

E-shopping Success Dimensions: An Empirical Study in Kuwait

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Abstract

Despite that business to customers web sites (B2C) are growing very fast and is becoming an important marketing and purchasing channels still customers are not very keen to shop online and are not satisfied with the current design and operation of the shopping websites. Therefore success of e-commerce B2C web sites is still one of the biggest challenges management can face. While B2C success has been recently the focus of several e-commerce studies, notably these studies have all ignored the effect of gender on B2C success. This study aims fill in this gap and investigate the effect of gender on success of B2C web sites in an Arab country. The proposed research model integrates four variables: system quality, service quality, perceived value and user satisfactions, and was tested using a random sample of 198 Kuwaiti adults. Based on regression analyses this study revealed that gender plays an important factor on the proposed research model. Finding of this study have implications for researchers and practical.

Keywords

Success of B2C, user satisfaction, service quality, perceived value, system quality, service quality, gender effect

1. Introduction

The increasing popularity of the Internet has attracted both businesses and customers to gain the benefits offered by this technology. Internet offers possibilities for both customers and businesses to engage in e-commerce. E-commerce allows several benefits for both customers and businesses which were previously well discussed by previous studies. Despite that business to customers web sites (B2C) are growing very fast and are becoming an important marketing and purchasing channels still customers are not very keen to shop online and are not satisfied with the current design and operation of the shopping websites (Zhu et al., 2004; Kuo and Chen 2011). Customer satisfaction is a major element for successful B2C website, to improve this, customers' quality needs must be identified and targeted then making the required quality enhancements to achieve those targeted needs (Kuo and Chen 2011).

In order to deal with this issue many studies, in e-commerce field, have focused on the success factors that encourage users to buy and repurchase from e-commerce websites. These studies can be categorized into two groups. The first group focused on different factors that affect success of B2C web sites (Cao et al., 2005; Petter and McLean 2009). The second group focuses on the need to develop models based on grounded theories such as Technology Acceptance Model, Technology-Organizational-Environment framework, Theory of Planned Behavior, or mixed theories. Another recent trend focuses on developing a comprehensive model that can encompass the main dimensions for e-commerce system success based on D&M (DeLone and McLean 1992; DeLone and McLean 2003). Despite that these two groups advanced the knowledge in the ecommerce success field, they suffer mainly from the following limitations: *First*, all past studies related to ecommerce success have ignored to focus on the effect of gender on success of B2C web sites. *Second*, although many researchers have tested and enhanced D&M (DeLone and McLean 1992; DeLone and McLean 2003) IS success model in the information system field (e.g., Rai et al., 2002; Sharkey et al., 2011); few studies applied their model in the e-commerce field and tested it empirically in relation to e-commerce (Wang 2008; Wang and Liao 2008; Brown and Jayakody 2008; Chen and Cheng 2009). *Third*, while the D&M model was developed in the western countries, none study tried to validate thoroughly in an Arab country. Also there is an extensive body of literature that have shown that culture affects information system adoption (Leidner and Kayworth 2006; Sanchez-Franco et al., 2009), as well in e-commerce (Gong 2009). Surprising, up to now none study has investigated the effect of culture on success of web sites.

This study is part of a large project that aims to address the three previous issues (Rouibah et al., 2014). But the current study addresses only the first issue. It aims to test the effect of gender on the modified D&M model in B2C e-commerce systems within an Arab culture taking into account the modifications proposed by (Wang 2008).

The research problem to be addressed in this research is the following: Does gender affect the relationships between system quality, service quality, perceived value and user satisfaction in Kuwait which is an Arab country.

2. Literature Review

D&M (DeLone and McLean 1992; DeLone and McLean 2003) is the most updated and used model to measure information systems. It consists of six success dimensions: system quality, information quality, service quality, use/intention to use, user satisfaction, and net benefits. In 1992, D&M proposed that *information quality* and *system quality* both singularly and jointly affect both *IS use* and *user satisfaction*. In addition, the amount of use can affect the degree of user satisfaction either positively or negatively, while the level of user satisfaction can affect the degree of use as well. IS use and user satisfaction are thus direct antecedents of *individual impact*. Impact on individual performance should eventually have an *organizational impact*. Subsequent to DeLone and McLean (1992) study, D&M (DeLone and McLean 2003) proposed an updated model based on many IS success research contributions that tested, validated, challenged, and enhanced their original model. Besides factors in D&M (DeLone and McLean 1992), the updated D&M IS Success model (DeLone and McLean 2003) included service quality. And these authors suggested applying their model to measure e-commerce systems success.

