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Post-Adoption Behavior of Digital Media: The Merge of U&G Theory and Affect Event Theory

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Abstract

We incorporate two streams of IS research: 1) the quality of the systems in determining systems success and 2) the effects of online incidents including online waiting interruptions and service failures on consumer behaviors, to understand three post-adoption behaviors in the use of digital media; continuance intention, recommendation, and complaint. We investigate digital media use from the perspectives of affective events theory and U & G motivations. The results of PLS analysis with 415 responses from an online survey suggest that usage behaviors are determined by perceived site quality and cognitive appraisal of incidents handling (CAIH) and satisfaction mediated the effect of positive and negative affects to post-adoption behaviors. Information and Entertainment motivations are two salient motivations of digital media use. However, interactivity shows no effect to satisfaction of digital media use. CFA and path analysis attest the dimensionality of constructs and the structure relationships of the integrated model.

Keywords: Uses and Gratifications Theory, Motivation, Post-Adoption Behavior, Affective Event Theory, Positive Affect, Negative Affect

1. INTRODUCTION

Digital media refer to audio, video, and images that exist in a computer-readable format, and can reside on a local device (CD, DVD, hard drive), or remote location (Website) (University of Guelph, 2006). Using digital media (e.g., YouTube) has become increasingly popular in recent years. The statistic results show that the weekly digital and traditional media consumption in the United States in fall 2013, by medium type and age: generation Xers (aged 35 to 49 years) spent an average of 30 hours per week with digital media and 36 hours per week with traditional media (Statista 2015a). The share of average time spent per day with selected digital media by U.S. adults is: Pandora radio accounted for 7.1 percent, and digital video accounted for 15.9 percent of time (Statista 2015b).

One of the most important changes in consumer behaviors during the last decade has been the change in media usage as a result of rapid innovations in media technologies. Consumers in countries around the world have adopted some of the new digital media technologies. This has increased interest in how and why people are using media today. Not only media companies who need to know users so they can plan their business strategies, but also the information service providers need to understand users to improve their quality of services.

Given intensified competition for consumers of digital media services, e-service providers have to pay great attention to retain customers with a customer-centric strategy. Due to low exit barriers stemming from the relatively low switching costs, digital media users can switch loyalty in a matter of a mouse click away. To satisfy digital media users by providing them a better use experience is a key to success for digital media service providers.

Based on the findings of IS adoption and media use theory, we formulate a research model that investigates the antecedent of three post-adoption behaviors: continuous use intention, complaints, and recommendation. The model is enriched with motivations of digital media use constructs originated from uses and gratifications (U&G) theory. The inclusion of U&G constructs strengthens the explaining power of the model through context specific factors (media use motivations). This addition complements what have been found in IS literature.

U&G theory is a longstanding communication theory which inquires how and why people use media. It has been adopted to study media behavior across media of all kind, such as online advertising, e-shopping, and online games (e.g., Ko et al. 2005; Lim & Ting 2012; Li et al. 2015). The theory helps greatly to investigate the motivations of media use and satisfaction. Numerous U&G motivations inform us context specific factors that can be used to explain the use behavior of digital media.

Previous studies has identified the three major post-adoption behaviors that open up research opportunity of understanding factors that impact user's e-loyalty. The key post-adoption behaviors are: continuance intention, complaint, and recommendation behaviors (Chea & Luo, 2008). Continuance intention has been well explored in system usage context; however, complaints and recommendations are largely under-explored. With the increase in popularity of the use of online social-oriented systems, including blogs, social networking, and consumer review forums as means for online customers to spread word-of-mouth and complaints, a better understanding of other post-adoption behaviors, such as word-of-mouth and complaint behaviors and their determinants is needed because the findings can help practitioners engineer better online services. A survey by Forrester research (2006) underscores the importance and timeliness of understanding the customers' word-of-mouth behaviors in addition to continuance intention in the study of customer retention (Mulpuru et al. 2006).

