Journal of Business and Economics, ISSN 2155-7950, USA
May 2019, Volume 10, No. 5, pp. 421-437
DOI: 10.15341/jbe(2155-7950)/05.10.2019/005

http://www.academicstar.us

Visitor Satisfaction of the Palace Museum Website in China: An Empirical and Integrated Model

Qiong Dang
(Vrije Universiteit Brussel, Belgium)

Abstract: In 2001, the website of the Palace Museum was opened to the public, marking that museum's first step into the digital era in China. Numerous studies and much research has concentrated on how to employ this new technology in order to digitize the museum and its collection. However, little attention has been paid to research regarding visitor satisfaction's regarding museum websites in China. This research aims to fill the gap. Consequently, this conceptual model has been proposed, and the Palace Museum website was as the research objective. Empirical methodology has been applied and the online survey was created to gather data, which results in a total of 557 questionnaires being analyzed though the SPSS 20.0. The findings demonstrate that system quality, perceived usefulness, perceived usability, and the museum's image have a positive impact on visitor satisfaction regarding their continuance intention. Furthermore, managerial implications are proposed for museum practitioners.

Key words: visitor satisfaction; the Palace Museum website; TAM; ECSI
JEL codes: Z3

1. Background

1.1 Background

In the digital era, technological innovation is a driving force of economic and social development. Consumption patterns have already changed due to improved productivity (Moore, 2014), and especially the way people consume culture has been updated. Museum websites as the product of technological innovation expand the communication channels of the museums and change the way visitors participate and engage with them (Russo, 2011). Moreover, it offers visitors vivid and visual enjoyment through videos, images, 3D virtual tours, blogs, apps etc. no matter who you are, and where you are, and allows for a more interactive, collaborative, and conversational relationship between museums and visitors (Fantoni, 2003; Parry, 2007). Previous influential research has already demonstrated that a shift in the field of museums has occurred from the objected-centered to the visitor-centered (Hooper-Greenhill, 1994). Therefore, it is essential for museums to take the visitor-centered approach in displaying the exhibitions or cultural or creative products in the virtual or physical context. Fitzgerald and Webb maintain that "effective communication takes account of the involves museum audiences in shaping a museum's messages" (Fitzgerald & Webb, 1994, p. 278).

Moreover, audiences are positive receivers and their feedback determines whether museums can effectively

Qiong Dang, Ph.D., Vrije Universiteit Brussel; research areas/interests: cultural studies. E-mail: dq95824@163.com.

achieve their desired communication. Studies conducted on museum's visitors have become indispensable for museum professionals and policy makers (Falk, 2006), and a considerable account of work has explored the relationships between museums and their visitors, both online and offline (Kravchyna & Hastings, 2002; Thomas & Carey, 2005). However, in the current literature, little attention has been paid to the research of visitor satisfaction regarding museum websites in China. Therefore, this study aims to fill the gap.

1.2 Problem Statement

In 2001, the Palace Museum's website was opened to the public, which marked that museum in China's first step into the digital era, and also implied that museums curators needed to develop a new management and marketing strategy. They essentially had to shift away from a government-centered strategy to a visitor-centered one to rethink and redefine the relationship between museums and their public/audiences (Zhou, 2016). This research was conducted in a Chinese context with the Palace Museum selected as the case. To my knowledge, there is scarcely any literature written in English that explores the relationship between visitor satisfaction and the websites of Chinese museums. However, in Chinese-language literature, attention has been paid to visitor satisfaction of physical museums in the 1980s. Empirical research was first conducted to investigate visitor satisfaction of physical museums in 2002 (Shi & Guo, 2003).

The existing literature has illustrated that the research concerning museums and satisfaction mainly focuses on three aspects: (1) the influencing factors of audience/tourist satisfaction (Zhang & Song, 2014; Zhuo, 2016); (2) to clarify the relationship between media commentary and audience satisfaction (Zeng, 2011; Dang, 2016), and (3) to study how service quality influences audience satisfaction (Xu, 2014; Zhang & Song, 2014). Obviously, there has scarcely been any empirical research concerning visitor satisfaction derived from museum websites. Therefore, the research question that is proposed is: what factors influence visitors to visit a museum's website? The customer satisfaction model has been introduced in order to answer the research question. The specific objectives of this study are to develop an integrated model aiming to examine the determinants of e-satisfaction of museum visitors in a virtual context, and to provide new insights for future research.

2. Research Hypothesis

Customer satisfaction is critical for establishing long-term client relationships (Patterson & Spreng, 1997). Previous influential studies have already demonstrated that customer satisfaction contributes to repurchasing behavior, reputation, fewer complaints, trust, and loyalty (Lee et al., 2015; Hu et al., 2017). It is of significance to have a fundamental understanding of the factors influencing web-based customer satisfaction (called e-satisfaction by Szymanski and Hise, 2000). To examine the factors influencing visitor satisfaction of museum websites, the conceptual framework (see Figure 1) in this study is proposed based on the Technology Acceptance Model (TAM) (Davis, 1985), the Information System Success model (DeLone & McLean, 1992), and the Europe Customer Satisfaction Model (ECSI, 1998). The three models were validated as being the authoritative model in the academic field of information system and consumer studies. Based on the conceptual framework, information quality (IQ), system quality (SQ), perceived usefulness (PUF), perceived usability (PUB) and museum image (MI) are proposed as predicting e-satisfaction and the hypotheses have been proposed as following.

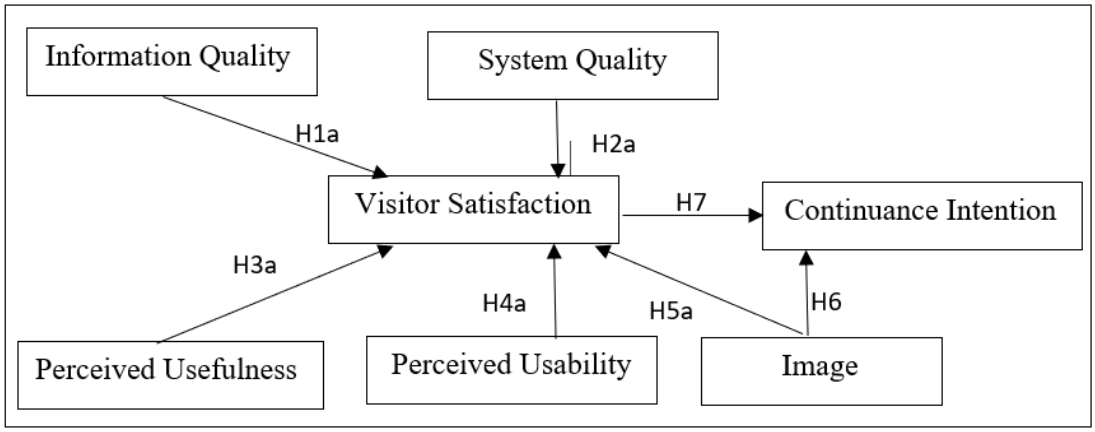

Figure 1 The Proposed Theoretical Framework

2.1 Customer Satisfaction

Customer satisfaction is a marketing term normally used to measure how a company provides products or services to meet or surpass the expectation of a customer (Farris et al., 2010). The definition of customer satisfaction has been discussed by many scholars in different fields, such as Cardozo (1965) and Oliver (1980, 1997, 2014). Oliver's (1997) definition concerning customer satisfaction is widely accepted in the academic field, which is that "satisfaction is believed to influence attitude change and purchase intention" (p. 460). Inspired by previous studies, e-satisfaction was defined as "the contentment of the customer with respect to his or her prior purchasing experience with a given electronic commerce firm" (Anderson & Sullivan, 1993, p. 125).

