

Acceptance of Information Technology affecting the convenience of Agritourism Services in Chumphon Province, Thailand

Sudarat Pimonratanakan
College of Logistics and Supply Chain
Suansunandha Rajabhat University, Thailand
Email: sudarat.pi@ssru.ac.th

Abstract

This research aimed to study the factors that influence the access to the online network system that affects the convenience of receiving agricultural tourism services in Chumphon Province in Thailand. It also studied the influence of the causal factors of accessing the online network system that affects the convenience of receiving agricultural tourism services in the province. Furthermore, the study also considered the path patterns, and causal factors that influence the use of online network systems which affect the convenience of receiving agricultural tourism services in Chumphon Province in Thailand. Agritourism activity has great tourism potential, which will progressively begin to be used through agritourism structures to entice tourists during the year. The researcher also sought to study ways to increase access to online networks which affect the convenience of receiving agricultural tourism services in the province . The sample comprised of both Thai and foreign tourists who use travel services in Chumphon Province. The number of respondents was 450 people. The tools used in the research were questionnaires about acceptance of information technology and also access to online network systems that affect the ease of use of agritourism services. Statistics used in data analysis included frequency, percentage, mean and standard deviation. For the statistics used in the hypothesis testing, the researcher used the harmonic index consisting of chi-square values, GFI values, RMSEA values and CFI values. The results of the study showed that the results of the examination of conformity with empirical data were consistent. The results of the data analysis showed that the chi-square was 9.05. The significance level (P-Value) was 0.100. CFI was 1.20. GFI was 0.92 and RMSEA is 0.024. Service innovation was thus found to have a direct causal relationship with the perceived benefits of online networking which affects the convenience of receiving services in agricultural tourism in Chumphon Province in Thailand.

Keywords: Service innovation, Technology Acceptance Model, usefulness, ease of use, system use.

Introductions

From the 12th National Economic and Social Development Plan (2017-2021), the Office of the National Economic and Social Development Board (NESDB) of Thailand, has been established on the basis of the 20-year national strategic framework (2017–2036), which is the main plan of national development and forms part of the Sustainable Development Goals (SDGs). This includes the restructuring of Thailand to 'Thailand 4.0', which continues from the 9-11 development plan from which is prepared the manpower and capacity development of the population, and the focus is on raising the quality of human capital of the country. These initiatives will hopefully result in the development of the country to balance and stand firmly and sustainably. In addition, they are the guidelines to be considered in increasing the use of knowledge, technology, innovation and creativity to be the main tools in driving the development of countries in all parts of the country (Office of the National Economic and Social Development Board, 2017). One of the principles of national development is intended for the sector of agritourism business. The Tourism Authority of Thailand or TAT (formerly the Tourist



Organization of Thailand or T.O.T.), was established in 1959 and has occupied a crucial role in tourism development in Thailand since then. The Ministry of Tourism and Sports was formed in 2002 so as to develop, back and endorse industrial tourism, sports and recreation.

The Second National Tourism Development Plan (2017-2021), has developed a national tourism development plan for tourism to be managed and developed continuously by creating a balance in tourist destinations, products and services in both space-time and location, and seasonal and tourism patterns of travel. It does this by promoting a spatial balance in income distribution and the number of tourists. This also leads to promoting specific markets for special interest groups such as sustainable agritourism groups Environmental and ecotourism groups (National Tourism Development Plan, 2017) of which agritourism is an agricultural product, way of life, or local wisdom and interesting cultural traditions of Thai agricultural communities are also promoted. The Tourism Authority of Thailand and the Department of Agricultural Extension have organized agricultural tourism activities and have a policy to manage agricultural tourism in all the provinces (Ministry of Tourism and Sports, 2019). The community is a key operative instrument in development which has been sanctioned to enhance self-reliance at the community level via agritourism as one option.

Nowadays, both the government and the private sector try to find ways to develop the agricultural sector of Thailand because the agricultural sector still has many problems. For example, farmers have insufficient income to sustain lif and often have to relocate to work in other industries. This also encourages the younger generation to turn their backs on a farming career. However, numerous farm households have modernised their farm businesses in order to survive economically. One way to do this has been to diversify their agricultural properties into recreational activities, including a tourism element. The younger generation considers that a farmers' occupation is a hazardous and difficult profession, and perhaps offers uncertain income. Thus the government sector is trying to promote farming as such, and has developed a drive in this regard in many agricultural sectors. In 2016, the government adopted the policy of Thailand 4.0, which is a policy to change the traditional agricultural model. In addition, the Thailand National Tourism Development Plan (2012-2016) refers to the presence of tourism in the national agenda. The objective of the National Tourism Development plan is to change Thailand's competitiveness and move it up by at least 15 places, which would put it amid the uppermost five destinations in Asia. The plan also envisioned to increase tourism income by at least 5 percent throughout this five year period.

