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Effects of Mobile Advertisement and Advertisement Involvement on Purchase Intention in Tourism Industry

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Abstract. The changes of social environments have tourism businesses encounter distinct pressure that the business performance becomes more important. Enhancing visitorsPurchase Intention therefore becomes a key item for tourism businesses Mobile Advertisement strategy with limited costs to stimulate a consumers Purchase Intention in the market. With online questionnaire survey, the users of TraNews/TTNews are sampled. Total 800 copies of questionnaires are distributed and collected, and 488 valid copies are retrieved, with the retrieval rate 61%. Each retrieved copy is regarded as a valid sample in this study. The research results reveal 1. partially effects of Advertisement Involvement on Mobile Advertisement, 2. effects of Advertisement Involvement on Purchase Intention, 3. significantly positive effects of Mobile Advertisement on Thinking of purchase in Purchase Intention, 4. partially remarkably positive effects of Mobile Advertisement on Willing to purchase in Purchase Intention, and 5. notably positive effects of Mobile Advertisement on Recommending for others in Purchase Intention.

1. Introduction

1.1. Background

The changing social environments in Taiwan have changed the national income and increase the leisure time for the citizens. A lot of people have got rid of the life style of satisfying basic living needs and changed to enhance the demands for the quality of life. Travel and recreation therefore become the key factors in the promotion of social peace, harmony, and spirits. The practice of two-day weekends further enhances peoples demands for leisure and recreation that tourism has gradually become a primary industry.

The marketing strategy for tourism industry refers to tourism businesses delivering recreational message to visitors through various media communications to induce visitor motivation participating in recreational activities. The delivery of travel message therefore becomes the key factor in visitors travel motivation, which is enhanced the importance with changing social environments. The importance and evolution of message delivery change with the changes of social culture and technological development. General people have more channels to conveniently acquire various living information that the information communication becomes more rapid and convenient. Relatively, the effects of travel information on visitors travel intention are increasing. In the mature market of mobile communication networks, the advancement of wireless Internet allows networks being integrated with smart phones. The parity of smart phones has enhanced

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the users of mobile Internet. In this case, when a tourism business could well apply mobile businesses to combining the advantages and resources of existing telecommunication businesses (such as Location-based Services, LBS), transfer travel advertisement to customized mobile devices, provide audio and video, interactive, or personalized advertisement, and precisely deliver mobile travel advertisement in time, Mobile Advertisement would be a growth point of innovative service added for tourism businesses. The blue ocean market would become a competition in tourism industry, with the infinite business opportunities and potential.

1.2. Definition and Hypothesis

Mobile Advertisement

According to American Marketing Association (AMA), Anthony et al. [1] defined Mobile Advertisement as the paid message through mobile media, aiming to affect the receivers attitudes, intention, and behaviors through such business information. In the end of 2003, Mobile Marketing Association (MMA) defined Mobile Marketing as the marketing, advertisement, or promotion activities through any mobile devices to consumers. Mobile Marketing was a communication channel which could bring instantaneity, convenience, and interactivity anytime anywhere. Generally speaking, it was a process to plan and practice conceptual ideas and price, promote, and distribute products or services through mobile communications [2]

Basheer & Ibrahim [3] pointed out the diverse characteristics of Mobile Advertisement as Information, Entertainment, Instantaneity, Convenience, and Interactivity; besides, Mobile Advertisement could be precisely transmitted according to user demands that it featured Personalization. The high popularity and diverse characteristics of mobile phones allow Mobile Advertisement being the new advertising medium. Mobile Advertisement is the advertising message shown on mobile phones or wireless devices, offering communication channels between advertisers and consumers. Mobile Marketing Association (MMA) defined Mobile Advertisement as delivering advertising message to users through mobile phones, PDA, or other wireless devices. Dao et al. [4] regarded Mobile Advertisement as a communication method to deliver message or media contents to one or more potential customers with mobile devices. The common Mobile Advertisement is presented on the banners of mobile websites, interstitial ads, pure text message (Short Message Service, SMS), Multimedia Messaging Service (MMS), mobile coupons, Location-Based Service (LBS), mobile game ads, and mobile film ads, while mobile websites, APP applications, QR Code, and Bluetooth are prevalent abroad. The rapid development of wireless network broadband enriches the advertising contents, including sound, pictures, and images for individual demands, interests, and preference of consumers [5, 6].

