Actual use is primarily determined by the goal.

H5 - There is a positive relationship between actual use and attitude toward to use using online video-based learning platforms.

#### 2.6.3 The Effect Of Course Differences (It Students & Non-It Students)

When first exploring the various elements that contribute to good video-based learning experiences, the researcher made an effort to investigate different input elements, such as perceptions and satisfactions of students, in relation to their IT expertise, video-based learning resources, and experiences, and their preferred methods of integrated education. The researcher specifically tried to determine whether video-based learning regardless of whether there are any perceptual differences between IT students and non- IT students. Since video-based technologies/materials often only support a portion of the learning activities that students engage in, [36] stated that "grading the quality of video-based learning experiences is no easy issue".

H6 – Course differences (IT students & Non-IT students) moderates the relationship between actual usage of the technology and how effective video-based learning.

#### 2.7 Conclusion

This chapter examined and addressed previous studies' findings on the elements affecting students' perceptions of and satisfaction with video-based learning environments during COVID-19. The conceptual framework that has been suggested and the generated hypotheses have been determined based on journal articles and past study findings. The next chapter covers the research methodology utilised in this study, including methods for collecting data, designing questionnaires, methods for analysing data, and more.

# CHAPTER 3 Research Methodology/Approach

# **3.1 Introduction**

This chapter will discuss the research technique and provide an explanation of how it was applied to this research project to get the required data. The chapter covers a variety of discussion points, such as research design, sample design, data collection methods, research measurement, construct measurement, and suggested tools for data analysis.

# 3.2 Research Design

The study and analysis of the students' perceptions and satisfaction with the video-based platform during Covid-19 were conducted using a quantitative technique in this study. To acquire the results and provide answers to the study questions, The variables could be quantified and quantitatively and numerically analysed using a quantitative technique [37]. The word "qualitative method" generally refers to the first-hand information that the researchers gathered from the respondents to represent a specific research study. A quantitative study employs computer techniques, conventional mathematical techniques, or empirical research to comprehend models [38]. Additionally, through quantitative research, relevant numerical models, hypotheses, and theories are constructed and put to the test. Having stated that, this method enables the researcher to effectively and efficiently get reliable data from the big population.

The emphasis is on UTAR students who have previous experience in a video- based learning environment (primary target) of this study. This study uses Google Form to distribute online questionnaires to the intended respondents in order to collect data from them. Exploratory research is research that is done to learn more about a subject that is not well-defined in order to better comprehend the current state of affairs.

A researcher typically begins with a general idea and uses the research to identify issues that could serve as a direction for further exploration. To better understand the factors influencing how students perceive and feel about the video-based platform during COVID-19, this research utilised an exploratory research technique.

## **3.3 Sampling Design**

#### **3.3.1** Target Population

The population is the entire group of people, events, or objects that the researcher wants to investigate [39]. The UTAR students who took part in or are currently taking part in videobased learning, both from an IT background and from a non-IT background, were the primary focus of this study's target audience. This is because their perceptions of their happiness with the integration of video-based learning into their learning environment or daily lives would have varied. Additionally, Due to their distinctive qualities and histories, this group of people may have varying views and experiences on the satisfaction they get from learning using video-based platforms.

#### 3.3.2 Sample Size

The targeted respondents are chosen from a significant community in order to fairly represent the public for this research. According to [40], a sample size of more than 250 respondents is enough for statistical data analysis and increases the reliability and accuracy rate of the findings. To prevent biases in sampling or mistakes when generalising a random sample, a suitable amount of random sample is required. According to [40], there is less chance of bias in results the higher the sample size. Consequently, in order to offer relevant data and meet the research's aims, The representative sample for this study is designed to have a minimum sample size of 250 respondents.

The location where this study is being done could be referred to as the sampling location. However, a specific place was chosen for this study, it was the UTAR campus in Kampar. Additionally, The Google Form will be used to virtually disseminate the questionnaires to the intended respondents. This is because to the fact that during the SOP of the COVID-19 outbreak in Malaysia, it would be difficult to physically contact the targeted responders. It is reasonably simple for the intended respondents from various faculties on the UTAR campus to access the questionnaire by distributing it online, where they could complete it using any readily available electronic devices.

#### 3.3.3 Sampling Technique/Method

According to [41], Sampling is a method for selecting a small group of people to use as a source of information for research or experimentation. The methodology for non-probability sampling uses a number of methods, including the convenience sampling method. Because respondents are typically straightforward to discover, easy to approach, and easily accessible, the non-probability convenience sample approach was chosen as the study's sampling strategy. On the other hand, Convenience sampling is frequently chosen by researchers for three main reasons: population size, time constraints, and accessibility. Convenience sampling is a non-probability sampling method that gathers data from any population members that are readily available and practical research subjects. This study therefore conforms to the dominant societal norm by using Google Form to distribute online surveys at random to the intended respondents. The Google Form could aid researchers in more effectively collecting eliminating data input errors and obtaining responses from selected respondents. However, using a Google Form to gather data may restrict the researcher's ability to contact respondents for additional explanation and clarification on any queries regarding the questionnaire, which could have an effect on the accuracy of the data gathered.

#### 3.4 Data Collection Method

In order to answer the specific research questions, test the hypotheses, and evaluate the findings, the researcher must collect data, which is the act of gathering and compiling information about the relevant variables [42]. Key data and secondary data are the two primary forms of data that are gathered for a particular research study. As a result, this study will use primary data.

#### 3.4.1 Primary Data

Information obtained directly from the public with the goal of addressing a specific research topic using various procedures and strategies that are suitable and pertinent to the study problem is referred to as "**Primary Data**" [43]. Furthermore, a variety of methods, including surveys, interviews, experiments, and so forth, can be used to collect primary data. By using By using primary data as the method of data collection for this investigation, the researcher was able to acquire precise data from a large population. In order to electronically disseminate questionnaires to the targeted respondents who have prior experience with video-based learning

near the UTAR Campus and collect the primary data for this study, Google Form will be employed.

# **3.5 Constructs Measurement**

# 3.5.1 Origin and Modification of Constructs

Variables / Authors	Adoption of questions	Modification of questions	
Perceived Ease of Use (Debajyoti Pal & Syamal Patra, 2020)	<ol> <li>In general, the online video-based learning is easy to use.</li> <li>Learning how to use the onlinevideo-based learning is easy for me.</li> <li>My interaction with onlinevideo-based learning is clear and understandable.</li> <li>It is easy for me to play and watch the videos used in the online video-based learning.</li> <li>Overall, I found the online video-based learning easy to use.</li> </ol>	<ol> <li>In general, the online video- based platform is easy to use.</li> <li>The way to use online video-based platform system is easy for me.</li> <li>My interaction with online video-based platform is clear and understandable.</li> <li>It is easy for me to play and watch the videos used in the online video-based platforms.</li> <li>Overall, I found the online video-based platforms easy to use.</li> </ol>	

	1	
Perceived Usefulness (Debajyoti Pal & Syamal Patra, 2020)	<ol> <li>Using online video-based learning improves my learning performance.</li> <li>Using online video-based learning enables me to accomplish my learning tasks more quickly.</li> <li>Using online video-based learning makes my learning more productive.</li> <li>Using online video-based learning makes it easier for me to study.</li> <li>I find online video-based learning useful for my studies.</li> </ol>	<ol> <li>Using video-based platform improves my learning performance.</li> <li>Using video-based platforms enables me to accomplish my learning tasks more quickly.</li> <li>Using online video- based platforms makes my learning more productive.</li> <li>Using online video- based platforms makes it easier for me to study during covid- 19.</li> <li>I find online video- based platform useful for my studies.</li> </ol>
Actual Use and Satisfaction of Video-Based Learning Environment (Debajyoti Pal & Syamal Patra, 2020)	<ol> <li>I use online video-based learning for enriching my knowledge.</li> <li>I watch lecture videos as it helps me with my learning.</li> <li>Overall, I would like to continue my usage of the onlinevideo-based learning.</li> </ol>	<ol> <li>I use online video- based platforms for enriching my knowledge.</li> <li>I watch lecture videos as it helps me with my learning.</li> <li>Overall, I would like to continue my usage of the online video- based platforms.</li> </ol>
Attitude toward use (Debajyoti Pal & Syamal Patra, 2020)	<ol> <li>I believe that using lecture videos for online learning is a good idea.</li> </ol>	Fully Adopted

2.	I believe that using	
	lecture videos for online	
	learning is advisable.	
3.	I believe that it is better	
	for me to use lecture	
	videos when learning	
	online rather than using	
	only reading materials	
	(e.g., textbook or lecture	
	slides).	

