The Behavioral Intention and Use of Digital Technology in Generation Z during Thailand COVID-19 Pandemic

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Abstract

This research aims to study the influence of perceived ease of use on perceived usefulness of Generation Z digital technology adoption; to study the influence of perceived usefulness, perceived ease of use, risk, and trust on the behavioral intention of Generation Z in digital technology use; and to study the influence of behavioral intention on the digital technology use of Generation Z in Thailand. The researchers were interested in the studying of Generation Z people born between 1995 and 2012, who were skilled and fluent in digital technology. A total of 397 sample respondents were used in this study. The result of the IOC validity test of the entire questionnaire was 0.93, and the result of the reliability test of the entire questionnaire with Cronbach's Alpha was 0.97. The research data were collected by a convenient and purposeful randomized method, and the data were collected using an online questionnaire. Statistical analysis of the study was performed using descriptive statistics and path analysis with the PLS-SEM method. The results revealed that (1) perceived ease of use significantly affected perceived usefulness, (2) four key factors included perceived usefulness, perceived ease of use, risk, and trust had a significant effect on behavioral intention of digital technology use, and (3) behavioral intention of Generation Z positively influenced actual use of digital technology during COVID-19 situation. The results of this study provide insights



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into the perceptions and behaviors of Generation Z in Thailand during the coronavirus situation, which will benefit organizations involved in the use of digital technology in this population.

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Keywords: Behavioral Intention, Use of Digital Technology, Generation Z, COVID-19 Pandemic

Introduction

The coronavirus (COVID-19) pandemic has affected the lives of people around the world, both personal and work lives (Piccarozzi, Silvestri, & Morganti, 2021). People all over the world have to change in their normal life with a new way of life known as the new normal. This national and global coronavirus outbreak has impacted social, medical, travel, communication, and economic fields. In the field of technology that has developed greatly, it is found that people in each country have to adapt to modern technology, especially when staying at home, working from home, and using technology for coronavirus outbreak management (Dwivedi, et al., 2020; Kenny & Dutt, 2021; Piccarozzi, Silvestri, & Morganti, 2021). Technology is very important to human life nowadays in the form of information technology and communication technology (Chao, 2019). The adoption, use, and management of technology, especially modern technologies and innovations, are necessary to develop new skills to support such technology or innovation (Cabrera-Sanchez & Villarejo-Ramos, 2019). The efficiency of technology use depends on many factors, such as knowledge and understanding of different types of technology, willingness to accept the technology (Chao, 2019). In terms of organizational management, an organization's adoption of technology is critical to an organization's success (Cabrera-Sanchez & Villarejo-Ramos, 2019). Organizations must be ready with human resources in order to accept technology for the benefit of the organization; therefore, the study of behavioral intentions in accepting technology is an important issue that should be studied (Ogwel, Otieno, & Odhiambo-Otieno, 2020). Past studies have believed that if technology users see the benefits and ease of use of a technology or innovation, then what happens is acceptance of that technology or innovation (Mogbel, Bartelt, & Cicala, 2014). Therefore, there have been many studies related to employee adoption and use of technology in an organization using the Technology Acceptance Model as a base of study (Cabrera-Sanchez & Villarejo-Ramos, 2019; Chao, 2019; Ogwel, Otieno, & Odhiambo-Otieno, 2020). The key elements in this model are behavioral intention,



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technology use behavior, perceived ease of use, and perceived usefulness of technology use. However, there are many scholars today adapting the model by adding appropriate variables to make the study more comprehensive. The more popular variables to study are perceived risk, perceived trust, satisfaction, perceived enjoyment, etc. (Chao, 2019). The development of the model has given rise to new models, which the researchers chose to use with a modified model in which perceived risk and perceived trust variables were added to the main model. In this study, the researcher wanted to study the technology acceptance of Generation Z people in Thailand, which has the same covid-19 epidemic as other countries. Research into technology adoption or innovation among Generation Z is helpful in planning future management of this group, especially in a work context. Generation Z people are an interesting group because they are born with modern technologies such as digital technology (Gaidhani, Arora, & Sharma, 2019; Salleh, Mahbob, & Baharudin, 2017). Therefore, the researchers were interested in studying of Generation Z people born between 1995 and 2012, who were skilled and fluent in digital technology (Salleh, Mahbob, & Baharudin, 2017). In conclusion, this study aims to study the influence of perceived ease of use on perceived usefulness of Generation Z digital technology adoption; to study the influence of perceived usefulness, perceived ease of use, risk, and trust on the behavioral intention of Generation Z in digital technology use; and to study the influence of behavioral intention on the digital technology use of Generation Z in Thailand.

