



The Effect of Technology, Human and Social Networks in Serviceable Cross-Culture Business to-Consumer (B2C) Websites

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Abstract

Business to-Consumer (B2C) e-commerce becomes more composite with the emerging growth of web services. Online Buyer expectations are often not taken into consideration in global and local B2C websites. Serviceability has made its approach into the e-commerce mainstream and emphasizes on how the web developers have developed their role to understand buyer's actions of purchasing and accessibility to accommodate evolving business process. For a B2C e-commerce website to engage online-buyers across cultures web designer should not ignore the technology and human related elements. This study is proposing a conceptual framework that describes the importance of serviceable B2C e-commerce that connects technology factors such as web content accessibility guidelines, human factors such as, cultural issues, buyers experience, cognitive behavior, religious attitude and social networking elements into B2C e-commerce websites.

Keywords: E-commerce, B2C, Culture, Social networking, Serviceability, Trust, Usability, Web Accessibility.

Introduction

In Human Computer Interaction (HCI) and Information Systems (IS) areas, serviceable websites are important. Various methods have been proposed by the researchers for measuring usability and creating global interfaces for the e-commerce websites to attract online buyers. Serviceability has the similar concept, to attract and engage the virtual buyers. Understanding the online buyer is a key to building effective websites (Hayes, 2005). Many business models are applied to attract and encourage buyers to revisit their websites. B2C e-commerce is the latest development that attempts to influence buyers to make their lives easier.

The evolution of technology, society and variations in development of web applications create myths around the world

that how web applications can be developed that really meets the user's needs. Having an appropriate technology infrastructure is not the only reason for effective e-commerce diffusion but this also depends on socio-economic and cultural variables (Yap et al., 2006). "International business is difficult due to difference in culture and language" (Lituchy and Barra, 2008).

The main aim of web accessibility is to represent high quality websites to increase user satisfaction. In particular, people with disabilities such as colour blindness, hearing deficiencies can buy online themselves without having to rely on others. Social networks such as Facebook, Twitter and YouTube have made a major impact on how today's Internet users share information. As noted by Swamynathan et al. (2008), users who engage in social networking generally

obtain higher user satisfaction. Safavi (2009) has explored that the success of e-commerce is not only depends on technical solution but also on social dimensions such as privacy, trust, usability and accessibility. Therefore, the web designer's should keep in mind the social dimensions in order to make e-commerce website more accessible.

The purpose of this paper is to first analyse the role of web accessibility and human related factors such as experience, culture, cognitive behaviour, religious attitude and social networking elements into B2C websites. Then based on the understanding from literature review a conceptual framework is presented. The study is organized as: The first section provides some background information and importance of the problem related to e-commerce across cultures. Then the following section presents related work followed by our framework. Finally, the conceptual framework is discussed and leaves an open issue.

Background

E-commerce

E-commerce, E-business or Internet Marketing is all about doing business electronically using the World Wide Web either in business-to-business (B2B) or business-to-consumer (B2C). Business-to-business "refers to e-commerce transaction between organizations while Business-to-consumer (B2C) refers to the e-commerce model in which business sells directly to individual shoppers" (Su and Adams, 2005). E-commerce is essential to most organizations. Over the last two decades the international market has seen significant growth in global trade due to rapid development of e-commerce (Tian and Xuehua, 2009). E-commerce is not only about running a website but designing a usable website is a critical issue (Safavi, 2009).

Culture

Hofstede et al. (2010) defines "culture as a mental software" that is "the collective programming of the mind which distinguishes the members of one group or category of people from another." According to Ferreira (2002) one of the Hofstede culture dimensions, individualism vs. collectivism has been revealed to affect the variety of information when people choose viewing written materials. Still, the individualism vs. collectivism dimension in computer applications globally has not been completely studied and the effect on the user's preference for information in decision making on web based applications is yet to be researched (Ferreira, 2002). Culture can clearly effect the behavior of online buyers (Yoon, 2009).

