



Understanding the Influence of Espoused Culture on Acceptance of Online Services in a Developing Country

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Abstract:

The acceptance of any technology in developing countries cannot be taken for granted given the fact that these technologies are imported from developed countries and may have been designed without any consideration of the cultural values of the developing countries. Information Technology acceptance and the influence of espoused national cultural values on its acceptance have been investigated in the developed countries, but such studies are rare in developing countries. The present study surveyed 201 Nigerians using constructs from established models with the aim of understanding the influence of some espoused national cultural values on acceptance of online services. The results indicate that espoused national cultural values seem to moderate the effect of some of the independent variables. In particular, Power Distance has a positive influence on "perceived usefulness-satisfaction" relationship; Masculinity/Femininity has a negative influence on "ease of use-satisfaction" relationship and a positive influence on "information/system quality-satisfaction" relationship. Individualism/Collectivism and Uncertainty Avoidance also indicate significant moderating effects on the relationship of "information/system quality-satisfaction." The resulting model is fairly significant with $R^2 = 0.67$ for user's satisfaction and $R^2 = 0.51$ for users' behavioral intention to continue to use the online services. The implications of the findings are discussed.

Keywords: Hofstede culture dimensions, espoused national cultural values, technology acceptance, online services, developing countries, behavioral intention

INTRODUCTION

Online services such as online banking, online applications and online learning are an emerging experience in developing countries in general and in African nations in particular (Howard and Mazaheri 2009; Buys et al. 2009). Crucial services, including governmental and nongovernmental ones, are becoming commonplace in developing countries. Citizens are increasingly being directed to go online to complete application forms for services, admission, or open accounts. In developing countries, some banking services, as well as job announcements and applications, are now commonly available and accessible online. Like their counterparts in developed countries, the citizens of developing countries are now using Internet cafés to receive online services that are either not available or physically available at a much higher cost (Helbert 2010). According to Muto and Yamano (2009) the Internet and the associated online services have real potential of enabling the less-developed countries to become co-players in the virtual global world. The developing countries are expected to gain much from the numerous benefits that go with online services (Muto and Yamano 2009; Hassanein and Head 2007; Porter and Donthu 2006). It is expected that in the future, more services will become available online for everyone everywhere at a much lower cost (Porter and Donthu 2006; Sundqvist et al. 2005; Baack and Singh 2007).

As Hofstede (2001) and others (Straub et al. 2002; McCoy et al. 2005) point out, nations differ widely in their national cultural values which affects much of their attitudes and decisions including acceptance of information technology (IT). Based on information system research conducted in developed countries (Srite and Karahanna 2006; Swigger et al. 2004; Sundqvist et al. 2005), there is a strong evidence indicating some impacts of espoused cultural values on IT acceptance (Sundqvist et al. 2005; Baack and Singh 2007). Developing countries have distinct national cultural values that set them apart from developed countries. There is a need to investigate the role of national cultural values on technology acceptance in developing countries since most of the existing studies are based on developed countries. Some authors (such as Yoon 2009; Straub et al. 2002; Ford et al. 2003; McCoy et al. 2005) have called for repeating these studies in developing countries. The current study is an attempt to do just that.

The purpose of the present study is to explore the role of espoused cultural values on acceptance of online services in a developing country using Hofstede's cultural value scale. The proposed model reflects the relationships between user's computer skills on perceived ease-of-use and between perceived-ease-of use, perceived usefulness, and information/system quality as independent variables and user satisfaction as the dependent variable. The model also reflects the relationship between user satisfaction and behavioral intention to continue to use online services. In addition, the moderating role of espoused national cultural values on the relationships is also captured in the model. The specific research questions are: (1) What are the determinants of user's intention to continue to use online services? (2) What are the determinants of user satisfaction with online services? (3) What are the moderating effects of espoused national cultural values on user's acceptance of online services? This study contributes to the understanding that national cultural values may affect acceptance of information technology in developing countries, given that such technologies are new and foreign to the normal way of life. This paper uses individual-level cultural values to explain the moderating role of espoused cultural value on acceptance of online services.

CONTRIBUTION

The contributions of this study to information systems research are in three parts as described below.

1. This study proposes and uses an integrated approach that involves technology adoption model (TAM) to evaluate the determinants of user satisfaction of online services which can lead to a decision to continue to use online services. The integration of TAM and Information Systems Success Model (ISSM) in our proposed model is a significant contribution. Through the integrated approach, the study brings together two separate research efforts (i.e., Information Systems and marketing) that attempt to explore the determinants and driving motives that affect the decision for a user to adopt a certain technology (in this case, online services), and the decision to continue to use the technology.
2. This study examines the moderating effects of espoused cultural dimensions on the relationship between user satisfaction and three independent variables (perceived ease of use; perceived usefulness and information/system quality) in a developing country, Nigeria that is truly heterogeneous. It may be mentioned that espoused cultural dimensions based on Hofstede's study were introduced to the IS literature by Srite and Karahanna (2006).
3. The study provides empirical evidence of how some espoused cultural values can moderate the effects of ease of use, perceived usefulness, and information/systems quality of user satisfaction, which in turn affect the user's decision to continue to receive online services.



This research is expected to be interesting to researchers focusing on the adoption of innovative IT and the effective marketing of goods and services using the innovative IT. It is also expected to be of high interest to business managers who are involved in designing and marketing new online services for global market place which involves varied cultural values.

The rest of this paper is organized into six sections namely: (1) the conceptual background which overviews the theories and frameworks upon which this study is based, (2) the research model and hypotheses, (3) data and methodology, (4) analysis and results, (5) discussion, and (6) conclusion.

CONCEPTUAL BACKGROUND

Espoused National Cultural Value

Culture is not easy to define because it contains an assortment of elements and these elements are explained by terms such as *behavior*, *values*, *norms*, and *basic assumptions* (Bearden et al. 2006; Myers and Tan 2002). Leidner and Kayworth (2006) define culture as “belief systems that individuals have toward human behavior, relationship, reality, and truth.” In effect, culture plays an important role in shaping an individual’s behavior. Straub, Loch, Evaristo, Karahanna, and Srite (2002) and other scholars also point out that national cultural values are aggregates of individual values. Byrne and Bradley (2007) argue that it is more appropriate to consider that culture influences individual’s values rather than an individual’s values influencing the national culture. It is important to consider how much an individual subscribes to various cultural values. So this paper considers espoused cultural values based on Hofstede’s national cultural dimensions. *Espoused cultural values* are defined as the degree to which an individual embraces the values of his or her national culture (Srite and Karahanna 2006). Hofstede’s national cultural dimensions were derived from the average tendencies of IBM employees of each country. It should be noted that significant variations in these averages may exist in subgroups of populations within a nation (McSweeney 2002).

Hofstede (2001) identifies four major dimensions of culture that have become widely used by researchers to determine cultural values of nations in order to determine how nations differ from each other. At an individual level, these dimensions can be referred to as espoused cultural dimensions (Srite and Karahanna 2006). For studying the impact of Hofstede’s national cultural dimensions at an individual level, it may thus make sense to use individual’s espoused national cultural values. Espoused cultural values based on Hofstede’s work have been used in both information system and business research in general (Bochner et al. 1994; Gomez et al. 2000; Srite and Karahanna 2005; Zhang and Maruping 2008; Yoon 2009). The four national cultural dimensions are used in the present study and are briefly explained as follows.

