Exploring Users' Continuance Intention Towards Mobile SNS: A Mobile Value Perspective

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Abstract. The functionalities of most Social Networking Sites allow users to enjoy practical benefits like maintaining important social and business relationships, communicating with others, and getting feedback on important shared information. However, the place of SNSs as a source of entertainment and enjoyment is also well-documented. The purpose of the paper is to identify the factors that predict continuance use of social networking sites from the perspective of mobile value. Data was collected from 452 students in three leading universities in Ghana and analyzed with Partial Least Square-Structural Equation Modeling. Results from the study revealed that both hedonic value and utilitarian value were significant predictors of continuance intention. Satisfaction was also found to be a significant predictor of continuance intention. In all, the model accounted for 55.6% of the variance in continuance intention. The study also provides important contributions to the literature, by demonstrating the significance of both utilitarian and hedonic value in leading to satisfaction with the usage of mobile SNS services. The implications and limitations of the current study are discussed and directions for future research proposed.

Keywords: Social networking sites · Hedonic value · Utilitarian value
Satisfaction · Continuance intention

1 Introduction

The motivations for consumption have been evolving in recent years. Whereas consumers previously made consumption decisions based on utilitarian considerations [1], customers now contemplate less functional and straightforward solutions to their needs

[2], favoring instead those value offerings which attend to their needs in a manner that entertains and addresses their emotional concerns also [3]. Such shifting values have spurred a flurry of research on what has been termed 'hedonic' values of consumers [4], with academics studying the effects of such motivations on traditional outcomes like loyalty [2], purchase intention [5], and quality perceptions [6], among others. This dichotomy of desired value has also been considered in the online context, with some researchers examining how utilitarian and hedonic motivations affect the usage of online services [7].

Moreover, the advent of social networking sites (SNS) has provided a unique context in which such perceptions of value can be assessed. López and Ruiz [8] and van der Heijden [9] propose that users on social media are motivated by both utilitarian and hedonic factors. For instance, the functionalities of most SNSs allow users to enjoy practical benefits like maintaining important social and business relationships [10], communicating with others [11], and getting feedback on important shared information [12]. However, the place of SNSs as a source of entertainment and enjoyment is also well-documented in the literature [13]. More relevantly, an increasing number of consumers access SNSs on mobile devices [14], and academics like Zhou et al. [15] opine that such mobile SNS is distinct from traditionally-accessed SNSs. This provides an important gap in the literature for researchers who seek to comprehend how such mobile application of an existing phenomenon may result in different consumer responses.

2 Literature Review

2.1 Continuance

One of the more important results of brands' marketing efforts is continued patronage from their customers. Sufficient evidence from existing literature indicates that it is much more expensive for organizations to serve and satisfy existing customers than for them to find new ones [16]. As such, it has been important for organizations to retain their consumers and encourage them to continue their purchase and/or engagement behavior. Antecedents of such continuance behavior have been studied in the literature, and include a number of constructs like, most pertinently, perceived value and customer satisfaction. For instance, Patterson and Spreng [17] and Pura [18] found a direct relationship between consumers' perceived value and their intention to continue the usage of services. Again, the role of satisfaction in leading to continuance intention has been observed by researchers in electronic contexts like self-service technology [19], mobile payment services [20], and the usage of Web 2.0 services [21], among others. Studies specific to mobile applications of social networking sites are still nascent, though, and there therefore remains significant gaps to be filled in the literature.

2.2 Mobile Value

Mobile technology has become a focal issue in both research and practice as it has gained a foothold among consumers of various brands. Kim [22] observed that a large proportion

of users now access internet services using mobile devices. This has been made possible by the increasing quality of mobile devices which provide immersive experiences that even larger screens and devices may not offer [15]. Indeed, prior literature has established that users' satisfaction with mobile internet usage and intention to continue use is largely dependent on their perceptions of its quality [6]. It is little wonder then that research from the consumer perspective has sought to identify and understand the perceived value gained from the usage of mobile internet services [23]. This has been referred to as mobile value, and Kim and Hwang [6] observe that in the consumer behavior literature, users typically enjoy two forms of mobile value: hedonic value, and utilitarian value [1]. These value perceptions have been found to be important predictors of consumer behavior, such as mobile internet adoption [24] and customer satisfaction [25].