Importance of the Problem

In recent years research interest in the cultural aspects of in e-commerce applications has grown significantly. For example, research related to Taiwan Culture (Thatcher et al., 2006), Chinese users (Clemons et al., 2012, Junjie and Guang, 2010, Kurnia, 2008, Yoon, 2009, Tan et al., 2007), for the Arab countries (Rambo et al., 2009, El-Said, 2006), e-commerce consumers differences between France and Belgium (Goethals et al., 2009), comparing cultures of UK, US and China (Su and Adams, 2005, Liao et al., 2008), e-commerce acceptance in Malaysia and Singapore (Poong et al., 2007) and cultural considerations in Australia, Singapore, Korea for internet shopping (Kang, 2005, Kang and Araújo, 2006, Kang, 2009) shows the connection between the culture and e-commerce. Cultural issues alone do not guarantee the success of e-commerce but social and trust elements are also critical issues (Casaló et al., 2011, Yoon, 2009, Clemons et al., 2012, Kang and Kovacevic, 2012).

However, to reflect the culture in a user interface still needs to be addressed effectively (Kyeong and Yuan Yuan, 2010, Lituchy and Barra, 2008, Oh et al., 2011). "Various outcomes can be seen if cross-cultural issues to be put in parallel with the development of design for e-commerce" (Isa et al., 2009). Effective e-commerce infrastructure development is not just a simple buy and sell phenomena but also needs resources and efforts such as "solid network infrastructure, talented IT workforce, supportive country policy and regulation, healthy global competition, loyal customer base and protection for new business venture in e-commerce" (Poong et al., 2007). "the effect of culture on the overall user experience is yet to be explored in depth, particularly in regards to emotional usability" (Kang and Kovacevic, 2012). Therefore, there is a need of quality measurement criteria such as usability and accessibility for e-commerce (Hasan and Abuelrub, 2011).

Approach

The aim of this work is to find out the significance of integrating technology factors such as web accessibility standards, human related factors such as experience, culture, cognitive behavior, religious attitude and social networking elements into B2C e-commerce design and to what extent it may be successful. A conceptual framework is then presented that describes the importance of technology, human and social networking elements for B2C e-commerce website. The literature review performed directing at providing empirical support for the serviceable B2C websites. The keywords used in this search are: E – commerce; web usability; user interface design; web accessibility; culture; trust and social commerce.

Related Studies

The section will present some observation extracted from the different research papers. At this point some key aspects are identified,

as highlighted by the extensive literature related to the integration of culture and trust, usability and social networks into B2C e-commerce design.

- Culture and Trust in E-Commerce
- Cross-Culture E-Commerce Usability and Serviceability
- Cross-Culture E-Commerce User Interface design
- Social Media in E-Commerce

Culture & Trust in E- Commerce

Concerning culture and trust in e-commerce application, Yap and Dad (2006) proposed e-commerce business model developed in one cultural environment might not be suitable for another culture. Su & Adams (2005) investigated two case studies using Hofstede's cultural dimensions (individualism vs. collectivism). The results show that e-commerce business models developed for the West may not be totally suitable for the East.

Tian and Xuehua (2009) discussed the awareness of cultural variation in internet marketing is necessary like a traditional market. The authors have analyzed various key cross-cultural issues related to internet marketing and described "product, price, promotion and place as elements of the marketing mix that can be applied to internet marketing strategy cross-culturally". However, benefits of Internet marketing are not as clearer in developing countries as that of in the developed countries because customer cultures vary in most of developing countries.

Yoon (2009) also suggest that culture can affect the behavior of electronic commerce customers. For that reason, the authors have adopted an acceptance model for e-commerce that integrates trust, perceived usefulness and perceived ease of use as variables together with Hofstede's cultural

dimensions. But the model does not have an effective theoretical background and data was collected only from Chinese university students.

According to Kang (2010) there are issues in B2C e-commerce web design and in designer approach, such as cultural differences for international customers. The author investigated an Australian, Singaporean, German, Brazilian, Korean, UK and Japan. The findings show that both Australian and Korean users have different preferences of web design features and prefer to use local sites. Therefore, there is need of a framework for usable e-commerce design for international users and it is important for a web designer to consider design features for international users.