The goal of current study is to test the research model, based on affective event theory and uses and gratifications theory, which encompass factor of system quality, motivations (information, entertainment, social interaction, and convenience), and affective factors (positive and negative affects) and intend to figure out the relative strength of these factors, so that post-adoption behaviors of an increasingly popular e-service—digital media—can be well-understood. Our research question lies in *how well does the proposed model* (driven from IS, media, and marketing literature) *predicts user post-adoption behaviors*. The research findings can contribute to system analysts to develop a better system and elucidate the key factors that enable e-service providers to build up e-loyalty.

In the following sections, we review prior work with U&G theory, affective event theory, satisfaction, affects, cognitive appraisal of incidents handling, and motivations. Then we present the arguments supporting the hypothesized relationship between constructs in the integrated model. The

effects of constructs under investigation are empirically tested with online surveys of 415 digital media users. Partial least squares (PLS) was used as an analytical tool. Finally, the results, discussion, theoretical and practical implications were presented.

2. LITERATURE REVIEW AND HYPOTHESES

2.1 Uses and Gratifications Theory

Uses and Gratifications (U&G) theory has been used to investigate why people use media, as well as the gratifications that derive from media usage and access. It posits that users' media consumption is purposive and that users actively seek to fulfill their needs from various media (Katz et al. 1974). U&G theory is considered an axiomatic theoretical approach because its principles are applicable to almost every type of mediated communication, including traditional media, such as newspapers and interactive media, such as the Internet (see Table 1 for more application areas in consumer contexts).

U&G is used to examine areas such as motivations, gratifications, expectancy value, audience activities, and media consumption (Palmgreen et al. 1981). Among these areas, identifying the motivations of media use is often the subject of U&G research. For example, U&G researchers have identified a set of common underlying dimensions for Internet usage motivations that reflect the inherent interactivity and user-directed nature of Internet media. These motivations include entertainment, pass time [sic], relaxation, social information (Ferguson & Perse 2000), escapism, social interaction, information seeking, and preference to use the Web (Kaye 1998). Interactive media is the closest form of media to digital media that is of interest to this study. We adopted Ko et al.'s (2005) motivations on interactive media: entertainment, social interaction, convenience, and information for our study.

Motivation. U&G theory postulates that media users are goal-directed and are active media users (Katz et al. 1974). Users are aware of their psychological needs which motivate them to engage in certain media behaviors for gratifications that fulfill those intrinsic and extrinsic needs (Rubin 1983). Based on previous studies (Papacharissi & Rubin 2000; Ko 2005), we identified four major motivations for using the digital media: information, convenience, entertainment, and social interaction. These four motivations have positive relationship with usage behaviors. Previous studies suggest that people who have a high degree of certain motivations are more likely to stay at a Website longer to satisfy their motivations. For example, people who have high entertainment motivation are more likely to expose themselves to mediated contents (e.g., YouTube, online news etc.) than those who have low entertainment motivation (Alwitt & Prabhaker 1992).

Interactivity. Interactivity has been considered one of the main reasons that the Internet is a unique marketing communication medium in comparison with other traditional media (Schultz 2000; Ksiazek et al. 2014). In other words, the Internet is considered a virtual marketplace where consumers interact with a wide array of product choices in a nonlinear fashion. Accordingly, emergence of the Internet brings about better interactive tools to strengthen relationships with customers regardless of their physical locations. Interactivity has been defined using various underlying dimensions, but two dimensions appear most frequently in the extant literature: human-message interaction and human-human interaction (Ko et al. 2005). In our study, we employ the two-dimensional concept of *interactivity* which refers to the degree to which people engage in media consumption processes by actively interacting with media message (human-message) and (human-human) provide users responses to e-service providers and other users (McMiiilan & Hwang 2002).

