A Review of Cultural Values Impact on Consumers’ Intention in the Context of Online Shopping

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Abstract: This study is intended to review the influence of cultural values on consumers’ intention to conduct online transactions. With the increase of online shopping in e-commerce sector and its impact on the national economy, it is essential for scholars to examine the factors that significantly affect the consumers’ intention when they engage in online shopping. Consequently, several related studies are reviewed to build a foundation to propose the importance of culture and cultural values. Most of the studies show the significant impact of culture on online shopping or e-commerce.

Keywords: Consumers’ intention, cultural values, culture, e-commerce, online shopping

INTRODUCTION

Web services and e-commerce have been increasing dramatically since the drop of the “dot com” era that had been popular before (Chaffey, 2007). Electronic Commerce or E-commerce as the name suggests, essentially involves business transactions such as the buying and selling of information, products and services via computer networks (Kalakota and Whinston, 1997). Therefore, referring to the definition, online shopping or online transactions are also categorised as E-commerce.

Currently, online shopping has experienced steady growth. Commission (2010), report an estimated $200 billion of online purchasing by 2006 in the United States alone. In developing countries such as China and Korea, 95% of the Internet users have intentions to shop online. However, there are some countries that have adopted online shopping slowly including some countries in Middle East (Nielsen, 2010; Van Slyke et al., 2010). In fact, based on several studies on electronic transactions, it was found that the adoption of online transactions by consumers is growing at a slower pace compared to the electronic transactions among the business firms (Loh and Ong, 1998; Aoyama, 2001). The adoption of online shopping varies among countries as a result of the diverse factors that influence the adoption of online shopping itself.

The findings of extensive studies show that to be able to investigate the factors influencing the adoption of online transactions, the researchers must consider the technology factors and consumer-centred factors. While the technology factors discuss the technical specifications of the websites such as user interface features, content, design and usability, the consumer-centred factors will discuss consumers’ perception and beliefs about online shopping, trust, risk, internet experience and service quality (Wu and Chang, 2006; Li and Liu, 2011; Bhatnagar et al., 2000). To discuss the latter, researchers also include culture as one of the attributes that has significant impact on some of the consumer-centred factors; for instance, the consumers’ different cultures will have different perceived risk (Ko et al., 2004).

Furthermore, there have been considerable studies that investigate online transactions and e-commerce by merging the culture and technology factors. Initiated by Barber and Badre (1998), the term ‘culturability’ was introduced to mark the integration of cultural factors and usability factors. Cultural and social factors then have become significant factors that need to be considered when examining the factors of online transaction adoption. This study aims to review the cultural aspects existing in e-commerce, specifically online transactions; whether cultural aspects encourage the development of online transactions, or on the other hand, discourage and eventually slow down the online transaction through Internet.

MATERIALS AND METHODS

It is fundamental to conduct a literature review before proceeding with any research study (Hart, 1998). Webster and Watson (2002) emphasize that review of prior relevant research is essential for any academic project and “it facilitates theory development, closes
areas where a plethora of research exists and uncovers areas where research is needed” (p 13).

RESULTS AND DISCUSSION

Culture in e-commerce: Culture has been believed to be manifested in broad concepts and therefore has been defined in many ways (Hoare and Butcher, 2008). Because of this belief, some scholars argue that culture cannot be used as an independent variable to explain empirical findings (Segall, 1984). However, some claim that culture can be viewed from an individual psychological perspective to predict behaviour (Hoare and Butcher, 2008). Therefore, culture can be defined as “the individual-level of manifestations of shared meaning systems that are learned from other members of the society” (Earley, 1997). Likewise, Johansen (1998) defines culture as a representation of a set of values that are shared among members of society that consists of facts in the society which guide individual perceptions of observed events and personal interactions and the selection of appropriate responses in social situations. Consequently, cultural values can be defined as “widely shared beliefs about how individuals are expected to behave by their culture” (Yau, 1994). Hofstede (1991) argues that culture is the collective programming of the mind which differentiates the members of one group from others. Subsequently, Hofstede categorised culture into five dimensions comprising of individualism-collectivism, power distance, uncertainty avoidance, masculinity-femininity and long-term versus short-term avoidance (Hofstede, 1984).

