
What can influence the consumers' online word-of-mouth? An online gaming perspective

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Abstract: With the increasing popularity of broadband networks, the online game market is becoming more mature. One of the most popular online games, World of WarCraft, has more than ten million global members, making it the largest massive multiplayer online role playing game (MMORPG). Thus, this study collects 317 players of the online game 'World of Warcraft' to empirically investigate this issue. By manipulating structural equation modelling (SEM), we investigate the relationships among brand image (BI), brand trust (BT), and online word-of-mouth (WOM) to examine the moderating effect of game experiences. This research indicates that BT serves as a partial mediator between brand image and online WOM and specifies the substantial moderating effect of game experiences in BI, BT, and online WOM. Meanwhile, if online game companies can develop a good BI, players will be willing to recommend and share their experiences with others on the internet.

Keywords: online games; brand image; brand trust; online word-of-mouth; WOM; structural equation modelling; SEM; mediating effect; moderating effect; brands; consumer behaviour; marketing.

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1 Introduction

A brand can acquire cultural meaning in a multitude of ways: the kinds of users typically associated with it, its employees or chief executive officer, its product-related attributes, packaging details, product category associations, brand name, symbol, image, advertising message and style, price, distribution channel, and so forth (Aaker, 1997). Certain brands, such as Coca-Cola, Mercedes, are considered to possess 'high brand equity', resulting in higher market shares and prices than competing products (Badenhausen, 1996). They typically have high customer loyalty, name awareness, perceived quality, strong brand associations, and other assets (Aaker, 1991). A key reason for their strength is the existence of favourable, strong, and unique associations about them in consumers' memories (Keller, 1993). Many of the brand associations that make brands distinctive and strong are of non-functional type; that is, they go beyond the perceived quality of the brand on functional product and service criteria and deal instead with 'intangible' properties of the brand (Aaker, 1997). An image of brand and its associations to product/service to consumer is tacit, since customers' perception and attitude on their purchases behaviour are concealed within the customers. Thus, the perception and attitude of a brand image (BI) might be a factor for consumers to influence their behaviours on a specific product and service. It is available but not accessible, and there is little possibility of exploring the full volume of information about consumers' BI that should be understood for its potential value of influence.

Consumer trust, defined as the consumer's expectations that a service provider can be relied on to deliver on its promises, is considered as a critical antecedent of consumer loyalty (Park and Kim, 2008). Dwyer et al. (1987) note that it might be impossible to cover all contingencies in a formal business activity for sustained partner relationship and cooperation, but if the parties have trust it may be unnecessary to cover all contingencies.

In contrast to the widespread belief that trust invariably translates into positive relational outcomes, however, the association between trust and relational outcomes varies considerably. Several researchers have found direct effects of trust on various indexes of loyalty, including commitment and propensity to provide referrals (Johnson, 2007). Geyskens et al. (1999) found that trust explained about 28% of the variance in commitment. Other studies, however, have shown only weak and non-significant effects of trust on relational outcomes, such as resource allocation, purchase choice, and increased levels of business (Doney and Cannon, 1997). Likewise, consumers who state that they are satisfied or trust in the organisation frequently switch to service providers (Reichheld, 1996). For example, Reichheld (1996) noted that 65% to 85% of consumers who defect report prior to defection that they are satisfied or very satisfied. Many other possible antecedents of trust could of course be investigated (e.g., marketing communications, service quality, and marketing ads). However, we chose to study BI because of the possible immediate impact that these perceptions or memories of a brand can have on the foundations of brand trust (BT). BI decreases uncertainties that can stabilise the trust on which a relationship is built, therefore, it can increase brand loyalty on purchase and after-purchase behaviours.

