

# A Study on E-Commerce: How Does It Have an Influence on Purchase Decision?

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**Abstract**—Travel India Professionals is currently facing a problem that has an impact on the declining consumer's interest to purchase through E-Commerce in Viator. Efforts were made to improve purchasing decisions in Travel India Professionals by increasing E-Commerce which includes Transaction/cost, Interactive Programs, Site Design and Interactivity. The method used in this research is descriptive and verification using explanatory survey method. The purpose of this study is to find out the impact of E-Commerce towards purchase decision in Travel India Professional. Respondents of this research were 120 consumers who have purchased the Travel India Professionals's tour package through Viator. This research used multiple regression as data analysis technique. The result shows that E-Commerce has an impact on purchase decision in Travel India Professionals.

**Keywords**—*e-commerce; purchase decision; travel India professionals*

## I. INTRODUCTION

Internet and technology of information and communication have provided remarkable development in tourism industry [1]. The right marketing and media strategies are used to reach the market through technology of information and communication [2]. [3] stated that online users have grown rapidly and globally which makes global competition takes place; and to get consumers who can buy continuously becomes an important thing that must be considered by the company.

E-Commerce is a modern way that can increase effectiveness in marketing strategies by helping to understand what consumers are looking for, processing, and using travel information in an online and offline context [4]. Business processes, such as business to business (B2B) and Business to consumer (B2C) have been digitally used and their attention has shifted from promotion (1960s), product development and marketing research (1970s) and revenue management (1980s) to focus on E-Commerce [5]. The number of foreign tourists arrival in India from 2013 to 2017 continue to increase. A very high increase occurred in the period of 2016 to 2017 with the number of foreign tourists reaching 10.18 million with growth around 15.6 percent compared to the previous year. In addition, 2015 also marked for consecutive growth for 3 years of foreign tourists arrival in India which was above average, with the percentage of foreign tourist arrivals increasing by four percent or more since

2013. Increased growth of foreign tourists can be seen in figure 1.

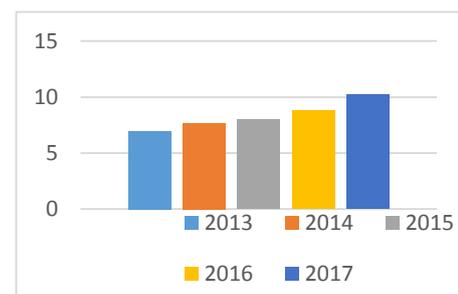


Fig. 1. Increased growth of foreign tourists  
Source: Indian Tourism Government [6]

Based on figure 1, almost 70% foreign tourists coming to India are caused by promotions through E-commerce activities such as social media, advertisement, international advertisements on international television and promotions from Indian tourism offices in foreign countries. From 70% foreign tourists coming to India, 60% of them used Travel Agent services to plan their trip [7]. Travel India Professionals is one of the travel company that provides tour packages to help foreign tourists travel in India. This research is associated with Travel India Professionals to get more data regarding purchase decision in using E-Commerce.

The benefit of using Viator application for Travel India Professionals is to increase the number of tour package purchases. Therefore, the company continues to update their tour packages in the Viator application to attract consumers in making purchase decision. They also create many tour packages and provide informations in Travel India Professionals' Viator account to facilitate foreign tourists who are looking for tour packages in India. Through this application, foreign tourists have an opportunity to choose tour package based on their budget, the desired services and the benefits. Apart from that, competition with other tour packages in Viator is a threat to Travel India Professionals in maintaining their tour packages in the Viator application.

According to [8] the internet influences all stages of purchase process followed by consumers. In this case E-Commerce as a part of digital marketing which is one of the marketing strategies using internet technology and E-Commerce as an activity of buying and selling through internet [9] affects the purchase process referred by Kotler, Bowen and Makens [10] stated that the final stage of a purchasing decision consists of Product Choice, Brand Choice, Dealer Choice, Purchase timings, and Purchase amount make the Purchase decisions through the Viator application different from the usual (traditional) [8]. Therefore, the system of buying and selling in E-Commerce has a big impact in improving purchase decision [11].