Referring to Lin and Wang [7], Mobile Advertisement is classified the characteristics into the following dimensions.

- 1. Information. Advertisement could convey complete product information to consumers, who therefore could perceive satisfaction in the purchase process.
- 2. Entertainment. Interesting, pleasant, and preferable advertisement reveal positive effects on brand attitudes.
- 3. Interactivity. Advertisement with Interactivity refers to the interaction between advertisement and consumers.
- 4. Personalization. Personalization allows consumers freely selecting services or products and service personnel applying differential treatment to customers.

Advertisement Involvement

Baek & Morimoto [8] regarded involvement as a psychological idea. In the early involvement theory, involvement was referred to an organism with self-centered stimuli or intentionally or subconsciously self-correlated stimuli. Involvement, as a psychological state, was the perceived correlations between a product or affair and the internal demands, value, and interests [9]. When perceiving higher correlations or importance of a specific product or affair, the correlations with individual perception would be increased, and more attention would be paid to the received correlations so that the involvement would be enhanced.

Friman [10] proposed that involvement was the perceived relationship with an affair based on personal demands, value, and interests. Hsu et al. [11] pointed out the close correlations between involvement and an individual as well as the effects on consumers receiving and dealing with message. When a consumer was motivated to look for information, he/she would concentrate more on advertising contents and deeply consider and deliberate the meanings that more involvement in the advertising contents was shown. Aiming at the subjects of involvement, Lin et al. [12] divided it into Product Involvement, Advertisement Involvement, and Purchase Decision Involvement; besides, Advertisement Involvement was defined as consumer concern about the advertising message or the psychological state when contacting with the advertisement. The higher Advertisement Involvement reveals the higher attention to the advertising message.

Involvement is divided into Essence as the focus of attention [13], which contains Situational Involvement, Enduring Involvement, and Response Involvement, and Classification Criteria based on the behavioral performance of the involvement subject, which includes Product Involvement, Advertisement Involvement, and Purchase Decision Involvement. Advertisement Involvement is also named Advertising Message Involvement. Persaud & Azhar [14] regarded Advertisement Involvement as the correlations between advertisement and the message receiver. Rose & Fogarty [15] defined Advertisement Involvement as the psychological state of audience concerning about or contacting with advertisement, from paying attention to relaxingly not seeing. A consumer presents distinct degree of involvement in advertisement would appear different treatment to advertising contents [16]. In this case, a consumer with distinct Advertisement Involvement would show different perception and treatment to the message and the degree of involvement would be affected by individual, entity, and situation factors.

Referring to Tan et al. [17], the following dimensions are proposed for measuring Advertisement Involvement in this study.

- 1. Ad click-through. The number of times each Internet user clicks on the advertisement, based on which the advertisers could understand the user response to the advertisement.
- 2. Click-through rate. The ratio of browsing the Internet and clicking on the advertisement, i.e. dividing the number of clicking on the advertisement by the number of browsing the advertisement.
- 3. Time on each web location refers to the time of a user spending on browsing a web page.