2.2 Affective Event Theory

Affective events theory (AET) has been popularized in the organizational literature (e.g., Weiss & Cropanzano 1996; Fisher 2002). The theory explains the relationship between employees and their emotional reaction to events that happen to them at work. It posits that momentary work events cause concurrent positive and negative affective states. Employees' affective states at workplace predispose their attitude toward the jobs and in turn attitude toward the job affects the cognition-driven behaviors about the jobs (e.g., intention to quit or stay). Additionally, work features influence these attitudinal judgments directly and indirectly via work events and affective states (Weiss & Cropanzano 1996; Weiss 2002). The theory also posits that affective states at work affect the affect-driven behavior (e.g., helping others). When affective events theory is applied to explain e-service like digital media's user behaviors, we can see that work features are similar to e-service Website features because digital

media have design features that make users feel at ease when using them while others do not have these features or have features that frustrate digital media users. Second, some Web incidents in digital media will delay, interrupt, or prohibit a smooth digital media experience. These incidents are similar to the annoying work events at the work place because, they are not expected by users/workers and they induce negative emotional reactions. Finally, AET conceptualizes two types of behaviors (cognition-driven and affective-driven behaviors) in workplace settings. The two types of behaviors can be conceptualized in Web usage context as e-service retention—continuance intention for cognition-driven behavior and two types of word-of-mouth for affect-driven behaviors (Chea & Luo 2008). Based on affective event theory, and U&G theory, we developed an integrated model that explains post-adoption behavior of e-services of many kinds including digital media usage. We add context-specific factors: motivations, duration of use, interactivity (Ko et al. 2005) to the model.

2.3 Satisfaction and Post-Adoption Behaviors

Satisfaction is a major determinant of continuance intentions; this has been attested in expectation-confirmation theory (ECT) studies (Bhattacharjee 2001; McKinney et al. 2002; Oliver 1994). User's satisfaction with interactive media was a significant predictor of their continuance intention (Hsu & Lin 2008; Shiao & Luo 2013; Oghuma et al. 2015). Thus, we hypothesize that:

H1: Satisfaction with digital media use is positively associated with continuance intention to use digital media.

Marketing literature on customer loyalty has focused on how satisfaction affects continuance, recommendation, and complaint behaviors (Bougie et al. 2003; Mooradian & Oliver 1997; Richins 1982; Blodgett et al. 1995; Bearden & Teel 1983). However, researchers rarely include all three aspects of post-adoption behaviors in a single model. According to previous literature (Bougie et al. 2003; Mooradian & Oliver 1997; Richins 1982; Singh 1988), we hypothesize that:

H2: Satisfaction with digital media is negatively associated with the complaint intention.

H3: Satisfaction with digital media is positively associated with the recommendation intention.

2.4 Positive and Negative Affects

Numerous literatures support the positive relationship between positive affect and satisfaction. So does the negative relationship between negative affect and satisfaction (e.g., Mano & Oliver 1993; Mooradian & Oliver 1997; Oliver 1993; Phillips & Baumgartner 2002; Westbrook 1987; Bagozzi 1982; Dai et al. 2015), we hypothesize that:

H4a: Digital media user's level of positive affective reaction to digital media is positively associated with satisfaction to digital media use.

H4b: Digital media user's level of negative affective reaction to digital media is negatively associated with satisfaction to digital media use.

2.5 Web Events and Cognitive Appraisal of Incidents Handling

When encountering a situational state (event) that can be either motive-consistent or motive-inconsistent, an individual will experience certain emotional states (positive emotion and negative emotion, respectively); this has been consistently described in Roseman's appraisal theory of emotion (1984) and the hypotheses of AET. Similar idea has been discussed in the consumer behavior literature where affect is recognized as the dual experience of negative and positive affect in consumption (Mano & Oliver 1993, Mooradian & Oliver 1997). Therefore, cognitive appraisal of incidents handling determine both positive and negative affective reactions. We propose the following hypotheses:

H5a: Cognitive appraisal of incidents handling is positively associated with the level of positive affective reaction to digital media use.

H5b: Cognitive appraisal of incidents handling is negatively associated with the level of negative affective reaction to digital media use.

