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The Acceptance and Use of Online Technology in Thailand: The Influences of Perceived Trust and Personal Innovativeness on the UTAUT Model

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Abstract

The main objectives of this research were to study the relationship of all factors in the UTAUT model, to examine the effect of perceived trust on performance expectancy, effort expectancy, and behavioral intention, and to test the effect of personal innovativeness on the intention to use technology. The authors utilized online questionnaires to collect the data by convenience sampling method. Data of 510 respondents were used for statistical analysis. The author utilized PLS-SEM assessment for examining the research hypothesis. The results revealed that performance expectancy, effort expectancy, perceived trust, and personal innovativeness positively affected behavioral intention to use online technology. Another finding is the perceived trust had a positive and significant influence on both performance expectancy and effort expectancy. A further finding of this research was facilitating conditions significantly affected actual use behavior of online technology. The last finding of this research proved that the behavioral intention to use online technology had a strong positive effect on the actual use behavior. The researchers suggest the benefits of this study to the corporate executives or the marketing department who have to plan for the online technology business to Thai people. Following the significant effect of key factors on users' behavior, the end result should improve the acceptance of online technology and lead to actual use behavior of Thai users in online technologies.

Keywords*: Acceptance and Use Model, Online Technology, Perceived Trust, Innovativeness, UTAUT Model*

I. Introduction

The world today has changed dramatically, especially in technology. It can be clearly seen that technology is changing and growing rapidly. In the daily lives of people in each country must rely on communication over the internet all the time. It uses online technology in all areas of human life, including communication, information perception, entertainment, financial transactions, education, and personal information that must be stored in high security. Thailand is considered one of the countries that have a lot of activities or transactions through online technology and growing every day. From the above points, it can be seen that Thai people are using programs or applications through the use of mobile

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phones and personal computers in the office all the time, especially during the outbreak of the COVID-19 outbreak that the Thai government announced to let Thai people stay at home, which is considered as a measure to quarantine the disease or work from home of all Thai people. It found that there are many technologies that Thai people used in that period such as the teaching and learning programs like Google hangouts and ZOOM, the entertainment programs like online movies, the interpersonal communication programs like LINE group and Facebook group, the financial programs such as the mobile banking, the shopping programs like LAZADA and Shopee, and the mobile game application. Therefore, the researchers were interested to study the behavior of the acceptance and use of the online technology of Thai people, what characteristics and what important factors were related to that behavior. This research adopted the UTAUT (Unified Theory of Acceptance and Use of Technology) model as the basis of the study. The UTAUT model consisted of six variables including performance expectancy, effort expectancy, social influence, facilitating conditions, behavioral intention to use, and the actual use behavior. The researchers then considered adding two important variables to study the behavior of using online technology, including perceived trust and personal innovativeness. In summary, the objective of this research was to study the influence of various factors on the UTAUT model and to study the influence of perceived trust and personal innovativeness that affected the intention to use technology in the UTAUT model. The researcher expects to benefit from this research for the corporate executives or the marketing department who have to plan to present the online technology to Thai people. The end result is acceptance of the use of modern technology and the more efficient use of various technologies.

II. Literature review

The researchers emphasized the assessment of the structural equation model based on the UTAUT model. And also, it focused on the examination of perceived trust and personal innovativeness that influenced the behavioral intention and use behavior of online technologies in the model. Although this model is popular for research studies on the acceptance and use of technology in many academic areas, the model is still being developed and tested continuously. The reason is researchers trying to find variables are beneficial to explain user's adoption and use of technologies. Another point is related to expanding the UTAUT model to be more comprehensive (Abrahao, Moriguchi, & Andrade, 2016; Alwahaishi & Snasel, 2013; Huang & Kao, 2015; Lafraxo, et al., 2018; Mandal, & McQueen, 2012; Turan, Tunc, & Zehir, 2015). For example, some studies added perceived trust and personal innovativeness variables in the research model to investigate the effect of those variables on the behavioral intention to use technology (Nawaz &Yamin, 2018; Sair & Danish, 2018). Therefore, the main literature review comprised three areas: UTAUT model, perceived trust, and personal innovativeness.

