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Article

Factors Affecting Digital Government Adoption: Empirical Study of Trust and Social Influences on Extended TAM

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Abstract: This research is conducted to propose a conceptual model for the adoption of digital government services based on an extended technology acceptance model. Through a survey of 359 users of digital government services, how to operationalize and test emerging variables is investigated to understand citizens' acceptance intentions. The results indicate that perceived social influence and trust are key factors in the acceptance of online government services and intention for adoption. Familiarity and ubiquitous connection have a substantial impact on social influence. Therefore, valuable insight into factors that practitioners prioritize when adjusting their approaches for better results is required. Thus, the adoption of digital government services needs to be related to the level of trust and social influence.

Keywords: Digital government; social influence; TAM; Trust; Ubiquitous connect; Context-aware

1. Introduction

The swift advancement of information technology and the continual expansion of digital services have led to the emergence of online government. The online government provides its service that is available on handheld devices such as mobile phones, personal digital assistants (PDAs), mobile internet devices (MIDs), play station portables (PSPs), MPEG-4 (MP4), and e-readers (Zhang and Ma, 2011). The integration of e-commerce and social media has enabled the swift growth of online government services (Yadav et al., 2013; Sotiriadis and van Zyl, 2013). Despite its growth and importance, there is still a lack of knowledge on how people adopt digital government services with mobile devices and how the way people interact with the internet changes, and how their online patterns differ from other online behaviors. To better understand the behavior of online government users, more rigorous academic studies are needed. These studies need to be theory-led and employ sophisticated analytical models and statistical methods. While relevant analyses have been conducted, most of the research is descriptive and relies heavily on subjective judgment. To understand the factors that shape the acceptance of digital governments, theories of information technology adoption such as the use of technology (UTAUT), task technology fit (TTF), innovation diffusion theory (IDT), and technology acceptance model (TAM) are used (Gefen et al., 2003). These theories are used to analyze digital governments' behavior and gain insight into the factors that influence their acceptance. Studies on technology acceptance mainly focus on information and task-related acceptance of new technologies such as Internet usage, while context-aware and ubiquitous connections of digital government users are largely overlooked.

This article addresses the gap in existing theoretical frameworks by exploring how context-aware and ubiquitous connections, as well as novel constructs such as social influences, trust, and familiarity, influence the acceptance of digital government services by users. In particular, it is examined how these factors interact with traditional TAM2 factors to shape users' acceptance of digital government services with the following questions.

1) How does ubiquitous connection affect TAM2 on digital government adoption behaviors?
2) How does context-aware affect TAM2 on digital government adoption behaviors?
3) How do TAM and TAM2 explain digital government adoption behaviors?

2. Literature Review

2.1 Digital Government Environment

Digital government is a method of online governance that syndicates traditional government services with social media platforms such as Twitter and social networking sites. It has become increasingly popular in recent years, being designed to provide

citizens with improved service experiences. Qu et al. (2013) defined digital government as activities conducted via the internet that involve dealings through either social media or other e-business sites. Smartphones are the most common devices for digital government transactions (Noh et al., 2013). Digital government is based on technological and ideological foundations with the conception and discussion of government content and services (Kaplan and Haenlein, 2010). It has the potential to provide positive information to increase government influence and facilitate the sharing of comments and advice through social groups (Dong, 2014). Digital government firms often collaborate with social network services to promote their services (Stephen and Toubia, 2009). Users of digital government can access services through SNSs and share their experiences with friends and strangers alike. This allows the digital government to exploit users to increase their adoption intention, which is more cost-effective (Kim and Park, 2013; Ngai and Gunasekaran, 2007).

2.2 Trust Concern in mobile Reading

Trust is an essential element in comprehending the dynamics of online and social interactions, and its absence can lead to misunderstandings and frustration. In the past decades, the issue of trust in digital services has been widely discussed (Gao and Liu, 2014; Valvi and West, 2013; Kim, 2012; Bianchi and Andrews, 2012; Kim et al., 2011). Trust is especially important in digital government with which businesses can benefit from decreased operational costs and improved information sharing. Research has shown that trust is a major variable in determining adoption intention and market success (Pavlou and Fygenson, 2006). In digital government, trust is essential for the exchange of information between senders and receivers. Trust in digital government services is based on the reliability in making efforts in good faith to fulfill prior commitments, their ability to adjust to changing conditions, and their avoidance of taking advantage of the exchange partner (Hill et al., 2013). Previous reputation or service information also has a substantial result on users' acceptance of digital government services (Shafiq et al., 2011). The intention to accept digital government is founded in the total consumption practice and extensive engagement (Yen et al., 2013). Since online citizens and service providers cannot interact in person, information from online friends is essential in cultivating trust for potential users.

