

A Value-based Approach for Explaining the Adoption Intention of Mobile Data Services

Mutaz M. Al-Debei *

ABSTRACT

This study aims at explaining the factors affecting the adoption intention of mobile data services from the perspective of consumers as users. In this study we focus on the value users can potentially gain from using these services. We hypothesize that if we can examine users' utilitarian, hedonic, uniqueness, epistemic and economic value, then we can explain and predict their intentions to use mobile data services. Our results show that utilitarian value is according to previous studies an important adoption factor. Additionally, economic value is also important and significant. Nevertheless, it seems that in our context, hedonic, uniqueness, and epistemic value dimensions are not as important for the use of mobile data services as utilitarian and economic value dimensions. The results of this study can be utilized by mobile service providers to get insights of consumers' needs and preferences in order to offer better and thus more popular services.

Keywords: Adoption Intention, Mobile Data Services, Value Elements, Value-based, Perceived Value, Mobile Business.

1. INTRODUCTION

The revolutionary developments in mobile technologies have brought Mobile Data Services (MDS) to the world of mobile business as a new, effective, and strategically important revenue stream for Mobile Network Operators (MNOs), especially with the saturation of voice market. MDS are varied in terms of purpose and range from communication (e.g. SMS, chat room), transactions (e.g. e-banking, product purchasing), information content (e.g. location based services, news, stocks update) to entertainment (e.g. games, ringing tones). Despite the emergence of such wide-ranged services, related literature shows that the diffusion of mobile data services is not yet as expected (Kim et al., 2005; Yang, 2004; Carlsson et al., 2006). This is indeed related to the misalignment between the nature of services provided by MNOs and the requirements of consumers.

Aiming to contribute in this domain, this study aims at examining the adoption intention of MDS in Jordan

using a value-based approach and from the perspective of consumers as users. We believe that the decision concerning the adoption of MDS is normally taken rationally and sensibly by consumers through evaluating the value that would be captured from such an adoption. Hence, we postulate that the value associated with the use of MDS as perceived from the perspective of consumers as users affects their adoption decisions. In this research, perceived value is used as a multidimensional construct that encapsulates *utilitarian*, *hedonic*, *uniqueness*, *epistemic*, and *economic* value elements. Hence, we approach the adoption intention of technology in general, and MDS in particular from a novel standpoint that gives attention to perceived value dimensions from consumers' perspective. This is deemed useful due to the lack of understanding of MDS value as it is perceived not only by consumers but also by people in organizations (Nah et al., 2005; Al-Debei and Avison, 2011).

The results of this study would be of great value to MNOs in guiding them into building effective strategies and business models (see Al-Debei and Avison, 2010; Al-Debei and Fitzgerald, 2010) and developing innovative services meeting the desires and wants of customers. This in turn would lead to a better allocation of resources and a significant increment in the revenues. Indeed, recognizing the value elements appreciated by

*Faculty of Business, The University of Jordan, Jordan.
Received on 22/11/2011 and Accepted for Publication on 20/12/2012.

consumers would help MNOs in developing and delivering services that are most likely accepted and welcomed by consumers. This would lead to a win-win situation where both parties (i.e. MNOs and consumers) are satisfied.

The remaining sections of this paper will be as follows. The next section discusses reviews from relevant literature, followed by our research model and hypotheses. Section 3 describes the research method. Data analysis and results are presented in section 4 while section 5 presents the conclusions of this research.

2. LITERATURE REVIEW AND RESEARCH MODEL

Research in the area of mobile data services has been flourished with the increasing number of people relying on mobile devices and services they offer. Scholars aim to build models that explain why and how people intend to adopt those services and define factors affecting their decisions. According to the theory of reasoned action (TRA), individuals often consider the consequences of their actions before intending to perform them (Van der Heijden et al., 2005). Applying this concept into our research topic, we assume that consumers will evaluate the consequences of using mobile services and build their intentions to adopt accordingly. Indeed, consumers always seek the value that can be derived from a certain product or service before making the final decision.