## 3.6 Scale of Measurement Method

Five sections, including Sections A, B, C, D, and E, made up the online questionnaire for this study. In Section A, the targeted respondents' demographic characteristics were gathered. A nominal scale was used to evaluate the targeted respondents' demographic characteristics, including gender, age, and ethnicity. The targeted respondents' course criteria were measured using an ordinal scale at the same time.

For all of the questions in Sections B through E, both the five-point Likert scale and the ratio scale were used. On a scale of 1 to 5, targeted respondents are asked to rank the statements in order of how they feel about them. The following statements are represented by an example five-point Likert scale from the online survey in the figure below:



(Figure 3.1: The Sample of Five-point Likert Scale)

## 3.7 Pilot Test

A pilot test is a trial run for the research where a pre-test is completed by a small sample of participants before the actual research is done. This enables researchers to identify flaws, improve quality, and reduce traps like incorrect statements, poorly formulated questions, and confusing statements, which increases the precision and dependability of the survey used for this study [38]. [38] stated that a minimum of 12 sets of samples are required to carry out the pilot test while taking into account the time and financial constraints. In order to conduct the pilot test, 250 sets of questionnaires were sent via Google Form to UTAR students. IBM The survey data will be examined using SPSS Version 27. The findings of the pilot test from 250 participants are shown in the table below:

Constructs	Number	Cronbach'	Reliability
	of Item	s Alpha	Level
Perceived Ease of	5	0.901	Very Good
Use			
		0.002	
Perceived	5	0.903	Very Good
Usefulness			
Actual Use and	3	0.836	Very Good
Satisfaction of			, in the second se
Video- Based			
Learning			
Environment			
Attitude Toward	3	0.825	Very Good
Use			

(Table 3.1: Pilot Test Result)

# 3.8 Conclusion

This chapter provides a thorough discussion of the research methodology employed for this study. The results and analysis from the data obtained using the suggested approach and examined using the suggested test produced by the SmartPLS software are presented in the next chapter. Based on the findings, the hypotheses are understood and discussed.

# CHAPTER 4 Findings & Result

# **4.1 Introduction**

An examination of a subject that aids in a better grasp of the sources that are available and what is being stated about a topic is known as preliminary research. By broadening or narrowing a topic, this type of research makes it stronger. Using the results of this inquiry to help choose search phrases.

# 4.2 Survey Analysis

In this chapter, the conclusions and analysis of the 250 responses for this study project are presented. The results were attained using SPSS and SmartPLS 4. The reliability procedure, significant descriptive statistics of the respondents' characteristics, and the evaluation of hypotheses are highlighted in this chapter.

For the descriptive statistics of the sample characteristics table, of describing the characteristics of the sample respondent, descriptive statistics are utilized. They provide an overview of a number of significant properties of a sample, including as its average value, frequency, percentage, and the manner in which its components are distributed.

Characteristics	Value	Frequency	Percentage
		<i>(n)</i>	(%)
Gender	Female	126	50.4
	Male	124	49.6
Age	18-24	167	66.8
	25-29	83	33.2
Ethnicity	Chinese	143	57.2
	Indian	75	30
	Malay	32	12.8
Faculty	FICT	125	50
	FBF	83	34

Table 4.1: Descriptive statistics of the sample characteristics.

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	FAS	23	9.2
	FEGT	15	6
	FES	2	0.8
Year of Study	Year 1	50	20
	Year 2	108	43.2
	Year 3	80	32
	Year 4	12	4.8
Exposure to video-based	Yes	250	100
platform	No	0	0
Attended any IT course	Yes	0	0
	No	250	100

# 4.1.1 Demographic Profile



Figure 4.1: Gender of respondents

Figure 4.1's findings indicate that a total of 250 respondents took part in the survey, 126 (or 50.4%) of whom were women and 124 (or 49.6%) of whom were men.


Figure 4.2: Age of respondents

The sample of 167 (66.8%), which represents the age range of 18 to 24 years old, contributed the most to this study. This was followed by the age range of 25 to 29 years old, which accounts for 83 (33.2%), and the last age groups of over 30 are represented by 0 (0%).



Figure 4.3: Ethnicity of respondents

Chinese individuals made up the bulk of the 250 people who were particularly chosen for the study and 143 of them (57.2%) are of Chinese origin. In addition, there were 0 (0.0%) respondents from other ethnic groupings, followed by 32(12.8%) respondents who were Malay and 75 (30%) respondents who were Indian.



Figure 4.4: Faculty of study of respondents

The respondents' fields of study were displayed in a graph, and FICT students categorised them as having an IT background (125 respondents; 50% were evenly chosen). After that, 125 respondents (or 50%) were classified as having no prior experience with information technology (non-IT) to provide additional specificity. FBF had 85 students, or 34% of the total respondents, followed by FAS with 23 students, or 9.2%, FEGT with 15 students, or 6%, and FES with 2 students, or 0.8%.



Figure 4.5: Year of study of respondents

In Figure 4.5, the respondents who participated in the questionnaire survey are depicted by the year of study they finished. The graph shows that year 2 pupils accounted for the biggest proportion of replies, 108 or 43.2%. Year 3 students came in second with 80 students or (32%) of replies, year 1 students came in last with 50 students (20%), and year 4 students were counted as 12 or (4.8%).





Figure 4.6: Exposure to video-based platform of respondents

Figure 4.6 of the survey questionnaire offers a visual representation of the respondents' level of experience with video-based platforms. All respondents have sufficient experience with video-based platforms, as evidenced by the fact that one hundred percent of those polled gave a positive response to the question. Every one of these responses provided encouraging comments.



7. Have you attended any IT courses helped you in using online video-based platform? <sup>250</sup> responses

Figure 4.7: Attended any IT course helped of respondents

Figure 4.6 of the survey questionnaire offers an illustration of the ways in which those respondents who had attended any IT courses benefited from the utilization of video-based platforms. One hundred percent of those who took part in the study had the impression that they had not taken any IT classes to learn how to use video-based platforms.

#### 4.1.2 Perceived Ease of Use

Table 4.1: Result of PEOU	Table	4.1:	Result	of PEOU
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Item	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)	Mean	Standard Deviation
In general, the online video-based platform is easy to use.	48.4	42.8	8	0.8	0.00	4.39	0.669
The way to use video- based platform system was easy for me.		36.00	7.6	0.8	0.00	4.46	0.671

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My interaction with online video-based platform is clear and understandable.	59.2	33.2	7.2	0.4	0.00	4.51	0.648
It is easy for me to play and watch the videos used in the online video-based platforms.	61.2	32.4	5.6	0.8	0.00	4.54	0.640
Overall, I found the online video-based platforms easy to use.	56.8	36	6.8	0.4	0.00	4.49	0.642

Participants were asked to rate how strongly they agreed or disagreed with each of the four assertions in this section about how perceived ease of use affects students' perception and satisfaction with video-based platforms. This section discusses how students' perception and satisfaction with video-based platforms is affected by perceived ease of use. According to the findings in Table 4.1, in response to the first question, "In general, the online video-based platform is easy to use," 48.4% of respondents indicated that they strongly agree with the statement, while 42.8% of respondents indicated that they agree with the statement, 8% of respondents indicated that they are neutral, and 0.8% was disagree and 0% indicated that they strongly disagreed with the statement. With regard to the second statement "The way to use online video-based platform system is easy for me", 55.6% of respondents have indicated that they strongly disagree, 36% have indicated that they agree, 7.6% have indicated that they are neutral, 0.8% have indicated that they disagree, and 0% have said that they definitely disagree. However, in response to the statement "My interaction with online video-based platform is clear and understandable," 59.2% of respondents indicated that they strongly agree with the statement, 33.2% said they agreed with the statement, 7.2% said they were neutral, and the number of respondents who indicated that they disagreed with the statement was 0.4%; none of the respondents indicated that they strongly disagreed with the statement. The findings of the fourth statement, which asks, "It is easy for me to play and watch the videos used in the online video-based platforms," show that 61.2% of respondents strongly agree with the statement, while 32.4% agree, 5.6% are neutral, plus 0.8% disagree, and 0% strongly disagree. And for the final statement of the PEOU, "Overall, I found the online video-based platforms easy to use," 56.8% of respondents strongly agree, agree by 36%, and are neutral 6.8%, followed by disagreeing with was 0.4%, and 0% strongly disagreed.

