Smartphones: User Engagement Motivations Effect on their Value, Satisfaction, and Future Engagement Intention

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Smartphones: User Engagement Motivations Effect on their Value, Satisfaction, and Future Engagement Intention

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ABSTRACT
The growth of mobile technology mediated environments is accelerated by its accessibility and easy usage of mobile technology tools, such as smartphones and tablets. User friendly and intuitive features drive user value and satisfaction. These features motivate and drive further engagement. Smartphones allow users to control when, where, and how they engage in chosen activities that serve their needs, saving time, completing a task (utilitarian), entertain them (hedonic), or connect with others (social). This study investigates, proposes, and tests an engagement motivation model to explain smartphone users’ motivations, and their value, satisfaction, and overall continued engagement intention. Findings indicate users’ engagement motivations do influence their value, satisfaction and overall engagement intention.

Keywords
Mobile technology, engagement, motivation, perceived value, satisfaction, continued engagement, smartphone

INTRODUCTION
Engaged activities using mobile technology has changed our communication, information gathering, and many other activities associated with our everyday life. The growth of mobile technology mediated environments is accelerated by its accessibility and easy usage of mobile technology tools, such as smartphones and tablets. These devices involve users and their lifestyle activities such as: education, business, medicine, living, working, and leisure pursuits. Recognizing and understanding mobile users’ engagement behavior that deliver value and satisfying experiences will see continued user engagement (Wachter et al. 2012). Smartphone and tablet technology adoption surpasses earlier forms of technology (e.g. computers, laptops) and it is no longer “the gift of civilization”; we are moving to a new era namely ubiquitous life.

Studies of human behavior in the context of electronic and mobile commerce (e.g., user engagement, motivation, perceived value, satisfaction, and intention to use technology) come from many research areas such as information systems and digital marketing. Information systems and technology acceptance research has utilized behavior within the Theory of Reasoned Action (TRA) (Fishbein and Ajzen 1975), the Technology Acceptance Model (TAM) (Davis 1989), the Theory of Planned Behavior (TPB) (Ajzen 1991), and Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al. 2003, 2012a, 2012b). Technology acceptance as part of ubiquitous life sees continued engagement as a motivating factor in using mobile technology.

Engagement using mobile technology can encourage a variety of user experiences which can be functionally or hedonically driven depending on user context. Being able to use mobile technology whenever and wherever increases user engagement tendencies, which also saves time, creates enjoyable encounters and increases motivation to continue to engage (Tojib and Tsarenko 2011). Engagement in mobile technology and its ubiquitous service drives value and satisfaction which automatically lead to the future engagement usage (Oliver 1980; Revels et al. 2010). According to Chapman et al. (1999), engagement can be described as behavioral flow without any intentional mindset: e.g., control, attention, focus, curiosity, and intrinsic interest. Studying user’s motivation to engage in activities using mobile technology can provide insights to further explain their engagement behavior. Engaging experiences that are fun and enjoyable are emotional experiences driving hedonic value which supports the low level of user technology effort that deliver high value (Davis, 1989, Davis et al. 1992, Venkatesh et al. 2012a, 2012b). These studies explain that positive engagement experiences give greater value and user
satisfaction which increases the level of continued user engagement. This strengthens the relational aspects of users’ mobile devices with further user engagement. However, most of those studies have been limited to predicting consumer’s technology adoption or acceptance.

This study investigates mobile users’ engagement motivation, their value and satisfaction in continuing engaging with their smartphones. The purposes of this study are to 1) explore engagement motivation behavior influence on users’ perception of value, overall satisfaction, and intention to continue engaging using their smartphones, 2) examine the relationships between the these components based on the proposed model and hypotheses, and 3) suggest implications for better understanding smartphone users’ engagement motivation behavior. The following section explains the research framework for the proposed model.

CONCEPTUAL OVERVIEW OF THE PROPOSED MODEL

Studies support the relationship that attitudes and their formation can be used to explain and evaluate the various behaviors around us and furthermore, predict future intention and behavior. According to Fishbein and Ajzen (1975), an attitude can be defined as a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object. Attitudes should be consistent over time as a learned process and actual behavior will be consistent with attitudes.

