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Identifying factors that influence intentions to use a metaverse concept platform

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ABSTRACT

The increasing trend related to discussions about metaverse technology that occurs indicates that there is high enthusiasm for the metaverse. There are various uses that can provide benefits, as games, entertainment media, virtual tourism, and also as a medium for more immersive marketing. In Indonesia itself, the reasons people are interested in trying the metaverse are the freedom to express themselves more widely, the existence of higher technology in communicating, the existence of new ways to open up wider market opportunities, and being able to improve the quality of education through more interactive learning. Previous research stated that the Augmented Reality (AR) feature had a significant influence on customer engagement and buying behavior. So the author will conduct research on factors that influence intentions to use a metaverse concept platform, namely Roblox using the Technology Acceptance Model theory. Based on the results from 100 respondents, it was found that Experience, Technology Anxiety, Perceived Ease of Use, and Perceived Usefulness had an influence on the intention to use the Metaverse concept platform.



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Introduction

Bringing the real world into virtual spaces is becoming increasingly common thanks to technological developments, enabling real-world based interactions in virtual spaces. Metaverse, as a result of these developments, allows users to interact virtually with avatars that represent them. Metaverse combines social media, online gaming, augmented reality (AR), virtual reality (VR), and cryptocurrency (Sopiandi & Susanti, 2022). As part of the new generation of the internet (web 3.0), the metaverse also includes AI, blockchain, and other digital innovations (Monaco & Sacchi, 2023).

In October 2021, Facebook changed its name to Meta, marking its ambition to enter the metaverse platform through Reality Labs which develops AR & VR hardware and software as well as Horizon World. Although the metaverse search trend has declined, experts predict that by 2040 the metaverse will be mature and used by more than half a billion people (Anderson & Rainie, 2022). Recent studies further suggest that continuous investment by technology companies and improvements in immersive technologies are accelerating the practical implementation of metaverse ecosystems across multiple industries (Adhini & Prasad, 2024).

Metaverse has wide applications, including in gaming, media, entertainment, tourism, buying and selling virtual property, and metaverse-based education. In Indonesia (Sumayah et al., 2023), sentiment towards the metaverse is positive, with 70.69% of Twitter tweets showing enthusiasm. Reasons why people are interested include ease of expression, use of high technology in communication, broad marketing opportunities,

improving the quality of education, and changes in the way of selling and advertising. Beyond these sectors, recent studies have highlighted the increasing adoption of metaverse technologies in healthcare and higher education, demonstrating that immersive virtual environments are becoming an important platform for learning, collaboration, and professional training while simultaneously revealing several technological and psychological barriers that influence users' willingness to adopt metaverse platforms (Baudier et al., 2025; Damar & Koksalmis, 2026; Mohammad et al., 2026).

Based on Dwivedi et al. (2023) research said that there is a huge opportunity for brands and marketers to transform their relationships with customers as the metaverse becomes increasingly sophisticated and will perhaps develop into a truly mixed reality and augmented reality ecosystem. Immersive, which is widely adopted by society and companies.

The ability to create online virtual experiences on this metaverse will allow marketers to engage in interactive product experiences with their customers that will influence brand attitudes, product knowledge, and purchase intent (Ramadan, 2023). Similarly, immersive experiences within the metaverse have been found to significantly improve users' perceived value and behavioral intentions by increasing their sense of presence and interaction with virtual environments (Liu & Park, 2024).

Digital marketing using AR and the metaverse concept offers great opportunities for companies to reduce operational costs, improve marketing strategies and strengthen relationships with stakeholders. Metaverse enables more immersive and interactive customer experiences, which increases marketing effectiveness and transforms customer relationships. For example Lovendra (2021), VR can be used to attract tourists by creating digital twins of tourist destinations, while AR is used in the beauty industry for virtual try-on (VTO) features, which increase customer engagement and purchasing behavior. Previous studies have also shown that AR and VR technologies significantly improve users' acceptance and learning experiences through enhanced immersion and interactivity (Shen et al., 2022).

In Indonesia, initial access to the metaverse can be achieved through the Roblox game, which supports avatars and cryptocurrency transactions. Roblox helps users build their own space by providing various resources for individuals to develop games (Han et al., 2021). One of the games, Car Driving Indonesia, allows users to buy virtual vehicles and homes, and offers opportunities for vehicle brands and housing developers to promote their products in the digital world.