3   Hypotheses Development

3.1   Hedonic Value (HV)

One form of mobile value, as has been previously mentioned, is hedonic value, which the literature identifies as "consumers' enjoyment of the shopping experience itself" [2]. Such value is motivated by the desire to be immersed in the world of the brand or activity, such that pleasure is derived from the entire process of interacting with the brand. Within the information systems literature, such perceived hedonic value is a strong motivator for the usage of entertaining information systems [9]. Interestingly, Pöyry et al. [7] identify that users with hedonic motivations may participate more on a brand's Facebook page, but have much less intention to purchase than utilitarian users who are silent browsers. Thus, it is evident that hedonic value can and does affect consumer behavior, but there remains the need for how the relationships work in various contexts. Hence, though Eroglu et al. [26] found that hedonic value is a stronger predictor of satisfaction than utilitarian value, and Chiu et al. [27] found that hedonic value is a significant indicator of consumer continuance intention, these results have not been substantiated in the mobile SNS context. Thus, the current study puts forth that:
H1:   Hedonic value significantly predicts satisfaction
H2:   Hedonic value significantly predicts user continuance intention.

3.2   Utilitarian Value

On the other hand, utilitarian value has been described in the literature as merely functional, attained from consumer attitude and behavior which may even "be thought of as work" [28]. It stems from the pursuit of a specific outcome in participating in an interaction with the brand or activity in question. Utilitarian perspectives have been used to explain user behavior for several years, and while the literature has pointed out its inability to comprehensively explain consumption patterns [1], its importance in predicting user variables remains uncontested. Anderson et al. [2], for instance, found that utilitarian motivations are an important part of users' participation in retail pages on Facebook, citing specific motivations like time savings and information access.

Interestingly, Babin et al. [4] and Ryu et al. [28] both found utilitarian value to be stronger than the hedonic in resulting in satisfaction. In leading to continuance intention, also, and Ryu et al. [28] found utilitarian value to be greater than hedonic in the restaurant sector. As there is little evidence within the mobile SNS context, however, the current study proposes that:

H3:   Utilitarian value significantly predicts satisfaction

H4:   Utilitarian value significantly predicts user continuance intention.

3.3   Satisfaction (SAT)

Satisfaction is a crucial element of marketing because of its prediction of several other desirable metrics for marketers [29]. Basically understood as the consumer's evaluation of the actual product or service as compared to their expectations of it [30], satisfaction begins and ends with the consumer, and is necessarily based on their perceptions of the value they have benefitted from. Satisfaction is often linked to continuance intention in the literature e.g. [29, 31], as a user is most likely to return to a product or service only when they are confident that it provides the value they seek for the sacrifices they made for it [17]. Researchers like Ryu et al. [28] and Namkung and Jang [32] concur on the importance of such a relationship. In the mobile SNS literature, however, the link has not often been confirmed. Moreover, the place of satisfaction as a possible mediator in the perceived value-continuance intention relationship remains murky.

The current study therefore hypothesizes that:

H5:   Satisfaction significantly predicts continuance intention.

4   Methodology

The items for the latent variables used in this study were drawn from previous studies and the questions were reworded to fit the social networking context. Items for hedonic value and utilitarian value were derived from Lin and Lu [33]. Satisfaction and continuance intention on the other hand were derived from Bhattacherjee [34]. The measurement instrument had 18 items in all. Items were presented in English and measured using a 5-point Likert scale anchored between 1 (Strongly Disagree) and 5 (Strongly Agree). Survey data was collected over a period of 5 days from students in three universities in Ghana using paper-based questionnaires. Data from 452 responses were used for the analysis. Of this number 209 were male and 243 were females.

5   Results and Analysis

Data were analyzed using the Partial Least Square-Structural Equation Modeling. Using the two-step process recommended by Chin [35], we first analyzed the measurement model and then went on to test the measurement model.