Literature Review

COVID-19 outbreak situation

The coronavirus outbreak or COVID-19 pandemic affects everything in today's world, including life, medicine, learning, social interactions, technology, information systems, business processes, and government service systems (Dwivedi, et al., 2020). This coronavirus infection started in Wuhan, China in December of 2019 and quickly spread across the world (Rashid & Yadav, 2020). The coronavirus outbreak has affected all areas of human life around the world, forcing governments to try to control and prevent its spread (Dwivedi, et al., 2020). During the COVID-19 pandemic, face-to-face interaction is not possible. People's communication has to turn to the online system mainly (Khan, et al., 2020). The new normal is a follow-up to the COVID-19 pandemic as people around the world in the future will not be able to live the same way (Dwivedi, et al., 2020; Khan, Zainuddin, Mahi, & Arif, 2020;

Rashid & Yadav, 2020). The study by Rashid and Yadav (2020) pointed out that education and research are needed to focus on managing the risks that arise during the coronavirus pandemic. This is consistent with the study of Khan, et al. (2020) which indicated that university students' learning needs to shift to an online format during the coronavirus pandemic. The study revealed the factors affecting the behavioral acceptance of students using modern technology during the COVID-19 pandemic. Therefore, this study aims to build an understanding of the attitudes and behaviors of the Generation Z population on the use of digital technology during the coronavirus pandemic.

Behavioral intention in the digital technology

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Recent developments in technology and the Internet have directly or indirectly affected the lives of people around the world. Digital technology plays an important role for both producers and buyers as businesses need to develop strategies linked to digital technology and consumers have to adapt in relation to the development of such digital technology (Gunawan & Djatnika, 2022). In some perspectives, the coronavirus outbreak accelerated development of digital technologies, such as in the entertainment industry (Aranyossy, 2022). Even in education, digital technology has played a key role in human behavior during the COVID-19 pandemic (Khan, et al., 2020; Rashid & Yadav, 2020). This study aims to determine the behavioral intentions of the Generation Z population during the coronavirus pandemic. This behavioral intention determines the decision to use digital technology. Behavioral intentions refer to decisions to try something new, especially technology or innovation (Hau, Nhung, & Trang, 2020). Several previous studies have identified important factors affecting behavioral intentions in the use of modern technology, such as ease of use, perceived usefulness, perceived trust, and risks (Aranyossy, 2022; Chao, 2019; Hau, Nhung, & Trang, 2020; Khan, et al., 2020; Mogbel, Bartelt, & Cicala, 2014).

Modified technology acceptance model

In technology studies or research, scholars have chosen several important models. One of the models that are popularly used as a framework in the study is the technology acceptance model (TAM) (Cabrera-Sanchez & Villarejo-Ramos, 2019; Chao, 2019; Diop, Zhao, & Duy, 2019; Kalayou, Endehabtu, & Tilahun, 2020; Moqbel, Bartelt, & Cicala, 2014). The key variables for this model are behavioral intention, the use behavior of the technology, the perceived ease of use, and the perceived usefulness of using the technology (Diop, Zhao, & Duy, 2019; Kalayou,

Endehabtu, & Tilahun, 2020; Khechine et al., 2014; Mogbel, Bartelt, & Cicala, 2014; Rauniar et al., 2014; Salim, 2012). Behavioral intentions refer to decisions to try to implement something new, especially technology or innovation (Hau, Nhung, & Trang, 2020). The study of Mogbel, Bartelt, and Cicala (2014) pointed out that the perceived usefulness and ease of use of technology are key factors in behavioral intent to use the technology, and found that behavioral intention directly affects user behavior in technology or innovation use. On the other hand, the study of Ogwel, Otieno, and Odhiambo-Otieno (2020) and Diop, Zhao, and Duy (2019) indicated that perceived usefulness and perceived ease of use had a significant effect on the behavioral intention in technology adoption. This study result was consistent with the study of Kalayou, Endehabtu, and Tilahun (2020) who concluded that perceived usefulness and perceived ease of use in the health technology positively influenced behavioral intention to adopt the health technology. Moreover, the study of Moqbel, Bartelt, and Cicala (2014) in couldcomputing technology implementation found out that perceived ease of use did not affect the behavioral intention to use it, but perceived ease of use had a significant influence on perceived usefulness. The result was consistent with the study of Kalayou, Endehabtu, and Tilahun (2020) who found that perceived ease of use in the health technology significantly affected perceived usefulness. Also, it was consistent with the study of Diop, Zhao, and Duy (2019) who found that perceived ease of use had a positive effect on perceived usefulness in technology adoption. In addition, the study of Cabrera-Sanchez and Villarejo-Ramos (2019) revealed that behavioral intention of technology use had positively influenced the use behavior in the organization technology. Based on the literature review, the researchers developed a technology acceptance model that added two key variables, perceived risk and perceived trust, to make the model more complete and comprehensive in this research (Abrahao, Moriguchi, & Andrade, 2016; Cabrera-Sanchez & Villarejo-Ramos, 2019; Chao, 2019; Hau, Nhung, & Trang, 2020; Mogbel, Bartelt, & Cicala, 2014; Ogwel, Otieno, & Odhiambo-Otieno, 2020).