Affective experiences in the workplace determine the affect-driven behaviors, like helping behavior (influenced by positive affect) or job-incompatible behaviors (influenced by negative affect) (Weiss & Cropanzano 1996). Positive and negative word-of-mouth (i.e., complaint and recommendation behaviors) are both affect-driven. A positive affective reaction toward digital media is related to recommendation behavior. Likewise, a negative affective reaction toward digital media might also relate to complaint behavior (Mooradian & Oliver 1997; Chebat et al. 2005; Singh 1988;

Chea & Luo 2008). Previous studies support the relationship between positive affect and recommendation behavior (Mooradian & Oliver 1997; Chea & Luo 2008). Thus we hypothesize that:

H6a: Digital media user's level of positive affective reaction is positively associated with their recommendation intention.

H6b: Digital media user's level of negative affective reaction is positively associated with their complaint intention.

Store atmospheric quality works as stimuli on customer affect was confirmed in the stimulus-organism-response (S-O-R) paradigm and consumer literature (Bitner 1992). Specifically, Ethier et al. (2006) found that Website quality affect customer cognitive appraisal of situational state during online shopping episode. The similar conclusion has drawn from research with the S-O-R paradigm in a Web environment (Eroglu et al. 2001; Ethier et al., 2006) in which elements of a site, such as color, background patterns, typestyles, shopping recommendation agents, and online communities were found as stimuli affecting cognitive appraisal of emotional states of online customers. Hence, we hypothesize that:

H7: The perceived site quality of digital media website is positively associated with cognitive appraisal of incidents handling.

While modeling e-service usage, identifying cognitive antecedents from emotional antecedents of satisfaction is a valuable to advance information systems (IS) and consumer literature (Westbrook 1987; Mano & Oliver 1993; Wirtz et al. 2000; Smith & Bolton 2002). Perceived site quality, including both hedonic and utilitarian beliefs, is customer post-adoption belief about the level of quality of e-service Website. Its relationship with satisfaction was attested (Bhattacharjee 2001), so did its relationship with customer continuance intention (Bhattacharjee 2001; Chea & Luo 2008). Perceived site quality and perceived usefulness are both post-adoption beliefs about the performance of an e-service. If perceived usefulness is related to satisfaction and customer continuance intention, we can infer that perceived Website quality is also related to satisfaction and customer continuance intention. Given that, we propose that digital media Website quality is predictors of satisfaction and continuous use of *digital media*.

H8: The perceived site quality of digital media is positively associated with satisfaction.

H9: The perceived site quality of digital media is positively associated with continuance intention.

2.6 Motivations, Duration of Use, and Interactivity

Motivations and behaviors have a direct relationship; motivations are in fact the driver of human behaviors (Zolkepli & Kamarulzaman 2011; Ezumah 2014; Li et al. 2015). Numerous studies have identified Internet related media motivation: interpersonal utility, pass time [sic.], information seeking, convenience, and entertainment (Papacharissi & Rubin 2000). We include four motivations: social interaction, convenience, entertainment, and information because these four motivations reflect to the context of digital media usage. The use of digital media encompasses two aspects of interactivity: human-human interaction and human-message interaction (Ko et al. 2005). The positive interactivity will create favorable attitude toward the digital media. Favorable attitude is operationalized as satisfaction towards media use. We therefore hypothesis that:

H10: Motivations are positively associated with duration of time on digital media.

H11: Duration of time on digital media is positively associated with interactivity.

H12: Interactivity is positively associated with satisfaction.

3. METHODOLOGY

3.1 Method

The population of interest was digital media users. A pretest and a main study were conducted to collect the data. In the pretest, participants were students who enrolled in a 300 level IT course in a major university in Taiwan. A total of 73 responses were collected. All participants were in their junior and senior years of college. The instruments were modified based on the pretest results. The data collection in main study was conducted by posting a message of online survey in the bulletin broad system (BBS) (telnet://ptt.twbbs.org) and an information portal (<http://taiwan.look.tw>). The BBS is one of the most popular bulletin broad systems, with a large user population. The information portal, whose major function is to provide timely information on fan club events and activities to get awards from consumer products, also has a huge user population. In the announcement message, users

were guided to link the survey URL. Incentives were provided to evoke participation. A total 425 subjects participated the online survey. The online survey system has function to pop-up a window reminding respondents when certain question left unanswered. Therefore, of these 425 responses were all valid. We used 415 responses from data analysis after deleting some replicated responses. The 415 participants who completed the questionnaire were composed of 217 (52%) male and 198 (48%) female. They were between 18 and 50 years of age. The majority of them (234, 56.3%) were between 21 to 25 years of age.