Agriculture had to be renewed so that farmers can add value to their own products by introducing new innovations or technologies, so government came to help develop the agricultural sector better. There are many forms of agricultural development at the present time, such as the development of products to increase productivity. Development is boosted by creating added value of agricultural products, etc. Every approach has the same goal, namely, to increase revenue and create a better quality of life for farmers. It also seeks to bolster agricultural development by pushing it into tourism as another way to increase income. Adding value to farmers' products in the form of agricultural tourism is vital to sustainability (Khermkhan Jeeranum, 2018). In addition, agricultural tourism operators in carrying out tourism activities have furthered interconnections in all dimensions, and provide Tourism sites which can focus on providing services to tourists in a manner that integrates tourism and agriculture as an agricultural tourism supply chain based on the proper way of playing and responding to the satisfaction of tourists needs and wants (Srisuk Thatsaphon, Jampathong Adisak & Tachom Charasanan, 2018). It is this principle that drives tourism development in the sector of small-scale agricultural product operators in Thailand, and there is a supply chain management with agriculture and this has been made Thailand into an agricultural tourism



destination (Pimonratanakan Sudarat & Ayasanond Chitpong, 2018). Agritourism suggests the presence of two core activities: agricultural and tourism activities, which assume three elements explicitly linked to the tourist product offering including accommodation, food and entertainment (Brezuleanu & Brad, 2001).

In the south, there are many famous tourist attractions. Both the main tourist attraction and alternative tourist attractions have unique and diverse tourist resources. Both have natural and cultural tourism resources as well as a way of life that indicates the identity of the southern people. Taken together with tourism activities, these can be linked to both land and sea activities. Especially important tourist destinations are found on both sides of the peninsula, including the coast of the Gulf of Thailand and the Andaman Sea coast. In Chumphon Province, there is a concrete drive for boosting tourism by the community. Under the communities, tourism network in Chumphon Province have been established which consist of communities that have tourism operations and this has helped them to join the group and they coordinate and help each when it comes to taking care of both old and young people. This is done in the name of the Chumphon Community Tourism Network (Ministry of Tourism and Sports, 2017). There is thus a strong social support spinoff over and above the agritourism which enhances the farms. Thai entrepreneurs can, through agritourism activity, begin to develop an efficacious model so as to capitalize on the huge tourist potential of Chumphon Province, and they can supplement the income from their agricultural holdings through the prospects of obtaining a better income from possible tourism activities (Mtapuri, Giampiccoli & Jugmohan, 2015).

For the community tourism network in Chumphon Province, there are 13 community members, namely 1) Ban Khlong Rua, Pak Song Subdistrict, Phato District 2) Ecotourism Club Phato District 3) Sufficiency Economy Learning Center, Kamnan Quaid House Thung Tako District 4) Ton Hong Community, Muang District 5) Lung Nil Farm Natural Agriculture Learning Center Thung Tako District 6) Lamae Ancient Sailing Conservation Club, Lamae District 7) Ban Rai Subdistrict, Dan Sawi District, 8) Ban Thong Tom Yai, Sawi District 9) Ban Ko Phitak Bang Nam Chuet Subdistrict, Lang Suan District 10) Chumphon Cabana Resort, Pathio District 11) Ban Thung Maha, Pak Khlong Subdistrict, Pathio District 12) Sufficiency Economy Learning Center for the People Living with the Forest Conservation unit and Phato Watershed Management, Phato District and finally 13) Sufficiency Economy Learning Center. This is according to the Science Royal Project, Nong Yai, Muang District, Chumphon Province. As a result, the community has friends in the management of tourism within the area, resulting in the process of participation in the network model. There is also a transfer of lessons learned in the form of community teaching so that they bring many lessons and work experience from the elders in the community and teach these to the younger community. For example, some people have ten years of work experience from serving in the Ban Ko community tourism initiatives (Raksapon Amnat, Na Thongkaew Benjamas, Pengkhona Juthamas, Thongsong Choldarong & Chittapapan Boonsilp, 2017).

From the reasons mentioned above, the researcher perceived the importance of education regarding the adoption of technology and access to the online network of agricultural tourists. In order to facilitate travel services of the tourists themselves and also support the creation of perfect service innovations as well, the results of this research will be used to formulate policies and plans within the organization as well as to improve and develop various areas of operation and other factors. This will be appropriate to create innovative services and encourage agritourism operators and new entrepreneurs to draw on the potential that creates innovative ideas about new service innovations for agritourism operators. Such initiatives will



help drive the organization to achieve its goals efficiently and effectively, making the organization progressively stable and thus more sustainable.

Research objectives

- 1. To study the factors that influence the access to the online network system that affects the convenience of receiving agricultural tourism services in Chumphon Province in Thailand.
- 2. To study the influence of the causal factors of online network access that affects the convenience of receiving agricultural tourism services in Chumphon Province in Thailand.
- 3. To study the path patterns, and the causal factors that influence access to the online network system that affects the convenience of receiving agricultural tourism services in Chumphon Province in Thailand.
- 4. To study ways to increase access to the online network system that affects the convenience of receiving agricultural tourism services in Chumphon Province in Thailand.