Perceived risk

Perceived risk refers to the thoughts or beliefs of users who are aware of the uncertainties or negative consequences that may arise after the use of a product or technology (Moqbel, Bartelt, & Cicala, 2014). The study of Abrahao, Moriguchi, and Andrade (2016) on risk and intentional adoption in technology found

that Risk has a negative influence on intentional acceptance. The study found that if the risk was increased, the willingness to accept the technology was significantly reduced. Also, the study of Moqbel, Bartelt, and Cicala (2014) revealed that perceived risk negatively affected the behavioral intention of technology use in cloud-computing technology. In addition, the study of Hau, Nhung, and Trang (2020) found that perceived risk negatively influenced the behavioral intention of technology use. However, Chao's (2019) study on the risks and intentions of adopting technology found opposite results. That is, risk has no influence on intentionally accepting the technology. As a result, the study concluded that the risk did not affect the intention of using the technology in any way. This result was consistent with the study of Cabrera-Sanchez and Villarejo-Ramos (2019) who found that perceived risk had no effect on behavioral intention in big data technology in Spain.

Perceived trust

Trust refers to the positive expectation of doing or accepting something, which includes the experience of using it (Ogwel, Otieno, & Odhiambo-Otieno, 2020). Previous studies have indicated that trust is one of the key factors influencing behavioral intentions adopting modern technology (Mogbel, Bartelt, & Cicala, 2014). Several studies related to the relationship between perceived trust and behavioral intention were found in two separate groups: one group found the influence of perceived trust on behavioral intention, the other group found that perceived trust has no effect on behavioral intention (Chao, 2019; Mogbel, Bartelt, & Cicala, 2014; Ogwel, Otieno, & Odhiambo-Otieno, 2020). However, the study of Mogbel, Bartelt, and Cicala (2014) concluded that user trust had a positive effect on behavioral intention of technology use. This was consistent with the study of Chao (2019) on technology trust and acceptance indicates that technology users' trust has a strong influence on their willingness to accept technology or information systems. However, this result did not consistent with the study of Ogwel, Otieno, and Odhiambo-Otieno (2020) who found that trust did not influence or predict the behavioral intention of technology adoption.

Generation Z

Generation Z was born between 1995 and 2012 (Salleh, Mahbob, & Baharudin, 2017). This group is considered to be a group of people born in the era of the development of technology and the Internet, which allows this group of people to be able to use these technologies fluently and live with devices that are connected to the Internet all the time (Gaidhani, Arora, & Sharma, 2019;



Gunawan & Djatnika, 2022; Salleh, Mahbob, & Baharudin, 2017). Generation Z was the first to embed digital technology naturally in the form of Internet of Things connectivity (Gunawan & Djatnika, 2022). These people's lifestyles are constantly utilizing digital technology in all aspects of social media communication, education, business transactions, and self-expression. Therefore, researchers are interested in studying this group of people during the coronavirus outbreak, which would be useful in developing digital technology for future use in Generation Z.

Research Objectives

The objective of this research is to study the factors relating to Generation Z technology use during Thailand's COVID-19 pandemic, with details as follows:

- 1) to study the influence of perceived ease of use on perceived usefulness of Generation Z's digital technology use.
- 2) to study the influence of perceived usefulness, perceived ease of use, perceived risk, and perceived trust on the behavioral intention of Generation Z's digital technology use.
- 3) to study the influence of behavioral intention on the digital technology use behavior of Generation Z during the COVID-19 Pandemic.

Research Framework

From the literature review related to the use of digital technology in Generation Z during the COVID-19 Pandemic, the conceptual framework of the research is shown in Figure 1.