3.2 Instrumentation

The survey questionnaire includes 86 items representing 15 constructs identified in Figure 1, as well as a series of demographic items and self-reported Internet use items. Each question was measured on Likert-type scale, ranging from 1 to 7. As mentioned earlier, we conducted a pretest with 73 subjects to test the items, prior to the main survey. Few items were re-worded based on the pretest participants' responses. The questionnaire for Taiwan participants was developed through a translation and back translation process by two bilingual coders.

Major constructs use measurements developed and validated in previous studies (Watson et al. 1988; McKnight et al. 2002; Roseman et al. 1996; Bhattacharjee 2001; Bougie et al. 2003). The construct of cognitive appraisal of incidents handling used in this proposed study is adapted from cognitive appraisal construct proposed by Roseman, Antoniou, and Jose (1996) and being adopted by Ethier et al. (2006) in their study on emotional response to site quality in online shopping. Perceived site quality was measured by the 5-item perceived site quality scale adapted from McKnight et al. (2002). Negative and positive affect (NA and PA) were measured with the 20-item PANAS Scales developed by Watson, Clark, and Tellegen (1988). Satisfaction was measured with the 6-item satisfaction scale adapted from Oliver (1997). Customer continuance intention was measured with the 4-item continuance intention scale adapted in Bhattacharjee's study of online banking (2001). Complaint intention and recommendation intention were measure by the 6-item complaint and 3-item recommendation scales respectively (Bougie et al. 2003). Motivations and interactivity were adopted from Ko et al.'s (2005) digital media study. The choices of these measures are based on known reliability and validity in previous studies.

4. DATA ANALYSIS

A partial least squares (PLS) analysis with Smartpls (version 3) was conducted to examine the reliability and validity of the measures and test the significance of the hypothesized relationships of the proposed model.

4.1 Measurement Model

Construct validity was tested with the PLS loadings. All items loaded substantially high (i.e., above .600) on their intended constructs and were found significant at the $p < .001$ level with the exception of three items in recommendation (RECM 2), satisfaction (SAT 5), positive affect (PF 7). Given the loading were very close to 0.600, they were retained for analysis. Item loadings range from 0.620 to 0.940 in the cross loading matrix which shows good discriminant validity because all the items loaded higher on the construct that they were supposed to measure than on any other constructs (Chin 1998).

The internal composite reliability, square roots of AVE (average variance extracted) and the inter-construct correlations were all at acceptable levels. Table 2 shows internal composite reliability of constructs, inter-correlation between construct, and square roots of average variance extracted. The results met the criteria. Furthermore, the internal composite reliability of all constructs was greater than .80 with exceptions of two constructs: recommendation (0.746, acceptable) and duration of time on the site (0.741, acceptable). Thus, there is evidence of construct reliability and validity. As shown in Table 2, the square root of each construct's average variance extracted (diagonal elements) is larger than its correlations with other constructs, thereby indicating adequate discriminant validity (Fornell & Larcker 1981).

4.2 Structural Model

The significance of all paths was assessed with 500 bootstrap runs to produce the t-value and test the significance of the path coefficients. Figure 1 presents the results of data analysis of the model and

the standardized path coefficients variance explained for each dependent variable. As shown in Figure 1, of the AET constructs, the data set supports most of the hypothesized relationships with only cognitive appraisal incident handling to negative affect (H5b) and positive affect to recommendation (H6a) not supported though the direction of relationship of H6a were found as expected.

