
E-tourism Satisfaction of Vietnam: The Comparison with other Countries in the Southeast Asian Region

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Abstract. Nowadays, tourism is one of the main economic industries of Vietnam, the profits from tourism industry are very huge. Following the development of Travel & Tourism competitiveness indexes (ICT), electronic tourism system has appeared. It makes the tourism industry develop stronger. However, the most important question is whether E-tourism of Vietnam can satisfy tourists/ users and in the comparison with other countries in the Southeast Asian region. This research tries to figure out this problem. It presents 5 factors (The convenience, Site designs, Facilities, Quality service and E-security) with 30 elements to evaluate the satisfaction level of E-tourism. The data is collected from questionnaires. The quantitative method was used to analyze is the data via SPSS software. This study also gives some suggestions to improve the satisfaction on the E-tourism of Vietnam.

Keywords: *Tourism, E-tourism, Satisfaction, E-satisfaction, and Satisfaction in E-tourism*

1. Introduction

Nowadays, tourism has a huge contribution to the economic development over the world. When the Information Communication Technologies (ICT) developed, it brought a lot of important changes for Travel and tourism. Via the Internet with online websites, it not only gives a new method of the tourism organization but also the travelers. Quick connection, global approachability and low price are the critical values of going online for tourism organizations and for tourists [1].

When the Information Communication Technologies (developed, it brought a lot of important changes to all of the industries over the world. Travel and tourism also have a quickly changing. In specially, via the Internet with online websites, it not only gives a new method of the tourism organization do their business but also allows the travelers can arrange their journeys by themselves. Many tourism organizations and companies put their information, products and services online by a website with many differences function, it allows customers can book and reserve services for their trips, empower the tourism organizations can connect and do the business to each other more easily. Quick connection, global approachability and low price are the critical values of going online for tourism organizations and for tourists [2].

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In the other view, tourism also was faced to a big challenge. The matter is how they can satisfy tourists and users, which has become a serious problem. Therefore, the government and tourism organizations of any country required recognizing and discovering this problem in general, and tourists' satisfaction level in Electronic tourism (E-tourism) in particularly. In tourism, to evaluate the satisfaction of the tourists, the researchers can collect the data from them, and then tourism organizations can propose their competitive strategies and their adaptation to changes in demand of users [3].

1.1. Overview of Vietnam tourism situation

Beginning at the 1990s until now, tourism industry developed and had a particular position in Vietnam. The numbers of international tourists sharply increased in the period of 2009 – 2019. Although the ICT of Vietnam has developed, the ICT Readiness in Tourism of some Southeast Asian countries is much higher than Vietnam's. The overall rank of these ICT Readiness rank of Viet Nam's tourism is 83th, much lower than Singapore's, Malaysia's and Thailand's [3].

After a lot of years have passed, when traditional tourism applied gradually ICT to expand, E-tourism has appeared. Website has a significant position in the relationship between tourists and related organizations, so the requirement for a successful E-tourism is an effective website. Vietnam tourism has realized this, and they also made efforts to cooperate and build effective tourism websites. Following the top site raking for travel in Vietnam: Booking.com is the most famous site for the accommodation and hotels, after that is Agoda.com. About airlines and airports, they have Jetstar.com and Vietnamairline.com. Mentioned the tourism destination, Tripadvisor.com is the top site.[4] In Vietnam, there are a lot of studies have been conducted about customer satisfaction (CS). But there is only a few of researchers studied about the online system. Especially in the tourism field, this number of the research is smaller than others

2. Literature review

2.1. Satisfaction and electronic satisfaction

Armstrong and Kotler [5] described the feeling when people compare a product or service's performance and their expectations related to their satisfaction with the products. E-satisfaction is the pleasure of the consumers that they have with a regarding their purchasing experiences with a retail-oriented website [6]. A successful online company always paid their attention and enhance the customer satisfaction. To maintain it, they have to get the knowledge about customers by providing an effective website with many necessary useful functions. The products and services are sold by the website so the honesty and E-security are the most importance elements. Therefore, they constantly improve the quality of the product and services.

