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An empirical study on consumer intention to participate in mobile marketing in China

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Mobile marketing is a kind of marketing activities through personal mobile devices. In recent years, mobile marketing is widely carried out in China. However, many enterprises which carried out mobile marketing did not achieve the desired effects. One of the reasons is that consumers' intention to participate in mobile marketing is not high. The article constructed the model of factors influencing consumers' intention to participate in mobile marketing on the basis of literature research. The conclusions showed that technology, consumer innovativeness, personalization, permission and entertainment had direct or indirect impact on intention. Therefore, if the enterprises promote the improvement of mobile technologies, focus their marketing activities on innovative consumers and improve the personalization, the level of permission and the entertainment of their mobile marketing, the intention of consumers to participate in mobile marketing would be enhanced.

Keywords: Mobile marketing, Participate, Structural equation, Intention

INTRODUCTION

In China, the users of mobile devices have been rapidly expanding in recent years. The latest statistics of MITT of PRC showed that mobile phone users had a net increase of 109,163,000 and amounted to 1,095,416,000 in October 2012. Among the mobile phone users, 3G subscribers had increased by 83,991,000 and amounted to 212,415,000. Under the condition of rapid development of the mobile communication industry and expanding of mobile phone users in China, many enterprises have already paid attention to the application of mobile devices in the commercial field. The applications include mobile coupons, SMS advertisement, MMS advertisement, RBT advertisement, mobile game advertisement, interactive mobile marketing activities, SMS Web promotion, customer relationship maintaining such as instant birthday reminder, etc. This kind of activity is called mobile marketing. For example, during the promotion period before Christmas in 2010, the Shanghai Unified

Starbucks Coffee Co., Ltd. cooperating with China's largest mobile social network service provider Jiebang network had launched a unique marketing campaign "Sign to Christmas" which was aimed at the urban fashion crowd. During the 45-day event, as long as the consumers registered to Jiebang network through mobile phone and signed to any outlets of Starbucks in East China, they would have chances to win virtual badges and gifts. That event attracted a large number of consumers to participate. Another example is that ANTA Company carried out a campaign "Cheering for Winter Olympics athletes, this moment is for China" through mobile network in 2010. In the campaign, ANTA used the cool and vivid stream media advertisements on mobile phone to demonstrate its brand image, and carried out interactive activities between consumers and Winter Olympics athletes. The campaign acquired the fanatical pursuit of consumers. The emergence of the Apple iPhone set off the boom of people's pursuit and had a certain impact on people's way of life as well as the enterprises' marketing to some extent. Many enterprises have developed client software specifically for the iPhone, so that consumers and enterprises can achieve

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interaction anywhere and anytime. However, many enterprises have not achieved remarkable results through mobile marketing. More usually, enterprises do not know how to well-design mobile marketing and often adopt a simple and low-end bulk SMS sending. Some enterprises aroused aversions by consumers and were blacklisted because of sending unsolicited spam messages and others were even punished because of offending laws. Thus, how to take full advantage of the integration of the rapid development of Internet technology and mobile communications technology to launch mobile marketing, how to encourage consumers to participate in mobile marketing and how to enhance mobile marketing effectiveness are the problems placed in front of a lot of enterprises in China.

THEORETICAL BACKGROUND

Mobile marketing is any marketing activity which is carried out through extensive mobile network connected by personal mobile devices (Kaplan, 2012). In recent years, theoretical researches on mobile marketing have been growing rapidly. Those researches can be divided into three types: Consumer perspective, mainly study the acceptance, perception, attitude, reaction and effect of mobile marketing; Enterprises and management perspective, focus on value chain, performance measurement, enterprise model, brands and applications; General perspective, mainly study the antecedents and the results, legal and policy issues, adoption and promotion issues of mobile marketing. Because consumers' participation or acceptance issues are important research content of the research field of technology innovation and mobile marketing, the article also mainly studied consumers' participation issues of mobile marketing.