Purchase Intention

Banerjee & Dholakia [18] defined Purchase Intention as the probability or possibility of a consumer purchasing a product, i.e. the intention to purchase a product. Chen & Hsieh [19] regarded Purchase Intention as individual judgment on repurchasing a specific service of an enterprise when considering current situations and possible occurrence. Gao et al. [20] pointed out Purchase Intention as a consumer subjectively selecting a certain product or brand. Kim et al. [21] considered Purchase Intention as consumer intention to purchasing a product or visiting a service shop. Lin [22] defined Purchase Intention as the possibility of a consumer purchasing a product. Chen & Hsieh [19] considered that a consumer would present the intention to purchase and further make purchase decision to express the strong Purchase Intention. Okazaki & Mendez [23] pointed out the motivation of purchase behaviors induced by various demands in order to satisfy such demands. Demands contained physiology, safety and health, love and friendship, financial resource and guarantee, entertainment, social image, possession, giving, information, and changes. Qayyum et al. [24] developed four dimensions with the strength of Purchase Intention and consumer confidence and involvement, including 1.Repeated passive (high confidence/low involvement), 2.Rational active (high confidence/high involvement, 3.Relational dependent (low confidence/high involvement), and 4.Not purchasing (low confidence/low involvement).

Referring to the literatures on Purchase Intention of consumers, Purchase Intention is classified into Thinking of purchase, Willing to purchase, and Recommending for others, based on Varan et al. [25], as the dimensions in this study.

Research Hypothesis

From the viewpoint of Advertisement Involvement, Chouyin [26] indicated that a consumer with higher degree of involvement in a product advertisement revealing a consumer, based on personal demands and

value demands, not simply presenting larger energy to deal with product-related information, but perceiving higher correlations. For this reason, a consumer with high Advertisement Involvement would show more advertisement attention and information management abilities. Geuens et al. [27] pointed out the variation of a consumer in the purchase decision process or communication management with individual degree of involvement. It showed the characteristics of a consumer with high Advertisement Involvement presenting active search and broad selection, while the one with low Advertisement Involvement would not show such characteristics [28]. Yang et al. [29] proposed that a consumer with low Advertisement Involvement would pay less attention to the advertisement and product information when facing advertising information so that the comprehension of such information was limited. The consumer therefore appeared lower perception on accepting such information that the connection between advertising information and the inspired thinking ability was weak [30]. Park et al. [31] discussed consumer attitudes towards Mobile Advertisement and found out the effects of Mobile Advertisement on Behavioral Intention, which further affected Consumption Behavior. Aiming at mobile phone users in China, Rau et al. [32] studied the effects of Personalized Mobile Advertisement on consumer attitudes. The research findings showed the remarkably positive effects of Personalization, Reliability, and Entertainment on Attitudes, which also positively affected Behavioral Intention. As a result, the following hypotheses are proposed.

- H1: Advertisement Involvement would affect Mobile Advertisement.
- H2: Advertisement Involvement would influence Purchase Intention.
- H3: Mobile Advertisement presents significantly positive effects on Thinking of purchase in Purchase Intention.
- H4: Mobile Advertisement shows remarkably positive effects on Willing to purchase in Purchase Intention.
- H5: Mobile Advertisement reveals notably positive effects on Recommending for others in Purchase Intention.

2. Methodology

2.1. Research Framework

Summing up the above literatures, the conceptual framework (Figure 1) is drawn to discuss the correlations among Advertisement Involvement, Mobile Advertisement, and Purchase Intention in this study.

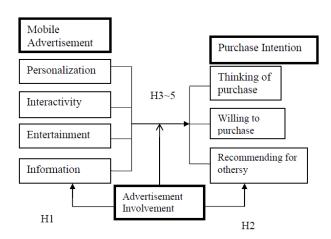


Figure 1: Research framework

2.2. Measurement of research variable

1. Mobile Advertisement

Referring to Lin and Wang (2011), Mobile Advertisement is divided into (1) Information, (2) Entertainment, (3) Interactivity, and (4) Personalization.

2. Purchase Intention

Referring to Varan et al. [25], (1) Thinking of purchase, (2) Willing to purchase, and (3) Recommending for others are proposed.