2.3 Social Iinfluence Concern

Satisfied digital government users do not voice any complaints about the government services or the sender of the information. Unfortunately, the online exchange process may not be acceptable to citizens due to their varying needs and expectations. To address this issue, the digital government must provide a way for users to voice their complaints. Social media platforms such as Facebook or Twitter provide users with the opportunity to share their experiences without interruption. Through these platforms, people can share their thoughts and opinions with others in an open and unrestricted environment. Previous studies showed that through the exchange of social information, citizens can gain a greater sense of belonging, recognition, and even social support, which leads to increased value and commitment. Social influence has been found to have a greater impact on the acceptance decision-making process in digital government than in practices. Therefore, social influence remains an important cause in increasing the adoption of citizens in digital government.

3. Hypotheses and Research Framework

3.1 Ubiquitous Connection

Having access to digital government services at any time and any place is known as a ubiquitous connection. This is possible through the use of mobile terminals, which free citizens from sequential and longitudinal constraints (Ngai and Gunasekaran, 2007). However, there are still issues due to unreliable systems and new systems (Zhang et al., 2014; Gao et al., 2015). This leads to service interruptions or unavailability, which affects user trust negatively in mobile transactions (Lee, 2005). Furthermore, it also leads to negative social influences among Internet users (Gao et al., 2015). If citizens cannot access reliable and ubiquitous connections, they can sense that digital government is undependable and unusable, which affects their acceptance of digital government services. Therefore, providing ubiquitous services to citizens is essential to demonstrate the digital government’s capability and integrity, and to enhance the trustworthiness of reading apps. Therefore, the following hypotheses are proposed in this study.

H1.1 *Ubiquitous connection positively affects the trust in digital government services.*
H1.2 *Ubiquitous connection positively affects the social influence of digital government services.*

3.2. Context awareness

Context awareness is becoming increasingly important in the digital age, as users bring their mobile devices with them wherever they go. This highlights the need for adapting the content of digital government applications to the citizen's present

condition. By understanding the background of an assumed background and situation, citizens can better adapt to context-aware behavior in their online applications. This eliminates the need for users to manually adjust their content, as devices do this automatically. Context is an essential part of our lives, and the ability to share and utilize relative data enhances the citizen experience. This leads to a more efficient and enjoyable user experience when interacting with digital government applications. Therefore, the following hypotheses are proposed in this study.

H2.1 *Context-aware positively affects the trust in digital government services.*
H2.2 *Context-aware positively affects the social influence of digital government services.*

3.3. Reputation

Reputation is a measure of how citizens perceive the association between the government and citizens (Herbig and Milewicz, 1997). It is determined by digital government possibilities (Hansen et al., 2008, Liu et al., 2012). Veloutsou and Moutinho (2009) argued that it is easier to damage a decent reputation than to create one as negative behaviors can have a more powerful effect on public opinion than positive ones. A worthy reputation clues to a higher grade of user trust and satisfaction (Raus et al., 2010) and positive online word-of-mouth (Hung and Li, 2007). This means that if citizens perceive that the digital government fulfills its promises, they will be more likely to trust the sites and share the information with others (Gao and Liu, 2014). As a result, the alternatives to the digital government become less attractive (McCorkindale and Morgoch, 2013). The reputation of digital government plays a crucial role in the early stages of a transaction (Dong, 2014). This reputation can provide citizens with a sense of trust and assurance which help them make decisions about their interactions with the government (Noh et al., 2013). When citizens have a positive experience with digital government, it increases its reputation. Reputation can also be used as a substitute for social influence when trust is lacking, and, predictably, this affects the digital government. Therefore, the following hypotheses are proposed in this study.

H3.1 *Reputation positively affects the trust in online government services.*
H3.2 *Reputation positively affects the social influence of online government services.*

3.4 Familiarity

Familiarity is a perception that includes both reasoning and responsive components (Lee and Kwon, 2011). It is described as a sensation of familiarity without being able to recall the exact details of the encounter. (Ecker et al., 2007). Ratcliffe (2002) referred to it as a "feeling of familiarity" and suggested that it is an important factor in behavior. In social network sites, familiarity is enhanced through interactions and experiences for greater understanding between social network friends (Sohn, 2014). Yoganarasimhan (2012) argued that greater familiarity with an online government increases trust and provides a bigger possibility of adopting the service or content suggested. This suggests that familiarity can have an important influence on perceived trust and social influences when it comes to online government apps. Therefore, the following hypotheses are proposed in this study.

H4.1 *Familiarity positively affects trust in online government services.*
H4.2 *Familiarity positively affects the social influence of online government services.*

3.5 Trust, Social Influence, and Acceptance of Digital Government

The acceptance intention of citizens towards a digital government site is a complex process that is affected partially by various peripheral causes such as the product, merchandise, seller, and effectiveness. The earlier investigation found that trust, social influence, and acceptance intentions are positively related. Acceptance intention has a direct consequence on engagement behavior. As online reading can often be a negative practice, distributing the data with friends alleviates this feeling. Thus, it is essential to consider the influence of trust, social influence, and acceptance intentions when assessing citizens' acceptance of digital government sites. Therefore, the following hypotheses are proposed.