The main researches on technology acceptance

As mobile marketing developed on the basis of the development of mobile communication technology and was very new, so most researchers used main technology acceptance theories to study the consumer acceptance issues of mobile marketing. That being used widely in the researches on adoption and acceptance of information technologies and information systems are TRA, TAM, TAM2, TPB, IDT, UTAUT, etc. There are close correlations between those theories. For example, TRA, TAM, TAM2, TPB and UTAUT successively mentioned external factors and social impacts. Especially the subjective norms factor of external factors was mentioned frequently. Perceived ease of use and perceived usefulness were considered to be the core variables of mainstream technology acceptance theories. Those technology acceptance theories had been widely

used in the field of acceptance and promotion of new products and information system technologies, and had been cited frequently. Technology acceptance theory mainly studies the promotion and application of new technologies, while mobile technology and mobile marketing is a new thing, so the core idea of technology acceptance theories could provide strong support for the article, such as the relationship between behavioral intention and behavior, and the relationship between perceived ease of use, perceived usefulness and behavioral intention.

The researches on consumer acceptance of mobile marketing

At present, the researches on mobile marketing cover a wide range and the issues of consumers' acceptance of mobile marketing are very important research content in those studies. As a new marketing communication mode, if consumers do not accept and participate, the effect of mobile marketing activities would be difficult to achieve. Here, consumers' acceptance refers to consumers' acceptance of mobile marketing and does not refer to the acceptance of certain products and services provided by enterprises. Consumers' intention to participate in or accept mobile marketing include willing to read business SMS and MMS advertisement, willing to connect to the mobile sites of enterprises to inquire product information, willing to participate in enterprises' interactive marketing activities and willing to receive mobile coupons or even actively exchange them.

Many scholars had already contributed for the research on consumers' acceptance of mobile marketing. Varnali and Toker (2010), concluded that consumers' acceptance of mobile marketing was affected by the following factors: consumer attitude and personal perception, demographic factors, social or peer factors, cultural factors, media factors, relevance and credibility of the content, trust of the information senders and wireless service providers, the context factors of mobile marketing and the users' control of content, and delivery time and frequency of mobile marketing information. The researches related to acceptance of mobile marketing focused on the following two types (Varnali and Toker, 2010).

The first type of mobile marketing research used the application view. Wang (2011), studied the revelation of the interactive features of the mobile magazine to mobile marketers. Yu (2010), studied the mobile marketing activities of the Wendy's fast-food chains. Feng (2011), studied the role of cultivating mobile phone scanning habits in developing mobile marketing. Xie et al. (2011) studied the main applications of mobile marketing in practice. Ma (2011), studied the development of technological innovation and mobile marketing, the main applications, the current status and the existing problems of mobile marketing. In these studies, the researchers

studied the unique characteristics of the applications through a variety of models. These features included the following factors: consumer, enterprise technology, location sensitivity, personalization, income caused by mobile advertising, mobile advertising concerns, etc. All these factors would affect the consumer acceptance of mobile marketing.

The second type of mobile marketing research used established IT acceptance model to study. Barnes and Huff (2003), used Rogers's IDT to study the diffusion and acceptance of mobile Internet advertisement. Based on TAM2 theory, Yang (2007), surveyed 468 university students in Taiwan to know about their attitude and willingness to accept mobile advertisements. The findings of survey were consistent with the conclusions of TAM2 and showed that the social factors significantly affected the attitudes of consumers toward mobile marketing. Moreover, the consumers' attitude toward mobile marketing would affect their attitude and willingness to use mobile advertisement. He and Lu (2009), used the core variables of UTAUT model, the personal innovativeness of IDT and the task matching of TTF to explore consumers' attitude and acceptance of mobile advertisement.

Conceptual model and hypotheses

In this section, we develop our hypotheses and a conceptual model based on the previous discussion on consumer acceptance of mobile marketing.