An important influence on consumers' choice of products is the word-of-mouth (WOM) by other consumers (Herr et al., 1991). In early researches, estimates which maintained as much as 80% of all buying decisions are influenced by an individual's direct recommendation (Voss, 1984). In light of this impact, firms have good reason to try to understand and manage the nature of consumer-to-consumer communication regarding their products and services. On the other hand, consumers often search information and suggestions through the internet before purchasing. The vigorous development of internet technology has led to the increased 'electronic WOM', including e-mail, MSN, BBS, and online forums that provide users with information sources and platforms for exchanging views. Unlike personal face-to-face WOM, interactive exchange of information, online WOM (OWOM) provides non-synchronous, one-to-many, and rapid dissemination of information. BI has a definite influence on product and service choice for consumers. By buying products of well-known brands, consumers can have confidence in the products, and the frequency of purchase will increase. On the other hand, BT is the situation where consumers are willing to take the initiative to trust and have confidence in a brand's products; and this trust can reduce the uncertainty of consumers, because consumers believe that the brand is reliable (Chaudhuri and Holbrook, 2001). Accordingly, from tacit to explicit manners, this study considers that BI and BT can influence OWOM on consumers' behaviour.

With the development of broadband networks, the online game market has grown rapidly. The internet data center (IDC) has estimated that the total revenue of online gaming will continue to increase until 2009. For example, 'World of Warcraft' has increased unabated since its introduction, making it one of the fastest selling games in the history of gaming. Most of the previous studies have focused on the operation and motives of online game companies. There have been few studies on the influence of BI and BT on OWOM communication. This study implements player of the online game 'World of Warcraft' as subjects, and verifies the relationship that both BI and BT positively affect OWOM. In addition, this study confirms the influence of game experiences on the relationships between BI, BT, and OWOM.

2 Theoretical background and hypotheses development

2.1 BI and OWOM

Dobni and Zinkhan (1990) considered BI as the brand concept held by consumers, whereas Kotler (2000) thought BI was consumers' brand concept generated by a particular brand. Aaker and Alvarez del Blanco (1995) developed three dimensions for BI, including value, personality, and organisation. BI is often taken as an external clue to evaluate the quality of products. Consumers will make use of BI to infer or maintain their perceived product quality (Richardson et al., 1994). Grewal et al. (1998) also confirmed that good BI led to good perceived product quality of consumers. On the other hand, Batra and Homer (2004) showed that if a social consumption context is evoked, and only if the BI beliefs are appropriate to the consumer schema for the product category involved, then BI beliefs can indeed reinforce equivalent consumer beliefs about a brand's fun and classiness benefits. This study used Martinez and Pina's (2003) questionnaire, amended from Aaker and Alvarez del Blanco (1995), and divided BI into three dimensions, including value, personality, and organisation.

BI can reduce perceived risk due to its invisible service and maintain customers' trust in good quality, thereby affecting customers' purchase decisions, thereby inducing customers to develop and maintain loyal relations with a business (Nguyen and Leblanc, 2001). Shankar et al. (2003) also pointed out that customer loyalty both expressed a high degree of repurchase intention, and also made customers willing to recommend service providers to others on the internet. In addition, with fewer time and space constraints, as well as having low-cost, the internet can increase communication between consumers (Bickart and Schindler, 2001), and make the propagation of WOM communication faster in the network environment.

This study considers that BI affects customer behaviour, especially the spread of WOM in the network environment. Therefore, good evaluation of BI would trigger customer loyalty and make customers more actively take the initiative to spread positive WOM about a brand over the internet. Thus, according to the above findings, this study established the following hypothesis:

H1 BI has a positive and significant impact on OWOM.

2.2 BI and BT

BT means that consumers believe a brand can provide the desired level of value (Chaudhuri and Holbrook, 2001). When consumers do not understand the product and find it difficult to choose, BT can reduce their product uncertainty (Doney and Cannon, 1997). In addition, Delgado et al. (2003) thought BT was composed by two elements: reliability (fiability) and intentionality. Brand reliability enables consumers to expect future satisfaction, and intentionality reflects the emotional insecurity of personal aspect. This study used Delgado and Munuera's (2005) questionnaire amended from Delgado et al. (2003), and divided BT into the two dimensions of brand reliability and brand intentions.