Despite the rapid growth of metaverse research, previous studies have primarily focused on educational environments (Al-Adwan et al., 2023; Alzahrani & Alzahrani, 2025; Baudier et al., 2025), healthcare applications, and tourism experiences (Liu & Park, 2024). Limited empirical evidence is available regarding users' behavioral intentions toward metaverse-based gaming platforms in developing countries, particularly Indonesia. Furthermore, only a few studies have simultaneously examined the roles of Experience and Technology Anxiety as external variables within the Technology Acceptance Model (TAM) to explain metaverse adoption.

Based on the description above, it is related to the use of the metaverse which can provide benefits to marketing, as well as its significance in increasing consumers' tendency to buy a product. Therefore, this study aims to investigate the factors influencing users' intention to use a metaverse-concept platform by extending the Technology Acceptance Model (TAM) with Experience and Technology Anxiety as external variables using Car Driving Indonesia (CDID) on the Roblox platform as the research object. The findings are expected to contribute to the understanding of user acceptance toward metaverse platforms and provide practical implications for developers and digital marketers in designing immersive virtual environments that better meet users' expectations.

Literature Review

Metaverse

The term "Metaverse" first appeared in 1992 in the fictional novel *Snow Crash* by Neal Stephenson, which described a computer-generated universe as an urban environment, essentially consisting of a single side street surrounding an artificial planet. Access to the metaverse is possible via a global communications network, either via virtual reality (VR) headsets or special terminals.

The word Metaverse consists of the prefix "Meta" and the suffix "verse". Meta itself is a term from Greece, and is popularly used as a prefix meaning after or afterwards. For example, the word "metadata" often means something more than just data, especially with self-referential connotations. The term "verse" is an abbreviation of "universe". Inspired by it, we argue that the portmanteau word "Metaverse" can be thought of as a computer-generated virtual space that exists outside the universe (Shi et al., 2024).

Based on Yang (2023) states that Metaverse is a form of expanding conventional communication which is only two-dimensional to multidimensional, with the aim of respecting, learning tools, media for entertainment and disseminating culture.

TAM

Fred Davis in 1985 introduced a concept that can identify technology acceptance, where the concrete form of use of a system is a response that can be described or predicted using user motivation, which will be influenced by external stimuli through the actual features and capabilities of the system itself. In 1986 Fred Davis perfected his concept and produced a new concept, namely TAM (Marangunić & Granić, 2015).

Furthermore, Venkatesh and Davis proposed a new development of the TAM concept, namely TAM 2. In this model it is said that an individual's attitudes and intentions in trying to learn to use new technology are determined by their considerations regarding the perceived benefits of the technology (Kao & Huang, 2023).

Beyond TAM and TAM2, technology acceptance research has evolved into broader frameworks such as the Unified Theory of Acceptance and Use of Technology (UTAUT), which integrates social influence, facilitating conditions, and performance expectancy to explain users' behavioral intentions toward emerging technologies. Nevertheless, TAM remains one of the most widely applied models because of its simplicity and strong predictive ability across various technology adoption contexts (Venkatesh et al., 2016).

Peng et al. (2023) mentioned that many empirical studies on TAM have found that perceived usefulness and ease of use influence users' desire to continue using technology. This finding is consistent with the systematic literature review conducted by Granić & Marangunić (2019), which concluded that perceived usefulness and perceived ease of use remain the two strongest predictors of technology acceptance across educational and digital learning environments. A person's perception of high relative ease of use will influence the desire to continue using, which in turn will drive actual technology adoption.

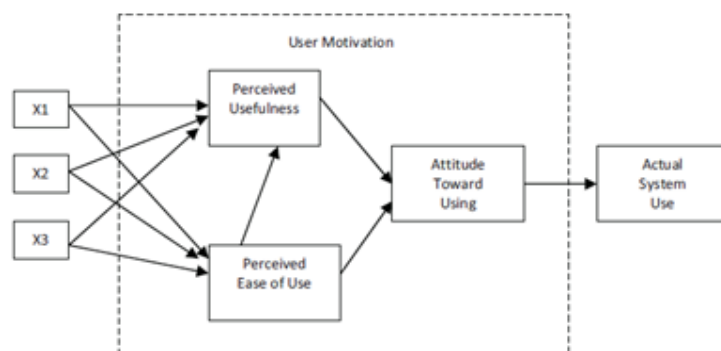


Figure 1. Technology Acceptance Model

Research Framework and Hypothesis

External Variables

The external variables used in the research are Experience (E) and Technology Anxiety (TA).