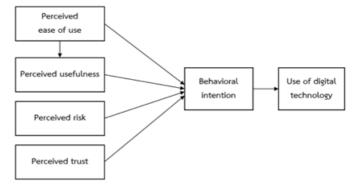


Figure 1: A research framework

Research Methodology

Population and Samples

The population of this study was Gen Z people in Thailand who experienced the time of the coronavirus outbreak in 2020 and 2021. The researchers were interested in the study of Generation Z people born between 1995 and 2012, who were skilled and fluent in digital technology (Salleh, Mahbob, & Baharudin, 2017). Since the exact population size is unknown, the researchers calculated the sample size using Cochran's formula at a ninety-five percent confidence level and a five percent error term (Cochran, 1977). The calculated result of the sample size was 395. However, the researchers submitted questionnaires to collect more data than this calculated amount, and the questionnaires were validated prior to data analysis. A total of 397 usable questionnaires were used in this study.

Research Tool

This research tool is a questionnaire developed from a review of the relevant literature with three components: the first is the general information of the respondents, the second is the key variables of the research (perceived usefulness, perceived ease of use, perceived risk, perceived trust, behavioral intention, and use behavior), and the third is the suggestion from respondents. To rate the opinions on the key variables of the research, the questionnaire uses a score from 1 to 10 (least agree to most agree). The researchers chose the ten-point scale because many scholars have identified it as being suitable for use in the social sciences and management (Birkett, 2022; Chyung, et al., 2018; Felix, 2011). The questionnaire was validated by IOC (Item-objective congruence) by three experts and tested for reliability with Cronbach's alpha statistic. The three experts who reviewed the questionnaire were competent in a range of research areas, such as human resources, strategy management, marketing, and statistical analysis. The results of the quality test of the research questionnaire were found to be consistent (IOC of each item > 0.6) and reliable (Cronbach's alpha of each variable > 0.7) (Hair, et al., 2014). The result of the IOC validity test of the entire questionnaire was 0.93, and the result of the reliability test of the entire questionnaire with Cronbach's alpha was 0.97. The results of the questionnaire analysis are shown in Table 1.

Table 1: Research questionnaire and reliability test result

Variables	References	Cronbach's Alpha
Perceived usefulness (USEFUL)	Rauniar et al. (2014); Salim (2012)	0.87
Perceived ease of use (EASE)		0.77
Perceived risk (RISK)	Chao (2019); Hau, Nhung, and Trang (2020)	0.83
Perceived trust (TRUST)	Chao (2019)	0.87
Behavioral intention (INTENT)	Khechine et al. (2014); Rauniar et	0.92
Use of digital technology (USE)	al. (2014)	0.91

Data collection

The researchers chose to collect data online for this study due to the coronavirus situation. The spread of the coronavirus is still under control by the Thai government, so collecting online questionnaires is optimal. In addition, online data collection is suitable for a sample of Generation Z who use the Internet and online in their daily lives. The research data were collected by a convenient and purposeful randomized method. In collecting this online data, the researchers initially stated that respondents must be a group of people born between 1995 and 2012. Researchers asked the respondents to read the questions and answer truthfully. They may voluntarily stop taking the survey. The researchers also stated that the information collected would be kept confidential and that the questionnaire would be destroyed immediately after the study was completed. Researchers expected data collection to complete the computed sample size, but if more questionnaires were returned, all usable questionnaires were considered for statistical analysis. Finally, the researchers obtained 397 valid questionnaires.

Statistical Analysis

The first part of the descriptive statistical analysis analyzed the personal factors of the respondents with frequencies and percentages and the research variables with mean, standard deviation, skewness, and kurtosis. The second part is the path analysis in the research model. The researcher uses the PLS-SEM structural equation model analysis, which is divided into two steps of the analysis:

the first step is to analyze the validity and reliability of the model, and the second step is to analyze the model. Path model analysis is a test for path effects between independent variables and dependent variables of research, which tests both direct and indirect effects. In a preliminary model examination in this study, the researchers determined convergent validity based on the average variance extracted (AVE) values, which must exceed 0.5 to be considered a suitable model. Construct reliability is also considered based on Cronbach's Alpha (CA) values, with values exceeding 0.7 being considered reliable and appropriate (Gelhard & Delft, 2015; Hair, et al., 2017). The researchers then tested the discriminant validity using the Fornell-Larcker Criterion method, which determined that each calculated value must not exceed the value at the top of its column (Henseler, Ringle, & Sarstedt, 2015). In addition, the researchers considered the coefficient of determination of the model from the proposal of Gelhard and Delft (2015), which stated that the independent variable could moderately explain the variance of the dependent variable if the coefficient was greater than 0.3 and assumed that the explanation ability is high if the coefficient is greater than 0.5.