The statement that " It is easy for me to play and watch the videos used in the online videobased platforms" had the highest mean score (4.54), followed by the statement that " My interaction with online video-based platform is clear and understandable," which had a mean score of 4.51. "In general, I found the online platforms that are focused on video to be simple to use," The item with the third highest average was the one that had a mean of 4.49. The next most common response was " The way to use video-based platform system was easy for me," with a mean score of 4.46. The statement that " In general, the online video-based platform is easy to use" received the lowest mean score (4.39), making it the most popular.

The statement that " The way to use video-based platform system was easy for me" had the greatest standard deviation (0.671), out of all the items in the survey. The statement that "My interaction with online video-based platform is clear and understandable" had the second greatest standard deviation of any item in the survey (0.669). The statement that "My interaction with online video-based platform is clear and understandable" had the third highest standard deviation of any of the items in the survey, with a value of 0.648 for the standard deviation. The statement that came next had a standard deviation of 0.642, and it said, "Overall, I found the online video-based platforms easy to use". The statement that "It is easy for me to play and watch the videos used in the online video-based platforms" had the smallest standard deviation were the standard deviation for this statement was (0.640).

### 4.1.3 Perceived Usefulness

Item	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)	Mean	Standard Deviation
Using online video- based platform improves my learning performance.	60	34.4	4.8	0.8	0.00	4.54	0.628
Using online video- based platforms enables me to accomplish my learning tasks more quickly.	57.2	36.4	5.6	0.8	0.00	4.50	0.642
Using online video- based platforms makes my learning more productive.	55.6	39.2	4.8	0.4	0.00	4.50	0.609
Using online video- based platforms makes it easier for me to study during covid-19.		40.8	5.2	0.8	0.00	4.46	0.634
I find online video- based platform	60.8	32.8	5.6	0.8	0.00	4.54	0.641

Table 4.2: Result of PU

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useful for my studies.				

Participants were asked to score each of the five statements made in this section on how students' opinion of the utility of using video-based platforms effects their overall happiness with such platforms on a scale from one to five. According to Table 4.2, for the first statement, "Using an online video-based platform improves my learning performance," 60% of respondents have indicated that they strongly agree with the statement, 34.4% have indicated that they agree with the statement, 4.8% have indicated that they are natural, 0.8% have indicated that they disagree, and zero percent have indicated that they strongly disagree. The findings revealed that 0% of respondents strongly disagree with the second statement, which asserted, "Using online video-based platforms enables me to accomplish my learning tasks more quickly." On the other hand, 57.2% of respondents strongly agree, 36.4% agree, 5.6% are neutral, and 0.8% disagree with the statement. Nevertheless, the results of the survey indicate that 55.6% of respondents strongly agree with the statement "Using online video-based platforms makes my learning more productive," while 39.2% of respondents agree with the statement, 4.8% of respondents are neutral, 0.4% disagree, and 0% strongly disagree with the statement. Follow up with the next statement, which is as follows: "Using online video-based platforms makes it easier for me to study during covid-19." The results of the statement indicate that respondents are divided into five groups: 53.2% strongly agree, 40.8% agree, 5.2% are neutral, and 0.8% disagree and 0% strongly disagree. The results of the survey suggest that in response to the statement "I find online video-based platform useful for my studies," respondents showed a percentage of 0.0% strongly disagreeing and 0.8% disagreeing, 60.8% strongly agreeing, 32.8% agreeing, and 5.6% being neutral.

The statements that "Using online video- based platform improves my learning performance" & "I find online video- based platform useful for my studies" received the highest mean score (4.54). And then came the statement that "Using online video-based platforms enables me to accomplish my learning tasks more quickly," which was followed by the statement that "Using online video-based platforms makes my learning more productive," both of which received a mean score of 4.50. The statement that "Using online video-based platforms makes it easier for me to study during covid-19" obtained the lowest mean score. This was due to the fact that this particular statement was the least supported by evidence (4.46).

Out of all of the answers in the survey, the statement that "Using online video-based platforms enables me to finish my learning activities more rapidly" had the biggest standard deviation (0.642). The item in the poll with the second highest standard deviation was the assertion that "I find online video-based platform valuable for my study" (0.641). With a value of 0.634 for the standard deviation, the statement that "Using online video-based platforms makes it easier for me to study during covid-19" had the third highest standard deviation of any of the items in the survey. This was due to the fact that this statement had the highest value for the variance. Following that was a statement with a standard deviation of 0.628 and it said, "Using an online video-based platform improves my learning performance. Standard deviation was lowest for the statement that "Using online video- based platforms makes my learning more productive" where the standard deviation for this statement was (0.609).

#### 4.1.3 Actual Use and Satisfaction of Video-Based Learning Environment

Item	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)	Mean	Standard Deviation
I use video-based platforms for enriching my knowledge.	58.4	35.2	5.6	0.4	0.4	4.51	0.660
I watch lecture videos as it helps me with my learning.		36.8	5.2	0.8	0.00	4.50	0.635
Overall, I would like to continue my usage of the video- based platforms.	58.8	34.8	6.0	0.4	0.00	4.52	0.629

Table 4.3: Result of AU

Participants were asked to rate, on a scale from 1 to 5, how accurately each of the three assertions in this section reflected their actual use of and level of satisfaction with a video-based learning environment. According to the findings in Table 4.3, for the first statement, "I utilise video-based platforms for improving my knowledge," 58.4% of respondents indicate that they strongly agree with the statement, 35.2% agree with it, 5.6% natural, 0.4% disagree, and 0% indicate that they severely disagree. Regarding the second statement, "I watch lecture videos because it helps me with my learning," the findings revealed that 57.2% of respondents strongly agree with it, 36.8% agree with it, and 5.2% are neutral regarding it. However, 0% of respondents strongly disagree and 0.8% of respondents disagree with it. On the other hand, the results of the poll reveal that the majority of respondents (58.8%) strongly agree with the

statement "Overall, I would like to continue my usage of the video-based platforms," while 34.8% agree with the statement, 43.3% are neutral, 0.4% disagree, and 0% strongly disagree. The statement that "Overall, I would like to continue my usage of the video-based platforms" received the highest mean score (4.52). The statement that "I use video-based platforms for enriching my knowledge" came in with a mean score of 4.51 and was the next most frequent response after that. The statement that "I watch lecture videos as it helps me with my learning" had the lowest mean score (4.50) making it the most popular choice, this is because it garnered the highest number of votes.

The statement that "I use video-based platforms for enriching my knowledge" had the largest standard deviation of any of the responses to the survey's questions and was the one that received the most responses (0.660). The statement that "I watch lecture videos as it helps me with my learning" was the item in the poll that had the second largest standard deviation after the overall question (0.635). The statement that "Overall, I would like to continue my usage of the video- based platforms" had the standard deviation that was the lowest among all the statements. The standard deviation for this statement was (0.629).

