

Factors Affecting Intention of Use Electronic Ticket Service of State Railway of Thailand Passengers

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ABSTRACT

This thesis studied factors influencing passenger intention to use the State Railway of Thailand (SRT) electronic ticketing (e-ticketing) system. Quantitative research was done, applying the theory of acceptance and use of technology, incorporating factors from previous research and new investigations of digital readiness and cost switching. The sample group comprised 208 passengers inexperienced in using the SRT website online ticketing system or D-Ticket application (app). Data was collected by electronic questionnaire and analyzed. Results were that environmental and cultural aspects of digital usage affect perceived systemic benefits, which in turn influenced the intention to use the system. In addition, factors related to expectations about the system's effectiveness directly impacted the intention to use the system. Samples perceived service costs as associated with switching costs from traditional ticketing channels, including time and convenience considerations. Sample educational levels influenced the intention to use the system. Limits with this research include the primary focus on examining the influence on the intention of passengers inexperienced with online ticketing services to use the SRT electronic ticketing system. Therefore, findings may not be relevant to other contexts. Further research might focus on different sample groups to generalize results. These findings may be useful for online ticketing service providers to enhance systems to better meet customer needs.

Keywords: Passenger intention, State Railway of Thailand (SRT), Electronic ticketing system, E-ticketing.

INTRODUCTION

State Railway of Thailand (SRT) is a state enterprise under the Ministry of Transportation that offers rail conveying and transportation. The main transportation services are divided into 2 categories 1. Commercial Train Service which requires fee payment with several optional services e.g., air conditioning, overnight staying, food service, and non-regular route service. Passengers usually use the services for traveling for leisure, for commuting, and for non-daily use basis e.g., special express trains, express trains, and fast trains. 2. Public Service Trains are the 3rd class trains that service regular routes daily and the passengers using this type of service are daily passengers e.g., regular trains, suburban trains, and local trains (State Railway of Thailand, n.d.). In the past, SRT offered a computational ticket acquisition and seat reservation service called STARS-2 (Seat Ticketing and Reservation System Stage 2) with 444 stations available. After the attempt was made on the improvement of ticket acquisition service by hiring an outsource company to handle it for 20 years from 2000-2020. The contract was terminated in August 2020. Additionally, the original STARS-2 service has many technical limitations which is unable to offer digital ticket acquisition service. Therefore, to improve the ticket acquisition and seat reservation service to be more convenient, fast, and simple for the passengers, SRT has hired an outsource company to proceed with the ticket acquisition and seat reservation service so-called D-Ticket or electronic ticket acquisition and seat reservation service by e-bidding. SRT has started a new contract with the new company from November 2020 for prompt and continuous improvement as well as serving the objective of satisfying the passengers of SRT.

D-Ticket system can be divided into 2 categories as follows: 1. Offline Service e.g., at the front desk of all train stations, Call Center 1690, Automatic Ticket Vending Machines (TVM) in an early phase, it can be used for non-reserved seats, and Ticket Vending On Train (TVT) for ticket checking on board and ticket acquisition at the train station or non-ticket acquisition locations 2. Online service e.g., Internet Ticketing System: i-Ticket via www.dticket.railway.co.th and Mobile Application (Mobile Ticketing System: M-Ticket) called SRT D-Ticket which is available on iOS and Android shown in Figure 1.



Figure 1: An interface of D-Ticket website by State Railway Thailand (<https://www.dticket.railway.co.th>)

The purpose of this research is to develop a parameter model that influences online ticket adoption decisions including 1. The influences of digital and academic knowledge (education levels) on the understanding of benefits and its associated parameters. 2. The influences of the cost of changes and education levels on the understanding of the cost of changes and its associated parameters. 3. The main causes of the influences of the cost of change, understanding of benefits, system acceptance, reliability, and education levels that might affect the online ticket acquisition decision. 4. The associated causes of education levels and the cost of changes on the system acceptance, risks, and reliability on the online ticket acquisition decision. Please note that the simple group has to have experience with the offline ticket acquisition system before including the front desk, middleman, or call center 1690 at least once, and never have experience buying the tickets online via the website or D-Ticket application.

METHODOLOGY AND METHODS

This study is a quantitative research that aims to understand the influences of the online ticket acquisition decision of passengers by surveying with a questionnaire from a simple group. The questionnaire is made based on literature reviews, theories, and other research, research methodology can be as follows:

Population and Sample Group

Studied Population

The sample group is Thai passengers who have purchased the ticket offline at least once but never purchased a ticket online via D-Ticket.