- Power Distance (PD)—the degree to which individuals in an organization or a nation accept, as a norm, a significant difference in power and inequality
- Masculinity/Femininity (MF)—the degree to which a society prefers or encourages masculine characteristics (such as assertiveness, ambition, competitiveness) rather than feminine characteristics (such as caring, relationship, enhancing quality of life)
- Individualism/Collectivism (IC)—the degree to which a society or organization emphasizes the role of individuals rather than that of a group
- Uncertainty Avoidance (UA)—the level of risk accepted by a nation or organization, which is reflected in the way people react to uncertainty, threat, and ambiguity

These dimensions of national cultural values have been used to derive corresponding espoused cultural values in several contexts, including business and technology acceptance (Srite and Karahanna 2006; Yoon 2009; Ford et al. 2003; Gefen and Heart 2006). Cultural value studies can be classified into two groups: one group treats cultural values at a national level and investigates relationships of national-level cultural values with other national-level constructs (see Hofstede 2001 for a list of examples), while the second group believes that culture as seen at individual level can influence individuals differently in any given nation (Srite and Karahanna 2006; Karahanna et al. 2005, Ford et al. 2003; McCoy et al. 2005). The present study belongs to the second group, which assumes that at individual-level analysis, culture can be treated as an individual-level variable. This is another way of stating that, at individual-level analysis, national culture is a manifestation of individuals’ espoused cultural values. According to Srite and Karahanna (2006), “espoused national cultural values are the degree to which an individual embraces the values of his or her national culture” and also “the effect of culture is not homogeneous but rather dependent on the extent to which the individual subscribes to various cultural values.” Additionally, Straub et al. (2002) propose a virtual-onion model in which an individual’s cultural profile is the product of the interaction of several layers of culture (supranational, national, professional, organizational, and group) and thus may not be adequate to operationalize an individual’s culture based on national culture only.

Nigeria is selected for this study because it has been demonstrated that some countries such as India and Nigeria are made up of ethnic subgroups with varied cultural, religious, and racial characteristics (Walsham 2002) and that it is safe to treat such countries as being made up of “sharp cultural discontinuities” (Korpela et al. 2000). In other words, the distinct subgroups within a country with multiple cultures, religions, and languages can be treated separately in assessing espoused national cultural values (Korpela et al. 2000). Nigeria, with over 150 million people, constitutes nearly 20 percent of the African population. Its people speak over 200 distinct languages and dialects and practice numerous religions. Korpela et al. (2000) describe Nigeria as “a colonial creation” that cannot possibly be defined with common sets of national cultural values, since there are large distinct groups, such as the Igbo, Yoruba, and Hausa. We refer readers to the extensive literature review by Korpela and colleagues on how diverse Nigeria is in terms of people, cultures, traditions, religions, languages, etc. (Korpela et al. 2000). Based on personal experience of one of the authors, we believe that Nigeria is a heterogeneous nation and hence suitable for Hofstede’s scale for assessing cultural dimensions at individual level. Since Nigeria is a heterogeneous nation, it is safe to state that the findings of this study are as good as the findings of the study involving multiple countries. Thus Hofstede’s scale may also be suitable for a study involving multiple cultural subgroups, which can be found in a single heterogeneous nation such as Nigeria.

Online Service Acceptance Theories

The theories used in this study to explain online service acceptance are drawn from the disciplines of marketing and information systems and include Theory of Planned Behavior (TPB), Technology Acceptance Theory (TAM), and the DeLone and McLean ISSM (Ajzen 1985; Davis 1989; DeLone and McLean 1992). Table 1 indicates the contribution of each model to the study constructs.

Theory of Planned Behavior (TPB)

Ajzen (1985) is accredited with TPB because he extended the Theory of Reasoned Action which assumes that if people view a behavior as positive (attitude) and if they believe that others would prefer them to perform the behavior (subjective norm), there will be a greater intention (motivation) to behave in that manner, and so they are more likely to do so. TPB introduced a major predictor called *perceived behavioral control*, which accounts for situations when people have the intention of carrying out a behavior, but the actual behavior is thwarted because those involved lack confidence or control over behavior (Miller 2005, p. 127). TPB expresses overall subjective norm as the sum of the individual perception and motivation assessments for all significant referents. The model also expresses behavioral control as individual’s perception of the difficulty of performing a behavior which is on a continuum of easy to demanding. The main independent constructs of TPB are attitude toward act, subjective norm, and perceived behavioral control, while the dependent constructs are behavioral intention and behavior. Information systems research studies generally refer to this concept as “self-efficacy” or the judgment of an individual’s ability to use a computer technology (Compeau and Higgins 1999). According to Agarwal and Prasad (1999), experience with computer technology and perceived outcome and usage are positively related. Other studies have indicated a strong effect of computer self-efficacy on the user’s responses to information technology, which includes online services (Venkatesh and Davis 2000; Udo et al. 2010).

Technology Acceptance Theory (TAM)

Davis (1989) developed technology acceptance model (TAM) which has become one of the most cited model in information systems research. TAM states that user adoption of a given information system can be explained by the users’ intention to use the system, which in turn is determined by the users’ beliefs about the system. The model assumes that attitudes about a system (operationalized as “perceived usefulness” and “perceived ease of use”), will impact the motivation (intention) to use a system, which in turn leads to actual usage. The model maintains that technology acceptance is determined by the users’ perceived ease of use, which is the degree to which a user believes that using a new information system would be free of effort; and perceived usefulness, which is the degree to which a user believes that using a new information system would enhance task performance. These two determinants in turn affect the users’ attitude toward using the information systems. TAM concepts are suitable for online service systems research since these systems are driven by information technology. The independent construct of TAM are perceived ease of use and perceived usefulness while the dependent constructs are behavioral intention to use and system usage. One of the limitations of TAM is the assumption that the user is not contained by any factors such as personal ability to use the system, lack of time, organizational issues, or environmental constraints. The TAM has been used and modified by several studies and has been proved to be a reliable predictor of a person’s acceptance of information technology (Gefen et al. 2003; Wang 2003; King and He 2006). With respect to Internet usage, Chen et al. (2002) equate usefulness to consumers’ perceptions that using the Internet will improve their shopping and information-seeking experience, while ease of use refers to the amount of effort involved in online shopping such as in clarity and navigation on the Web pages.



Information Systems Success Model (ISSM)

In addition to relying on many of the constructs from the above theories, the proposed model in this study also includes constructs from the Information System Success Model (ISSM), which was developed to provide explanation to causal interrelationships among six success dimensions. The ISSM was first proposed by DeLone and McLean in 1992 and updated in 2003, based in part on the “influence” theory of Mason (DeLone and McLean 2003). The model provides multidimensional and interdependent instrument for assessing the success of information systems. One dimension is known as the semantic and is the success of the information in conveying the intended meaning. Another dimension is the effectiveness which is the effect of the information on the receiver. The construct referred to as “systems quality” assesses the technical success, while the construct referred to as “information quality” assesses the semantic success. The system effectiveness is captured by constructs called “use” and “user satisfaction.” Basically, the model maintains that every information system is developed with some features that cause various degrees of system and information quality. Upon using a system, users will experience these features and become either satisfied or dissatisfied with the system or its information products. The experience with the system or its information products will then influence the users in the performance of their tasks. The proxies for “system quality” include ease-of-use, functionality, reliability, flexibility, data quality, portability, integration, and importance. The proxies for “information quality” are accuracy, timeliness, completeness, relevance, and consistency. DeLone and McLean (2003) suggest that ISSM dimensions have causal relationships with user satisfaction and intention to use. The “Information/System Quality” component of the research model proposed in the present study is based on the ISSM and emphasizes the customer’s evaluation of the discrepancy between expectation and performance. This construct measures perceived quality and how it is related to the users’ intention to continue to use the system.