Unified Theory of Acceptance and Use of Technology (UTAUT) Model

This model was developed by Venkatesh, Morris, Davis, and Davis (2003) which was developed from many other models that related to user behaviors in the acceptance and use of technology such as TAM, TRA, and TPB (Abrahao, Moriguchi, & Andrade, 2016; Bervell, & Umar, 2017; Thomas, Singh, & Gaffar, 2013; Venkatesh, Thong, & Xu, 2016). The UTAUT model consists of four key factors, including performance expectancy, effort expectancy, social influence, and facilitating conditions that influence the behavioral intention to use technologies. And it has two key factors, namely behavioral intention and facilitating conditions, influence the actual use behavior of technologies (Bervell, & Umar, 2017; Marchewka, & Kostowa, 2007; Thomas, Singh, & Gaffar, 2013; Venkatesh, Thong, & Xu, 2016). According to Venkatesh,

Thong, and Xu (2016), performance expectancy means the belief of people in the benefits of technology use such as technology can gain performance. While Thomas, Singh, and Gaffar (2013) state that the effort expectancy is the ease use of the technology for people who would like to utilize the technology. Numerous studies support the effect of performance expectancy and effort expectancy on behavioral intention to use the technologies (Chao, 2019; Hubert, et al., 2019; Lee & Song, 2013; Tan, 2013; Thomas, Singh, & Gaffar, 2013; Zuiderwijk, Janssen, & Dwivedi, 2015). For instance, the study of Liu (2019) noted that both performance expectancy and effort expectancy significantly affected the behavioral intention to adopt the technology. However, the study conducted by Naranjo-Zolotov, Oliveira, and Casteleyn (2019) and Tarhini, et al. (2016) noted that effort expectancy had no significant effect on the intention to use online technology. Social influence is one of the key variables in the UTAUT model. It reflects people are convinced by others who trust the benefit of technologies (Tan, 2013; Thomas, Singh, & Gaffar, 2013; Venkatesh, Thong, & Xu, 2016). Previous studies conducted by many academic researchers confirmed the effect of social influence on behavioral intention to adopt the technology use (Abrahao, Moriguchi, & Andrade, 2016; Lee & Song, 2013; Liu, 2019; Tan, 2013; Zuiderwijk, Janssen, & Dwivedi, 2015). For instance, However, some studies found that the social influence variable was not influenced behavioral intention to use technologies (An, Han, & Tong, 2016; Bervell, & Umar, 2017; Naranjo-Zolotov, Oliveira, & Casteleyn, 2019). Facilitating condition, the last independent variable in the UTAUT model, means the supporting factor of organizational and technical support in the technology to people who adopt or use that technology. Many studies concluded that facilitating conditions significantly influenced the behavioral intention to use technology (Huang & Kao, 2015; Thomas, Singh, & Gaffar, 2013; Turan, Tunc, & Zehir, 2015), but Lafraxo, et al. (2018) and Zuiderwijk, Janssen, and Dwivedi (2015) did not found the influence of facilitating conditions variable on behavioral intention to technology use. Further previous studies proved the direct influence of facilitating conditions on behavioral use of technology (Bervell, & Umar, 2017; Tan, 2013; Thomas, Singh, & Gaffar, 2013; Venkatesh, Thong, & Xu, 2016). The study of Tarhini, et al. (2016) confirmed the significant effect of facilitating conditions on behavioral intention to use online technology. However, some research found the opposite result, it showed that facilitating conditions was not affect the use of technology (Zhou, et al., 2019). Also, the previous research and literature relating to The UTAUT model concluded that it had the direct effects of three key variables including performance expectancy, effort expectancy, and social influence, on the intention to adopt the technology use (Bervell, & Umar, 2017; Salim, 2012; Tan, 2013; Thomas, Singh, & Gaffar, 2013; Venkatesh, Thong, & Xu, 2016). Finally, the UTAUT model illustrates the relationship between behavioral intention and actual use behavior of technologies. It shows that behavioral intention influences the use behavior of technologies (Bervell, & Umar, 2017; Marchewka, & Kostowa, 2007; Venkatesh, Thong, & Xu, 2016). Previous studies confirmed that figure. It showed the effect of behavioral intention to use technology on the actual use behavior of technologies (Tan, 2013; Zhou, et al., 2019). This finding was consistent with the study conducted by Chua, et al. (2018) who found the impact of the behavioral intention of users on actual use behavior in social networking technology. The studies conducted by Alwahaishi and Snasel (2013) and Zhou, et al. (2019) summarized that the higher behavioral intention will turn to significant use of technologies.