Wang (2008) is one initiative that validated the updated D&M in e-commerce field. Wang (2008) identified four difficulties/weaknesses with regard to D&M Model. First, DeLone and McLean's net benefits measure is too broad to define. Therefore, to measure the net benefits, the researcher needs to define carefully what qualifies as benefits, for whom, and at what level of analysis (Wang 2008, pp.533). Second, DeLone and McLean (2003) did not try to adequately link their model with perceived usefulness suggested by (Davis 1989; Seddon 1997) that gives the model richness in theoretical perspective. Third, the updated DeLone and McLean model lacks consistency with the marketing and customer behaviour literature that proposed a quality-value-satisfaction-loyalty chain that influences customers. Fourth, the updated DeLone and McLean model has not yet been validated empirically in the e-commerce environment. Thus, Wang's (2008) study focused on combining the updated DeLone and McLean model with Seddon's (1997) perceived usefulness, the marketing literature, and with Davis's (2009) TAM. Wang (2008) then re-specified and validated a new modified model. Wang (2008) replaced Seddon's (1997) perceived usefulness with perceived value, explaining that perceived value is a more reliable and comprehensive measure of net benefits. In addition, Wang (2008) used *intention to reuse* as a success measure of e-commerce systems, suggesting that increased *user satisfaction* will lead to increased intention to reuse. In addition, Wang (2008) stated that customer *intent for future use* should be a more precise measurement of e-commerce system success "*net benefits*" than current customer use or initial use of a system.

Besides Wang (2008) study, other efforts were undertaken to empirically validate the D&MM including (Wang and Tang 2003; Brown and Jayakody 2008; Wang and Liao 2008; Cenfetelli et al., 2009; Chen and Cheng 2009; Sharkey et al., 2010). These studies explored empirically the dimensions that effect e-commerce systems success and their relationships. These studies have adopted, challenged, and enhanced DeLone and McLean success model in e-commerce. But they were not as comprehensive as Wang (2008). Wang & Liao (2008) provided an empirical test of an adaptation of D&MM (DeLone and McLean 2003) in the context of e-Government. Based on convenient sample of 119 users in Taiwan they found that system quality and service quality both affect user satisfaction. However the effect of system quality and service quality on perceived value and perceived value on user satisfaction were not tested. Brown & Jayakody (2008) tested a modified D&MM (DeLone and McLean 2003) in South Africa based on a convenient sample of 166 online shoppers. Besides the six constructs in the D&M model their model included also trust and loyalty incentives. Authors found that service quality positively affect user satisfaction. However, authors did not test the following paths: System Quality and perceived value, service quality and perceived value, perceived value – and user satisfaction.

Cenfetelli et al. (2009) investigated the factors that influence B2C websites and developed a model close to D&MM. Their model included perceived services functionality (similar to system quality), service quality and perceived usefulness (similar to perceived value); user satisfaction and continuance intentions to reuse. They tested their model based on random sample of 1081 Canadian participants. They found that perceived service functionality and service quality are both positively related to perceived usefulness. In addition, perceived service functionality, service quality and perceived usefulness are positively associated with user satisfaction. Chen and Cheng (2009) re-specified D&MM (DeLone and McLean 2003) for the purpose of assessing the success of e-commerce systems. They tested their model based on 331 customers in Taiwan most of them students. They found that both system quality and service quality are positively correlated with user satisfaction. However, the paths between system

quality and perceived value, service quality & perceived value, and perceived value and user satisfaction were not tested.

3. The Research Model

As we mentioned in the introduction, this study is a part of large project that aims to develop and enhance a comprehensive model for web sites success in the Arab world. The first phase consisted to test Wang (2008) in the context of Kuwait by reusing the same items as Wang (2008). Based on the factor analysis two constructs of Wang (2008) were removed. Items related to these constructs they did not loaded on the due constructs, which led us to reduce Wang (2008) model as follow:

First, items related to information quality did not loaded on this construct and thus were eliminated. And kept only system quality and service quality. One possible explanation is that Kuwaiti shoppers seem not to worry about information provided by B2C web sites. Web sites requirement such as information completeness, precision, meeting online shoppers, information reliability and up to date information are becoming de facto in most B2C web sites.