Technology and intention

In real life, the mobile phone and network technology has a greater impact on consumers' use of mobile marketing services. The technologies which have direct impact on mobile marketing include: (1) Information transfer technology. Information transfer technology refers the mobile communication network technology that affects the speed and accuracy of the information transfer. If because of some reasons of the mobile communication network such as a bad signal, frequent disconnection and too slow speed, consumers could not receive information accurately or participate in mobile marketing activities in a timely manner, so the consumers' enthusiasm for participating in mobile marketing is bound to reduce greatly.

Mobile device technology: Launching and applying mobile marketing could not be separated with the use of a large number of new mobile data services. But the prerequisite of adopting new mobile services such as browsing web and participating in interactive mobile games is the penetration of mobile phones with necessary technical capabilities. Smart mobile phones

have certain properties such as XHTML scanning, location integrating, running smoothly in different networks, and usually have larger screens, which allow advertisers to make multimedia information more attractive. Thus, the intentions of consumers who have smart mobile phones to participate in mobile marketing are often higher.

Mobile data services technology: Mobile data services technology refers to the technology developing a variety of data services such as SMS, MMS, ring tones and mobile games. Those data services are the basis for developing mobile marketing. Mobile marketing requires more than just a channel, but also need a platform to develop and provide applications. For example, the location awareness desired in mobile marketing activities puts forward higher requirements of GPS technology. It could be predicted that innovation of mobile technology will make mobile data services have a gradual transition from SMS-based services to more advanced services such as WAP and multimedia applications, so as to provide a richer mobile marketing communication channels for enterprises. A variety of applications of mobile phone and mobile marketing campaigns will be more attractive to consumers.

Okazaki and Taylor (2008), thought that only when a country's technology reached a certain extent, would there be enough consumers to adopt these technologies and be touched by SMS advertisement. Clearly, the technology in some countries is stronger than other countries, which generally depends on the country's economic development level. For example, the technology in Europe, Japan and the U.S. is more developed, thus there are more consumers in these countries willing to participate in mobile marketing. The smart technology of mobile phones, faster connection speeds and more accurate location-awareness make mobile marketing more attractive whether it is to enterprises or consumers. Moreover, the large screen, smooth video, rapid connection allows consumers to easily participate in mobile marketing activities, so that their enthusiasm is higher than ever. Thus, this article considers perceived ease of use as a mediator between technology and intention, and puts forward the following hypothesis:

- H1: Technology will have a positive effect on intention.
- H2: Technology will have a positive effect on perceived ease of use.

Consumer innovativeness and intention

Innovativeness actually reflects the tendency and attitude of consumers to accept new things. One study showed that consumer innovativeness can be a good predictor of

consumers' use of IT innovation (Yi et al., 2006). Considering that mobile services are relatively new, innovativeness could be thought to be a variable which affects intention. Besides that, innovative consumers are more challenging, and their fears of new things are also weaker, so in the use of new technologies and services, their perceived ease of use is significantly stronger than backward users. Thus, this article considers perceived ease of use as a mediator between consumer innovativeness and intention and put forward the following hypothesis:

- H3: Consumer innovativeness will have a positive effect on perceived ease of use.
- H4: Consumer innovativeness will have a positive effect on intention.

Personalization, permission, entertainment, perceived ease of use, perceived usefulness and intention

Real life shows that consumers are more willing to participate in related mobile marketing activities. For example, the consumers who are looking for real estate are usually not so disgusted with the real estate information sent to their mobile phones. The personalized information and activities which could meet the consumers' practical needs often have more attractiveness to consumers. In addition, consumers feel easier to participate in their familiar fields.

Permission will have an impact on consumer intention to participate in mobile marketing. Many SMS information considered as SMS spam by many consumers has become a common enemy because it frequently harasses consumers without permission. But the information sent to registered users or members is usually more accepted by consumers because it represents consumer permission in some degree. In addition, the business information sent to users or members is often the information which consumers need and is useful for consumers. Consumers are also relatively friendly to the mobile marketing information and activities providing unsubscribe ways.