5.1   Measurement Model Assessment

The measurement model was assessed with reliability, convergent validity and discriminant validity. As recommended by Henseler et al. [36] it can be seen from Table 1 that all the latent variables are reliable since the values of both Cronbach's alpha and composite validity are compellingly higher than 0.7. Convergent validity was assessed with the Average Variance Extracted. Hair et al. [37] recommend that for convergent validity to be assured, AVE values must be greater than 0.5. Support for this is also provided in Table 1.

Table 1. Loadings-cross loadings and reliability statistics

	INT	HV	SAT	UV	α	CR	AVE
INT1	**0.902**	0.582	0.506	0.616	**0.922**	**0.944**	**0.810**
INT2	**0.927**	0.515	0.533	0.610			
INT3	**0.904**	0.425	0.501	0.553			
INT4	**0.864**	0.425	0.460	0.510			
HV1	0.459	**0.871**	0.241	0.494	**0.913**	**0.939**	**0.793**
HV2	0.471	**0.886**	0.283	0.477			
HV3	0.531	**0.913**	0.283	0.501			
HV4	0.477	**0.891**	0.294	0.465			
SAT1	0.412	0.229	**0.820**	0.287	**0.892**	**0.918**	**0.650**
SAT2	0.453	0.325	**0.820**	0.369			
SAT3	0.488	0.241	**0.848**	0.333			
SAT4	0.444	0.263	**0.779**	0.271			
SAT5	0.430	0.207	**0.785**	0.315			
SAT6	0.461	0.225	**0.783**	0.343			
UV1	0.563	0.454	0.355	**0.893**	**0.929**	**0.950**	**0.825**
UV2	0.569	0.488	0.357	**0.916**			
UV3	0.585	0.505	0.349	**0.918**			
UV4	0.602	0.526	0.386	**0.906**			

Note: α - Cronbach's Alpha, CR - Composite reliability, AVE - Average Variance Extracted, INT - Continuance intention, HV - Hedonic value, SAT - Satisfaction, UV - Utilitarian value

Discriminant validity was assessed using the Fornell –Larcker criterion, which states the square root of the AVE for each construct must be greater than the correlation between that construct and any other construct [38]. The results in Table 2 provide support for this criterion. In all, the results showed that the psychometric properties of the measures used in the study were adequate.

Table 2. Fornell-Larcker criterion

	INT	HV	SAT	UV
INT	**0.900**			
HV	0.545	**0.891**		
SAT	0.557	0.310	**0.806**	
UV	0.639	0.544	0.399	**0.908**

Note: Square root of AVEs are
shown on the diagonal in bold

5.2 Structural Model Assessment

In assessing the structural model we examined the magnitude significance and sign of the path coefficients. We also examined the overall fitness of our model. Results for the structural model assessment are provided in Table 3.

Table 3. Hypotheses testing of paths

Hypotheses	Path	Path coefficient	P values	Results
H1	HV → SAT	0.132	0.031	Supported
H2	HV → INT	0.238	0.000	Supported
H3	UV → SAT	0.327	0.000	Supported
H4	UV → INT	0.377	0.000	Supported
H5	SAT → INT	0.333	0.000	Supported
	Model fit			
	SRMR	0.047		

Hedonic value was found to have a significant positive effect on satisfaction ($\beta = 0.132$ $p = 0.031$) thereby providing support for H1. Hedonic values was again seen to have a positive effect on Continuance intention ($\beta = 0.238$ $p = 0.000$). Utilitarian value was also found to be significant predictor of satisfaction ($\beta = 0.327$ $p = 0.000$) and continuance intention ($\beta = 0.377$ $p = 0.000$) providing support for H3 and H4 respectively. Of the three predictors of continuance intention Utilitarian value is the most significant. Lastly satisfaction was found to be a significant predictor of continuance intention ($\beta = 0.333$ $p = 0.000$).

6 Discussions and Implications

The current study aimed to identify how consumers' perceptions of hedonic and utilitarian values affect their satisfaction with mobile social networking sites, as well as their continuance intention. The results of the study indicate that all proposed hypotheses were supported by the data. Firstly, it was found that the perception of both utilitarian and hedonic value from the mobile SNS are predictors of continuance

intention. The results of the study also indicate that utilitarian value is a stronger predictor of both customer satisfaction and continuance intention when it comes to mobile SNS applications. Though in a different context, these results are similar to those found by the likes of Babin et al. [4] and Ryu et al. [28]. It is therefore most important for brands and organizations to ensure that their mobile SNS pages meet the rational expectations of their users, providing useful and practical information, as this is what will keep consumers satisfied and draw them to keep coming back. It is also necessary for marketers to provide some hedonic value for users to enjoy pleasurable experiences on SNS pages, as our results show that such experiences are also useful in creating satisfaction and return visits.