In the market economy, how to meet visitor expectations are today's museums' priority, not only in the real world but also in the virtual world. Customer satisfaction in a museum website context refers to the result of perceived perception in comparison with actual perception when people visit the museum website (Dai, 2014). It emerges from the process of visiting museum websites and browsing them (Bowen & Filippini-Fantoni, 2004), and as a subjective experience, is related to psychological factors such as visitor's feeling, perception and expectation (Goulding, 2000). Meanwhile, it is the accumulation of active and positive micro mental experiences after visitors use museum websites many times and includes an equitable and interactive experience in the service process of interacting with the museum website (Dai, 2014). Drawing on previous scholars' research, visitor satisfaction is measured through visitors' overall satisfaction, process satisfaction and outcome satisfaction in the research (Negash et al., 2003).

2.2 Information Quality and System Quality

Information quality and system quality are two key predictors for determining whether users consider the effectiveness of an IS (Delone & McLean, 2003). Information quality is a function of a value of the output, which cannot be assessed independently of the consumers who use the information (Strong et al., 1997; Negash et al., 2002). Previous research has suggested that numerous different dimensions exist for measuring information quality (Negash et al., 2002; Li & Song, 2013). For instance, Katerattanakul and Siau (1999) claim that information quality is divided into four main categories: "intrinsic information quality, contextual information quality, representational information quality, and accessibility information quality" (p. 280).

Negash et al. (2002) measures information quality though informativeness and entertainment in a web-customer context. Moreover, Mckinney et al. (2002) employ relevance, timeliness, scope and perceived usefulness in order to estimate the quality of the information in regards to online shopping satisfaction. Although

numerous studies have examined a diversity of factors to determine information quality and the system quality of a website, there is no standard measure emerging. Based on an analysis of the available literature, four dimensions have been identified to measure information quality in the study: relevance, entertainment, reliability and scope (Mckinney et al., 2002; Negash, 2002; Li & Song, 2013).

With respect to system quality, it is considered as an instrument for measuring the process of system information (Negash et al., 2002). Many studies have supported that accessibility, being easy to understand, reliability and interactivity are the dimensions for measuring system quality in a website context (Bailey & Pearson, 1983; Li & Song, 2013). On account of the validated research of information system towards satisfaction, four dimensions have been selected to evaluate system quality in this dissertation: accessibility, entertainment, links, mapping and interactivity (Negash et al., 2002; Hasan & Abuelrub, 2008; Li & Song, 2013).

In terms of the relationship between information quality, system quality and visitor satisfaction, DeLone and McLean (1992) definitely claimed that the information features and system features were considered two significant determinants of satisfaction. Furthermore, they identified information quality and system quality as antecedents of user satisfaction and use according to analyzing the literature concerning IS success. In IS model the quality is different from "product quality" in the real world, rather than in the information technology world. It refers to visitor factual perception of the quality of online products or services offered by museum websites, including online products or services, perceived special services, online services functions and integrated quality (Dang, 2016; Li, 2014). Oliver (1993) announces that quality is viewed as the antecedent of satisfaction. The website quality is measured by information quality and system quality (Bharati & Chaudhury, 2002). A considerable amount of research has already demonstrated that the two predictors have a positive influence on visitor satisfaction. For example, McKinney et al. (2002) utilize the expectation-disconfirmation theory to explore user satisfaction from online shopping and their results are that website quality and information quality have a positive association with e-satisfaction.

Therefore, we proposed the postulation that

- H1a: Information quality has a positive impact on visitor satisfaction.
- H2a: System quality has a positive impact on visitor satisfaction.
- H1b: Information quality has a mediating effect on continuance intention via visitor satisfaction.
- H2b: System quality has a mediating effect on continuance intention via visitor satisfaction.

2.3 Perceived Usefulness and Perceived Usability

TAM was created to measure the application of information technology. According to TAM, perceived usefulness and perceived usability are two significant factors to determine information technology adoption. Perceived usefulness is "the degree to which a person believes that using a particular system would enhance his or her job performance" and perceived usability is "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320). In the museum website context, perceived usefulness refers to the public perception of how a museum's website improves the quality of visitor's work, life, and learning (Bai et al., 2008). In the study, perceived usefulness is measured in four aspects (see appendix 1). Perceived usability means visitors have a feeling that they can browse the museum websites easily (Bai et al., 2008; Al-Qeisi et al., 2014). There are five dimensions to evaluate perceived usability (see appendix 1).

Visitor satisfaction can be predicted by perceived usefulness and perceived usability in the e-environment. Carlos Roca et al. (2009) believe that greater perceived usability could provide visitors with a better understanding of the content and tasks, and their empirical results demonstrate that perceived usability of a

website has a positive association with user satisfaction and loyalty. Gefen and Straub (2000) utilize the TAM to explore the importance of perceived usefulness in the e-commerce environment, and its role towards user satisfaction was demonstrated to have a positive impact. Previous empirical research has suggested that perceived usefulness and perceived usability indirectly or directly stimulate visitor satisfaction, and further contribute to continued repurchase and revisit intention (Bowen & Filippini-Fantoni, 2004; Bai et al., 2008). Thus, the hypothesis in this research was proposed. Therefore, these two hypotheses are also proposed:

H3a: Perceived usability positively influences visitor satisfaction.

H4a: Perceived usefulness positively influences visitor satisfaction.

H3b: Perceived usefulness has a mediating effect on continuance intention via visitor satisfaction.

H4b: Perceived usability has a mediating effect on continuance intention via visitor satisfaction.

2.4 Museum Image

Since marketing was introduced to the museum field, museum managers have modified their management ideas to accelerate the cooperation between museums and marketing, and customers have played a core role in realizing sustainable competitive advantages (Harrison & Shaw, 2004). Museums as a brand (Caldwell, 2000) have a deep association with customer satisfaction. The Europe customer satisfaction model takes image as a predictor of customer satisfaction, and image in this model involves a company's overall image as well as products or brand awareness, which is connected with a customer expectations and perception (ECSM, 1998). An image in early age is used to describe and evaluate a firm's service and the public's overall impression of the company (Dichter, 1985).