This research examines the adoption intention of MDS from consumers' perspective by highlighting the important role perceived value construct along with its dimensions or elements can play in explaining and predicting the adoption intention of technologies. In the IS and Marketing literature, perceived value is recognized as the salient determinant for consumers when making a decision (Anchar et al., 2003; Kim and Han, 2009; Shin, 2009). Recognizing its importance in the context of MDS adoption and acceptance, perceived value construct or some of its dimensions were utilized in previous research (Kim et al., 2007; Turel, 2007). This was based on the argument that perceived value has a strong influence on users' decision process for pay-per-use services (Hong et al., 2006; Kim et al., 2007; Kim and Han, 2009; Kim and Han, 2011; Lin and Lu, 2011). The result of such studies revealed that utilitarian value (that relates to task accomplishment), hedonic value (which involves the enjoyment and pleasure felt when using MDS), and social

or uniqueness value (which can be defined as enhancement of the social image of the user through the use of MDS) dimensions have strong positive influences on the adoption intention of MDS. However, we postulate that other dimensions of perceived value such as epistemic and economic value elements should be also considered. Epistemic value is relevant given that MDS are often new and the curiosity to learn new things amongst some consumers is seen positively and reported to have a positive influence on adoption intention (Bhatti, 2007; Pihlstrom and Brush, 2008; Rouibah and Hamdy, 2009). Economic value is also important since if MDS are priced inappropriately, consumers are most likely to reject it. Despite the importance of perceived value elements and their impact on users' decisions, little has been done to comprehensively identify the perceived value elements of mobile services and their effect on adoption intention (Hong et al., 2008) and more specifically in the Arab world. Thus, this paper comes to contribute in this domain. As this study approaches the adoption intention of mobile data services from consumers' perspective, the study examines the effect of the dimensions of perceived value (i.e. utilitarian, hedonic, uniqueness, epistemic and economic) on the adoption intention of MDS (See Figure 1).

Utilitarian value

Utilitarian value relates to the level of effectiveness and efficiency that is perceived by consumers when using Information Systems (IS) (Kim and Han, 2009). Utilitarian value can also be described as the effective achievement of a utilitarian goal which is often suitable for customers classified as problem-solvers (Pura, 2005). For example, overcoming the time and place constraints, video phone services is seen as the greatest benefits of MDS (Kim, 2004; Carlsson et al., 2005). Location-based services represent another example of mobile services providing utilitarian values such as finding the nearest petrol station, although such services can also provide location-based games which deliver hedonic values. Most studies on the IS domain have strongly supported utilitarian value as a crucial determinant of prompting behavioral intention to adopt and use IS because customers make rational and calculated assessments of the functional benefits and sacrifices of using IS. The results of many studies indicated that utilitarian value has a positive and significant influence on intention to adopt MDS (Anchar et al., 2003; Van der Heijden et al., 2005;

Carlsson et al., 2006). Hence, we hypothesize that utilitarian value that can be derived from the use of services such as mobile banking, buying tickets, and location based services will have a positive effect on the

adoption intention of MDS.

H1. Utilitarian value has a positive and significant influence on adoption intention of MDS.