2.2. Satisfaction in E-tourism

According to the studied "E-satisfaction: an initial examination", some of elements like the convenience of the website, the information of products, the design of website, and then financial security, all of them affect e-satisfaction level of customers in significantly [7]. And the most important factors respectively are *Convenience, Site design, Financial security, Product information and Product offerings*.

In 2012, a study was undertaken by Davoud Bagheri Dargah, Hamed Golrokhsari [8] found and compared which significant factors can satisfied the customer in E-tourism

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than traditional tourism. By the study, they introduced five elements made the tourists or users feel the E-tourism system is convenience or not. The result shows that around 60% of the customers feel very convenience and pleasure with the E-tourism system because they can save their time, purchase anywhere and anytime, and they can get the information easier. They also concluded that E-tourism is the suitable retailing method tourism organizations than traditional.

Ibrahim Mohamed and Leila Moradi [9] contributed to the general models of satisfaction in E-tourism by “A model of E-Tourism Satisfaction Factors for Foreign Tourists”. This study focused on the tourists' first step in the three-stages process in E-tourism that the authors mentioned before (including before traveling, during traveling and after traveling). Through the study, the authors categorized these factors into five main groups: The Convenience, the Site Design, the Facilities, the Service Quality and the E-security.

3. Research methodology

3.1. Research questions

To conduct the survey, the author prepared a questionnaire with three parts. The first part includes four questions, the goal of these questions to verify that the participants are the suitable with the survey or not. The second section would be shown the E-tourism satisfactoriness performance of Vietnam and in comparing with Malaysia, and Singapore, this section provides a five-point scale-scaling question regarding 30 satisfactoriness indicators of E-tourism. In the end, the questionnaire collected the demographic background of respondents. It is conducted in the hotels, the airplane agent to collect tourists' responds with the supports from the staffs of these organizations.

3.2. Questionnaire design

To conduct the survey, the author already prepared a questionnaire in English with three parts. The first part includes four questions, in which there are two questions about the purpose for the using tourism websites of respondents. And two others dichotomous questions about the experiences in E-tourism to examine that they can continue to answer the subsequent relevant questions or not. The goal of these questions to verify that the participants are the suitable with the survey or not. The second section would be shown the E-tourism satisfactoriness performance of Vietnam and in comparing with other countries. Firstly, the participants are required to rank the satisfaction position in E-tourism of eleven Southeast Asian countries. Next, to measures the evaluation of participants about their satisfaction level in E-tourism of Vietnam - Malaysia, and Singapore, this section provides a five-point scale-scaling question regarding 30 satisfactoriness indicators of E-tourism. Therefore, this is the main section of the questionnaire. In the end, the questionnaire collected the demographic background of respondents.

To check the understanding as well as the time to finish the questionnaire of participants, a demo version is presented directly to 3 tourists. After getting the responses, the questionnaire is fixed again and upload on the survey website to conduct the online survey. Additionally, the survey also conducts in the hotels, the airplane agent to collect tourists' responds with the supports from the staffs of these organizations.

3.3. Sampling method and sample size

Non-probability techniques consider to picking random samples, so it is easy to accomplish for the sample [22], Hence, it was a suitable option for this research. Following the requirement about experiences of participants, the study use the snowball method to collect the data. In this research, the participants are required to evaluate the satisfaction level in E-tourism through the products/ services/ experiences they have bought/ had before via E-tourism system. So, the sample size of this study is quite large and it is hard to determine how many participants is enough for the research. To solve this problem, the author is going to use a formula to estimate the sample size [30]:

$$N_0 = Z^2pq/e^2$$

With:

N_0 : Sample size

$z = 1.96$ (the confidence level at 95%)

e : The correctness ($\pm 9\%$)

p : the estimated proportion of an attribute at 50%

$q = 1-p$

$$N_0 = (1.96)^2 (0.5) (0.5) / (0.09)^2 = 118 \text{ tourists.}$$

4. Discussion of finding

4.1. Demographic description

It is different in the rate of gender, females accounted for 58.12% (64 people) and 41.82% (46 people) is estimated for males in total respondents. In the other hand, More than a half is stated in-group 26-45 (around 61.82%), but for the over 65-year-old group is only 6 people (5.45%). Additionally, there are 26 respondents are from 18 to 25 years old (23.64%), and the number of the 46-65 group is 10 participants (9.09%).