### 4.1.4 Attitude Toward Use

Item	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)	Mean	Standard Deviation
I believe that using lecture videos for online video-based learning is a good idea.	55.2	36.8	6.8	1.2	0.00	4.46	0.677
I believe that using lecture videos for online video-based learning is advisable.	60.4	33.6	5.2	0.8	0.00	4.54	0.634
I believe that it is better for me to use lecture videos when learning use online video-based platform rather than using only reading materials (e.g., textbook or lecture slides).		32.4	5.6	1.2	0.00	4.53	0.660

Table 4.4 : Result of ATU

On a scale from one to five, participants rated their agreement with each of the three statements contained in this section regarding the impact of students' attitude toward use on their perceptions of video-based platforms and their level of satisfaction with such platforms. According to Table 4.4, 55.2% of respondents strongly agree with the first statement, "I believe that employing lecture videos for online video-based learning is a wonderful concept." 36.8% of respondents agree, 6.8% naturally agree, 1.2% disagree, and 0% strongly disagree with the statement. The results show that 0% of respondents strongly disagree and 0.8% of respondents disagree with the second statement, which states, "I believe that using lecture videos for online video-based learning is advisable." In contrast, 60.4% of respondents strongly agree, 33.6% agree, and 5.2% are neutral regarding this statement. Despite this, the findings of the survey indicate that 60.8% of respondents strongly agree with the statement, 32.4% agree with it, 5.6% agree with it, 1.2% disagree, and 0% strongly disagree. When it comes to my education, I think that it would be more beneficial for me to use an online video-based platform that offers lecture videos rather than relying just on reading materials (such as a textbook or lecture slides).

The statement that earned the highest mean score was the one that said, "I believe that using lecture videos for online video-based learning is advisable" this statement (4.54). The statement that "I believe that it is better for me to use lecture videos when learning use online video-based platform rather than using only reading materials (e.g., textbook or lecture slides)" came in with a mean score of 4.53 and was the next most frequent response after that. The statement that "I believe that using lecture videos for online video-based learning is a good idea" had the lowest mean score (4.46).

The statement that "I believe that using lecture videos for online video-based learning is a good idea" had the largest standard deviation of any of the responses to the survey's questions with (0.677). The statement that "I believe that it is better for me to use lecture videos when learning use online video-based platform rather than using only reading materials (e.g., textbook or lecture slides)" was the item in the poll that had the second largest standard deviation after the overall question (0.660). The standard deviation was at its lowest for the assertion that "I believe that using lecture videos for online video-based learning is advisable", the standard deviation was (0.634).

#### 4.2 PLS-SEM Analysis

PLS-SEM analysis, method of statistical testing that are not as complicated, connect the variables that are dependent and those that are independent. The issue arises, however, when there are many causal variables at play or when there are factors that influence the independent variables [51]. SEM analysis is a tool that helps researchers examine the intricate direct and indirect interactions that exist between the several causative elements that are represented in a single model.

#### 4.2.1 Measurement Model – Analysis of Reliability and Validity Testing

The research being discussed is represented by the measuring plan in Table 4.5 below. According to the findings of the investigation, none of the components fall below the minimum acceptable value of 0.5. On the other hand, a portion of the outer loading was removed due to the fact that it was PU4 and the value was lower than 0.5. The analysis revealed that all of these constructs, with the exception of PEOU, PU, AU, and ATU, are classified as exceptional when the outer load is more than 0.7.

Both the Composite Reliability and Cronbach's Alpha have values that are either larger than 0.70 or equal to it, whereas composite reliability measures a variable's true reliability value [52]. Cronbach alpha measures a variable's lowest reliability value up to a composite reliability value > 0.6 and a cronbach alpha value > 0.60.

The reliability of the composite is demonstrated by the fact that every component in Table 4.5 has a value that is more than 0.8. PU had the highest rating, with a total reliability score of 0.911, while PEOU received the rating with the lowest score (0.851). The findings reveal an impressively high level of composite dependability for each variable.

The Cronbach's alpha for PU was 0.876, which indicates that the relationship between the variables is very strong. Second, the values of Cronbach's alpha for AU, PEOU, and ATU are 0.797, 0.789, and 0.776, respectively, with a dependability that is deemed to be good when it is greater than 0.7. The Cronbach's alpha scores of all of the variables, which ranged from 0.776 to 0.976, were all higher than the minimum required value of 0.7. As a direct consequence of this, consider all of the variables to be dependable & reliable.

The following "rule of thumb" stipulates that the maximum correlation with any other latent variable should be lower than the positive square root of the AVE for each of the latent variables

[53]. In addition, convergent validity was shown when the average variance extraction value was more than the permissible threshold of 0.5. According to Table 4.5, all constructions have values more than 0.5, with PU coming in at 0.722, AU coming in at 0.712, ATU coming in at 0.696, and PEOU coming in at 0.536. As a result, the convergent validity test was successfully completed by all of the constructs. As a direct result of this, each of the items possessed an adequate level of convergent validity.

		5 5 5	5 0
Constructed Item	Cronbach's alpha	Composite reliability	Average variance
		(rho_c)	extracted (AVE)
ATU	0.776	0.872	0.696
AU	0.797	0.881	0.712
PEOU	0.789	0.851	0.536
PU	0.876	0.911	0.722

Table 4.5: Measurement Model – Analysis of Reliability and Validity Testing

#### 4.2.2 Discriminant Validity

The Fornell-Larcker Criterion and the High-Throughput Multivariate Test (HTMT) are the two procedures that can be used to determine whether or not a discriminant is valid. The conventional methodology, which asserts that the square root of each latent variable's AVE can be used to prove discriminant validity as long as it is higher than the correlation values of the other latent variables, was presented [44]. According to this methodology, the AVE of each latent variable can be used to demonstrate discriminant validity. The "classical approach" is what this is referring about. In order to achieve this goal, the square root of AVE is manually computed, and the result is then written in bold on the table's diagonal. The correlations between the latent variables are displayed in the triangle in the bottom left corner of the table. These correlations are obtained from the "Latent Variable Correlation" portion of the report that was automatically prepared.

	ATU	AU	Faculty	PEOU	PU
ATU	0.834				
AU	0.804	0.844			
Faculty	0.042	-0.145	1.000		
PEOU	0.287	0.252	-0.231	0.732	
PU	0.439	0.445	-0.218	0.395	0.850

Image 4.3 : Result of Discriminant Validity - Fornell-Larcker Criterion

Table image 4.4 provides an overview of the cross-loadings for each individual indicator. When the reliability of each item was examined using cross-loading, it was discovered that the factor loading values for each structure were relatively high and above the threshold value of 0.70 [51]. This was the case when testing the dependability of each item. In comparison to the other loading levels, only three validity levels—AU5, PEOU1, and PEOU5—were lower than the threshold of 0.7. In the case of cross-loading, each value represents the contribution that a different item made to the construction. When compared to other latent variables, the values that indicators provide to their related latent variable are significantly higher. The discriminant validity of the model can be verified in this way by first establishing that the manifest variables in each construct do, in fact, correspond to the latent variables that have been allotted. To give you an example, the variance for Faculty and Faculty x PU is 1.0, which indicates that it contributes 100% to the construction of the building. In addition, discriminant validity was found for each structure that had the highest cross-loading value among its own latent variables. This value was used to determine which structures were valid.

	ATU	AU	Faculty	PEOU	PU	Faculty x PU
ATU1	0.708	0.535	-0.337	0.379	0.211	-0.421
ATU2	0.905	0.763	0.271	0.111	0.403	0.041
ATU3	0.876	0.699	0.111	0.255	0.464	0.001
AU1	0.686	0.870	-0.111	0.199	0.417	0.211
AU2	0.628	0.828	-0.319	0.077	0.407	-0.111
AU2	0.337	0.363	-0.195	0.266	0.869	0.185
AU3	0.247	0.163	-0.364	0.192	0.713	-0.096
AU3	0.720	0.832	0.063	0.361	0.300	0.012
AU5	0.413	0.472	-0.192	0.332	0.919	0.168
Faculty	0.042	-0.145	1.000	-0.231	-0.218	0.270
PEOU1	0.233	0.260	-0.250	0.677	0.178	-0.276
PEOU2	0.278	0.231	-0.353	0.870	0.422	-0.193
PEOU3	0.107	0.060	-0.078	0.729	0.314	-0.230
PEOU4	0.308	0.260	0.145	0.702	0.240	0.085
PEOU5	-0.037	0.006	-0.438	0.663	0.201	-0.253
PU1	0.437	0.414	-0.111	0.469	0.882	0.111
Faculty x PU	-0.131	0.046	0.270	-0.207	0.137	1.000

Image 4.4: Cross Loadings

#### 4.2.3 Structure Model

The findings are presented in Table 4.6 for the cases in which there is no evidence of multicollinearity and the VIF values range from 1.0 to 2.5. Additionally, the route coefficients demonstrate that the variables are directly related to one another, which is helpful when attempting to estimate the extent of the influence. The range that is recommended is between between 0.1 and 1.