In e-commerce or online shopping, culture is considered as one of the prominent factors involved in the discussions of e-commerce studies specifically studies about online shopping. Some researchers strongly believe that the influence of culture can be seen in consumers’ behaviour when shopping online. Cultural values affect consumers’ motives, attitudes toward choices, intentions and behaviour (Henry, 1976). Moreover, culture dimensions are also believed to affect consumers’ willingness to trust online transactions (Lee and Turban, 2001). Table 1 shows the studies conducted to establish the influence of culture on internet or online transactions.

Table 1 summarises the importance of culture or cultural values in online transactions or online shopping. Most of the studies show the significant impact of culture on online shopping or e-commerce.

**Culture in visual interface design:** Furthermore, other researchers believe that culture must be considered in website design as well so that they will attract more consumers and thus increase online transactions (Kondratova and Goldfarb, 2006).

As one of the products of the rapid technology advancement, online shopping has experienced an

<table>
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<th>Researchers</th>
<th>Major findings</th>
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<td>Hwang and Lee (2012)</td>
<td>One of the objectives of this study is to investigate the moderating role of uncertainty avoidance of cultural values and the findings show that uncertainty avoidance is an important moderator of the relationship between subjective norms and the integrity and ability dimensions of online trust to consumer behaviour.</td>
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<td>Ruiz-Mafe et al. (2013)</td>
<td>The study is intended to consider the drivers of online purchasing behaviour. Besides, it also analyses the influence of attitude, subjective norms and perceived behavioural control on such decisions between two cultures. The findings show that national culture affects the use of internet to conduct the online shopping.</td>
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<td>Rambo et al. (2009)</td>
<td>One of the objectives of this study is to identify the socio-cultural and technical factors that influence the Saudi females’ online shopping adoption. The researchers presents the semiotic diagnosis of the sociocultural e-commerce design requirement in their study including human information functions comprising social world, pragmatics and semantics and the IT platform comprising syntactics, empirics and physical world. The result of this study show that socio-cultural factors (informal factors, formal factors and technical factors) influence the adoption of female consumers to online shopping.</td>
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<td>Adapa (2008)</td>
<td>One of the aims of this study is to examine whether the cultural typology or cultural dimensions affect the adoption of internet shopping among the women in the country of origin and country of residence. It was found that culture has effect on the adoption of internet shopping in the country of origin while it does not affect much for the subjects in the country of residence as they still nurture their culture of origin in their country of residence.</td>
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<td>An and Kim (2008)</td>
<td>The main objective of the study is to examine the effects of cultural values on customer trust in internet shopping. It was found that even though it does not have direct impact, the cultures play an intervening role in predicting consumer trust in online shopping.</td>
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<td>Jin et al. (2008)</td>
<td>On examining the relationship among firm reputations, e-satisfaction, e-trust and e-loyalty across cultures, it was found that cultural dimensions are influential in affecting the two different cultures (USA and South Korea) on their trust, satisfaction and loyalty.</td>
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<td>Jamal and Ahmed (2007)</td>
<td>Cultural factors such as language, religious belief and local preferences, have significant influence on the adoption of online transactions.</td>
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<td>Tan et al. (2006)</td>
<td>The study focuses on extending prior research by integrating national culture into the theory of planned behaviour to better understand the actual online shopping behaviour across two cultures. The results of the study showed that the national culture dimensions of long-short term orientation and individualism vs. collectivism have significant effects on both intended and actual online shopping behaviour.</td>
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<td>Pavlou and Chai (2002)</td>
<td>A cultural effect significantly moderates key relationships in their model. The proposed model incorporates (Hofstede, 2001) cultural dimensions (individualism/collectivism, power distance, long term orientation) as key moderators of the effect of TPB variables on online consumer behaviour which aims to explain the e-commerce adoption across cultures.</td>
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impressive growth. This fact underlines the importance of building and maintaining customer loyalty in e-commerce (Gommans et al., 2001). As a consequence, the appropriate interface design is needed to accommodate this and according to Kondratova and Goldfarb (2010) a culturally appropriate interface design is important and emphasised by many researchers. Barber and Badre (1998) specifically emphasises it, calling it “culturability” which shows a combination of culture and usability in web design. This combination will directly affect the users’ perception of credibility and trustworthiness of websites which subsequently lead the users to be the loyal customers (Marcus and Gould, 2000). In addition, Robbins and Stylianou (2002) suggest that user interface characteristics, which are appropriate for culturally diverse audiences, tend to encourage and build trust of the web.