Experience

Experiences are events that occur as a result of responses to simulations or stimuli. Experience can also be defined as a collection of skills acquired from previously carried out activities. Budiman (2021) a person's previous interactions or exposure to a system and the knowledge gained from use are called experience. Researchers focused on the level of engagement or involvement of respondents in the Metaverse platform in this study (Castiblanco Jimenez et al., 2020).

H_1 : Experience (E) has an significant influence on Perceived Ease of Use (PEOU).

H_2 : Experience has an significant influence on Perceived Usefulness (PU).

Technology Anxiety

The theory of technology anxiety originates from early research on computer anxiety. Although the early invention of computers showed the potential to facilitate human life and work, many researchers are interested in the psychological nature of people who use computers naively, which causes them to have anxious and negative attitudes towards computers (Tsai et al., 2020). Technology anxiety is a phenomenon that emerged along with advances in information technology. This occurs when users begin to use technology

and applications extensively and importantly in their daily lives, causing them to be anxious or worried about the effects (Pratama & Widodo, 2020).

H_3 : Technology Anxiety (TA) has an significant influence on Perceived Ease of Use (PEOU).

H_4 : Technology Anxiety (TA) has an significant influence on Perceived Usefulness (PU).

Technology Acceptance Model Constructs

The following are the variables contained in the Technology Acceptance Model theory:

Perceived Ease of Use

Perceived ease of use is used as a measure of a person's level of confidence in a system or technology that makes it easier for them to carry out tasks (Ashsifa, 2020). The core assumption in TAM is that individuals' use of technology is mediated by their acceptance of the technology, which in turn is determined by two cognitive factors, namely perceived usefulness (PU) and perceived ease of use (PEOU) (Tahar et al., 2020).

H_5 : Perceived Ease of Use (PEOU) has an significant influence on Perceived Usefulness (PU).

H_6 : Perceived Ease of Use (PEOU) has an significant influence on Attitude Towards Use (ATU).

Perceived Usefulness

The concept of perceived usefulness is a concept that refers to the extent to which a person believes that using a system or technology will improve their work performance. This is an important component of the technology acceptance model, also known as TAM, which measures how users accept and use new technology (Tahar et al., 2020). Meanwhile Ashsifa (2020) said that perceived usefulness is used to measure a person's confidence in using a particular system that can improve performance. Apart from that, perceived usefulness is also used as a benchmark for the profits obtained

H_7 : Perceived Usefulness (PU) has an significant influence on Attitude Towards Use (ATU).

H_8 : Perceived Usefulness (PU) has an significant influence on Behavioral Intention (BI).

Attitude Towards Use

Attitude towards use is how someone has an attitude towards using the system, which can be accepted or rejected. If someone uses technology to complete a task, there is an impact from that response. A person's attitude then influences his desire to like or dislike something; This attitude also influences his desire to use the system or not. One component that influences individual behavior is perspective (Rimawati & Saptomo, 2019).

H_9 : Attitude Towards Use (ATU) has an significant influence on Behavioral Intention (BI).

Behavioral Intention

A person's desire to carry out an activity or his tendency to use a technology is called intensity or intention (Tandra, 2021). The level of use of computer technology by a person can be predicted by taking into account various factors, such as the desire to increase self-development using technology that supports it, motivation to continue using the technology, and the desire to motivate other users (Pratama & Widodo, 2020). In other words, many things influence a person's behavior related to computer technology. This includes the desire for self-improvement, self-motivation, and the desire to encourage others to use technology.

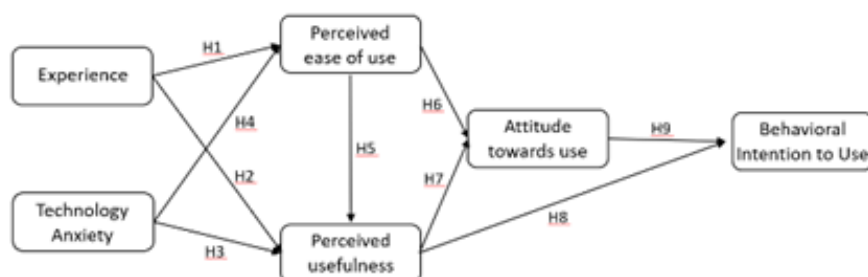


Figure 2. Research Model

Method

Object Of Research

Because currently there is no platform in the form of a metaverse, the object used in this research is a game that has a metaverse concept. Car Driving Indonesia is one of the games available on the Roblox platform,

which is an online game platform and game creation system that gives users the ability to develop and play games that have been created by other users. Roblox's vast and diverse community creates a variety of virtual worlds with unique rules and mechanisms.



