
The Correlation between Word of Mouse, Customer Value and Purchase Intention in Eco-tourism Industry

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Abstract

In recent years, leisure and entertainment have become a trend. The rising of ecotourism is not only to satisfy people's primary demand but also to get into the swing of worldwide sustainable development. The demand of tourist market is vigorous. Therefore, some more proactive marketing strategies are necessary. It'll be a serious topic to create good word of mouse, customer value, and ecotourism through cultural creativity and technological behavior, and meanwhile, using various demands of customers as a tourism marketing strategy. This research focus on tourist who did eco tour in Taroko National Park in Taiwan, and the questionnaire is randomly distributed. There're 360 copies being distributed and 263 of them are effective, with retrieval rate 73%. The research results reveal as follows. 1. There's significantly positive correlation between word of mouse and customer value. 2. There's significantly positive correlation between customer value and purchase intention. 3. There's significantly positive correlation between word of mouse and purchase intention. According to research results, suggestions are proposed to aid domestic ecotourism promoting through cultural creativity and technology and hope to enhance competitiveness in ecotourism industry effectively.

Keywords: word of mouse, customer value, purchase intention, ecotourism

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INTRODUCTION

With advancing standard of living, people pursue higher quality materially and mentally; hence, with the rising concept of leisure and entertainment, humanities and monuments, ecological environment and recreation facilities, the development of ecotourism contents not only people's primary demand and expectation of ecological and environmental protection but also the trend of worldwide sustainable development. The demand of tourist market is vigorous. The tourism industry has a bright prospect of it. Thus, operators enlarge their scope and geographical area and take more proactive marketing strategy, such as cultural creativity, technological behavior, consumers' various demand. Word of mouse affecting consumer behavior has become more prominent. Comparing to formal or organizational information resource, consumers tend to rely on informal or personal information resource, and consequently word of mouse is more persuasive and influential. It has been considered as the cheapest information communication tool and highly credible medium. Along with time changing rapidly, operation manners and organizational pattern of ecotourism industry have also changed a lot due to economic distress and political policies. A B2C

business such as ecotourism industries has faced enormous challenge since then. It's important to improve customer satisfaction, establish long-term relationship, and provide what customer truly needs. That's the only way to possess steady growth in this Red Sea Market. However, it'll be one of the vital topics to implement effective managerial strategies and provide comprehensive service quality and then create excellent word of mouse, customer value, and trust in ecotourism industry. As a result, this research is aimed at word of mouse, customer value, and purchase intention to conduct empirical research. It's expected to assist domestic ecotourism industries through cultural creativity and technology and enhance competitiveness in ecotourism industry effectively.

LITERATURE REVIEW

Word of Mouse

Li et al. (2017) considered word of mouth as a non-official marketing approach. It's independent of sales, and that's why word of mouth is considered as higher credibility than advertisement by consumers. Gavilan et al. (2018) believed that word of mouth is a widely-accepted non-commercial information source. It's significantly influential about consumer opinion

formation and decision making. Kim et al. (2018) with Internet, customers can collect product information and discussion from other consumers through browsing web pages. It capacitates customers the ability to share personal experience, opinions, and relevant knowledge, and it become so-called electronic word of mouth, or word of mouse. Basri et al. (2016) thought that it is supposed word of mouse when customers share personal experience, opinions, and relevant knowledge about specific topics on the network message board or chat room voluntarily and actively, with non-commercial purpose, or collect product information and discussion from other consumers. Lee et al. (2018) developed word of mouse message credibility pattern and induced three aspects as follows, reliability, professional, and attractiveness. It's been approved and used by many scholars. The following is the respective explanation among these three aspects:

1. Trustworthiness: Message sender is credible to message acceptor. It's about the confidence level between message acceptor and the message.

2. Expertness: The message is provided with relevant professional knowledge of the product. The higher expertness the message is, the higher credibility message acceptor has about this message.

3. Attractiveness: Message sender makes the product or service attractive. Attractiveness includes physical attraction and let message acceptor have positive evaluation about product through graceful demeanor.

Customer Value

Guo et al. (2017) defined that customer value is an overall assessment about "what they pay" and "what they get". Sparks et al. (2016) thought customer value is an evaluation about product satisfying customers' demand. If a product or service from a certain company could fulfill customers' demand, the customer value of this company would also be relatively high. Cenni and Goethals (2017) believed that customer value has a direct relation with consumers' preference and choices. The higher customer value is, the higher purchase intention and preference consumer has. Lappas et al. (2016) pointed out that customer value is the total value that customers obtain from product or service. Aside from customer value, there're product value, service value, individual value, and image value. To customer, it costs to obtain value from product and service, including money cost, time cost, energy cost, and psychological cost.