Kondratova and Goldfarb (2006) classify the models used to manage the issues of cross-cultural web design into three: First, cultural dimension (n-factor) by Hall and Hofstede, second, cultural marker models by Barber and Badre and third cultural attractors by Smith. Furthermore, Kondratova and Goldfarb explained that the most commonly cited model is Hofstede’s model which contains five factors including Power Distance, Uncertainty Avoidance, Masculinity vs. Femininity and Individualism vs. Collectivism.

Hofstede’s theory, which is also known as cultural dimensions model, measures and compares different cultures using a number of cultural factors. The first dimension is Power Distance (PD) which refers to the extent to which less powerful members of society accept the unequal power within a culture. Hofstede claims that a country with high PD experiences inequalities. Other characteristics of the countries with high PD are centralised political power. On the other hand, countries with low PD expect equality. Parents and children, teachers and students and superiors and subordinates will regard themselves as equals but not identical. The implication of this dimension, according to Marcus and Gould (2000) is characterised in the user interface and web design. For example, the country with high PD will have highly structured access to information, tall hierarchies in mental models, emphasise more on the social and moral orders (by putting more symbols of nationalism or religion, official stamps, logos, etc.) and give more prominence to leaders.

The second dimension is individualism vs. collectivism which refers to how loose or tight the society is tied together. Individualist societies expect individuals to look after themselves and their immediate families only, while those in collectivist societies are tied in strong, cohesive groups which support and connect with them throughout their lives. Individualistic cultures respect freedom and challenge. Furthermore, in a family relationship, honesty, talking things out and self-respect are highly maintained. The societies in this culture also respect freedom of the press and highly value self-actualisation, self-government and freedom. On the contrary, collectivist societies give more value to harmony than honesty. Consequently, those that belong to this society will prefer to be silent instead of talking things out. These societies also may invade private lives and control the press. The aspects of user interface and web design that need to be considered include motivations that are based on personal achievements, the image of success that is demonstrated through materialism and consumerism for individualists and achievement of social-political agendas for collectivists. The other prominent implications are the emphasis on change where individualists prefer the new and unique while collectivists prefer tradition and history and the willingness to disclose personal information for individualists and the protection of personal data for the collectivist.

The third dimension is masculinity vs. femininity which is described as gender roles in which masculine roles imply assertiveness, competition and toughness while femininity roles imply orientation to home, children, people and tenderness. High masculinity cultures would focus more on the following user-interface and design elements: traditional gender, navigation oriented to exploration and control and graphics, sound and animation used for utilitarian purposes. On the other hand, feminine cultures would focus on mutual cooperation, exchange and support and attention which are gained through poetry and visual aesthetics.

In the fourth dimension lies Uncertainty Avoidance (UA), Hofstede refers it as the feeling people feel when they face uncertainty or unknown situations. Every culture varies in its avoidance of certainty. According to Hofstede, cultures with high uncertainty avoidance tend to be expressive and show emotions and businesses may have more formal rules and focus on tactical operations rather than strategy. The high avoidance societies also tend to avoid ambiguous situations and expect structure in organisations and institutions. As for cultures with low uncertainty avoidance, business may be more informal and focus on long-term strategic matters. Moreover, the societies with this type of UA will behave quietly without showing strong emotions. In the user interface and web design, the high uncertainty avoidance can be translated into simplicity, with clear metaphors and limited choice and navigation schemes intended to prevent users from becoming lost. While low UA would focus on the complexity with maximal content and choices, less control of navigations and coding of colour, typography and sound to maximise information.