Now, it is an era when mobile communications technology and network technology develop rapidly. Because most people have the nature to play, so people often use the tools on mobile phones to spend leisure time when taking the subway or when waiting somebody. Based on mobile data services such as game, MMS, and video, mobile marketing is more exciting and more entertaining, so it often can get consumers fanatical pursuit and forwarding. The more entertaining mobile marketing information and activities could better meet the entertainment needs of consumers, so for consumers, they are also useful. Thus, this article puts forward the following hypothesis:

- H5: Personalization will have a positive effect on perceived ease of use.
- H6: Personalization will have a positive effect on intention.
- H7: Personalization will have a positive effect on perceived usefulness.
- H8: Permission will have a positive effect on intention.
- H9: Permission will have a positive effect on perceived usefulness.
- H10: Entertainment will have a positive effect on intention.
- H11: Entertainment will have a positive effect on perceived usefulness.

Perceived ease of use, perceived usefulness and intention

TAM theory showed that perceived usefulness and perceived ease of use had positive effects on intention, and at the same time, perceived ease of use had positive effect on perceived usefulness. The core ideas of TAM theory have become the theoretical sources of the main technology acceptance theories and also become the important theoretical basis of studying consumer adoption of mobile marketing. In mobile marketing, if the marketing information and marketing activities sent or carried out by enterprises could meet consumers' needs, consumers' intention to participate in mobile marketing would be significantly stronger. In addition, if mobile marketing activities were designed to be relatively simple, consumers' participation would be easier, consumers' acquiring marketing information would be relatively easier, and their intention to participate in mobile marketing would be also stronger. Thus, the article puts forward the following hypotheses:

- H12: Perceived ease of use will have a positive effect on intention.
- H13: Perceived usefulness will have a positive effect on intention.
- H14: Perceived ease of use will have a positive effect on perceived usefulness.

The conceptual model

According to the hypotheses, the article built the following model representing some factors affecting consumers' intention to participate in mobile marketing. The causal relationship between each variable is shown in Figure. 1.

As shown in Figure 1, technology, consumer innovativeness and personalization are antecedents of perceived ease of use. They will not only directly affect the intention, but also affect intention indirectly through the mediators such as perceived ease of use and

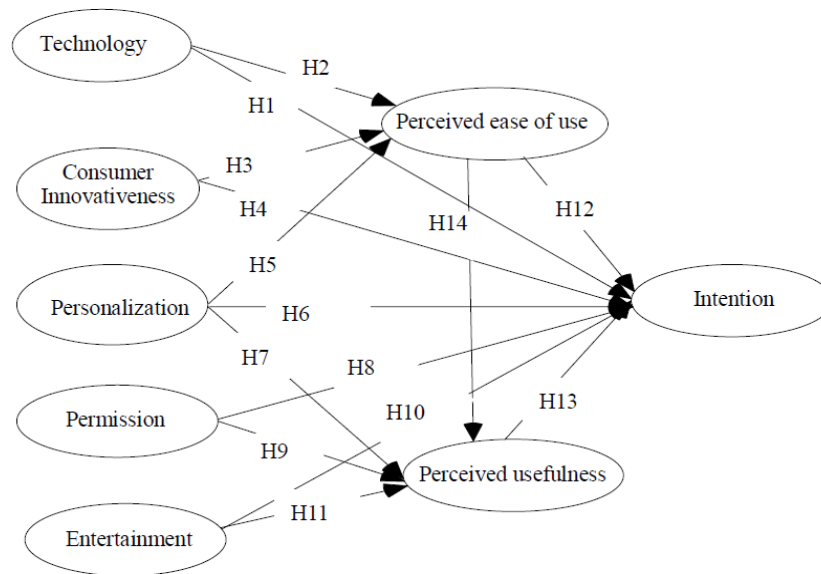


Figure 1. A Conceptual Model for Consumer Participation in Mobile Marketing

Table 1. The Sources of Measurement Items

Variables	Literatures
Technology	Kim et al., 2007; Lu et al., 2008
Consumer innovativeness	Goldsmith, 1991; Kim et al., 2010; Okazaki, 2007
Personalization	Schierz, 2009; Xu et al., 2008
Permission	Merisavo et al., 2007
Entertainment	Yang, 2007; Kim et al., 2010; Okazaki, 2007
Perceived ease of use	Kim et al., 2010; Davis, 1989
Perceived usefulness	Kim et al., 2010; Davis, 1989
Intention	Yang, 2007; Kim et al., 2010; Okazaki, 2007