Zhuang et al. (2018) also divided customer value into three aspects:

1. Individual Value: Instrument value is about behavioral state and effects human behavior. Terminal value is the value that people pursue to reach the ideal state of survival.

2. Expected Value: It's the value that customers expected to have before transaction.

3. Measured Value: It's the value how and what customers feel after transaction.

Purchase Intention

Chan et al. (2017) defined purchase intention is the possibility and probability that consumers are willing to purchase the product. Luca and Zervas(2016) thought purchase intention is the whole value consumers have to a certain product and trigger the transaction. Shankar et al. (2016) thought consumer purchase intention depends on profit and value they can obtain from it, and thus to grow purchase intention. Hu et al. (2017) generally speaking, purchase intention is a mentally decision making. Once consumers have needs, they'll expect to fulfill it naturally. Driven by fulfilling needs, consumers will collect relevant information about the product according to personal experience and physical environment. When collected information reaches a certain degree, consumers will begin to evaluate and decide, and then they purchase this product. Munir et al. (2018) integrated theoretical pattern of store purchasing behavior and consumer behavior in the past, and also thought that purchase intention is the final process of consumer evaluation and determination. After literature review, this research used research from Gao et al. (2018) to bring up method to evaluate purchase intention, using possible purchase, desirous purchase, considerable purchase as three dimensions of question options.

Research Hypothesis

Liu et al. (2017) believed that customer value is the whole value customers have about whether the product satisfying their needs or not. Besides, word of mouse is a non-commercial marketing way to communicate between consumers and product or service. That's why consumers give higher credibility about it. (Chatterjee 2017) indicated the higher customer value is, the higher possibility to enhance word of mouse about this certain product or brand. However, word of mouse also plays an important part in affecting consumer behavior or attitude and with enormous persuasiveness and influence. Li et al. (2017) referred that word of mouse

and customer value affect each other. The higher satisfaction customers reach, the higher customer value the enterprise has. Lee et al. (2018) proved when customers are more satisfying, it brings more positive word of mouse. To sum up, the greater word of mouse is, the higher customer value is. Accordingly, the following hypothesis is proposed in this study.

H1: the correlation between word of mouse and customer value is significant.

Xiang et al. (2017) proposed the concept of price, perceived quality, and perceived value. Among them, consumer purchase intention depends on the perceived value consumer has about product. If consumer possesses higher perceived value, it'll enhance purchase intention. In other words, Guo et al. (2017) found out when tourists possess higher perceived value about ecotourism, it means their purchase intention is likely higher. Donghui et al. (2016) pointed out customer value has a positive effect on purchase intention. Zhuang et al. (2018) proved the correlation between customer value and purchase intention is significant, and thus the following hypothesis is proposed in this study.

H2: the correlation between customer value and purchase intention is prominent.

Fang et al. (2016) indicated word of mouse is a widely-accepted non-commercial information source. It has considerable influence over consumer opinion forming and purchase decision making. Xie et al. (2017) pointed out word of mouse is like talking to a friend with no bias. It brings up trust and let consumer accept their recommendation easily. When consumer faces complicated evaluation standard or lack of objective opinion, they tend to use word of mouse as reference. Chan et al. (2017) proved positive word of mouse increase purchases possibility, and meanwhile, negative one decreases the possibility. On top of that, negative word of mouse is more influential than positive word of mouse. Gao et al. (2018) found out negative information is liable to draw more attention and spread, comparing to positive information, hence the following hypothesis.

H3: The correlation between word of mouse and purchase intention is remarkable.

RESEARCH METHOD

Method Model

LISREL (linear structural relation) model combines factor analysis and path analysis in traditional statistics

and is added simultaneous equations in econometrics. It could calculate multi-factor and multi-causal path at the same time. The model fit could be evaluated from preliminary fit criteria, overall model fit, and fit of internal structure of model.

The research data are organized in **Table 1**.

Research Sample and Object

Aiming at the tourists in Taroko National Park in Taiwan, 360 copies of questionnaire are distributed, and 263 copies are retrieved and effective, with the retrieval rate 73%. The questionnaire is randomly distributed.

Reliability and Validity Test

The questionnaire items are referred to domestic and international research that it should present certain content validity. The dimensions of word of mouse, customer value, and purchase intention are tested the overall structural causal relationship, and the linear structural relation model analysis result reveals the overall model fit achieving the reasonable range that it shows favorable convergent validity and predictive validity. Item-to-total correlation coefficients are used in this study for testing the construct validity of the questionnaire content, i.e. reliability analysis. The calculated item-to-total correlation coefficients are used for judging the questionnaire contents. The item-to-total correlation coefficients in this study are between 0.80 and 0.90 which means the dimensions present certain construct validity.