Viator as a form of E-Commerce has four dimensions that influence purchase decision [12], there are transaction/cost, Incentive Programs, site design, and interactivity. These four dimensions can be considered as sophisticated IT (Internet Technology) process that support the attainment of overall consumer experience and purchase decision [13]. These four dimensions are success factor for Viator application that has been used by previous researchers in measuring the performance provided by an application and this research is expected to provide input for Travel India Professionals in making tour packages on Viator as well as suggestions for marketers in tourism industry regarding the importance of knowing the consumer's point of view in taking decision when purchasing a tour package on Viator application, as we all know that competition at this time is not only around the surrounding environment but also globally.

Based on the introduction above, the authors are interested in conducting research on "The Impact of E-Commerce Towards Purchase Decision in Travel India Professionals through Viator".

## II. LITERATURE REVIEW

Tourism marketing is a sequential and continuous process through hospitality management and planning tourism industry, research, application, control, and evaluation of activities designed to meet the needs and desires of consumers and their own organizational goals [14]. To be more effective, marketing requires the efforts of everyone in an organization and can be more or less effective depending on how a company takes action [14]. According to [14] there are six marketing bases used, there are ensuring satisfaction of customer needs and desires, having the nature of sustainable marketing, understanding the steps in marketing, understanding the role of marketing research, interdependence of hospitality and travel organization and the latter understanding the company and multi-department.

The travel industry will need professional marketing where they understand the big picture and can respond to changing consumer needs through creative strategies based on actual marketing knowledge. Several years ago, McCarthy in [10] classified various marketing activities into marketing mix tools which he called marketing 4Ps: Product, Price, Place, and Promotion. [14] is one of the tourism marketing writers who overcomes this deficiency with the addition of a marketing mix element, based on the assumption that "there are additional 4Ps in the tourism industry, there are: People, Packaging, Programming and Partnership".

If marketers did a good job of identifying consumer needs, developing products, pricing, distributing and promoting them effectively, the results will be an attractive products created [15]. Promotional activities according to Juhasz (2016) at this time have developed with the emergence of digital marketing that can be used effectively by utilizing current digital technology, such as online sites, applications and social media. [9] explained that digital marketing strategies have several forms, which are: Channel Strategy, Electronic Commerce, Social Media, and Viral Marketing.

Based on the explanation above, E-Commerce is part of digital marketing strategy which is the process of buying, selling, exchanging products and services through the internet [16]. E-Commerce has attributes that can affect purchase decision including Transaction / cost which is a transaction activity carried out through the internet by considering price, company security and transaction process. Incentive programs are programs that can encourage consumers to be interested or continue to make purchases. Site design is a design that is on the application to attract consumers' attention in seeking information as a first impression when visiting an application, and interactivity is a method of consumers in contacting sellers who currently offer various alternatives such as e-mail, internet phone calls, and social media [12].

According to [15], purchase decision are a decision process where consumers really decide to buy one of the products among various alternative choices. According [17] the purchase decision dimensions consist of Product Choice where consumers can make decisions to buy a product or use their money for other purposes, Brand Choice is a consumers choice to decide which brand to buy, Dealer Choice is the decision of the consumer to determine the distributor, the dealer will always vary due to various factors, for example whether the location is close, the price is cheap, comfort, flexibility of place and others. Purchase timing is the decision of the consumer in selecting the purchase time, Purchase amount is consumers choice to make decisions about how many people will join the trip.

Based on the explanation above, the researcher put forward the hypothesis that "There is an impact of E-Commerce towards purchase decision in Travel India Professionals."

## III. RESEARCH METHOD

This study analyze how E-Commerce can give an impact toward decision making to purchase tour packages through viator application in Travel India Professionals. This research consists of two variables, variable X, and variable Y. Independent variable is E-Commerce (X) which has four dimensions consisting of Transaction / Cost (X1.1), Incentive Programs (X1.2), Site Design (X1.3), and Interactivity (X1.4). While dependent variable is purchase decision consisting of Product choice, Brand choice, Dealer choice, Purchase timing, and Purchase amount.

Respondents in this study were consumers in Travel India professionals which has bought tour packages using the Viator application as a platform and analytical subject in this study is Travel India Professionals as a travel agent company that uses Viator application to market and sell their tour packages. This

research was conducted in less than one year, therefore the research method used was cross sectional study.