Sample Randomization

In this study, nonprobability sampling is applied via judgment sampling which the sample group has to experience the ticket acquisition offline (e.g., at the train station, agents or call center 1690) at least once and never purchased tickets online (e.g., website or D-ticket application of SRT).

Number of Sample Group

The sample group size can be calculated from an equation from Hair et al. (2021), it was said that the recommended sample group should have at least 5 to 10 times the indicators in this study, 42 questions are applied thus the number of sample group should be at least 210 samples.

The Design of Questionnaires

In this study, an online questionnaire is applied for data collecting purposes via social media platforms e.g., Line application, Facebook, and sent through acquaintances as well as through the courtesy of SRT. The questionnaires can be subdivided into 4 including:

Questions regarding the usability of the ticket acquisition and seat reservation system (D-Ticket): The screening of the passengers who have never purchased the tickets online via D-Ticket but have purchased the ticket at the train stations leading the the next part for the introduction of the system.

Basic information of ticket acquisition and seat reservation system (D-Ticket): An explanation of the details, function, and basic system utilization.

Questionnaires regarding ticket acquisition and seat reservation (D-Ticket): Questions about different parameters e.g., the acceptance and utilization of technology, understating the cost of change, reliability, and risks, and the intention of service use using a 5-point Likert scale as follows: 1 point means strongly disagree. 2 points means disagree. 3 points means neutral. 4 points means agree. 5 points means strongly agree. Questions regarding the basic information of passengers e.g., age, education level, occupation, and open-ended questions.

Research Design

This study used electronic questionnaires via online platforms as a data collecting system for the convients of respondents by a uniform resource locator on Facebook in a train passengers Facebook group and Line. The spreading of questionnaires started from April to May 2023.

Reliability of Research Tools Analysis (Pre-Test)

The data collected from a sample group (Pre-test) of 30 samples is done to examine the questions according to theories or the same idea boundaries by the consideration of Cronbach's alpha coefficient which the result should be in the range of 0-1. The Cronbach's alpha coefficient should be greater than 0.7.

Data analysis

Statistic Hypothesis Examination

The examination of missing data from the questionnaires and data analysis using the normality test is used to verify the univariate outlier by its skewness in the range of >-3 or $<+3$ as consideration criteria via frequency statistic distribution.

Description Statistic

The description statistic used to describe the personal information of each individual by distributing and presenting in frequency, percentage of the sample group, and the average of standard deviation against different parameters influenced the intention of D-Ticket utilization and presented in a table form.

Research Hypothesis Test and Analysis of Covariance (ANCOVA)

This tool is used for comparison of statistical results by variables controlled between the education level group of the respondents.

RESULTS AND DISCUSSION

From the data collection of the sample group, the analysis and discussion can be portrayed as the demographic data, verification of accuracy and reliability of data, verification of data distribution, and research hypothesis testing.

Verification of Accuracy and Reliability of Data (Data Screening)

Verification of Qualification of Respondents

This study analyzes the parameters that influence the intention of the electronics ticket acquisition system with 266 sets of questionnaires answered by respondents in which the respondents have never experienced the online ticketing system via D-Ticket. Thus, to screen the respondents in order to meet the research qualification, this screening criteria was applied. The results have shown that there were 58 respondents not meet the qualification resulting in the remaining 208 sets of questionnaires which can be calculated to 99.05%.

Sample Group Demographic

The personal details regarding the questions of the sample group include ages, genders, education levels, occupations, and monthly incomes. From the qualified sample group of 208 people, it was found that 52.88% of all respondents are female, the age between 31-40 years old consisted of 37.98%, the age of 41-50 years old consisted of 34.13%, education levels of bachelor's degree/equal consisted of 75.96%, 36.06% of respondents are government officers/public servants/state enterprises, corporate workers consisted of 34.13%, and the monthly income of 15,000-30,000 Baht consisted of 54.92%.

Hypothesis Test and Analysis of Covariance (ANCOVA)

There are a variety of train passengers with different demographics which can be divided into different groups and these groups have different effects on each variable. For this reason, demographic characteristic of education levels is used as a sample group and the parameter from the independent variable is used as an intervening variable for the analysis of covariances (ANCOVA). From the sample group, the results have shown that the education level of bachelor's degree or equal consisted of 158 respondents while 34 respondents have master's and doctoral degrees education and 16 respondents have lower than bachelor's degree education level.