Research Findings

After checking the validity and completeness of the questionnaires, three hundred ninety-seven usable questionnaires were found. Therefore, all of these questionnaires were used by the researcher to statistically analyze the data. The results of the statistical analysis are shown in the second to the seventh tables as follows.

Table 2: Results of descriptive analysis

	Variables	Frequencies	Percent
Gender	Male	65	16.4
	Female	332	83.6
Education	Below Bachelor degree	40	10.1
	Bachelor degree	308	77.6
	Above Bachelor degree	49	12.3
Income per month	Less than 10,000 Baht	377	95.0
	10,000 Baht or more	20	5.0

The second table shows the results of the descriptive statistical analysis of the participants in this study. It found that the majority of the respondents were female, which is 83.6%. Most of the respondents had a bachelor's degree, which is 77.6%. And it found that most of the respondents earned less than ten thousand baht per month, which is 95.0%.

Table 3: Statistical analysis of key variables

Variables	Means	Standard Deviation	Skewness	Kurtosis
Perceived usefulness (USEFUL)	7.61	1.62	-0.57	-0.30
Perceived ease of use (EASE)	7.69	1.61	-0.67	-0.18
Perceived Risk (RISK)	7.18	1.85	-0.43	-0.30
Perceived trust (TRUST)	6.86	1.73	-0.08	-0.55
Behavioral Intention (INTENT)	7.45	1.68	-0.48	-0.29
Use of Digital Technology (USE)	7.49	1.71	-0.51	-0.40

The third table is the result of descriptive statistical analysis of the key variables of this research. It found that the mean for all variables was high, with an average of 6.86 (perceived trust) to 7.69 (perceived ease of use). This reflects the opinions of Generation Z participants who have a high level of opinion on the research variables. The variable with the highest mean was perceived ease of use, followed by perceived usefulness, use of digital technology, behavioral intention, perceived risk, and perceived trust, with mean values of 7.69, 7.61, 7.49, 7.45, 7.18, and 6.86, respectively.

Table 4: The results of the validity and reliability tests

Factors	Variables	Loadings	VIF	Cronbach's Alpha	AVE
Perceived ease of	EASE1	0.903	3.683	0.945	0.821
use (EASE)	EASE2	0.918	4.401	_	
	EASE3	0.931	4.876	_	
	EASE4	0.878	3.059	_	
	EASE5	0.900	3.603		
Perceived	PU1	0.702	1.394	0.858	0.707
usefulness (USEFUL)	PU2	0.861	2.344	_	
	PU3	0.910	3.315	_	
	PU4	0.876	2.671		
Perceived risk (RISK)	Risk1	0.892	2.847	0.929	0.825
	Risk2	0.907	3.371	_	
	Risk3	0.927	4.054	_	
	Risk4	0.907	3.512		
Perceived trust	Trus1	0.882	2.866	0.927	0.820
(TRUST)	Trus2	0.896	3.161	_	
	Trus3	0.924	3.842	_	
	Trus4	0.921	3.358		
Behavioral intention	Intent1	0.917	3.689	0.948	0.865
(INTENT)	Intent2	0.929	4.237	_	
	Intent3	0.941	5.079	_	
	Intent4	0.932	4.534		
Use of Digital Technology (USE)	USEBHV	1.000	1.000	1.000	1.000

The fourth table shows the results of the analysis of the validity and reliability of research variables. Overall, it was found that all the variables had test

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results passed the specified criteria in the structural equation model analysis. The perceived ease of use variable has five sub-variables with loading values between 0.878 and 0.931 and VIF values between 3.059 and 4.876. The Cronbach's alpha and the AVE value of perceived ease of use are equal to 0.945 and 0.821, respectively, which are considered to pass the tests of validity and reliability. The perceived usefulness variable has four sub-variables with loading values between 0.702 and 0.910 and VIF values between 1.394 and 3.315. The Cronbach's alpha and the AVE value of perceived usefulness are equal to 0.858 and 0.707, respectively. This result showed that the validity and reliability tests of the perceived usefulness variable are good. The perceived risk variable has four sub-variables with loading values between 0.892 and 0.927 and VIF values between 2.847 and 4.054. The Cronbach's alpha and the AVE value of perceived risk are equal to 0.929 and 0.825, respectively, which are considered to pass the tests of validity and reliability. The perceived trust variable has four sub-variables with loading values between 0.882 and 0.924 and VIF values between 2.866 and 3.842. The Cronbach's alpha and the AVE value of perceived trust are equal to 0.927 and 0.820, respectively. This result indicates that the validity and reliability tests of the perceived trust variable are great. The behavioral intention variable has four sub-variables with loading values between 0.917 and 0.941 and VIF values between 3.689 and 5.079. The Cronbach's alpha and the AVE value of behavioral intention are equal to 0.948 and 0.865, respectively, which are considered to pass the tests of validity and reliability as well. Finally, the use of digital technology variable has only one sub-variable. It finds that this variable is acceptable to continue to the next step. Therefore, researchers used all available variables for the next process in the structural equation model analysis.