Figure 3. Car Driving Indonesia

Additionally, Roblox users can interact, share experiences, and make transactions using virtual currency known as Robux, which can be converted into real money. The CDID (Car Driving Indonesia) game allows users to explore several big cities in Indonesia such as Jakarta, West Java and Central Java virtually as well as virtual ownership of vehicles provided by the game developer using virtual currency (Robux) which can be obtained via purchase by exchanging rupiah. CDID users can get virtual money as a bonus by working on daily objectives determined by the developer, they can also get virtual money by working in the game, such as being a taxi driver, office worker, expedition courier and also being a commercial vehicle driver.

Users can use the money they will collect to buy vehicles and modify their vehicles to be unique. While driving their car, they can see many different parts of Indonesia, along with city icons such as the Gelora Bung Karno Stadium and the Selamat Datang Statue, which is a hallmark of the DKI Jakarta province.

Target population

This panel aims to identify the factors that influence the intention to use the metaverse in Indonesia. Therefore, participants in this study were required to meet several criteria: they must be users of the Indonesian Car Driving game, reside in the Jabodetabek area, and be at least 17 years old.

This research will use the unknown population formula offered by Lemeshow because there is no data on how many users are active on the Roblox platform. The number of samples whose population is unknown can be calculated using the Lemeshow formula. The z value, or 95% confidence level, is combined with the d value, or 10% error rate, and the p value is set at 0.5 for an unknown population size. So the sample figure was found to be 96.04% which was rounded up to 100 respondents.

Data Collection

Generally data is divided into two, the first is primary data. Primary data shows the authenticity of information or in other words data that has never been processed by certain parties. Meanwhile number two is secondary data, this data shows the inauthenticity of the information contained in the data because it has been processed for a purpose. To obtain data, this research was carried out by means of a literature study, namely by collecting various information related to the metaverse and technology acceptance models including books, scientific journals, conference proceedings and online articles. Apart from that, researchers will also distribute a questionnaire containing indicators to determine the acceptance factors of the metaverse in Indonesia. Later the questionnaire will be distributed online to make it easier to collect, process and visualize it.

Variable Constructs

In determining whether the hypothesis is accepted, a research construct is used in the form of a statement based on the variables used in the research. In total there are 30 statements that will be distributed to the respondents.

Table 1. Variable Constructs

Construct	Number of Items
Experience	6
Technology Anxiety	4
Perceived Ease of Use	7
Perceived Usefulness	6
Attitude Towards Use	3
Behavioral Intention	4

Data Measurement

Measurement is the assignment of numbers or symbols to various characteristics or variable values in accordance with applicable rules. In this study, the Likert scale will be used, which is commonly used in the form of a questionnaire. The Likert scale in this study uses 5 scales in answering the questionnaire.

Table 2. Likert Scale

Category	Weight
Strongly Disagree	1
Disagree	2
Neutral	3
Agree	4
Strongly Agree	5

Results and Discussions

Demographic Information

Based on the findings in this study, it was found that 96% of the respondents in this study were aged 17-25 years old, while in the 26-30 years old age range there were 2% of the respondents, and in the 31-40 years old age range there were 2% of the respondents. So the majority of respondents in this study were aged between 17-25 years old. The number of men and women is 87% and 13% so it can be concluded that men are the majority in this study.

As for the work category, students dominated this research with 46 respondents while school students were 36 respondents. Meanwhile, in third and fourth place were employees with seven respondents and entrepreneurs with five respondents. There are two respondents who work as freelancers, then there are contractors, content creators, gamers, and not yet working, each of which has one respondent.

A total of 60 respondents who were the majority in this study had a high school education, while 25 respondents had a junior high school education and 14 respondents had a bachelor's degree and there was one respondent who was a master's graduate.

The majority of respondents with a total of 75 people in the study have played the Car Driving Indonesia (CDID) game for more than 3 months, then in second place with a total of 17 respondents have played CDID for a period of 1-3 months, and the last for less than 1 months in playing CDID a total of eight respondents.

Within a week, 54 respondents spent more than seven hours or if divided per day, spent more than one hour playing CDID, apart from that there were also 26 respondents who took the time to play CDID for 3-7 hours within a week. , and finally 20 respondents spent less than three hours a week playing CDID games.