4.2. The evaluation of satisfaction in E-tourism of Vietnam

This study used SPSS 20 software to digitize the data, then going on analyzing to show the results. Mean (M) and the Standard Deviation (S) are the quantities utilized to display the results.

Table 4.1: Satisfactions about Convenience (C) in Vietnam E-tourism

Convenience (C) Factor	M	S
C1 – Obtain feedback	3.382	0.967
C2 – Willing to work with e-tourism system	2.836	0.862
C3 – Less steps required to get something to work	4.064	0.758
C4 – Amount of appropriate and clear services in e-tourism	3.264	0.992
C5 – Enough services	3.491	0.936
C6 – Time and cost saving	3.227	0.983

Convenience (C) is the first factor that drives the satisfaction in E-tourism. Almost all elements of this factor score higher than 3, mean that they are considered satisfied tourists/users. The best benefit of E-tourism is that it can help tourist save their time and money,

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E-tourism of Vietnam perform not bad in this element. It is related to the providing and arranging enough services appropriately and clearly. Particularly, Vietnam reduced some of unnecessary steps on the system for serving the tourists take an easier working, it is evaluated the most satisfied element. However, due to some reasons the E-tourism of Vietnam not really active. It is reasonable because the using ICT and the Internet of Vietnam in tourism transactions between business to each other or even to the consumer is not stable. It leads the tourists and users is not willing to work and they assess dissatisfied with this element.

Table 4.2: Satisfaction about Site Design (SD) in Vietnam E-tourism

Site Design (SD) Factor	M	S
SD1 – Enough services in the e-tourism sites	3.827	0.988
SD2 – Easy to use	4.218	0.669
SD3 – Clear interface in use	4.100	0.766
SD4 – Readable, logically arranged and good pleasing screen	4.191	0.760
SD5 – Easily to find the information	4.491	0.646

There are five elements of Site Design (SD). In Viet Nam, all of the indicators of this determinant made the tourists and user very satisfy and their scores are greater than 3.8. The participants mark 4.4 concerning their satisfaction level for the easily to use and find the information. E-tourism of Vietnam is appraised that the screen is arranged logically, delightful and readable; the interface is easy to use; in the e-tourism sites provide quite enough services.

Table 4.3: Satisfaction about Facilities (F) in Vietnam E-tourism

Facilities (F) Factor	M	S
F1 – Collecting, viewing and downloading comprehensive destination	3.000	0.929
F2 – Accessible personalized travel package	2.455	0.884
F3 – Buying the ticket for destination in electronic forms	3.382	0.857
F4 – Getting the visa for destination in electronic forms	2.464	0.798
F5 – Reserved room in electronic forms	2.946	0.855
F6 – Online payment	3.372	0.811

The determinant of facilities (F) owns a vital impact on satisfaction in E-tourism. With score 3; it means the tourists and users feel fair with them. Basically, with any E-tourism system, tourists and users also can get, find and download whole destination information; it also allows them buying the ticket, online payment and so on. But, mean value of booking

accommodations just considers 2.9 that expresses tourists and users are slightly dissatisfied. Besides, both the purchasing personalized travel packages and visa application via E-tourism of Vietnam are identified less satisfied. It implies the tourism industry do not pay enough attentions for these services, even though these features are not only really necessary with tourists but also crucial to increase the tourism's profit.

