
The Impact of Interaction and Ubiquity on Trust, Benefits, and Enjoyment in Social Media Continuance Use

Timothy Jung. Senior Lecturer, Manchester Metropolitan University

M. Claudia tom Dieck. Research Associate, Manchester Metropolitan University

Namho Chung. Professor, Kyung-Hee University

Abstract

Social media networks are important marketing tools for the acquisition and retention of hotel guests within the intangible luxury hotel industry. Especially with the emergence of smartphones, factors such as ubiquity and interaction become increasingly important to take into account when formulating marketing strategies however, theoretical models integrating interaction and ubiquity to study hotel guests' intention to continued usage of social media networks are scarce. The present study aims to investigate the impact of interaction and ubiquity on trust, benefits, and enjoyment in social media continuance use by UK luxury hotel guests. A total of 258 usable data were collected and analysed using a partial least square analysis. The findings show that the two social media characteristics, interaction and ubiquity, influence hotel guests' continued social media network usage through the mediating variables of trust, benefits and enjoyment.

Key Words *Interaction, Ubiquity, Trust, Benefit, Enjoyment, Continued Use, Social Media*

Experience Theme *Experience Technologies*

Focus of Paper *Practical/Industry*

Entrant for PhD student competition No

Introduction

The increased importance of social media networks for the hospitality industry has been acknowledged by numerous researchers (Fotis, Buhalis, and Rossides, 2012; Hudson and Thal, 2013). In essence, social media networks, such as Facebook, Twitter or LinkedIn, are online platforms that allow users' and businesses to generate, share, and comment on content and interact with other users (Kaplan and Haenlein, 2010). In the intangible hospitality industry social media networks, which facilitate the interaction among users and businesses, are perceived as very powerful as hotel guests perceive word-of-mouth as one of the most trustworthy sources of information (Ayeh, Au, and Law, 2013a). In addition, social media networks are an important tool for the acquisition and retention of hotel guests (Sigala, 2011). According to Palmer et al. (2000, p. 58), using innovative marketing approaches is very important for luxury hotels where "customisation is a customer expectation" and hotels have to offer highly tailored services to satisfy their guests. Furthermore, King et al. (2011) strengthened the importance of engaging in social marketing strategies as luxury hotels compete in a very competitive environment thus, are dependent on innovative marketing strategies.

A number of researchers studied social media networks and their acceptance within the tourism context using the technology acceptance model as a theoretical foundation (e.g. Ayeh et al., 2013a) however, theoretical models integrating interaction and ubiquity to study hotel guests' intention to continued usage of social media networks are scarce. Therefore, the present study aims to test a theoretical model including interaction, ubiquity,

trust, benefits and enjoyment and the continued usage intention of social media networks by UK luxury hotel guests.

Literature Review

Interaction and Ubiquity

There has been increased interest with regards to the importance of interaction as a result of web 2.0 developments (Lee, 2005). According to Lee (2005), the increased importance of interaction can be linked to always new technologies where users are enabled to interact anywhere and anytime. In essence, interaction involves interpersonal communication and in the case of online networks this can be communication between users however also computer-user interaction (Lowry et al., 2006; Venkatesh & Davis, 2000). According to Wang and Chiang (2009, p. 470), “trusting relationships generally result from strong, symmetrical interaction ties” and therefore, they confirmed that interaction has a strong direct effect on trust in the online auction context. Overall, interaction was found to influence behaviours, opinions and satisfaction in various research contexts (Cheng et al., 2011; Lopez-Nicolas et al., 2008) however, research on the effects of interaction towards perceived benefits and enjoyment is scarce.