Perceived trust and the UTAUT model

Perceived trust is another variable that has been found to be of interest in studies because this variable is related to the behavior of technology users. It found that perceived trust plays an important role in a people's perspective (Nawaz & Yamin, 2018). This perceived trust may mean trust in technology, trust in the quality of service, or trust in the services of technology providers (Nawaz & Yamin, 2018). Therefore, perceived trust is a critical factor for business management and marketing program to handle a good relationship between consumers and companies (Hossain, 2019). Previous

research studied user's perceived trust in technology acceptance and use (Gao, et al., 2014; Maduku, 2014; Mazhar, et al., 2014). The study of Lee and Song (2013) concluded that perceived trust had a positive effect on both performance expectancy and effort expectancy of users in new technology. Also, the study conducted by Lwoga and Lwoga (2017) showed that perceived trust had a positive and significant influence on the effort expectancy in the technology. Meanwhile, the study of Nawaz and Yamin (2018) concluded that the perceived trust of technology users affected the behavioral intention to adopt or use the technology. This finding was consistent with the research of Phong, Khoi, and Le (2018) who found that trust was the important factor that influenced behavioral intention to use mobile technology. Further study of Chiu, Bool, and Chiu (2017) confirmed that initial trust showed a significant effect on behavioral intention to use online banking services. According to Sanny, et al. (2020), it found that brand trust of social media significantly impacted purchase intention. However, some research found that perceived trust did not influence the intention to use the technologies (Lafraxo, et al., 2018). Therefore the authors selected the perceived trust variable to improve the basic UTAUT model. The researchers expected to investigate the influence of perceived trust on the performance expectancy, effort expectancy, and behavioral intention to use of technologies.

Personal innovativeness and the UTAUT model

Personal innovativeness is about an individual's attempt to try something new like innovation or new technology (Hepola, Karjaluoto, & Shaikh, 2016). It may mean people's willingness to use something new in their lives (Lwoga & Lwoga, 2017). Sair and Danish (2018) stats that personal innovativeness is a psychological variable relating to users' behaviors to accept or adopt the new technology. The study of Hepola, Karjaluoto, and Shaikh (2016) found that personal innovativeness was one of the key factors that affected the behavioral intention to use the innovative mobile banking application. The study conducted by Lwoga and Lwoga (2017) found that personal innovativeness positively influenced consumers' decision to adopt mobile technology. This finding was consistent with Turan, Tunc, and Zehir (2015) who studied the personal innovativeness factor that linked to the UTAUT model of technology adoption. It found that innovative people had a relationship with technology acceptance. Also, the finding was consistent with Saprikis, et al. (2018) who concluded that personal innovativeness significantly influenced consumers' behavior to adopt mobile technology. However, the study conducted by Lu, Yao, and Yu (2005) found that personal innovativeness did not affect the behavioral intention to use mobile technology. This study attempts to evaluate the influence of personal innovativeness on behavioral intention to adopt or use online technology in Thai people.

III. Recent framework and hypothesis

After reviewing the literature and previous research, the authors developed the conceptual framework as shown in Figure 1. And the authors determined 10 hypotheses (H1-H10) as follows.