H5.1 *Trust positively affects the social influence of online government services.*
H5.2 *Trust positively affects acceptance of online government services.*
H5.3 *Social influence positively affects acceptance of online government services.*

The research framework is shown in Figure 1.

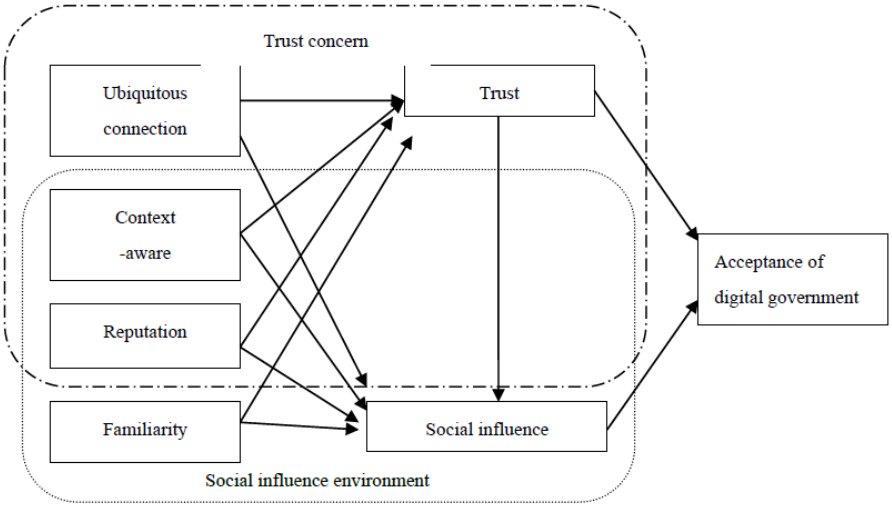

Fig. 1. Research model.

4. **Method**

The research framework comprises seven factors confirmed in previous research. To measure these constructs, a survey was carried out with items recorded in Appendix 1. The items were calculated on a 7-point Likert scale, ranging from "strongly disagree" to "strongly agree". The questionnaire was pre-tested by fifteen online government users, and several items were revised based on their comments to improve clarity and understandability (Ya-Wen et al., 2010). An online survey was conducted to collect data. Messages were posted in government forums to invite citizens to participate in the survey by clicking on the hyperlink which directed them to the survey website. Out of the 412 responses collected, 15 were excluded due to missing or inappropriate data, and 38 were excluded because they had no mobile experiences in the service. Finally, 359 qualified responses were used for the analysis. The information on the respondents is presented in Table 1.

Table 1. Breakdown of respondents.

Demographic Categories	Range	Frequency	Proportion
Age	Under 20	111	0.31
	20–29	92	0.26
	30–39	83	0.23
	40–49	64	0.18
	Above 50	9	0.03
Gender	Male	154	0.43
	female	205	0.57
Education	High school or less	53	0.15
	College	240	0.67
	Postgraduate	43	0.12
	others	23	0.06
Occupation	Un-employed	4	0.01
	Student	132	0.37
	Office clerk	85	0.24
	Public servant	37	0.10
	Academic	63	0.18
	others	38	0.11
Experiences with digital government services	Less than 6 months	166	0.46
	6−12 months	127	0.35
	13−24 months	52	0.14
	Above 24 months	14	0.04

Two assessments were piloted for the Common Method Variance (CMV). First, Harman's single-factor exam was used (Liu et al., 2013). The results revealed that the highest variance enlightened by separate factors was 11.248%, indicating that no factor clarified the commonality of the variance. Secondly, total items were modeled as variables of a cause expressive of the process effect (Malhotra et al., 2006).

5. Results and Discussions

5.1 Assessment of Measurement Model

The research was evaluated with the validation of the measurement model. This evaluation included assessing item reliability, convergent validity (individual item reliability), and discriminate validity. Convergent validity was used to determine if the chosen items accurately reflected the corresponding factor, while discriminant validity was used to determine if each couple of elements were suggestively different (Yurdugul and Alsancak Sarikaya, 2013).

Table 2. Results of reliability test.

Latent Variable	Item *	Standardized Loading	Average Variance Extracted	Composite Reliability	α Value
Ubiquitous connection (UC)	UC 1	0.731	0.69	0.89	0.88
	UC 2	0.798			
	UC 3	0.801			
Context-aware (CA)	CA 1	0.784	0.67	0.90	0.87
	CA2	0.741			
	CA3	0.763			
Reputation (RE)	RE 1	0.701	0.72	0.90	0.88
	RE 2	0.698			
	RE 3	0.665			
Familiarity (FA)	FA 1	0.732	0.70	0.86	0.84
	FA 2	0.684			
	FA 3	0.711			
Trust (TR)	TR 1	0.803	0.70	0.85	0.84
	TR 2	0.784			
	TR 3	0.787			
Social influence (SB)	SB 1	0.671	0.81	0.93	0.89
	SB 2	0.700			
	SB 3	0.734			
Acceptance of digital government(AM)	AM1	0.728	0.85	0.94	0.90
	AM 2	0.699			
	AM 3	0.703			

* Items are referred to as in Appendix A.