Following the assessment of the PLS measurement models, structural models were built, and the internal models were analysed to establish the validity of the model assumptions that were provided. The results of Table 4.15 suggest that there are no indicators of multicollinearity problems with the value of VIF. The T-statistics and the P-value can then be utilised in order to identify the type of relationship that the two variables have with one another. The alternative hypothesis is accepted when the P-value and T-statistics value are both less than 0.05 and the T-statistics value is greater than 1.96.

		• •		
Path	VIF	<b>T-Statistics</b>	P-Values	Results
ATU→ AU	1.378	6.526	0.000	Accept
(Hypothesis 5)				
Course Difference $\rightarrow$	1.232	1.846	0.034	Accept
AU				
(Hypothesis 3)				
PEOU→ ATU	1.00	0.954	0.171	Reject
(Hypothesis 2)				
PEOU → PU	1.00	2.292	0.012	Accept
(Hypothesis 1)				
PU → AU	1.476	0.078	0.469	Reject
(Hypothesis 4)				
Course Difference X	1.367	1.817	0.036	Accept
PU→ AU				
(Hypothesis 6)				

Table 4.6: Path Analysis for Structural Model

Attitude Toward Use:	R-square = 0.083; Adjusted R-square = 0.050
Actual Use:	R-square = 0.723; Adjusted R-square = 0.678
Perceived Usefulness:	R-square = 0.156; Adjusted $R$ -square = 0.126

Indicator reliability levels of the outer loading that are more than 0.7 are consequently considered to be extremely satisfactory [46]. In addition, an outer loading value that is larger than 0.5 is deemed to be acceptable, however a component that has an outer loading value that is less than 0.5 ought to be removed [45]. According to figure 4.1, which was the second test because numerous loading values were lower than 0.4, all of the variables exhibit a positive link with one another. On the other hand, certain goods with factor loadings of less than 0.3 or even less than 0.4 ought to be deleted because there is no use in keeping them [46].



Image 4.5: Finalized Model of Conceptual Framework

#### 4.3 Conclusion

Conclusion, SmartPLS software was used to compile the information gathered from 250 respondents for this study. The relevant relationships between the variables that can affect students' perception and satisfaction on video-based platform during covid-19 were examined using a variety of analysis techniques. the findings indicate that every factor has an impact on how satisfied users are with video-based learning platforms the chapter after this one will continue the discussion of the findings.

### **CHAPTER 5 Discussion and Conclusion**

#### **5.1 Introduction**

An in-depth explanation of the subsequent discussion of the research findings that were presented in the preceding chapter will be provided in this chapter. The most significant findings will be summarized and discussed in this chapter, along with the study's implications, constraints, and suggestions for future research. An assessment of the relationship between the independent variables and the dependent variable will be made at the conclusion of this chapter.

#### **5.2 Respondent Demographics Analysis**

The majority of respondents were female (50.4%), as was demonstrated by the analysis of the respondents' demographic characteristics. The participants' ages ranged from 18 to 24 at the time they provided their answers. This is due to the fact that this age group comprises the great majority of UTAR's student body. On the other hand, 57.2% of respondents were students who identified as being of Chinese descent. Furthermore, FICT represented half of the respondents, who identified as IT students, while the other faculties represented the other half, who identified as non-IT students. In addition, 43% of the students who answered were in their second year of school. Last but not least, 100% of respondents have exposure to video-based platform of respondents have and same level percentage of respondents do not attend any IT course helped for attending the video-based learning platforms.

#### **5.3 Discussion of Major Findings**

The aim of this research is to investigate the perceptions and satisfaction of students towards the use of online video-based platforms. The variables that were looked at actual usage, attitude towards using, perceived ease of use and perceived usefulness of online video-based platforms. The findings of this study revealed the applicability of the TAM in assessing the level of acceptability of the online video-based platforms among UTAR students. The majority of the hypothesized constructs, as well as the interactions between them, were discovered to be significant.

#### 5.3.1 H1

# *H1* - *The perceived ease of has a positive impact on the actual use of video-based learning platform.*

According to the result, it was found that perceived ease of use has a positive significant impact on actual use of video-based learning platforms. This is consistent with numerous TAM-based research from the past [57]. The results imply that the system will be seen as useful when it is simple to use. If a student has to exert a lot of effort to utilize or comprehend new technology as video-based learning platform, they may conclude that it is very beneficial. On the other hand, if a student finds a piece of technology difficult to use, they will likely conclude it is not particularly valuable. For video-based learning platform, the system must be simple to use so that the user may learn the necessary skills quickly. The likelihood that students will conclude that the system is useful will increase if they find it simple. Saving time, money, and effort may be included in the perceived value or advantages. Therefore, in order to establish a sense of usefulness for the system, it must be constructed in a way that makes it appear simple to use. In a nutshell, when a system is viewed as simple to use, students are more likely to find it beneficial.

#### 5.3.2 H2

H2 - Attitude toward use has a positive impact on the how easy it is to use video-based learning.Participants were questioned about their opinions toward utilizing the video-based learning system and how easy it is to use they thought it was. It's interesting to note that simplicity of use did not negatively influence attitudes about adopting video-based learning platforms, despite the fact that other studies [58] highlighted it as one of the hurdles to the acceptance of new technologies. The hypothesis was not accepted. The fact that video-based learning platforms are still relatively new to students between the ages of 18 to 24 as well as to students from faculties other than FICT may have contributed to this outcome. As a result, such students do not completely understand the risks associated with using video-based learning platforms. Furthermore, it's probable that students' physical classrooms affected their confidence in video-based learning systems. It is envisaged that e-learning methods and platforms will function similarly to how satisfying are offered by actual classrooms.

#### 5.3.3 H3

# H3 - There is a positive relationship between perceived usefulness and attitude towards using online video-based learning platforms.

The research verified that perceived usefulness on the attitude towards using online video-based learning platforms as suggested by the TAM. Additionally, this link is consistent with the TAM and earlier research [59]. As a result, when the students think adopting the platforms will enhance their e-learning, the desire to use it will be there. Consequently, students must be convinced that there are many advantages to adopting the platforms. In order to support the students' favorable attitude about utilizing the online video-based learning platform, it is necessary for the system to convince the students of its benefits.

#### 5.3.4 H4

# H4 - There is a positive relationship between perceived usefulness and actual use of online video-based learning platforms.

The results of these research indicate that there is an ineffective component influencing the link between actual utilization and perceived usefulness. Similar to this, it has been shown by [60] that students frequently employ imprecise video-based learning system usage, which negatively affects students' e-learning. As a result, employing video-based learning platforms for online learning has drawbacks, and little is known about how well students use these resources or how valuable they actually find them to be. Because of this, it is challenging to ensure the long-term viability of these platforms.

#### 5.3.5 H5

# H5 - There is a positive relationship between actual use and attitude toward to use using online video-based learning platforms.