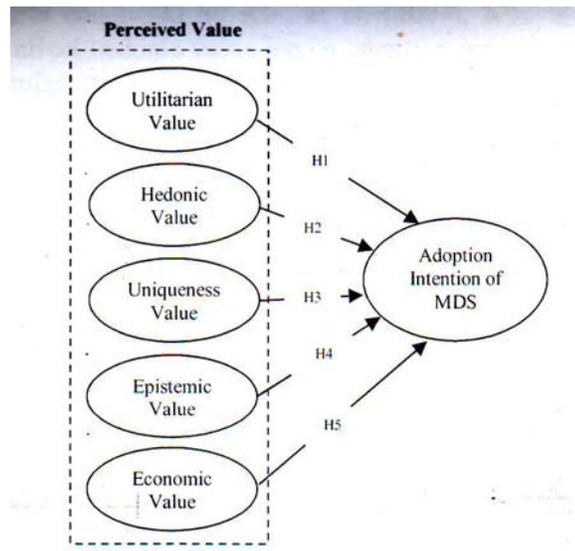


Figure1. The Research Model

Hedonic value

Hedonic value is defined as the level of pleasure and joy users experience when using a certain technology. In the context of MDS, hedonic values are delivered when mobile services successfully provide users with fun and enjoyment. Intrinsic motivations (level of enjoyment) which refer to the satisfaction sensed when performing an activity have a direct and favorable influence on user behavior (Kwon and Chidambaran, 2000; Hong et al. 2008). Entertaining services that include fun element such as games, ringing tone, MP3 player are preferred by customers (Kim et al., 2005) and they use them based on emotional wants rather than performance enhancement. These services powered by technological advances and communicated through media and social members enable their users to better communicate with relatives and kill time when there is nothing to do while amusing themselves and feeling relaxed at the same time. Previous studies conducted by Kim et al. (2007), Kim and Han (2009) had shown the positive effect hedonic value has in explaining the adoption intention of MDS. Therefore, we postulate that there is a direct and positive relationship between hedonic value and adoption intention of MDS.

H2. Hedonic value has a positive and significant influence on adoption intention of MDS.

Uniqueness value

Uniqueness value relates to the sense of differentiation from others (Tepper and Mckenzie, 2001). Individuals who quest uniqueness normally value their sense of self-importance and seek whatever ways that will lead them to their quest. Possession and usage of a unique product can help users obtain the perception of dominance and leadership in their hierarchy. Mobile phones are used as a symbol to create a better social image, but with the increasing number of advanced mobile phones' holders, services offered by such enhanced technology are also used nowadays to shape the social image (Nicolas et al., 2008). Young people in many Asian countries use their smartphones as new fashion items to show off in public (Lu et al., 2005). This indicates that services that are observable and can draw attention would be widely adopted by individuals looking for distinguishing themselves from others (Heinonen and Anderson, 2002; Hong et al., 2006). Moreover, MDS offer highly personalized services to its carrier. Telecoms

as service providers can detect the identity and the location of the user, thus offering customized information based on resources nearby (Lee and Benbasat, 2004). However, it must be noted that once a service becomes popular among many users, it loses its uniqueness. Thus, innovative mobile services must be provided in a constant and timely manner. According to the findings of Hong et al. (2006), there is a strong positive relationship between uniqueness and MDS adoption intention. So we hypothesize that uniqueness will have a direct effect on intention to adopt MDS.

H3. Uniqueness value has a positive and significant influence on adoption intention of MDS.

Epistemic value

Epistemic value relates to the knowledge gained upon trying out new services (Pihlstrom and Brush, 2008). In the context of information technology, individuals who are willing to try out a new technology are called personal innovators. It has been believed that individuals who have high personal innovativeness tend to be more risk-taking and are considered to be among the first to try out new technologies and recognize their usefulness and ease of use (Yand, 2004; Lu et al., 2005; Nicolas et al., 2008). Those innovators are more influenced by information gathered from external sources (e.g. media, internet) rather than information received from friends and colleges (Lu et al., 2005). Pagani (2004) mentioned that the more innovative the service is, the more are the interested people to adopt it. An important point we have to take into consideration here is that the process of experimenting new services will not always lead to final adoption, but in general epistemic value and the curiosity to learn new things and gain new knowledge amongst innovators is seen positively and reported to have a positive effect on adoption intention of various technologies (Bhatti, 2007; Pihlstrom and Brush, 2008; Rouibah and Hamdy, 2009). Therefore, we hypothesize that epistemic value positively and significantly affect the adoption intention of MDS.

H4. Epistemic value has a positive and significant influence on adoption intention of MDS.

Economic value

People usually think twice before spending their money on a product or service that they have never tried before. This is especially true when it comes to MDS, since unlike many services on stationary Internet which

are provided for free, MDS are pay-per-use services (Kim et al., 2007). Moreover, MDS are usually used for personal needs and the cost is borne mainly by individuals; hence, if the satisfaction received is not worth it, consumers would feel guilty for spending money irrationally. Indeed, it has been found that financial cost, initial cost, and operating cost are amongst the main barriers for using mobile data services (Anckar et al., 2003; Carlsson et al., 2005). Hence, we assume that the mobility value derived from mobile devices will cease its effect if there is a significant monetary sacrifice associated with the use of MDS (Heinonen, and Anderson 2002). According to that, we can expect that people will be more willing to use MDS if the cost associated with them is reasonable (Phan and Daim, 2011). Thus, we hypothesize that economic value has a strong effect on intention to adopt MDS.