Different dimensions exist for measuring image. Kennedy (1977) proposes that the functional and emotional elements were the two principal components of an image. Sondoh et al. (2007) measure brand image through benefiting from the dimensions of the experiential, symbolic, social, functional and appearance. Kaveh et al. (2012) adopt reputation, impression, and brand to measure hotel image. On account of previous research, four dimensions have been selected to measure museum image: reputation and popularity, unique characteristics, expectation, and brand (Sondoh et al., 2007; Kaveh et al., 2012). The four dimensions are further interpreted (see appendix 1).

With respect to the relationship between image and satisfaction, previous studies have suggested that a company or organization's image positively affects customer satisfaction and visitor continuance intention (Nguyen and Leblanc 2001). Moreover, the relationship is that image has a positive impact on continuance intention which is also demonstrated by other scholars, such as Lin and Lu (2010). On account of the above, these hypotheses are proposed:

H5a: Museum image has a positive influence on visitor satisfaction.

H5b: Museum image has a mediating effect on continuance intention via visitor satisfaction.

H6: Museum image has positive influence on visitor continuance intention.

2.5 Continuance Intention

Chen et al. (2013) state that continuance intention refers to the psychological intention that the visitor re-chooses or repurchases products or service supplied by a company or organization. Kannadasan and Aravazhi (2015) define that customer satisfaction is "a leading indicator of consumer purchase intentions and loyalty" (p. 73). A great number of previous studies have already demonstrated that satisfaction has a causal relationship with continuance intention (Kim, 2011; Chen et al., 2012). There are three dimensions for measuring continuance intention: the visitor will revisit it, the visitor will often visit it, and the visitor will recommend it to others (Zhu,

2017). The three dimensions are clarified in appendix 1.

Jones and Sasser (1995) argue that how to achieve customer satisfaction is the priority for a firm because visitor satisfaction influences customer behavior, which determines whether a company makes profits. Taylor and Baker (1994) state that 'the purchase intentions of consumers are positively influenced by service quality and customer satisfaction in service environments', which also have a positive impact on continuance intention (p. 163). As mentioned above, many researchers have devoted themselves to clarifying how customer satisfaction influences individual repurchase behavior.

Therefore, the hypothesis is proposed that:

H7: Customer satisfaction has a positive impact on continuance intention.

Based on this statement, the proposed model is divided into three parts including influence variables, the intermediate variable and the behavioral variable. In the proposed model, there are seven structure variables (latent variable): information quality, system quality, perceived usefulness, perceived usability, museum image, visitor satisfaction and continuance intention. The model takes visitor satisfaction as an intermediate variable, and information quality, system quality, perceived usefulness, perceived usability and museums are proposed to predict visitor satisfaction. The behavioral variable is continuance intention.

3. Method

3.1 Development of the Constructs

The hypothesized research model aims to empirically test what factors affect visitor satisfaction of museum websites towards visitor's continuance intention. The 28 items (see appendix 1) of the questionnaire in this research used pre-validated scales applied in previous studies to ensure content validity and appropriate revisions have been made to fit the content of the museum website. Three procedures were performed to refine the questionnaire items to ensure the improved measurement accuracy.

First, before designing the questionnaire, an in-depth interview was conducted with the director of the Department of IT, Imaging, and Digital Media in the Palace Museum, whose department is responsible for the development of the online "Digital Palace Museum" (official website, www.dpm.org.cn). The semi-structured interview lasted about 80 minutes, focusing on the question of how to facilitate museum websites' goal of attracting more visitors to the Palace Museum in Beijing in China. Based on the interviews, three main factors (information quality, system quality and user perception) were identified for measuring e-satisfaction, which was consistent with previous academic research, such as Li and Song (2013) and Abasi and Hafashjani (2015). Second, based on the interview and the earlier studies, these items were first proposed and written in English, then translated into Chinese in order to deliver the survey in a Chinese context. Third, a pilot study was conducted to estimate and ameliorate the measurement items so as to assure content validity. The five-point Likert scale is anchored from strongly disagree (1) to neutral (3) to strongly agree (5).

3.2 Data Collection Procedures

The Palace Museum website is the research objective and an online survey was created with the aim of gathering empirical data. The questionnaire was conducted in a Chinese context. The links of the Palace Museum website was arranged in the first place of the questionnaire and the visitors who did not visit it before were required to browse it, then completed the survey to guarantee its authenticity. A special function was set to avoid duplicate entries. And each respondent was asked to finish the whole questionnaire to avoid the missing elements.

The 28-item questionnaire was distributed at random through Chinese social media, such as Wechat, QQ, and Micro-Blog. It lasted approximately three months. A total of 564 questionnaires were returned with just 7 of these being removed as a result of identifying duplicate cases. Therefore, the online survey yielded 557 available responses. The SPSS 20.0 software has been applied to analyzing the quantitative data gathered. The process of analysis was divided into three steps: (1) The reliability and validity of the questionnaire was examined to guarantee the worthwhileness of the empirical work; (2) the correlation analysis was conducted to ensure further data analysis; (3) the regression analysis was done to explore the hypotheses proposed.

4. Findings

4.1 The Reliability and Validity of the Questionnaire

Greasley (2007) claims that one of the biggest advantages of the questionnaire is that it is a valuable instrument for interpreting the latent sophisticated levels of analyses from the designed few questions, because it can produce a range of statistical data. Tavakol et al. (2008) illustrates that "the two fundamental factors in evaluating a measurement instrument are validity and reliability" (p. 77), and they are measured by Cronbach's Alpha and KMO value and Bartlett's Test value (Cronbach & Meehl, 1955).

The output (see Table 1) shows that the Cronbach's Alpha of the Palace Museum were over 0.9 respectively and that the reliability evaluated for the two museums was above the recommended 0.7 level (Bland & Altman 1997; DeVellis, 2016), which indicated that the two scales had a high rate of reliability. The reliability of each dimension of the Palace Museum (see Table 1) was larger than 0.7, the information quality was 0.924, the system quality and perceived usefulness both were 0.938, and the perceived usability was 0.948, and the rest for museum image, visitor satisfaction, and continuance intention were 0.907, 0.941 and 0.856 respectively. The Cronbach's alpha all were over 0.9, which demonstrated that it had a strong reliability.