According to Kim et al. (2008b, p. 395), “through mobile devices, business entities are able to reach customers anywhere at anytime. On the other hand, users can also get any information in which they are interested, whenever they want the information regardless of where they are, through Internet-enabled mobile devices”. The potential to access hotel information easily anytime and anywhere is expected to provide hotel guests with more power however, interestingly Okazaki, Molina and Hirose (2012) examined a negative effect of ubiquity on trust in terms of mobile marketing as the potential to constantly receive marketing material negatively influences trustworthiness. In terms of the effect of ubiquity on enjoyment, Tojib and Tsarenko (2012) confirmed a strong effect within the mobile service context. Interestingly, research assessing the effects of ubiquity on perceived benefits is scarce. Overall it can be said, that there has been limited research in the tourism context integrating interaction and ubiquity and therefore, the following hypotheses are proposed:

- H₁: Interaction has a positive effect on trust.
- H₂: Ubiquity has a positive effect on trust.
- H₃: Interaction has a positive effect on perceived benefits.
- H₄: Ubiquity has a positive effect on perceived benefits.
- H₅: Interaction has a positive effect on perceived enjoyment.
- H₆: Ubiquity has a positive effect on perceived enjoyment.

Trust, Perceived Benefits, Enjoyment and Continued Usage

Trust is considered extremely important in the intangible hospitality industry as hotel guests tend to read online reviews on social media networks in order to get first hand reviews of previous hotel guests to reduce risk and uncertainty (Ayeh et al., 2013a). Wang and Chiang (2009) investigated the online auction context and found a significant effect of trust on the continuance intention to use online auctions. Furthermore, Kim et al. (2008a) found that both, trust and perceived benefits, influence the intention to use e-commerce. In terms of perceived enjoyment, a number of scholars (Ayeh et al., 2013b; Lin and Lu, 2011; van der Heijden, 2004) linked the dimension to the intention to use e-commerce. For instance, Lin and Lu (2011, p. 1159) confirmed an extremely strong effect of perceived enjoyment on the continuance intention to use social media networks and concluded that businesses need to “continue developing applications and small games with novel, pleasurable experiences to reinforce pleasurable effects in using the site and further to strengthen its stickiness”. Therefore, the following hypotheses are proposed:

- H₇: Trust has a positive effect on social media continuance use.
- H₈: Perceived benefits has a positive effect on social media continuance use.
- H₉: Perceived enjoyment has a positive effect on social media continuance use.