Of the total 100 respondents, PC or personal computer devices were the most widely used with 63 people, while 46 respondents used Android devices, followed by 26 iOS devices, 5 Mac devices, Xbox 2 consoles, and tablets. 1.

Data Analysis

This research will test the research results using the SEM method; This method can measure latent variables through estimating parameters or indicators rather than directly measuring them. Initially, SEM was developed from a general linear model or GLM which used multiple regression. Because it uses confirmatory rather than exploratory modeling, SEM is more suitable for quantitative types (Abdillah & Hartono, 2015).

Validity test

Convergent validity

Based on calculations carried out using SmartPLS, it was found that several indicators had values below 0.7, including; Experience 3 (E3), Technology Anxiety 4 (TA4), Perceived Usefulness 2 (PU2), Perceived Ease of Use 2,5,6 (PEOU2,5,6), and Behavioral Intention 1,3 (BI1,3). So that indicators whose values are insufficient are removed and recalculated without involving these indicators in testing this outer model. After recalculating without using these indicators, it was found that the outer loading value for each indicator was greater than 0.7. As for other methods of testing validity based on the ave value, it can be said that the variable is valid if it has a value greater than 0.5, where the ave value of all variables in the study is greater than 0.5, which can be seen in the table below.

Table 3. AVE Value

Variabel	AVE Value	Description
Experience	0.685	Valid
Technology Anxiety	0.694	Valid
Perceived Usefulness	0.620	Valid
Perceived Ease of Use	0.662	Valid
Attitude Towards Use	0.617	Valid
Behavioral Intention	0.794	Valid

Reliability Test

For research that uses questionnaire data collection techniques as a measuring tool, one condition must be met: the questionnaire must be reliable. A person's answers to a questionnaire must be consistent or stable over time.

Table 4. Cronbach's Alpha Value

Variable	Cronbach's Alpha	Description
Experience	0.886	Reliable
Technology Anxiety	0.779	Reliable
Perceived Usefulness	0.847	Reliable
Perceived Ease of Use	0.830	Reliable
Attitude Towards Use	0.700	Reliable
Behavioral Intention	0.741	Reliable

Table 5. Composite Reliability Value

Variable	Composite Reliability	Description
Experience	0.916	Reliable
Technology Anxiety	0.872	Reliable
Perceived Usefulness	0.891	Reliable
Perceived Ease of Use	0.887	Reliable
Attitude Towards Use	0.828	Reliable
Behavioral Intention	0.885	Reliable

In this research, it can be concluded that all variables meet the requirements to be considered reliable, namely having an overall Croanbach Alpha value greater than 0.6. Based on calculations carried out using the current model, it was found that the overall composite reliability value of the variables exceeded the value of 0.7; in other words, all variables used in this research are considered reliable.

Determinant Coefficient

The R Square value is divided into three categories, namely R Square <0.75 which means strong, R Square <0.50 moderate, and R Square <0.25 which means weak. The greater the value, it shows that the variable is more dependent on other variables (Budiman, 2021).

In this research, the value can be seen that the influence exerted by the variables perceived usefulness and attitude towards use on behavioral intention can be explained by 59.4% or in the moderate category, where the remaining 40.6% is another variable not used in this research. The experience and technology anxiety variables together have a 59.5% or moderate influence on the perceived ease of use variable, while the remaining 40.5% is influenced by other variables that are not in this research. In this study, the perceived usefulness variable was influenced by 75.2% or quite strongly by the variables experience, technology anxiety, and perceived ease of use simultaneously, while the remaining 24.8% was another variable that was

not used in this research. Meanwhile, the variables perceived ease of use and also perceived usefulness have an influence of 51.9% or moderate on the attitude towards use variable, 48.1% is another variable that is not used in this research.

Effect Size

Effect Size Testing (F2) is used to determine whether the removed exogenous construct has a significant effect on the endogenous construct. An effect size or F2 of 0.02 is considered small, 0.15 is medium, and 0.35 is large. However, if the value is below 0.02, the effect is negligible or absent.

Based on the F2 value of 0.071, the results of this study indicate that the experience variable has a small influence on the perceived ease of use variable. In other words, the experiences users have while using the system, such as enjoyment in using the metaverse and freedom in developing ideas through CDID, do not necessarily influence their perception of how easy the system is to view.

Furthermore, the experience variable has an F2 value of 0.060 compared to the variable perceived usefulness or small influence. This shows the various experiences experienced by CDID game users, such as animating the tasks in the game and vehicles that adequately represent the original vehicles in the CDID game do not affect the user's perception of the usefulness of the system.