With U&G constructs, entertainment and information are salient motivations of digital media use; they are significant precursors of duration of time using a digital medium. Human-message interaction is positively associated with duration of time. Interactivity is not associated with satisfaction; H12 was not supported. All in all, the proposed relationships were mostly supported by the data set.

5. DISCUSSION

5.1 Discussion of Key Findings

The results show that most of the hypothesized relationships were supported by the data. A good site quality (belief on system quality) leads to satisfaction, which in turn influence continuance intention, positive and negative word-of-mouth. Cognitive appraisal of incidents handling has impact toward positive affect which in turn predicts satisfaction. Negative affect contribute negatively to satisfaction. Positive affect towards the digital media leads to recommendations to other potential digital media users. In contrast, an unsatisfied digital media user will complaint to other or service providers about their unhappy feeling of the use experience. This is consistent with earlier e-service study in which positive relationships of perceived site quality, cognitive appraisal of incident handling, affects, satisfaction, and three post-adoption behaviors: continuance intention, recommendations, and complaints (Chea & Luo 2008; Chea & Luo 2009). The consistent results suggest that bringing affective event theory to online context is reasonable and the pattern of the relationships between constructs exists. Notably, the negative items (i.e., negative affect) were not predicted well with cognitive appraisal of incidents handling, not as expected. Perhaps the service failure of the Internet has become part of Internet experiences and digital media users may feel acquainted with it. Although the direction of relationship do not hold, the weak strength of relationship ($\beta = 0.008$, n. s.) should not be overlooked.

Information quality and system quality factors have been discussed well with satisfaction and adoption decision (e.g., Wixom & Todd 2005). We go beyond information/system quality and taken into account of affects (i.e., negative and positive affects) and motivations (entertainment and information). The boundary condition of adoption and satisfaction theories is therefore being extended. This attempt enriches our understanding to digital media when it is widely used and gradually becomes an important part of users' everyday experiences. Entertainment motive is a stronger predictor than information motive to duration of use. Despite the weak association, information motive remains to be a predicator of digital media use. Interactivity is not associated with satisfaction. With only human-message interaction related to duration of use, the function of social interaction (i.e., human-human interaction) with the digital media is not salient. Digital media (or media in general) plays a role for re-enforcing democracy, its functionality ideally should encouraging human-human interaction. More research should be conducted to uncover the role of digital media in this aspect.

5.2 Theoretical Implications

Post-adoption behavior is focus attention of acceptance literature. Over years, acceptance research is continuously developed and refined. Along with the new applications (e.g., mobile devices) available to users, theories that can capture user behavior are needed to provide knowledge for the new users groups and applications. In marketing, media study, and IS, many fruitful research models and results enable us to examine behavior from a multi-disciplinary perspective. This study contributes to the knowledge of system use by incorporating key factors appears in marketing, media, and IS research. We assert that this is an appropriate approach because digital media encompass the quality of information system and media, it is reasonable to taken into account factors that being explored in IS and communication studies. This research also extends the application area of marketing research to IS by addressing key factors that have been discussed in marketing literature. These factors include satisfaction, word-of-mouth, and recommendation. The acceptance literature developing along with this approach should further go forward when applications develop today is targeting fulfill holistic user experiences.

5.3 Managerial Implications

The findings of this study are beneficial to practitioners. Usability practitioners can use the perceived site quality items to examine the usability issues of digital media and cognitive handling appraisal items to manage the perception of digital media users on their reactions to the unexpected Web events. Marketing executives can also use the results to figure out the differences in satisfaction and provide solutions for intrigue positive affect and minimize the negative affect. For instance, a digital media user may respond positive affect when digital media Website receive a message of acknowledgement when critical incidents happen or provide instant chatting with online representatives for problem solving and these may lead to satisfaction. Likewise, negative affect can result in unsatisfied digital media user to spread negative word-of-mouth. These negative affect should not be overlooked and need to be managed by enhancing system functionalities and better customer cares. Taken affect, and system quality measures, entertainment and information motives into account would provide valuable information to designers as currently users satisfaction is a key to success of digital media Websites. This attempt gives a holistic view of modeling digital media users' post-adoption behaviors.