In summary, the present study proposes an integrated model based on TPB, TAM, and ISSM (Ajzen 1985; Davis 1989; DeLone and McLean 2003) and captures the relationships between information/system quality, user satisfaction and behavioral intention to continue to use a system. This is not the first study to propose a theoretical model that integrates user satisfaction and TAM models. Wixon and Todd (2005) already proposed an integrated model that links user satisfaction and TAM. This type of integrated model has been described as “a bridge between design and implementation decisions and system characteristics” (Ong, Day, and Hsu 2009). Ong et al. (2009) also investigate the integrated model and argued that beliefs about quality seem to affect satisfaction, and that beliefs are influenced by perceived usefulness and perceived ease of use.

RESEARCH MODEL AND HYPOTHESES

The proposed research model in this study is an integrated model that combines constructs from TPB, TAM, and DeLeone and McLean models. Figure 1 depicts the proposed model which is explained in this section. Parentheses indicate the number of items for each construct.

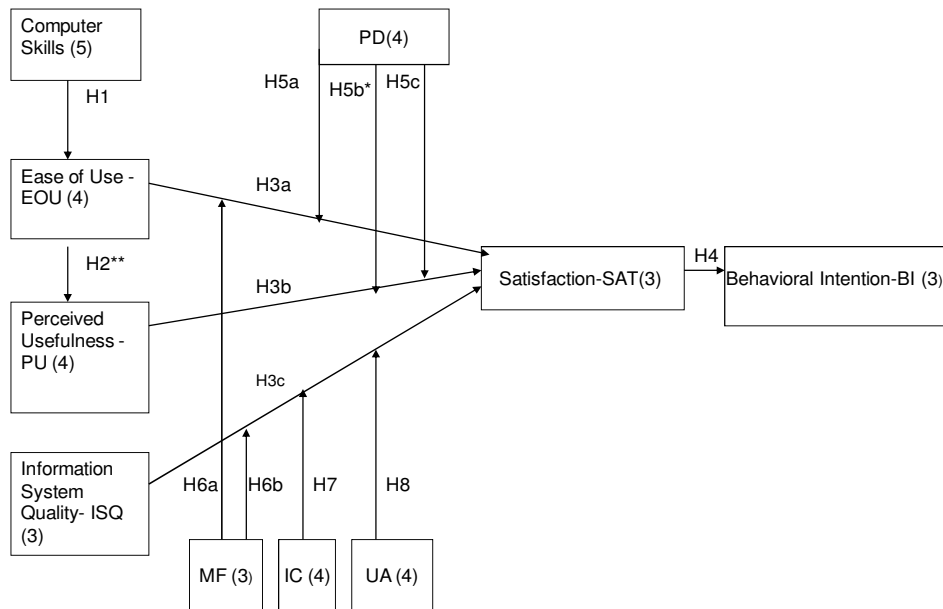


Figure 1: Proposed research model.

Table1 shows how each of the three theories link to the proposed research model in terms of the construct sources. First, the direct effects of the independent variables on the dependent variables were explored before investigating the moderating effects of espoused national cultural values. The study hypotheses are also given in this section.

Table 1: Contributing Theories for Proposed Model			
Theories	Independent Variables	Dependent Variables	Construct(s) Contributed
TPB (Ajzen 1985)	Attitude Toward Act, Subjective Norm, Perceived Behavioral Control	Behavioral Intention and Behavior	Computer Skills, Behavioral Intention
TAM (Davis 1989)	Perceived Ease of Use; Perceived Usefulness; Behavioral Intention	Behavioral Intention to Use; System Usage	Perceived Ease of Use; Perceived Usefulness; Behavioral Intention
ISSM (DeLone and McLean 2003)	Information Quality; System Quality	Usage; User Satisfaction	Information/System Quality, User Satisfaction,
Cultural Theory (Hofstede 2001; Srite and Karahanna 2003)	PD, UA, MF, IC (Moderator Variables)		Espoused PD, UA, IC, MF

Computer Skills (CS)

The skill level of an e-customer in manipulating the prevailing technology can affect the outcome of the service experience. One difference between traditional service encounters and online service experiences is that the online customer relies entirely on his or her ability to use technology to obtain the service, thus becoming a partner in the delivery of the online service (Kuisma et al. 2007; Kim et al. 2009). This factor is often referred to as self-efficacy (Porter and Donthu 2006). Ford et al. (2003) established a strong relationship between individual differences and behavior in Internet search. Rowley (2006) argues that increasing a customer's knowledge and skill sets with a service process is a key organizational strategy for managing customer satisfaction. She maintains that firms need to go beyond simply providing good Web site design and clear navigation instructions to implementing learning processes which will help their e-customers become more skillful when engaging in e-service encounters.

The learning processes have to capture unique customer inclinations, learning styles, and skill levels. Sanchez-Franco and Roldan (2005) point to the fact that differences in individual expertise can account for differences in perceived satisfaction. A skillful Web user is more likely to overcome Web site challenges and hence more likely to have a favorable assessment of Web service in terms of ease of use (Udo et al. 2010; Shih 2004). Alford and Biswas (2002) conclude that individual differences account for the difference in intentions to search and/or purchase among e-customers. In the case of Nigerian Web site users, more computer skills can lead to a perception that the online service systems are easy to use, as they can navigate these Web sites more easily and can identify flaws on the Web site more easily.

The related hypothesis to be tested is as follows:

H1: Computer skills positively impact how online customers perceive ease of use of online services.

Perceived Ease of Use (EOU)

Several studies have concluded that personal computer skills have a positive effect on how the user perceived ease of use which in turn affects how the user perceived the system's usefulness (Shih 2004; Kuisma et al. 2007; Kim et al. 2009). Yoon (2009) and Castaneda et al. (2007) are a few of many studies that conclude that EOU positively affects perceived usefulness, user's satisfaction, as well as the user's intention to use an information system. Other previous studies that relate EOU to perceived usefulness and user's satisfaction include: Srite and Karahanna (2006); Montoya-Weiss et al. (2003); and Rai et al. (2002).

The second hypothesis is expressed as follows:

H2: Perceived ease of use positively affects perceived usefulness of online services.

Perceived Usefulness (PU)

If a user perceives an information system to be useful, he/she will likely continue to use the system after the initial experience (Davis 1989). PU is the perceived likelihood that a system will make the user's work easier and attainable. Gefen and colleagues (2003) have shown PU to be significant in determining customer's intention to use

online shopping system. Some studies (Srite and Karahanna 2006; Castaneda et al. 2007; Ong et al. 2009) find PU to be a significant factor in determining the user's satisfaction and intention to use the system.