Based on the F2 value of 0.212, the technology anxiety variable has a moderate influence on the perceived ease of use variable. Users find the existing CDID gaming technology makes it easy to use.

Technology anxiety has an F2 value of 0.166, which means it has a moderate effect on the variable perceived usefulness. This is because users' lack of anxiety when using CDID makes them feel that CDID is helping them.

The perceived ease of use variable has an influence of 0.184 on the perceived usefulness variable. Users' views about the usefulness of the system are influenced by the ease of use of the CDID, such as features that are easy to operate and remember, the use of maps that are easy for the user to remember, and the suitability of the CDID game to the user's wishes.

Based on the F2 value of 0.255, the variable perceived ease of use of CDID has a moderate influence on the attitude variable towards use. This is due to perceived ease of use including easy to remember maps and ease of remembering existing features. This has an impact on users who try the vehicles in the CDID and are happy.

Based on the F2 value of 0.028, the perceived usefulness variable has a small influence on the attitude variable towards use. By using CDID, users can enjoy several benefits. These include the ease of exploring the virtual world, the ease of trying out available vehicles, the ease of visiting, and the thrill of living in a virtual world. User enjoyment in trying out in-game vehicles, satisfaction in using the metaverse, and acceptance of the game CDID.

In accordance with the requirement that an F2 value greater than 0.35 has a significant influence, the perceived usefulness variable has a significant influence on the behavioral intention variable. CDID users gain many benefits, such as convenience in exploring the virtual world, the ease of trying various vehicles through the game rather than directly without having a vehicle in the real world, and a positive effect on the intention to use the system.

Since the F2 value is 0.009, which is much smaller than 0.02, the attitude variable towards use is not influenced at all. Views regarding the use of CDID, such as enjoying trying new vehicles in the real world, enjoying using the metaverse, and very accepted, do not influence the user's desire to continue following developments and learning about metaverse technology.

Hypothesis Test

Bootstrapping technique is used to prove the SmartPLS hypothesis. This technique produces output inner values in the model. The results of this technique explain the relationship between variables and explain the research hypothesis. To be able to say that there is an influence between variables, a p value is needed that is smaller than alpha 0.05, whereas to know the significance between variables, you must have a t statistical value that is greater than the t table of 1.98.

Based on the results of bootstrapping calculations with Smartpls software, it was found that 7 hypotheses were accepted or there was a significant influence based on a p value greater than alpha 0.05 and a statistical t value greater than t table 1.96. The accepted hypotheses are H1, H2, H3, H4, H5, H6, H8. Meanwhile, the hypothesis that was rejected was H7 because it had a p value of 0.182 which was greater than alpha 0.05 and

a t statistic of 1.335 which was smaller than the t table of 1.96, the next hypothesis that was rejected was H9 which had a p value greater than alpha 0.05, namely 0.340 and The statistical t value is 0.954 which is smaller than the t table of 1.96. It can be concluded that the Perceived Usefulness variable has no influence on the Attitude Towards Use variable, and the Attitude Towards Use variable has no influence on Behavioral Intention.

Discussions

Based on the findings in this research, it is stated that there is a significant influence between the experience experienced by users and the perceived ease of using the metaverse. The level of user experience is measured by the enjoyment of playing CDID where users can interact with other users while playing roles as well as the influence of the device on the loading speed of CDID games, and also freely create creations in CDID. Users can make modifications to the vehicles they own, such as improving engine performance so the vehicle drives faster, replacing accessories such as lights, wheels and vehicle color to make the vehicle match the owner's wishes, where these modification services can be easily accessed in the game. CDID by visiting an available workshop to make modifications to the vehicle you own. Apart from that, the ease of memorizing the maps in the CDID game certainly increases the user's desire to be able to create their own vehicles. In playing CDID, users are required to have money in the game which can be obtained by doing work provided by the game developer. There are various kinds of work that can be done, such as being an office employee, a taxi driver, an online motorcycle taxi and also as a delivery truck. Another way to have money in this game is by exchanging robux which is a virtual currency on the Roblox platform. Users can buy robux through the application and make payments with real currency then the robux they have obtained can be exchanged for rupiah in the game. CDID.