perceived usefulness. Personalization, permission and entertainment are antecedents of perceived usefulness. They will not only directly affect intention, but also indirectly affect intention through the mediators such as perceived ease of use and perceived usefulness. Perceived ease of use and perceived usefulness as mediators will also directly or indirectly affect intention.

RESEARCH METHODS

Construct measurement

The measurement used Likert7 items. 1 represents "totally disagree" and 7 represents "totally agree". The sources are shown in Table 1. The survey questionnaire included the major variables and demographic items such as gender, age, income, etc.

After determining the first draft of the measurement, the authors randomly selected 70 university students in

Guangdong in China to test sales. 62 copies returned, of which 12 were invalid and 50 were valid. Then the measurement was carried out using the reliability and validity analysis. Based on the analysis results, the measurement was fine tuned and the formal measurement was formed.

Data collection procedure

In the formal survey, the samples were randomly selected from university students in six provinces in China which were Hunan, Hubei, Guangdong, Inner Mongolia, Hebei and Zhejiang. The subjects took part in the survey voluntarily. Before the survey, the subjects were provided certain explanations so as to ensure the authenticity and validity of the questionnaires. There were 800 questionnaires sent out and 401 questionnaires returned. The response rate was 50.12%. Among the returned questionnaires, there were 60 invalid and 341 valid. The valid rate was 85.04%.

Table 2. Measurement Testing and Descriptive Statistical Analysis

Variables	Cronbach's a	Composite reliability	Average variance extracted	Mean n=341	Std. Deviation
Technology	0.910	0.903	0.700	3.881	1.272
Consumer innovativeness	0.935	0.934	0.738	3.748	1.333
Personalization	0.959	0.959	0.824	3.194	1.450
Permission	0.895	0.897	0.745	3.410	1.451
Entertainment	0.957	0.955	0.843	3.024	1.491
Perceived ease of use	0.951	0.947	0.817	3.749	1.357
Perceived usefulness	0.942	0.939	0.755	3.492	1.361
Intention	0.936	0.789	0.937	3.356	1.520

DATA ANALYSIS AND RESULTS

After data collection and collation, the scales were carried out reliability and validity analysis by using Cronbach's Alpha coefficient and confirmatory factor analysis. Then, the data were carried out descriptive statistical analysis. Finally, the article applied AMOS path analysis and tested the hypotheses.

The analysis results showed that 54.8% of the subjects were women and 45.2% were men. The majority of subjects had used mobile phone for 3 to 4 years and occupied 39.6% of the total users. The other high percent users were those having used mobile phones for 1 to 2 years and occupied 34.6% of the total users. For subjects who were university students, their disposable income was low and their monthly spending on mobile services was significantly less than normal. But because university students have higher level of education, their pursuit of new things is significantly higher than the other groups. They would be a very important potential consumer group and a new force of participating in mobile marketing. Their intention to participate in mobile marketing will also have a great impact on future consumption. The vast majority of subjects had mobile Internet experiences, which showed they had a certain degree of understanding of mobile value-added services and were not too strange about mobile marketing campaigns. That could ensure the reasonableness of the survey. However, due to limited economic income, the majority of subjects used ordinary mobile phones, accounting for 52.2% of the total subjects. Their using mobile value-added services were also affected in some way because of the limitations of the ordinary mobile phone functions. The survey results also showed that the percent of men holding smart phone was significantly higher than the percent of women. The men's entertainment needs was higher than women, such as mobile games and other entertainment services.