Table 3. Discriminant validity test.

	UC	CA	RE	FA	TR	SB	AM
UC	0.811						
CA	0.041	0.774					
RE	−0.042	0.200	0.711				
FA	−0.156	0.411	0.501	0.785			
TR	0.340	0.008	−0.054	0.409	0.721		
SB	0.167	0.147	0.117	−0.112	0.203	0.732	
AM	0.073	0.201	0.212	0.082	−0.049	−0.118	0.848

The results of Table 4 show a weak fitness indicated by the goodness of fit index (GFI) of 0.704 and the root mean square error of approximation (RMSEA) of 0.138. These values are lower than 0.9 and higher than 0.08. respectively, indicating that CMV is not a significant problem in this research.

Table 4. Recommended and actual values of fit indices.

Fit Indices	Chi2/df	GFI	AGFI	CFI
Recommended Value (Baumgartner and Homburg, 1996)	<3	>0.90	>0.80	>0.90
CFA	2.15	0.939	0.901	0.966
Structural model	2.15	0.927	0.901	0.966

Note: The performance of the model was evaluated using the Chi-square to degrees of freedom ratio (Chi2/df), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Comparative Fit Index (CFI), Normed Fit Index (NFI), Standardized Root Mean Square Residual (SRMR), and Root Mean Square Error of Approximation (RMSEA).

5.2 Evaluation of Structural Model

The proposed research model was evaluated by creating a structural model with the LISREL software. Tables 4 and 5 present the recommended and actual values of fit indices, as well as the path coefficients and their significance. The assessment focused on the calculation of the standardized coefficients (β) to measure the strength of the relationship between two variables. The results of the study showed that a ubiquitous connection of digital governments had a substantial constructive effect on social influence (β=0.27, P<0.01), consequently supporting Hypothesis 1.2. Yet, it had no substantial positive effect on trust (β=-0.07), thus failing to support Hypothesis 1.1. Furthermore, the path coefficients of context-aware to trust and social influence were both significant at the P<0.001 level, thus validating Hypotheses 2.1 and 2.2. Additionally, coefficients of reputation to trust and social benefit were found to be statistically significant with P-values of less than 0.001 and 0.05 respectively, confirming Hypotheses 3.1 and 3.2. The results revealed that familiarity had a significant positive effect on trust (β=0.27, P<0.05), thus confirming Hypothesis 4.1. Surprisingly, familiarity had no significant positive effect on social influence (β=-0.09), thus failing to support Hypothesis 4.2. The path coefficient of trust to social influence was not significant (β=0.06), thus failing to confirm Hypothesis 5.1. However, the two hypothesized paths from trust and social influence to acceptance intention were both significant at P<0.01 and P<0.001 levels, thus validating Hypotheses 5.2 and 5.3.

Table 5. Path coefficients and their significance

Hypothesis	Path	Co-efficient *β*	Supported or not
H 1.1	Ubiquitous connection → trust	0.07	Not supported
H 1.2	Ubiquitous connection → social influence	0.27*	Supported
H 2.1	Context-aware → trust	0.16**	Supported
H 2.2	Context-aware → social influence	0.31**	Supported
H 3.1	Reputation → trust	0.24*	Supported
H 3.2	Reputation → social influence	0.35*	Supported
H 4.1	Familiarity → trust	0.27*	Supported
H 4.2	Familiarity → social influence	-0.11	Not supported
H 5.1	Trust → social influence	0.06	Not supported
H 5.2	Trust → acceptance intention	0.37**	Supported
H 5.3	Social influence → acceptance intention	0.22*	Supported

P<0.05, * P<0.01, ** P<0.001

6. Conclusions

6.1 Theorey Implications

This research provides both theoretical and practical findings about digital government. Theoretically, this research extends the TAM by examining the guidance of ubiquitous, reputation, and familiarity on engagement with trust and social influence. The findings in this research showed that ubiquitous connection has a considerable impact on social influence, but no significant effect on trust. Additionally, context awareness and reputation were found to have a significant influence on both trust and social influence in online digital governments. Familiarity, as a key element of SNS, directly affects trust but does not directly affect social influence. However, it affects acceptance intention through the path of trust. By conceptually and empirically distinguishing between the variables, valuable insight was gained for individual contributions to the acceptance of the digital government. Practically, the findings provide a novel finding of the relationship between context awareness, ubiquitous connection on trust concern, and social benefit in online service behaviors. This research helps to inform the design of digital government services, as well as the development of strategies to increase user acceptance and trust.

The findings of this research coincide with previous studies (e.g., Noh et al.), showing that the variables in the framework are related to social benefit and trust in digital governments, leading to action. This indicates that digital government distinguishes the concepts and empirical proof associated with the variables, and more understanding of individual influences is required for the acceptance of the digital government. The results did not support hypothesis H1.1, which proposed that ubiquitous connection would harm trust. The ubiquity of connection enables governments to better monitor and protect their citizens' data, making them trust that their data is secured. This consequence is constant with previous works (Lin, 2013; Yadav et al., 2013). However, the social benefit is a mediating factor between the ubiquity of digital connections and the acceptance of digital governments. The results outspread the TAM by suggesting that better context awareness can expand the social benefit and trust of digital government users (Hsu and Rahayu, 2014). When people are aware of the context of their surroundings, they are more likely to use portable applications in a socially conscious and trusting manner. Understanding the environment and context of a situation helps people make better decisions and interact with others more respectfully.