Based on the findings of this research, it was found that there is an influence from the user's experience in playing CDID on the perception of usefulness obtained when playing CDID, one of which is when the user engages in work as a truck driver to deliver goods from one area to another in order to complete tasks and earn money. can be used in this game to buy vehicles and make modifications to these vehicles directly. Users can experience life in a virtual world, namely working to fulfill their desires. The vehicles in the CDID game also represent the original vehicle, but in CDID both the brand and the name of the vehicle are not completely the same due to copyright on the vehicle, however, users still feel that these vehicles can be easily owned without having to own the original vehicle. because users don't need to spend a lot of money to buy a vehicle, just do work in the CDID game which will later be rewarded and can be used to own the desired vehicle.

Based on the findings in this study, it is said that the absence of anxiety in using the CDID influences the perception of ease in using the CDID. The comfort felt by users in using CDID such as not requiring additional devices such as head mounted displays or movement sensors used on the hands of course not everyone is comfortable with this technology therefore CDID does not use these devices. Users feel comfortable because they only need to use conventional devices such as smartphones, personal computers or game consoles such as Xbox. The use of this uncomplicated technology certainly makes the features contained in the CDID easier to access and remember without the need for other additional devices, not feeling fear and doubt in playing the CDID also gives a signal that users will easily operate the features contained in the game Apart from that, they can also easily remember existing maps in order to live life in their virtual world.

Based on the findings contained in this research, it is said that users' lack of anxiety in playing CDID has an influence on the perception of usefulness obtained from CDID games. If users feel afraid and also doubtful about CDID games, of course they will not feel the benefits obtained through this game, such as ease of use. trying vehicles through games rather than trying vehicles directly, the ease of visiting areas in Indonesia virtually and experiencing life in them such as doing work and socializing with other users, as well as the ease of owning a vehicle without having to buy one in the real world, which of course is in addition to the costs involved. The expenses incurred in owning a vehicle are high, including fuel expenses, vehicle tax, replacement of spare parts and routine maintenance, so this makes owning a vehicle in the virtual world easier than in the real world. The comfort of using the technology in the CDID game also has an impact on the user's comfort in exploring the virtual world. CDID users can visit three provinces in Indonesia such as DKI Jakarta, Central Java and also West Java. Users can visit various places that are characteristic of the area, such as the Gelora Bung Karno Main Stadium, Hotel Indonesia Roundabout and other places which are a form of digital twin technology in the form of virtual objects based on real objects.

Based on the findings in this research, it is known that the perceived ease experienced by users in operating the CDID influences their perception of the usefulness of using the CDID. This shows that the easier a CDID is to use, the greater the benefits felt by its users. Features that are easy to remember and operate allow users to more easily play CDID, such as driving a vehicle or doing work. For example, when the user's avatar is near a vehicle, an automatic notification will appear on the screen to board the vehicle. If the fuel indicator runs out, the user can go straight to the fuel filling station, and a choice of fuel type will automatically appear according to the vehicle engine type, with the user's money deducted according to the nominal filling amount. The ease of remembering CDID in-game maps also makes users comfortable exploring the virtual world, allowing them to visit typical places of a region or another province using vehicles.

Based on the findings of this research, it is known that the ease of use of the CDID influences the user's attitude towards the game. This influence is based on the ease of operating in-game features, the ease of remembering existing features and maps, and the suitability of the game CDID to the user's wishes. This contributes to the feeling of joy experienced when playing CDID, such as the opportunity to try vehicles that have never been experienced in person, as well as the satisfaction of using the metaverse which allows users to experience life and explore a virtual world that represents Indonesia through three provinces: DKI Jakarta, West Java, and Central Java. Apart from that, the vehicles available in the game are also suitable for the Indonesian market. These various conveniences make it easier for users to receive and enjoy CDID games. On the other hand, if the features are difficult to operate and not easy to remember, users will most likely switch to another game.

Based on the findings in this research, it was found that the usefulness experienced by users did not have a significant influence on their attitudes towards CDID. Although one of the benefits of the CDID game is that it makes it easy for users to try out vehicles without having to do it directly, this does not necessarily make users feel happy, satisfied, or accept CDID. Other benefits such as convenience in exploring the virtual world and ease of living in the virtual world also do not affect user acceptance of the CDID system. This may be due to additional burdensome requirements, such as the need for special permits to own more than one vehicle and the obligation to purchase a gamepass for vehicle modifications, retro vehicle ownership, and luxury home ownership in CDID. Users must buy robux first and then use it to buy various game passes available. This condition appears to reduce the positive influence that might result from the game's benefits, thereby not influencing how users receive the CDID system.