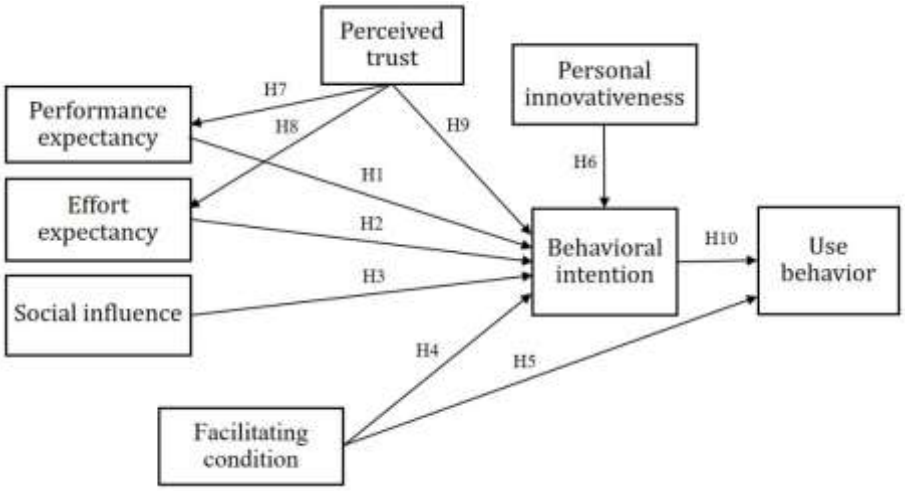

Figure 1. Research framework

H1: Performance Expectancy significantly influences Behavioral intention

H2: Effort Expectancy significantly influences Behavioral intention

H3: Social influence significantly influences Behavioral intention

H4: Facilitating condition significantly influences Behavioral intention

H5: Facilitating condition significantly influences Use behavior

H6: Personal innovativeness significantly influences Behavioral intention

H7: Perceived trust significantly influences Performance Expectancy

H8: Perceived trust significantly influences Effort Expectancy

H9: Perceived trust significantly influences Behavioral intention

H10: Behavior intention significantly influences Use behavior

IV. Research methodology

Population and sample

The population of this research was Thai people who use online technologies such as online banking, online learning, online teaching, or training such as Google hangouts, or communication via social media such as Facebook or LINE. The authors used Cochran's formula for calculation of the optimal sample size at the confidence level and error term of 95% and 5 %, respectively (Cochran, 1977). As a result, the expected sample size was 385. This study utilized the convenience sampling method. This method is a non-probability sampling technique that is time flexibility to participate

in the study. And also, this technique is easy to collect data through online questionnaires. Finally, 510 usable questionnaires were used in statistical analysis in this research.

Research tool

The structured questionnaire was developed from previous research. This process was to ensure content validity. The first part was demographic data of respondents such as gender, age, education, and monthly income. The second part was the key variables of the research framework. The measurement of 6 key variables, including performance expectancy (4 items), effort expectancy (4 items), social influence (4 items), facilitating conditions (4 items), behavioral intention to use (4 items), and use behavior (3 items), were adapted from Venkatesh et al. (2003), Khechine et al. (2014), and Salim (2012). The measurement of perceived trust (4 items) adapted from the study of Chao (2019), and Acharya, Junare, and Gadhavi (2019). The type of measurement using a 10-point scale ranging from "totally disagree (1)" to "totally agree (10)". Finally, the personal innovativeness (4 items) using a 5-point Likert scale (totally disagree=1 to totally agree=5), adapted from Dajani and Hegleh (2019), and Sair and Danish (2018). The wording of all items was modified based on the context of this research. The authors tested the reliability of the questionnaires by Cronbach's Alpha. It found that all constructs were acceptable. As a result, shown in Table 1, all values were above a recommended cut-off of 0.7 (Hair, et al., 2014).

Table 1. Reliability test of Constructs

Constructs	Cronbach's Alpha
Performance expectancy (PERFORM)	0.801
Effort expectancy (EFFORT)	0.767
Social Influence (SOCIAL)	0.882
Facilitating conditions (FACIL)	0.782
Perceived Trust (TRUST)	0.871
Personal innovativeness (INNOVA)	0.744
Behavioral intention (INTENTION)	0.919
Use behavior (USE)	0.870

Statistical analysis

Descriptive statistics included frequency, percentage, mean, and standard deviation were analyzed by the SPSS Statistics version 25 program. To the analysis of inferential statistics, the researcher utilized Smart PLS 3.3.0 software to test the research hypothesis by Partial Least Square-Structural Equations Modeling (PLS-SEM) method (Hair, et al., 2017). It had three steps of PLS-SEM assessment. The first step was the measurement model assessment with various statistics.

It consisted of (1) the validity and reliability tests by Average Variance Estimates (AVE), Composite Reliability (CR), and Cronbach's Alpha (CA), (2) the discriminant validity test, and (3) the Heterotrait-Monotrait (HTMT) test. The second step was the assessment of the structural model by testing the influence of the independent variables on the dependent variable. This step, the author used 5000 subsamples in the bootstrapping process as recommended by Hair et al. (2017). Finally, the last step was the evaluation of the structural model by beta coefficients, the significance of t-statistics, the coefficient of determination (R^2), and the effect size (f^2) (Ringle, Wende, & Becker, 2015).