Keller (1993) thought BI was composed of a series of brand associations, which could be divided into the functional concept, the symbol concept, and the empirical concept of BI according to consumers' personal value of product or service. Brand is the

impressions of consumers, existing in their memory network, and it affects consumers' decision-making and favouritism to a brand (as BT). Thus, BI could affect BT of consumers. On the other hand, Richardson et al. (1994) thought BI was often regarded as an external clue of product quality's evaluation for consumers, and consumers will use the BI of a product to infer or maintain their perceived quality of the product. Based on consumers' tendency to trust higher quality products, we can say that the relationship between BI and BT of consumers is inseparable. Thus, this study established the following hypothesis:

H2 BI has a positive and significant impact on BT.

2.3 *BT and OWOM*

Bone (1995) considered WOM to be communication between people who were not the source of marketing, and it was mainly based on interpersonal relationships of consumers, not only did it have higher reliability than the information of official sources provided by enterprises, but it was also more convenient than other sources of information, so that it became the most frequently used information source for consumers in their daily lives (Kiel and Layton, 1981). Gelb and Johnson (1995) pointed out that communication of information on the internet was a form of WOM, referred to as 'OWOM'. Zeithaml et al. (1996) said that OWOM was propagated because customers were willing to actively take the initiative to spread their own or others' product experience and the interaction process with businesses through the electronic media for non-commercial purposes. Hansen (2000) further pointed out that OWOM spread on the internet, such as e-mail, could spread WOM more quickly and widely in interpersonal communication. Many customers presently browse a large number of online reviews prior to making purchase decisions to access the WOM comments of other customers about the products and services in which they are interested (Ye et al., 2011). This study revised Bloemer and Odekerken-Schroder's (2002) questionnaire, amended from Zeithaml et al. (1996), to conduct research.

The establishment and linking process of the relationship to the customer will enable customers to gain friendship, comfort, and trust (Gwinner et al., 1998), and such relations can increase the probability of customers' recommendation and spreading positive WOM. Satisfaction and trust are very closely related, but they are still different concepts, each with its own special characteristics. Evidence further finds that satisfaction and trust have different impacts on how to retain customers (Szymanski and Henard, 2001). Trust means that one party is willing to believe the other party is trustworthy and has a high degree of honesty and integrity. Compared to satisfaction, trust has a stronger emotional link in the commitment of relations (Ranaweera and Prabhu, 2003). If the enterprise and customers establish a relationship of mutual trust, it will reduce the uncertainty and risk of injury (Berry, 1995), which can increase the commitment and create real customer loyalty. Swan and Oliver (1989), and Ranaweera and Prabhu (2003) found a high degree of customer loyalty which helped to increase positive WOM effect. As transactions through the internet continue to increase, success will largely depend on customers' trust in the company (Choi and Au, 2011).

Accordingly, trust generated by the relationship will lead to customer loyalty for the enterprise, and then customers will be willing to serve as ambassadors, spreading positive WOM. Similarly, with the development of the internet, customers have a broader space

and the means to facilitate OWOM interaction. Therefore, this study made the following hypothesis:

H3 BT has a positive and significant impact on OWOM.