Meanwhile Gould et al. (2000) state that FonsTrompenaars rejected several of Hofstede’s dimensions and developed his own set of seven cultural differences containing Universalism and Particularism,
Individualism and Communitarianism, Specific vs. Diffuse, Neutral vs. Affective, Achievement vs. Ascription, Time orientation and nature orientation.

Furthermore, cultural markers was developed by Barber and Badre (1998) and was further developed by Badre (2001) in which he listed the cultural markers to include web design elements such as colour, fonts, shapes, icons, sounds and motions. Smith et al. (2004) defined cultural design elements as cultural attractors, which include colours, colour combinations; banner averts, trust signs, use of metaphor, language cues, etc.

In line with the importance of cultural values in web design, some researchers show the different results in which some of them approve it while some others reject it. Kondratova and Goldfarb (2006) found that the careful consideration of local users’ needs will achieve long lasting success and user satisfaction which in turn, will affect the success of global e-commerce. While Mushtaha and De Troyer (2007) show that there is convergence in some cultural values which is encouraged by the modern communication including internet and multimedia. Furthermore, they also found that there are still differences in some of the cultural dimensions for individualism vs. collectivism, power distance, internal vs. external control, gender roles, achievement vs. ascription, affective vs. neutral and universalism vs. particularism. In a different study, De Angeli and Kyriakoullis (2006) stress the value of user research to set the foundation of culturally-aware designs and the important evolution of cultural values within the young generation (as compared to Hofstede’s). In his study, Fletcher (2006) tried to highlight the need for cultural sensitivity in designing websites and he found that the specific versions of websites for ethnic groups are important.

Most of the research that have been conducted highlight the importance of cultural values in designing websites to meet the needs of a diverse market and users’ expectation. It is further acknowledged that the design elements that are appropriate for one culture may not be appropriate for another (De Angeli and Kyriakoullis, 2006); therefore the needs of culturally appropriate websites for e-commerce in Arab countries will be different as well. Table 2 shows the studies that discussed the cultural influence on the website design.

### Table 2: Studies of cultural influence on website design

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<tr>
<th>Researchers</th>
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<tr>
<td>Gong (2009)</td>
<td>This study aims to investigate the effects of national culture on diffusion process of Business-to-Consumer (B2C) e-commerce. By applying Hall’s cultural classification and Hofstede’s cultural framework, the findings show that culture influences the diffusion process in three ways: the design of website, promotional strategies and message-design strategies.</td>
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<tr>
<td>Sia et al. (2009)</td>
<td>The study investigates whether website designers must take into account the cultural characteristics of prospective consumers. The results of the study show that culture-specific cultural differences are important in constructing web strategies.</td>
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<tr>
<td>Mushtaha and De Troyer (2007)</td>
<td>For designing e-learning portals, it is not necessary to take into account all the traditional cultural dimensions investigated by anthropologists and system designers. But it is necessary to know the target audience and to know the culture values that should be taken into consideration for this audience.</td>
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<td>Fletcher (2006)</td>
<td>The extent to which culture will need to be taken account in design and content of the website will depend on whether the purpose of the site is to merely provide information or whether it is to be used as a vehicle of marketing. It will also be influenced by whether the site is intended to be interactive or passive.</td>
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<tr>
<td>Kondratova and Goldfarb (2006)</td>
<td>In the global software development market, only careful consideration of local users’ needs will achieve long lasting success and client satisfaction with the cultural “look and feel” of the final product. This will impact the success of global e-business and e-learning enterprises.</td>
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<td>De Angeli and Kyriakoullis (2006)</td>
<td>The study demonstrates important differences between people’s perception of websites even within the boundaries of the European countries. Cypriots were more anxious about using e-commerce than British people, probably due to their higher level of Uncertainty Avoidance (UA). People tend to favour national brands independent of their culture, but it highlights the difficulty of designing websites which are perceived as reflecting one’s own culture. In general, people in higher UA countries are less open to changes and innovation. People living in a collectivist society prefer to follow the habits of others like them.</td>
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<tr>
<td>Dormann and Chisalita (2002)</td>
<td>Culture affects users from different cultures, who may perceive the same website in totally different ways. Some metaphors, navigation, text, graphical elements, or navigation might be misunderstood. Therefore, culture aspects should be taken into considerations during localisation or website development.</td>
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Variables of culture in website design: As it has been mentioned before, culture plays pivotal roles in interface design for website (Gould et al., 2000; Hornby et al., 2002; Sun, 2001; Marcus, 2002; Becker, 2002; Smith et al., 2001). It directly impacts the user’s perception of credibility and trustworthiness of websites (Jarvenpaa et al., 1999; Marcus and Gould, 2000; Fogg, 2002). Based on this fact, Web designers need to cater to each culture that exists in one nation when designing culturally-appropriate interface for websites. To make it more manageable, it is essential to use the cross-cultural theory such as Hofstede’s work (Gould et al., 2000).
Another model which has been used extensively is the Cultural markers model which was developed by Barber and Badre (1998). In their model, Barber and Badre combined culture and interface design elements and features so that can be used as guidelines to develop interface for websites. In his model, Badre (2001) postulated the list of cultural markers conforming to web design elements. Among them are:

