College of Information Science and Technology



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Glebal User-Interface Design: Characteristics of Multinational Corporate Websites

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Abstract

The fundamental bases of web-user interface design may vary across cultures and nationalities because culture is an essential aspect that influences users' view on contextual environment. In fact, recent empirical researches have found that website interfaces of different countries often reflect distinct cultural dimensions (Marcus & Gould, 2000; Sheridan, 2001; Robbins & Stylianou, 2002; Wurtz, 2005; Callahan, 2005). In this study, I conducted a qualitative analysis on two sets of an American and a Korean website to compare the cultural attributes and characteristics reflected in them. Results indicate that American websites express individualistic and low context cultural characteristics. However, Korean websites also contain significant western cultural traits, such as individualism and low context culture. In addition, Korean websites are more visually-oriented than the American one.

Research Questions

- 1. How do localized multinational corporate websites in the U.S. and Korea differ in terms of interface design aspects?
- 2. What are the distinct cultural factors in the localized multinational corporate website interfaces for the U.S., and Korea?

Culture and Cultural Dimension

 Understanding culture is critical in global web-user interface design because users' actions are highly dependent on their respective cultural context.

High context culture: More implicit in verbal communications, low transparency in website design, and focus on imagery and the use of visual aesthetic

 Low context cultures: Direct communication forms, highly structured messages, and placing extensive stress on words and technical signs (Hall, 1976; Wurtz, 2005)

- High context cultures: collectivist countries (Korea, Japan, and Arabic nations)

Low context cultures: individualistic countries (the U.S., Scandinavian, and Germanspeaking countries (Hall & Hall, 1989)

Hypothesis 1: The Korean websites, which express high context culture, use more graphics, pictures, animations, multimedia than the American ones.

 Hofstede's five cultural dimensions (Hofstede, 1980a, 1980): individualism and collectivism, power distance, masculinity and femininity, uncertainty avoidance, and long term and short term orientation.

 Individualism: a social framework in which people take care only of themselves and their immediate families

 Collectivism: a tight social framework in which people distinguish between in-groups and out-groups (Park, & Wiedenbeck, 2005).

In Hofstede's cultural dimension index score, America is the most individualistic country and Korea is one of the most collectivistic ones.

Hypothesis 2: The American multinational corporate websites express more individualistic cultural characteristics and the Korean ones show more collectivistic cultural characteristics.

Global Web User Interface Design Factors

The majority of software is developed in, or contracted by the U.S., and its interfaces have, therefore, been based primarily on American metaphors, mental models, navigation logic, appearance, and interaction, representation, and color association (Shen, & Prior, 2006).

Languages: Often gets larger and longer, as much as 40 % (Belge, 1995).

. Formats: Numbers, currency, date, and time

 <u>Symbols and icons</u>: The male symbols from the U.S. and India (Represent content and information on the levels of the contextual environment of the users)

 The role of <u>metaphors</u> in user-interface design can be critical because they are culturally biased and may serve as a powerful communication tool when implemented properly (Shen et al., 2006).

 <u>Visual aesthetics</u>: High context cultures, such as Korea, focus on imagery and other nontextual forms of communication to provide context in general (Wurtz, 2005).

 Different cultures prefer different <u>functionalities</u> in the web-user interface. For example, the joint-purchase feature in Korean websites allows individual users to purchase the same item together at a discounted rate. This is a good example of representing collectivist culture.

Methodology

 Websites for global organizations that run businesses in both the U.S. and Korea: the Starbucks (Figure 1 & 2) and Honda Motors corporate websites (Figure 3 & 4) for the U.S. and Korea.

. Two websites from both countries are selected.

I developed a technique based on Hofstede's (1980) and Hall's (1976) cultural dimensions to determine certain cultural characteristics about website design and features.





Figure1. The U.S. Starbucks www.starbucks.com/

Figure 3. The U.S. Honda Motors www.honda.com

Figure 2. The Korean Starbucks www.istarbucks.co.kr



Figure 4. The Korean Honda Motors www.hondakorea.co.kr



Results and Discussion

•For the both sets of the websites, the American ones show strong individualism while the Korean websites express moderate collectivism, confirming the hypothesis 2.

 The Starbucks America website has privacy statement, sign-in feature, and Honda focus on individual's goals and actions by providing links to nutrition information, and Honda America provides Locate a Dealer, Current Offer, News Link and Privacy Policy (signs of individualism).

 Different from the second hypothesis, the Korean Starbuck (Figure 2.) also shows signs of relatively high individualism (refer the previous bullet point) and moderately low context culture.

 The Korean websites contain more visually attracting aspects in the design than the American ones, confirming the hypothesis 1. A high context culture values visual cues and non-verbal communication. (Figure 5.)

 It was consistent that the American sites always express low context culture. They show limited use of and simple animation and visual cues as means of communication in their websites.

While the American sites deliver with clear visual metaphors, the Korean sites contains metaphors that are rather ambiguous (Figure 2. a Starbucks Korea website banner, 'Coffee Break'; Figure 4. a Honda Korea banner, 'Advanced & Challenging')



Figure 5. The Korean Honda site above indicates high context culture by focusing on visual cues; the initial page background image completely changes every a couple minutes using three different visual backgrounds (figure 2.). In the background images, working as metaphors, the Honda Korea intends to deliver the technology-oriented corporate atmosphere by showing a foot of Ashimo, Honda's state of the art Humanoid robot. Also, it shows low transparency, which is a trend in high context culture, by providing no text in describing each link.

Conclusion

* Korean websites show propensity to western-like cultural attributes, such as individualism and low context cultural characteristics, while still maintaining collectivist and high context culture. This is a contradicting result compared to previous theories and empirical studies. We can assume that the mixed results for Korea indicate that culture evolves over the time affected by economic development, democratic institutions, and so on.

The multinational corporations' Korean websites tend to use English as metaphors and/or icon titles.

Using English in multimedia is common in Korean culture.

The analysis is limited to the websites of multinational corporations. Local websites for local companies may represent different trends in both countries.

Further investigations, possibly longitudinal study, are in need.