According to Wilkie (1994), human behavior is actually a combination of three components: mental, emotional, and physical dimensions. Since these components were introduced in Rosenberg and Hovland’s study (1960), attitude has been explained and examined in the context of three dimensions which are divided into three stages: cognition, affection, and conation. Therefore, studies using these three components were often modeled on the theory of reasoned action, the theory of planned behavior, the technology acceptance model, and the unified acceptance and use of technology yielding significant contributions to the literatures understanding of behavior. Most of these studies used existing constructs rather than explore new relationships that evolving technology had the potential to deliver.

LITERATURE REVIEW AND MODEL HYPOTHESES

Engagement Motivation

Engagement is defined as the state of being involved, occupied, and interested in something (Pagani and Mirabello 2011). In the context of mobile technology, we define engagement motivation as user’s motivation to engage in activities using their mobile devices (e.g., smartphones). Mobile engagement occurs when users interact with their devices to satisfy a need state (Kowatsch and Maass 2010; O'Brien and Toms 2010). The ability to deliver satisfying experiences influences the value of engaging in these activities. Those engagement behaviors that serve useful (utilitarian), enjoyable (hedonic) and connectivity to others (social) drive further engagement intentions (time spent) (Babin et al. 1994; Varnali and Toker 2010; Venkatesh and Brown 2001; Venkatesh et al. 2012a; Venkatesh et al. 2012b). Activities that offer variety, enjoyment and relaxation engage users in pleasurable pursuits that are hedonically motivated (Venkatesh and Brown 2001). Users’ engagement motivation allowing them to better manage lifestyle decisions (organizing schedules, appointments, etc.), prioritize activities and tasks are driven by the functionality and useful purpose (utilitarian) motivations. Social engagement motivation is technologically determined through events and moments that users construct, create, share with others that can serve needs virtually not physically. Thus, we propose

Proposition 1: Motivations to engage in smartphone use positively influence users’ perceived value

Venkatesh and Brown (2001) suggested that utilitarian value is strongly related to the effective and efficient use of an information system. Utilitarian value is a strong determinant impacting behavioral intention to use an information system (Hong and Tam 2006; Kim et al. 2007). Utilitarian motivation reflects users’ belief that mobile engagement serves a purpose that satisfies user needs (Babin et al. 1994; Kim and Han 2011; Venkatesh and Brown 2001). These motivations encourage behavioral intentions to continue using mobile technology (Kim and Han 2011). Thus, perceived value, as an antecedent of behavioral intention, can be predicted by utilitarian motivation.

H1a: Utilitarian motivation positively influences users’ perceived value

Hedonic motivation stems from activities that are fun, exciting, and enjoyable satisfying intrinsic needs. This drives hedonic value as mobile users consider these activities personal (intrinsic) to them (Holbrook and Batra 1987). Holbrook and Batra (1987) state consumers’ user experience can satisfy intrinsic needs when their experience provides pleasure with feelings of fun and excitement. Lee and Jun (2005) show that an interesting activity intrinsically motivates people to be more engaged in mobile technology. Hedonic value is more subjective and personal and their hedonic experience results from the fun driven activity (Holbrook and Batra 1987). Activity engagement motivations that are pleasurable and enjoyable are
hedonically driven (Kim and Han 2011; Sheth et al. 1991). It is empirically shown that hedonic value is a key value driving system use (Turel et al. 2007; Venkatesh and Brown 2001). Thus, higher hedonic engagement motivation should lead to higher user perceived value.

**H1b: Hedonic motivation positively influences users’ perceived value**

Mobile technology engagement motivation that is socially based involves structures that satisfy and serve user needs (Edvardsson et al. 2011). Engagement motivations influence the value of user experiences, contexts, and meanings attributed to their engagement motivation satisfaction (De Moor et al. 2010; Vargo and Lusch 2008; Vargo, 2009). Social networks allow users co-creation activities to produce and share with other mobile users (Edvardsson et al. 2011; Hoffman 1990). Social engagement motivations are context driven, value added activities (Hoffman 1990). These social tendencies influence users’ attitudes and perceptions of other users (Deighton and Grayson 1995). Users’ social engagement motivation affects the way users perceive and structure their network activities within the mobile environment (Giddens 1984). Thus, we propose