H5. Economic value has a positive and significant influence on adoption intention of MDS.

3. RESEARCH METHOD

3.1 Data Collection and Measurement Scale

This study utilized the survey questionnaire as the instrument for data collection, where participation was completely voluntary. Hence, a self-completion, well-structured questionnaire was developed based on previous literature and was then distributed to a random sample. A total of 285 questionnaires were distributed from October 16, 2011 to February 9, 2012. Amongst the 275 returned questionnaires eight were excluded due to multiple skipped questions and missing values. In total, 267 responses ($n = 267$) were usable for data analysis. Given that MDS is new in the context of Jordan, respondents to this questionnaire can be characterized as potential early adopters of this innovation.

The constructs of interest in this study are Utilitarian Value (UV), Hedonic Value (HV), Uniqueness Value (UNQV), Epistemic Value (EV), Economic Value (ECV), and Adoption Intention of MDS (ADI). The developed questionnaire in this study adapted questionnaire items from previous literature. Table 1 lists the questionnaire items. Measurements for utilitarian value (UV) were adopted from Davis (1989) and Sirdeshmukh et al. (2002). Hedonic value (HV) measures were based on the work of Davis et al. (1992) and Sweeney and Soutar (2001). Measurements for uniqueness value (UNQV) were borrowed from Tepper

and McKenzie (2001), and Hong and Tam (2006). Measurements for epistemic value (EV) were adopted from Lu et al. (2008). As for economic value (ECV), its measurements were borrowed from Dodds et al. (1991).

Finally, measurements for adoption intention of MDS were adopted from Davis (1989). All the items were measured using a five-point Likert-type scale with anchors from "Strongly disagree" to "Strongly agree".

Table1. Summary of Measurement Scales

Construct	Item	Measure	Source
Adoption Intention of MDS (ADI)	AI1	I intend to use MDS in the future	Davis (1989)
	AI2	I expect that I would use MDS in the future	
	AI3	I plan to use MDS in the future	
Utilitarian Value (UV)	UV1	Using MDS would increase my chances of achieving things that are important to me	Davis (1989); Sirdeshmukh et al. (2002)
	UV2	Compared to the effort and time I need to put in and spend, the use of MDS would be beneficial and worthwhile to me	
	UV3	Using MDS would help me accomplish things more quickly	
	UV4	MDS would be useful in my daily life	
Hedonic Value (HV)	HV1	I expect that using MDS would be enjoyable	Davis et al. (1992); Sweeney and Soutar (2001)
	HV2	I expect to have fun using MDS	
	HV3	Using MDS would make me feel good	
	HV4	MDS would be the services that I feel relaxed about using	
Uniqueness Value (UNQV)	UNQV1	I often think that using MDS would shape a more unusual personal image about myself	Tepper and McKenzie (2001); Hong and Tam (2006)
	UNQV2	I am often on the lookout for new MDS that will add to my personal uniqueness	
	UNQV3	I actively seek to develop my personal uniqueness by using special MDS	
	UNQV4	Using MDS is interesting and assisting me in establishing a distinctive image	
Epistemic Value (EV)	EV1	If I heard about a new MDS, I would look for ways to experiment with it.	Lu et al. (2008)
	EV2	I always look forward to a new MDS so as I can get new knowledge about new technologies and services	
	EV3	Among my peers, I am usually the first to explore new MDS	
	EV4	In general, I am hesitant to try out new MDS	

Construct	Item	Measure	Source
Economic Value (ECV)	ECV1	I expect that MDS would be reasonably priced	Dodds et al. (1991)
	ECV2	MDS would offer a good value for money	
	ECV3	I believe that at the current price, MDS would provide a good value	

3.2 Sample Profile

The sample's descriptive statistics showed that 36.3% of the respondents were male and 63.7% were female. Respondents aged between 18-24 years formed the largest age group and represented 79.8% of the sample, whilst respondents aged between 25-30 years represented 12.4% of the sample. Also, 4.5% of the respondents aged between 31-35 years. Respondents aged between 36-40 years represented only 1.5% of the sample. Finally, 1.9% of the respondents aged above 40 years. In terms of their

education, the majority respondents (i.e. 92.9%) are pursuing their undergraduate degrees, whilst those pursuing their postgraduate degrees represented only 6% of the sample. Respondents pursuing their high school degrees formed 1.1% of the sample. In terms of mobile service providers, Zain was found to be the main provider with 64.8% of the sample. Many respondents are subscribed with more than one provider. The details are shown in table 2.