V. Research result

510 usable questionnaires were collected and retained for analysis in this study. Descriptive analysis revealed that most of the participants were female. The female participants were 382 people (74.9%) and male participants were 128 people (25.1%). Most of the respondents were younger than 25 years, with the number of 374 persons (73.3%), followed by the age between 25-40 years was 99 people (19.4.4%) and age >40 years was 37 people (7.3%), respectively. The largest percentage of the education group of the respondents was the bachelor's degree, equal to 413 people (80.9%). And it found that most respondents have a monthly income of fewer than 300 USD, equal to 371 people (72.7%), followed by monthly income between 300-450 USD was 66 people (12.9%) and monthly income between 600-750 USD equal to 25 people (4.9%), respectively.

The results of the measurement model assessment shown in Table 2. It concluded the measurement model was accepted. As a result, it showed that all outer loadings were greater than 0.7 as recommended by Hair et al. (2017). For the results of validity and reliability testing, the authors evaluated by CA, CR, and AVE values. It indicated that all variables were accepted as a recommended cut-off by Hair et al. (2017) who suggests that CA and CR values were accepted when each value was higher than 0.7 while AVE value was accepted when it was higher than 0.5.

Table 2. Validity and reliability of measurement model

Construct	Item	Loading	CA	CR	AVE
PERFORM	Per1, Per2, Per3, Per4	0.914, 0.921, 0.918, 0.866	0.926	0.948	0.819
EFFORT	Eff1, Eff2, Eff3, Eff4	0.706, 0.863, 0.905, 0.862	0.855	0.903	0.702
SOCIAL	Soc1, Soc2, Soc3, Soc4	0.842, 0.818, 0.782, 0.786	0.822	0.882	0.652
FACIL	Fac1, Fac2, Fac3, Fac4	0.847, 0.829, 0.897, 0.855	0.881	0.917	0.735

TRUST	Tru1, Tru2, Tru3, Tru4	0.869, 0.854, 0.904, 0.894	0.905	0.933	0.776
INNOVA	Inno1, Inno2, Inno3, Inno4	0.711, 0.862, 0.707, 0.727	0.749	0.840	0.569
INTENTION	Int1, Int2, Int3, Int4	0.913, 0.926, 0.938, 0.922	0.943	0.959	0.855
USE	Use1, Use2, Use3	0.948, 0.952, 0.946	0.944	0.964	0.900

When considering the discriminant validity, the authors evaluated this validity by the Fornell-Larcker criteria as shown in Table 3. The results indicated that the criteria were satisfied when using all bolded loadings values in the diagonal dimension compared with the values of vertical loadings. It showed that almost all bolded values were higher than vertical loadings, except only one value of the INTENTION-USE pair was different.

Table 3. Discriminant validity (Fornell-Larcker)

Variables	EFFORT	FACIL	INNOVA	INTENTION	PERFORM	SOCIAL	TRUST
EFFORT	**0.838**						
FACIL	0.731	**0.857**					
INNOVA	0.359	0.340	**0.754**				
INTENTION	0.663	0.678	0.381	**0.925**			
PERFORM	0.735	0.764	0.364	0.782	**0.905**		
SOCIAL	0.331	0.441	0.191	0.367	0.329	**0.807**	

TRUST	0.453	0.579	0.289	0.682	0.508	0.383	**0.881**
USE	0.666	0.683	0.365	0.954	0.802	0.368	0.637

Next, the author tested a robust approach of discriminant validity by the Heterotrait-Monotrait (HTMT) method. As a result, shown in Table 4, the result indicated that only the INTENTION-USE pair had value more than 0.9 but other values were acceptable (Henseler, Ringle, & Sarstedt, 2015). The next assessment of the research model was collinearity testing. The assessment result is shown in Table 5. It evaluated the common method bias (CMB). As a result, shown in Table 5, it found that the model did not take the CMB issue because of all values equal to 3.3 or lower (Hair et al. (2017).

Table 4. Heterotrait-Monotrait Ratio (HTMT)

Variables	EFFORT	FACIL	INNOVA	INTENTION	PERFORM	SOCIAL	TRUST
FACIL	0.833						
INNOVA	0.437	0.411					
INTENTION	0.739	0.731	0.438				
PERFORM	0.825	0.829	0.421	0.836			
SOCIAL	0.398	0.525	0.248	0.412	0.372		
TRUST	0.500	0.634	0.341	0.716	0.537	0.438	
USE	0.741	0.737	0.418	1.008	0.858	0.413	0.667

Table 5. Collinearity Statistics (VIF)