The Influences of Skills, Ecosystems, Technical Infrastructure, and Education Level on the Perceived Usefulness of D-Ticket System Use

When analyzing the variants of the influences of each parameter on the perceived usefulness, the results found that the significant level is 0.69 which is greater than 0.05 which indicates that the independent variable has different variants. From the general linear model analysis, the adjusted predicted coefficient (Adjusted R²) is 48.8% indicating that the digital ecosystem influences the perceived usefulness which the significant p value is lower than 0.05 meaning the acceptance of the hypothesis (H2) with the regression coefficient (Beta) of 0.576. Moreover, the independent variable—technical skill does not have a direct influence on the perceived usefulness of the D-Ticket system. After covariance analysis, it was found that the education level lower than bachelor's degree co-influences with skills affected perceived usefulness on D-Ticket system use with the regression coefficient (Beta) of 1.023 indicating that this sample group are digitally skillful and can understand the benefits of D-Ticket system more than other sample groups since this group is familiar with technology use e.g., work-related or on the daily basis which has a more significant influence than the master's and doctor's degree education level sample group. Furthermore, it was found that the lower than bachelor's degree sample group is co-influenced by technical infrastructure on the perceived usefulness of D-Ticket system use which the regression coefficient consisted of -0.840 indicates that this sample group who has access to basic

infrastructures e.g., the internet or mobile phones has lower perceived usefulness than those who of master's and doctor's degree significantly. The latter is already equipped with devices and access which is why they have more experience with different systems thus D-Ticket system might be similar to those systems they have experienced before resulting in lower perceived usefulness.

The Influences of Monetary Cost, Time Taken, Efforts Convenience and Education Levels on Perceived Switching Value of D-Ticket System Use

From the analysis of variants stability on the influences of perceived switching value on D-Ticket system use, the significant interval is 0.56 which is greater than 0.05 indicating that the independent variables have different variants. From the general linear model analysis used for hypothesis testing of the influence of perceived switching value of D-Ticket system use as well as hypothesis testing by variants analysis, it was found that the adjusted R^2 is 47.5% and shown that the time taken, efforts convenience and education level (bachelor's degree or equal) has significant interval p lower than 0.05 which indicates to the acceptance of hypothesis H5, H6, H15 as well as the regression coefficient (Beta) of 0.443, 0.476, 1.371 respectively in which the education level has the greatest influence on the perceived switching value (1.37 times greater than the master's and doctoral degree) or the regression coefficient (Beta) equals to 1.37. Additionally, the monetary cost-independent variable does not have an effect on the perceived switching value of D-Ticket system use. After the covariance analysis, the education level of a bachelor's degree or equal influences the time taken which affects the perceived switching value of D-Ticket system use with a -0.315 regression coefficient value indicates that this sample group has a lower perceived switching value of D-Ticket system use than those of higher education levels significantly. This might be due to the perspective of this sample group that found no significant change in the time utilization of the system including traveling to buy the tickets time, learning time, and application installation time.

The Influences of Performance Expectancy, Effort Expectancy, Social Influences, Perceived Usefulness, Perceived Switching Value, Risk, Trust and Education Level on the Intention of D-Ticket System Use

From the analysis of variants stability on the influences of perceived switching value on D-Ticket system use on the intention of D-Ticket system use, it was found that the significant interval is 0.145 which is greater than 0.05 indicating that the different independent variables have different variants. Moreover, from the general linear model analysis used for hypothesis testing of the influence of perceived usefulness of D-Ticket system use as well as hypothesis testing by variants analysis, the adjusted R^2 is 62% which the main influence variable is the independent value of performance expectancy and the perceived usefulness that has the significant value p lower than 0.05 meaning the acceptance of hypothesis (H7 and H10), the regression coefficient (Beta) of 0.473 and 0.595 respectively, and effort expectancy, social influences, perceived switching value, risk, trust, and education level does not have a direct influence on the intention of D-Ticket system use. Furthermore, from the covariance analysis, it was found that the sample group of bachelor's degree or equal co-influences the perceived switching value of the D-Ticket system more than the higher education group significantly. This may be due to the previous sample group understanding the change from offline to online already and still having an intention to use D-Ticket system. Additionally, it was found that the sample group with lower than bachelor's degree education level co-influences with trust that also affects the intention of D-Ticket system use with the regression coefficient (Beta) of -0.624 indicates that this sample group does not trust the system in comparison to the group with higher than bachelor's degree education system significantly in which the intention of D-Ticket system use is lower than other groups. The results might be due to the perspective of this sample group which thinks trust is irrelevant to the intention of D-Ticket system used.