Measurement testing and descriptive statistical analysis

The results of reliability and validity analysis and

descriptive statistical analysis are summarized in Table 2. As shown in Table 2, all the Cronbach's Alpha of scales are higher than 0.7 the acceptable level. All the composite reliabilities of scales are also above 0.7. The average variance extracted is above 0.5. Based on the above indicators, the internal consistency of the scales is higher and the reliability is better. As shown in Table 2, all the mean of the main variables is less than 4, the intermediate value of Likert7 scale. That shows consumers believe the overall technology environment of mobile communications is not ideal and consumer innovativeness is not strong. It also shows the activities and information of enterprises are not personalized, do not provide high level of permission and entertainment, are not easy to understand and participate, and are not very useful for consumers. Overall, consumers' intention to participate in mobile marketing activities is not high.

The path analysis and hypotheses testing

Path analysis results are shown in Figure 2, The effect relationships between the variables are shown in Table 3, The hypotheses testing results are shown in Table 4.

As shown in the above Figures and Tables, all the usual fit indexes such as P, RMSEA, GFI, AGFI and CMIN / DF values are consistent with the requirements, so the fit degree of the model is very high and the basic theoretical model is verified. The dotted lines represent that the original hypothesized relationships between variables do not exist. Only four hypotheses of the original fourteen hypotheses such as H1, H6, H9 and H12 are not supported. All other hypotheses are supported.

Discussions

The above analysis shows that the intention of consumers to participate in mobile marketing is influenced by many factors. The relationships between the various factors and consumer intention are as follows:

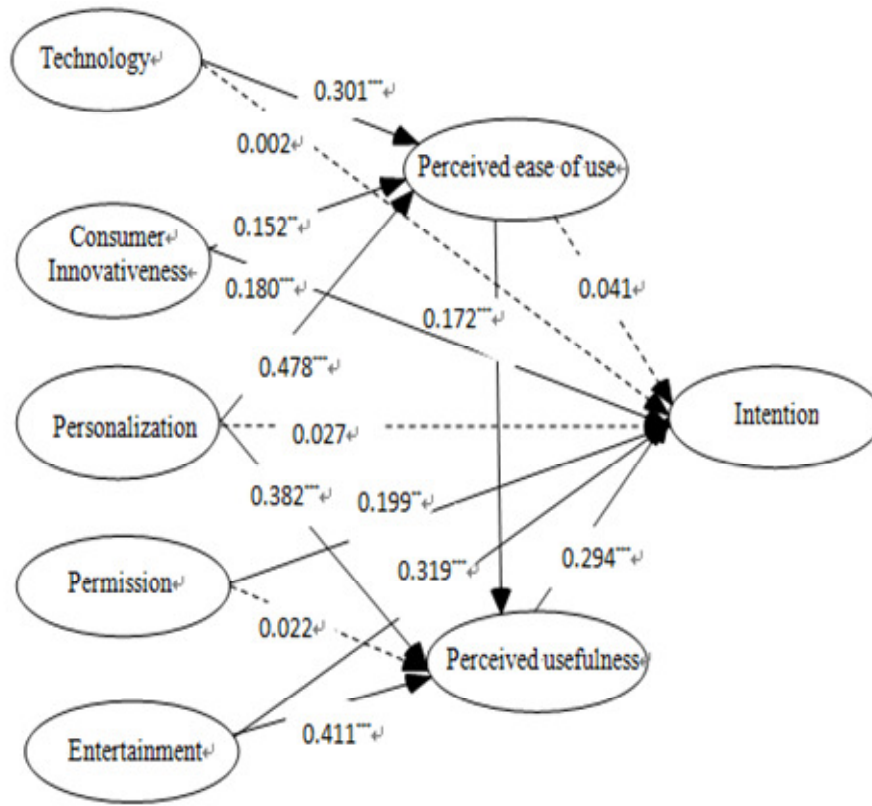


Figure. 2. Structural Equation Model: Standardized Path Estimates (P = 0.239; RMSEA = 0.012; GFI = 0.925; AGFI = 0.904; CMIN/DF = 1.046; Path significance: ** P < 0.05, *** P < 0.001)

Table 3. Direct Effect, the Indirect Effect and the Total Effect between the Variables of the Model (Standardized Results).