- **HTML specific** which include number of lines, link colour, background image, text colour, etc
- **Icons/metaphors**: International, local, clocks, pages, thumbtacks, etc
- **Colours**: Red, blue, black, white, multiple, etc
- **Specific colours**: Flag, graphics, pictures, borders, background
- **Grouping**: Symmetrical, asymmetrical, proximity, alignment, boundary, enclosure, connection
- **Flag**: Native, foreign, multiple
- **Language**: Native, foreign, multiple
- **Geography**: Maps, outline, globe
- **Orientation**: Centred, left-right, right-left
- **Sound**: Music, voice
- **Font**: Cursive, italics, bold, size, shading
- **Links**: Colour, embedded, stand alone, internal, external
- **Regional**: Foliage, animals, landscape, water, desert
- **Shapes**: Squares, circles, triangles, rectangles, lines, arrows
- **Architecture**: House, office, church, cityscape

While Sun (2001) focussed on four major categories of cultural markers: Language, visuals, colours and page layout. It was found that cultural markers influence the user performance and acceptance of website (Badre, 2001). Furthermore, cultural markers also improved performance for users on their local sites (Sheppard and Scholtz, 1999). The Cultural markers approach, therefore, provides easier guidelines to design culturally-appropriate interfaces for websites.

**CONCLUSION**

Numerous studies that have been carried out show that there are several factors influencing the online purchase intention such as trust, risk, internet experience, shopping orientation, online shopping experience, shopping motivation, cultural values and social influence. Each or a combination of these factors uniquely contribute to the effects of online purchase intentions. For example, a study carried out by Au Yeung and Iwata (2011) showed that social influence affect the strengths of trust relations and then eventually encourage users to have preference over many choices. Other study by Budisantoso and Mizerski (2010) was to find the relationships between shopping motivation, optimum stimulation motivation and perceptions of store atmosphere, store patronage satisfaction and re-patronage intention. It was found that store patronage satisfaction is influenced by the perception of interior layouts, social factors and store spaces. In turn, this store patronage satisfaction affects re-patronage intention. Online shopping experience is also one of the factors affecting online purchase intentions. According to Wan et al. (2012) consumers’ web shopping experience influence the search, experience and credence ratings of products and services in online shopping. Meanwhile, shopping orientation, cultural values and internet experience also share their impacts on the online purchase intention. The studies that show these impacts were done by Hansen and Jensen (2009), Evers and Day (1997), Hillier (2003), Marcus and Gould (2000) Robbins and Stylianou (2002), Fletcher (2006), Dormann and Chisalita (2002) and Rhee and Riggins (1999).

Cultural factors, nevertheless, has become key in the discussion and studies of factors influencing users’ intention in the context of online transactions. It affects both the technology and consumers-centred perspectives in studies researching the factors in users’ intentions when performing online transactions.

**REFERENCES**