Table2. Sample Profile of the Survey

Measure	Item	Frequency	Percentage (%)
Gender	Male	97	36.3
	Female	170	63.7
Age	18-24	213	79.8
	25-30	33	12.4
	31-35	12	4.5
	36-40	4	1.5
	Above 40	5	1.9
Educ. Background	High School	3	1.1
	College/University	248	92.9
	Postgraduate	16	6
MNOs	Zain	173	64.8
	Orange	24	9.0
	Umniah	26	9.7
	Zain+Orange	15	5.6
	Zain+Umniah	23	8.6
	Zain+Orange+Umniah	1	0.4
	Orange+Umniah	3	1.1

4. RESULTS AND DISCUSSION

4.1 Reliability and Validity

The scales' reliabilities were measured and the

Cronbach's alphas of all scales as in Table 3 were ranged between 0.751 and 0.839; indicating good reliabilities of the scales.

Table 3. Descriptive Statistics and Reliability

Variable	Cronbach Alpha (α)	Mean	Standard Deviation
Adoption Intention (ADI)	0.827	4.041	0.804
Utilitarian Value (UV)	0.839	4.107	0.714
Hedonic Value (HV)	0.763	3.935	0.647
Uniqueness Value (UNQV)	0.779	3.264	0.824
Epistemic Value (EV)	0.751	3.520	0.670
Economic Value (ECV)	0.782	3.367	0.875

4.2 Hypotheses Testing and Discussion

The simple correlation amongst all the study variables was conducted using Pearson correlation analysis as shown in Table 4. As variables showed significant correlations ($p \leq 0.01$), we then utilized the regression model to test multicollinearity by examining collinearity statistics; i.e. Variance Inflation Factor (VIF) and tolerance. This is significant given that variables with

high collinearity pose a problem to regression analysis. The VIF value of any variable should not exceed 10; otherwise the variable is considered highly collinear (Hair et al., 1998). Collinearity statistics showed that tolerance values of all variables ranged between 0.618 and 0.846 and VIF values ranged between 1.181 and 1.672; indicating that multicollinearity is not a likely threat to the parameter estimates in this study.

Table 4. Correlation analysis amongst the variables

	UV	HV	UNQV	EV	ECV	ADI
UV	1.00					
HV	0.420**	1.00				
UNQV	0.314**	0.391**	1.00			
EV	0.305**	0.372**	.0508**	1.00		
ECV	0.273**	0.127*	0.200**	0.215**	1.00	
ADI	0.547**	0.329**	0.310**	0.307**	0.287**	1.00

UV: Utilitarian Value, HV: Hedonic Value, UNQV: Uniqueness Value, EV: Epistemic Value, ECV: Economic Value, ADI: Adoption Intention. ** $p \leq 0.01$, * $p \leq 0.05$

Moreover, regression analysis requires data to be normally distributed as a prerequisite so as to ensure the validity and reliability of the results. This research employs Jarque-Bera (skewness-kurtosis) test to make sure that all variables are within the acceptable limit of the skewness-kurtosis ranges. This test provides a comparison of the distributions of the study data and the normal distribution. Skewness values indicate the symmetry of the distribution. If skewness values are positive, then data are clustered to the left of the distribution; otherwise data are clustered to the right of