Several studies such as Yoon (2009) and Castaneda et al. 2007) conclude that EOU positively affects user's satisfaction and dependent other variables. This emphasizes the relationship between EOU and satisfaction which is related in hypothesis 3b below.

Information and System Quality (ISQ)

DeLone and McLean IS Success Model (DeLone and McLean 1992) provides the basis of ISQ construct of the proposed model. ISQ deals with the quality of information on the Web site and the quality of the online system through which customers have their online service experiences. Web site content can be defined as the presentation and layout of the information and functions that captures the overall firm presence (Cyr et al. 2010) and its public image, and is assumed to affect a customer's satisfaction with online services (Chen and Macredie 2005; Huang 2000). This construct includes such dimensions as information quality, appropriateness of the amount of information, types of media, presentation mode, size and types of the images, and the overall appeal of the Web site (Cyr et al. 2010). ISQ can make Web-based services more "real" and experiential to the online customer (Liu and Arnett 2000; Landrum et al. 2007; Yang et al. 2005). Size and style of graphs can be used to influence the perceptions of online shoppers. Researchers have also shown that the size and style of graphs not only influence perceptions but can also attract and retain e-customers (Nitse et al. 2004; Raney et al. 2003). Montoya-Weiss et al. (2003) also confirm that graphic styles, among other dimensions of Web site content, can influence online channel use and overall satisfaction.

User Satisfaction (SAT)

Several studies conclude that satisfaction is an affective, rather than a cognitive, construct (Oliver 1997; Olsen 2002). Rust and Oliver (1994) define satisfaction as the "customer's fulfillment response" which is an evaluation as well as an emotion-based response. It is an indication of the customer's belief of the probability of a service leading to a positive feeling. Cronin et al. (2000) assess service satisfaction using items that include interest, enjoyment, surprise, anger, wise choice, and doing the "right thing," three items were taken from previous studies (Zhang and Prybutok 2005). The items are: "I am satisfied with my previous online service," "Online service is a pleasant experience," and "Overall, I am satisfied with my online service experience." The user satisfaction construct items are based on ISSM (DeLone and McLean ISSM 2003).

The third set of hypotheses for the present study is:

H3a: Perceived ease of use positively impacts satisfaction.

H3b: Perceived usefulness positively impacts satisfaction.

H3c: Information and system quality positively impacts satisfaction.

Behavioral Intention (BI)

According to a model presented by Zeithaml et al. (1996), behavioral intentions can be captured by such measures as repurchase intentions, word of mouth, loyalty, complaining behavior, and price sensitivity. High satisfaction (as perceived by the customer) often leads to favorable behavioral intentions while low satisfaction tends to lead to unfavorable behavioral intentions. Zeithaml et al. (1996) further emphasize that behavioral intentions are relevant to a customer's decision to remain with or leave a company. Zhang and Prybutok (2005) conclude that customer experiences are related to behavioral intentions. The more positive the customer's experience, the more likely he or she is willing to reuse the service. Several authors (Venkatesh et al. 2003, Rai et al. 2002; Ajzen 1985; Featherman and Pavlou 2003) have used behavioral intention as an indicator of system success.

The related hypothesis is:

H4: User satisfaction has a positive impact on intention to continue to use online services.

The following subsections next describe the theoretical mechanisms that explore the moderating effects of espoused culture dimensions on the relationships between user satisfaction and the three independent variables (EOU, PU, and ISQ). We also sometimes refer to these as PD, UA, IC, and MF instead of espoused PD, espoused UA, espoused IC, and espoused MF, for brevity's sake.

Power Distance (PD)

Srite and Karahama (2006) investigate the moderating effect of espoused PD on subjective norm and concluded that espoused PD seems to have a positive and significant moderating effect on the relationship between subjective

norm and behavioral intention to use a system. It has been shown that customers from high PD countries seem to have less confidence in online shopping than customers from low PD countries (Yoon 2009).

If inequality is accepted as a norm in a society, the society ranks high on PD, but if equality is upheld as the norm, then the society ranks low on PD. A high PD at an individual level is a scenario where superiors and subordinates consider each other as unequal and the superiors tell the subordinates what to do. Individuals with high espoused PD values will always try to abide by their superior's opinions and judgments. Therefore, the opinion of leaders regarding a technology use should matter to subordinates. Opinion leaders in a developing nation such as Nigeria have already seen the benefits of using online systems in developed nations and would be favorably disposed to its use and would influence the subordinates accordingly. So high ease-of-use, high usability and high information/system quality may further goad a user to use and consequently high satisfaction will result from the high individual PD-related belief that rewards rather than punishes will follow. So the following set of hypotheses is to be tested:

H5a: The higher the espoused PD, the greater the effect of EOU on User Satisfaction.

H5b: The higher the espoused PD, the greater the effect of PU on User Satisfaction.

H5c: The higher the espoused PD, the greater the effect of ISQ on User Satisfaction.

Masculinity/Femininity (MF)

MF is the degree to which a society prefers or encourages masculine characteristics (such as assertiveness, ambition, competitiveness), rather than feminine characteristics (such as caring, relationship, enhancing quality of life). It does not refer to gender, but rather to characteristics or traits that are either masculine or feminine in nature (Hofstede 2001). Individuals with feminine-type of traits are likely to assign much importance to an online service system that is perceived to be easy to use than individuals with masculine-type traits, as it is a quality-of-work life issue. Therefore, the effect EOU on user "Satisfaction" will be more adversely affected in the case of masculine-type individuals (or individuals with high espoused masculine value). Yoon (2009) confirms that the lower the degree of espoused masculinity, the higher the effect of EOU. Srite and Karahanna (2006) also indicate a negative relationship between the degree of espoused masculinity and effect of EOU, but in their study the espoused MF moderating effect was not significant. Since quality is associated with goal achievement, it is expected that individuals with masculinity-type characteristics will value quality of online information and system (i.e., ISQ) much more than individuals with feminine-type characteristics. Since we use the instrument of Srite and Karahanna (2006) in measuring espoused cultural values such as MF (which is based on the instrument of Dorfman and Howell [1988]), it is possible that the items measuring MF actually measure gender differences and not work-value differences, as noted by those authors. Their results did not find any significant moderating relationships of MF between PU and intention. Thus the impact of moderating value of MF on the relationship between PU and satisfaction may not be very important or relevant and is not considered as a hypothesis. The related set of hypotheses is:

H6a: The higher the degree of espoused masculinity of individuals, the lower the effect of EOU on User Satisfaction.

H6b: The higher the degree of espoused masculinity of individuals, the greater the effect of ISQ on User Satisfaction.

Individualism/Collectivism (IC)

Individualism/Collectivism is always viewed as being high (individualism) or low (collectivism). Collectivistic individuals (or individuals with high espoused collectivistic values) are more interested in group and interdependent tasks. There is no clear conclusion in the previous studies regarding the moderating effects of IC on technology acceptance relationships such as between PU (or EOU) and intention (Srite and Karahama 2006). Thus we do not postulate any moderating role of IC on relationships between PU (or EOU) and satisfaction. However, Zahang and Maruping (2008) propose that the moderating effect of IC on the relationship between household IT acceptance and certain independent variables is significant. Since online service systems, such as online shopping, e-learning, etc., are primarily designed to motivate individuals to achieve their ambitions, needs, and goals, the information and system quality of online service systems will be more consequential to individualistic than collectivistic users. The related hypothesis is:

H7: The higher the degree of espoused individualism of the online user, the greater the effect of ISQ on User Satisfaction.