The study has also provided important contributions to the literature, by demonstrating the significance of both utilitarian and hedonic value in leading to both satisfaction and continuance intention in the usage of mobile SNS services.

6.1   Limitations

The current study found some exciting result that endorses previous studies, however a few limitations must be taken into consideration when interpreting and generalizing results. First, data were collected from students in three universities in Ghana. Even though this sample represents a fairly typical band of SNS users it is still not representative of all SNS users. Secondly, our study employed a cross-sectional design, however, since user behavior changes over time it would be interesting to consider a longitudinal design in future studies.

References

1. Hirschman, E.C., Holbrook, M.B.: Hedonic consumption: emerging concepts, methods and propositions. J. Mark. **46**, 92 (1982)
2. Anderson, K.C., Knight, D.K., Pookulangara, S., Josiam, B.: Influence of hedonic and utilitarian motivations on retailer loyalty and purchase intention: a Facebook perspective. J. Retail. Consum. Serv. **21**, 773–779 (2014)
3. Batra, R., Ahtola, O.T.: Measuring the hedonic and utilitarian sources of consumer attitudes. Mark. Lett. **2**, 159–170 (1991)
4. Babin, B.J., Darden, W.R., Griffin, M.: Work and/or fun: measuring hedonic and utilitarian shopping value. J. Consum. Res. **20**, 644 (1994)
5. Jones, M.A., Reynolds, K.E., Arnold, M.J.: Hedonic and utilitarian shopping value: investigating differential effects on retail outcomes. J. Bus. Res. **59**, 974–981 (2006)
6. Kim, D.J., Hwang, Y.: A study of mobile internet user's service quality perceptions from a user's utilitarian and hedonic value tendency perspectives. Inf. Syst. Front. **14**, 409–421 (2012)
7. Pöyry, E., Parvinen, P., Malmivaara, T.: Can we get from liking to buying? Behavioral differences in hedonic and utilitarian Facebook usage. Electron. Commer. Res. Appl. **12**, 224–235 (2013)
8. López, I., Ruiz, S.: Explaining website effectiveness: the hedonic–utilitarian dual mediation hypothesis. Electron. Commer. Res. Appl. **10**, 49–58 (2011)

9. van der Heijden, H.: User acceptance of hedonic information systems. MIS Q. **28**, 695 (2004)

10. Aharony, N.: Relationships among attachment theory, social capital perspective, personality characteristics, and Facebook self-disclosure. Aslib J. Inf. Manag. **68**, 362–386 (2016)

11. Lipford, H.R., Wisniewski, P.J., Lampe, C., Kisselburgh, L., Caine, K.: Reconciling privacy with social media. In: Proceedings of the ACM 2012 Conference on Computer Supported Cooperative Work Companion - CSCW 2012, pp. 19–20 (2012)

12. Liu, D., Brown, B.B.: Self-disclosure on social networking sites, positive feedback, and social capital among Chinese college students. Comput. Hum. Behav. **38**, 213–219 (2014)

13. Lin, K., Lu, H.: Why people use social networking sites: an empirical study integrating network externalities and motivation theory. Comput. Hum. Behav. **27**, 1152–1161 (2011)

14. Xie, W.: Social network site use, mobile personal talk and social capital among teenagers. Comput. Hum. Behav. **41**, 228–235 (2014)

15. Zhou, T., Li, H., Liu, Y.: The effect of flow experience on mobile SNS users' loyalty. Ind. Manag. Data Syst. **110**, 930–946 (2010)

16. Berry, L.L.: Relationship marketing of services perspectives from 1983 and 2000. J. Relatsh. Mark. **1**, 59–77 (2002)

17. Patterson, P.G., Spreng, R.A.: Modelling the relationship between perceived value, satisfaction and repurchase intentions in a business-to-business, services context: an empirical examination. Int. J. Serv. Ind. Manag. **8**, 414–434 (1997)

