## CULTURAL ISSUES IN WEBSITE DESIGN. A EUROPEAN PERSPECTIVE ON ELECTRONIC COMMERCE

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Abstract: Commerce and electronic business have gained momentum in recent years. Attracted by the mirage of global markets, most companies enter the virtual environment without taking into account the cultural implications of such a step. The major question that arises at this stage of development of global trade on the Internet is if companies understand the importance of cultural factors in their actions on the global market and if we have tools, theories and models with which to carry out cultural analysis for understanding cultural environments online.

**Keywords:** electronic commerce, Internet, localization, culture, marketing **JEL Classification:** F23, A13, M31

The Internet has shrunk the world in a sense, but it has not eliminated the fundamental cultural differences. This is also true for the European economic space, characterized by a acute cultural and linguistic fragmentation. A number of studies shows that taking cultural diversity into consideration during the process of creation a website is essential. (Del Galdo and Nielsen 1996; Marcus 2000; Burgmann, Kitchen & Williams, 2006; Singh, Kumar & Baack, 2005; Cyr & Trevor-Smith, 2004; Ahmed, Mouratidis, Preston, 2009; etc.). Users from various countries not only speak different languages, but also have different cultures which make them process information, think, feel and behave differently. Thus the development of a good website which would attract users from various cultures requires a careful analysis of the implications of all major cultural elements.

Singh, Zhao and Hu (2005) have analysed the cultural content of Internet pages and have extracted a series of characteristics to which they attributed a number of cultural implications:

Characteristics	Cultural implication of the
	characteristic
The web is a general open network	The web is viewed by people across
having global accessibility	cultures thus lending itself to vast cultural

Table 1 - Characteristics of the web that lend it to be a cultural document

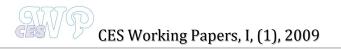
	variability
Inherent interactive nature of the web	The interactive nature of the web
	makes it an ideal medium to create
	culturally sensitive dialogue
Web is characterized by hyperlinks	Hyper links and self-search options
and	rely on consumer motivation to browse,
self-search option	therefore if web content is not customized
	for global customers on individual bases
	the interactive efforts might be wasted
	(Fock, 2000)
Web technologies can help capture	Using customer databases and
customer data that can be used for mass	software country specific profiles can be
customization	created and used to make the web sites
	culturally adapted
Media convergence and broad-band	Media convergence on the web can
technology make web an ideal medium to	be used to develop country-specific themes,
interact with audio, video, graphic and text	pictures, videos, and sounds to create
	localized web sites
On the web the capacity to hold the	The web sites that are culturally
visitors attention "the flow state" is an	congruent or closely match the social
important challenge	perceptions of users are more likely to
	engage the users (Simon, 2001)

Source: Singh, Zhao and Hu, 2003

The concepts of internationalisation and localisation are currently used frequently in developing interface based on cultural criteria.

Internationalisation refers to the process of elimination of specifically cultural elements . As a result the interface can be easily adapted for use in various countries, cultures and languages (Fernandes, 1995; Del Galdo, 1996). This perspective offers a number of advantages in developing websites. These advantages may include the reduction of time and costs, usage of less resources, a cheaper maintenance of source codes and a more efficient architecture for these.

Unlike internationalisation, localisation refers to the process of using subtle cultural elements in building web pages (Fernandes, 1995; Del Galdo, 1996).



A localization of a web site means to consider factors such as language, graphic design, layout and spatial orientation, colour preferences, icons, symbols, and also culture, customs, currency, number format, measurements, date/time, etc. (Singh and Boughton, 2002; Brandel, 2007; Cyr and Trevor-Smith, 2004; Singh, Alhorr and Bartikowski, 2010).

The goal of localizing user interfaces is to provide a "technologically, linguistically and culturally neutral platform from which to launch global e-commerce initiatives while allowing a framework that incorporates local content and functionality" (Shannon, 2000).