**H1c: Social motivation positively influences users’ perceived value**

**Perceived Value and Satisfaction**

Activities that require little effort can increase the likelihood one will engage (Davis, 1989). The ubiquity and seamless nature for mobile users and their motivation engagement tendency influence value driven satisfactions. Users’ perceived value is their perception and attitudes toward their mobile device ability to conveniently and easily deliver their desired end state (activity and goal) when engaged (Smukupt et al. 2011). Value users derive from mobile engagement should enhance relationship satisfaction during and after the activity which increases their value engagement attitude. Engagement motivation is driven by the potential to offer value added satisfactory activity experiences to users. When user experience activities achieve their desired end state (utilitarian, hedonic, social), users should be satisfied (De Moor et al. 2010; Edvardsson et al. 2011; Kim and Han 2011; Pura 2005). Thus, we propose

**Proposition 2: Motivation to engage using a smartphone positively influences users’ satisfaction**

**H2a: Utilitarian motivation positively influences users’ satisfaction**

**H2b: Hedonic motivation positively influences users’ satisfaction**

**H2c: Social motivation positively influences users’ satisfaction, and**

**H4: Mobile users’ perceived value positively influences users’ satisfaction**

**Continued Engagement**

Smartphones allowing engagement for whatever reason or purpose can increase the likelihood of users’ willingness to continue to engage in the future (Chapman et al. 1999; Oliver 1980; Tojib and Tsarenko 2011). Engagement intention is influenced by how users characterize their engagement behavior. When these experience contexts are relevant to them, this should create value added benefit and future intention motivation behavior (Chae et al. 2002; De Moor et al. 2010; Kim and Han 2011; Pihlström 2007). The value added benefits to lifestyle activity motivations whether social, utilitarian, or hedonically driven, serve user needs. These need motivation states that deliver valuable and satisfying engagement relationships should create further engagement intentions with users (Revels et al. 2010). This should encourage continued engagement with others (social) to meet current needs (utilitarian), and be enjoyable (hedonic) (Lee and Kim 2010). Thus, we propose

**Proposition 3: Motivation to engage using a smartphone positively influences users’ engagement intention**

**H3a: Utilitarian motivation positively influences users’ engagement intention**

**H3b: Hedonic motivation positively influences users’ engagement intention**

**H3c: Social motivation positively influences users’ engagement intention, and**

**H5: Perceived value positively influences users’ engagement intention**

**H6: Satisfaction positively influences users’ engagement intention**

In this respect, the current study will identify and examine three engagement motivations: utilitarian, hedonic, and social within the cognitive, affective, and conative dimensions of attitude. Figure 1 shows the hypothesized model within the attitude constructs.
RESEARCH METHODOLOGY AND DATA COLLECTION

Measurement Development

The survey instrument was constructed to measure participants’ motivation to engage in mobile activities, perceived value, satisfaction, and continued engagement using their smartphone. The pretest was performed with ninety-one undergraduate students in all majors. The range of pretest initial sample Cronbach Alpha reliability measurement was from 0.84 to 0.91. The final survey questionnaire consisted of twenty items to measure users’ behavior twelve items for motivations, three items for perceived value, three items for satisfaction and two for engagement intention including questions for socio-demographic data (see Appendix A for measurement items).

Data Collection

The sample was collected at a southeastern university in the U.S. from undergraduate students who were 18 years or older. A brief explanation about mobile technology and purpose for the research was given by the researcher before distribution of the survey. Participation was anonymous and voluntary with no penalty nor check for non-participating respondents. A two-day collection process obtained 604 surveys from a variety of courses and class times at a large southeastern university in the U.S. Incomplete and invalid responses (e.g., not smartphone users) were discarded from the data set, leaving 298 usable samples (49%). Of the valid samples, 150 (50.3%) are males and 147 (49.3%) are females, paralleling U.S. 2010 census data (49.2% male and 50.8% female) (Bureau of the Census 2010).

Data Analysis and Results

Since we measure latent constructs by multiple measurement items, Structural equation modeling (SEM) approach is used to analyze the data for both the measurement model and structural model. SEM is a statistical methodology that takes a confirmatory (i.e., hypothesis-testing) approach to the analysis of the interrelationships between latent constructs (i.e., causal relationship) theory (Bollen 1989; Byrne 2001; Chin 1998). To ensure the appropriateness of the instrument, reliability, construct validity, and convergent validity of measurement model were tested before the structural model testing. Table 1 shows the summarized the results of measurement model testing including descriptive statistics of constructs.