Table 4.4: Satisfaction about Service Quality (SQ) in Vietnam E-tourism

Service Quality (SQ) Factor	M	S
S1 – Contact us	2.391	0.665
S2 – Fulfilling required expectations	2.764	0.812
S3 – Immigration information	2.782	0.999
S4 – General information about the destination	3.327	8.058
S5 – Exchange information	2.809	0.904
S6 – Transportation details	2.600	0.706
S7 – Multi languages	3.209	0.868

Service Quality (SD) is related to satisfaction level in E-tourism system of a country. There are only two factors are evaluated that satisfy with score greater than 3. Comparing with others, E-tourism of Vietnam is not successful in satisfying tourist and users. The tourists/users feel is dissatisfied about the immigration information, the details of transportation deal. The expectations of their requirements are not really fulling; the facilities related to financial do not really well. So, these indicators are rated with a score less than 3. Especially, the visitors are not satisfied when they contact with Vietnam's E-tourism system.

The last but most importance factor is E- security (ES). Since the traditional tourism bases on the ICT development to transfer their business, E- security is able to enhance or reduce tourists' satisfaction level with any E-tourism system.

Table 4.5: Satisfaction about E-Security (ES) in Vietnam E-tourism

E-Security (ES) Factor	M	S
E1 – Safe feeling in transaction	3.973	0.851
E2 – Reducing of occurring mistakes	4.136	0.784
E3 – Ready, reliable and update information	3.855	0.855
E4 – Personal information security	3.966	0.898
E5 – Financial security	3.755	0.911
E6 – No absent or misleading information	4.009	0.904

Vietnam achieves a certain position in satisfaction about this dimension, the evaluation of all the indicators in this factor is quite highly satisfied. Tourists and users feel safe in the transaction with the others via E-tourism because they recognize that their personal information is protected. The information in the website is reliable and updated frequently.

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Particularly, this system also improved the E-security by reducing of occurring mistakes in the access and transaction process of the visitors.

Throughout this part, it makes clear that Vietnam's E-tourism is satisfied tourists and user with some factors (Site design, E-security and Convenience).

4.3. The comparison of satisfaction level in E-tourism between Vietnam and these major leading countries in Southeast Asia area

Table 4.6: Paired sample t-test table for examining the H2
VIETNAM - MALAYSIA **VIETNAM - SINGAPORE**

Variables	M	t	Sig (2 tailed)	Variables	M	t	Sig (2 tailed)
Ca - Cb	-0.448	-6.989	0.00	Ca – Cc	-0.626	-9.486	0.00
SDa - SDb	0.144	2.562	0.012	SDa – SDc	-0.207	-3.434	0.001
Fa – Fb	-0.545	-9.132	0.00	Fa – Fc	-1.021	-14.77	0.00
SOa – Sob	-1.221	-19.00	0.00	SOa – Soc	-1.686	-36.21	0.00
ESa - ESb	-0.179	-3.231	0.002	ESa - ESb	-0.512	-7.983	0.00

The result shows that the values of sig. (2 tailed) in all of factors are less than 0.05. So, it can be declared that the evaluation of satisfaction in E-tourism of Vietnam, Malaysia's and Singapore's is totally different. Next, to find out more about the differences in the satisfaction level in E-tourism of Vietnam, Malaysia's and Singapore's, this study is going to analyzing the mean value of each factor and indicators via figure 1.1

It is easy to see the E-tourism satisfaction ordinal in this comparison is Singapore, Malaysia, and Vietnam in respectively. But in some dimensions, Vietnam satisfied the visitors better than Malaysia and even they can compete with Singapore.

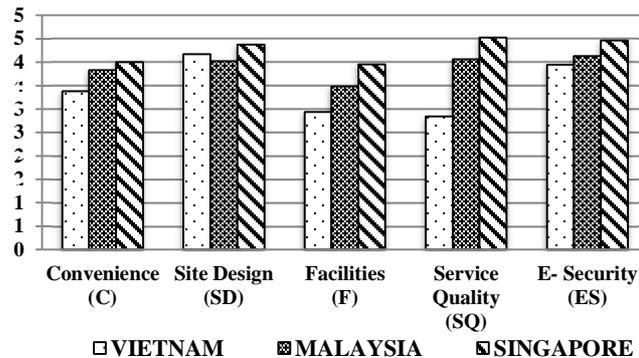


Figure 4.1: The satisfaction level in E-tourism of Vietnam and other countries – Malaysia and Singapore