Second, items related to intention to reuse did not loaded on this construct and were consequently removed. We kept user satisfaction as a success dimension of B2C web sites. Unlike Wang (2008) re-specification of D&M model which considers that perceived value, user satisfaction, and intention to reuse are all considered forms of net benefits measures, this study focuses only on user satisfaction as a dimension of success. Here we defined user satisfaction as the extent to which users believe that the B2C web site available to them meets their information requirements. We believe that e-loyalty, repeat purchase or intention to reuse can be used to measure user satisfaction, while length of stay can be used to measure system use. However, in this study we focus more on satisfaction rather than on length to stay. Also, user satisfaction is utilized in this study because if online shoppers are not satisfied with the current shopping experience of B2C web sites it is less likely the system in use will be successful. Therefore the revisit of online shoppers to repurchase is by default a trivial activity. Therefore, the presence of intention to revisit is not required and helps to reduce the researcher model. The more satisfied the user is with the B2C web site the more he or she will be inclined to shop from it. In other word, when a B2C meets an online user's needs, satisfaction with the system should increase, which should further lead to greater use of that system.

Third, we included gender in the research model since Wang (2008) suggested continuing testing and challenging his research model in other setting and cultures.

There was a common fact among information researchers that culture affects information system adoption and success. In particular USA where DeLone and McLean models were developed; Taiwan where Wang's (2008) re-specified the D&M Model, other studies that tested empirically other forms of D&M (DeLone and McLean 2003) model: Taiwan (Wang and Liao 2008; Chen and Cheng 2009), South Africa (Brown and Jayakody 2008). Thus, validating the modified DeLone and McLean model (DeLone and McLean 2003) applicability in ecommerce in Kuwait is questioned and may produce different results compare of previous studies (Wang and Tang 2003; Brown and Jayakody 2008; Wang and Liao 2008; Cenfetelli et al., 2009; Chen and Cheng 2009).

Culture has been operationalised using different dimensions (Leidner and Kayworth 2006). Gender was one major dimension that received extensive focus in information system literature (e.g. Leidner and Kayworth 2006). Gender relations in Kuwait are grounded in religious and tribal traditions. While Kuwaiti women are well educated (two/third graduated students from Kuwait university are female), and are active participants in the workforce, religious and tribal mores guide social relations. Reflecting the strong patriarchal structure, socially there is a segregation of sexes outside the family. For example, most important political, decisions, policy discourses are carried out in Diwaniyyas, informal social clubs, where memberships are generally restricted to men. However, recently there is a trend to have few Diwaniyyas for women. For example, one of the rare Kuwait studies that examined the effect of gender on attitude toward information ethics found that privacy and property issues different between male and female (Alshawaf et al., 2002).

Several past studies have also found that gender influences the adoption and the use of different technologies such as information system innovation (Agarwal and Prasad 1999); e-mail (Gefen and Straub 1997), information system for a data centre (Venkatesh and Morris 2000); new software technology application (Morris et al., 2005); mobile chat use (Nysveen et al 2005); e-learning (Ong, and Lai 2006); online shopping (Slyke et al., 2002; Dittmar et al., 2004;

Cyr et al., 2007;); e-loyalty in Internet service provider (Maltby et al., 2003; Sanchez-Franco et al., 2009); blog posting use (Lu and Hsiao 2009); and customers' elaboration processes towards recommendation agent advices (Doong and Wang 2011).

Lu and Hsiao (2009) studied the effect of gender for blog posting use. Authors developed a model based on Social Cognitive Theory that incorporates three key determinants of the intention to update weblogs (self-expression; subjective norms; and personal outcome expectations). And they tested their model using a sample of 525 Taiwanese subjects. They found that women's intention was strongly influenced by self-expression while men's intention was strongly influenced by personal outcome expectations of using weblogs. Doong and Wang (2011) studied the effect of gender on customers' elaboration processes towards recommendation agent advices using the advertising hierarchy of effects model. Authored tested their model using a sample of 432 members randomly selected from a database of a well-known Internet-based sellers. They found that women consider perceived usefulness of recommendation agent advices to a greater extent than men while making decisions about the usefulness of recommendations

Based on the previous discussion related to success of B2C web sites and gender effect on technology adoption, we propose the following research model and study hypotheses, which are outlined in figure 1. The expected type of association is stated for each of the four hypotheses. These associations were hypothesized based on prior supporting studies. This model depicts four variables: two exogenous (system quality and service quality) and two endogenous (perceived value and user satisfaction).