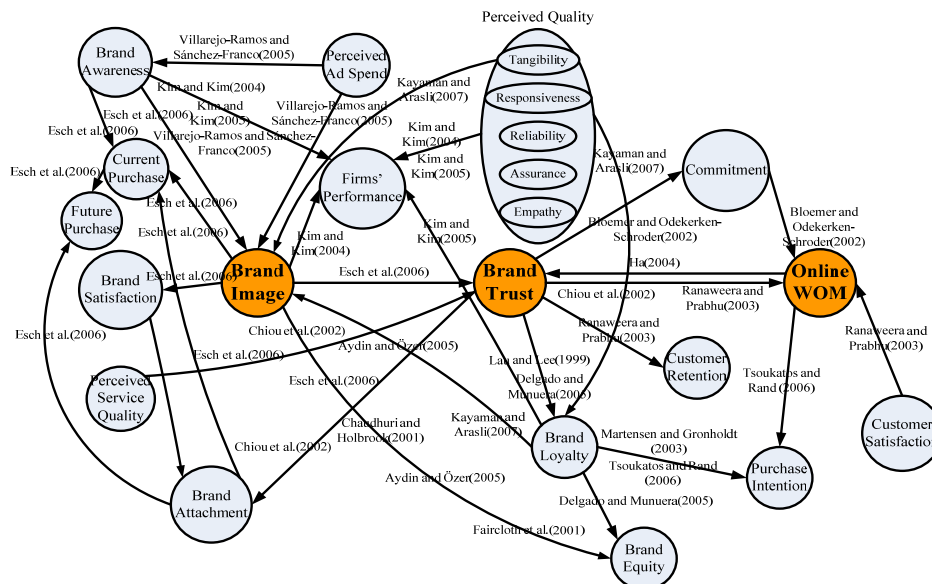
2.4 BI, BT, and OWOM

Aydin and Ozer (2005), Chiou et al. (2002), Delgado and Munuera (2005), and Esch et al. (2006) all used BT as a mediator for research. Aydin and Ozer (2005) thought perceived service quality affected customer loyalty and perceived switching cost. Chiou et al. (2002) thought that perceived service quality affected overall satisfaction and OWOM through BT. Delgado and Munuera (2005) believed overall satisfaction affected brand loyalty through BT. In addition, Esch et al. (2006) thought BI affected brand attachment through BT. For BI and OWOM, in comparison to the direct impact, the indirect effect may be more significant. Thus, this study took BT as a mediator and conferred the relationship between BI and OWOM. Therefore, this study established the following hypothesis:

H4 BI increases OWOM through the mediator of BT.

Integrating our literature review, this study drew up a research map as shown in Figure 1. This shows not only the relationships among BI, BT, and OWOM, but also other extending variables, such as brand loyalty, brand equity, and purchase intention. Considering these relationships, this study developed the research frameworks and hypotheses, and then verified them.

Figure 1 Research map (see online version for colours)

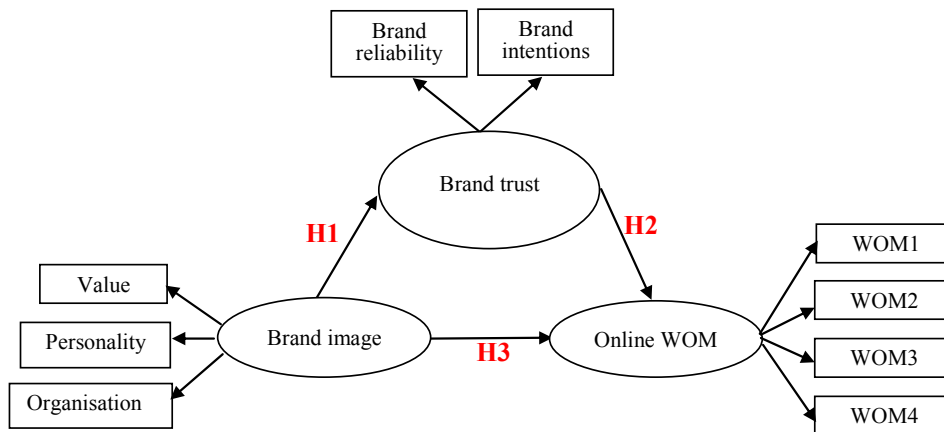


3 Methodology

3.1 Research framework

This study investigates the relationship between BI and OWOM, and further takes BT as a mediator to understand the relationships between BI, BT, and OWOM. Based on the literature, this study established a research framework, as shown in Figure 2.

Figure 2 Research framework (see online version for colours)



3.2 Measures

This study used Martinez and Pina’s (2003) questionnaire, amended from Aaker and Alvarez del Blanco (1995), developed by the three dimensions of BI as a measured criteria, including value, personality, and organisation, and took “perceptions about a brand reflected as associations existing in the memory of the consumer” (Keller, 1993) as the operational definition of BI. On the other hand, this study used Delgado and Munuera’s (2005) questionnaire, amended from Delgado et al. (2003), developed by two dimensions of BT as a measure of criteria, including brand reliability and brand intentions, and took “the confident expectations of the brand’s reliability and intentions” (Delgado et al., 2003) as the operational definition of BT.

Besides, this study used Bloemer and Odekerken-Schroder’s (2002) questionnaire, amended from Zeithaml et al. (1996), and took “a kind of customer behavior that display one’s own or others’ experience of consuming products and the perceptions of interacting actively and positively with firms via electronic media” as the operational definition of OWOM.