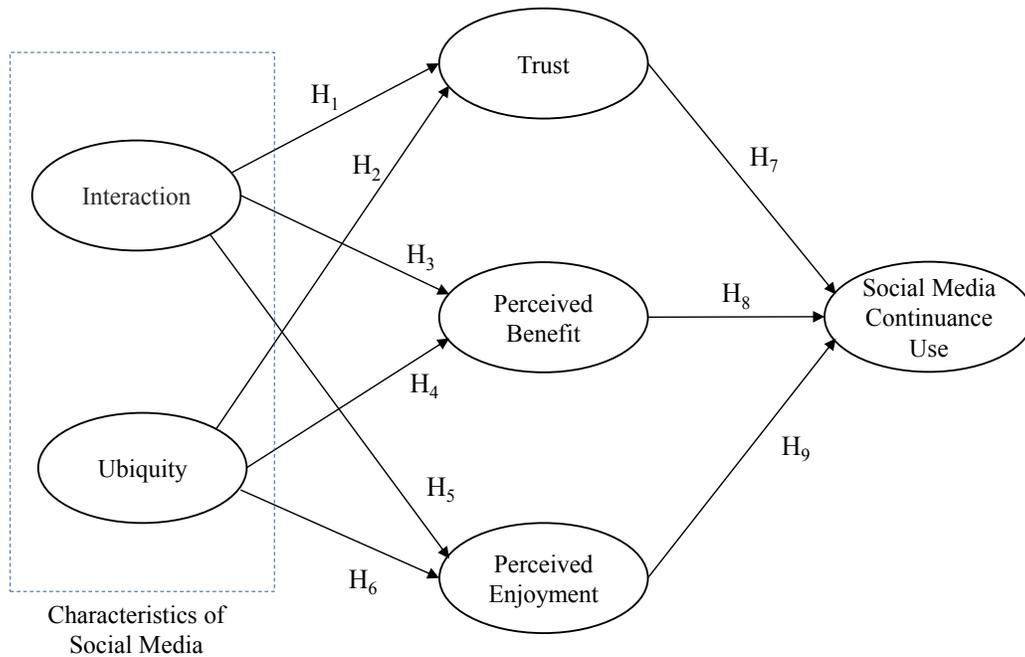


Fig 1. Research Model

Methodology

This research used surveys for the primary data collection. The sampling unit were domestic hotel guests that follow four and five star hotels' social media network pages in the UK. The measurement items used in this research were adapted from previous studies (Table 1). An online link to the questionnaire was posted by ten four and five star UK hotels from May 15 to September 18, 2013 on their Facebook and Twitter pages resulting in 258 usable samples from domestic hotel guests. Partial least squares (PLS) analysis was used to examine the data. PLS is a powerful structural equation model that has been used widely in IS research (Chin et al., 1996). All measures in this study were treated as reflective constructs. In a reflective measurement model, indicators are considered consequences of the latent variable to which they belong (Jarvis et al., 2003). Therefore, reflective indicators should be highly correlated (Henseler and Fassott, 2010). PLS-Graph version 3.00 was used to perform the analysis.

Table 1. Measurement items

Construct	Measurement items		Sources
Interaction	INT1	Social media networks assist guest-guest interaction.	Self-developed
	INT2	Social media networks enable me to interact with other hotel guests.	
	INT3	Social media networks enable me to share hotel content with other users.	
Ubiquity	UBI1	Social media networks make hotel information easy to access.	Wixom and Todd, 2005; Lopez-Nicolas et al., 2008
	UBI2	I can engage with hotels on social media networks anywhere.	
	UBI3	I can engage with hotels on social media networks anytime.	
Trust	TR1	Hotel guests on social media networks are trustworthy.	Kim, 2009, Gefen et al., 2003, Hsu and Lin, 2008
	TR2	Hotel guests' comments on hotels' social media network pages are trustworthy.	
	TR3	Based on my experience with hotels on social media networks in the past, I know they are honest.	
	TR4	Based on my experience with hotels on social media networks in the past, I know they are trustworthy.	
	TR5	In general, I can rely on social media networks for hotel information.	
Perceived Benefit	BEN1	I believe to receive special offers on hotels' social media networks pages.	Self-developed
	BEN2	I believe to receive special information on hotels' social media networks pages.	
	BEN3	Overall, I think that communicating with hotels on social media networks has benefits	
Perceived Enjoyment	ENJ1	I find using social media networks to engage with hotels to be enjoyable.	Venkatesh and Bala, 2008, Wu and Liu, 2007
	ENJ2	The actual process of engaging with hotels on social media networks is pleasant.	
	ENJ3	I have fun using social media networks to engage with hotels.	
	ENJ4	Engaging with hotels on social media networks gives me a lot of pleasure.	
	ENJ5	Participating in hotel competitions on social media networks is exciting.	
	ENJ6	Engaging with hotels on social media networks gives me a lot of pleasure.	
Social Media Continuance Use	CU1	I will continuously use social media networks to engage with hotels.	Sánchez and Hueros, 2010, Castaneda et al., 2007
	CU2	I intend to use social media networks to get information for my next hotel trip.	
	CU3	In the future I intend to regularly check hotels' social media network pages for information.	
	CU4	I want to continue using social media networks to engage with hotels rather than stop using it.	
	CU5	I will frequently use social media networks to engage with hotels in the future.	

Results

Sample Characteristics

The vast majority of respondents (73.3%) were female. The respondents were distributed across all ages, with the majority being between 25 and 54. In terms of highest qualification, there was a fair representation of all degrees, with the biggest percentage having an undergraduate degree (29.5%). The majority of respondents were either married (46.5%) or single (43.4%). In addition, 51.2% of respondents were full time employed. In regards to social media network experience, the majority of respondents (65.5%) had more than three years experience in using social media networks. In contrast, the years of experience in following hotels on social media networks was equally distributed ranging from less than six months (26.0%) to more than three years (15.1%).

Instrument Validation

Self-reported data on two or more variables collected from the same source have the potential to lead to the common method variance problem. Therefore, Harman's single-factor test is used to test for this bias (Podsakoff et al., 2003). The test assumes that if a high level of common method variance is present, then when all of the variables are entered together, they will load on one factor, thereby accounting for a majority of the variance

(Wilson, 2010). The single-factor test results do not indicate that a single-factor structure accounts for the majority of the variance, suggesting that common method bias is not a concern in the data. An exploratory factor analysis with varimax rotation results in six factors with eigenvalue greater than 1 (see Table 2).