Table 1: Descriptive Statistics and Reliability Coefficients for Constructs

<table>
<thead>
<tr>
<th>Constructs</th>
<th>No. of Items</th>
<th>Mean</th>
<th>Variance</th>
<th>Cronbach Alpha</th>
<th>Composite Reliability</th>
<th>AVE</th>
<th>Concept &amp; Scales adapted from</th>
</tr>
</thead>
</table>

1 Composite Reliability = \( \frac{\left(\sum \lambda_i\right)^2 \text{var} F}{\left(\sum \lambda_i\right)^2 \text{var} F + \sum \text{var} \epsilon} \), where \( \lambda_i \) is the component loading to an indicator. \( \text{var}(\epsilon_i) = 1 - \lambda_i \). The composite reliability as a measure of internal consistency should be higher than 0.7 (Fornell and Larcker 1981).
Utilitarian Motivation | 6 | 3.679 | .139 | 0.712 | 0.703 | 0.750 | Revised on (Kim et al. 2010)
Hedonic Motivation | 3 | 3.672 | .628 | 0.755 | 0.704 | 0.710 | Revised on (Kim et al. 2010)
Social Motivation | 3 | 3.711 | .336 | 0.726 | 0.725 | 0.730 | Revised on (Kim et al. 2010)
Perceived Value | 3 | 3.966 | .059 | 0.801 | 0.804 | 0.883 | (Petrick 2002; Zeithaml 1988)
Overall Satisfaction | 3 | 3.899 | .093 | 0.777 | 0.782 | 0.872 | (Oliver 1977)
Continuance Intention | 2 | 4.539 | .079 | 0.696 | 0.668 | 0.821 | (Cronin and Taylor 1992)

Note: +: Mean and standard deviation (S.D.) are calculated using the average of construct items.

The reliability of the measurement models was tested using Cronbach’s Alpha and Fornell’s composite reliability (Fornell and Larcker 1981). The Cronbach reliability coefficients and composite reliability should be greater than the benchmark of 0.7 to be considered adequate (Fornell and Larcker 1981). All reliabilities of constructs have a value higher than the minimum cutoff score of 0.7 except continuance intention. All constructs have an AVE of at least 0.5 (Fornell and Larcker 1981). The AVE can also be used for evaluating discriminant validity. The AVE for the construct should be higher than the variance shared between the construct and other constructs in the model (Fornell and Larcker 1981). As shown on Table 2, in all cases the correlations between each pair of constructs were lower than the square root of the AVE for the relevant constructs.

Table 2: Correlations among research constructs

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Utilitarian Motivation</td>
<td>0.613</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>2. Hedonic Motivation</td>
<td>0.569</td>
<td>0.675</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>3. Social Motivation</td>
<td>0.601</td>
<td>0.566</td>
<td>0.644</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>4. Perceived Value</td>
<td>0.328</td>
<td>0.471</td>
<td>0.332</td>
<td>0.846</td>
<td>0.000</td>
</tr>
<tr>
<td>5. Overall Satisfaction</td>
<td>0.285</td>
<td>0.365</td>
<td>0.292</td>
<td>0.682</td>
<td>0.834</td>
</tr>
<tr>
<td>6. Continuance Intention</td>
<td>0.284</td>
<td>0.320</td>
<td>0.292</td>
<td>0.457</td>
<td>0.471</td>
</tr>
</tbody>
</table>

Note: Diagonal elements are the square root of AVE (Average Variance Extracted), which should exceed the off-diagonal inter-construct correlations for adequate discriminant validity.

To ensure the acceptable level of convergent validity of the research instruments, an exploratory factor analysis (EFA) using the dataset was conducted and summarized in Table 3. The acceptable level is when all items loadings are greater than 0.50 and the measurement items for each construct load onto only one factor (Wixom and Watson 2001). The result of EFA demonstrates the six distinct factors show and all items loaded highly (above 0.538) onto only one factor.