3.3 Personal variables

This section seeks to understand the tested objects’ basic information, so that we can take the information as the interpretation and reference of the analysis and findings. Basic information includes: gender, education level, age, occupation, residence area, frequency

of using the internet, average time on the internet each time, purposes for using the internet in addition to online gaming, length of experience on the internet, and length of experience of playing 'World of Warcraft'. This study drew on the experience of playing 'World of Warcraft' to confer the moderating effect of game qualifications. In this study, all items were measured on five-point Likert-type scales, with anchors of 1 = strongly disagree and 5 = strongly agree.

3.4 Sampling

Our subjects were players who play the online game 'World of Warcraft'. The questionnaire was set up in the my3q free website (<http://www.my3q.com/>) located at URL: <http://www.my3q.com/home2/194/dolly0105/59332.phtml/>. We also posted it on telnet://ptt.cc and advertised it on <http://www.gamer.com.tw>, which are two well-known 'World of Warcraft' boards in Taiwan. We received 527 responses from Dec. 2007 through Feb. 2008. After deleting invalid ones, there were a total of 317 valid samples.

The individual variables' distribution of this study is as follows: the male ratio is about four times higher than the female ratio in the 'gender' part; the tertiary institution is the largest proportion in the 'education level' part; 21 to 25 is the largest proportion in the 'age' part; students are the highest proportion in the 'occupation' part; the northern part is the highest proportion in 'living area' part; on the internet once a day is the largest proportion in 'frequency on the internet' part, accounting for 94.6%; 1 to 4 hours is the largest proportion in 'average time on the internet each time' part; more than eight years is the largest proportion in 'experience on the internet' part; 2-3 years is the largest proportion in 'experience of playing World of Warcraft' part. Most customers of the online game 'World of Warcraft' are male students who are daily on the internet.

4 Results

4.1 The first-order factor measurement model

Table 1 shows that the reliabilities (Cronbach's α) for all measures are above the recommended limits 0.7 (variables: 0.877~0.928; dimensions: 0.704~0.867), which indicate high reliability.

Table 1 First-order factor reliability analysis of the formal questionnaire

Variables	Dimensions	Items	Cronbach's α	
			Dimensions	Variables
Brand image	Value	2	0.735	0.877
	Personality	3	0.704	
	Organisation	2	0.812	
Brand trust	Brand reliability	3	0.837	0.890
	Brand intentions	3	0.867	
Online WOM	-	4	-	0.928

All of the measurement t-values are between 9.21 and 20.96 (all larger than 1.96), which show good convergent validity in BI, BT, and OWOM. In this study, all $\Delta\chi^2$ are larger than 3.84, which are between 0.65 and 151.11. This shows that the discriminant validity of BI between value and personality is 0.65, which is less than 3.84. As the discriminant validity of BI between value and personality is poor, this study tries to delete other items of BI. In this study, we delete items by a variety of criteria, according to standard solution and modification indices (MI) values. After deleting No. 3 and No. 7 of BI, the discriminant validity of BI between value and personality is still poor. After deleting No. 6 and No. 7 of BI, the discriminant validity of BI between value and personality is also poor. Finally, we delete No. 7 and No. 8 of BI. Therefore, this study adopts the second-order factor model and for good discriminant validity.

4.2 The second-order factor measurement model

As the discriminant validity of the first-order factor is poor, this study conducts the second-order factor analysis. Because the measurement error of brand reliability dimension is not significant ($\varepsilon = 0.08$, $p > .05$), this study deletes No. 13 of the brand reliability dimension. This not only solves the originally problem of insignificant measurement errors, but also lets the measurement model attain a good level. Therefore, this study adopts the second-order factor as the final model. This study modifies the initial model because of incomplete model fits based on MI values. Lower item standard solution value means lower explanation of variables, and higher MI means mixed identification of items. Table 2 lists the final model fits after deleting some items based on these two criteria. Finally, this study deletes 3 items of BI, and 2 items of BT in order to achieve good model fits. Thus, the measurement model of this study has good model fits, such as GFI, NNFI > 0.9 , and CFI > 0.95 ; SRMR < 0.08 , between 0.013 and 0.024. RMSEA is between 0.034 and 0.099. The normed chi-square is between 1.370 and 4.130. Table 3 shows that the reliabilities (Cronbach's α) for all measures are above the limits 0.7 (variables: 0.910~0.928; dimensions: 0.704~0.891), which indicates high reliability. All of the measurement t-values are between 13.84 and 20.70 (all larger than 1.96), which shows good convergent validity for BI, BT, and OWOM. In this study, the discriminant validity shows good fit indices. All $\Delta\chi^2$ are larger than 3.84, which are between 69.17 and 283.63. This shows a good discriminant validity of the measurement model.