The study discovered that the actual use has a positive impact on video-based learning platform usage impacted by attitude toward utilization. Studies using TAM place a lot of attention on this relationship [61]. According to the TAM hypothesis, a student's intention to really use video-based learning platforms will be stronger when they adopt a favorable attitude toward using them. In other words, there is a significant possibility that students will use the video-based learning platform when they want to. The pupils who identified the system's advantages and simplicity of use have a more positive attitude toward trying it out. The intention to use the

system will then be stronger due to the positive mindset. This demonstrates how crucial it is to adopt a positive outlook in order to motivate the pupils to use the new method. The system's utility, brief and clear instructions, and positive experience can foster a positive mindset.

#### 5.3.6 H6

### H6 - Course differences (IT students & Non-IT students) moderates the relationship between actual usage of the technology and how effective video-based learning.

The main factors utilized to distinguish across courses are the precision, applicability, and depth of the information being imparted to the students. Because the students who encountered the association between actual technology usage and how well students view video-based learning platform, the course differences are quite significant in an online video-based learning platform scenario. Undoubtedly, one of the major elements that may have an impact on a student's efficacy and success in an online learning environment is course differences (Patricia, 2020). An earlier study confirmed that the course differences have a direct impact on how strongly IT students will feel the effect compared to non-IT students regardless of the type of technology employed [62][63]. According to the findings, depending on the course, there is a positive correlation between actual technology use and students' perceptions of the effectiveness of video-based learning.

The aforementioned findings led to the conclusion that there is no obvious distinction between courses, actual technology usage, and the efficacy of video-based learning. Undoubtedly, prior study suggested that IT students typically outperform non-IT students in terms of technology. However, there is a common misconception that IT students have better technological skills than non-IT students [63]. But this impression is fading to the point where non-IT students now know more about information technology systems than their IT student counterparts [63]. The differences in the courses have little bearing on the learning outcomes. Research, there are variations in student satisfaction with online video-based learning platforms depending on the course [62][63]. As a result, a conclusion was drawn to support the idea that course differences might not be able to predict how satisfied students are with an online video-based learning environment.

#### **5.4 Implications**

The study offers crucial information that students can use to succeed in a video-based learning environment. Following a separation into the theoretical and practical components, the full ramifications of the research findings are discussed.

#### **5.4.1** Theoretical implications

Five variables—perceived usefulness (PU), perceived ease of use (PEU), attitude toward use (ATU), actual usage (AU), and course differences have effectively been added to the existing TAM in this research study. According to the research findings, perceived usefulness and actual use of video-based learning platforms are the key moderating factors influencing the student's satisfaction and perception of online video-based learning platforms in Malaysia. According to the research's findings, actual use has the strongest statistically significant positive link with the choice of video-based learning platforms among UTAR students. Additionally, there is a strong and favourable correlation between perceived usefulness and the actual usage of video-based learning platforms. Although earlier studies indicated that video-based learning positively influenced students' perceptions and actual system use [64].

Less study has been done on this topic of online video-based learning platforms using Malaysian students (UTAR students) as the intended respondents. As a result, this study can add to the body of knowledge already available on Malaysians' perception and satisfaction with video-based learning platforms. This study also advances the TAM's understanding of how students really use and judge the value of online video-based learning systems. According to TAM modal, perceived usefulness and actual use are what decide whether technologies and innovations are adopted and used. Additionally, the TAM is extended in an effort to make a comprehensive prediction regarding the use of video-based learning platforms by Malaysian students. The study's conclusions confirmed that adopting e-learning platforms can be looked at from a TAM viewpoint. These results are corroborated by [65]. The expanded model may also be used to adopt new and upcoming innovations and technology items in Malaysia.

#### 5.4.2 Practical Implications

#### 5.4.2.1 Effectiveness

The most majority of students are completely oblivious to the numerous benefits that may be gained via the utilisation of the online video-based learning platform. According to the data, the majority of students believe that by utilising an online video-based learning platform, they would be able to learn during pandemic more effectively, it will be more convenient to e-learning, and it will save them more time. Therefore, it is necessary for students to concentrate on these aspects in order to provide the kind of e-learning experience that other students have requested. It is necessary for the online video-based learning platforms to be designed in a way that makes the experience of e-learning more manageable. For instance, the products that are offered need to be arranged in a manner that is consistent with the categories and contain the keywords that students will typically use when conducting a search. The categorization can be done based on the type of platform, and even students can choose how they want to categorize themselves. In addition to this, get notes via e-learning helps save time because there is no need search physical book. Because the study has already demonstrated that perceived usefulness has an effect on the amount of time people spend using a platforms, it is imperative that students make their fellow classmates aware of the many advantages that are easily available to them.

#### 5.4.2.2 Ease of Use

The e-learning system is highly competitive, and one of the most critical considerations in getting people to use an online video-based learning platform is how the student experience is designed. The ages of the students vary anywhere from 18 to more than 30 years old. Because of this, the system needs to be as easy to use as is humanly possible in order to ensure that students of varying ages can comprehend it without much difficulty. The students have a responsibility to seek the advice and guidance of trained professionals in order to improve the user experience of the online video-based learning system that is accessible via web browsers as well as via mobile applications. The experiences that can be had on either platform are highly different from one another or call for distinct kinds of attention.

In addition to this, the video-based learning method that is now being offered by Microsoft and Google offer sufficient direction for the students. Because it is an online guideline, "learn anywhere and anytime" is one of the most crucial components of an e-learning platform. The absence of quick service contributes to the product's already high level of use.

#### 5.5 Limitations of the Research

There are certain restrictions on how this study was carried out. The data collection procedures used in this research are limited to only contacting the target respondents online using Google Form rather than in person due of the global pandemic COVID-19 outbreak. Currently, academics are increasingly employing online surveys to collect primary data, in accordance with societal trends. However, using an online platform to distribute surveys limits the capacity to communicate with the intended respondents in real time and respond to their queries. Online surveys might thus encourage participants to choose a statement at random to express their opinions, which could have an effect on the validity and accuracy of the results. Therefore, even if all of the respondents' responses are accurate, the data will still be false and misleading when utilised for data analysis.

Another drawback of this study is the limited amount of time available for the investigation. In reality, time is a key factor in the production of top-notch research. Due to time constraints, the sample size for this study was the absolute minimum needed to complete a study in order to quickly achieve the validity, reliability, and research objectives. When examining the elements that affect student satisfaction with the A limited sample size could result in statistical analysis conclusions that are different from those provided by a high sample size in an online learning environment. A smaller sample size may have an impact on the reliability and accuracy of the research study since it makes it more difficult to demonstrate an exact association between the independent factors and dependent variable. In order to provide more accurate results, high-quality research should put more time and effort into striving for a sample size that accurately reflects the population as a whole.

Then it was discovered that the targeted respondents' demographic profile was imbalanced. Only a modest number of respondents from varied backgrounds were sought because students made up the majority of the study's respondents. The survey was advertised on social media in order to solicit responses from participants in the same social circle. It's possible that comments from survey participants from similar social backgrounds would change how reliable the research results were. Additionally, the survey's restriction to English-only items may exclude some additional respondents. This is because Malaysia is a mixed country with Malay, Chinese, and Indian residents.

#### **5.6 Recommendations for Future Research**

Future researchers can improve the findings of this related topic research in a number of ways. In order to minimize response falsification and to ensure that respondents understand the questions, future researchers might include a brief explanation next to each question. Future researchers may even develop a mini-chat group in real-time that is formed particularly to answer queries from responders. Furthermore, Researchers in the future should focus more on aiming for sample sizes that accurately represent the population. This is because it's possible that future research findings from more reliable and accurate population sample sizes will increase accuracy, representativeness, and consistency.

Future researchers may create a multilingual poll that includes English, Bahasa Malaysia, and Mandarin to boost response rates. Language obstacles among respondents may be overcome and eliminated, despite the fact that creating survey questions may be time-consuming and difficult. As a result, respondents were able to respond to the survey's questions with greater assurance. It is probable that as a result, survey participants will comprehend the questions more fully, improving the reliability and accuracy of the results. Future researchers are recommended to choose respondents using probability sampling approach rather than nonprobability sampling technique to avoid selecting respondents from a similar social background. The COVID-19 outbreak in Malaysia made it impossible to target a varied group of respondents, hence this study used convenience and snowball sampling employing non-probability sampling approaches. Researchers can select a sample from a large population by using the probability sampling technique, which enables them to draw precise and trustworthy statistical conclusions about the population of interest. Using a random sample technique allows the researcher to select a larger range of responses from a community, enhancing the essential representation of the population as a whole.