The findings indicate that citizens consider the reputation of digital governments as a key factor in avoiding risks such as fraud, which in turn affects their trust. This is in line with previous research on reputation, social influence, and trust (Ha, 2012; Park et al., 2014). H4.2 is not supported, as familiarity with online government services does not necessarily lead to a positive social influence. The adverse awareness of the services is often resulted in, as people may become frustrated with the absence of suitability or the difficulty of navigating the website. Additionally, the lack of trust in the government leads to a lack of trust in the services and to a further decrease in the social influence of the services. This research result indicates that citizens of websites with good reputations can have a positive impact on society, and the digital government is looking to capitalize on this. Trust is a vital variable in any relationship, and it is no different when it comes to online government services. Without trust, citizens may not feel comfortable using online government services, which leads to a decrease in social influence. It is also indicated that citizens are likely to become more engaged with their peers and acquaintances on familiar websites after taking action, likely resulting in an increased level of sharing. Leek and Christodoulides (2011) demonstrated that social influences have a positive effect on the commitment perception and acceptance intention of users. This is especially true in the context of digital government, where social influence is seen as a major factor in online social interactions. Therefore, it is important to ensure that digital governments foster respect and social contact to strengthen the acceptance intention of users.

6.2 Practical Implications

This research suggests that trust and social influences have in purchase intention in digital governments. Ubiquitous connection and familiarity do not directly affect trust, but rather, social influence acts as a mediator in influencing acceptance. Practitioners can have a better understanding of how trust and social influence can impact purchase intention based on this research. Familiarity and trust can improve engagement, and digital governments emphasize growing the social benefits of citizens rather than collective ubiquitous connection and familiarity to enhance trust. Governments must build trust and be mindful of citizens' needs when creating digital services. Furthermore, to effectively support digital government initiatives, officials need to raise positive associations with citizens through sociable communication. This escalates social benefits and trust, both of which are critical for the success of any digital government marketing strategy.

6.3 Limitations and Future Research

This investigation has limitations taken into consideration. Firstly, the objects were confined to citizens of one country, where digital government services are rapidly developing and exceed those of urbanized governments. Consequently, future investigations need to include a broader range of digital government users. Secondly, the questionnaire used in this research was adopted from existing research, so there may have been inaccuracies in the variables. Finally, when conducting future studies, it is important to consider the potential for common method variance (CMV) since the data for the independent and dependent variables were collected simultaneously through online questionnaires.

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Appendix A: Measurement scales and items

Ubiquitous connection (UC), adapted from Lee (2005)
UC1: I can use digital government services anywhere.
UC2: I can use digital government services anytime.
UC3: I can use digital government services at any time from anywhere.
Context-aware (CA), adapted from Lee (2005)
CO1: This digital government service offers understandable info to me.
CO2: This digital government service offers specific location info to me.
CO3: This digital government service can offer the ideal services based on my benefits and position.
Reputation (RE), adapted from Kim and Park (2013)
RE1: This digital government service is popular.
RE2: This digital government service has a decent reputation.
RE3: I am acquainted with this digital government service.
Familiarity (FA), Adapted from Ng (2013)
FA 1: My friends use this digital government service through information exchanges.
FA 2: My friends will share experiences with this digital government service.
FA 3: I maintain an active dialogue with each individual who uses this digital government service.
Trust (TR), adapted from Ng (2013)
TR1: I am comfortable engaging with the social network community and I am feeling great.
TR2: I have faith in the support and feedback I receive from my social network (e.g., friends, and relatives) when I communicate with them.
TR3: I expect that my online social connections would always be supportive of me and my interests.
Social influence (SB), developed by authors.
SB1: This digital government service offers me the opportunity to make beneficial social connections.
SB2: I find joy in discussing my reading experiences with my friend.
SB3: I find it helpful to seek advice from my peers when I am reading online..
Acceptance of digital government service (AM), adapted from Ng (2013) and Kim and Park (2013)
AM1: I have a strong desire to use this digital government service if it is recommended by my social network contacts.
AM2: I have no qualms in trusting the advice and feedback of my friend when deciding to use this digital government service.
AM3: It is likely that I will soon be taking advantage of this digital government service by making purchases through it.