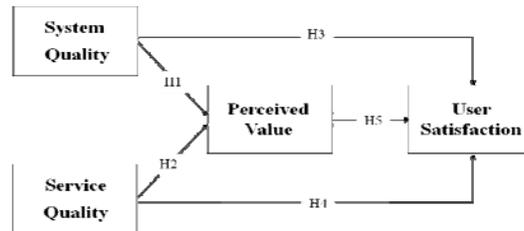


Figure 1 Research model and hypotheses

Table 1. Rational and summary of research hypotheses for the research model

Number	Path between variables	Direction (+ or -)	Rational	Supporting studies
H1	System Quality → Perceived value	+	In B2C web sites, system quality has a positive influence on perceived value	Wang (2008) Cenfetelli et al. (2009)
H2	Service quality → Perceived value	+	In B2C web sites, service quality has a positive influence on perceived value	Wang (2008) Cenfetelli et al. (2009)
H3	System Quality → User satisfaction	+	In B2C web sites, system quality has a positive influence on user satisfaction	Wang (2008); Brown and Jayakody. (2008); Wang and Liao, (2008); Chen and Cheng, (2009)
H4	Service quality → User satisfaction	+	In B2C web sites, service quality has a positive influence on user satisfaction	Wang (2008); Brown and Jayakody. (2008); Wang and Liao, (2008); Chen and Cheng, (2009)
H5	Perceived value → User satisfaction	+	In B2C web sites, perceived value has a positive influence on user satisfaction	Wang (2008); Chen and Cheng. (2009)

4. Research Methodology

The target sample was online shoppers from Kuwait who experienced purchasing products or services over the Internet. The questionnaire was designed to capture the participant's most recent experience with a particular website. In this research, we did not assign a particular website for evaluation by the participants. Instead, our goal is to measure the users' experience in purchasing at B2C websites and evaluate our research model accordingly. Therefore, we asked the participants to write the name of the last website from which they had purchased, and the type of product or service they bought from that website, then we requested them to answer the survey's questions accordingly. Through this approach, we tested the applicability of the research model in the e-commerce context in general and not for a particular e-commerce website. Before data collection, the questionnaire was tested for its understandability and readability based on four professors experts in the field of e-commerce. Feedback from the four professors led to adding an additional item for user satisfaction: "I was satisfied with the quality of this website." and additional modifications were related to the items' wording the questionnaire in general. Arabic and English versions of the questionnaire were randomly distributed using a web-based questionnaire during one month. We distributed the questionnaire to 550, and we received 228 answers. We discarded 30 incomplete questionnaires, leading to a sample of 198 of usable questionnaires which represent a response rate of 36%.

The questionnaire items were adopted from Wang (2008) who borrowed from previous studies. System quality was measured using two items representing system ease of use which adopted from Doll & Torkzadeh (1988), and Rai et al. (2002). Perceived value was measured using three items which are related to money perceptions and good value for money adopted from Dodds et al. (1991). Service quality was measured six items adopted from Wang & Tang's (2003) which represent reliability, responsiveness, assurance, and empathy. User satisfaction was measured using three items. All items in the questionnaire were measured using a 5-point Likert-type scale ranging from strongly disagree to strongly agree.

5. Results and Discussion

Statistical data analysis was conducted in order to test the reliability and the convergent validity of the research model, as well as to test the relationships' significance between the constructs of the research model. We tested the reliability of the measurement model using Cronbach's alpha, and convergent validity using factor analysis. Linear regression was conducted to explore the relationships between the model's constructs.

5.1. Demographic data and behavior of respondents

Table 1 provides demographic data related to our sampled participant in this study. It reveals that most participants are female, under 29 years old, and have a university degree, and have purchased between 2 and 4 times per year, and mostly purchased clothes from B2C web sites.

Table 2 Characteristics of respondents

Respondents' Demographic		Frequency	Percentage
Gender	Male	92	46.71
	Female	106	53.29
Age	Under 21 years	29	14.47
	21-29 years	116	58.55
	30-39 years	47	23.68
	40-49 years	5	2.63
	More than 50 years	0	0.00
Education	High school degree or lower	26	13.16
	Diploma degree	48	24.34
	Bachelor degree	95	48.03
	Masters degree	27	13.82
	Doctoral degree	1	0.66
The most recent products and services respondents bought from e-commerce websites	Clothes	60	30.26
	Software	0	0.00
	Music/ videos	7	3.29
	Sport equipment	9	4.61