Variables	PERFORM	EFFORT	INTENTION	USE
PERFORM			2.9	
EFFORT			2.6	
SOCIAL			1.3	
FACIL			3.3	1.8
TRUST	1.0	1.0	1.6	
INNOVA			1.2	
INTENTION				1.8

The final step to test the model was the assessment of the structural model. The results of the PLS-SEM method analysis reported in Table 6 and were graphically shown in Figure 2. It summarized that H1, H2, H5, H6, H7, H8, H9, and H10, were supported while H3 and H4 were not supported. As a results, performance expectancy (beta = 0.510, $p < 0.001$), effort expectancy (beta = 0.130, $p < 0.01$), perceived trust (beta = 0.366, $p < 0.001$), and personal innovativeness (beta = 0.055, $p < 0.05$) positively affected behavioral intention to use, but social influence (beta = 0.027, $p > 0.05$) and facilitating conditions (beta = -0.050, $p > 0.05$) did not significantly influence behavioral intention to use. The result also found that facilitating conditions (beta = 0.068, $p < 0.01$) significantly affected the actual use behavior of online technology. And the results proved that behavioral intention to use (beta = 0.908, $p < 0.001$) had a positive and significant effect on actual use behavior. In addition, perceived trust significantly influenced both performance expectancy and effort expectancy. Finally, the authors assessed the overall model performance. The result is shown in Table 6. The first evaluation of the structural model was effect size (f^2). The effect size uses for testing the strength of the relationship between the latent variables. The strength criteria have 3 levels. The first level is the effect size below 0.02, it means the relationship between focused latent variables has a small effect. The second level is the effect size between 0.03 – 0.34, this means the medium-level of relationship. And the last level is the effect size of 0.35 or above, it means the relationship of the large effect (Wong, 2013). As a result in Table 6, the effect size of all the significant relationships between the latent variables of the research model was medium to high levels. It showed that perceived trust had the high effect size with three key variables including performance expectancy, effort expectancy, and behavioral intention to use technology while personal innovativeness had the low effect size with behavioral intention to use technology.

Table 6. Result of Structural analysis

Relationship	Standard Beta	S.D.	t Statistics	p values	^{2}	Evaluation

PERFORM -> INTENTION	0.510	0.046	10.960	0.000***	.330	Supported
EFFORT -> INTENTION	0.130	0.043	3.043	0.002**	.024	Supported
SOCIAL -> INTENTION	0.027	0.029	0.952	0.341	.002	Not supported
FACIL -> INTENTION	-0.050	0.055	0.904	0.366	.003	Not supported
FACIL -> USE	0.068	0.024	2.802	0.005**	.028	Supported
INNOVA -> INTENTION	0.055	0.026	2.135	0.033*	.009	Supported
TRUST -> PERFORM	0.508	0.035	14.339	0.000***	.348	Supported
TRUST -> EFFORT	0.453	0.037	12.127	0.000***	.258	Supported
TRUST -> INTENTION	0.366	0.036	10.154	0.000***	.315	Supported
INTENTION -> USE	0.908	0.018	49.526	0.000***	.076	Supported

Note: ***, **, * means statistical significance at 0.001, 0.001, and 0.05 respectively