Table 1 Reliability Statistics of Each Dimension

The Palace Museum	Cronbach's Alpha	Items
IQ	.924	4
SQ	.938	5
PUF	.938	4
PUB	.948	5
MI	.907	4
VS	.941	3
CI	.856	3
In total	.988	28

Table 2 shows that the Approximate of the Chi-square of the Palace Museum was 21379.498 with 378 degrees of freedom, which P-value was smaller than 0.05. The KMO value of 0.985 was greater than 0.05. Therefore, the values ($P < 0.001$) of the significance level of the Palace Museum indicated that it was suitable for the factor analysis for further analysis of the data. The KMO value ranged from 0.739 to 0.905 (CI = O.723, PUB = 0.905), all the significances were at 0.000 level of significance. Hence, the measurement model is satisfactory.

Table 2 The KMO and Bartlett's Test for Each Dimension

The Palace Museum	Item	Construct	Kaiser-Meyer-Olkin measure of sampling adequacy	Bartlett's Test of Sphericity		
				Approx. chi-square	df	Sig.
	4	IQ	.853	1735.830	6	.000
	5	SQ	.891	2404.112	10	.000
	4	PUF	.863	1992.468	6	.000
	5	PUB	.905	2675.072	10	.000
	4	MI	.838	1503.561	6	.000
	3	VS	.767	1518.029	3	.000
	3	CI	.723	781.585	3	.000
In total	28		.985	21379.498	378	.000

4.2 Descriptive Statistics of the Measurement Instrument

The mean and standard deviation were calculated to guarantee the constructs and the measured items (see Table 3). The means of all the constructs were rated above 3.0 on the one-to-five scale, ranging from 3.55 (continuance intention, SD = 1.235) to 3.79 (visitor satisfaction, SD = 1.123). Among the constructs, the lowest was the continuance intention (mean = 3.55, SD = 1.235), while visitor satisfaction was the highest (mean = 3.79, SD = 1.123). The means of the items ranged from 3.27 (CI2, SD = 1.331) to 3.88 (MI4, SD = 1.118).

Table 3 Descriptive Statistics of the Measurement Instruments

Construct	Item	Mean	SD	Skewedness	Kurtosis
Information quality	IQ1	3.56	1.227	-.526	-.559
(Mean = 3.73, SD = 1.166)	IQ2	3.78	1.134	-.685	-.260
	IQ3	3.79	1.127	-.683	-.216
	IQ4	3.79	1.176	-.780	-.105
System quality	SQ1	3.73	1.128	-.669	-.227
(Mean = 3.71, SD = 1.145)	SQ2	3.76	1.153	-.589	-.370
	SQ3	3.69	1.116	-.698	-.135
	SQ4	3.76	1.133	-.605	-.254
	SQ5	3.61	1.193	-.523	-.521
Perceived usefulness	PUF1	3.68	1.209	-.710	-.262
(Mean = 3.78, SD = 1.157)	PUF2	3.84	1.140	-.786	-.091
	PUF3	3.84	1.137	-.826	.001
	PUF4	3.75	1.141	-.739	-.134
Perceived usability	PUF1	3.66	1.152	-.579	-.349
(Mean = 3.712, SD = 1.116)	PUB2	3.65	1.103	-.518	-.346
	PUB3	3.81	1.107	-.759	.007
	PUB4	3.65	1.117	-.546	-.320
	PUB5	3.79	1.103	-.709	-.122
Museum image	MI1	3.72	1.208	-.647	-.461
(Mean = 3.783, SD = 1.168)	MI2	3.76	1.198	-.715	-.329
	MI3	3.77	1.147	-.724	-.136
	MI4	3.88	1.118	-.788	-.098
Visitor Satisfaction	VS1	3.76	1.127	-.684	-.151
(Mean = 3.79, SD = 1.123)	VS2	3.81	1.113	-.716	-.131
	VS3	3.80	1.130	-.783	-.010
Continuance intention	CI1	3.73	1.153	-.666	-.302
(Mean = 3.55, SD = 1.235)	CI2	3.27	1.331	-.247	-1.043
	CI3	3.65	1.222	-.530	-.654

Table 4 Correlation Matrix of the Research Variables (Pearson Correlation)

	VS	PUB	IQ	SQ	PUF	MI	CI
VS	1						
PUB	.936**	1					
IQ	.924**	.921**	1				
SQ	.936**	.945**	.921**	1			
PUF	.943**	.933**	.935**	.924**	1		
MI	.905**	.881**	.904**	.895**	.899**	1	
CI	.890**	.893**	.859**	.901**	.883**	.840**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Graybill (1994) defines that the correlation coefficient refers to the particular descriptive statistic that measures the degree of linear association between two variables and is designated "r", and believes that although we offer no proof, r always lies between the values of -1 and +1. More specially, "when 'r' is close to 0, it indicates that two variables exist with little association or are lacking a mutual relationship or connection; When 'r' is close to 1, the two variables demonstrate a stronger correlation" (Graybill, 1994, p. 25). According to Graybill's statement, Table 4 presented that the correlations of $0.84 \leq r \leq 0.905$ suggested a strong, positive association between the two variables in the research.

4.4 Hypothesis Verification

Table 5 The Regression Analysis of IQ, SQ, PUF, PUB and MI towards VS

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(constant)	-.003	.048		-.054	.957
	IQ	.038	.041	.037	.915	.360
	SQ	.222	.041	.214	5.372	.000
	PUF	.368	.042	.368	8.666	.000
	PUB	.250	.043	.239	5.833	.000
	MI	.136	.032	.132	4.233	.000

R .962[a]
R Square /Adjusted Square .926/ .925
F/Sig. 1378/.000[a]
a. Predictors: (constant), MI, PUF, IQ, PUB, SQ.
b. Dependent variable: VS
c: P at the 0.001 level

Graybill (1994) writes that multiple linear regression draws on fitting a linear equation to the observed data aiming to model the relationship between two or more explanatory variables and a response variable, which refers to examine how multiple independent variables related to a dependency on the variable. It is used to comprehend the functional relationship between the dependent and independent variables, in an attempt to find out what may cause variation in the dependent variable. Therefore, the multiple linear regression was conducted aiming to test the hypothesized relationship in this research. The whole hypothesized results were presented in Tables 5-8. The regression was conducted step by step. Before displaying the results, the rules of regression were first introduced. In the literature, R-square is always between 1 and 0. 1 which implies that all the variability of the response data

around its mean is explained by the model, while 0 suggests that none of the variability of the response data around its mean is interpreted (Graybill, 1994).

Generally, R-squared is greater than 0.5, which identifies that the model fits the data. Moreover, F-ratio examines whether the overall regression model is a good fit for the data. The output demonstrated that the independent variables statistically and significantly predicted the dependent variable (p*** < .0001 and p** < 0.05), which made apparent that the regression model was a good fit for the data. The adjusted R-squared compares with the explanatory power of the regression models that contain different numbers of predictors. P value indicated the level of the statistical significance of a regression coefficient. The p-value for each term tests the null hypothesis that the coefficient is equal to zero (no effect). A low p-value (< 0.05) indicates that you can reject the null hypothesis. Conversely, if the P-value is less than 0.05 it indicates it is statistically significant. More details concerning the results were presented.