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Firstly, convenience is a significant factor that is mentioned in the E-tourism development. The satisfaction score of Malaysia and Singapore is higher than Vietnam in most of elements in this dimension. However, the tourists and users evaluated that E-tourism system of Vietnam requires fewer steps than the other countries when they accessed. Moreover, the ICT infrastructure of Vietnam is still in the development process; therefore, in comparing with Malaysia and Singapore, Vietnam cannot work as quickly as them. Besides, with all of the attributes of Facilities factor, Singapore is the strongest competitor in this relationship. Malaysia also satisfies the visitors at a specific level, but still lower than Singapore. About Vietnam, there are only two indicators can compare with Malaysia with a similar score. They are online payment and booking the ticket via online.

About Service Quality, Singapore and Malaysia do very well and this is the most satisfied factor of them. In the contrast, it is the worst factor of Vietnam in the comparison. Not only a small distance, the evaluation of Vietnam is much lower than the other countries in all elements in this section. Particularly, in some elements, Vietnam totally dissatisfied the tourists and users. For example, some of tourists said that they could not contract with some tourism companies, event by address in the website.

However, in other dimensions, there are some attributes of Vietnam are outstanding than Singapore or Malaysia. One of the positive factors of Vietnam is E-Security. Because Vietnam tried to reduce the steps of the accessing process, it made the E-tourism becomes simpler and easier to use, including the E-security of the system. Not only decrease the occurring errors in the system, E-tourism of Vietnam also satisfies visitors by lessening misleading information and guarding their individual information, in order to the similar score with Malaysia, but it cannot be equal as Singapore.

The last circumstance is discussed, but Site design is the most determinants of Vietnam can be convinced the tourists and users. Although its score is lower than Singapore but still higher than Malaysia. Arranging not enough services is the only element that E-tourism of Vietnam does not as strongly as Malaysia. In opposition, four other ingredients, Vietnam obtained the visitor satisfaction completely. Especially, finding the information via E-tourism of Vietnam is judged easiest among three countries.

It can conclusion that, E-tourism of Vietnam is less satisfied than Malaysia and Singapore, but Vietnam also has some certain strengths in this comparison. So, Vietnam can develop these strengths become the competitive advantages for themselves.

5. Conclusion

In the beginning, the idea of this research is trying to figure out the visitors' satisfaction in E-Tourism of Viet Nam. Besides, it also conducts a comparison between Viet Nam with other Southeast Asian countries.

Firstly, this study presented these factors of E-tourism satisfaction, including five factors about the satisfaction in E-tourism system, namely Convenience, Site Design, Facilities, Service Quality, and E-Security. Moreover, these indicators for each determinant were also identified to evaluate satisfaction level of tourists in E-tourism.

The results are described showed that among 30 suitable indicators, there are 21 determinants were assessed higher than 3, and 9 attributes do not satisfy visitors. This seemed to be the danger since Vietnam may lose the current position in E-tourism system of tourism market and do not attract more tourists. Therefore, Vietnam should have to work really hard to become more satisfied in E-tourism.

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Besides, the findings are exposed that E-tourism of Vietnam is less satisfied in most of the factors in the comparison with Malaysia and Singapore. This is a big challenge of Vietnam tourism; it requires the tourism organizations need to have a number of appropriately adjustments to shorten the distance between Vietnam and the competitors.

Suggestions for improving the satisfaction level in E-tourism of Vietnam

From the findings, Vietnam's E-tourism is not really satisfied the tourists and users. So, Vietnam should have more efforts to improve their E-tourism system via some of field like: Human resource, ICT infrastructure, and the functions of E-tourism System, etc.