	Jewelry/ bags/ watches	16	7.89
	Books/ magazines/ journals	18	9.21
	Electronics/ Computer hardware	31	15.79
	Travel (tickets/ hotels)	34	17.11
	Other	23	11.84
Online purchases frequency	Once a year	44	0.22
	2-4 times per year	57	0.29
	5-10 times per year	45	0.23
	More than 10 times per year	52	0.26

5.2. Factor Analysis

Factor analysis was conducted to test the convergent validity using Varimax rotation. Four factors with Eigen values greater than 0.7 emerged for both male and female participants. Among the six constructs of Wang (2008) items related to information quality and intention to reuse were eliminated since they did not satisfy the condition of Hair et al., (1998). Therefore only four factors explain were retained (see figure 1) which explain 71.04% of the total variance for male participant and 66.04% for female participants, and for the mixed (male and female participants). In addition to obtain these results, we also dropped two items from male participants: SV3 of perceived value and US1 of user satisfaction, and one item from female participants: SV6 from perceived value. Results also reveal the merge between two constructs: intention to reuse and user satisfaction items (US1, US2, US3, ITR1, ITR2 and ITR3). Thus we decided to label the new construct simply “user satisfaction” construct. Table 2 displays the kept items with factor loadings more than 0.50 as recommended by past studies Hair et al., (1998).

Table 3. Factor analysis for both Male and female participants

Items		Gender	Item discarded		Mean	SD	Cronbach's Alpha	Component			
			Male	Female				1	2	3	4
SQ1	The e-commerce system is user friendly	M			4.31	0.71	0.895				.801
		F			4.21	0.70	0.886				.735
SQ2	The e-commerce system is easy to use.	M			4.25	0.71	0.895				.835
		F			4.14	0.80	0.889				.842
SV1	When I have a problem, the e-commerce system service shows a sincere interest in solving it	M			3.66	0.88	0.896		.768		
		F			3.64	0.83	0.888		.724		
SV2	The e-commerce system service is always willing to help me	M			3.82	0.87	0.895		.794		
		F			3.73	0.88	0.884		.775		
SV3	I feel safe in my transactions with the e-commerce system service in terms of security and privacy protection	M	X		3.89	1.06	0.899				
		F			3.96	1.04	0.883		.548		
SV4	The e-commerce system service has the knowledge to answer my questions	M			3.61	0.84	0.894		.772		
		F			3.65	0.85	0.885		.769		
SV5	The e-commerce system service gives me individual attention	M			3.86	0.80	0.890		.717		
		F			3.83	0.77			.600		
SV6	The e-commerce system service understands my specific needs	M			3.75	0.77	0.894		.676		
		F		X	3.85	0.78	0.885				
PV1	The product/service of the e-commerce system is a good value for money	M			4.03	0.91	0.890			.642	
		F			3.96	0.95	0.876			.761	
PV2	The price of the product/service of the e-commerce system is acceptable	M			3.97	0.77	0.897			.759	
		F			4.02	0.97	0.877			.814	
PV3	The product/service of the e-commerce system is considered to be a good buy	M			4.13	0.79	0.890			.701	
		F			4.21	0.72	0.881			.663	
US1	I am satisfied with this e-commerce system	M	X		4.24	0.69	0.890				
		F			4.17	0.75	0.875	.753			
US2	The e-commerce system is of high quality	M			4.13	0.91	0.889	.695			
		F			4.15	0.91	0.875	.783			
US3	The e-commerce system has met my expectations	M			3.87	0.97	0.891	.722			
		F			3.96	0.86	0.879	.806			

SQ: System Quality; **SV:** Service Quality; **US:** User Satisfaction; **PV:** Perceived Value

Reliability of the four constructs was assessed using Cronbach's alpha. The results reveal high reliability of the instrument since for male participant the values of Cronbach's alpha are comprised between 0.885 and 0.899 and between 0.872 and 0.889 for female participant. Consequently, all the reliability examination results in this study exceed 0.60 which was recommended by [Error! Reference source not found.] as the lower limit of acceptability.

5.3. Testing the hypotheses

We build two regression models which were used to the user satisfaction for two groups: male participants vs. female participants. The outcome of the regression models are shown in figure 2. The results show that gender plays a significant role in the success of B2C web sites.