Table 5: The results of the discriminative validity analysis by Fornell-Larcker Criterion

Construct	USE	INTENT	EASE	USEFUL	RISK	TRUST
USE	1.000					
INTENT	0.945	0.865				
EASE	0.642	0.624	0.821			
USEFUL	0.481	0.480	0.617	0.707		
RISK	0.371	0.371	0.310	0.217	0.825	
TRUST	0.492	0.532	0.293	0.244	0.286	0.820

The results of the discriminant validity test with the Fornell-Larcker Criterion are shown in Table 5. It is found that every computed value in this table does not exceed the value at the top of the column. In conclusion, the model is considered to have good discriminant validity and can be analyzed in the next step to analyze the influence path.

Table 6: The results of the path analysis in the research model.

Coefficient (Beta)			- Standard			
Path analysis	Direct effect	Indirect effect			t-value	p-value
EASE -> USEFUL	0.786		0.786	0.025	31.118	0.000***
USEFUL -> INTENT	0.112		0.112	0.048	2.331	0.020*
RISK -> INTENT	0.113		0.113	0.041	2.754	0.006**
TRUST -> INTENT	0.378		0.378	0.037	10.088	0.000***
INTENT -> USE	0.972		0.972	0.004	234.951	0.000***
EASE -> INTENT	0.434	0.088	0.522	0.039	13.302	0.000***
EASE -> USE		0.508	0.508	0.038	13.313	0.000***
USEFUL -> USE		0.109	0.109	0.047	2.328	0.020*
RISK -> USE		0.110	0.110	0.040	2.749	0.006**
TRUST -> USE		0.368	0.368	0.036	10.116	0.000***

Note: *, **, and *** mean the significant levels are at .05, .01, and .001, respectively.

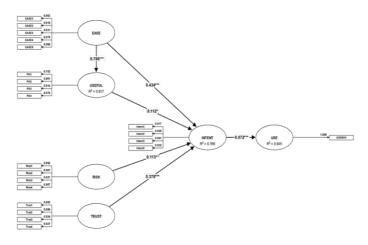


Figure 2: The path model

From the sixth table and second figure, it can be concluded that, as a whole, all the influence pathways in the research structural equation model were statistically significant for both direct and indirect influences. Perceived ease of use has a significant direct influence on perceived usefulness with a coefficient of 0.786, while perceived ease of use has a significant direct influence on behavioral intentions with a coefficient of 0.434 and had a significant indirect influence on behavioral intention with a coefficient of 0.088. Perceived usefulness, risk, and trust had a statistically significant direct influence on behavioral intentions with a coefficient of 0.112, 0.113, and 0.378, respectively. Furthermore, behavioral intentions had a significant direct influence on the use of digital technology, with a coefficient of 0.972. In other indirect influence analyses, it was found that perceived ease of use, perceived usefulness, risk, and trust had a statistically significant indirect influence on the use of digital technology with a coefficient of 0.508, 0.109, 0.110, and 0.368, respectively.

Table 7: The coefficient of determination in the research model

Construct	Coefficient of determination (R2)	Adjusted R ²
USE	0.945	0.945
INTENT	0.766	0.763
USEFUL	0.617	0.616

Table seven shows the coefficients of determination of influence paths based on dependent variables. Considering the first path with a dependent variable as perceived usefulness, it was found that the perceived ease of use could account for 61.7 percent of the variance of the perceived usefulness. When considering the paths with dependent variables as behaviors using digital technology, it was found that the independent variables could account for 94.5 percent of the variance of the dependent variable. Finally, when considering paths with dependent variables as behavioral intentions in digital technology, it was found that the independent variables, namely perceived usefulness, perceived ease of use, perceived risk, and trust, could account for 76.6 percent of the variance of the dependent variable. In conclusion, it was found that all the explanatory abilities of the variables in the influence paths in the research model were at a high level.