Table 3: Exploratory Factor Analyses

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1. Utilitarian Motivation</td>
<td>UM1</td>
<td>0.604</td>
</tr>
<tr>
<td></td>
<td>UM2</td>
<td>0.623</td>
</tr>
<tr>
<td></td>
<td>UM3</td>
<td>0.617</td>
</tr>
<tr>
<td></td>
<td>UM4</td>
<td>0.655</td>
</tr>
<tr>
<td></td>
<td>UM5</td>
<td>0.659</td>
</tr>
<tr>
<td></td>
<td>UM6</td>
<td>0.655</td>
</tr>
</tbody>
</table>

\[ \text{AVE} = \frac{\sum \lambda_i^2 \text{var}(F)}{\sum \lambda_i^2 \text{var}(F) + \sum \text{var}(\varepsilon)} \], where \( \lambda_i \) is the component loading to an indicator and \( \text{var}(\varepsilon)=1-\lambda_i \). The average variance extracted should be higher than 0.5 (Fornell and Larcker 1981).
To test the proposed hypotheses, we employ structural model testing using SmartPLS3 2.0 M3, a component-based Partial Least Square (PLS) regression technique. SmartPLS supports complex nomological network models with less stringent data requirements (e.g., no distribution assumptions) and minimal demand of sample size, recommended at ten times the number of maximum arrowheads pointing onto a latent variable (Temme et al. 2006). Figures 2 illustrates the results of structural model testing including estimating path coefficient and R-squared, which can be interpreted as standardized beta weights and explained variances as in a regression analysis, respectively.

Figure 2: PLS Analysis Result

As shown in Figure 2, all three engagement motivations have strong positive effect on perceived value, overall satisfaction, and continuance intention, except the effect of utilitarian motivation on perceived value. Mobile users’ perceived value has a strong positive effect on both overall satisfaction and continuance intention. Overall satisfaction also shows a strong positive effect on continuance intention. These results support all hypotheses except H1a and all propositions except proposition 1 which is partially supported (see Table 4).

Table 4. Results of Hypothesis Testing

<table>
<thead>
<tr>
<th>Proposition and Hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposition 1</td>
<td></td>
</tr>
<tr>
<td>H1a</td>
<td>NS</td>
</tr>
<tr>
<td>H1b</td>
<td>S***</td>
</tr>
<tr>
<td>H1c</td>
<td>S**</td>
</tr>
</tbody>
</table>

| HM1   | 0.171 | 0.313 | 0.820 |
| HM2   | 0.216 | 0.270 | 0.635 |
| HM3   | 0.426 | 0.248 | 0.646 |
| SM1   | 0.331 | 0.747 | 0.381 |
| SM2   | 0.253 | 0.538 | 0.308 |
| SM3   | 0.422 | 0.649 | 0.240 |
| PV1   | 0.151 | 0.391 | 0.226 |
| PV2   | 0.256 | 0.355 | 0.212 |
| PV3   | 0.206 | 0.294 | 0.244 |
| OS1   | 0.142 | 0.263 | 0.172 |
| OS2   | 0.180 | 0.248 | 0.203 |
| OS3   | 0.297 | 0.361 | 0.197 |
| CI1   | 0.1399| 0.245 | 0.153 |
| CI2   | 0.1839| 0.214 | 0.213 |

2. Hedonic Motivation
1. Social Motivation
4. Perceived Value
5. Overall Satisfaction
6. Continuance Intention

Table 4. Results of Hypothesis Testing
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Note: S: Significant, NS: Not Significant, * Significant at the 0.1 level, ** significant at the 0.05 level, *** significant at the 0.01 level

DISCUSSION AND CONCLUSION

Rosenberg and Hovland’s (1960) three stages framework was applied to examine users’ perceived value and mobile engagement motivations as elements of mobile users’ cognitive stage. Users’ engagement is further specified by three sub-elements: utilitarian, hedonic, and social motivations. Mobile users’ overall satisfaction is an element of their affective stage as this represents an individual’s feelings toward an object (i.e., mobile technology), which can be favorable or unfavorable. Since affect usually becomes operational at the conative stage/state of the model, mobile user continuance intention is used as an evaluation element of the model. From a theoretical perspective, this study examines mobile users’ engagement behaviors from the cognition/affect/conation framework, in the context of mobile technology. This is a unique contribution of the study.