2.3. Research Subject and Sampling Data

TraNews/TTNews is the research subject in this study. TraNews/TTNews, the largest and the number one travel news medium on the Internet in Taiwan, is a professional travel news supplier and cooperates with globally top 100 portal sites, aiming to become the largest travel medium globally. TraNews/TTNews, positioned on Travel Media, was established in 2002 and became the largest travel news medium on the Internet in Taiwan in 2005. Focusing on rooting travel news, the contents of TraNews/TTNews are rich and deep. In such an era with the explosion of knowledge when true and false information is flooding, TraNews/TTNews insists on the spirits of Positive, Correct, True, Plain, Neutral, Objective, Fresh, and Public Trust that it can be promoted in the globally top 100 traditional Chinese websites because of the insistence and reader support. With online questionnaire survey, the users of TraNews/TTNews are sampled and distributed 800 copies of questionnaires. Total 488 valid copies are retrieved, with the retrieval rate 61%, where each retrieved copy stands for a valid sample in this study. The retrieved copies are proceeded data analyses with SPSS, and Factor Analysis, Reliability Analysis, Regression Analysis, and Analysis of Variance are utilized for testing the hypotheses.

2.4. Analysis

Analysis of Variance is used for discussing the variation of Advertisement InvolvementinMobile Advertisement and Purchase Intention, and Regression Analysis is further applied to understanding the correlations between Mobile Advertisement and Purchase Intention.

3. Results

Reliability and Validity Analysis

With Factor Analysis, Mobile Advertisement was extracted four factors of Information (eigenvalue=3.422, α =0.86), Entertainment(eigenvalue=2.731, α =0.87), Interactivity(eigenvalue=2.355, α =0.82), and Personalization(eigenvalue=1.916, α =0.85). The covariance explained achieved 82.473%.

With Factor Analysis, Purchase Intention was extracted three factors of Thinking of purchase(eigenvalue=2.751, α =0.88), Willing to purchase(eigenvalue=2.263, α =0.84), and Recommending for others(eigenvalue=1.772, α =0.90). The covariance explained reached 86.843%.

4. Discussion

Effects of Advertisement Involvement on Mobile Advertisement and Purchase Intention

1. Variance Analysis of Advertisement Involvement and Mobile Advertisement

Analysis of Variance was used for discussing the variation of Advertisement Involvement in Mobile Advertisement, i.e. to analyze and explain Ad click-through, Click-through rate, and Time on each web location in Advertisement Involvement. In terms of the variation of Advertisement Involvement in Mobile Advertisement, Table 1, Time on each web location appeared significant variation in Mobile Advertisement.

Table 1: Variance Analysis of Advertisement Involvement and Mobile Advertisement

Variable	F	P	Scheffe post hoc
Ad click-through	15.436	0.286	
Click-through rate	8.557	0.774	
Time on each web location	26.538	0.007*	456>123

^{*} stands for p<0.05

2. Variance Analysis of Advertisement Involvement and Purchase Intention

Analysis of Variance was applied to discussing the variation of Advertisement Involvement in Purchase Intention, i.e. to analyze and explain Ad click-through, Click-through rate, and Time on each web location in Advertisement Involvement. Regarding the variation of Advertisement Involvement in Purchase Intention variance, Table 2, Ad click-through, Click-through rate, and Time on each web location presented notable variation in Purchase Intention.

Table 2: Variance Analysis of Advertisement Involvement and Purchase Intention

Variable	F	P	Scheffe post hoc
Ad click-through	13.689	0.011*	34>12
Click-through rate	9.834	0.027*	34>12
Time on each web location	22.128	0.000*	456>123

^{*} stands for p<0.05

4.1. Correlation Analysis of Mobile Advertisement and Purchase Intention

3. Correlation Analysis of Mobile Advertisement and Thinking of purchase

To test H1, the analysis results, Table 3, showed the significant effects of Information(t=1.933*), Entertainment(t=1.724*), Interactivity(t=2.046**), and Personalization(t=2.351**) on Thinking of purchase that H1 was supported.