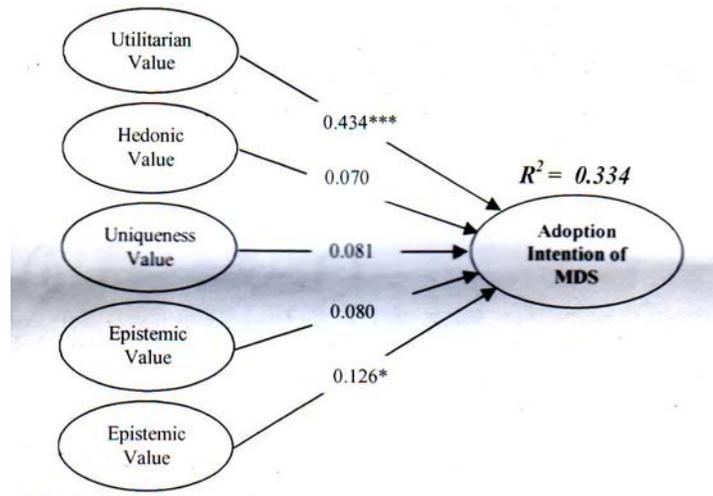
the distribution. Kurtosis values indicate the height of the distribution. Positive kurtosis values indicate a peaked distribution, while negative kurtosis values suggest a flatter distribution (Hair et al., 2006). Skewness-kurtosis acceptable values have been suggested by scholars such as Tabachnick and Fidell (2007) to be within the range of ± 2.58 at the 0.01 significance level. As in Table 5, almost all the Skewness-kurtosis values of the study data are within the recommended range and thus normality as a condition for successful regression analysis is assured in this study.

Table 5. Normality Test

Variable	Skewness	Kurtosis
Adoption Intention (ADI)	-1.039	1.849
Utilitarian Value (UV)	-1.615	4.266
Hedonic Value (HV)	-0.459	0.126
Uniqueness Value (UNQV)	-0.478	-0.065
Epistemic Value (EV)	-0.186	-0.669
Economic Value (ECV)	-0.536	-0.230

After making sure that necessary conditions are all satisfactorily met, the study hypotheses were tested using multiple regression analyses. First, value elements or dimensions (i.e. "utilitarian value", "hedonic value", "uniqueness value", "epistemic value", and "economic value" were regressed on "adoption intention". As in Figure 2, it was found that "utilitarian value" ($\beta = 0.434$, $p < 0.001$) and "economic value" ($\beta = 0.126$, $p < 0.05$) are

significantly and positively related to "adoption intention" of MDS (*Adjusted R*² = 0.334). Thus, H1 and H5 are supported. However, results show that "hedonic value" ($\beta = 0.070$), "uniqueness value" ($\beta = 0.081$), and "epistemic value" ($\beta = 0.080$) are not significant at $p \leq 0.001$, $p \leq 0.01$, or $p \leq 0.05$ levels. Hence, H2, H3, and H4 are not supported.



* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

Figure 2. Results of Regression Analysis

The findings of this study illustrate that utilitarian value strongly influences adoption intention of MDS. This indicates that people in Jordan search for goal fulfillment or task accomplishment services and this is consistent with the findings of Kim and Han (2009), and Lu et al. (2008). Economic value has also been found to positively predict adoption intention, which is also expected since people are usually concerned about the costs of such services (Kim et al., 2007). Research conducted by Van der Heijden et al. (2005), Kim et al. (2007), and Kim and Han (2011) revealed that hedonic

value is a weak predictor for adoption intention; a finding that is supported by our results. Strahilevitz and Myers (1998) argued that hedonic value is often associated with some guilt feeling and people often seek to justify their choices. In the case of mobile data services that contribute to personal pleasure, finding a proper justification might be difficult; which can be a reason for this weak relationship.

Moreover, uniqueness value was not found to have a significant effect on adoption intention of MDS. This is consistent with the findings of Carlsson et al. (2005) which

argued that the use of mobile services to emphasize social status is considered a small benefit. Furthermore, epistemic value has similar results. Novelty seeking and curiosity about new services are characteristics of innovators; those individuals can cope with uncertainty in order to gain new knowledge. As the culture in the Middle East is described as “strong uncertainty avoidance” (Kandari and Gaither, 2011), we are not surprised to find out there is no significant relationship between epistemic value and adoption intention.

5. CONCLUSIONS

This study contributes to the existing body of knowledge about MDS drivers, especially in Jordan. A research model was developed to investigate the effect of technological, social and informational influences on mobile value elements, and the effect those value elements have on the intention to adopt mobile data services. In light of our results, utilitarian and economic value elements are the best predictors of MDS adoption intention in Jordan, and mobile technology forms the

strongest influence on people’s perception about those value elements. Social and informational influences were also significant but not at a lesser degree than technological influences.