First, among the multiple linear regression of information quality, system quality, perceived usefulness, perceived usability and museum image towards visitor satisfaction, Table 5 displayed that the regression model was a good fit for the data (R2 = 0.926, P < 0.001). With respect to information quality, the p-value exceeded 0.05, which implied that hypothesis 1 was not significant. Except for that, the predictor variables for visitor satisfaction were significant because their p-values were at the 0.000 level (p < 0.001), which illustrated that hypotheses 2a, 3a, 4a, and 5a were strongly significant. This illustrates that system quality, perceived usefulness, perceived usability, and museum image had a positive influence on visitor satisfaction. These hypotheses were supported by the previous studies. For example, Lee (2006) conducted an empirical investigation to guarantee that the satisfaction of e-learning is positively influenced by information quality and system quality. However, there is a difference that information quality in the research has no impact on visitor satisfaction in the research. In terms of perceived usefulness and perceived usability, visitor satisfaction was positively influenced by them, which is consistent with past studies which already demonstrated that both have a positive association with satisfaction, not only in the customer satisfaction model (Ekinci & Sirakaya, 2004; Bai et al., 2008) in the real world but also in information technology model in virtual world (Liao et al., 2007).

In addition, museum image positively influenced visitor satisfaction (p < 0.001), which was in correspondence with prior research, such as the ECSI model. The result of the regression analysis of the museum's image towards continuance intention (see Table 6) indicated that the hypothesis was supported due to p < 0.001. For example, Li et al. (2010) address that destination image has a positive effect on tourists' revisit intention, and Zhao (2017) maintains that the brand image of pharmaceutical enterprises increasingly attracts customers to repurchase, hence contributing to its reputation. The output of Table 7 implied that visitor satisfaction had a positive continuance intention.

Table 6 The Regression Analysis of MI towards CI

		Unstandardized coefficients		Standardized coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(constant)	.326	.104		3.142	.002
	MI	.855	.026	.809	32.410	.000
	R	R Square	Adjust R Square	F	Sig.	
	.809[a]	.645	.645	1050.387	.000[a]	

Predictors: (constant), MI; b. Dependent variable: CI; c: p at the 0.001 level.

Table 7 The Regression of VS towards CI

		Unstandardized coefficients		Standardized coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(constant)	.230	.089		2.579	.010
	VS	.879	.023	.856	38.959	.000
	R	R Square	Adjusted R Square	F	Sig.	
	.856[a]	.732	.732	1517.801	.000[a]	

a. Predictors: (constant), VS
b. Dependent variable: CI

Table 8 Mediating Effect of Visitor Satisfaction on IQ, SQ, PUF, PUB, MI towards CI

	VS		CI(A)		CI(B)		Significant?
	B	t	B	t	B	t	
IQ	.038	0.915	.490	.721	.047	.689	No
SQ	.222	5.372***	.596	8.748***	.584	8.349***	Yes
PUF	.368	8.666***	.010	.150	.010	-.132	No
PUB	.250	5.833***	.379	5.357***	.365	5.007***	Yes
MI	.136	4.233***	.066	-1.246	.073	-1.365	No
VS					.055	.786	
Adjusted R^2	.926		.807		.807		
F	1378.223***		465.913***		388.094***		

P < 0.05; ** P < 0.01; ***P < 0.001
a. independent variables: IQ, SQ, PUF, PUB, MI;
b. dependent variable: CI;
c. mediating variable: VS.

Second, the mediating effect of visitor satisfaction on IQ, SQ, PUF, PUB, MI towards CI was examined. The results were presented in Table 8. In the statistics domain, the mediation model is constructed and examined to identify and explore the relationship between an independent variable and a dependent variable via a third proposed variable that is also known as a mediating variable, intermediary variable, or intervening variable. For example, satisfaction is regarded as a mediator variable to verify the relationship between information quality and continuance intention, which aims to check whether information quality positively influences continuance intention by satisfaction in the research. MacKinnon (2012) clarifies that the core goal of hiring a mediator variable is to probe into the nature of the relation between the independent and dependent variables. Hayes (2009) mediation analysis is applied to facilitate a better understanding of the variables without a definite connection by exploring the underlying mechanism or process. Partial mediation means that only some of the relationship between the independent variable and dependent variable is presented by the mediating variable and indicates that there is a significant relationship between the mediator and the dependent variable as well as some direct relationship between the independent and dependent variable.

In the research, visitor satisfaction was considered as the mediating variable to investigate the relationship of information quality towards continuance intention (H1b), system quality towards continuance intention (H2b), perceived usefulness towards continuance intention (H3b), perceived usability towards continuance intention (H4b) and museum image towards continuance intention (H5b). To test the hypotheses, the hierarchical regression model was utilized, and on account of Baron and Kenny's (1986) model, the prerequisite multiple regress analysis

was conducted to examine the relationship among the dependents (CI), independents (IQ, SQ, PUF, PUB, MI) and mediating (VS) variables. Sobel's (1982) test was operated to identify whether the independent variables have a positive impact on the dependent variable without the mediator variable, which means that the test estimates if a mediation effect is significant.

The results presented in Table 8 illustrated that visitor satisfaction had a positive mediating impact between system quality, perceived usability and continuance intention due to $P < 0.01$. The hypothesis 2b and 4b were supported, consistent with DeLone and Mclean's (1992) IS success and use theory that visitor satisfaction was positively determined by information quality and system quality, further leading to revisiting. However, there was no mediating effect between information quality and continuance intention via visitor satisfaction ($P > 0.5$), and the partial mediation between perceived usefulness and continuance intention did not exist ($P > 0.5$) and between museum image and continuance intention ($p > 0.5$). Therefore, the hypotheses 1b, 3b and 5b were not supported. Based on the results of the analysis, the overall results of hypotheses examination were showed in Table 8 that information quality has no significance with visitor satisfaction, while system quality, perceived usefulness, perceived usability and museum image positively influence visitor satisfaction, and visitor continuance intention was positively influenced by museum image and visitor satisfaction.

Table 9 Overall Results of Hypothesis Testing

NO.	Hypothesis	Supported?
H1a	The museum website information quality positively affects visitor satisfaction.	No
H2a	The museum website system quality positively affects visitor satisfaction.	Yes
H3a	Perceived usefulness has a positive impact on visitor satisfaction.	Yes
H4a	Perceived usability has a positive impact on visitor satisfaction.	Yes
H5a	Museum image has a positive impact on visitor satisfaction.	Yes
H6	Museum image positively affects visitor continuance intention.	Yes
H7	Visitor satisfaction has a positive impact on continuance intention.	Yes
H1b	Information quality has a mediating effect on continuance intention via visitor satisfaction.	No
H2b	System quality has a mediating effect on continuance intention via visitor satisfaction.	Yes
H3b	Perceived usefulness has a mediating effect on continuance intention via visitor satisfaction.	No
H4b	Perceived usability has a mediating effect on continuance intention via visitor satisfaction.	Yes
H5b	Museum image has a mediating effect on continuance intention via visitor satisfaction.	No

5. Conclusion

5.1 Discussions

The findings indicate that e-satisfaction was positively influenced by system quality, perceived usefulness and perceived usability, and museum image. Visitor satisfaction directly influences continuance intention. System quality and museum image had indirect and positive impacts on continuance intention. Museum image and perceived usability partially positively affected continuance intention via visitor satisfaction.