To further understand the reliability, the reliability analysis is preceded. According to the standards to develop the formal questionnaire, the measured Cronbach's α appears in 0.70~0.90, conforming to the reliability range.

EMPIRICAL RESULT ANALYSIS

Model Fit Test

MLE (maximum likelihood estimation)

With "maximum likelihood estimation", the analysis results in this study achieve the convergence. Overall speaking, the overall model fit indices in this study pass the test, **Table 1**, fully reflecting good extrinsic quality of the model.

Test of Path Relationship

In regard to the intrinsic quality of the model, the squared multiple correlations (SMC) of manifest variables are higher than 0.5 (**Table 2** & **Table 3**), revealing good measurement of latent variables. Furthermore, the latent variables of word of mouth, customer value, and purchase intention present the

Table 1. Model Analysis

Model Fit	Performance indicators	Assessment indicators	result
	<i>p</i> -value	<i>p</i> -value <0.05	0.000
	$\chi^2/d.f.$	< 3	1.433
	GFI	> 0.9	0.986
	AGFI	> 0.9	0.911
	CFI	> 0.9	0.975
	RMR	< 0.05, < 0.025 excellent	0.009
	RMSEA	0.05~0.08 good < 0.05 excellent	0.024
	NFI	> 0.9	0.944
	IFI	> 0.9	0.931

Table 2. SMC of variable to dimension

Word of mouth		
reliability	professional	attraction
0.67	0.70	0.73

Table 3. SMC of variable to dimension

Customer value			Purchase intention		
Individual value	Expected value	Measured value	Possible to purchase	Intend to purchase	Consider to purchase
0.71	0.75	0.77	0.74	0.78	0.80

Table 4. Component variable and average variance extracted of variables

Evaluation items	Word of mouse	customer value	purchase intention
Component variable	0.821	0.846	0.862
Average variance extracted	0.81	0.83	0.85

component reliability higher than 0.6 and the average variance extracted of the dimensions higher than 0.5 (Table 4), apparently conforming to the test requirement for intrinsic quality of the model.

CONCLUSION

The research results show that word of mouse has an effect on customers when purchasing ecotourism service. Word of mouse is not only a review, but also a promise and trust, and it's formed by subjective conscious. Therefore, the greater word of mouse is, the higher customer value is. If ecotourism industry builds a good term with customers, it usually can obtain greater word of mouse. At this moment, customers often praise this ecotourism operator and generate preference about it. Word of mouse is a voluntary behavior from consumer, and consequently positive word of mouse brings good image. Customer value depends on consumer personal perceived value. If a ecotourism operator wants to increase customer value, it's necessary to fulfill customer needs and expectation, and proceed to remain existing customers. When consumer possesses higher perceived value about

Table 5. Linear structure model analysis

Evaluation items	parameter/evaluation standard	result	t-value
Internal fit	Word of mouse→customer value	0.827	24.35**
	customer value→purchase intention	0.862	32.16**
	Word of mouse→purchase intention	0.885	38.57**

Table 6. Hypothesis verification

Research hypothesis	correlation	Empirical result	P-value	result
H1	+	0.827	0.00	V
H2	+	0.862	0.00	V
H3	+	0.885	0.00	V

ecotourism, it represents that consumer purchase intention is also higher. Therefore, the higher customer value is, the higher purchase intention is. It can be seen that, if the service from ecotourism industry can fulfill customer demand, this certain ecotourism operator will get higher customer value.

SUGGESTION

According to the substantial results and findings, practical suggestions are proposed as follows.

1. Word of mouse delivers opinions, review, advices, and information through word of mouth or any other mass media. When customers feel satisfactory about the service from ecotourism, it's likely that they will promote this ecotourism operator complimentarily in the future. It's possible that customers share their satisfactory experience about ecotour to their friends and family, or even recommend the operator to them when they purchasing ecotour. Therefore, it's important for ecotourism operators to fulfill customer needs to proceed to positive word of mouth.

2. The whole process during purchasing ecotour could affect consumer purchase intention, so ecotourism operators should pay more attention to their service quality such as providing various services. For example, customers could find the service they need through audiovisuals on the Internet or APP. It's suggested to provide all kinds of options for different situation so that consumer could increase customer value during the service, and one step further, create more profit.

3. Employees from the ecotourism operator represent company image to consumer because servers are the direct forefront with customers. Therefore, it's considerable to train employees treating customers genuinely and valuing promises. They must keep their words and think customers as their own family. In that case, they'd really put themselves in customers' shoes

and be liable to fulfill customer needs. This would be a recommended way to enhance customers' trust and increase consumer purchase intention.

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