Uncertainty Avoidance (UA)

Individuals with high UA values tend to be uncomfortable in unpredictable or unstable situations (Hofstede 2001). The impact of information and system quality of online services on satisfaction may depend on the level of espoused UA. High risk taking (low espoused UA) induces a proclivity of mastery of new tools and new ways of doing work (such as e-service) and together with a greater effect of ISQ may encourage greater user satisfaction. In



previous similar studies that investigate the role of espoused cultural values, such as the study of Srite and Karahanna (2006), the moderating influences of UA on the relationships between EOU (or PU) and intention were not investigated. We do the same, for parsimoniousness of the overall model, by refraining from formulating hypotheses that investigate the moderating influences of UA on the relationships between EOU (or PU) and satisfaction.

H8: The lower the degree of espoused UA, the greater the effect of ISQ on User Satisfaction.

DATA AND METHODOLOGY

The survey instrument is based on the proposed research model discussed above and presented in Figure 1. The pretested survey instrument was administered to users of Internet cafés around a major metropolitan city in Nigeria during an academic visit to Nigeria by the first author. The construct items for each variable in the research model along with their factor loadings and Cronbach's alphas are provided in the Appendix. For a confirmatory model such as ours, a Cronbach's Alpha of 0.800 or better, a composite reliability of 0.700 or better, and an R^2 of 0.670 indicate a good model (Chin 1998). Only participants with online service experience within the previous six months were allowed to participate in the study. A total of 222 participants completed the survey, but only 201 completed surveys met the requirements (participants must have online service experience within the previous six months) and were used for the analysis discussed below.

Unlike many studies that focus on one or two information technologies, we decided to focus on a basket of Internet-based systems which were labeled "online services." This approach is suitable and necessary for two reasons: (a) the study's emphasis is on acceptance of Internet-based systems and not on any particular technology, and (b) selecting a particular online system would have disqualified many of the otherwise qualified participants. Also, it worth noting that being a developing nation, Nigeria lacks facilities for extensive Internet use, and hence we adopted a low threshold for categorizing types of users (i.e., three to six times a year; over six times a year, etc.). Another inhibiting factor for extensive use of Internet is the high cost involved.

Table 2 provides the demographics on the study participants. Females composed 58.2 percent of the participants. The age ranges were: less than 18–24 years (54.7 percent), between 24 and less than 35 years (43.8 percent), and over 35 years (1 percent). About 29.9 percent of the participants had an annual salary of less than \$10,000; 53.7 percent reported annual salary between \$10,000–\$20,000 while 16.7 percent earned above \$20,000. About 83.1 percent of the participants use English while about 10.9 percent use Nigerian languages for everyday communication.

Measure	Range	Percentage
Gender	Female	58.2
	Male	41.8
Age	18–24 yrs	54.7
	25–35 yrs	43.8
	≥ 35 yrs	1.00
Salary	≤ \$10,000	29.9
	\$10,000–\$20,000	53.7
	≥ \$20,000	16.5
Citizenship	Nigerian	97.0
	Others	3.0
Primary Language	English	83.1
	Nigerian languages	10.9
Number of times they used e-service in the last year	1–2 times	31.3
	3–6 times	42.3
	Over 6 times	26.4

In terms of number of times the participants used online services in the previous six months, 31.3 percent reported using online services between one and two times. About 42.3 percent reported using it between three to six times while 26.4 percent reported using online services more than six times. It is also worth noting that majority of the participants were females (58.2 percent) which fairly mirrors the percentage of females in a typical Internet café across the country. The reason for this unusually high proportion of females could be that in Nigeria, males are more likely to spend spare time in outdoor games such as soccer while females are more likely to spend spare time in libraries and Internet cafés. It could also be that females are more likely to help a stranger, including completing a survey.

ANALYSIS AND RESULTS

We use PLS modeling using SmartPLS 3.0 software (Ringle et al. 2005). Modeling moderation effects of variables in PLS can be done by including an exogenous term in the model and including the interaction variable's effect in form of product of predictor, and moderator, modeled as an indicator of a latent interaction variable (Baron and Kenny 1986). The product indicator was standardized (Chin et al. 1996). The present model also includes the main effect and the moderating variable's main effect on the endogenous variable. If the interaction variable's coefficient becomes statistically significant from zero, it may be concluded that moderating effect is significant. Chin et al. 1996) think that the interaction technique in PLS is even better than OLS regression in modeling moderation effects. Bootstrapping is considered to be the preferred method to test significance, so we used this method (Henseler and Fassot 2010). Since we model these variables as reflective indicators rather than formative ones, PLS moderation technique can be used without any problem (Eberl 2010).

Table 3: Results of Confirmatory Analysis

	B1	SAT	EOU	PU	ISQ	MF	IC	PD	UA	CS
BI1	0.83	0.31	0.24	0.23	0.30	-0.01	0.21	0.04	0.06	0.01
BI2	0.91	0.37	0.37	0.32	0.37	0.06	0.31	0.02	0.23	0.06
BI3	0.73	0.28	0.37	0.34	0.42	0.10	0.33	0.07	0.16	0.03
SAT1	0.12	0.78	0.29	0.54	0.38	0.24	0.22	0.08	0.17	0.09
SAT2	0.30	0.88	0.40	0.43	0.52	0.11	0.21	0.17	0.14	0.09
SAT3	0.38	0.87	0.29	0.37	0.46	0.18	0.16	0.16	0.18	0.03
EOU1	0.39	0.34	0.78	0.47	0.43	-0.03	0.18	0.11	0.04	0.12
EOU3	0.27	0.28	0.73	0.44	0.43	0.04	0.12	0.16	0.15	0.12
EOU4	0.25	0.34	0.78	0.56	0.35	0.11	0.17	0.26	0.11	0.29
EOU5	0.29	0.21	0.73	0.42	0.30	-0.01	0.12	0.09	0.06	0.27
PU1	0.12	0.52	0.29	0.70	0.38	0.24	0.22	0.08	0.17	0.09
PU2	0.25	0.25	0.48	0.74	0.30	0.02	0.11	0.16	0.05	0.22
PU4	0.24	0.26	0.42	0.71	0.30	0.04	0.09	0.13	0.14	0.12
PU5	0.35	0.20	0.53	0.74	0.37	0.08	0.21	0.07	0.22	0.18
ISQ1	0.37	0.40	0.31	0.28	0.66	0.05	0.15	0.08	0.21	0.02
ISQ2	0.39	0.31	0.46	0.43	0.77	0.08	0.23	0.04	0.17	0.07
ISQ3	0.25	0.50	0.37	0.41	0.82	0.23	0.20	0.12	0.14	0.00
MF1	0.06	0.14	0.02	0.11	0.12	0.75	0.30	0.14	0.34	0.04
MF2	0.04	0.15	0.09	0.13	0.18	0.86	0.27	0.26	0.07	0.04
MF3	0.06	0.04	0.09	0.18	0.11	0.63	0.25	0.11	0.17	0.01
MF4	0.04	0.11	-0.02	0.05	0.10	0.71	0.34	0.23	0.13	0.10
IC1	0.09	0.13	0.09	0.46	0.13	0.31	0.64	0.26	0.32	0.15
IC2	0.18	0.17	0.09	0.13	0.14	0.25	0.76	0.15	0.39	0.13
IC3	0.28	0.19	0.11	0.12	0.19	0.26	0.73	0.15	0.21	0.03
IC4	0.28	0.13	0.23	0.30	0.19	0.24	0.62	0.12	0.22	0.08
PD1	0.13	0.10	0.23	0.13	0.13	0.23	0.17	0.72	-0.05	0.22
PD2	0.04	0.15	0.15	0.07	0.06	0.19	0.09	0.79	-0.15	0.08
PD3	-0.04	0.11	0.08	0.07	0.09	0.21	0.18	0.67	0.11	0.01
PD5	0.04	0.12	0.07	0.11	-0.02	0.20	0.19	0.65	0.12	0.06
UA1	0.12	0.07	0.07	0.14	0.14	0.11	0.32	-0.03	0.71	0.03
UA2	0.03	0.07	0.04	0.11	0.11	0.08	0.36	-0.09	0.70	0.06
UA3	0.17	0.11	0.08	0.13	0.19	0.08	0.36	-0.02	0.80	0.04
UA4	0.17	0.20	0.11	0.20	0.19	0.29	0.234	0.10	0.75	0.00
CS1	0.05	0.06	0.27	0.19	0.05	0.01	0.08	0.05	-0.04	0.83
CS2	0.05	0.12	0.21	0.17	0.10	0.01	0.05	0.06	-0.03	0.80
CS3	-0.06	0.01	0.18	0.14	-0.02	0.07	0.11	0.20	-0.01	0.81
CS4	-0.05	0.07	0.12	0.14	-0.07	0.06	0.09	0.20	-0.02	0.73
CS5	0.11	-0.01	0.22	0.21	0.02	0.14	0.19	0.01	0.17	0.70