Literature Review

Related concepts and theories about service innovation

Schumpeter (1934) and also Chen, et al., (2009) stated that the service innovation concept was developed from the innovation theory which is just a broad concept of creating and developing new things. While most innovations have been developed using technology to involve many, research often focuses on the use of technology to change the form of service. Salter and Tether (2006) have commented that the nature of human services will create a higher level of interaction and interest. The service is therefore designed from the perspective and experience of customers who participate and this takes a long time and there are many elements in the beginning of the decision-making process. In any event, innovation is generally inherently risky for both individuals and organizations, especially in its early stages when new ideas are created and put into practice for the very first time (Lyons, Chatman & Joyce, 2007: 10). Farms can become interesting places for rural development developments, for example those for travel, education, leisure, and adventure. A farm in which agritourism is practiced can also be promoted by suitable place branding as a required destination for tourism drives. (Rinaldi & Cavicchi, 2012). According to Nicolaides and Grobler (2017), tourism visits in nature and thus also in agritourism boosts the quality of life of those who participate even if only for a few days.

Chen (2011) stated that Service innovation means developing new ideas and being beneficial for improving service efficiency and this applies equally to most sectors including tourism. In addition, Flaatin (2007) states that service innovation is to offer various services in a new way to meet the needs of both internal and external customers. Lyons, Chatman and Joyce (2007) discuss the differences between service innovation and manufacturing innovations. Competing on service innovation requires a much more intensive set of organizational practices than merely competing on physical product innovation. There are five key issues or key distinctions between innovation in services and innovation in manufacturing. First, innovation in services is dispersed through-out an organization. Secondly, it is fluid and unremitting in speed. Thirdly, it is more pertinent to hiring and promotion choices. Fourthly, it is influenced by formal reward systems and culture at a company-wide level. Finally, it is



sturdily influenced by a leaders' behavior. The fundamentals. either cultural or structural, for competing on innovation in services should be universal (Lyons, Chatman & Joyce, 2007: 8).

Boonvatcharapai Tossaporn, Jadesadalug Viroj, Tuntrabundit Khwanruedee (2016) said that service work needs to focus on quality rather than quantity. Different from product innovation or general products, service innovations in Thai boutique hotels are linked to practices and are a gradual development process rather than a sudden change over a short period of time. This is whether they in the form of innovative services or services that are updated from existing ones.

From the above, the researcher concluded that service innovation means creating and developing new things. By using information technology to develop and to change the service model in order to meet the needs and wants of consumers, in terms of communication and to facilitate the use of services, service provision improves.

From the review of the concepts, theories and related research we can summarize as hypotheses, the following:

Hypothesis 1: Service innovation has a direct causal relationship with the perceived benefits of online networking. That affects the convenience of receiving agricultural tourism services in Chumphon Province in Thailand.

Hypothesis 2: Service innovation has a direct causal relationship with the perception of ease of use of the online network system. That affects the convenience of receiving agricultural tourism services in Chumphon Province in Thailand.

Related concepts and theories about Technology Acceptance Model - TAM

The Technology Acceptance Model - TAM is a theory invented by Davis, Bagozzi and Warshaw (1989) and it was developed from the concept of TRA. TAM focuses on various factors that affect acceptance or decisions to use new technology or innovations. The main factors that directly affect the acceptance of technology or innovation of users are Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) as shown in Figure 7 by factors that influence (Behavioral Intention) .There are 4 factors, including External Variables, Perceptual Ease of Use (PEOU), Perceived Usefulness (PU) and Attitude, in the end, behavioral intentions in using technology will influence the acceptance and use of that technology.

The Technology Acceptance Model (TAM) is thus the acceptance of technology, and an information system theory involving accepting technology users will accept when the factors that influence the decision to accept are positive. The research confirmed the validity of the Davis instrument, and supports its use with different populations of users and diverse software adoptions. We should note that TAM has been widely criticised, notwithstanding its common use, leading the original advocates to try to redefine it. TAM as a "theory" is attacked based on its dubious experimental value, limited descriptive and extrapolative power, triviality, and lack of practical value (Chuttur, 2009).

Davis (1989) says technology includes understanding of the Perceived Usefulness (PU) and this means being aware of the use of technology and the benefits from technologies such as reduction of work processes and saving time. Perceptual Ease of Use (PEOU) means knowing the uses of technology and making work easier. After the technology has been implemented,



the work can usually be done faster and more efficiently as well (Davis,1989). Davis also defines the Perceived Usefulness (PU) as the level at which people believe that using this special system will help increase work efficiency. The definition of perception of convenience (PEOU) is the level at which using people believe this special system will help simplify work and it is an influencer on the perception of benefits, because a system that is easy to use is much more useful.

From the above, the researcher concluded that adoption of technology means understanding technology and making decisions that apply technology correctly in everyday life by taking into account the perceived benefits such as ease of use, intention to use and actual use.