Table 2 Measurement model indices

Indices	Brand image		Brand trust		Online WOM
	Initial	Final (delete nos. 3, 7, 9)	Initial	Final (delete nos. 13 and 14)	Final
GFI	.930	.980	.920	.990	.990
SRMR	.037	.024	.045	.018	.013
RMSEA	.090	.058	.127	.034	.099
NNFI	.980	.990	.950	1.000	.980
CFI	.980	.990	.970	1.000	.990
Normed chi-square	3.550	2.070	6.110	1.370	4.130

Table 3 Second-order factor reliability analysis of the formal questionnaire

Variables	Dimensions	Items	Cronbach's α	
			Dimensions	Variables
Brand image	Value	4	0.861	0.925
	Personality	3	0.704	
	Organisation	3	0.806	
Brand trust	Brand reliability	3	0.837	0.910
	Brand intentions	4	0.891	
Online WOM	-	4	-	0.928

4.3 Comparison of first and second-order factor measurement model analysis

This study implements first-order confirmatory factor analysis in the beginning, but the discriminant validity is poor. Thus, this study tries the second-order factor analysis then. Table 4 shows that first-order is poor partially in normed chi-square and discriminant validity, but the second-order reaches a good level. On the other hand, there are fewer deleted items of second-order than of first-order. Based on these factors, this study ultimately adopts the second-order factor model as the main analysis model.

Table 4 Comparison of first and second-order factor analysis

Items	First-order factor	Second-order factor	Comparison
GFI	> 0.90	0.970	All larger than 0.9
NNFI	> 0.90	0.990	All larger than 0.9
CFI	> 0.95	0.990	All larger than 0.95
SRMR	0.013~0.024	0.021	All less than 0.08
RMSEA	0.034~0.099	0.053	Both acceptable
Normed chi-square	1.37~4.13	1.90	The second-order is better (< 3)
Cronbach's α	> 0.7	> 0.7	Both high reliabilities
Construct reliability	0.74~0.93	0.82~0.93	All larger than 0.6
Convergent validity	t-values: 9.21~20.96	t-values: 13.84~20.70	All larger than 1.96
Discriminant validity	0.65~151.11	69.17~283.63	The second-order is better (> 3.84)
Delete items	Nos. 3, 7, 9 of brand image Nos. 13 and 14 of brand trust (5 items)	No. 13 of brand trust (1 item)	The second-order is better

4.4 Correlation analysis

Table 5 lists the means, standard deviations of variables and their correlations. As it can be seen, the following relationships exist between these research variables.

Table 5 Descriptive statistics and correlation coefficients

Variables	Dimensions	Mean	S.D.	1	2	3	4	5	6
Brand image	Value	3.99	.85	1					
	Personality	3.75	.80	.792**	1				
	Organisation	4.13	.77	.837**	.780**	1			
Brand trust	Brand reliability	3.53	.87	.699**	.722**	.659**	1		
	Brand intentions	3.24	.97	.472**	.557**	.524**	.714**	1	
Online WOM	-	4.10	.85	.692**	.639**	.681**	.640**	.480**	1

Notes: 1 values in parentheses along the diagonal are alpha coefficients
 2 * $p < 0.05$, ** $p < 0.01$.

4.4.1 Relationships between BI and OWOM

This study finds that BI is positively related to OWOM, meaning that BI affects OWOM. Table 5 shows that the correlation between value dimension and OWOM is larger than those between personality, organisation dimensions and OWOM.