Future research should look at students' perceptions of and satisfaction with an approach using online video-based learning platforms. A system of video-based learning platforms combines offline and online teaching techniques as an educational strategy [66]. Many educational institutions and organisations are anticipated to continue implementing online video-based learning systems even after Malaysia enters the COVID-19 endemic phase in April 2022. However, face-to-face learning can also be combined with online video-based learning platforms simultaneously to boost efficacy [67][68]. A number of Malaysian educational institutions have started using blended learning, which enables students to attend lectures online and practical and tutorial classes in person. Less academics have focused their research on

video-based learning platform environments, particularly in Malaysia. In the future, researchers may decide to carry out a study on the Malaysian video-based learning platforms approach to aid educational institutions in improving their teaching methods.

Finally, this strategy only takes the learner's perspective into account when analysing videobased learning. Future study should take into account the opinions of both students and teachers. Therefore, another exciting topic to research in the context of video-based learning is teachers' viewpoints on the advantages and disadvantages of using videos in online classrooms..

#### 5.7 Conclusion

The main goal of this study is to look into the variables that affect how well UTAR students perceive and are satisfied with the online video-based learning environment, as well as the important distinctions between gender, age, faculty, and other groups in terms of perception and satisfaction. The findings indicate that while hypotheses H1, H3, H5, and H6 are accepted (p > 0.05) H2 and H4 are not accepted(p < 0.05).

When contrasting the relationships between actual usage and perceived usefulness and the relationship that follows between attitudes toward adoption and how simple it is to use, H2 and H4 are not accepted, demonstrating that users' opinions of and satisfaction with online videobased learning platforms are statistically similar.

The results showed that the most significant element affecting students' perspective and happiness with an online video-based learning platform is perceived usefulness actual use based on course differences. In turn, this influences the students' desire to while simultaneously raising their level of contentment and actual during the learning process, they continue learning in an online setting.

In conclusion, our research has shown that each of these characteristics may have influenced how UTAR students perceived and relished online video-based learning platforms. Thus, the results of this study could act as a roadmap for future studies on related issues that focus on how people perceive and respond in online video-based learning environments.

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# APPENDIX

# **Questionnaire Sample**

STUDENTS' PERCEPTION AND SATISFACTION ON VIDEO-BASED PLATFORM DURING COVID-19				
This survey is part of Bachelor Degree research to understand the students' perception a video-based platform during covid-19.	ind satis	faction	on	
Your Participation in this research is absolutely voluntary and confidential.				
Thank you for your time.				
SECTION A : Demographic Profile		Ū	•	
Description (optional)				
1. What is your gender? *				
O Male				
○ Female				
2. What is your age? *				
0 18-24				
O 25-29				
O Above 30				
3. What is your ethnicity? *				
O Malay				
◯ Chinese				
🔘 Indian				
Other Ethnicity				

4. Faculty of Study? *
⊖ FICT
○ FBF
⊖ FAS
○ FEGT
⊖ FES
5. Year of Study
O Year 1
O Year 2
O Year 3
O Year 4
6. Exposure to Video-Based Platform before COVID-19
○ Yes
Νο
7. Have you attended any IT courses helped you in using online video-based platform?
⊖ Yes
O No
SECTION B : Perceived Ease of Use Description (optional)
* 1. In general, the online video-based platform is easy to use.
1 2 3 4 5
Strongly Disagree

2. The way to use online	e video-bas	ed platforr	n system is	easy for n	* ne.	
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
3. My interaction with o	nline video	-based pla	tform is cle	ar and und	erstandable	* e.
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
4. It is easy for me to pl	ay and wat	ch the vide	eos used in	the online	video-base	* d platforms.
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
5. Overall, I found the onli	ne video-ba	used platfo	::: rms easy to	use.		
5. Overall, I found the onli	ne video-ba 1	ased platfo 2	rms easy to 3	use. 4	5	
5. Overall, I found the onli Strongly Disagree			rms easy to 3		5	Strongly Agree
	1	2	rms easy to 3		5	Strongly Agree
Strongly Disagree SECTION C : Perceived Us	1 O	2	rms easy to	4	0	Strongly Agree
Strongly Disagree SECTION C : Perceived Us Description (optional)	1 O	2	rms easy to	4	0	Strongly Agree
Strongly Disagree SECTION C : Perceived Us Description (optional)	1 efulness	2 O	rms easy to 3 O	4 O	nce. *	Strongly Agree
Strongly Disagree SECTION C : Perceived Us Description (optional) 1. Using online video-bas	1 of the set of the s	2 o n improves 2 O	rms easy to 3 O s my learnin 3 O	4 o g performa 4 o	nce. * 5	Strongly Agree
Strongly Disagree SECTION C : Perceived Us Description (optional) 1. Using online video-bas Strongly Disagree 2. Using online video-bas	1 of the set of the s	2 o n improves 2 O	rms easy to 3 O s my learnin 3 O	4 o g performa 4 o	nce. * 5	Strongly Agree

			::::			
3. Using online video-ba	sed platfor	ms makes		g more pro	oductive. *	
	1	2	3	4	5	
Strongly Disagree	0	0	0	$\bigcirc$	0	Strongly Agree
4. Using online video-ba	sed platfor	ms makes	it easier fo	r me to sti	udy during o	covid-19. *
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
5. I find online video-bas	ed platforn	n useful fo	or my studie	2S.		
	1	2	3	4	5	
Strongly Disagree	0	0	0	$\bigcirc$	0	Strongly Agree
SECTION D : Actual Use an Description (optional)	nd Satisfact	tion of Vide	eo-Based Le	arning Env	ironment	
					ironment	
Description (optional)					ironment 5	
Description (optional)	d platforms	for enrich	ing my kno	wledge. *		Strongly Agree
Description (optional) 1. I use online video-base	d platforms 1	o for enrich 2	ing my kno 3 O	wledge. *		Strongly Agree
Description (optional) 1. I use online video-base Strongly Disagree	d platforms 1	o for enrich 2	ing my kno 3 O	wledge. *		Strongly Agree
Description (optional) 1. I use online video-base Strongly Disagree	d platforms 1 O as it helps n	for enrich 2 O	ing my kno 3 O y learning.	wledge. * 4 〇	5	Strongly Agree
Description (optional)  1. I use online video-base Strongly Disagree  2. I watch lecture videos a	d platforms	a for enrich 2 O ne with my 2 O	ing my kno 3 O v learning. 3 O	wledge. * 4 O	5 〇	Strongly Agree
Description (optional)  1. I use online video-base Strongly Disagree  2. I watch lecture videos a Strongly Disagree	d platforms	a for enrich 2 O ne with my 2 O	ing my kno 3 O v learning. 3 O	wledge. * 4 O	5 〇	Strongly Agree

SECTION E : Attitude Tow Description (optional)	ard Use					
1. I believe that using lec	ture videos	for online	video-base	ed learning	is a good io	dea. *
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
2. I believe that using lec	ture videos	for online	video-base	ed learning	is advisable	e. *
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
3. I believe that it is bette platform rather than usin						
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree

#### Title

Thank you for your time.



Image: First output from SmartPLS

## Reliability

## Scale: Attitude Toward Use

## **Case Processing Summary**

		Ν	%
Cases	Valid	250	100.0
	Excluded <sup>a</sup>	0	.0
	Total	250	100.0

 Listwise deletion based on all variables in the procedure.

## **Reliability Statistics**

Cronbach's Alpha	N of Items
.825	3

Image: Reliability test of ATU



#### Scale: Actual Use and Satisfaction

### Case Processing Summary

		Ν	%
Cases	Valid	250	100.0
	Excluded <sup>a</sup>	0	.0
	Total	250	100.0

 Listwise deletion based on all variables in the procedure.