From the review of the concepts, theories and related research can be summarized as hypotheses, including these two below:

Hypothesis 3: In the recognition of the benefits of online networking there is a direct causal relationship with the actual use of the online network system and this affects the convenience of receiving agricultural tourism services in Chumphon Province in Thailand.

Hypothesis 4: In the perception of ease of use of the online network system, there is a direct causal relationship with the actual use of the online network system that affects the convenience of receiving agricultural tourism services in Chumphon Province in Thailand.

Related concepts and theories about Perceived Risk

Different models have been developed and operationalized to assess the amount of risk and how these have been established over the last few years. Cunningham (1967) describes the perceived risk as perception of risk which is the perceived uncertainty of customers that are involved in the negative direction and use of a service. Therefore, perceived higher risks are caused by negative uncertainties which are an important aspect. Consequently, the security system and keeping personal information of customers is important to help customers understand and accept that difficulties that may occur are a part of usual operations. In addition, the presentation of the organization or website of the service facility is an important part that affects the selection and use of the services of customers as well. For example, if the store or website of the organization presents complete and clear information, it may cause low levels of risk awareness. This shows that the risk depends on the security system which is in place and the personal information of customers, including the presentation of their complete information.

Cunningham (1967) has given us the above meaning of risk perception. There are many scholars who accept this notion in explaining the perception of risk. Laeiadeenun Kewarin (2014) stated that perceived risk means consumers have some awareness of acceptable results for what happens if they make a purchase. In addition, awareness of risk also means accepting the risk if the personal information of the consumer is correct. This is revealed when using the service or when the content in the system may not be as relevant as one expects.

From the above, the researcher concluded that risk perception effectively means the result of the risk is great and that one may be aware of the wrong information or unclear information which will show results in the form of safety, use and storage personal information of customers including offering complete product information. This may lead to dissatisfaction



setting in and a loss of confidence and even unbelief, and may cause the consumers or customers to make new decisions for example, regarding online payments, in the future.

Related concepts and theories about Agritourism

Paresh, Joshi, Milind and Bhujbal (2012) explained that Agritourism is an activity that is conducted on a farm for recreation, entertainment, education or for fun activities on the farm, either involving livestock, culture, harvesting or other activities deemed to be interesting as an agricultural tourism activity. Reynolds (2005) stated that agritourism is a business in which farmers operate on their own farms with the core aims of enjoyment and educating visitors to support the increase of agricultural production in farms. Moreover, Khermkhan Jeeranum (2018) have stated that Agritourism is a tourism model that has activities related to agriculture and other fun activities that agricultural tourism can use to educate visitors and also generate income for the community coupled with needed conservation of limited agricultural resources.

Agritourism can be built on the assets of the farmers (their land, agricultural holdings, and agricultural culture), which tourists come to experience. This activity can then lead to the development of Small, Medium and Micro Enterprises (SMMEs), which mainly use family labour (particularly female labour). Agritourism can utilize the agricultural holdings and products for the purpose of tourism, such as the scenery of paddy fields and vineyards, food and drink from agricultural products (vegetables, fruit, etc), souvenirs from local products (handicrafts), and accommodation from redundant or vacant property. (Srisomyong, 2010:33)

From the review of the concepts, theories and related research a further hypothesis results:

Hypothesis 5: In the perception of online network risk there is a direct causal relationship with the actual use of the online network system that affects the convenience of receiving agricultural tourism services in Chumphon Province in Thailand

From reviewing the theoretical concepts throughout the relevant research, a basic research framework was established for studying the adoption of information technology and online network access that affects the convenience of receiving agricultural tourism services in Chumphon Province in Thailand as shown in Figure 1.

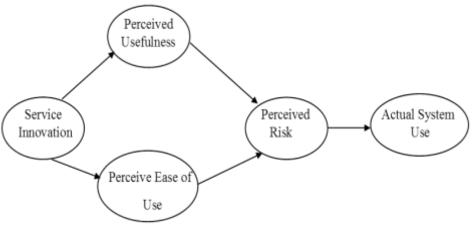


Figure 1. Research Model



Methodology

Population and sample

The population used in this research comprised of both Thai and foreign tourists who used tourism services in Chumphon Province. For the sample, the researcher considered the nature of the research data that requires advanced analytical statistics, i.e., path analysis, therefore determining the size of the sample group had to be consistent with the use of statistics as a preliminary step by using larger samples as the criterion for determining the sample size. Chumphon Province has an average number of 1,495,633 visitors per year (Chumphon Provincial Tourism and Sports Office, 2017) therefore, the questionnaire was determined to have 400 sets, but in order to increase the confidence of the information, the researcher increased the number of sample groups by 50 samples. Thus, a total of 450 sets and was required and was based on a purposive sampling method of Thai and foreign tourists using tourism services. Through a convenience sampling method, there was a total of return questionnaires of 450.