Cross-Culture E-Commerce Usability and Serviceability

Concerning e-commerce usability, researcher has proposed different approaches pertaining to incorporating usability factors in e-commerce environment (Smith et al., 2004, Ying et al., 2007). It is difficult for a novice user to determine the right UI (User Interface) component such as “toolbars, dialogs, and windows” to complete a specific task in e-commerce applications.

Smith et al (2004) presented a “process model for developing usable cross-cultural websites compatible with ISO 13407”. The authors suggested different approaches during the project life cycle from requirement phase to design. However, the authors believe there is still no solid framework that link culture to software. Ying et al. (2007) proposed approach guides end-users by “prompting the next UI component to help improve e-commerce application usability using the knowledge embedded in business process definitions”. However, the approach shows that the expert user’s being forced to follow a “single navigation sequence to carry out business activities”.

Mohd et al. (2010) proposed conceptual model based on the Hofstede’s cultural dimensions and web site usability. The authors used an Islamic culture as a case study and investigated whether users prefer the website designed for their own culture. The results shows that the users were more satisfied with culturally design websites. Hasan and Abuelrub (2011) proposed framework suggests some comprehensive indicators that can be used by web designers to build quality web sites. Downing and Chang (2011) believes that usability is e-commerce is one of the critical issue for organization, not only to attract customers but is able to serve their business goals. Wang (2011) have researched that “Interaction design for e-commerce website is an important indicator to measure the usability of e-commerce websites”. According to Sivaji et al. (2011) quality of website effects the online shopping experience.

Ranjbarian et al. (2012) proposed e-satisfaction model integrates “convenience, merchandising, website design, security and serviceability”. According to the authors serviceability includes the customer services, price, feedback, transaction process, time and delivery of the product. The result shows that the serviceability has positive effect on e-satisfaction of online shoppers.

Cross-Culture E-Commerce User Interface Design

Concerning cross-cultural user interface design for e-commerce, Huiyang et al. (2007) addresses the cultural issues in electronic business for national and international users and discusses that innovative web design features are important to attract consumers and increases the chances of e-commerce success.

Purwati (2011) believes that e-commerce websites lose up to 50% of online sales because users can’t find the right information what they want. Therefore “more research

should be conducted in this area on how technology can be most efficient and effective across countries, cultures and languages” (Lituchy and Barra, 2008).

Oh et al. (2011) found that there are still issues in user interface technology, such as user behaviour patterns, cross cultural and social interaction. The authors believe customer’s needs should be kept in mind for innovative communication strategies for the tourism sites globally.

Social Media in E-Commerce

Concerning the use of social networks in e-commerce, Swamynathan et al. (2008) presents an evaluation of social media on overstock business transactions and the results shows a significant user satisfaction. Guo et al. (2011) the author investigated the Chinese social commerce website (Taobao) where the social media are integrated and the buyers can use to ask sellers or other buyers for advice. The study shows that the information processing and trust positively influence the consumer choice. According to Pei-Lee and Ahmed (2011) social commerce has changed the nature of e-commerce. The authors have examined the influence of motivation, ability and opportunity on social commerce adoption by surveying university students. The results show that “Individuals behavioral intention to use social commerce

significantly affects the individuals’ actual social commerce behavior”.

Teh and Ahmed (2012) also studied the behavioral intention of social commerce users by investigating the influence of perceived ease of use, perceived usefulness and trust. The authors proposed model is an extension of technology acceptance model and the empirical result shows that “Individuals’ behavioral intention to use social commerce is built through user trust”. According to Sun (2011) the social commerce are still facing a challenge how to use social media effectively. The author has examined two successful e-commerce sites TaoBao and Etsy and describe that the use of social network features in social commerce can engage the users globally.

Framework

Based on the understanding from reading the articles, theory and theses in related studies section we are suggesting a conceptual model by integrating the technology factor such as, Web Content Accessibility Guidelines and human factors such as, experience, culture dimensions, cognitive behavior, religious attitude and the use of social network into B2C e-commerce design. The conceptual framework will help to develop serviceable cross culture B2C e-commerce websites to increase online buyer satisfaction as shown in Figure 1.