Based on the findings in this research, it was found that the perceived usefulness of CDID influences the intention to use CDID. This is due to the various benefits felt by users, such as comfort when exploring and experiencing life in the virtual world through work, as well as ease of interacting with other users. This interaction allows for role-playing between users and the exchange of information regarding their vehicle modifications, similar to what happens in the real world. These benefits make users want to continue following CDID game developments, such as the release of new vehicles, new modification features, or game map updates, which provide their own enjoyment. Apart from that, the ease of trying and owning a vehicle in the virtual world also encourages users to continue using CDID, to increase their insight regarding the virtual metaverse world.

Based on the findings of this research, it is known that attitudes towards using CDID do not have a significant influence on the intention to continue using or getting the latest information about the game. The feeling of excitement that users experience when trying a vehicle they have never tried before directly does not influence their desire to follow the latest developments in CDID games. Even though users can easily accept game CDIDs, this does not automatically make them want to stay up to date with the latest information. The main motivation for users to stay up to date with CDID developments is more related to specific things such as the launch of new vehicles or in-game map updates. Therefore, other factors that are more oriented towards new content and features are likely to have more influence on users' intentions to continue following CDID developments.

Implication

In CDID game developers cover several important aspects. First, developers can pay attention to developments in VR devices such as head-mounted displays and other related technologies. They need to consider the right time to implement this technology to provide a more immersive experience to users. Implementation of VR technology should be carried out when the device is easily accessible to all users. Otherwise, this service may not be utilized optimally due to limited user access to the device.

Currently, the features contained in CDID are quite good considering that users do not experience difficulties in using and remembering these features, so this good thing needs to be maintained so that in the future we don't carelessly add features that can make it difficult for users to operate them.

Apart from that, developers can also add new job types in the game, such as being a police officer, firefighter, and medic. This addition not only enriches the role that users can play but also provides education regarding driving etiquette on the road. This is very relevant considering that the demographic majority of respondents are 17-25 years olds who still have an unstable emotional level, especially in the context of driving on the highway.

Furthermore, CDID developers can collaborate with vehicle manufacturers to include their vehicle models in the game. In this way, manufacturers can create new, more immersive marketing channels, not just through photos and videos, but by giving users the opportunity to see the interior, engine and drive the vehicle virtually.

Apart from that, activities such as amazing races can be held by driving long distances while completing challenges at checkpoints which are iconic buildings from various regions. The winners can get prizes in the form of virtual vehicles. This strategy is very in line with the reason people are interested in the metaverse concept, namely opening up new marketing channels that are bigger and more interactive. In this way, CDID game developers can create richer and more engaging experiences for users and provide added value for vehicle manufacturing partners.

Limitation and Future Research

This research has limitations because it only uses TAM (Technology Acceptance Model) theory. Therefore, future research can use other theories to understand intentions or acceptance of the metaverse. Future researchers are also expected to be able to use additional variables that have not been explored in this research to identify other factors that influence intention to use the metaverse. Apart from that, future researchers are expected to be able to use different research objects, considering that on the Roblox platform alone there are various kinds of games that allow virtual interaction between users. This variety of research objects will help in understanding the dynamics of interaction in the wider virtual world.

Future researchers are also advised to expand the research sample, not just limited to the Jabodetabek area. By expanding the geographic scope of the sample, the research results will be more representative and can provide more comprehensive insight into the factors that influence intentions to use the metaverse in various regions.

Conclusions

Based on the findings of this research, perceived usefulness is a determining factor in users' intention to use the metaverse. The high level of usefulness perceived by users increases their desire to obtain the latest information and continue using CDID. Perceived usefulness in playing CDID is influenced by several factors, particularly positive user experiences, comfort with the technology used, and the ease of operating the available features and gameplay. Positive user experiences within the CDID game strengthen users' perceptions of its usefulness. Users who perceive tangible benefits from using the game are more likely to continue using and recommending it to others. In addition, the absence of anxiety regarding the technology used in the CDID system contributes to perceived usefulness, as users who feel comfortable with the existing technology tend to accept and utilize the available features more easily. Furthermore, the ease of operating the available features and gameplay that aligns with users' preferences also enhances perceived usefulness. Users who find the features and gameplay easy to use and consistent with their expectations are more likely to continue using the game. Overall, the high level of perceived usefulness among CDID users encourages their intention to continue using the game and obtaining the latest information from it. These findings highlight the importance of providing positive user experiences, ensuring user comfort with technology, and maintaining ease of use to enhance perceived usefulness and strengthen users' intention to use the metaverse.

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