Results and Discussions of Research Hypothesis Testing

The Relationships Between Digital Skills and Perceived Usefulness of D-Ticket System Use

From the hypothesis test, the results show that digital skills do not have a significant interval of 0.5 which disagrees with hypothesis 1 that said digital skills have a positive influence on the perceived usefulness of D-Ticket system and the study of Cetindamar Kozanoglu and Abedin (2021) who found that the technology knowledges help improve the capability of learning about the system use. However, the result of the influence of education level on the perceived usefulness of D-Ticket in which the sample group with lower than bachelor's degree education level with technology skills has higher perceived useful than other groups which agrees well with Nikou et al. (2022) who found that technology skills have a direct influence on the convenience of technology use. In comparison, the groups of bachelor's degree and higher education level have lower perceived usefulness since they do not find D-Ticket system useful.

The Relationships Between Digital Ecosystem and Culture on the Perceived Usefulness of D-Ticket System Use

The result indicates that the digital ecosystem and culture influence the perceived usefulness of D-Ticket system use which agrees well with Hammerton et al. (2021) who found that the digital ecosystem and culture which is one of the components leading to different practices in different ecosystems of technology use including social ecosystem, access to technology e.g., local society and urban society which have different accesses to opportunity.

The Relationships Between Technology Infrastructure on Perceived Usefulness of D-Ticket System Use

This study found that digital systems and infrastructure has no statistically significant interval of 0.05 which disagrees with hypothesis 3 that said digital systems and infrastructure have a positive influence on the perceived usefulness of D-Ticket system use and also disagrees with digital systems and infrastructure principle which is a digital system and technology use for

convenient supporting the appropriate digital platform use e.g., automation production technology and robotic [Soomro et al., 2020]. However, the result agrees well with the work of Alshammari et al. (2016) who found that useful technical support and the acceptance of technology by users lead to a positive result but in contrast with this, there will be an obstacle in the perceived usefulness of new technology. Therefore, when comparing the result to the statistical analysis of this research found no positive supporting explanation for the hypothesis of the influence of technology infrastructure on D-Ticket system use which results in a negative way. This may be due to responders not finding D-Ticket system useful in several ways including devices, an appropriate platform, stability of the system, and internet access thus these parameters have a negative effect on the perceived usefulness of D-Ticket system.

The Relationships Between Monetary Cost on Perceived Switching Value of D-Ticket System Use

The result shows that there is no significant interval of 0.05 on the monetary cost on perceived switching value of D-Ticket system use which disagrees with hypothesis 4 that says monetary cost has a positive impact on the perceived switching value of D-Ticket system use as well as the concept from Soomro et al. (2020) who found that with the increase in monetary cost, the customers can recognize it and lead to the change in service further. Furthermore, the result agrees well with several studies including Viitikko (2023) who found that the perceived switching value of Facebook users in Finland does not affect the intention of Facebook use and Aishah and Kassim (2019) who found that system acceptance and switching to electronic payment of Malaysia customers has a low to none effect on the acceptance of electronic payment significantly since there is little options in the electronic payment and the internet access is not good enough in some areas which agrees well with Tiwari and Tiwari (2020) who found that monetary recognition has no significant effect for Indian mobile banking. In conclusion, there is no supporting explanation for the hypothesis of the positive impact of monetary cost on the perceived switching value of D-Ticket system since many passengers do not want to pay additionally to gain special benefits in comparison to other purchasing platforms as a result, passengers do not see the importance of switching to D-Ticket system.

The Relationships Between Time Taken on Perceived Switching Value of D-Ticket System Use

The result from this study agrees well with Soomro et al. (2020) who found that the increase in time taken resulted in the recognition of passengers and led to switching to D-Ticket service.

The Relationships Between Convenient Efforts on Perceived Switching Value of D-Ticket System Use

The result agrees well with Jiang et al. (2013) who found that the services with direct help for the customers in selecting, providing the knowledge, and the use increase the satisfaction of the customers and affect re-purchasing which is convenient for evaluation, searching, and transaction. The after-service has an impact on the recognition of the customers in purchasing goods.

The Relationships Between Performance Expectancy on the Intention of D-Ticket System Use

The result agrees well with Susanto et al. (2018) who found that effort expectancy has the most impact on behavior efforts and performance expectancy is also another parameter that affects the intention of use. For this study, the performance expectancy shows the time taken for the system to work or the good experiences of users which impact the intention of D-Ticket system use.