Based on the variables studied, the method of this research used is descriptive and verification research. The research method used is explanatory survey method.

The population in this study are consumers who use the Viator application as a platform to buy tour packages in India Professionals Travel where the number of consumers of the Viator application in Travel India Professionals are 167 consumers. This study uses a sample of 120 respondents which is calculated using the Slovin formula. The sample technique used in this study was a systematic random sampling technique.

Based on the data sources listed, the types of data collected in this study are primary and secondary data. Data collection techniques used in this study were interviews, observations, questionnaires and literature studies.

Test results conducted include validity and reliability test shows that in 11 questions for E-Commerce variable and 10 questions for purchase decision variable declared valid and reliable so that they can be used as a correct measurement tool.

The data analysis technique used in this study is multiple linear regression. The variables analyzed are independent variable (X), which is E-Commerce. While the dependent variable (Y) is the purchase decision. Multiple regression equations are formulated as follows [18] :

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4$$

Information:

Y = Purchase Decision

a = Constant Value

b = Number of direction or regression coefficient

X = Subjects on independent variable that have a certain value. Transaction / Cost (X1.1), Incentive Programs (X1.2), Site Design (X1.3) and Interactivity (X1.4) are the causal variables.

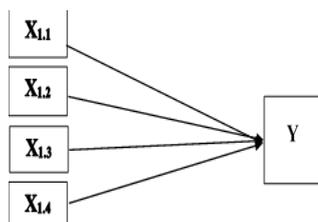


Fig II. Multiple Linear Regression  
Source: [18]

Information :

X1 = Transaction/Cost

X2 = Incentive Programs

X3 = Site Design

X3 = Site Design

Y = Purchase Decision

The design of testing hypotheses in this study as follows:

### 1. Simultaneously

- a.  $H_0 : \rho = 0$ , means there is no significant impact between E-Commerce towards decision making to purchase a tour package in Travel India Professionals
- b.  $H_1 : \rho \neq 0$ , means there is significant impact between E-Commerce towards decision making to purchase a tour package in Travel India Professionals

Regression coefficients have a significant effect if  $\alpha \leq 0.05$ . The decision making criteria for the proposed hypothesis are:

- a. If  $f_{count} > f_{table}$ , then  $H_0$  rejected, means X has an impact towards Y
- b. If  $f_{count} < f_{table}$ , then  $H_0$  accepted, means X has no impact towards Y

### 2. Partially

- a.  $H_0$  : it means there is no significant impact on Transaction/Cost towards purchase decision  
 $H_1$  : it means there is significant impact on Transaction/Cost towards purchase decision
- b.  $H_0$  : it means there is no significant impact on Incentive Programs towards purchase decision  
 $H_1$  : it means there is significant impact on Incentive Programs towards purchase decision
- c.  $H_0$  : it means there is no significant impact on site design towards purchase decision  
 $H_1$  : it means there is significant impact on site design towards purchase decision
- d.  $H_0$  : it means there is no significant impact on Interactivity towards purchase decision  
 $H_1$  : it means there is significant impact on Interactivity towards purchase decision

The decision-making criteria for the proposed hypothesis are:

- a. Reject  $H_0$  if  $t_{count} \geq t_{table}$
- b. Accept  $H_0$  if  $t_{count} < t_{table}$

## IV. RESEARCH RESULTS AND DISCUSSION

Based on the results of recapitulation responses from 120 respondents, the E-Commerce variable in Travel India Professionals can be measured through calculation of overall score from the total score and average score comparison on E-Commerce variable. Total score for E-Commerce is 4,461 which are classified as high and printed at intervals of 4,488 - 5,544. The sub variables or dimensions that have the highest rating from Travel India Professionals customers are Interactivity with a percentage of 26.18%, the assessment is based on the interactions made by Travel India Professionals in Viator application by continuing to update information about Travel India Professionals' tour packages. While for the lowest value are Incentive Programs with a percentage of 21.74%.