Table 2. Exploratory Factor Analysis Results

Items	Interaction	Ubiquity	Trust	Benefit	Enjoyment	Continuance Use
INT1	0.814	0.099	0.140	-0.037	0.115	0.162
INT2	0.829	0.040	0.078	0.009	0.260	0.145
INT3	0.645	0.107	0.130	0.334	0.066	0.153
UBI1	0.056	0.749	0.152	0.193	0.106	0.228
UBI2	0.114	0.860	0.079	0.110	0.189	0.185
UBI3	0.089	0.861	0.069	0.098	0.162	0.205
TR1	0.110	-0.132	0.762	0.065	0.125	0.030
TR2	0.215	-0.004	0.801	0.042	0.122	0.028
TR3	-0.002	0.265	0.738	0.104	0.175	0.285
TR4	0.009	0.291	0.723	0.169	0.230	0.220
TR5	0.080	0.254	0.676	0.198	0.189	0.329
BEN1	-0.062	0.081	0.142	0.861	0.177	0.124
BEN2	0.132	0.205	0.138	0.823	0.085	0.200
BEN3	0.180	0.141	0.100	0.674	0.215	0.338
ENJ1	0.146	0.112	0.204	0.234	0.725	0.267
ENJ2	0.039	0.112	0.137	0.118	0.779	0.302
ENJ3	0.101	0.031	-0.006	0.064	0.845	0.170
ENJ4	0.210	0.062	0.155	-0.056	0.818	0.052
ENJ5	-0.022	0.269	0.224	0.227	0.647	0.009
ENJ6	0.155	0.157	0.247	0.158	0.782	0.138
CU1	0.144	0.163	0.239	0.322	0.274	0.663
CU2	0.099	0.176	0.062	0.101	0.101	0.850
CU3	0.144	0.145	0.090	0.092	0.144	0.846
CU4	0.139	0.197	0.226	0.195	0.118	0.782
CU5	0.132	0.151	0.195	0.176	0.317	0.754

Then, we conducted confirmatory factor analysis (CFA) by checking item loadings, reliability, and discriminant validity. Convergent validity is assessed using three criteria. First, standardized path loadings, which are indicators of the degree of association between the underlying latent factor and each item, should be greater than 0.7 and statistically significant (Gefen et al., 2003). Second, composite reliabilities (CR), as well as Cronbach's alphas, should be larger than 0.7 (Nunally, 1978). Third, the average variance extracted (AVE) for each factor should exceed 50 percent (Fornel and Lacker, 1981). Gefen and Straub (2005) suggested that it is common to have higher cross-factor loadings in PLS. The value of item loadings should be above 0.70, showing that more than half of the variance is captured by the construct. All the items herein have significant score loadings above the threshold of 0.70 (see Appendix). Likewise, composite reliability (CR) and Cronbach's α for

all the constructs exceeded 0.7, and the AVE for each construct was greater than 0.5, supporting convergent validity (Campbell and Fiske, 1959; Fornell and Larcker, 1981; Nunnally, 1967).

Discriminant validity is assessed by determining whether (1) the indicators load highly on their own theoretically assigned factors, and not highly on other factors and (2) the constructs share more variance with their own measures than they share with other constructs in the model. In variance analysis, the square root of every average variance extracted (AVE) is much larger than any correlation among any pair of latent constructs (see Table 3). Discriminant validity was thus supported herein (Bhattacharjee and Sanford, 2006). All correlations among the four dimensions were significant.