Research tools

Tools used for data collection are considered. The researcher used a survey form. Questionnaires were close-ended and in part 1 there was a Checklist while section 2-5 comprised the 5 point-Likert Rating Scale. The questionnaire was divided into 6 parts: Part 1 contained general demographic information about respondents and was in the form of a check list. Part 2 related to Service Innovation, Part 3 to Recognition of the Benefits of Using Information Technology, Part 4 to Easy Access and Use, Part 5 to Real Access In the national technology system and, Part 6 related to any additional suggestions.

Validation of the Tests

The researcher analyzed the reliability of the questionnaire and of each question with Cronbach's Alphas Coefficient and this was found to have a 0.914 confidence value which is greater than 0.7 indicating that the instrument had confidence at a high level and this is acceptable (Vichanbuncha Kalaya & Wanichbancha Thita, 2014: 159).

Statistics and data analysis

The analysis was of causal factors affecting online network access that affects the convenience of receiving travel services that will be used to verify the consistency with empirical data. The researchers set the guidelines for analyzing data as stated below.

Basic data analysis

- 1. Analysis of basic statistics of variables related to the background of the sample group was done by using descriptive statistics to calculate the basic statistics such as percentages. This analysis used the finished program.
- 2. Data analysis of all variables and the preliminary analysis of variables was in the form of the data obtained from the rating scale questionnaire. The statistics used for preliminary data analysis included Mean, Standard Deviation, and the Analysis in this section used the finished program.
- 3. Analysis of causal factors affecting access to online network systems that affect the convenience of receiving agricultural tourism services was done via a path analysis using the social sciences program SPSS. Considering the value $\chi 2$ / df is less than 2, the CFI index has a value approaching 1, the RMSEA and RMR index is below 0.05, which is in the



acceptable criteria which Hair et al. (2006) accept and which is in harmony with the empirical data.

Results

The research found that the sample group consisted of 450 people using agricultural tourism services in Chumphon Province, of which 248 were male, accounting for 55.11% and 202 females, accounting for 44.88%. Aged 30 years or more were 194 people, representing 43.11%. Those with a bachelor's degree numbered 214 people or 47.55%. Income per month was between 25,000-30,000 baht for 231 people, representing 51.33 percent, and there are sample groups that responded to the opinion of service innovation (SINV) overview and individual aspects in four areas, namely information, process, technology and the environment were at a high level for the adoption of information technology in terms of Perceived Usefulness (PU), Perceptual Ease of Use (PEOU), Actual System Use (ASU), and Perceived Risk (PRK).

The research team used a multivariate statistical analysis using path analysis to test hypothesis, acceptance of information technology and access to online network systems. That affects the convenience of receiving agricultural tourism services in Chumphon Province in Thailand. The researcher considered the Pearson's Product Moment Correlation coefficient to determine the preliminary agreement of structural equation analysis. In order to see the relationship between variables used in the study and if it has is a linear relationship or not and has any relationship. The direction of the relationship between variables that are of any value, is shown in Table 1

Table 1. Correlation coefficients, mean and standard deviation of variables

	SINV	PU	PEOU	ASU	PRK
SINV	1				
PU	0.778**	1			
PEOU	0.743**	0.780**	1		
ASU	0.740**	0.712**	0.785**	1	
PRK	0.712**	0.670**	0.739**	0.728**	1
Mean	3.739	3.779	3.791	3.689	3.829
SD	0.601	0.710	0.748	0.709	0.689

Note * with statistical significance at 0.05 level ** with statistical significance at 0.01 level

From Table 1, we can see that it was found that the correlation coefficients between the variables were 10 pairs. The correlation values were from 0.670 to 0.785 with an average between 3.689 and 3.829.

Analysis of structural model, causal relationship of information technology adoption and online network access that affects the convenience of receiving agricultural tourism services in Chumphon Province in Thailand follows. The results showed that the value = 9.00 (p-value = 0.100), df = 6, GFI = 0.92, AGFI = 0.90, CFI = 1.20, RMSEA = 0.024, RMR = 0.005, CN =



720.01. When considering these index values and the harmonization criteria of models and empirical data, it can be seen that the chi-square values are not statistically significant. The ratio between the chi-square and the free degrees is less than 2.00. The GFI, AGFI, RMSEA, RMR, CFI and CN indexes all the values go through the criteria that indicate that the model is in harmony with the empirical data as shown in figure 2.

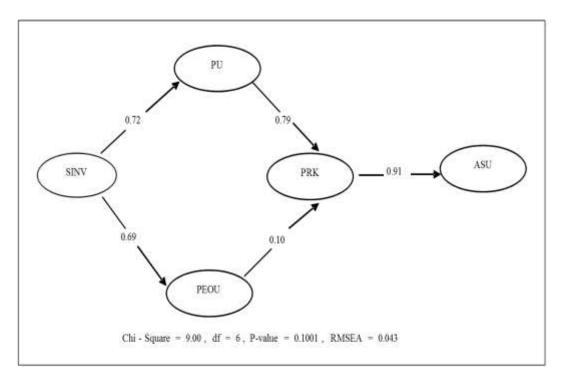


Figure 2. The results of the route analysis, the influence of the adoption of information technology and online network access that affects the convenience of receiving agricultural tourism services in Chumphon Province in Thailand.