In a website, visual design aids the viewer in establishing a system to structure information. This structure is created by use of icons, symbols, or other navigational tools (Pullman, 1998). Winn and Beck (2000) describe the persuasive power of design elements on an e-commerce web site, and offer a set of guidelines to Web designers based on elements such as navigation or optimal presentation of information as they appeal to user's logic, emotions and credibility.

The Internet also creates a new vocabulary. Yeo (1996) proposes the terminology of "interface cultural design", with the same significance as localisation. Barber and Badre (1998) propose the terminology of "culturability" which underlines the importance of the connection between the concept of "usability" (efficiency in usage) and localisation.

The term "culturability", which comes form the combination of the words "cultural" and

"usability", has been introduced in specialist literature by Barber and Badre (1998) and is used to emphasize the importance of the relationship between culture and usability.

Generally, the graphic components are closely linked with how successful web transactions are, yet one must take into account that web page designers have different cultural backgrounds. Thus due to the inherent global nature of the Internet, organisations must evaluate the impact of images, text, colours, gestures, symbols etc, used within web pages.

Del Galdo and Nielson (1996) have demonstrated in their paper that Internet page design and the colours used have diverse psychological and social implications in various cultures. What is more important is that different users have different concepts on using web interfaces and this because – for instance – the direction of writing in Arabic presupposes that a webpage design should start in the right-hand side upper corner continuing towards the left-hand side upper corner. (Del Galdo and Nielson 1996).

In building Internet interfaces the Latin system is generally used which starts from the lefthand side upper corner. Also in Chinese information starts from the left-hand side upper corner the text downwards towards the lower left corner. This is only one aspect, but which illustrates very well the importance of providing localised interface designs. Peterson (1997) shows that due to the fact that the Internet reaches beyond any border, there is always a possibility to offend some nationalities. For instance he shows that Germany and France have liberal views regarding sex, which, if included in publicity presentations, will not create controversies, whereas this view is not shared in Greece. Moreover, companies ought to be careful in using gestures and colours on their web pages, as these may have different meaning throughout the world. For instance, the thumb and index united in a circle signifying 'OK" in American culture is considered as obscene in Germany (Peterson, 1997).

Besides incorporating cultural differences in their online actions, companies ought to also consider one of the biggest problems regarding Internet global communication, namely that of the language. The predominant Internet language is English; yet a long accepted idea is that marketing should always be practiced in the language of the target market. To surpass this problem Nicovich and Cornwell (1998) have noticed that many companies build their web pages with options for several languages.

Luna, Peracchio and de Juan (2002), constructed a cross-cultural model of flow that includes both dimensions of flow described in the extant literature, cognitive and affective. This model showed that the congruity of a website with a visitor's culture is a key site content that influences a visitor's likelihood of experiencing flow.

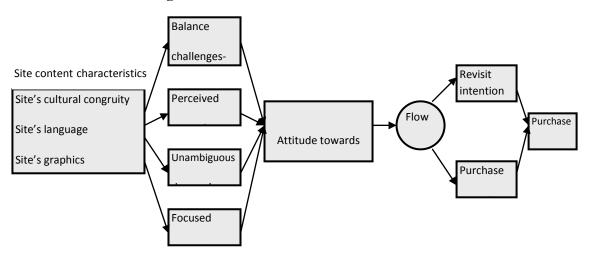


Figure 1 - Flow in cross-cultural web sites

Source: Luna, Peracchio and de Juan (2002)

## CONCLUSIONS

Internet does have its own culture, yet there needs to be an awareness that Internet users come from different cultures, and thus in such a milieu the differences between cultures are not to be ignored. By creating its own culture and by offering common experiences and elements the Internet can be used as a 'bridge mechanism for the transfer between cultures' (Nicovich and Cornwell, 1998).

In pursuing a global market, organisations should be sensitive to cultural differences that impact on the usability of the customer-interface of E-Commerce environments.