Information quality had no positive association with visitor satisfaction, which implies that visitors of the Palace Museum website pay less attention to information quality. However, system quality was significant with visitor satisfaction. Negash et al. (2003) consider it as an instrument to measure the process of system information, and it is measured by access, understandability, navigation, and interactivity (Li & Song, 2013). Compared with information quality, visitors pay more attention to whether they can easily access the system and interact with the

museum's website. A possible explanation is that communication is no longer a single process but an interactive process, and visitors are active receivers. Digital technologies have great potential to serve the challenges faced by museums in relation to reaching and nurturing both existing and new audiences. Visitors tend to emphasize their feelings and a website's convenience rather than the information the museum website offers. This is supported by earlier scholars, for example, Shannon and Weaver (1951) believe that the accuracy and efficiency of the communication system are of significance of the production of information.

Perceived usefulness and perceived usability could determine whether visitors use the museum website and are two core factors which could predict whether visitors continue to use the museum website. The research demonstrates that visitors are satisfied with the museum's website if they perceive its usefulness and ease of use. One of the motivations of the web-visitor is to search for valuable information, hence, when they feel the information is useful, their demands might be met. Individuals tend to utilize the website to access the information because it can save time to finally facilitate their work efficiency (Davis, 1989). Previous empirical research has suggested that perceived usefulness and perceived usability indirectly or directly stimulates visitor satisfaction, and further contributes to continued repurchase and revisit intention (Bai et al., 2008).

Museum image as the external factor also has a direct influence on visitor satisfaction. The results indicate that it is self-evident that most of the visitors surf the Palace Museum's website due to its reputation and popularity. An image at an early age is used to describe and evaluate a firm's service and the public overall impression of the company (Bitner 1991). Kotler et al. (2009) identify that if a firm has a good image, it could bring further profits. Moreover, if visitors are satisfied from the museum website, they will revisit it or recommend it to their friends. As a result, people increasingly might participate in museums. Consistent with the hypothesis, the relationship among image, satisfaction, and continuance has already explained by scholars, such as Chen et al. (2013) and Lin and Lu (2010). Museum managers should keep in mind that if visitors satisfy the Palace Museum website, it could result in continuing to revisit it.

5.2 Managerial Implications

Based on the empirical results, several managerial implications exist. First, new digital technology should be applied in museums. For example, the Internet creates a virtual space for museums to disseminate their information to visitors without considering the limitations of time and space. The museum websites provide an equal opportunity for most people to access collections stored in the physical museum. The visitor's satisfaction from the museum website depends on whether the visitor can accept the technological platform and service system of the website, so the visitor satisfaction measurement must take into consideration the relationship between visitor technology acceptance and the function of the museum's website information system (McKinney & Zahedi, 2002; Mey & Mohamed, 2010).

Second, perceived usefulness and perceived usability have a positive impact on visitor satisfaction. Therefore, museum managers should take a visitor-centered approach to design and deploy museums websites. For example, it is necessary for them to provide visitors an adequate system that eases the acquisition of the necessary knowledge and creates a more personalized and a closer customer relationship which increases the level of individual satisfaction. Moreover, visitor satisfaction has a direct impact on continuance intention. In China, the Palace Museum represents the royal culture, and it serves the government and keeps a long distance from the public before the reform and opening up. Nowadays, a shift in the Palace Museum is that more attention is being paid to attracting visitors. Especially, in the experience economy era, museums attempt to attract an ever-growing share of the leisure and tourist market. Museum managers should put the visitors in a central space and consider

how to utilize the new technology to create the new experience for the visitor to achieve their cultural and economic goal.

Third, visitor satisfaction is affected by the museum's image. Rodgers (2003) describes that "when consumers believe a website is poor or its content lacks reliability and effectiveness, they will use these established criteria to evaluate the companies that sponsor the website. [In other words], the evaluations formed about the website will "rub off' in evaluations made about the sponsor" (p. 69). In the study, the museum's image had a directed impact on visitor satisfaction and continuance intention, and visitors displayed a positive attitude towards famous museum websites. Therefore, it is significant for museum managers to build a better image not only in the real world but also in the virtual world. In summary, museum managers should consider technologies, visitors' requirements, and museum image into consideration when designing and planning their businesses so as to fulfill the visitor's satisfaction.

Although the new digital technology creates infinite possibilities for development of the Palace Museum, we should keep in mind that technology is not the only way to determine whether visitors are satisfied or not, hence, in this case we encounter the dilemma of technological determinism (Smith & Marx, 1994). When museum managers develop museum websites, they should hold a critical and comprehensive point of view.

5.3 Limitations

There are a couple of limitations on this research. First, this research only focuses on the Palace Museum. Although Flyvbjerg (2006) states that "it is correct that one case can generalize in the ways Giddens described and that often this is both appropriate and valuable" (p. 123), this study is hard to generalize for all Chinese museums because there are more than four thousand museums in China. Second, this study was conducted through an online survey, and the face-to-face interview might be conducted to enrich the data. Third, this survey was conducted in a Chinese context, and it cannot represent an international lens.

References

Anderson E. W. and Sullivan, M. W. (1993). "The antecedents and consequences of customer satisfaction for firms", *Marketing Science*, Vol. 12, No. 2, pp. 125-143.

Bailey J. E. and Pearson S. W. (1983). "Development of a tool for measuring and analyzing computer user satisfaction", *Management Science*, Vol. 29, No. 5, pp. 530-545.

Bowen J. P. and Filippini-Fantoni S. (2004, March). "Personalization and the web from a museum perspective. In Museums and the Web (Vol. 4). Archives & Museum Informatics, Toronto, Canada.

Baron R. M. and Kenny D. A. (1986). "The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations", *Journal of Personality and Social Psychology*, Vol. 51, No. 6, p. 1173.

Bharati P. and Chaudhury A. (2009). "SMEs and competitiveness: The role of information systems", *International Journal of E-Business Research*, Vol. 5, No. 1.

Bland J. M. and Altman D. G. (1997). "Statistics notes: Cronbach's alpha", *BMJ*, Vol. 314, No. 7080, p. 572.

Cardozo R. N. (1965). "An experimental study of customer effort, expectation, and satisfaction", *Journal of Marketing Research*, Vol. 2, No. 3, pp. 244-249.