The study results provide empirical evidence for mobile users’ behavior involving their engagement motivations, perceived value, satisfaction, and intention to continue engagement. The results confirm the proposed model within three stages of attitude: cognitive, affective, and conative. The proposed model is supported by the empirical data collected from smartphone users: users’ engagement motivation has a strong and positive relationship with their perceived value, satisfaction, and intention continuance engagement; perceived value is strongly related to satisfaction and intention continuance engagement; satisfaction strongly influences intention continuance engagement.

The findings provide several managerial implications. Motivating users to engage using their smartphone, their intention continuance engagement increases users’ value and satisfaction. Most significantly, users hedonic motivation, ‘fun and excitement’, influences users perceived value ($\beta = 0.340$) and satisfaction ($\beta = 0.277$). Smartphones that provide users fun tools and applications will encourage further engagement. Results support that perceived value influences on intention to the continuance engagement ($\beta = 0.362$) more significantly than either satisfaction ($\beta = 0.275$) and hedonic engagement motivations ($\beta = 0.201$) which is the highest among three engagement motivations. This implies that exiting perceived value is more important to smartphone users than their engagement motivation or affective satisfaction in continuing to engage. Another significant finding shows that utilitarian motivation does not have a significant relationship with perceived value ($p > 0.1$). It simply explains that utilitarian motivation (e.g., organizing your activity and schedule efficiently and effectively) could be regarded as a basic motivation (part of ubiquitous life) rather than “necessary” motivation to engage in smartphone technology. Although utilitarian motivation does not significantly influence perceived value, it has a significant relationship with satisfaction ($\beta = 0.093$) and continuance intention ($\beta = 0.123$). This finding also supports why “hedonic and social” motivations are highly related to the continuance intention.

Although the sample was collected from college students they will be the majority of smartphone users in the near future, the data from one southeastern university limits the generalizability to broader populations. Data from the other universities would be useful to generalize the findings. Nevertheless, we believe that our research results with users’ engagement motivations can be useful in future information systems and strategic marketing strategy research.

REFERENCES


Kim, B., and Han, I. "The role of utilitarian and hedonic values and their antecedents in a mobile data service environment," Expert Systems with Applications (38:3) 2011, pp 2311-2318.


### APPENDIX A: MEASUREMENT ITEMS

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Measurement Items</th>
</tr>
</thead>
</table>
| Utilitarian Motivation (1- not at all important / 5- extremely Important) | Please rate the importance of the following reasons when you are using /engaging in mobile technology  
UM1: To try and find new and different things using mobile technology.  
UM2: To keep me informed and updated using mobile technology.  
UM3: To increase my skills and knowledge in using technology.  
UM4: To keep me organized (e.g., checking email, schedule, and plan).  
UM5: To save and use my time more efficiently and effectively with what I have to do (e.g., assignment /project/work)  
UM6: It offers a variety of ways to communicate with others (e.g., voice, face-to-face, or text message). |
| Hedonic Motivation (1- not at all important / 5- extremely Important) | HM1: To get rest and relaxation using mobile technology.  
HM2: To enjoy the variety of contents (e.g., email, applications, weather, and scheduling) that mobile technology offers.  
HM3: To enjoy what I like about using technology. |
| Social Motivation (1- not at all important / 5- extremely Important) | SM1: To keep in touch/share events (community) with my friends and family.  
SM2: To be connected and meet other people with similar interests.  
SM3: To tell my friends and family about what I learned/read/heard using mobile technology. |
| Perceived Value (1- not at all important / 5- extremely Important) | PV1: Using mobile technology is an enjoyable experience  
PV2: The overall value of my experience using mobile technology is outstanding  
PV3: Mobile technology represents good use of my time and money |
| Overall Satisfaction (1 - Very dissatisfied / 5 - Very satisfied) | OS1: Overall, how satisfied are you with using/engaging in mobile technology?  
OS2: Based on your total bill payments, how satisfied are you with your use/engagement in mobile technology?  
OS3: Based on your total time spent, how satisfied are you with your use/engagement in mobile technology? |
| Continuance Intention (1 - Unlikely / 5 - Very likely) | CI1: How likely are you going to continue to use/engage in mobile technology?  
CI2: How likely are you going to recommend your use /engagement in mobile technology to someone? |