Service Qualities is the factor that is least satisfied in E-tourism of Vietnam. For improving SQ in E-tourism, Tourism managers in Vietnam should update all kind of information that tourists need (like: Immigration information, Exchange information, Transportation details, General information about Vietnam, etc.). Besides, because of the difference languages, the website should be provided with many various language's version. Particularly, almost all of the participants indicate that they are dissatisfied with SQ factor because it is quite hard to contact. Although in E-tourism, the interaction between the organization and tourists are via the website but it also needs "moment of truth" because the human interaction cannot be displaced by technology. So, the responsibility of each tourism organization is that they should pay more attention and invest more in human, financial resource to improve their services. Not only that, E-tourism also do not fulfil their required expectations. So, the tourism managers need to conduct these researches about the demand and expectation of tourists about the E-tourism system to improve the service quality.

Among 5 factors, the *Facilities factor* is the second that do not satisfy tourists and users. Specially, Tourism managers should improve "Personalized travel package" function in E-tourism system become more efficient to serve tourists better. Additionally, all the tourism organizations as resorts, hotel, etc. that related with the services in tourism should enhance the reservation feature by electronic forms on their websites and associate themselves with another to make easy for tourists' options. Beside it, it is necessary for Vietnam to have improvement in the efficiency of services getting the visa by electronic forms for tourism visa. Moreover, Online payment feature can be improved by co-operating with the financial firm; particularly with the international banks.

Regarding the *Convenience of E-tourism*, to satisfy tourists and users, the ICT infrastructure of Vietnam should be enhanced to get an efficient and qualitative E-tourism system. It will save the money and time of visitors. They also should provide the services and products fully and clearly in tourism website by conducting the research about tourist's need; then develop and add more functions; diversify the services and features using (such as: give and get feedback from the other tourists, linking with website of other tourism organizations or companies, etc.) for tourists. The importance thing is to invest in the human resource to develop the E-tourism system. For improving service quality in E-tourism - the least satisfied determinant of Vietnam, easy in contact, fulfilling required expectations, updating all kind of information that tourists need (like Immigration, Exchange, Transportation, information about Vietnam, etc.). In addition, because of the different languages, E-tourism system should be provided the website with many various languages version.

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Finally, although *E-Security and Site Design* are the most satisfied factors in E-tourism of Vietnam, but these tourism organizations need to keep going maintain the advantages in these aspects by the suitable development strategies

REFERENCES

1. M.Moharrer, H.Tahayori and A.Sadeghian, Drivers of customer satisfaction in online tourism-the case of european countries, *Middle-East Journal of Scientific Research*, 13(9) (2013) 1172-1179.
2. A.E.Millan Angel, Development of multiple-item scale for measuring customer satisfaction in travel agency services, *Tourism Management*, 25(5) (2003) 533-546.
3. The WTTC World 2019 Economic Impact Report; Accessed on May, 2019, Available at:
<https://www.wttc.org/research/economic-research/economic-impact-analysis/#undefined>
4. Top websites ranking, Top sites ranking for Travel in Vietnam. Accessed June, 2019; Available at:
<https://www.similarweb.com/top-websites/vietnam/category/travel-and-tourism>
5. G.Amstrong, Philipkotler, *Marketing: An Introduction*, 12th edition, (2015) 236.
6. R.E.Anderson and S.S.Srinivasan, E-satisfaction and e-loyalty: A contingency framework, *Psychology and Marketing*, 20(2) (2003) 123-138.
7. D.M.Szymanski and R.T.Hise, E-satisfaction: an initial examination, *Journal of Retailing*, 76(3) (2000) 309-322.
8. D.B.Dargah and H.Golrokhsari, E-tourism and customer satisfaction factors, *International Journal of Advances in Management Science*, 1 (2012) 35-40.
9. I.Mohamed and L.Moradi, A model of e-tourism satisfaction factors for foreign tourists, *Australia Journal of Basic and Applied Sciences*, 5(12) (2011) 877-883.
10. M.Saunders, P.Lewis and Thornhill, *Research methods for business students*, 5th edn, Essex: Pearson Education, 2009.
11. W.G.Cochran, *Sampling Techniques*, 3rd edn., New York, John Wiley and Sons, 1977.