The Relationships Between Effort Expectancy on the Intention of D-Ticket System Use

The result shows that there is no significant interval of 0.05 which disagrees with hypothesis 8 that said effort expectancy has a positive effect on the intention of D-Ticket system use and the study of Susanto et al. (2018) who found that the effort expectancy is the most important parameter influences the behavior effort and performance expectancy in which it leads to the effort as well. However, the result agrees well with Mensah (2019) who found that the effort expectancy and internet trust do not have an important impact on the intention of the government's internet of Chinese students as well as the study of Taylor and Strutoon (2010); Choi et al. (2011); Chaouali et al. (2016) who found that from the use of electronic commerce and mobile banking, the effort expectancy does not have the most important impact on the intention of electronic system use since the users find the performance of the system more important. Moreover, from the statistical analysis of this research, it was found that there is no positive support for the intention of D-Ticket which can be explained that the increase or decrease in the intention of D-Ticket system use does not depend on the simplicity of the system but other parameters thus with the increase in effort expectancy including the difficulty in the system use, the ticket reservation steps, and the well-explained guidelines does not increase the intention of the D-Ticket system use.

The Relationships Between Social Influences and the Intention of D-Ticket System Use

The result shows that there is no significant interval of 0.05 which disagrees with hypothesis 9 that said social influences have a positive impact on the intention of D-Ticket system use while the result from hypothesis test agrees well with Naito et al. (2014) who found that the intention in system use of the internet users of biometric in electronic store is not from the influences of the surroundings or the media. Also, they do not find the application used to be more in trend than non-users. Furthermore, the result also agrees well with Wong et al. (2015); Salim (2012); Awwad and Al-Majali (2015) who proposed that social influences do not have a significant effect on service behaviors because other things that other people found more important do not affect the service due to the less impact of external parameters in comparison to internal parameters of the products including the usefulness and user-friendliness. Finally, after the statistical analysis of this study, the result shows that there is no positive supporting explanation of the hypothesis on the intention of D-Ticket system use which can be explained with the advice from the external members especially the chief executive or CEO e.g., the railway Governor, Minister of Transportation, the Prime Minister or the call center does not affect the consideration of using D-Ticket system.

The Relationships Between Perceived Usefulness on the Intention of D-Ticket System Use

The result shows that the perceived usefulness has an impact on the perceived switching value of D-Ticket system which agrees well with Pender (1996) who found that the recognition of benefits is a trust level of an individual to gain some benefits from one behavior or the trust level of a person who gains a positive benefit from their own action including food delivery application and products and service purchasing in which the perceived useful has both direct and indirect impacts on the intention of the use of that technology. Musyaffi et al. (2021) found that the benefits gained are an evaluation of the trust level of technology users who recognize that the system can be improved. The perceived usefulness is the most important indicator of services as users tend to adopt information systems because they see the features and usability of information systems.

The Relationships Between Perceived Switching Values on the Intention of D-Ticket System Use

The result shows that there is no significant interval of 0.05 which disagrees with hypothesis 11 that the perceived switching values have a negative impact on the intention of D-Ticket system use and the study of Mannan et al. (2017) who found that the perceived switching cost has a relationship with the intention of system use which if the perceived switching cost is low, the intention in using the old system will be longer. Moreover, the hypothesis test agrees well with Ting (2014) who found no relation between perceived switching cost and the level of purchase intention of the customers. However, the neutral satisfaction level customers show a positive and important switching cost and the purchase intention indicates that the organization should not aim for setting the switching cost to maintain the customers but should aim for maintaining the satisfaction of customers. Additionally, the statistical analysis from this work found no positive supporting hypothesis on the influences of perceived switching cost on the intention of D-Ticket system use which can be explained that transitioning from offline to online ticketing changes the cost of the customers including learning cost increases from the internet payment and smartphones yet these things do not affect the intention of D-Ticket system use.