While global e-commerce constitutes a growing area that deserves attention from both practitioners and scholars, it is evident that the field is still a young realm that will continue to draw attention from several conceptual perspectives. It is through a continuous and growing research that the best global e-commerce practices will surface for multinational firms to adopt.

## REFERENCES

- Ahmed, T., Mouratidis, H., Preston, D. (2009), Website Design Guidelines: High Power Distance and High-Context Culture, International Journal of Cyber Society and Education, vol. 2, no. 1, pp. 47-60.
- Barber, W., Badre, A.N. (1998), *Culturability: The merging of culture and usability*, accessed at http://zing.ncsl.nist.gov/hfweb/att4/proceedings/barber/
- Brandel, M. (2007), *The Global/Local Web Site: Why You Need It; How to Build It*, Computerworld, vol. 19, pp. 29-32.
- Bridgewater, S., Egan, C. (2001), *International Marketing: Traditional Relationship and Network Perspectives*, Macmillan, Basingstoke.
- Burgmann, I., Kitchen, J., Williams, R. (2006), *Does culture matter on the web?*, Marketing Intelligence and Planning , vol. 24, no1, pp. 62-67.
- Cyr, D., Trevor-Smith, H. (2004), Localization of Web design: An empirical comparison of German, Japanese, and U.S. website characteristics, Journal of the American Society for Information Science and Technology, vol. 55, no. 13, pp. 1-10.
- Del Galdo, E., Neilsen, J. (1996), International user interfaces, Wiley, New York.
- Fernandes, T. (1995), *Global interface design: A guide to design international user interfaces*, AP Professional, Boston.

CES Working Papers, I, (1), 2009

- Luna, D., Peracchio, L. A., de Juan, M. D. (2002), Cross-cultural and cognitive aspects of Web site navigation, Journal of the Academy of Marketing Science, vol. 30, no. 4, pp.397-410.
- Marcus, A., Gould, E.W. (2000), *Cultural Dimensions and Global Web User-Interface Design*, accessed at http://www.amanda.com/resources/hfweb2000/hfweb00.marcus.html
- Nicovich, S., Cornwell, T.B. (1998), An Internet culture? Implications for marketing, Journal of Interactive Marketing, vol. 12 no. 4.
- Parker, E. (1998), The world wide web as a public relations medium: the use of research planning and evaluation by web site decision-makers, paper presented at the Annual Conference of the Association for Education in Journalism and Mass Communication, Baltimore.
- Pullman, C. (1998), Some things change. American Institute of Graphic Arts, accessed at http://www.aigany.org/ideas/features/pullman.html.
- Richardson, P. (2001), Internet Marketing: Readings and Online Resources, McGraw-Hill, New York.
- Shannon, P. (2000), *Including language in your global strategy for B2B e-commerce*, *World Trade*, vol.13, no.9, pp.66-68.
- Singh, N., Boughton, P.D. (2002), Measuring Web Site Globalization: A Cross-Sectional Country and Industry Level Analysis, American Marketing Association Conference Proceedings, vol. 13, pp. 302-303.
- Singh, N., Kumar, V., Baack, D. (2005), *Adaptation of cultural content: Evidence from B2C ecommerce firms*, European Journal of Marketing, vol. 39 (1/2), pp. 71–86.
- Singh, N., Zhao, H., Hu, X. (2005), Analyzing the cultural content of web sites: A cross-national comparision of China, India, Japan, and US, International Marketing Review, vol. 22, no. 2, pp.129-146.
- Singh, N., Alhorr, H. S., Bartowski, B. P (2010), *Global e-commerce: A portal bridging the world markets*, Journal of Electronic Commerce Research, vol. 11, no. 1.
- Yeo, A. (1996), World-Wide CHI: Cultural User Interfaces, A Silver Lining in Cultural Diversity, SICHI Bulletin, vol. 28, no. 3, pp.4-7.
- Winn, W., Beck, K. (2000), The persuasive power of design elements on an e-commerce web site, Technical Communication, vol. 49, no. 1, pp.17-35.