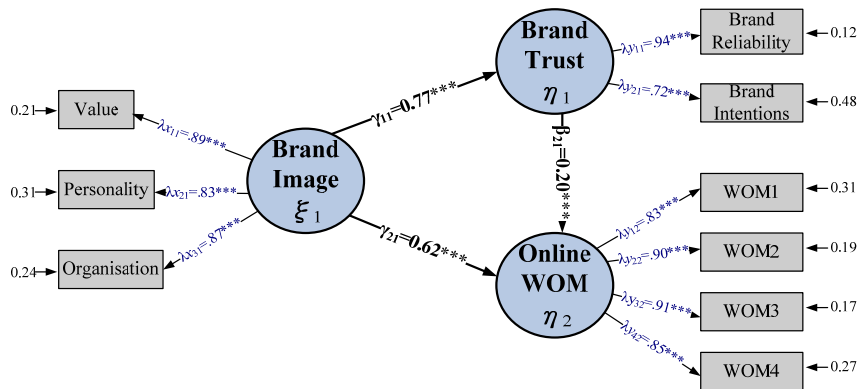
4.4.2 Relationships between BI and BT

This study finds that BI is positively related to BT, meaning that BI affects BT. Table 5 shows that the correlation between BI and brand reliability dimension is larger than that between BI and brand intentions dimension.

4.4.3 Relationships between BT and OWOM

This study also finds that BT is positively related to OWOM, meaning that BT affects OWOM. Table 5 shows the correlation between brand reliability dimension and OWOM is larger than that between brand intentions dimension and OWOM.

Figure 3 Theoretical model (see online version for colours)



Chi-Square=45.63, df=24, P-value=0.00491, RMSEA=0.053

4.5 Structural model

The theoretical model for this study is as shown in Figure 3. In the relationships among BI, BT, and OWOM, t-values are all significant. Figure 3 presents the overall model fits and the results of path analysis which indicate an adequate fit: $\chi^2 = 45.63$, $p = 0.00491$, and RMSEA = 0.053. The significant standard solution of each path is 0.62, 0.77, and 0.20 respectively.

4.6 Research hypotheses testing

This study tests the full structural equation modelling by using the maximum likelihood method. Table 6 lists all indices of the structural model (hypotheses testing).

Table 6 Structural parameter estimates and goodness-of-fitness indices

<i>Path</i>	<i>Standard solution</i>	<i>Standard error</i>	<i>t-value</i>	<i>Relation</i>	<i>Result</i>
Brand image → online WOM (γ_{21})	.62*	.08	7.39	+	Supported (H1)
Brand image → brand trust (γ_{11})	.77*	.05	14.48	+	Supported (H2)
Brand trust → online WOM (β_{21})	.20*	.08	2.47	+	Supported (H3)

4.6.1 BI and OWOM

Table 6 shows that the t-value between BI and OWOM is 7.39 ($\gamma_{21} = 0.62$), which is significant, so BI has a positive and significant influence on OWOM. Therefore, this result supports H1.

4.6.2 BI and BT

Table 6 shows that the t-value between BI and BT is 14.48 ($\gamma_{11} = 0.77$), which is significant, so BI has a positive and significant influence on BT. Therefore, this result supports H2.

4.6.3 BT and OWOM

Table 6 shows the t-value between BT and OWOM is 2.47 ($\beta_{21} = 0.20$), which is significant, so BT has a positive and significant influence on OWOM. Therefore, the result supports H3.

4.6.4 BI, BT, and OWOM

Table 7 shows that the total effect of BI to OWOM is 0.77, and the indirect effect is 0.15. Accordingly, this result supports H4.