Table 3. Correlations between Constructs

Construct	(1)	(2)	(3)	(4)	(5)	(6)	CR	AVE	α
(1) Interaction	0.818						0.858	0.669	0.757
(2) Ubiquity	0.270**	0.895					0.924	0.801	0.876
(3) Trust	0.335**	0.369**	0.803				0.899	0.645	0.864
(4) Benefit	0.287**	0.399**	0.396**	0.867			0.901	0.751	0.836
(5) Enjoyment	0.383**	0.394**	0.471**	0.407**	0.826		0.928	0.682	0.903
(6) Continuance Use	0.412**	0.486**	0.483**	0.511**	0.486**	0.867	0.938	0.752	0.917

** $p < 0.01$

Note: Leading diagonal shows the square root of AVE of each construct

Hypothesis Testing

The structural models were examined for their explanatory power and path significance using a bootstrapping technique. The size of the bootstrapping sample used in PLS analyses was 500. Figure 2 presents the results of the hypothesis tests. All path coefficients were significant. Trust was predicted by interaction ($\beta = 0.248$, $p < 0.001$) and ubiquity ($\beta = 0.345$, $p < 0.001$), which explained 22.8% of trust variance. Hence, H₁ and H₂ were supported. Perceived benefit was predicted by interaction ($\beta = 0.236$, $p < 0.001$) and ubiquity ($\beta = 0.351$, $p < 0.001$), which explained 22.5% of perceived benefit variance. Therefore, H₃ and H₄ were supported. Perceived enjoyment was predicted by interaction ($\beta = 0.302$, $p < 0.001$) and ubiquity ($\beta = 0.315$, $p < 0.001$), which explained 24.4% of perceived enjoyment variance. Therefore, H₅ and H₆ were supported. Social media continuance use, in turn, was predicted by trust ($\beta = 0.277$, $p < 0.001$), perceived benefit ($\beta = 0.325$, $p < 0.001$), and perceived enjoyment ($\beta = 0.238$, $p < 0.001$), which explained 44.8% of social media continuance use. Thus, H₇, H₈, and H₉ were supported.

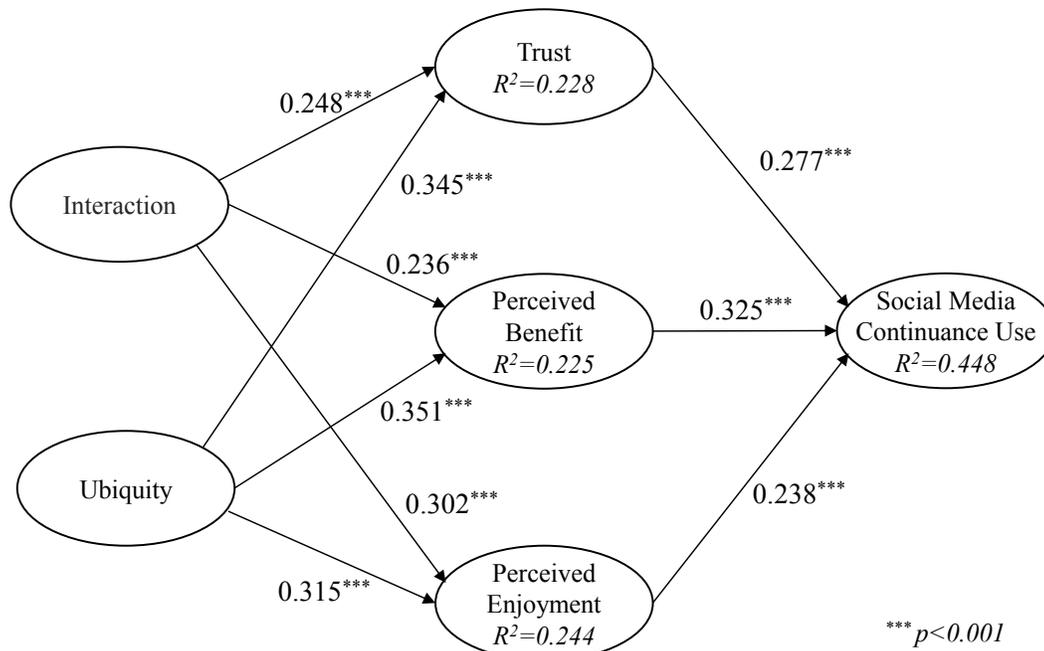


Fig 2. Results of Hypothesis Testing (* $p < 0.05$, ** $p < 0.01$, * $p < 0.001$)**