References

1. Baltrunas, L., Ludwig, B., Peer, S., & Ricci, F. (2012). Context relevance assessment and exploitation in mobile recommender systems. *Personal and Ubiquitous Computing*, *16*, 507–526.
2. Baumgartner, H., & Homburg, C. (1996). Applications of structural equation modeling in marketing and consumer research: A review. *International Journal of Research in Marketing*, *13*, 139–161.
3. Bianchi, C., & Andrews, L. (2012). Risk, trust, and consumer online purchasing behavior: a Chilean perspective. *International Marketing Review*, *29*, 253–276.
4. Casal , L.V., Flavi N.C., & Guinal, U.M. (2013). New members' integration: Key factor of success in online travel communities. *Journal of Business Research*, *66*, 706–710.
5. Chakravarty, A., Liu, Y., & Mazumdar, T. (2010). The Differential Effects of Online Word-of-Mouth and Critics' Reviews on Pre-release Movie Evaluation. *Journal of Interactive Marketing*, *24*, 185–197.
6. Dong, W. (2014). Factors influencing mobile reading behavior of college students and service strategies. *Journal of Jiaxing University*, *26*, 136–143. (in Chinese)
7. Ecker, U.K.H., Zimmer, H.D., Groh-Bordin, C., & Mecklinger, A. (2007). Context effects on familiarity are familiarity effects of context — An electrophysiological study. *International Journal of Psychophysiology*, *64*, 146–156.

8. Gallego, D., & Huecas, G. An empirical case of a context-aware mobile recommender system in a banking environment. In Proceedings of the IEEE 2012 Third FTRA International Conference on Mobile, Ubiquitous, and Intelligent Computing (MUSIC), Vancouver, Canada, June 26–28, 2012; pp. 13–20.
9. Gao, H., & Liu, D. (2014). Relationship of trustworthiness and relational benefit in electronic catalog markets. *Electronic Markets*, *24*, 67–75.
10. Gao, L., Waechter, K.A., & Bai, X. (2015). Understanding consumers' continuance intention towards mobile purchase: A theoretical framework and empirical study–A case of China. *Computers in Human Behavior*, *53*, 249–262.
11. Gatautis, R., & Medziausiene, A. (2014). Factors Affecting Social Commerce Acceptance in Lithuania. *Procedia - Social and Behavioral Sciences*, *110*, 1235–1242.
12. Gefen, D., Karahanna, E., & Straub, D.W. (2003) Trust and TAM in online shopping: An integrated model. *Mis Quarterly*, *27*, 51–90.
13. Gr Nli, T.-M., Ghinea, G., & Younas, M. (2014) Context-aware and automatic configuration of mobile devices in cloud-enabled ubiquitous computing. *Personal and Ubiquitous Computing*, *18*, 883–894.
14. Ha, H.Y. (2012) The effects of online shopping attribute on satisfaction-purchase intention link: a longitudinal study. *International Journal of Consumer Studies*, *36*, 327–334.
15. Hansen, H., Samuelsen, B.M., & Silseth, P.R. (2008) Customer perceived value in B-t-B service relationships: Investigating the importance of corporate reputation. *Industrial Marketing Management*, *37*, 206–217.
16. Herbig, P., & Milewicz, J. (1997) The relationship of reputation and credibility to brand success. *Pricing Strategy and Practice*, *5*, 25–29.
17. Hill, W.W., Beatty, S.E., & Walsh, G. (2013) A segmentation of adolescent online users and shoppers. *Journal of Services Marketing*, *27*, 347–360.
18. Hsu, H.-H., & Rahayu, W. (2014) Theme issue on location and context-aware services. *Personal and Ubiquitous Computing*, *18*, 259–260.
19. Hung, K.H., & Li, S.Y. (2007) The influence of eWOM on virtual consumer communities: Social capital, consumer learning, and behavioral outcomes. *Journal of Advertising Research*, *47*, 485–495.
20. Kaplan, A.M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, *53*, 59–68.
21. Kim, D. (2013). Under what conditions will social commerce business models survive? *Electronic Commerce Research and Applications*, *12*, 69–77.
22. Kim, D.J. (2012). An investigation of the effect of online consumer trust on expectation, satisfaction, and post-expectation. *Information Systems and E-Business Management*, *10*, 219–240.
23. Kim, D.J., Ferrin, D.L., & Rao, H.R. (2009a). Trust and Satisfaction, Two Stepping Stones for Successful E-Commerce Relationships: A Longitudinal Exploration. *Information Systems Research*, *20*, 237–257.
24. Kim, J., Jin, B., & Swinney, J.L. (2009b). The role of etail quality, e-satisfaction and e-trust in online loyalty development process. *Journal of Retailing and Consumer Services*, *16*, 239–247.
25. Kim, M.J., Chung, N., & Lee, C.K. (2011). The effect of perceived trust on electronic commerce: Shopping online for tourism products and services in South Korea. *Tourism Management*, *32*, 256–265.
26. Kim, S., & Park, H. (2013). Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance. *International Journal of Information Management*, *33*, 318–332.
27. Landeta, J. (2006). Current validity of the Delphi method in social sciences. *Technological Forecasting and Social Change*, *73*, 467–482.
28. Lee, H.C., Wang, C.Y., & Hong, R.S. (2013). The factors influencing adolescents' purchase intentions of state-of-the-art cell phones in Taiwan. Service Business, 7, 713–734.
29. Lee, T. (2005). The impact of perceptions of interactivity on customer trust and transaction intentions in mobile commerce. *Journal of Electronic Commerce Research*, *6*, 165-180.
30. Lee, Y., & Kwon, O. (2011). Intimacy, familiarity and continuance intention: An extended expectation–confirmation model in web-based services. *Electronic Commerce Research and Applications*, *10*, 342–357.
31. Leek, S., & Christodoulides, G. (2011). Brands: Just for consumers? Introduction to the special issue on B2B branding. *Industrial Marketing Management*, *40*, 1060–1062.
32. Lin, Y.C. (2013). Evaluation of co-branded hotels in the Taiwanese market: the role of brand familiarity and brand fit. International Journal of Contemporary Hospitality Management, 25, 346-364.
33. Liu, H., Rieg, R., & Hu, Y. (2012). Performance Comparison Of Artificial Intelligence Methods For Predicting Cash Flow. *Neural Network World*, *22*, 549–564.
34. Liu, X., Datta, A., & Rzadca, K. (2013). Trust beyond reputation: A computational trust model based on stereotypes. *Electronic Commerce Research and Applications*, *12*, 24–39.
35. Lu, Y., Zhao, L., & Wang, B. (2010). From virtual community members to C2C e-commerce buyers: Trust in virtual communities and its effect on consumers' purchase intention. *Electronic Commerce Research and Applications*, *9*, 346–360.