From Figure 2 and Table 2, the results of the route analysis found that (1) service innovation has a direct causal relationship with the perceived benefits of the online network system. This then affects the convenience of getting services in agricultural tourism in Chumphon Province in Thailand with a path coefficient of 0.72 at a 0.01 significance level (2) service innovation has a direct causal relationship on perception. The ease of use of the online network system affects the convenience of getting services in agricultural tourism in Chumphon Province in Thailand with a path coefficient equal to 0.69 at the significance level of 0.01 (3) recognition of the benefits of online networking.

There is a direct causal relationship with the perception of online network risk which affects the convenience of agricultural tourism in the province in Thailand with a coefficient of pathway equal to 0.79 at the significance level of 0.01 (4) perception of ease of use of the online network system.

There is also a direct causal relationship with the perception of online network risk which affects the convenience of receiving services in agricultural tourism in Chumphon Province in Thailand, with a coefficient of pathway equal to 0.10 at the significance level of 0.01 and there is a direct causal relationship with the actual use of the online network system. This also affects the convenience of getting services in agricultural tourism in Chumphon Province in Thailand as shown by a coefficient of 0.90 at the significance level of 0.01.



Table 2. Direct effects, indirect effects and total effects

Factors	SINV			PU			PEOU			PRK		
Effect factors	DE	IE	TE	DE	IE	TE	DE	IE	TE	DE	IE	TE
	0.72**	-	0.72**	-	-	-	-	-	-	-	-	-
PU	(0.01)	-	(0.01)	-	-	-	-	-	-	-	-	-
	21.69	-	21.69	-	-	-	-	-	-	-	-	-
	0.69**	-	0.75**	-	-	-	-	-	-	-	-	-
PERO	(0.02)	-	(0.02)	-	-	-	-	-	-	-	-	-
	19.67	-	19.69	-	-	-	-	-	-	-	-	-
		0.70**	0.70**	0.79**	-	0.79**	0.10**	-	0.10**	-	-	-
PRK		(0.01)	(0.01)	(0.04)	-	(0.04)	(0.04)	-	(0.04)	-	-	-
		26.37	26.37	14.82	-	14.82	2.39	-	2.39	-	-	-
		0.69**	0.69**	-	0.78**	0.81**	-	0.10**	0.10**	0.91**		0.91
ASU		(0.03)	(0.03)	-	(0.05)	(0.05)	-	(0.04)	(0.04)	(0.03)	-	(0.0
		21.30	21.30	-	10.09	10.09	-	2.42	2.42	27.69	-	27.0

 $\text{Chi-Square=9.00, } df = 6, p \text{-value=0.100, } \text{GF1=0.92, } AGFI = 0.90, RMSEA = 0.024, RMR = 0.005, CN = 720.011 \\ \text{Chi-Square=9.00, } df = 6, p \text{-value=0.100, } GF1 = 0.92, AGFI = 0.90, RMSEA = 0.024, RMR = 0.005, CN = 720.011 \\ \text{Chi-Square=9.00, } df = 6, p \text{-value=0.100, } GF1 = 0.92, AGFI = 0.92, AGFI = 0.92, RMSEA = 0.024, RMR = 0.005, CN = 720.011 \\ \text{Chi-Square=9.00, } df = 6, p \text{-value=0.100, } GF1 = 0.92, AGFI = 0.92, RMSEA = 0.024, RMR = 0.005, CN = 720.011 \\ \text{Chi-Square=9.00, } df = 6, p \text{-value=0.100, } GF1 = 0.92, AGFI = 0.92, RMSEA = 0.024, RMR = 0.005, CN = 720.011 \\ \text{Chi-Square=9.00, } df = 6, p \text{-value=0.100, } GF1 = 0.92, AGFI = 0.92, RMSEA = 0.024, RMR = 0.005, CN = 720.011 \\ \text{Chi-Square=0.000, } df = 0.005, CN = 0.0$

Note

1) * Statistical significance at 0.05 level ** with statistical significance at 0.01 level

2) DE = Direct effects IE = Indirect effects TE = Total effects

Discussions

From the research results regarding the adoption of information technology affecting the convenience of using agritourism services, Chumphon Province in Thailand, the researcher would like to briefly discuss some findings.

- (1). Service innovation has a direct causal relationship on the perceived benefits of online networking which affects the convenience of receiving services in agricultural tourism in Chumphon Province in Thailand. It was found that the path coefficient is 0.78 at the significance level of 0.01
- (2). Service innovation has a direct causal relationship with receiving service and knowing the ease of use of the online network system. This affects the convenience of receiving services in agricultural tourism in Chumphon Province in Thailand, and it was found that the path coefficient was 0.69 at the significance level of 0.01, because with the technology that has a leapfrog developmental role, this results in current tourists accessing various types of information more quickly.