4. Correlation Analysis of Mobile Advertisement and Willing to purchase

To test H2, the analysis results, Table 3, revealed the remarkable effects of Information(t=1.615*), Interactivity(t=2.133**), and Personalization(t=2.462**) on Willing to purchase that H2 was partially supported.

5. Correlation Analysis of Mobile Advertisement and Recommending for others

To test H3, the analysis results, Table 3, appeared notable effects of Information(t=1.983*), Entertainment(t=1.817*), Interactivity(t=2.296**), and Personalization(t=2.683**) on Recommending for others that H3 was supported.

Table 3: Analysis of Mobile Advertisement and Purchase Intention

Dependent variable→	Purchase Intention						
Independent variable↓	Thinking of purchase		Willing to purchase		Recommending for others		
Mobile Advertisement	Beta	t	Beta	t	Beta	t	
Information	0.168	1.933*	0.136	1.615*	0.173	1.983*	
Entertainment	0.142	1.724*	0.114	1.322	0.166	1.817*	
Interactivity	0.187	2.046**	0.191	2.133**	0.212	2.296**	
Personalization	0.215	2.351**	0.224	2.462**	0.241	2.683**	
F	15.438		23.267		31.134		
Significance	0.000***		0.000***		0.000***		
R2	0.233		0.271		0.322		
Adjusted R2	0.018		0.024		0.033		

Note: * stands for p<0.05, ** for p<0.01,*** for p<0.001

Data source: Self-organized in this study

5. Conclusion

According to the research results, higher Advertisement Involvement would stimulate a consumer to present higher demands for or interests in the advertising information, or the stimulation of the information would show strong importance on the person. From Table 3, Information, Entertainment, Interactivity, and Personalization reveal significantly positive correlations with Purchase Intention, presenting the more

favorable Information, Entertainment, Interactivity, and Personalization, the better Purchase Intention of customers in tourism industry. Interactivity and Personalization are the unique communication advantages between mobile devices and consumers. The research results present that Interactivity and Personalization are the key value factors in Mobile Advertisement being different from traditional advertisement in tourism industry. The higher interactive advertisement would affect consumers being willing to invest in more resources that the advertising effect would be better. Personalization of Mobile Advertisement in tourism industry stresses on the customized interaction with customers and service uniqueness. Consequently, with the portable convenience of Mobile Advertisement, a consumer could be offered proper information at proper time. Moreover, the ubiquity and positioning functions of mobile commerce allow actually mastering a consumers behavioral habits and provide properly attentive and personalized information services. Travel Information is also regarded as a useful motivation factor in Mobile Marketing. The results reveal that Information with travel advertisement characteristics could enhance a consumers realization and demands for travel products or services and product information and be the consumption reference. It presents positive effects on Purchase Intention.

6. Recommendations

Aiming at above research results, the following suggestions are proposed in this study.

- 1. Proper application of Mobile Advertisement. Regarding the characteristics of Personalized Mobile Advertisement, atourism business should allow consumers possessing the hegemony to decide what to see and how to see and use. Such Location-Based Service (LBS) advertisement could appeal to consumers as they could look for news, according to personal demands, anytime anywhere. Such information provision is divided into Pull LBS and Push LBS. Real-time demands and advertising services could reduce searching costs for a consumer or accelerate the process of a consumer contacting with advertisement and products so as to develop the advantage of efficient delivery of Mobile Advertisement. It reveals great assistance on regional and instantaneously demanded product advertisement as well as consumers.
- 2. Integrating Mobile Advertisement with life entertainment and being assisted with interaction. In the research results, personal Advertisement Involvement would affect the path of information management and further influence Mobile Advertisement. Technology-based services would be restricted by the new technology acceptance and use habit of a consumer, which would further affect the intention, perception, and evaluation of the service. It is therefore suggested that a tourism business could deepen the advertising information, provide consumers with personalized new product information, functions, and interests, reinforce the visual stimulation, image, memory, and attention of advertisement, and reduce the uncertainty of a consumer.

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