36. Malhotra, N.K., Kim, S.S., & Patil, A. (2006). Common method variance in IS research: A comparison of alternative approaches and a reanalysis of past research. *Management Science*, *52*, 1865–1883.
37. Martin, H.S., & Herrero, A. (2012). Influence of the user's psychological factors on the online purchase intention in rural tourism: Integrating innovativeness to the UTAUT framework. *Tourism Management*, *33*, 341–350.
38. Mccorkindale, T., & Morgoch, M. (2013). An analysis of the mobile readiness and dialogic principles on Fortune 500 mobile websites. *Public Relations Review*, *39*, 193–197.
39. Ng, C.S.P. (2013). Intention to purchase on social commerce websites across cultures: A cross-regional study. *Information & Management*, *50*, 609–620.
40. Ngai, E.W., & Gunasekaran, A. (2007). A Review For Mobile Commerce Research And Applications. *Decision Support Systems*, *43*, 3–15.
41. Noh, M., Lee, K., Kim, S., & Garrison, G. (2013). Effects Of Collectivism On Actual S-Commerce Use And The Moderating Effect Of Price Consciousness. *Journal of Electronic Commerce Research*, *14*, 244–260.
42. Pagani, M., & Mirabello, A. (2011). The Influence of Personal and Social-Interactive Engagement in Social TV Web Sites. International Journal of Electronic Commerce, 16, 41–67.
43. Pallapa, G., Das, S.K., Di Francesco, M., & Aura, T. (2014). Adaptive and context-aware privacy preservation exploiting user interactions in smart environments. *Pervasive and Mobile Computing*, *12*, 232–243.
44. Panniello, U., Gorgoglione, M., & Tuzhilin, A. (2016). Research Note—In CARSs We Trust: How Context-Aware Recommendations Affect Customers' Trust and Other Business Performance Measures of Recommender Systems. *Information Systems Research*, *27*, 182–196.
45. Panniello, U., Tuzhilin, A., & Gorgoglione, M. (2014). Comparing context-aware recommender systems in terms of accuracy and diversity. *User Modeling and User-Adapted Interaction*, 24, 35–65.
46. Park, I., Bhatnagar, A., & Rao, H.R. (2010). Assurance Seals, On-Line Customer Satisfaction, and Repurchase Intention. *International Journal of Electronic Commerce*, *14*, 11–34.
47. Park, J., Lee, H., & Kim, C. (2014). Corporate social responsibilities, consumer trust and corporate reputation: South Korean consumers' perspectives. *Journal of Business Research*, *67*, 295–302.
48. Pavlou, P.A., & Fygenson, M. (2006) Understanding and predicting electronic commerce adoption: An extension of the theory of planned behavior. *Mis Quarterly*, *30*, 115–143.
49. Premazzi, K., Castaldo, S., Grosso, M., & Hofacker, C. (2010). Supporting retailers to exploit online settings for internationalization: The different role of trust and compensation. *Journal of Retailing and Consumer Services*, *17*, 229–240.
50. Qu, Z., Wang, Y.W., Wang, S., & Zhang, Y.H. (2013). Implications of online social activities for e-tailers' business performance. *European Journal of Marketing*, *47*, 1190–1212.
51. Ratcliffe, M. (2002). Heidegger's attunement and the neuropsychology of emotion. *Phenomenology and the Cognitive Sciences*, *1*, 287–312.
52. Raus, M., Liu, J., & Kipp, A. (2010). Evaluating IT innovations in a business-to-government context: A framework and its applications. *Government Information Quarterly*, *27*, 122–133.
53. Shafiq, R., Raza, I., & Zia-Ur-Rehman, M. (2011). Analysis of the factors affecting customers' purchase intention: The mediating role of perceived value. *African Journal of Business Management*, *5*, 10577–10585.
54. Shankar, V., Smith, A.K., & Rangaswamy, A. (2003). Customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing*, *20*, 153–175.
55. Shi, Y., Sia, C.L., & Chen, H. (2013). Leveraging social grouping for trust building in foreign electronic commerce firms: An exploratory study. *International Journal of Information Management*, *33*, 419–428.
56. Sohn, D. (2014). Coping with information in social media: The effects of network structure and knowledge on perception of information value. *Computers in Human Behavior*, *32*, 145–151.
57. Sotiriadis, M.D., & Van Zyl, C. (2013). Electronic word-of-mouth and online reviews in tourism services: the use of twitter by tourists. *Electronic Commerce Research*, *13*, 103–124.
58. Steenhaut, S., & Van Kenhove, P. (2006). An empirical investigation of the relationships among a consumer's personal values, ethical ideology and ethical beliefs. *Journal of Business Ethics*, *64*, 137–155.
59. Stephen, A.T., & Toubia, O. (2009). Explaining the power-law degree distribution in a social commerce network. *Social Networks*, *31*, 262–270.
60. Teo, T., & Noyes, J. (2011). An assessment of the influence of perceived enjoyment and attitude on the intention to use technology among pre-service teachers: A structural equation modeling approach. *Computers & Education*, *57*, 1645–1653.
61. Tsai, Y.C., & Yeh, J.C. (2010). Perceived risk of information security and privacy in online shopping: A study of environmentally sustainable products. *African Journal of Business Management*, *4*, 4057–4066.
62. Vazquez-Carrasco, R., & Foxall, G.R. (2006). Influence of personality traits on satisfaction, perception of relational benefits, and loyalty in a personal service context. *Journal of Retailing and Consumer Services*, *13*, 205–219.