Therefore, the tourism service business is alerted to the need to take advantage of technology in creating service innovation for communication and providing information which is related to tourism and that is important for tourists because of the important goal of managing the tourism system as much as possible. This is vital in order to meet the needs of tourists. Each establishment can also develop and implement marketing strategies together, therefore resulting in more satisfaction for tourists which is consistent with Rhee's research (2010) and



also that of others and which summarizes the elements of market-oriented factors into three areas: customer focus, competitors and coordination within the organization. Given such elements, this causes the process of creating activities between departments in the organization both in terms of information that can respond to customer satisfaction and their diverse needs.

Analysis of operating conditions of competitors as well as giving priority to the steps of coordination of employees in the organization in such operations can benefit the strategy that is consistent with the organization's goals. There is a study of the relationship of market focus on service innovation as well as a perception of the benefits of online networking. There is direct causal relationship with the perception of online network risk and this affects the convenience of getting services in agricultural tourism in Chumphon Province in Thailand. It was found that the path coefficient is 0.79 at the significance level of 0.01 (4)and that the online network system there has a direct causal relationship with the perception of online network risk.

This in turn affects the convenience of receiving services in Chumphon Province. Tourism in Thailand, found that the path coefficient is 0.10 at the significance level of 0.01, because at present, tourism operators have implemented the information technology system in their service, resulting in more travel service innovation such as access to accommodation on the website of the hotel, accommodation booking and online travel information inquiry, which corresponds to Chen and Tsou's study (2007). This summarized the elements of information technology adoption factors in four aspects such as IT infrastructure, strategic alignment, organizational structure (Organizational structure) and individual learning. Creating strategies for accepting information technology in the organization will invariably lead to a competitive advantage. Perception of the risk of the network system does exist.

For Online networks, there is a direct causal relationship with the actual use of the online network system which affects the convenience of getting services in Chumphon Province tourism in Thailand. It was found that the path coefficient is 0.91 at the significance level of 0.01, because for tourism businesses, that focus on service innovation should be important to systems that are quick to download information, and offer details of information. These improve the potential to be able to support and care effectively for the users as well. This corresponds with Rogers (1978) research showing the view that accepting new ideas and technology is something that should be done simultaneously in the organization by starting slowly because of the ability of innovation in technology that has changed dynamically, and the risk of accepting people or organizations in applying new technologies may cause problems in work. Therefore, the organization must have a plan of action in order to balance the benefits of using information technology in the service process.

Promptness of customers, is required to check delivery on the services and see the progress of the service process. Therefore, tourism operators must have management in the service system in order to continuously improve the quality of service and quality standards. In order for the service recipients to receive maximum comfort and safety, therefore, higher risk perception arises from negative uncertainties, because sometimes perceiving the risks that affect the assessment, impact on choosing to use that service as well.

Therefore, the security system and the treatment of personal information is important to help customers understand and accept the risk that may occur in some aspects. In addition, the presentation of the organization or website of the service site is an important part that may affect the selection to use the service of the customer as well, for example, if the organization's website offers clear and complete information. This may cause low levels of risk perception



which shows that the risk depends on the security system and the personal information of the customer, including the presentation of complete information.

References

Boonvatcharapai Tossaporn., Jadesadalug Viroj & Tuntrabundit Khwanruedee (2016). Organizational Creativity and Service Innovation of Thai Boutique Hotel. *Veridian E-Journal, Silpakorn University*, 9(3).

Brezuleanu, S., & Brad, I. (2001). Considera tii privind activita tile agroturistice din landul Baden-Wurttemberg, Germania. Lucr. st. USAMV la si. *Seria Agronomie*, 44. Available online: http://www.

uaiasi.ro/revagrois/PDF/pdf_2001_fdf99a5620d83e128992e72b54a04713.pdf [Accessed on 15 April 2019].

Chen, W.J. (2011). Innovation in hotel services: Culture and personality. *International Journal of Hospitality Management*, 30, 1.

Chen, J. S. & Tsou, H.T. (2007). Information Technology Adoption for Service Innovation Practices and Competitive Advantage: The Case of Financial Firms. *IR Information Research*, 12 (3), 1-25.

Chen, Y.G., Chen, Zi-Hui., Ho, J.C. & Lee, Chung-Shing. (2009). In-depth Tourism's in fluencies on service innovation. *International Journal of Culture, Tourism and Hospitality Research*, 3(4), 326-336.

Chumphon Provincial Tourism and Sports Office. (2017). Number of tourists in Chumphon Province. Available online at https://chumphon.mots.go.th/more_news.php?cid=45 [Accessed on 25 March 2019].

Chuttur, M.Y. (2009). Overview of the Technology Acceptance Model: Origins, Developments and Future Directions, Indiana University, USA, Sprouts: Working Papers on Information Systems.

Cunningham, M.S. (1967). *Perceived risk and brand loyalty, in risk taking and information: Handling in consumer behavior,* Cambridge, MA: Harvard University Press.