The results of the responses of 120 respondents, variable purchase decision in Travel India Professionals can be measured through the calculation of overall score from total score and the

average score comparison purchase decision variable. Total score for purchase decision which is 4,463 is classified as high and printed in intervals 4,080 - 5,040. In this variable, the sub variable or dimension that has the best response is Purchase Amount with the percentage 21.24%. Responses about purchasing decisions based on travel time and the number of people needed by consumers can make consumers more interested in making decisions to purchase Travel India Professionals' tour packages through Viator. While for the lowest value is 18.84% of Product Choice.

Testing the hypothesis about the impact of E-Commerce towards purchase decision in Travel India Professionals simultaneously has a total effect of 0.511 or 51%. This shows that every dimension of E-Commerce (X) contributes 51% to the purchase decision variable (Y), while the remaining 49% is contributed by other factors which is not examined in this study. Partially, there is one dimension that has a significant impact towards purchase decision, which is Incentive Programs. Whereas the other three dimensions are Transaction / cost, Site design, and Interactivity do not have a significant impact on purchase decision by using a significant level of two-party test of 0.025 or 2.5%.

## V. CONCLUSION AND RECOMMENDATION

### A. Conclusion

1. Based on the responses from 120 respondents regarding the use of E-Commerce in Travel India Professionals which consists of Transaction / Cost, Interactive Programs, Site Design and Interactivity has a good rating and is in a high category. The sub variables or dimensions that have the highest rating from Travel India Professionals' customers is Interactivity with a percentage of 26.18%, the assessment is based on the interactions made by Travel India professionals on Viator application by continuing to update information about their tour packages. While for the lowest value is Incentive Programs dimension with a percentage of 21.74%.
2. Consumer responses regarding purchase decision which is consumers' interest in making decisions to purchase Travel India Professionals tour packages through Viator application consist of Product Choice, Brand Choice, Dealer Choice, Purchase Timings, and Purchase Amounts that have good ratings and are included in the high category. This shows that consumers are willing and trusting to make a decision to purchase Travel India Professionals tour packages through the Viator application in the future.
3. Based on hypothesis testing, it can be seen that E-Commerce consisting of Transaction / Cost, Interactive Programs, Site Design and Interactivity has a positive impact on purchase decision in Travel India Professionals.
4. Simultaneously, there is a significant impact of E-Commerce consisting of Transaction / Cost, Interactive Programs, Site Design and Interactivity on purchase decision in Travel India Professionals. Partially, among the four dimensions that exist only one dimension has a significant impact on purchase decision, which is Incentive Programs. The other three dimensions are Transaction / cost, Site Design and Interactivity do not have a significant impact on purchase decision.

### B. Recommendation

The results of Transaction/cost shows the lowest score in the level of security when using a credit card in Viator application with a total value of 404 or 15.72%. This is against the company's missions, which is providing security and comfort for consumers. Therefore Travel India Professionals should convince consumers about the security of the use of credit cards, such as cooperating with other applications that already have a guaranteed / credit card security certification. In addition, the Viator application must have a credit card security guarantee / certification to convince consumers that Viator application can be trusted especially regarding the use of credit cards.

The results of the Incentive Programs which shows the lowest score is in the interesting level of Give-aways provided by Travel India Professionals on Viator application with a percentage of 43.54% and a total of 310. Incentive Programs in Travel India Professionals is coupons programs while give-aways is provided programs but rarely offered. therefore, Travel India Professionals need to improve their creativity by adding more programs that can attract consumers' attention such as promos, discounts or competitions in tourism.

The results of the Site Design shows the lowest score is suitability level of the review about Travel India Professionals in the comments section on Viator application with a percentage of 51.65% and a total of 439. in Travel India Professionals' account; E-Commerce comments or reviews are not given by previous consumers. This cause the new consumers still are still in doubt about the suitability of comments or reviews. Travel India Professionals should encourage consumers to give comments on and reviews their Viator account for the credibility of their products.

The results of Interactivity shows the score for updating the tour package information through Viator application obtain a total 428 or 100%, this indicates that consumers thought Travel India Professionals are very concerned about providing the tour packages information, meaning Travel India Professionals should keep updating their tour package information. Moreover, it would be better if the company could maintain this performance very well.

In Travel India Professionals' e-commerce, there are sub-variables or dimensions that have the lowest rating compared to other dimensions, which is Incentive Programs which includes give-aways and coupons on tour packages. Therefore, Travel India Professionals should improve their creativity by adding more programs that can attract consumers' attention such as promos, discounts or competitions in the field of tourism.