Discussion/Conclusion

This research examines the technology acceptance of Generation Z people in Thailand during the COVID-19 pandemic. The first results of the study found that perceived ease of use had a significant positive influence on the perceived usefulness of the technology. This result was found to be consistent with the study of Kalayou, Endehabtu, and Tilahun (2020) who indicated that perceived ease of use significantly influenced perceived usefulness, the study of Moqbel, Bartelt, and Cicala (2014) who concluded that perceived ease of use had a significant effect on perceived usefulness, and the study of Diop, Zhao, and Duy (2019) who pointed out that perceived ease of use positively affected on perceived usefulness in technology adoption. The second study found that all four variables, perceived usefulness, perceived ease of use, perceived risk, and perceived trust, had a significant effect on the behavioral intentions of Generation Z people's adoption of technology. This second result was consistent with the study of Kalayou,

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Endehabtu, and Tilahun (2020) and Mogbel, Bartelt, and Cicala (2014) who concluded that the perceived usefulness and perceived ease of use of technology are key factors that predicted behavioral intent to adopt the new technology, and the study of Ogwel, Otieno, and Odhiambo-Otieno (2020) and Diop, Zhao, and Duy (2019) who revealed that perceived usefulness and perceived ease of use had a significant influence on the behavioral intention in technology adoption. Also, the result was consistent with the study of Hau, Nhung, and Trang (2020) who indicated that perceived risk significantly influenced the behavioral intention of technology using and the study of Mogbel, Bartelt, and Cicala (2014) and Chao (2019) who pointed out that perceived trust had a significant influence on behavioral intention of technology use. The final results of the study revealed that the behavioral intentions of Generation Z people's adoption of technology significantly influenced their technology usage behavior. The result was consistent with the study of Cabrera-Sanchez and Villarejo-Ramos (2019) who found that behavioral intention of technology use had positively influenced the use behavior in the new technology. This research suggests that organizations involved in managing the adoption of modern technology, whether in the public or private sectors, should focus on the key factors affecting Generation Z's adoption of technology. That includes all four factors: perceived usefulness, perceived ease of use, perceived risk, and perceived trust. Once the technology is adopted, Gen Z people are more likely to use it in their lives. For future research, other researchers can add other factors related to external influences such as political or economic conditions of the country in the model for a more comprehensive study.

Recommendation

This research focuses on the Generation Z population, who are familiar with and use technology all the time in their daily lives. The results of the study will benefit the organizations involved in this generation in order to understand the attitudes, behaviors, and decisions that lead to future planning of digital technology adoption for this group. For example, the adoption of educational technology by Generation Z to maximize educational achievement or the development of marketing technology to stimulate the use of that digital technology and ultimately lead to decision making. From the results of this study, it was found that if Generation Z was aware of the ease of use and the benefits of digital technology that the agency wanted to use, it would result in this group

showing their intention in the use of digital technology. The trust and risk management of such technologies will also influence the behavioral intent in the decision-making process of Generation Z. Understanding the attitudes and behaviors of Generation Z is essential, especially in the new normal that Generation Z faces in education, work, or daily life. Therefore, the results of this research will help to better understand and plan for the digital technology management challenges of this generation. For future research, the researchers suggest that additional factors in the model, such as economic factors, financial readiness factors, and social reference factors, should be studied in order to cover the behavioral decision-making of Generation Z in using digital technology in the new normal era.

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References

- Abrahao, R. S., Moriguchi, S. N., & Andrade, D. F. (2016). Intention of adoption of mobile payment: An analysis in the light of the unified theory of acceptance and use of technology (UTAUT). **Revista de Administracao e Inovação**. 13, 221-230.
- Aranyossy, M. (2022). Technology adoption in the digital entertainment industry during the COVID-19 pandemic: An extended UTAUT2 model for inline theater streaming. **Informatics**. 9(71), 1-19.
- Birkett, A. (2022). Survey response scales: How to choose the right one for your questionnaire. Retrieved March 11, 2022 from https://cxl.com/blog/survey-response-scales/
- Cabrera-Sanchez, J., & Villarejo-Ramos, A. F. (2019). Factors affecting the adoption of big data analytics in companies. **Revista de Administracao de Empresas**. 59(6), 415-429.
- Chao, C. M. (2019). Factors determining the behavioral intention to use mobile learning: An application and extension of the UTAUT model. **Frontiers in Psychology**. 10, 1-14.
- Chyung, S.Y., Swanson, I., Roberts, K., & Hankinson, A. (2018). Evidence-based survey design: The use of continuous rating scales in surveys.