Discussion and Conclusion

The purpose of the present study was to investigate the impact of interaction and ubiquity on trust, benefits, and enjoyment in social media continuance use by UK luxury hotel guests. The present paper is unique as we examined the characteristics of social media from two different aspects, interaction and ubiquity, which has not been applied to the social media and hospitality context previously. However, especially in the light of today's technological mobile, and even wearable, developments ubiquity and interaction become increasingly important (Kim et al., 2008b; Lee, 2005). This trend was confirmed by the findings in the present study as we found that interaction and ubiquity are important motivating factors influencing continued usage of social media by UK luxury hotel guests through the mediating effects of trust, benefits and enjoyment. For academia, the research model provides a new research direction by including interaction and ubiquity as antecedents of continued usage behaviour. For hotel marketing professionals, these findings provide once more important implications of the increased importance of mobiles, smartphones and wearables. The possibility to interact with other users and businesses anytime and anywhere provides hotel guests with enhanced power thus, marketing managers need to ensure to provide trustworthy, beneficial and enjoyable content in order to retain existing and attract new hotel guests.

There are a number of limitations in the present study. Data were only collected from UK four and five star hotel guests and therefore it is difficult to generalise findings to other contexts. Further research could be conducted to compare the findings between different hotel segments. In addition, further research could be carried out in the context of different countries considering the importance of cultural factors. Furthermore, the research model does not account for moderating factors (e.g. experience, gender, age) and therefore, future research is recommended to investigate moderating effect of such variables to enhance the applicability of findings.

References

- Ayeh, J., Au, N., & Law, R. (2013a). Towards an Understanding of Online Travelers' Acceptance of Consumer - Generated Media for Travel Planning: Integrating Technology Acceptance and Source Credibility Factors. In L. Cantoni & Z. Xiang (Eds.), *Information and Communication Technologies in Tourism 2013*. Springer,

Heidelberg.

- Ayeh, J. K., Au, N., & Law, R. (2013b). Predicting the intention to use consumer-generated media for travel planning. *Tourism Management*, 35, 132-143.
- Bhattacharjee, A., & Sanford, C. (2006). Influence Processes for Information Technology Acceptance: An Elaboration Likelihood Model. *MIS Quarterly*, 30(4), 805-825.
- Campbell, D. T., & Fiske, D.W. (1959). Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix. *Psychological Bulletin*, 56(2), 81-105.
- Castañeda, J. A., Muñoz-Leiva, F., & Luque, T. (2007). Web Acceptance Model (WAM): Moderating effects of user experience. *Information & Management*, 44(4), 384-396.
- Cheng, B., Wang, M., Yang, S. J., & Peng, J. (2011). Acceptance of competency-based workplace e-learning systems: Effects of individual and peer learning support. *Computers & Education*, 57(1), 1317-1333.
- Chin, W. W., Marcolin, B. L., & Newsted, P. R. (1996). A Partial Least Squares Latent Variable Modeling Approach for Measuring Interaction Effects: Results from a Monte Carlo Simulation Study and Voice Mail Emotion/Adoption Study. In J. I. DeGross, S. Jarvenpaa, and A. Srinivasan (eds.), *Proceedings of the Seventeenth International Conference on Information Systems*, Cleveland, OH, 21-41.
- Fornell C., & Larcker D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Fotis, J., Buhalis, D., & Rossides, N. (2012). Social media use and impact during the holiday travel planning process. In M. Fuchs, F. Ricci & L. Cantoni (Eds.), *Information and Communication Technologies in Tourism 2012*, Springer, Vienna, 13-24.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in Online Shopping: An integrated model. *MIS Quarterly*, 27(1), 51-90.
- Gefen, D., & Straub, D. W. (2005). A Practical Guide to Factorial Validity Using PLS-Graph: Tutorial and Annotated Example. *Communications of the Association for Information System*, 16, 91-109.
- Henseler, J., & Fassott, G. (2010). Testing Moderating Effects in PLS Path Model: An Illustration of Variable Procedure. In V. Esposito Vinzi et al. (eds). *Handbook of partial least squares*, Springer Handbooks of computational statistics, 713-735.
- Hsu, C. L., & Lin, J. C. C. (2008). Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation. *Information & Management*, 45(1), 65-74.
- Hudson, S., & Thal, K. (2013). The Impact of Social Media on the Consumer Decision Process: Implications for Tourism Marketing. *Journal of Travel & Tourism Marketing*, 30, 156-160.
- Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M. (2003). A Critical Review of Construct Indicators and Measurement Model Misspecification in Marketing and Consumer Research. *Journal of Consumer Research*, 30(2), 199-218.
- Kaplan, A., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53, 59-68.
- Kim, D. J. (2009). Self-perception-based versus transference-based trust determinants in computer-mediated transactions: A cross-cultural comparison study. *Journal of Management Information Systems*, 24(4), 13-45.
- Kim, D. J., Ferrin, D. L., & Rao, H. R. (2008a). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision support systems*, 44(2), 544-564.
- Kim, D. Y., Park, J., & Morrison, A. M. (2008). A model of traveller acceptance of mobile technology. *International Journal of Tourism Research*, 10(5), 393-407.
- King, C., Funk, D. C., & Wilkins, H. (2011). Bridging the gap: An examination of the relative alignment of hospitality research and industry priorities. *International Journal of Hospitality Management*, 30, 157-166.
- Lee, T. (2005). The Impact Of Perception Of Interactivity On Customer Trust And Transaction Intentions In Mobile Commerce. *Journal of Electronic Commerce Research*, 6(3), 165-180.
- Lin, K. Y., & Lu, H. P. (2011). Why people use social networking sites: An empirical study integrating network externalities and motivation theory. *Computers in Human Behavior*, 27(3), 1152-1161.
- López-Nicolás, C., Molina-Castillo, F. J., & Bouwman, H. (2008). An assessment of advanced mobile services