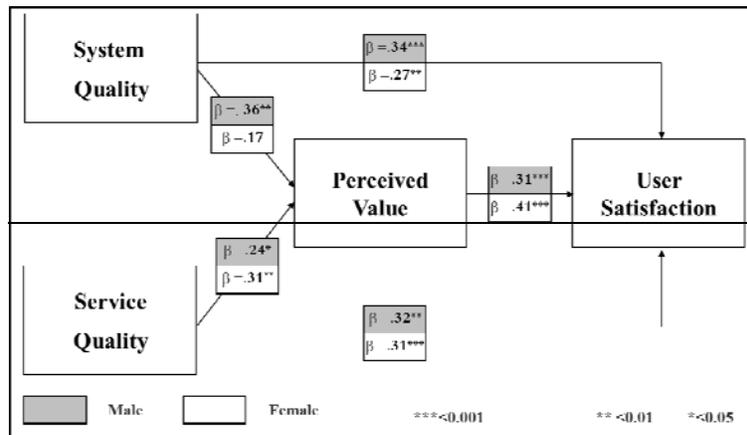


Figure 2. Linear regression results

Predicting user satisfaction for male and female participants

Results reveal that three variables system quality, service quality, and perceived value affect positively user satisfaction: system quality ($\beta=.34$; $p<0.001$); service quality ($\beta=.317$; $p<0.01$), and perceived value ($\beta=.31$; $p<0.001$). These results support H3a, H4a, and H5a. Moreover, results highlight the importance of system quality since it exerts the stronger predictor on user satisfaction. These three variables explain $R^2 = 35.1\%$ of the total variance in the male user satisfaction. Similar to male participants, results reveal that three variables system quality, service quality, and perceived value affect positively user satisfaction: system quality ($\beta=.271$; $p<0.01$); service quality ($\beta=.311$; $p<0.001$), and perceived value ($\beta=.41$; $p<0.001$). These results support H3b, H4b, and H5b. But unlike male participants; results highlight the importance of perceived value since it exerts the stronger predictor on user satisfaction. These three variables explain $R^2 = 34\%$ of the total variance in the female user satisfaction.

The study findings support, conflict and extend previous findings. The findings of this study support those of previous e-commerce studies related to testing the D&M in the ecommerce field and that have found some influence from system quality, service quality and perceived value on user satisfaction (Wang 2008; Brown and Jayakody 2008; Wang and Liao 2008; Cenfetelli et al. 2009; Chen and Cheng 2009).

Predicting perceived value for male and female participants

Results in figure 2 also shown that as hypothesized, the two variables system quality ($\beta=.363$; $p<0.01$) and service quality ($\beta=.238$; $p<0.05$) positively affect perceived value for male participants. Thus the two hypotheses are supported: H1a, and H2a. These two variables explain 21.9% in the total variance of perceived value of web sites. Unlike male participants, results in figure 2 shown that only service quality ($\beta=.308$; $p<0.01$) positively affects perceived value for female participants, thus leading to support H2b and reject H2a. The variance explained in the perceived value is 11.9%. With regard to the effect of gender our results support, contrast and extend previous studies that focused on the effect of system quality and service quality on perceived value of web site (Wang 2008; Chen and Cheng 2009). For example, Wang (2008) found that system Quality ($\beta = 0.30$) and service quality ($\beta = 0.35$) had both effect on perceived value but the effect of service quality is stronger than that of system quality. Cenfetelli et al. (2008) found that in Canada, perceived service functionality (similar to system quality) ($\beta = 0.50$) and service quality ($\beta = 0.28$) have both positive effect on perceived usefulness (similar to perceived value) of Canadian web sites, and the effect of system quality was the strongest one. This explained 56% of the variance of perceived usefulness (similar to perceived value). While our study also extend previous studies (Wang and Liao

2008; Brown and Jayakody 2008; Chen and Cheng 2009) who did not tested such relationship. Finally our results confirm previous studies that investigated the effect of gender on technology adoption (Agarwal and Prasad 1999; Gefen and Straub 1997; Seddon 1997; Maltby et al., 2003; Dittmar et al., 2004; Nysveen et al., 2005; Ong and Lai 2006; Cyr et al., 2007; Doong and Wang 2011). However, this study contrast with other studies that failed to found such effect, in particular with the study Baker et al. (2007) about computer use in Saudi Arabia, a close country to Kuwait, and e-mail use in South Africa (Belle and Stander 2005). In addition, they extend the literature on gender effect since this is the first study that proves the effect of gender on B2C success dimension.