The Relationships Between Risks on the Intention of D-Ticket System Use

The hypothesis test indicates that the risks and the intention of D-Ticket use do not have a significant interval of 0.05 which disagrees with hypothesis 12 that said risks have a negative impact on the intention of D-Ticket use and the study of Park and Kim (2014) who studied risks of online shopping and divided the risks acceptance into the risk of product delivery and payment. Dowling and Staelin (1994) found that the additional risk is the quality of products and the return of products/money from the purchase, the unsafe payment method is one of the components of risk acceptance. However, it agrees well with Kim and Koo (2016) who found that trust and risk influence each other but risks do not affect the intention of the transaction and Al-Saedi et al (2020) who found that risks do not affect the intention of mobile banking. Additionally, from the statistical result, it was found that there is no supporting explanation for the hypothesis that said risks have a negative impact on the intention of D-Ticket use which can be explained that even though, the passengers concern about the technical issues regarding the use of D-Ticket e.g., seat reservation, payment and privacy etc. However, the concern does not affect the intention of D-Ticket system use which can be concluded that the impacts of these risks still are not high enough to change the minds of the customers in D-Ticket use.

The Relationships Between Trust on the Intention of D-Ticket System Use

The hypothesis test indicates that trust and the intention of D-Ticket use do not have a significant interval of 0.05 which disagrees with hypothesis 13 that said trust has a positive impact on the intention of D-Ticket use. However, it agrees well with Mensah (2019) who found that effort expectancy and trust in the Internet are not important parameters for the intention of using electronic government of college students in China as well as Minarti and Segoro (2014) who found that brand trust does not have a significant impact on the intention of mobile phones use of the customers. Additionally, the statistical result found no support to the hypothesis about the positive influences of trust and the intention of D-Ticket system use which can be explained that the customers trust SRT or D-Ticket system. However, trust does not affect the use of D-Ticket since these people may find other parameters than trust also influencing the intention of D-Ticket system use.

The Relationships Between Education Level on Perceived Usefulness

The result shows that there is no significant interval of 0.05 which disagrees with hypothesis 14 that said education level shows a positive on the perceived usefulness and disagrees with Tavittyanan et al. (2022) who found that education level influences the perceived usefulness of hotel technology and customers with bachelor's degree or higher have more perceived usefulness of hotel technology significantly. However, it agrees well with van Dijk et al. (2008) who found that social and population demographics e.g., gender, age, social status, and education level do not have a significant effect on the perceived usefulness of internet use of the Netherlands government. Additionally, the statistical result found no support for hypothesis 14 which can be explained by that the perceived usefulness is beyond the learning under the curriculum thus the education level does not have any impact.

The Relationships Between Education Level on the Perceived Switching Value

The result shows that the education level of each sample group has an impact on the perceived switching value which agrees well with Kiser (2002) who found that population data is an important parameter used in the explanation of the relations of money saving time in which the potential in the change of household banking accounts with higher education levels and incomes is higher than of those with lower.

The Relationships Between Education Level on D-Ticket System Use

The result shows that there is no significant interval of 0.05 which disagrees with hypothesis 16 that said education system has a positive impact on D-Ticket system use which disagrees with Gumussoy et al. (2007) who found that education levels determine the behavior intention in the system use, the perceived convenient and usefulness of the system. However, it also agrees well with Sandrine (2009) who found that the population demographic e.g., gender, race, status, and education level does not affect the intention of Internet banking use [3. Furthermore, the statistical result indicates that there is no positive support for hypothesis 16 which can be explained that education levels have no significant impact on the intention of D-Ticket use. However, it co-influences the perceived switching values cost which affects the intention of D-Ticket use, and the education level lower than Bachelor's degree co-influences with the trust of D-Ticket system.

CONCLUSION

This thesis studies the parameters influencing the intention of electronic ticket acquisition of passengers which is quantitative research via surveys from the data collecting of electronic questionnaires from social media platforms e.g., Line and Facebook. The unified theory of acceptance and usage of technology: UTAUT is modified and applied in this study with additional studied parameters including digital readiness and switching cost to the hypothesis test. The sample group is train passengers who have never purchased the tickets online via the website and D-Ticket application with the qualified sample group of 208 people used in the analysis. The population demographic result shows that 52.88% of the sample group is female, ages ranging between 31-40 is 37.98%, ages close to 41-50 is 34.13%, bachelor's degree or equal is 75.96%, public servants/government agents/state enterprisers is 36.06% (majority), cooperate, workers, is 34.13% and the average monthly income is 15,000-30,000 Baht is 54.92%. Furthermore, the statistical result found parameters that influence the intention of D-Ticket system use are the digital ecosystems and cultures and the effort expectancy has a direct effect on the intention of D-Ticket use as well. Moreover, responders have perceived switching and time costs as well as the service convenience. Lastly, the covariant analysis found that education level influences the intention of system use differently.

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