Endogenous variables	Exogenous variables						
	Entertainment	Permission	Personalization	Technology	Consumer innovativeness	Perceived ease of use	Perceived usefulness
Perceived ease of use			0.478	0.301	0.152		
			0	0	0		
			0.478	0.301	0.152		
Perceived usefulness	0.411 ^a		0.382	0	0	0.172	
	0 ^b		0.082	0.052	0.026	0	
	0.411 ^c		0.464	0.052	0.026	0.172	
Intention	0.319	0.199	0	0	0.180	0	0.294
	0.121	0	0.136	0.015	0.008	0.051	0
	0.440	0.199	0.136	0.015	0.188	0.051	0.294

Note: a- indicates direct effect between the variables; b- indicates the indirect effects between the variables; c- indicates the total effect (direct effect + indirect effect) between the variables.

Table 4. Hypotheses testing

Hypotheses	Standardized estimates	T-value	Hypotheses testing
H1: Technology will have a positive effect on intention.	0.002	0.031	Not supported
H2: Technology will have a positive effect on perceived ease of use.	0.301	4.070***	Supported
H3: Consumer innovativeness will have a positive effect on perceived ease of use.	0.152	2.215**	Supported
H4: Consumer innovativeness will have a positive effect on intention.	0.180	3.810***	Supported
H5: Personalization will have a positive effect on perceived ease of use.	0.478	7.382***	Supported
H6: Personalization will have a positive effect on intention.	0.027	0.297	Not supported
H7: Personalization will have a positive effect on perceived usefulness.	0.382	4.811***	Supported
H8: Permission will have a positive effect on intention.	0.199	2.580**	Supported
H9: Permission will have a positive effect on perceived usefulness.	0.022	0.312	Not supported
H10: Entertainment will have a positive effect on intention.	0.319	3.510***	Supported
H11: Entertainment will have a positive effect on perceived usefulness.	0.411	6.013***	Supported
H12: Perceived ease of use will have a positive effect on intention.	0.041	0.703	Not supported
H13: Perceived usefulness will have a positive effect on intention.	0.294	4.532***	Supported
H14: Perceived ease of use will have a positive effect on perceived usefulness.	0.172	3.526***	Supported

** P <0.05, *** P <0.001

Technology has no direct effect on intention, but has indirect effect on intention through perceived ease of use and perceived usefulness: This conclusion initially reveals the mechanism of action between technology and consumer intention to improve the mobile communication technology and to make the mobile Internet more stable, faster and more convenient to connect related interfaces, consumers will feel easier to acquire enterprise mobile advertisement or participate in enterprise mobile marketing campaigns. Accordingly, because it is easier for consumers to access relevant information or to participate in related activities, so in a way, consumers' efficiency of searching and purchasing would be enhanced. Thus the consumers' perceived usefulness would be affected, which would indirectly affect their intention to participate in mobile marketing. For enterprises, the mobile marketing would be easier to achieve success too.

The mechanism shows that the mobile communication technology is the source of consumers' perceived ease of use, and perceived ease of use has an indirect effect on consumers' intention to participate in mobile marketing. So in order to carry out mobile marketing more successfully, the enterprises should promote the government, the mobile operators and related agencies to improve the technical level of the entire mobile communications would be affected, which would indirectly affect their intention to participate in mobile marketing. For enterprises, the mobile marketing would be easier to achieve success too.