Caldwell N. G. (2000). "The emergence of museum brands", *International Journal of Arts Management*, pp. 28-34.

Chen S. C., Liu, M. L. and Lin, C. P. (2013). "Integrating technology readiness into the expectation-confirmation model: An empirical study of mobile services", *Cyberpsychology, Behavior, and Social Networking*, Vol. 16, No. 8, pp. 604-612.

Cronbach L. J. and Meehl P. E. (1955). "Construct validity in psychological tests", *Psychological Bulletin*, Vol. 52, No. 4, p. 281.

Carlos Roca J., José García J. and José de la Vega J. (2009). "The importance of perceived trust, security and privacy in online trading systems", *Information Management & Computer Security*, Vol. 17, No. 2, pp. 96-113.

Dang J.J. (2016). "Audience satisfaction of interpretation media in Banpo Museum of Xi'an", Northwestern University.

DeVellis, R. F. (2016). Scale development: Theory and applications (Vol. 26). Sage publications.

Dai M. Y. (2014). "Research on customer satisfaction based on structural equation model", Hunan Normal University.

DeLone W. H. and McLean E. R. (1992). "Information systems success: The quest for the dependent variable", *Information Systems Research*, Vol. 3, No. 1, pp. 60-95.

Davis F. D. (1989). "Perceived usefulness, perceived ease of use, and user acceptance of information technology", *MIS Quarterly*, pp. 319-340.

Dichter E. (1985). "What's in an image", *Journal of Consumer Marketing*, Vol. 2, No. 1, pp. 75-81.

Ekinci Y. and Sirakaya E. (2004). "An examination of the antecedents and consequences of customer satisfaction", *Consumer Psychology of Tourism, Hospitality and Leisure*, Vol. 3, pp. 189-202.

ECSI Technical Committee (1998). "European customer satisfaction index: foundation and structure for harmonized national pilot projects", Report prepared for the ECSI Steering Committee.

Flyvbjerg B. (2006). "Five misunderstandings about case-study research", *Qualitative Inquiry*, Vol. 12, No. 2, pp. 219-245.

Falk J. H. (2006). "An identity-centered approach to understanding museum learning", *Curator: The Museum Journal*, Vol. 49, No. 2, pp. 151-166.

Farris P. W., Bendle N., Pfeifer P. and Reibstein D. (2010). *Marketing Metrics: The Definitive Guide to Measuring Marketing Performance*, Pearson Education.

Fantoni S. F. (2003). "Personalization through IT in Museums, Does it really work? The case of the Marble Museum website", *Archives & Museum Informatics*, Vol. 2.

Fitzgerald L. and Webb P. (1994). "Vivent les differences: Identifying audiences for a museum exhibition", *Public Understanding of Science*, Vol. 3, No. 3, pp. 277-290.

Harrison P. and Shaw R. (2004). "Consumer satisfaction and post-purchase intentions: An exploratory study of museum visitors", *International Journal of Arts Management*, Vol. 6, No. 2, pp. 23-32.

Hu P. J. H., Hu H. F. and Fang X. (2017). "Examining the mediating roles of cognitive load and performance outcomes in user satisfaction with a website: A field quasi-experiment", *Management Information Systems Quarterly*, Vol. 41, No. 3, pp. 975-987.

Hooper-Greenhill E. (1994). *The Educational Role of the Museum*, London, UK: Routledge.

Hayes A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. Communication monographs, 76(4), 408-420.

Hasan L. and Abuelrub E. (2011). "Assessing the quality of web sites", *Applied Computing and Informatics*, Vol. 9, No. 1, pp. 11-29.

Kaveh M., Mosavi S. A. and Ghaedi M. (2012). "The application of European customer satisfaction index (ECSI) model in determining the antecedents of satisfaction, trust and repurchase intention in five-star hotels in Shiraz, Iran", *African Journal of Business Management*, Vol. 6, No. 19, pp. 6103-6113.

Greasley P. (2007). *Quantitative Data Analysis Using SPSS: An Introduction for Health & Social Science*, McGraw-Hill Education (UK).

Graybill F. A. (1994). "Regression analysis: concepts and applications", Duxbury Resource Center.

Guo and Shi (2003). *2002 Public Research on Museums: Take the Museum of Lusun Japanese Russian Prison As An Example*, Jilin People's Press.

Goulding C. (2000). "The museum environment and the visitor experience", *European Journal of Marketing*, Vol. 34, No. 3/4, pp. 261-278.

Gefen D. and Straub D. W. (2000). "The relative importance of perceived ease of use in IS adoption: A study of e-commerce adoption", *Journal of the Association for Information Systems*, Vol. 1, No. 1, p. 8.

Jones T. O. and Sasser W. E. (1995). "Why satisfied customers defect", *Harvard Business Review*, Vol. 73, No. 6, p. 88.

Kannadasan S. and Aravazhi D. (2015). "Customer satisfaction in marketing", *CLEAR International Journal of Research in Commerce & Management*, Vol. 6, No. 8.

Kim, K. Y. (2011). "Multiculturalism and museums in China", University of Michigan Working Papers in Museum Studies, number 7, pp. 1-27

Kravchyna V. and Hastings S. K. (2002). "Informational value of museum web sites", *First Monday*, Vol. 7, No. 2.

Katerattanakul P. and Siau K. (1999). "Measuring information quality of web sites: Development of an instrument", *ICIS 1999 Proceedings*, p. 25.

Kennedy S. H. (1977). "Nurturing corporate images", *European Journal of Marketing*, Vol. 11, No. 3, pp. 119-164.

Lee D., Moon J., Kim Y. J. and Mun Y. Y. (2015). "Antecedents and consequences of mobile phone usability: Linking simplicity and interactivity to satisfaction, trust, and brand loyalty", *Information & Management*, Vol. 52, No. 3, pp. 295-304.

Lin L. Y. and Lu C. Y. (2010). "The influence of corporate image, relationship marketing, and trust on purchase intention: the moderating effects of word-of-mouth", *Tourism Review*, Vol. 65, No. 3, pp. 16-34.

Liao C., Chen J. L. and Yen D. C. (2007). "Theory of planning behavior (TPB) and customer satisfaction in the continued use of e-service: An integrated model", *Computers in Human Behavior*, Vol. 23, No. 6, pp. 2804-2822.

McKinney V., Yoon K. and Zahedi F. M. (2002). "The measurement of web-customer satisfaction: An expectation and disconfirmation approach", *Information Systems Research*, Vol. 13, No. 3, pp. 296-315.

MacKinnon D. (2012). *Introduction to Statistical Mediation Analysis*, Routledge.

Kotler P. (2009). Marketing management: A south Asian perspective. Pearson Education India.