- acceptance: Contributions from TAM and diffusion theory models. *Information & Management*, 45(6), 359-364.
- Lowry, P. B., Spaulding, T., Wells, T., Moody, G., Moffit, K., & Madariaga, S. (2006). A theoretical model and empirical results linking website interactivity and usability satisfaction. Paper presented at the Annual Hawaii International Conference.
- Nunnally, J. C. (1967). *Psychometric theory*. New York: McGraw-Hill.
- Okazaki, S., Molina, F. J., & Hirose, M. (2012). Mobile advertising avoidance: exploring the role of ubiquity. *Electronic Markets*, 22(3), 169-183.
- Palmer, A., McMahon-Beattie, U., & Beggs, R. (2000). A structural analysis of hotel sector loyalty programmes. *International Journal of Contemporary Hospitality Management*, 12, 54-60.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Sánchez, R. A., & Hueros, A. D. (2010). Motivational factors that influence the acceptance of Moodle using TAM. *Computers in human behavior*, 26(6), 1632-1640.
- Sigala, M. (2011). eCRM 2.0 applications and trends: The use and perceptions of Greek tourism firms of social networks and intelligence. *Computers in Human Behavior*, 27, 655-661
- Tojib, D., & Tsarenko, Y. (2012). Post-adoption modeling of advanced mobile service use. *Journal of Business Research*, 65(7), 922-928.
- Van der Heijden, H. (2004). User acceptance of hedonic information systems. *MIS quarterly*, 695-704.
- Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. *Decision sciences*, 39(2), 273-315.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, 46(2), 186-204.
- Wang, J. C., & Chiang, M. J. (2009). Social interaction and continuance intention in online auctions: A social capital perspective. *Decision Support Systems*, 47(4), 466-476.
- Wilson, B. (2010). Using PLS to Investigate Interaction Effects Between Higher Order Branding Construct. In V. Esposito Vinzi et al. (eds.), *Handbook of partial least squares*, Springer Handbooks of Computational Statistics, 621-652.
- Wixom, B. H., & Todd, P. A. (2005). A theoretical integration of user satisfaction and technology acceptance. *Information systems research*, 16(1), 85-102.
- Wu, J., & Liu, D. (2007). The effects of trust and enjoyment on intention to play online games. *Journal of electronic commerce research*, 8(2), 128-140.