6. Conclusion

This study focused on the effect of gender on factors that affect web sites success in an Arab country. It develops a model based on Wang (2008). The model includes four variables: system quality, service quality, perceived value and user satisfaction. In this study success was measured based on user satisfaction. The study has achieved three main contributions: This is the first study that investigates the effect of gender on success of B2C web sites in the Arab world and found that gender does affect the user satisfaction of web sites. We found absence of the link between system quality and perceived value for female participants. We also found the difference in the relative importance on the effect of exogenous variable on endogenous one. Satisfaction of male participants were primarily driven by system functionalities of the web sites such as system accessibility, ordering process, and search capability, and secondly by service quality features such as website intelligence, responding customers properly, and assuring customers' privacy. Unlike male participants, female were more driven by perceived value of the web sites in term of monetary values followed by service quality. Our results also reveal that despite both system quality and service quality affect perceived value of the web sites; perceived value is mainly driven by system quality; however it is driven only by service quality features for the female participants. Such results have not been previously studied and extend finding of previous studies (Wang 2008; Wang and Liao 2008; Brown and Jayakody 2008; Cenfetelli et al., 2008; Chen and Cheng 2009). Third, this study uses a random sample of participants and did not focus on students compare to previous studies.

References

- Agarwal, R., & Prasad, J. (1999). Are Individual Differences Germane to the Acceptance of New Information Technologies? *Decision Sciences*, 30, 361-391.
- Alshawaf A.R., Ahikari A., and Zhang H., (2002). Information ethics: an investigation of different subcultures in a society. *Review of Accounting and Finance*, Vol 1, No3, 54-73.
- Baker, E., Al-Gahtani, S., & Hubona , G. (2007). The effects of gender and age on new technology implementation in a developing country Testing the theory of planned behavior (TPB). *Information Technology & People*, 20(4), 352-375.
- Belle, J., & Stander , A. (2005). Gender Differences in the Perception and Use of Email in Two South African Organisations. *The Electronic Journal of Communication*, 15(1 & 2).
- Brown, I., & Jayakody, R. (2008). B2C e-commerce success: a test and validation of a revised conceptual model. *The Electronic Journal Information Systems Evaluation*, 11(3), 167-184.
- Cao, M., Zhang, Q., Seydel, J. (2005). B2C e-commerce web site quality: an empirical examination. *Industrial Management + Data Systems*, 105(5/6), 645-661.
- Cenfetelli, R. T., Benbasat, I., & Al-Natour, S. (2008). Addressing the what and how of online services: Positioning supporting-services functionality and service quality for business-to-consumer success. *Information Systems Research*, 19(2), 161-181
- Chen, C. D., & Cheng, C. J. (2009). Understanding consumer intention in online shopping: a respecification and validation of the DeLone and McLean model. *Behaviour & Information Technology*, 28(4), 335-345.
- Cyr, D., Hassanein , K., Head , M., & Ivanov, A. (2007). The role of social presence in establishing loyalty in e-Service environments. *Interacting with Computers*, 19, 43-56.
- David, Z., & Hise , R. (2000). E-satisfaction: An initial examination. *Journal of Retailing*, 76(3), 309-322.
- Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-39.
- DeLone, W.H., & McLean, E.R. (1992). Information systems success: The quest for the dependent variable. *Information Systems Research*, 3(1), 60-95.
- DeLone, W.H., & McLean, E.R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems*, 19(4), 9-30.