Measurement Model Analysis

Construct validity was assessed using the Covariance Analysis of Linear Structural Equations (CALIS) procedure in SmartPLS 3.0 (Ringle et al. 2005). To test measurement model reliability, a confirmatory factor analysis (CFA) was first conducted, as shown in Table 3. All questions load at acceptable levels (alpha of 0.70) according to Nitse and colleagues (2004). The measures of customer satisfaction and behavioral intentions were subject to the validity and reliability analysis in the same fashion as the other measures. The values of composite reliability are 0.85 for Satisfaction and 0.87 for behavioral intentions, which suggest no need for refinement of items making up each construct.

Specifically, the measurement model (Figure 2) identifies the four factors and indicates the relationships between the indicator variables and their associated factor dimensions. Examination of the fit statistics (to be discussed below) leads to the conclusion that the proposed model is an acceptable measurement model.

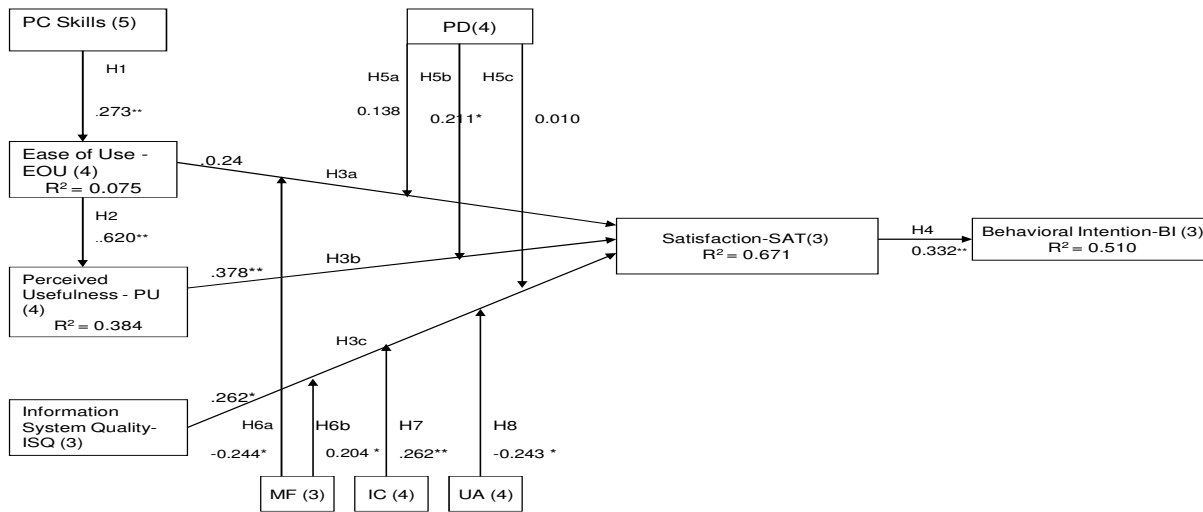


Figure 2: Confirmed research model.

Empirically, construct validity are ensured by two schemes: convergent and discriminant validity. Convergent validity was assessed by reviewing the *t*-tests for the factor loadings. In terms of the parameter estimates (factor loadings), the loading items for each factor were set exactly as suggested by the model. The metric for each scale was established by fixing the coefficient for one indicator to 1.00 for each of the four factors (i.e., “CS Skills,” “Perceived Ease of Use,” “Perceived Usefulness,” and “Information and System Quality”). Other than the fixed loadings, each item evidenced highly-significant *t*-statistics ($p < 0.000$), suggesting that all indicator variables provide good measures to their respective constructs.

These results generally supported the convergent validity of the indicators (Anderson and Gerbing 1988). It is also generally assumed that a construct displays convergent validity if the average variance extracted (AVE) is at least 0.50, or the square root of AVE is at least 0.71 (i.e., when the variance explained by the construct is greater than measurement error). The square root of AVE values of constructs (shown in italics as diagonal elements of Table 4) varied from 0.71 to 0.88.

To test for discriminant validity (the degree to which the measurement items are dissimilar), we first considered the correlations between the variables (Table 4). Findings of discriminant validity are further supported by the relatively small inter-item correlations and by the large differences observed between the square root of average variance extracted (AVE) for each variable. As a measure of discriminant validity, the average variance extracted (AVE) was examined. In this method, the constructs are considered different if the AVE is greater than their shared variance. The square root of the AVE for a given construct should be greater than the absolute value of the standardized correlation of the given construct with any other construct in the analysis (Anderson and Gerbing 1988).