Table 7 Direct and indirect effects

Variables	Effects	Brand trust		Online WOM	
		Effect	t-value	Effect	t-value
Brand image	Direct effect	0.77	14.48	0.62	7.39
	Indirect effect	-	-	0.15	2.47
	Total effect	0.77	14.48	0.77	13.21
Brand trust	Direct effect	-	-	0.20	2.47
	Indirect effect	-	-	-	-
	Total effect	-	-	0.20	2.47

4.6.5 Moderating effect of game experiences

The analysis of moderating effect shows that game experiences have moderating effect on the relationships among BI, BT, and OWOM. Between the relationship of BI and OWOM, low experiences ($\gamma_{21} = 0.90, p < .05$) are stronger than high experiences ($\gamma_{21} = 0.43, p < .05$). In the relationship between BT and OWOM, high experiences are positively significant ($\beta_{21} = 0.32, p < .05$), while low experiences are not significant ($\beta_{21} = -0.01, p > .05$), that is to say, the relationship between BT and OWOM of highly experienced players is significantly stronger than lowly experienced players. Thus, H5a and H5c are supported and H5b is not supported, so H5 is partially supported in this study.

5 Managerial implications

The results of this study confirm that BI has a positive influence on OWOM. Therefore, this study suggests that in addition to the game itself as well as the system, information, and services, online game companies should also be concerned their own BIs. With good BI, online game companies can attract more new users to join, and increase customer loyalty. This is in agreement with the empirical study of Suh and Yi (2006). In addition, a favourable BI can also indirectly advertise for its next online game, and create good OWOM reputation.

The data analysis results show that BI has a positive impact on BT. In other words, good BI leads to good BT of consumers. This is in agreement with the empirical study of Esch et al. (2006). Therefore, this study suggests that online game companies should work to promote BI in order to enhance BT. For example, eye-catching displays, designs to highlight products' personality, using corporate social responsibility to portray a positive influence, and other methods can be used.

This study finds that BT has a positive impact on OWOM. That is to say, good BT leads to consumers' spreading positive OWOM. This agrees with the analysis of Ranaweera and Prabhu (2003), and Chiou et al. (2002), but disagrees with Ha (2004). It means that OWOM may not be a dependent variable. OWOM could have another possibility with the relation to BT. Therefore, there is a need for follow-up research in this area.

In this study, BT plays an intermediary role between BI and OWOM. Therefore, online game companies who wish to upgrade their OWOM, brand reliability and brand

intentions are important. Good BT is the prerequisite for positive OWOM, which relates to whether the brand meets customers' demands, that is, customers personally believe that a brand can realise the value of commitments (brand reliability).

As to the relationships among BI, BT, and OWOM, few researchers have considered the moderating effect of experiences. According to the moderating effect analysis of this study, for both more and less experienced players, BI and BT both have positive effects on OWOM. And the correlation between BT and OWOM for highly experienced players is clearly stronger than less experienced players. Therefore, online game companies should consider the possible impact of game experiences.

On the other hand, correlation analysis shows that there is a positive correlation between BT and OWOM, and the correlation effect between brand reliability dimension is stronger than between brand intentions dimension, namely, increasing brand reliability leads to enhanced OWOM. Therefore, this study suggests that online game companies can let consumers have more trust in future continuous satisfaction by meeting their needs, so they will then spread positive OWOM. This is in agreement with the empirical study of Rotte et al. (2006) and Main et al. (2007) that certainty and transparent information processing can enhance the impact of stated trust on consumer loyalty.

Most scholars in the past agreed that perceived service quality was a very important factor for BT (Chiou et al., 2002; Aydin and Ozer, 2005), and the analysis of this study can help to further understand the influence of BI on BT, which is the major contribution of this study. Good BI will help to increase BT of consumers (Esch et al., 2006). Therefore, this study suggests that online game companies must value the significance of BI and make use of it to improve BT.

WOM spreads through the internet is a rich medium of communication that uses a number of digital and multimedia tools. Although it is more convenient for consumers to find and spread a message through WOM, it still can not completely replace traditional face-to-face WOM. After all, WOM interaction is originally an interpersonal activity of exchanges. Therefore, when improving intrinsic motivation of customers' WOM communication, online game companies should consider 'core quality' as a backup, so that players gain the experience of interests and satisfaction from the game, and continue to establish a good relationship with other players, thereby increasing customer loyalty. By increasing the outside force of customers' WOM communication, online game companies can create a virtual communications platform site, which provides convenience, interaction, rich interface, and content, allowing players to share experience or messages with a good interactive platform and mechanism. Thus, a two-pronged approach linking the use of entities and OWOM should be able to receive a good addition effect.

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