This study has several implications for digital media customer retention practice. First, keeping the Website quality up to or better than industry standard in digital media/e-services is an important aspect to keep customer satisfied. Second, results confirm that satisfied customers not only intend to continue the patronage of digital media but also help spread positive word-of-mouth and intend to complaint less to friends and a third-party. Finally, practitioners need to take customers' affect into account when engineering digital media offering. The goal is to maximize customer positive emotional experience and minimize their negative emotional experience through better handling of Web incidents to make the digital media meet users' expectation to ensure their satisfaction with digital media use. Special attention needs to be paid to the negative customer affect. Thus, recovery efforts from incidents on the Web site need to be immediate and right at the first trial to avoid carryover effect of negative affect. Lastly, hedonic motive (entertainment) is a more salient predictor to prolong usage than utilitarian motive (information). The results are consistent with previous studies (e. g., Luo & Remus 2014; Hsu 2015). System developers should develop functionalities that fulfill users entertainment gratification, even media do have strong tendency to keep audience informed. We should take a different perspective for digital media given that its interactive characteristics are in contrast very much with one-to-many communication of traditional media.

5.4 Limitations and Future Research

It is necessary to point out that the study has certain limitations. Since it uses a cross-sectional survey method of data collection, the results presented here comprise a snapshot of the post-adoption behaviors of digital media users, neglecting possible time-lag effects of affective response. There are several kinds of e-services and digital media is one of them, so the results might not be applicable to other forms of e-services, such as B2B or C2C e-services. Context-specific factors have to be explored to fully understand the e-service adoption. However, our study takes the initiative to explain digital media post-adoption behaviors with affective event approach and U&G theory and the results are encouraging. More research effort with this orientation is worthy of pursuit. Finally, some degree of caution is required because the study is "recall"-based, some covariates/factors may have affected the results.

6. CONCLUSION

With affective event theory, we test the factors that affect post-adoption behaviors of digital media users. We found that entertainment and information are most salient motivations to digital media use. Duration of time of digital media use predicts human-message interaction. Satisfaction is significant predictor of three post-adoption behaviors: continuous intention, recommendation, and complaints. Affects are related to the outcome as expected direction. Site quality and cognitive handling of appraisal also contribute to satisfaction and positive affect, respectively. Studies in modeling digital media use behaviors with a holistic view encompasses cognitive, affective, and system quality, and online incidents attributes, to our knowledge, is scant. We foresee the potential of doing research with this approach. Future research may explore different types of e-services and provide context-specific factors to test with AET constructs. Specifically, the roles of entertainment and information are found important to e-service usage. Further research may adopt U&G theory to elaborate how U&G

motivations predict use and post-adoption behaviors and how systems can support and facilitate these motivations. In particular, mobile devices are widely used, our research model should continuously develop for context of mobile usage. The great business value of mobile commerce is the driver of further explore the post-adoption behaviors.

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Table 1. U&G Motivations of Technology Use

Type of Media	Authors	Medium	Intrinsic	Extrinsic
Traditional Media	Berelson (1949)	Newspaper	Source of security/Ceremonial Ritualistic/Tool for everyday living/Escape/Social prestige	Searching for information Social contact for conversational purpose
	Rubin (1983)	TV	Pass time/Habit Entertainment Escape	Information Companionship
Internet	Papacharissi & Rubin (2000)	Internet	Entertainment Pass time	Information seeking Convenience Interpersonal utility
	Charney & Greenberg (2002)	Internet	Division entertainment Peer identity Good feelings Coolness	Keep informed Communication Sights and sounds Career
	Diddi & LaRose (2006)	Internet News	Escapism Entertainment Habit Pass time	Surveillance News quizzes
	Sun, Rubin, & Haridakis (2008)	Internet	Substitution	Information Social Interaction Convenience Control
WWW	Ferguson & Perse	TV-related	Entertainment	Social information