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Consumer innovativeness has a direct effect on intention on the one hand and has an indirect effect on intention through perceived ease of use and perceived usefulness on the other hand: This conclusion shows that higher consumer innovativeness is, more positive consumer's adoption of new technology would be. Consumer will feel it easier to understand and participate in mobile marketing, if his innovativeness is stronger. So enterprises should consider target consumers' innovativeness when they carry out mobile marketing. Carrying out mobile marketing focused on high innovative consumers will enhance the possibility of success of mobile marketing.

Personalization has no direct effect on intention, but has an indirect effect on intention through perceived ease of use and perceived usefulness: This conclusion shows that if the personalization of enterprises' mobile marketing activities and information is stronger and the content is more relevant to the consumer, both the consumer's perceived ease of use and perceived usefulness would be stronger. It would indirectly make consumer more willing to participate in mobile marketing. So enterprises should take full account of consumer's time, location, interest and other related information when design mobile marketing.

Permission has a direct effect on intention: This

conclusion shows that, under the premise of consumer's permission, the mobile advertisement or other information sent by enterprises will be more welcomed by consumers. It means that enterprises could obtain the permission of the consumer through a simple registration of consumer when designing mobile marketing or through providing unsubscribe conditions for consumers when carrying out mobile marketing activities and sending marketing information. So consumers' intention to accept and participate in mobile marketing would be higher.

Entertainment has a direct effect on intention and has an indirect effect on intention through perceived usefulness: This conclusion shows that, if enterprises design mobile marketing campaigns more entertaining, on the one hand, consumers' intention could be stimulated directly, on the other hand, the consumer would think of these activities and information more useful to himself. Thus it would affect consumers' intention indirectly. Therefore, when carrying out mobile marketing, enterprises should try to add some fun elements in designing mobile SMS ads, MMS ads, mobile game, etc., so that the enthusiasm of consumers to participate in mobile marketing would be enhanced.

Perceived ease of use has an indirect effect on intention through perceived usefulness, and perceived usefulness has a direct effect on intention: This conclusion is consistent with the major theoretical contribution of Davis et al. (1989), and Venkatesh (1999), to some extent: perceived ease of use had direct and indirect effect on perceived usefulness. It also supported the view of Mallat (2007), and Au and Kauffman (2008): the intention of individuals to use information technology depended largely on their perceived usefulness of the information system. When users feel that mobile marketing is helpful to their finance and trading, they will be more willing to accept and participate in mobile marketing activities. The conclusion reveals the relationship between perceived ease of use and intention in the field of mobile marketing: when consumers think mobile marketing campaigns easier to understand and easier to participate in, to some extent, they also think it could help them to enhance their efficiency of purchasing decisions and to save time, so they think it is more useful and are more willing to participate in mobile marketing.

The mechanism of action shows that: on one hand, enterprises could design mobile marketing relatively simple, and enhance consumers' perceived usefulness through enhancing perceived ease of use, so indirectly promote consumer to accept and participate in mobile marketing; on the other hand, enterprises could promote consumers to accept mobile marketing by directly enhancing the usefulness of mobile marketing. In other words, consumers' perceived usefulness is the critical and necessary part of enhancing consumer intention and plays a decisive role in consumers' participation and mobile marketing's success.

Conclusions

The main purpose of this article is to determine the factors that affect consumer intention to participate in mobile marketing. In order to achieve the objective, the article constructed a model which included five antecedent variables (technology, consumer innovativeness, personalization, permission and entertainment), two mediators (perceived ease of use and perceived usefulness) and an outcome variable (intention).

The research of this article could provide complement for the existing mobile marketing research. It also could provide practical guidance for enterprises carrying out mobile marketing in China. The empirical analysis showed that technology, consumer innovativeness, personalization, permission and entertainment had direct or indirect impact on the intention of consumers to participate in mobile marketing. Therefore, enterprises should not only promote various parts to carry out technological innovation to improve the technical environment of mobile marketing, but also they should improve their own level of mobile marketing such as enhancing personalization, permission and entertainment of mobile marketing. The results also showed that if enterprises focus their mobile marketing on innovative consumers, the likelihood of success would be greater.

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