The present study also provides implications for MDS practitioners. Based on the results, people in Jordan are more interested in goal-oriented services that would enable them to accomplish their tasks more effectively and efficiently than self-oriented hedonic personal services. Consequently, service providers must focus their efforts on providing this type of services. Moreover, monetary value must not be overlooked as it ranked second after utilitarian value amongst other value elements individuals look for. Offering appropriate services may not yield the expected results if they were not associated with reasonable prices. This is especially important with the intensified competition in mobile industry. When promoting their added value services, providers must stress on the utilitarian aspects of their services along with the cost savings gained by using such services.

REFERENCES

- Al-Debei, M. M. and Avison, D. 2010. Developing a Unified Framework of the Business Model Concept. *European Journal of Information Systems*, 19(3), 359-376.
- Al-Debei, M.M. and Avison, D. 2011. Business Model Requirements and Challenges in the Mobile Telecommunication Sector, *Journal of Organizational Transformations and Social Change*, 8(2), 215-235.
- Al-Debei M. M. and Fitzgerald, G. 2010. The Design and Engineering of Mobile Data Services: Developing an Ontology Based on Business Model Thinking. *IFIP Advances in Information and Communication Technology, 2010, Volume 318, Human Benefit through the Diffusion of Information Systems Design Science Research*, 318, 28-51.
- Anckar B., Carlsson C., Walden P. 2003. Factors Affecting Consumer Adoption Decisions and Intents in Mobile Commerce: Empirical Insights. In *Proceedings of the 16th Bled eCommerce Conference: eTransformation*.
- Bhatti T. (2007). Exploring Factors Influencing the Adoption of Mobile Commerce. *Journal of Internet Banking and Commerce*. 12(3): 1-13.
- Carlsson, C., Carlsson, J., Hyvonen, K., Puhakainen, J., Walden, P. 2006. Adoption of Mobile Devices/Services - Searching for Answers in the UTAUT. *Proceedings of the 39th Hawaii International Conference on System Sciences*.
- Carlsson, C., Hyvonen, K., Repo, P., Walden, P. 2005. Asynchronous Adoption Patterns of Mobile Services. *Proceedings of the 39th Hawaii International Conference on System Sciences*.
- Heinonen, K. and Anderson, P. 2003. Swedish Mobile Market: Consumer Perceptions of Mobile Services. *Communications and Strategies*, 49: 151-171.
- Hong, S., Tam, K., Kim J. 2006. Mobile Data Service Fuels the Desire for Uniqueness. *Communications of the ACM*, 49(9): 89-94.
- Hong, S., Thong, J., Moon, J., Tam, K. 2008. Understanding the behavior of mobile data services consumers, *Information System Frontiers*, 10: 431-445.
- Kandari, A. and Gaither, T. 2011. Arabs, the west and public relations: A critical/cultural study of Arab cultural values, *Public Relations Review*, 37, 266- 273.
- Kim, B. and Han, I. 2011. The role of utilitarian and hedonic values and their antecedents in a mobile data service environment, *Expert Systems with Applications*. 38: 2311-2318.
- Kim, B. and Han I. 2009. What drives the adoption of mobile data services? An approach from a value perspective, *Journal of Information Technology*. 24: 34-45.
- Kim H., Chan H., Gupta S. 2007. Value-based Adoption of