McKinney V., Yoon K. and Zahedi F. M. (2002). "The measurement of web-customer satisfaction: An expectation and disconfirmation approach", *Information Systems Research*, Vol. 13, No. 3, pp. 296-315.

Moore L. (2014). "Cultural and Creative Industries Concept — A Historical Perspective", *Procedia-Social and Behavioral Sciences*, 110, 738-746.

Mey L. P. and Mohamed B. (2010). "Service quality, visitor satisfaction and behavioural intentions: Pilot study at a museum in Malaysia", *Journal of Global Business and Economics*, Vol. 1, No. 1, pp. 226-240.

Oliver R. L. (1980). "A cognitive model of the antecedents and consequences of satisfaction decisions", *Journal of Marketing Research*, pp. 460-469.

Oliver R. L. (1997). *Satisfaction: A Behavioral Perspective on the Consumer*, Routledge.

Oliver R. L. (2014). *Satisfaction: A Behavioral Perspective on the Consumer*, Routledge.

Parry R. (2007). *Recoding the Museum: Digital Heritage and the Technologies of Change*, Routledge.

Patterson P. G. and Spreng R. A. (1997). "Modelling the relationship between perceived value, satisfaction and repurchase intentions in a business-to-business, services context: An empirical examination", *International Journal of Service Industry Management*, Vol. 8, No. 5, pp. 414-434.

Negash S., Ryan T. and Igbaria M. (2003). "Quality and effectiveness in web-based customer support systems", *Information & Management*, Vol. 40, No. 8, pp. 757-768.

Nguyen N. and Leblanc G. (2001). "Corporate image and corporate reputation in customers' retention decisions in services", *Journal of Retailing and Consumer Services*, Vol. 8, No. 4, pp. 227-236.

Russo A. (2011). "Transformations in cultural communication: Social media, cultural exchange, and creative connections", *Curator: The Museum Journal*, Vol. 54, No. 3, pp. 327-346.

Rodgers S. (2003). "The effects of sponsor relevance on consumer reactions to internet sponsorships", *Journal of Advertising*, Vol. 32, No. 4, pp. 67-76.

Smith M. and Marx L. (1994). "Technological determinism in American culture", in: M. R. Smith & L. Marx (Eds.), *Does Technology Drive History? The Dilemma of Technological Determinism*, pp. 1-35.

Shannon C. E., Weaver W. and Burks A. W. (1951). *The Mathematical Theory of Communication*, University of Illinois Press.

Strong D. M., Lee Y. W. and Wang R. Y. (1997). "Data quality in context", *Communications of the ACM*, Vol. 40, No. 5, pp. 103-110.

Sondoh S. L., Omar M. W., Wahid N. A., Ismail I. and Harun A. (2007). "The effect of brand image on overall satisfaction and loyalty intention in the context of color cosmetic", *Asian Academy of Management Journal*, Vol. 12, No. 1, pp. 83-107.

Tavakol M., Mohagheghi M. A. and Dennick R. (2008). "Assessing the skills of surgical residents using simulation", *Journal of Surgical Education*, Vol. 65, No. 2, pp. 77-83.

Thomas W. A. and Carey S. (2005). "Actual/virtual visits: What are the links", in: *Museums and the Web*.

Xu L. (2014). "An effective way to improve museum service quality: Summary report of survey on satisfaction of summer camp of Nanjing museum of civil customs", *Reform and Opening-up*, No. 11, pp. 75-76.

Zhang E. J. and Song X. G. (2014). "A preliminary study on the factors affecting the satisfaction of the museum's audience service", *Chinese Museum*, No. 3, pp. 90-96.

Zhou L. J. (2016). "A study on the satisfaction of the visitors of the capital museum", Jilin University.

Zeng J. Y. (2011). "Relationship between commentary media and tourist satisfaction in Jinsha Ruins Museum", Beijing Forestry University.

Zhao D. (2017). "The impact of brand image on consumers' purchase behavior", *China Market*, No. 36, pp. 85-100.

Zhou L. J. (2016). "A study on the satisfaction of the visitors of the capital museum", Jilin University.

Zhu Y. J. (2017). "The influence of mixed country of origin image on consumers' purchase evaluation", Changchun Taxation College.

Appendix 1: 28 Question Items

(scaling from "strongly disagree" 1 to "strongly agree" 5 on a five-point scale)

Item 1 (IQ1): Relevance: information is comprehensive, complete and provides the right level of details, informative, meaning, added value according to its audience.

Item 2 (IQ2): Entertainment: The museum website provides a virtual tour, online games and online shopping, and the design of the website is innovative has an aesthetic effect by its graphic and animation.

Item 3 (IQ3): Reliability: Information is trustworthy, accurate and credible, and is presented in an objective manner without political, cultural, religious, or institutional biases.

Item 4 (IQ4): Scope: Information is presented in different ways (i.e.: text, video, image and sound), and covers a wide variety of topics and a great number of different subjects.

Item 5 (SQ1): Accessibility: the museum website is responsive to my request, and quickly loads the text and graphics. In general, the museum website provides good access.

Item 6 (SQ2): Understandability: system information is clear in meaning, is easy to comprehend and read. In general, the information from the museum website is understandable for me.

Item 7 (SQ3): Links: Links work properly; it should take the user where they intended to go.

Item 8 (SQ4): Mapping: Adequate website map or navigation bar/menu is available on each page to facilitate navigating the website.

Item 9 (SQ5): Interactivity: The website has clear instructions to use different parts/sections/forms of it. FAQ is available that summarizes frequently asked questions and their answers. Communication channel and feedback exist between users and website through email, chat rooms, online community, or suggestions.

Item 10 (PUF1): Visitors consider that information on the website is valuable.

Item 11 (PUF2): Visitors perceive that it is useful to learn knowledge and search information.

Item 12 (PUF3): Visitor perceives that the utilization of a system enhances their performance and improves work efficiency.

Item 13 (PUF4): It is a place where visitors' requirements are satisfied.

Item 14 (PUB1): Everything is easy to understand on the museum website.

Item 15 (PUB2): The museum website has a simple layout for its contents.

Item 16 (PUB3): The museum website is easy to use.

Item 17 (PUB4): The museum website is well organized.

Item 18 (PUB5): The museum website has a clear design.

Item 19 (MI1): I went to visit the Palace Museum's website, because of its reputation and popularity.

Item 20 (MI2): The museum has a personality that distinguishes itself from competitors.

Item 21 (MI3): It is a brand museum that does not disappoint me.

Item 22 (MI4): The museum has a nice brand.

Item 23 (VS1): I am satisfied with the overall museum website.

Item 24 (VS2): I am satisfied with the process of visiting the museum website.

Item 25 (VS3): I am satisfied with the results of visiting the museum website.

Item 26 (CI1): I will revisit the museum's website.

Item 27 (CI2): I will often visit it.

Item 28 (CI3): I will recommend it to my friends and relatives.