Table 4: AVE and Correlation Matrix

	Mean	SD	B1	SAT	EOU	PU	ISQ	MF	IC	PD	UA	CS	CCR
BI	3.79	1.05	0.83										0.87
SAT	3.57	1.09	0.39	0.88									0.85
EOU	3.68	1.05	0.39	0.39	0.76								0.84
PU	3.48	1.10	0.36	0.45	0.36	0.71							0.77
ISQ	3.73	1.16	0.43	0.56	0.50	0.50	0.75						0.79
MF	2.80	1.49	0.06	0.17	0.06	0.14	0.18	0.74					0.82
IC	3.47	1.34	0.34	0.22	0.20	0.23	0.25	0.39	0.76				0.80
PD	2.5	1.31	0.05	0.19	0.21	0.16	0.11	0.27	0.24	0.71			0.79
UA	4.18	0.99	0.19	0.18	0.11	0.21	0.23	0.23	0.40	0.03	0.74		0.81
CS	3.50	1.84	0.04	0.06	0.27	0.22	0.03	0.07	0.14	0.11	0.04	0.77	0.88

CCR: Composite Construct Reliability; Diagonal values are square root of AVE

Structural Model Fit Analysis

SmartPLS 3.0 was used to create the component-based regression/path analysis model (Ringle et al. 2005). PLS has the advantage of being able to model multiple dependent and independent variables while handling multicollinearity among the independent variables. It is also robust in handling missing data and the basis of cross-products involving the response variable(s), hence resulting in stronger predictions (Wold 1985; Chin 1998). According to Wold (1985), the quality criteria used in judging structure model fit are (a) path coefficients, (b) composite reliability, and (c) R-square. For a confirmatory model, a composite reliability of 0.7 or better, and an R-square of 0.67 indicate a good model (Chin 1998). Chin rates R-squares of 0.67, 0.33, and 0.19 as “substantial,” “moderate,” and “weak,” respectively.

In the proposed model, the composite construct reliabilities range between 0.77 and 0.88 (see Table 3). The R-square values for “Satisfaction” and “Behavioral Intentions” are 0.67 and 0.51, respectively. Based on these three quality criteria, the proposed model is considered substantial. Figure 2 displays the path coefficients and the significant levels. All of the model paths except one (the path between “Perceived Ease of Use” and “Satisfaction”) are significant at least at the $p < 0.1$ level. Significant tests of the path coefficients were performed using the bootstrap routine with 400 samples.

DISCUSSION

The study model with the path coefficients and significance levels are given in Figure 2. The strong validity and reliability, as well as the resulting fit measures, provide robust support for the study hypotheses. Table 5 summarizes the results. The results show that hypotheses 1, 2, 3b, 3c, 4, 5b, 6, 7, and 8 are supported. Hypothesis 1, which states that computer skills positively impact how online customers perceive ease of use of online services, has support from previous research (Udo et al. 2010; Shih 2004). Hypothesis 2, which is “Perceived ease of use positively affects perceived usefulness of online services,” is based on previous research and is a fundamental aspect of TAM (Shih 2004; Kuisma et al. 2007; Kim et al. 2009). Our results show that perceived usefulness and information/system quality positively impacts satisfaction (hypotheses 3b and 3c) and is supported by several earlier works (Castaneda et al. 2007; Ong et al. 2009; Montoya-Weiss et al. 2003). Hypothesis 4, which states that user satisfaction has a positive impact on intention, is also supported by previous work (Zhang and Prybutok 2005). The moderating role of espoused PD on the path PU to satisfaction is also supported as postulated. Similarly the moderating role of MF on the paths EOU and satisfaction as well as ISQ and satisfaction are both supported as earlier hypothesized.

Hypotheses 3a, 5a, and 5c are the only ones not supported. In effect, perceived ease of use does not lead to user satisfaction (Hypothesis 3a), although it leads to perceived usefulness and thus indirectly affects satisfaction.

The results clearly indicate that the satisfaction of online service is determined by ISQ and PU with an R-square of 0.67 (H3b and H3c), and that intention to continue to use online services is influenced by satisfaction (H4) with an R-square of 0.51. The coefficient from satisfaction to behavioral intention is 0.33 and significant at $p < 0.00$. This emphasizes the important role of user satisfaction with online services.



Table 5: Results Summary			
Hypotheses	Model	Std. Reg. Coef.	T-Statistic
H1	CS → EOU	0.27* (R ² = 0.08)	7.20
H2	EOU → PU	0.62** (R ² = 0.38)	17.61
H3a	EOU → SAT	0.24	4.46
H3b	PU → SAT	0.38**	7.80
H3c	ISQ → SAT	0.26	5.27
H4	SAT → BI	0.33** (R ² = 0.51)	6.67
H5a	EOU * PD → SAT	0.14	1.54
H5b	PU * PD → SAT	0.21	0.68
H5c	ISQ * PD → SAT	0.01	0.18
H6a	EOU * MF → SAT	-0.24*	3.37
H6b	ISQ * MF → SAT	0.20**	2.25
H7	ISQ * IC → SAT	0.26**	1.21
H8	ISQ * UA → SAT	-0.24*	1.28
		** p < 0.00	* p < 0.05

We next discuss what happens when espoused cultural factors are brought in as possible moderators between various antecedents and satisfaction (SAT). It is observed from the results that satisfaction depends on the PU (H3b) and not EOU (H3a). These relationships do not change when the moderator in the form of espoused cultural influence is PD-oriented (H5a and H5b). This result somewhat contradicts the result of Yoon (2009). As discussed earlier, in high PD societies, there is high expectation on benefits of technology such as Web-based online services; more emphasis is put on development of technology which is considered good, whether it is easy to use or not (Hofstede 2001, p. 101). It can be expected that individuals with high espoused PD values will exhibit the same behavior. Thus high espoused PD and high PU lead to high satisfaction, but espoused PD does not significantly moderate the relationship between EOU and satisfaction. A high PD-oriented individual will require the ISQ issues to be enforced by the Web site rather than by himself/herself. So the impact of ISQ is insignificant when the espoused PD moderates the relationship (H5c).

However, ease of use (EOU) is relevant when espoused MF moderates the relationship (H6a) in line with the observation of Yoon (2009). Thus high EOU results in high satisfaction when the espoused cultural influence is feminine. Feminine culture emphasizes equal sharing between partners in regard to buying decisions and shopping, unlike in a masculine society where men make major buying decisions and women shop for food. Also, high feminine cultures opt for “purchase for use.” It can be expected that individuals with high espoused masculine/feminine values will exhibit the same corresponding behaviors. Thus high EOU together with high espoused feminine values facilitate high satisfaction and use, thus supporting H6a. ISQ, on the other hand, influences satisfaction when the espoused cultural influence is masculine (H6b). High-masculinity encourages high performance and mastery (Hofstede 2001, p. 299). High ISQ and the tendency to maintain and achieve higher performance and mastery by individuals (i.e., high espoused masculinity) lead to higher satisfaction and usage as far as Web-based services are concerned. This provides support for H6b.

ISQ also influences user satisfaction when the espoused cultural influence is individualistic, as individuals with high espoused IC may likely to be better informed, and, hence, high ISQ of Web-based services makes them more satisfied (H7). Again high ISQ leads to high satisfaction when the espoused cultural influence is risk-taking (low UA). Internet/Web use is more frequent in low UA societies (Hofstede 2001, p.180). Therefore, it is expected that individuals with low espoused UA will frequently use online services. Thus low espoused UA together with high ISQ leads to more use and higher user satisfaction (H8). These results are summarized in Table 6. Table 6 also provides the implication of each result.