- Mobile Internet: An empirical investigation. *Decision Support Systems*. 43: 111-126.
- Kim, Y., Lee, J., Koh, D. 2005. Effects of consumer preferences on the convergence of mobile telecommunications devices. *Applied Economics*, 37: 817-826.
- Kim, Y. 2005. Estimation of consumer preferences on new telecommunications services: IMT-2000 service in Korea. *Information Economics and Policy*, 17, 73-84.
- Kwon, H. and Chidambaran L. 2000. A Test of the Technology Acceptance Model. The Case of Cellular Telephone Adoption. *Proceedings of the 33rd Hawaii International Conference on System Sciences*.
- Lee Y. and Benbasat I. 2004. A Framework for the Study of Customer Interface Design for Mobile Commerce. *International Journal of Electronic Commerce*. 8(3), 79-102.
- Lin K. and Lu H. 2011. Understanding User Intention to Use Mobile Social Networking Sites: Utilitarian and Hedonic Value Perspectives. *Proceedings of Business and Information Conference*.
- Nah F, F-H., Siau, K., Sheng, H. 2005. The value of mobile applications: a utility company study. *Communications of the ACM*. 48, 85-90.
- Nicolas, C., Molina-Castillo F., Bouwman, H. 2008. An assessment of advanced mobile services acceptance: Contributions from TAM and diffusion theory models. *Information & Management*. 45, 359-364.
- Pagani, M. 2004. Determinants of Adoption of Third Generation Mobile Multimedia Services. *Journal of Interactive Marketing*. 18(3): 46- 59.
- Phan K. and Daim, T. 2011. Exploring technology acceptance for mobile services. *Journal of Industrial Engineering and Management*. 4(2): 339-360.
- Rouibah, K., and Hamdy, H. 2009. Factors Affecting Information Communication Technologies Usage and Satisfaction: Perspective from Instant Messaging in Kuwait. *Journal of Global Information Management*. 17(2), 1-29.
- Shin, D.H. 2009. A Cross-National Study of Mobile Internet Services: A Comparison of U.S. and Korean Mobile Internet Users. *Journal of Global Information Management*. 17(4): 29-54.
- Strahilevitz, M. and Myers, J. 1998. Donations to Charity as Purchase Incentives: How Well They Work May Depend on What You Are Trying to Sell. *Journal of Consumer Research*. 24, 434- 446.
- Tepper, K. and McKenzie, K. 2001. The Long-Term Predictive Validity of the Consumers' Need for Uniqueness Scale. *Journal of Consumer Psychology*. 10(3): 171-193.
- Turel, O., Serenko, A., Bontis, N. 2007. User acceptance of wireless short messaging services: Deconstructing perceived value, *Information & Management*. 44, 63-73.
- Van der Heijden, H., Ogertschnig M., van der Gaast, L. 2005. Effects of Context Relevance and Perceived Risk on User Acceptance of Mobile Information Services. *Proceedings of the Thirteenth European Conference on Information Systems (ECIS)*, Regensburg, Germany.
- Yang K. 2004. Exploring factors affecting the adoption of mobile commerce in Singapore. *Telematics and Informatics*. 22, 257-277.

منهجية القيمة في تفسير استخدام الخدمات الرقمية في شبكات الإتصالات الخلوية

معتز محمد الدبعي*

ملخص

هدفت هذه الدراسة إلى توضيح العوامل المؤثرة في نية استخدام خدمات البيانات الخلوية من منظور المستهلكين كمستخدمين لتلك الخدمات. وسنركز في هذه الدراسة على القيمة التي من الممكن أن يحصل عليها المستخدمون جراء هذه الخدمات ونحن نفترض انه إذا تمكنا من معرفة القيمة المنفعية والترفيهية والاجتماعية والمعرفية والاقتصادية التي توفرها لكلا الخدمات، فإننا سنتمكن من توضيح وتوقع النية في استخدام خدمات البيانات الخلوية. أظهرت النتائج، أن القيمة المنفعية من أبرز الأسباب التي ادت إلى اعتماد هذه الخدمات، بالإضافة إلى أهمية القيمة الاقتصادية. ويبدو أن القيمة الترفيهية والقيمة الاجتماعية والقيمة المعرفية ليست بذات الأهمية التي تعد من دواعي استخدام خدمات البيانات الخلوية في الأردن. ومن المؤمل استخدام نتائج البحث من قبل الأشخاص المسؤولين عن التزويد بالخدمات الخلوية حتى يكونوا على دراية بحاجات واهتمامات المستهلكين من أجل تقديم خدمات ذات رواج اكبر بصورة أفضل.

الكلمات الدالة: نية الاستخدام، خدمات البيانات الخلوية، عنصر القيمة، القيمة المدركة، الأعمال المتعلقة بالخدمات الخلوية.

* كلية الأعمال، الجامعة الأردنية، الأردن. تاريخ استلام البحث 2011/11/22، وتاريخ قبوله 2012/12/20.