18. Pura, M.: Linking perceived value and loyalty in location-based mobile services. Manag. Serv. Qual. Int. J. **15**, 509–538 (2005)

19. Chen, S.-C., Chen, H.-H.: The empirical study of customer satisfaction and continued behavioural intention towards self-service banking: technology readiness as an antecedent. Int. J. Electron. Financ. **3**, 64–76 (2009)

20. Zhou, T.: An empirical examination of continuance intention of mobile payment services. Decis. Support Syst. **54**, 1085–1091 (2013)

21. Chen, S.C., Yen, D.C., Hwang, M.I.: Factors influencing the continuance intention to the usage of Web 2.0: an empirical study. Comput. Hum. Behav. **28**, 933–941 (2012)

22. Kim, B.: Understanding antecedents of continuance intention in social-networking services. Cyberpsychol., Behav. Soc. Netw. **14**, 199–205 (2011)

23. Chun, H., Lee, H., Kim, D.: The integrated model of smartphone adoption: hedonic and utilitarian value perceptions of smartphones among Korean college students. Cyberpsychol., Behav. Soc. Netw. **15**, 473–479 (2012)

24. Kim, H.-W., Chan, H.C., Gupta, S.: Value-based adoption of mobile internet: an empirical investigation. Decis. Support Syst. **43**, 111–126 (2007)

25. McDougall, G.H.G., Levesque, T.: Customer satisfaction with services: putting perceived value into the equation. J. Serv. Mark. **14**, 392–410 (2000)

26. Eroglu, S.A., Machleit, K., Barr, T.F.: Perceived retail crowding and shopping satisfaction: the role of shopping values. J. Bus. Res. **58**, 1146–1153 (2005)

27. Chiu, C.-M., Wang, E.T.G., Fang, Y.-H., Huang, H.-Y.: Understanding customers' repeat purchase intentions in B2C e-commerce: the roles of utilitarian value, hedonic value and perceived risk. Inf. Syst. J. **24**, 85–114 (2014)

28. Ryu, K., Han, H., Jang, S. (Shawn): Relationships among hedonic and utilitarian values, satisfaction and behavioral intentions in the fast-casual restaurant industry. Int. J. Contemp. Hosp. Manag. **22**, 416–432 (2010)

29. Cronin, J., Brady, M., Hult, G., Tomas, M.: Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. J. Retail. **76**, 193–218 (2000)

30. Anderson, E.W., Sullivan, M.W.: The antecedents and consequences of customer satisfaction for firms. Mark. Sci. **12**, 125–143 (1993)
31. Zhao, L., Lu, Y., Zhang, L., Chau, P.Y.K.: Assessing the effects of service quality and justice on customer satisfaction and the continuance intention of mobile value-added services: an empirical test of a multidimensional model. Decis. Support Syst. **52**, 645–656 (2012)
32. Namkung, Y., Jang, S.: Does food quality really matter in restaurants? Its impact on customer satisfaction and behavioral intentions. J. Hosp. Tour. Res. **31**, 387–409 (2007)
33. Lin, K.-Y., Lu, H.-P.: Predicting mobile social network acceptance based on mobile value and social influence. Internet Res. **25**, 107–130 (2015)
34. Bhattacherjee, A.: Understanding information system continuance: an expectation confirmation model. MIS Q. **25**, 351–370 (2001)
35. Chin, W.W.: The partial least squares approach to structural equation modeling. In: Modern Methods for Business Research, pp. 295–336 (1998)
36. Henseler, J., Hubona, G., Ray, P.A.: Using PLS path modeling in new technology research: updated guidelines. Ind. Manag. Data Syst. **116**, 2–20 (2016)
37. Sarstedt, M., Ringle, C.M., Smith, D., Reams, R., Hair, J.F.: Partial least squares structural equation modeling (PLS-SEM): a useful tool for family business researchers. J. Fam. Bus. Strateg. **5**, 105–115 (2014)
38. Fornell, C., Larcker, D.F.: Evaluating structural equation models with unobservable variables and measurements error. J. Mark. Res. **18**, 39–50 (1981)