	(2000)	Web surfing Motivations	Pass time Relaxation	
	Kaye (1998)	WWW	Entertainment Pass time Escape	Social interaction Information Web Site Preference
	Roy (2009)	Web health Information Seeking	Relaxation	User friendly Self development Wide exposure Career opportunities Global exchange
Commercial Web sites	Stafford & Stafford (2001)	Commercial Web sites	Entertainment	Search factor Cognitive factor News and Unique factors
	Ko, Cho, & Roberts (2005)	Marketing Website	Entertainment Social interaction	Information Convenience
	Lim & Ting (2012)	Marketing Website	Entertainment gratification	Informativeness gratification
Social Media	Ancu & Cozma (2009)	Social Media	Entertainment	Social utility Information and guidance
	Dunne, Lawlor, & Rowley (2010)	Social Networking	Entertainment Escapism and alleviation of boredom	Communication Friending Identity creation and management Information search Interacting with boys
	Park, Kee, & Valenzuela (2009)	Social Networking	Entertainment	Socializing Self-status seeking Information seeking
	Zolkepli & Kamarulzaman (2011)	Social Media	Tension release needs	Personal integrative needs Social integrative needs
	Ezumah (2014)	Social Networking	Entertainment	Keeping in touch with friends/family Sharing photos Reconnecting with old friends
	Li et al. (2015)	Social Networking	Hedonic (enjoyment, fantasy and escapism)	Social (social interaction and social presence) Utilitarian (achievement and self-presentation)
	Ifinedo (2016)	Social Networking	Entertainment	Self-discovery Maintaining interpersonal interconnectivity Social enhancement
	de Oliveira, Huertas, & Lin (2016)	Social Networking	Entertainment	Maintaining interpersonal interconnectivity

Table 2. Measurement Model Estimation

AVE/Correlation		Latent Constructs														
Latent Constructs	ICR	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Cognitive appraisal of incidents handling (CAIH)	0.838	0.798														
Complaint (CMPLN)	0.945	0.072	0.881													
Continuance intention (CI)	0.956	0.419	-0.232	0.937												
Convenience (CM)	0.877	0.276	-0.130	0.416	0.802											
Duration of time on a site	0.741	0.208	-0.004	0.182	0.271	0.767										
Entertainment (EM)	0.892	0.312	-0.132	0.407	0.604	0.378	0.789									
Human-Human Interaction (HHI)	0.852	0.273	0.181	0.221	0.295	0.108	0.266	0.770								
Human-Message Interaction (HMI)	0.856	0.379	-0.036	0.451	0.641	0.309	0.606	0.510	0.773							
Information (IM)	0.893	0.350	0.003	0.354	0.608	0.267	0.441	0.415	0.533	0.857						
Negative Affect (NA)	0.953	0.008	0.561	-0.224	-0.201	-0.066	-0.148	0.016	-0.186	-0.028	0.819					
Perceived Site Quality (PSQ)	0.888	0.669	-0.078	0.643	0.433	0.273	0.444	0.232	0.527	0.422	-0.107	0.785				
Positive Affect (PA)	0.856	0.387	0.018	0.423	0.237	0.135	0.297	0.325	0.384	0.333	0.113	0.487	0.678			
Recommendation (RECM)	0.746	0.189	-0.691	0.484	0.220	0.078	0.210	0.064	0.205	0.167	-0.474	0.333	0.263	0.714		
Satisfaction (SAT)	0.828	0.303	-0.587	0.650	0.338	0.161	0.360	0.162	0.381	0.284	0.495	0.534	0.391	0.699	0.669	
Social Interaction (SM)	0.866	0.329	0.068	0.383	0.545	0.232	0.553	0.531	0.655	0.533	-0.046	0.441	0.350	0.140	0.274	0.786

Notes: 1. ICR: Internal Composite Reliability.

2. Diagonal elements are the square root of the shared variance between the constructs and their measures; off-diagonal elements are correlations between constructs.

Figure 1. Research Results (N = 415)

*** p<0.001, ** p<0.01, * p<0.05