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
.836	3

Image: Reliability test of AU

#### Reliability

## Scale: Perceived Usefulness

## Case Processing Summary

		N	%
Cases	Valid	250	100.0
	Excluded <sup>a</sup>	0	.0
	Total	250	100.0

 Listwise deletion based on all variables in the procedure.

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
.903	5

Image: Reliability test of PU

## Scale: Perceived Ease of Use

## **Case Processing Summary**

		N	%
Cases	Valid	250	100.0
	Excluded <sup>a</sup>	0	.0
	Total	250	100.0

 Listwise deletion based on all variables in the procedure.

## **Reliability Statistics**

Cronbach's Alpha	N of Items
.901	5

## Image : Reliability test of PEOU

Path coefficients - Mean, STDEV, T values, p values					
	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
ATU -> AU	0.849	0.830	0.130	6.526	0.000
Faculty -> AU	-0.243	-0.245	0.132	1.846	0.034
PEOU -> ATU	0.287	0.303	0.301	0.954	0.171
PEOU -> PU	0.395	0.457	0.172	2.292	0.012
PU -> AU	-0.011	0.023	0.144	0.078	0.469
Faculty x PU -> AU	0.247	0.240	0.136	1.817	0.036

Image: Path Coefficients

## FINAL YEAR PROJECT WEEKLY REPORT

(Project II)

Trimester, Year: S3Y3	Study week no.: 3	
Student Name & ID: Vickram A/L Ravi (1700778)		
Supervisor: Dr. Abdulkarim Kanaan Jebna		
Project Title: Students' Perception And Satisfaction On Video-Based Platform		
During Covid-19		

## **1. WORK DONE**

- ✓ Modification some chapters for FYP1 to FYP2.
- $\checkmark$  Add some missing component from FYP2.
- ✓ Include more specifications from FYP1 to FYP2.

## 2. WORK TO BE DONE

- Distribute questioner around UTAR campus.
- Collect the data and compline in a excel file.
- Done some modification Chapter 3.

## **3. PROBLEMS ENCOUNTERED**

- Need more time to get 250 responders around UTAR campus from selected faculty.
- Difficulty to achieve the maximum number of responders.

## 4. SELF EVALUATION OF THE PROGRESS

- With the help of some friends and faculty mates, achieve the target of responders.
- Modification done based on supervisor advise,



Supervisor's signature

Student's signature

## FINAL YEAR PROJECT WEEKLY REPORT

(Project I)

Trimester, Year: S2Y3	Study week no.: 5	
Student Name & ID: Vickram A/L Ravi		
Supervisor: Dr. Abdulkarim Kanaan Jebna		
Project Title: Students' Perception And Satisfaction On Video-Based Platform		
During Covid-19		

## 1. WORK DONE

- $\checkmark$  Achieve target responder to have valid research.
- ✓ Chapter 1-4 done based on supervisor guide.
- $\checkmark$  All analysis done and achieve the aim of research.

## 2. WORK TO BE DONE

- $\circ$  Work on chapter 5,
- Need related the research based on original objective and research question.
- Reedit some part of the research.
- Add all the prove of test run during SMARTPLS & SPSS

## **3. PROBLEMS ENCOUNTERED**

- > The modification of accepted result take time.
- ➢ Format error.

## 4. SELF EVALUATION OF THE PROGRESS

• With a lot knowledge sharing by supervisor I learn new skill such as access to some software. On the other hand with full effort I work on this FYP although less time I have to done it.

Supervisor's signature

t's signature Studer

## POSTER

# STUDENTS' PERCEPTION AND SATISFACTION ON VIDEO-BASEDPLATFORM DURING COVID-19

RQ1: Are there any significant difference between courses (IT-Specialist and Non-IT) in terms of how students actual use video-based learning platforms?

RQ2: What are the TAM variables that affect how students perceive and satisfaction about video-based learning platforms?

RQ3: How does "course difference" affect the correlation between the perceived usefulness and actual use of video-based learning?

RQ4: To what extent are students satisfied with COVID-19's online video-based platform learning?

Bachelor of Information Systems (Honours) Business Information Systems Faculty of Information and Communication Technology (Kampar Campus), UTAR

# Methodology

Target - UTAR Students Method - Convenience Sampling Method



# **Discussion**

Demographics showed that 50.4% of responders were female. Participants were 18–24 have higher value. However, 57.2% of students identified as Chinese. FICT had half of the IT students, while the other faculties had half of the non-IT students.

Theoretical implications Less study has been done on this topic of online video-based learning platforms with the moderater of course differences relationship wit PU & AU.

> Practical Implications Effectiveness Ease of Use

# Findings

#### H1, H3, H5, H5 WAS ACCEPTED H2, H4 WAS NOT ACCEPTED

Table 4.6: Path Analysis for Structural Model

VIF	T-Statistics	P-Values	Results
1.378	6.526	0.000	Accept
1.232	1.846	0.034	Accept
1.00	0.954	0.171	Reject
1.00	2.292	0.012	Accept
1.476	0.078	0.469	Reject
1.367	1.817	0.036	Accept

When contrasting the relationships between actual usage and perceived usefulness and the relationship that follows between attitudes toward adoption and how simple it is to use, H2 and H4 are not accepted, indicating that there is no statistically significant difference in how users perceive and are satisfied with online video-based learning platforms.

The results showed that the most significant element affecting students' perspective and happiness with an online video-based learning platform is perceived usefulness actual use based on course differences

# CONCLUSION

## PLAGIARISM CHECK RESULT

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## Form Title: Supervisor's Comments on Originality Report Generated by Turnitin for Submission of Final Year Project Report (for Undergraduate Programmes)

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## FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

Full Name(s) of Candidate(s)	VICKRAM A/L RAVI
ID Number(s)	17ACB00778
Programme / Course	Bachelor of Information Systems (Honours) Business Information Systems (IB)
Title of Final Year Project	Students' Perception And Satisfaction On Video-Based Platform During Covid-19

Similarity	Supervisor's Comments (Compulsory if parameters of originality exceed the limits approved by UTAR)
Overall similarity index: <u>9</u> %	
Similarity by source	
Internet Sources: <u>5</u> % Publications: <u>5</u> %	
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<b>Number of individual sources listed</b> of more than 3% similarity: <u>0</u>	

Parameters of originality required, and limits approved by UTAR are as Follows:

(i) Overall similarity index is 20% and below, and

(ii) Matching of individual sources listed must be less than 3% each, and

(iii) Matching texts in continuous block must not exceed 8 words

Note: Parameters (i) - (ii) shall exclude quotes, bibliography and text matches which are less than 8 words.

<u>Note:</u> Supervisor/Candidate(s) is/are required to provide softcopy of full set of the originality report to Faculty/Institute

Based on the above results, I hereby declare that I am satisfied with the originality of the Final Year Project Report submitted by my student(s) as named above.

- Signature of Supervisor	Signature of Co-Supervisor
Name: Dr. Abdulkarim Kanaan Jebn	Name:
Date: <u>06/12/2022</u>	Date:

## **FYP 1 CHECKLIST**



## UNIVERSITI TUNKU ABDUL RAHMAN

## FACULTY OF INFORMATION & COMMUNICATIONTECHNOLOGY (KAMPAR CAMPUS)

## **CHECKLIST FOR FYP1 THESIS SUBMISSION**

Student ID	17ACB00778
Student Name	VICKRAM A/L RAVI
Supervisor Name	Dr. Abdulkarim Kanaan Jebna

<b>TICK</b> $()$	DOCUMENT ITEMS
	Your report must include all the items below. Put a tick on the left column after you have
	checked your report with respect to the corresponding item.
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	Signed form of the Declaration of Originality
	Acknowledgment
	Abstract
	Table of Contents
	List of Figures (if applicable)
	List of Tables (if applicable)
	List of Symbols (if applicable)
	List of Abbreviations (if applicable)
	Chapters / Content
	Bibliography (or References)
	All references in bibliography are cited in the thesis, especially in the chapter
	of literature review
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