Consumers responses to make purchase decision in Travel India Professionals are high. Based on the results of purchase decision sub-variables consisting of Product Choice, Brand Choice, Dealer Choice, Purchase Timing, and Purchase Amount, there are sub-variables with the lowest value, which is Product Choice, this means the company needs to improve it, especially in the tour packages offered and adjust it according to consumer needs.

The results of the study stated that E-Commerce has a positive impact on purchase decision, therefore Travel India Professionals is expected to pay attention and increase

consumers interest to make purchase decision through E-Commerce by keep providing innovations and updates regarding all the tour packages they have so consumers will be interested and are not easily bored.

The recommendation for further research in Travel India Professionals is hopefully it can raise the theory of Digital Marketing Strategy which could increase consumers interest to make purchase decision through E-Commerce operated by Travel India Professionals. With the development of current technological sophistication, of course you can expand the marketing of Travel India Professionals that can be studied, reviewed and discussed in the future.

#### REFERENCES

- [1] E. Carvajal-trujillo and E. Bons, "Influence of Trust and Perceived Value on The Intention to Purchase Travel Online : Integrating the Effects of Assurance on Trust Antecedents," vol. 47, pp. 286–302, 2015.
- [2] T. Pradiani, "Pengaruh Sistem Pemasaran Digital Marketing Terhadap Peningkatan Volume Penjualan Hasil," vol. 11, pp. 46–53.
- [3] M. Echanisms, P. Mccole, E. Ramsey, and K. H. Lim, "Research Article Truwst, Satisfaction, and Online Repurchase Intention: The Moderating Role of Perceived Effectiveness of E-Commerce Institutional Mechanisms," *Res. Artic.*, vol. 38, no. 2, pp. 407–427, 2014.
- [4] C. Ho, M. Lin, and H. Chen, "Web Users' Behavioural Patterns of Tourism Information Search: From Online to Offline," *Tour. Manag.*, vol. 33, no. 6, pp. 1468–1482, 2012.
- [5] C. Morosan, J. T. Bowen, and M. Atwood, "The Evolution of Marketing Research," *Int. J. Contemp. Hosp. Manag.*, vol. 26, pp. 706–726, 2014.
- [6] ministry of tourism, *Annual report 2016-17*. 2016.
- [7] "Annual Report 2016-2017," 2016.
- [8] S. Karimi, "A purchase decision-making process model of online consumers and its influential factor a cross sector analysis," The University of Manchester, 2013.
- [9] A. Bång and C. Roos, "Digital Marketing Strategy within Manufacturing Industries - A qualitative case study," Linnaeus University, 2014.
- [10] P. Kotler and K. L. Keller, *Marketing Management*, 15th ed. Pearson Education, 2016.
- [11] C. Lo and D. Frankowski, "Understanding Behaviors that Lead to Purchasing : A Case Study of Pinterest," pp. 531–540.
- [12] G. Hallberg and R. Owusu, "Factors Influencing the Cnsumer Purchase Decision within E-Commerce in Emerging Markets," 2015.
- [13] N. Hua, C. Morosan, and A. Defranco, "The Other Side of Technology Adoption: Examining The Relationships Between E-Commerce Expenses and Hotel Performance," *Int. J. Hosp. Manag.*, vol. 45, pp. 109–120, 2015.
- [14] A. Morrison, *Hospitality and Travel Marketing*, 4th ed. Delmar Cengage Learning, 2010.
- [15] P. R. Kotler, J. T. Bowen, and J. Makens, *Marketing for Hospitality and Tourism*, 6th ed. London: Pearson Education Limited, 2017.
- [16] J. Chen, Y. Chen, and E. Capistrano, "Process Quality and Collaboration Quality on B2B E-Commerce Industrial Management & Data Systems," *Ind. Manag. Data Syst.*, vol. 113, no. 6, pp. 908–926, 2013.
- [17] P. Kotler and K. L. Keller, *Marketing Management*, 14th ed. New Jersey: Pearson Education, 2012.
- [18] U. Silalahi, *Metode Penelitian Sosial*. Bandung: PT. Refika Aditama, 2012.