- DeLone, W.H., & McLean, E.R. (2004). Measuring e-commerce success: Applying the DeLone & McLean information systems success model. *International Journal of Electronic Commerce*, 9(1), 31-47.
- Dittmar, H., Long, K., Meek, R. (2004). Buying on the Internet: gender difference in on-line and conventional buying motivations. *Sex Roles* 50 (5/6), 423-444.
- Dodds, W.B., Monroe, K.B. & Grewal, D. (1991) Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 28, 307-319.
- Doll, W.J., & Torkzadeh, G. (1988). The measurement of end-user computing satisfaction. *MIS Quarterly*, 12(2), 259-274.
- Doong, H., & Wang H. (2011). Do males and females differ in how they perceive and elaborate on agent-based recommendations in Internet-based selling. *Electronic Commerce Research and Applications* 10(5), 595-604
- Evanschitzky, H., Iyer G.R., Hesse J., Ahlert D. (2004). E-satisfaction: a re-examination. *Journal of Retailing* 80 (2004), 239-247
- Gefen, D. & D. Straub. (1997). Gender Differences in the Perception and Use of E-mail: An Extension to the Technology Acceptance Model. *MIS Quarterly*, 21, 389-400.
- Gong, W. (2009). National culture and global diffusion of business-to-consumer e-commerce. *Cross Cultural Management: An International Journal*, 16 (1), 83 - 101.
- Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C., (199). *Multivariate data analysis* (5th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-related Values*, Sage, Newbury Park, CA.
- Kuo, H., & Chen C. (2011). Application of quality function deployment to improve the quality of internet shopping website interface design. *International Journal of Innovative Computing, Information and Control*, 7(1), 1349-4198.
- Leidner, D. E., & Kayworth, T. (2006). A Review of culture in information system research: Toward a theory of information technology culture conflict. *MIS Quarterly*, 30(2), 357-399.
- Lin, H-F. (2007). The impact of website quality dimensions on customer satisfaction in the B2C e-commerce context. *Total Quality Management & Business Excellence*, 18, 363-378.
- Lu, H., & Hsiao K. (2009). Gender differences in reasons for frequent blog posting. *Online Information Review* 33(1), 135-156.
- Maltby, A., Chudry, F., & Wedande, G. (2003). Cyber dudes and cyber babes: gender differences and internet financial services. *Journal of Financial Services Marketing* 8 (2), 152-165.
- Molla, A., & Licker P.S. (2001). E-commerce system success: An attempt to extend and respecify the DeLone and McLean model of IS success. *Journal of Electronic Commerce Research*, 2 (4), 131-141.
- Morris, M.G., Venkatesh, V., & Ackermann, P.L. (2005). Gender and age differences in employee decisions about new technology: an extension to the theory of planned behavior. *IEEE Transactions on Engineering Management* 52 (1), 69-84.
- Nysveen, H., Pedersen P.E., & Thorbornsen H. (2005). Explaining intention to use mobile chat services: moderating effects of gender. *Journal of consumer Marketing* 22 (5), 247-256.
- Ong, C., & Lai J. (2006). Gender differences in perceptions and relationships among dominants of e-learning acceptance. *Computers in Human Behavior* 22 (2006), 816-829.
- Pather, S., Remenyi, D., & de la Harpe, A. (2006). Evaluating e-commerce success: A case study. *The Electronic Journal of Information Systems Evaluation*, 9(1), 15-26.
- Petter, S., & McLean, E. (2009). A meta-analytic assessment of the DeLone and McLean IS success model: An examination of IS success at the individual level. *Information & Management*, 46(3), 159-166.
- Rai, A., Lang, S.S., & Welker, R.B. (2002). Assessing the validity of IS success models: An empirical test and theoretical analysis. *Information Systems Research*, 13(1), 50-69.
- Rouibah, K., Lowry, P. B., & Al-Mutairi L. (2014). B2C Systems Success Dimensions: Testing A Modified Delone & Mclean IS Success Model In Kuwait in an E-commerce Context. *Submitted to Journal of Global Information Management*
- Sanchez-Franco, M. J., Ramos A.F.V., & Velicia F.A.M. (2009). The moderating effect of gender on relationship quality and loyalty toward Internet service providers. *Information & Management*, 46 (2009), 196-202.
- Seddon, P.B. (1997). A respecification and extension of the DeLone and McLean model of IS success. *Information Systems Research*, 8(3), 240-253.
- Sharkey, U., Scott, M., & Acton, T. (2010). The Influence of quality on e-commerce success: An empirical application of the DeLone and McLean IS success model. *International Journal of E-Business Research*, 6(1), 68-84.

- van Slyke, C., Comunale, C.L., & Belanger, F. (2002). Gender differences in perceptions of web-based shopping. *Communications of the ACM* 45(7), 82–86.
- Venkatesh, V., & Morris, M. G. (2000). Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS Quarterly*, 24, 115–139.
- Wang, Y.-S. & Tang, T.-I. (2003). Assessing customer perceptions of Web sites service quality in digital marketing environments. *Journal of End User Computing*, 15, 14–31.
- Wang, Y-S. (2008). Assessing e-commerce systems success: A respecification and validation of the DeLone and McLean model of IS success. *Information Systems Journal*, 18(5), 529-557.
- Wang, Y-S., & Liao, Y-W. (2008). Assessing e-government systems success: A validation of the DeLone and McLean model of information systems success. *Government Information Quarterly*, 25(4), 717–733.
- Zhu, K., Kraemer, K., Xu, S. & Dedrick, J. (2004). Information Technology Payoff in E-Business Environments: An International Perspective on Value Creation of E-Business in the Financial Services Industry. *Journal of Management Information Systems*, 21(1), 17-54.

Biography

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