63. Valvi, A.C., & West, D.C. (2013). E-Loyalty Is Not All About Trust, Price Also Matters: Extending Expectation-Confirmation Theory In Bookselling Websites. *Journal of Electronic Commerce Research*, *14*, 99–123.
64. Veloutsou, C., & Moutinho, L. (2009). Brand relationships through brand reputation and brand tribalism. *Journal of Business Research*, *62*, 314–322.
65. Venkatesh, V., & Speier, C. (2000). Creating an effective training environment for enhancing telework. *International Journal of Human-Computer Studies*, *52*, 991–1005.
66. Williams, C.C., & Martinez-Perez, A. (2014). Why do consumers purchase goods and services in the informal economy? *Journal of Business Research*, *67*, 802–806.
67. Yu, Y.-W., Lin, Y.-T., Chen, Y.-H., & Chen, J.K.C. (2010). The exploration of B2B e-auction adaptation strategy in Taiwan. In Proceedings of the 2010 Portland International Conference on Management of Engineering & Technology (PICMET 2010), Phuket, Thailand, July 12-18, 2010.
68. Yadav, M.S., De Valck, K., Hennig-Thurau, T., Hoffman, D.L. & Spann, M. (2013). Social Commerce: A Contingency Framework for Assessing Marketing Potential. *Journal of Interactive Marketing*, *27*, 311–323.
69. Yang, F.X. (2013). Effects of restaurant satisfaction and knowledge sharing motivation on eWOM intentions: the moderating role of technology acceptance factors. *Journal of Hospitality & Tourism Research*, 1096348013515918.
70. Yen, N.Y., Park, J.J., Jin, Q., & Shih, T.K. (2013). Modeling user-generated contents: an intelligent state machine for user-centric search support. *Personal and Ubiquitous Computing*, *17*, 1731–1739.
71. Yoganarasimhan, H. (2012) Impact of social network structure on content propagation: A study using YouTube data. *Qme-Quantitative Marketing and Economics*, *10*, 111–150.
72. Yurdugul, H., & Alsancak Sarikaya, D. (2013) The Scale of Online Learning Readiness: A Study of Validity and Reliability. *Egitim Ve Bilim-Education and Science*, *38*, 391–406.
73. Zhang, H., Lu, Y., Gupta, S., & Zhao, L. (2014) What motivates customers to participate in social commerce? The impact of technological environments and virtual customer experiences. *Information & Management*, *51*, 1017–1030.
74. Zhang, L., & Ma, W. (2011) Correlation analysis between users' educational level and mobile reading behavior. *Library Hi Tech*, *29*, 424–435.
75. Zheng, X., Zhu, S., & Lin, Z. (2013) Capturing the essence of word-of-mouth for social commerce: Assessing the quality of online e-commerce reviews by a semi-supervised approach. *Decision Support Systems*, *56*, 211–222.
76. Zhou, L., Zhang, P., & Zimmermann, H.-D. (2013) Social commerce research: An integrated view. *Electronic Commerce Research and Applications*, *12*, 61–68.