CONCLUSION

This preliminary study is one of the first set of studies to investigate the important role of espoused national cultural values, in moderating the impact of traditional antecedents on accepting online services in a developing nation context. Based on the data analysis and hypothesis testing, it is clear that user satisfaction with online services is determined by perceived usefulness and information/system quality. And satisfaction, in turn, determines the user’s behavioral intention to continue to use the online services. Additionally, the effect of perceived usefulness on satisfaction is positively moderated at a significant level by espoused cultural value of Power Distance. Other significant influences of espoused national cultural values include that of espoused Masculinity/Femininity on both Ease-of-Use and Information/System Quality with Satisfaction.

Table 6: Summary of Results and Implications

	Hypothesis	Supported?	Implications
H1	Computer skills positively impact how online customers perceive ease of use of online services.	Yes	$R^2 = 0.08$; the more the individual computer skills, the easier the system is perceived.
H2	Perceived ease of use positively affects perceived usefulness of online services.	Yes	$R^2 = 0.38$; the more a user perceived a system to be easy to use, the more he/she perceives it to be useful for the purpose.
H3a	Perceived ease of use positively impacts satisfaction.	No	System ease of use does not necessarily lead to user satisfaction .
H3b	Perceived usefulness positively impacts satisfaction.	Yes	The more a system is perceived to be useful, the more user satisfaction results.
H3c	Information and system quality positively impacts satisfaction.	Yes	Higher info/sys quality results in user satisfaction.
H4	User satisfaction has a positive impact on intention to continue to use online services.	Yes	$R^2 = 0.51$; satisfied users are more likely to continue to use system.
H5a	The higher the espoused PD, the greater the effect of EOU on User Satisfaction.	No	Power Distance (PD) has positive but insignificant role on the relationship between ease of use and user satisfaction.
H5b	The higher the espoused PD, the greater the effect of PU on User Satisfaction.	Yes	Individuals with high PD scores assess their satisfaction based mostly on their perceived usefulness of the system.
H5c	The higher the espoused PD, the greater the effect of ISQ on User Satisfaction.	No	PD plays no significant role in the relationship between information/system quality and user satisfaction.
H6a	The higher the degree of espoused masculinity of individuals, the lower the effect of EOU on User Satisfaction.	Yes	Masculine individuals seem to be less satisfied with systems that are easy to use than with a more challenging systems.
H6b	The higher the degree of espoused masculinity of individuals, the greater the effect of ISQ on User Satisfaction.	Yes	Masculine individuals base their satisfaction assessment mostly on information and system quality.
H7	The higher the degree of espoused individualism of the online user, the greater the effect of ISQ on satisfaction.	Yes	Individualistic users give more weight to information/system quality than to ease of use or usefulness of the system.
H8	The lower the degree of espoused UA, the greater the effect of ISQ on User Satisfaction.	Yes	Users who are risk averse are usually more satisfied because of system's high quality systems than users who are risk seeking.

The study provides a useful point of view to help the companies and managers who are interested in finding out what goes on in the minds of users of online services. It shows that espoused national cultural values play an important role in the continued use of online services. The contents and structure of the various parts of the survey have been tested and validated before (Srite and Karahanna 2006; Davis1989; DeLone and McLean 2003). There might be some bias in results as it is conducted only on a sample of only one developing country, Nigeria. Though the amount of survey data is enough for the purpose of this study, additional data collected from other developing nations may lead to the discovery of more meaningful results. Another limitation of the study is the fact that 58.2 percent of the respondents were females and hence the results could be somewhat biased.

This research also raised several questions for further research. First, will the choice of different developing nations affect the research results? Second, will the results be different in a developed nation context? Third, can different set of espoused cultural values other than Hofstede's explain the results better? Future research can focus on these questions and others providing additional insights on this research topic.

ACKNOWLEDGMENTS


The authors wish to acknowledge Professor Mark Srite, the Senior Editor and the two anonymous reviewers for their valuable contributions and suggestions which improved the quality and value of the final paper. This project was partly funded by the scholarship from the Fulbright Foundation. The errors that may remain are solely ours.

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APPENDIX: Operationalized Latent Variables and Factor Loadings

Construct and Indicators	Standardized Loading	Cronbach's Alpha
Individual Computer Skills (CS)		0.84
CS1: Rate your skill in Microsoft Word.	0.83	
CS2: Rate your skill in Microsoft Excel.	0.80	
CS3: Rate your skill in Microsoft Power Point.	0.81	
CS4: Rate your skill in using the Internet.	0.73	
CS5: Rate your skill in using Microsoft Access.	0.77	
Ease of Use (EOU)		0.75
EOU1: It is easy to navigate this site.	0.78	
EOU2: It is easy to find what you are looking for.	0.73	
EOU3: It is easy to use the services on this site.	0.78	
EOU4: The language to me is clear and easy to understand.	0.73	
Perceived Usefulness (PU)		0.77
PU1: The information provided is sufficient.	0.70	
PU2: The vendor gives prompt service to customers.	0.74	
PU3: The contents of this Web site is useful for my purpose.	0.71	
PU4: My needs/queries are adequately addressed by the Web site.	0.74	
Information/System Quality (ISQ)		0.79
ISQ1: The Web site has an ideal amount of images/graphics.	0.66	
ISQ2: The graphics on this Web site are appealing.	0.77	
ISQ3: The contents of this Web site are useful for my purpose.	0.82	
Satisfaction (SAT)		0.85
SAT1: I am satisfied with my previous online shopping experience.	0.78	
SAT2: Online shopping is a pleasant experience.	0.88	
SAT3: Overall, I am satisfied with my e-service experience.	0.87	
Behavioral Intentions (BI)		0.76
BI1: I intend to use e-service frequently.	0.83	
BI2: I intend to use e-service.	0.91	
BI3: In the future, I intend to use e-service whenever I have a need.	0.73	
Power Distance (PD)		0.64
PD1: Managers should make most decisions without consulting subordinates.	0.72	
PD2: Managers should not ask subordinates for advice, because they might appear less powerful.	0.79	
PD3: Decision making power should stay with top management in the organization and not be delegated to lower level employees.	0.67	
PD4: A manager should perform work which is difficult and important and delegate tasks which are repetitive and mundane to subordinates.	0.65	
Masculinity/Femininity (MF)		0.82
MF1: It is preferable to have a man in high level position rather than a woman.	0.95	
MF2: It's more important for men to have a professional career than it is for women to have a professional career.	0.86	
MF3: Solving organizational problems requires the active forcible approach which is typical of men.	0.63	
MF4: Women do not value recognition and promotion in their work as much as men do.	0.77	
Individualism/Collectivism (IC)		0.80
IC1: Group success is more important than individual success.	0.84	
IC2: Being loyal to a group is more important than individual gain.	0.76	
IC3: Individual rewards are not as important as group welfare.	0.88	
IC4: It is more important for a manager to encourage loyalty and a sense of duty in subordinates than it is to encourage individual initiative.	0.76	
Uncertainty Avoidance (UA)		0.77
UA1: Rules and regulations are important because they inform workers what the organization expects of them.	0.76	
UA2: Order and structure are very important in a work environment.	0.79	
UA3: It is important to have job requirements and instructions spelled out in detail so that people always know what they are expected to do.	0.88	
UA4: It's better to have a known bad situation than to have uncertain situation which might be better	0.75	

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JITTA is a Publication of the Association for Information Systems
ISSN: 1532-3416