 Performance Improvement. 57(5), 38-48.
- Cochran, W. G., (1977). Sampling techniques (3rd ed.). New York: John Willey and Sons.
- Diop, E. B., Zhao, S., & Duy, T. V. (2019). An extension of the technology acceptance model for understanding travelers' adoption of variable message signs. **PLoS ONE**. 14(4), 1-17.



- Dwivedi, Y. K., Hughes, D. L., Coombs, C., Constantiou, I., Duan, Y., Edwards, J. S., Gupta, B., Lal, B., Misra, S., Prashant, P., Raman, R., Rana, N., Sharma, S. K., & Upadhyay, N. (2020). Impact of COVID-19 pandemic in information management research and practice: Transforming education, work and life. International journal of Information Management. 55, 1-20.
- Felix, R. (2011). The impact of scale width on responses for multi-item, self-report measures. **Journal of Targeting, Measurement and Analysis for Marketing**. 19, 153-164.
- Gaidhani, S., Arora, L., & Sharma, B. K. (2019). Understanding the attitude of generation Z towards workplace. **International Journal of Management, Technology and Engineering**. 9(1), 2804-2812.
- Gelhard, C. & Delft, S. (2015). The role of strategic and value chain flexibility in achieving sustainability performance: An empirical analysis using conventional and consistent PLS. Retrieved March 11, 2022 from http://proceedings.utwente.nl/350/1/UsePLS 2015 submission 97.pdf
- Gunawan, A. I. & Djatnika, T. (2022). Gen Z loyalty: The role of brand communication, SERVQUAL, and trust in online shopping culture. **Hong Kong Journal of Social Sciences**. 59, 467-476.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E., (2014). **Multivariate data** analysis (7th ed.). US: Pearson Education.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling. (2nd ed.). Thousand Oaks: Sage.
- Hau, H. T., Nhung, D. T. H., & Trang, P. H. (2020). An empirical analysis of factors affecting the intention of using digital wallets in Vietnam. **Journal of International Economics and Management**. 21(1), 86-107.
- Henseler, J. F., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling.

 Journal of the Academy of Marketing Science. 43, 115-135.
- Kalayou, M., H., Endehabtu, B., F., & Tilahun, B. (2020). The applicability of the modified technology acceptance model (TAM) on the sustainable adoption of eHealth systems in resource-limited settings. Journal of Multidisciplinary Healthcare. 13, 1827-1837.
- Kenny, J. & Dutt, C. 2021). The long-term impacts of hotel's strategic responses to COVID-19: The case of Dubai. **Tourism and Hospitality Research**. 1-15.

- Khan, S. A., Zainuddin, M., Mahi, M., & Arif, I. (2020). Behavioral intention to use online learning during COVID-19: An analysis of the technology acceptance model. International conference on innovative methods of teaching and technological advancements in higher education, Tbilisi, Georgia.
- Khechine, H., Lakhal, S., Pascot, D., & Bytha, A. (2014). UTAUT model for blended learning: The role of gender and age in the intention to use webinars.

 Interdisciplinary Journal of E-Learning and Learning Objects. 10, 33-52.
- Moqbel, M., Bartelt, V., & Cicala, J. (2014). Personal cloud user acceptance: The role of trust and perceived risk in the technology acceptance model. Proceedings of the southwest decision science institute forty-fifth annual conference. Dallas, TX. 881-889.
- Ogwel, B., Otieno, G., & Odhiambo-Otieno, G. (2020). Cloud computing adoption by public hospitals in Kenya: A technological, organizational and behavioral perspective. International Journal of Scientific and Research Publications. 10(1), 33-43.
- Piccarozzi, M., Silvestri, C., & Morganti, P. (2021). COVID-19 in management studies: A systematic literature review. **Sustainability**. 13, 1-30.
- Rashid, S. & Yadav, S. S. (2020). Impact of covid-19 pandemic on higher education and research. **Indian Journal of Human Development**. 14(2), 340-343.
- Rauniar, R., Rawski, G., Yang, J., & Johnson, B. (2014). Technology acceptance model (TAM) and social media usage: An empirical study on Facebook.

 Journal of Enterprise Information Management. 27(1), 6-30.
- Salim, B. (2012). An application of UTAUT model for acceptance of social media in Egypt: A statistical study. **International Journal of Information Science**. 2(6), 92-105.
- Salleh, M. S. M., Mahbob, N. N., & Baharudin, N. S. (2017). Overview of generation Z behavioral characteristic and its effect towards hostel facility.

 International Journal of Real Estate Studies. 11(2), 59-67.