Davis, F. D., Bagozzi, R. P. & Warshaw, P. R. (1989). User acceptance of computer technology: Acomparisonof two theoretical models. *Journal of Management Science*, 35(8), 982 – 1003.

Flaatin, C. (2007). Antecedents of organizational creativity and innovation-A differentiating perspective. Master's Thesis In Psychology (Autumn). *University of Oslo*.

Mtapuri, O., Giampiccoli, A. & Jugmohan, S. (2015). 'Community-based tourism affinity index: A visitor's approach', *African Journal of Hospitality, Tourism and Leisure*, 4(2), 1–13.

Hair, J. F., Black, B., B., Anderson, R. E. & Tatham, R. L. (2006). Multivariate Data Analysis. 6th ed. Upper Saddle River, N.J.: Pearson Education Inc.

Javed Mahmood Jasra., Muhammad Asif Khan., Ahmed Imran Hunjra., Rana Aziz Ur Rehman & Rauf I. Azam. (2011). Determinanta of Business Success of Samll and Medium Enterprises. International *Journal of Business and Social Science*, 2(20).



Jeeranun Khermkhan (2018). The Perspective of Agro Tourism Development in Thailand. *King Mongkut's Agricultural Journal*, 36(2), 162-167.

Laeadeenun Gewarin. (2014). Acceptance of technology and online consumer behaviour that affects the decision to buy books electronics Consumers in Bangkok. Independent research Master of Business Administration, Bangkok University.

Likert R. (1967). *The Human Organization: Its Management and Value*. New York: McGraw-Hill Book Company.

Lyons, C. & Joyce. (2007). Innovation in Corporate culture and investment banking. Californian Management Review, 50, 174-191.

Ministry of Tourism and Sports. (2019). *Agro Toursim Services*. Available online at http://newdot2.samartmultimedia.com/subweb/content/5 [Accessed on 24 March 2019].

Ministry of Tourism and Sports. (2007). Standard home school. Available online at http://newdot2.samartmultimedia.com/Subweb/content/5 [Accessed on 24 March 2019].

Nicolaides, A. & Grobler, A. (2017). Spirituality, Wellness Tourism and Quality of Life, *African Journal of Hospitality, Tourism and Leisure*, 6 (1).

Office of the National Economic and Social Development Board. (2017). Summary of the draft development plan National Economy and Society No. 12 (2017-2021). Available online at http://www.nesdb.go.th

Paresh V Joshi & Milind B. Bhujbal (2012). Agritourism a specialized rural tourism: innovative product of rural market. *International Journal of Business and Management Tomorrow*, 1(2), 1-12.

Pimonratanakan Sudarat & Ayasanond Chitpong (2018). The Supply Chain Management of Pomleo Production Processes and Tourism Sustainability in Nakhon Chaisri, Nakhon Pathom Province, Thailand. *African Journal of Hospitality, Tourism and Leisure*, 7(5)-2018

Raksapol Amnat, Na Thongkaew Benjamas, Phengkona Jutamas, Thongsong Chondarong & Jittapraphan Boonsin. (2017). Marketing Strategy Development of Community-Based Tourism Looping System in Chumphon Province. *Area Based Development Research Journal*, 9(1), 23-37.

Reynolds, K. A. (2005) Consumer demand for agricultural and on farm nature tourism. Davis: California.

Rhee, J., Park, T. & Lee, D.H. (2010). Drivers of Innovativeness and Performance for Innovative SMEs in South Korea: Mediation of Learning Orientation. *Technovation*, 30: 65-75.

Rinaldi, C. & Cavicchi, A. (2012). Cooperative behaviour and place branding: A longitudinal case study in Italy. *Qual. Mark. Res.*,19, 156–172.

Rogers, E. & Shoemaker, F. (1978). Communication of Innovations: A Cross-Cultural Approach. New York: Free Press.



Salter, A. & Tether, B.S. (2006). Innovation in service. Through the looking glass of innovation studies. Background paper for AIM Research's grand challenge on Service Science. April 7, 2006. Available athttps://pdfs.semanticscholar.org/85ce/1a52560877f5a.pdf

Schumpeter, J.A. (1934). The Theory of Economic Development: An Inquiry into Profit, Capital, Credit, Interest and the Business Cycle. Harvard University Press: Cambridge, MA.

Srisomyong, N. (2010) Agritourism, rural development and related policy initiatives in Thailand, Available from Sheffield Hallam University Research Archive (SHURA) online at:http://shura.shu.ac.uk/20397/

Srisuk Thatsapon, Jampathong Adisak, Tachom Charasanan, (2018). Guidelines for Integrated Agro-Toursim Marketing and Nan Lifestyle, *Journal of the Suvarnabhumi Institute of Technology*, 4(2).

Tourism Authority of Thailand. (2017). National Tourism Development Plan. Available at https://thai.tourismthailand.org/home [Accessed on 25 March 2019].

Wanichbancha Kalaya & Wanichbancha Thita. (2014). Using SPSS for Windows for data analysis. (Type 14). Bangkok: Sam Lada Printing Factor