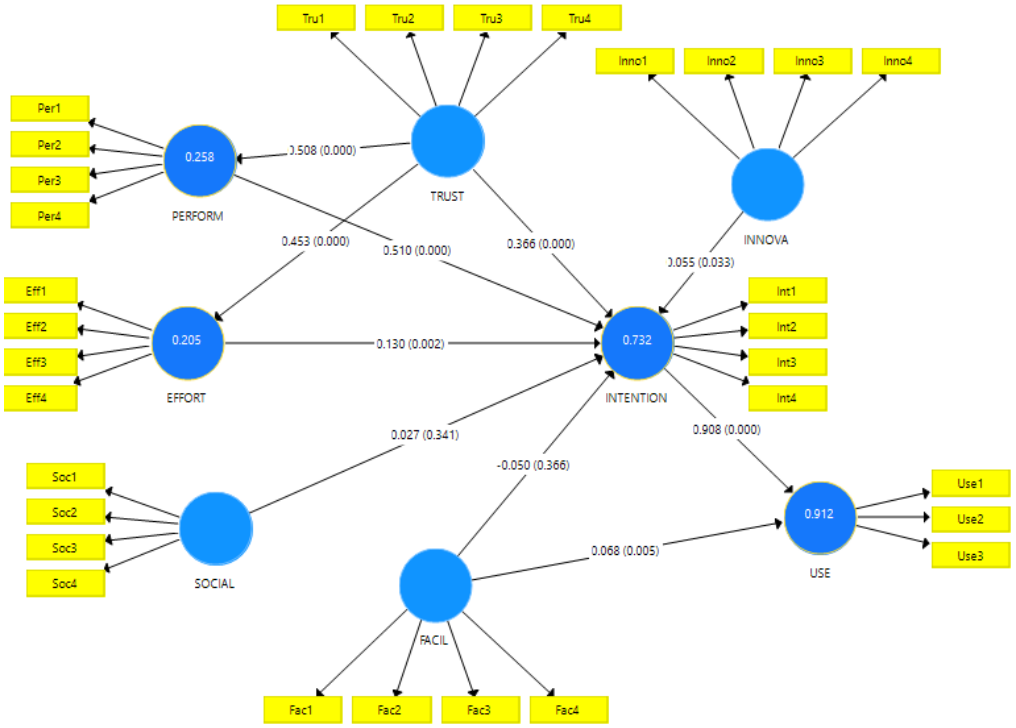

Figure 2. PLS-SEM analysis result

When considering the structural model by R square values, the result showed that overall performance for variance in the behavioral intention to use online technology was 73.2%. This means behavioral intention to use technology was predicted by four significant factors including performance expectancy, effort expectancy, perceived trust, and personal innovativeness at a variance of 73.2%. Another result is R square values of the actual use behavior of online technology. This result showed the variance in the actual use behavior was 91.2% by behavioral intention to use. The last consideration is about the relationship between perceived trust and two variables: performance expectancy and effort expectancy. As a result, the variance in the performance expectancy was 25.8% by perceived trust, and the variance in the effort expectancy was 20.5% by the perceived trust.

VI. Discussion

The research adopted the UTAUT model to investigate the acceptance and use of online technology in Thai people. It consisted of the main six variables including performance expectancy, effort expectancy, social influence, facilitating conditions, behavioral intention to use, and the actual use behavior. Moreover, the authors considered to improve the model by adding two key variables for the study, including perceived trust and personal innovativeness. Therefore, the main objectives of this research were to study the relationship of all factors in the UTAUT model, to examine the effect of perceived trust on performance expectancy, effort expectancy, and behavioral intention, and to test the effect of personal innovativeness on the intention to use technology. The results revealed that performance expectancy, effort expectancy, perceived trust, and personal innovativeness positively affected behavioral intention to use online technology, but social influence and facilitating conditions did not significantly influence behavioral intention. These findings were

consistent with many previous studies (Bervell, & Umar, 2017; Chao, 2019; Hubert, et al., 2019; Lee & Song, 2013; Thomas, Singh, & Gaffar, 2013; Zuiderwijk, Janssen, & Dwivedi, 2015). For instance, the study conducted by Liu (2019) noted that both performance expectancy and effort expectancy significantly affected the behavioral intention to adopt the technology. The studies of Nawaz and Yamin (2018) and Chiu, Bool, and Chiu (2017) concluded that the perceived trust of technology users influenced the behavioral intention to use the technology. And the study conducted by Lwoga and Lwoga (2017) indicated that personal innovativeness positively influenced consumers' adoption of mobile technology. Another finding is a significant effect of perceived trust on both performance expectancy and effort expectancy. This is consistent with the study of Lee and Song (2013) who found that perceived trust had a positive effect on both performance expectancy and effort expectancy of users in new technology. A further finding of this research was facilitating conditions significantly affected the actual use behavior of online technology. The finding was similar to the study of Huang and Kao (2015) and Turan, Tunc, and Zehir (2015) who pointed out the effect of facilitating conditions on actual use behavior of technologies. The last finding of this research proved that the behavioral intention to use had a positive and significant effect on actual use behavior of online technology. The finding is consistent with the studies of Bervell and Umar (2017) and Chua, et al. (2018) who found the impact of the behavioral intention of users on actual use behavior in the technology. The researchers suggest the benefits of this study to the corporate executives or the marketing department who have to plan for the online technology business to Thai people. Following the significant effect of key factors on users' behavior, the end result should improve the acceptance of online technology and lead to the actual use behavior of Thai users in online technologies.

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