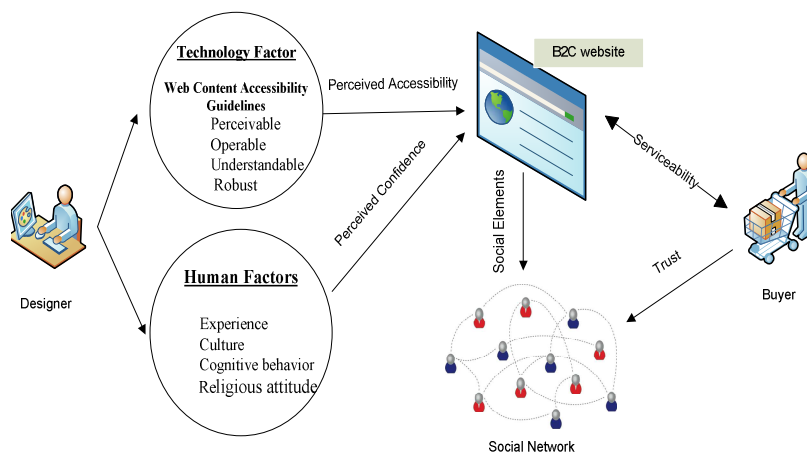


Fig. 1: Framework for Cross-Culture Serviceable B2C Websites

Discussion

Importance of Web Accessibility

The World Wide Web Consortium (W3C) is an international group that develops web standards. The current universal guidelines developed by W3C are Web Content Accessibility Guidelines (WCAG 2.0). According to World Wide Web Consortium (W3C 2005), web based applications should be internationalize in a way that can be easily adopted to any cultural group.

The purpose is to help make the website easier for users of all ages and with disabilities such as color blindness, hearing deficiencies. For-example, a color blind user using the online shopping cannot differentiate the red font highlighting the discounted prices or hot deals and may be the difficulty in reading small fonts by elderly persons. Therefore, such disable users require aids which can be fulfill by Web Content Accessibility Guidelines (Perceivable, Operable, Understandable and Robust) (W3C 2005). The purpose of "Perceivable" is to direct the user to perceive the user interface components. The "Operable" guides the users that how the interface should be operating and how to navigate. The "Understandable" means the web contents should be understandable by all users. The "Robust" describes that the information should be interpreted by the variety of users in the same way. According to Smallman (2006) and Roggio (2008) e-commerce sites must follow web accessibility by law. Web Accessibility can make it easier for a buyer to use online shopping facility successfully and thus possibly resulting in an increase in revenue.

Experience

Buyer's experience is a symbol of involvement between the product and the business organization that issue such products. Traditionally, Buyers of a product might have only one interaction with a business organization, such as repairs after bought. As the B2C e-business evolves over

time more interactions experience is needed to benefit both business and the buyers. The more frequently a buyer uses a B2C e-commerce website, the more they get experience to buy the product. As noted by Chelule (2010), a usable website provides users with a satisfying experience, thus increasing sales and revenue for vendors. This implies that as buyers continue to use the B2C e-commerce sites, their perception of confidence will increase over time. This interaction may influence the confidence of the buyer's directly. Moreover, business can also get benefits from those buyers' experiences, such as increasing revenue.

Culture

Here the "culture" means the online buyer's culture. Several researchers have provided evidence that culture as defined by Hofstede (2010) effects the online shopping experience. According to Costa (2006) culture is clearly a variable in the design of information systems with good usability.

Yoon (2009) also suggests that culture can affect the behavior of online buyers. Tian and Xuehua (2009) discusses the awareness of cultural variation in Internet marketing is necessary like a traditional market. However, benefits of Internet marketing are not as clearer in developing countries as that of in the developed countries because of cultures variation. Therefore, a culturally B2C e-commerce website will incorporate human computer interaction that will have a positive influence on buyer confidence to shop online.

Cognitive Behavior

With respect to B2C e-commerce website, a buyer's cognitive behavior may directly impact buyer's confidence to buy online. For example, if the site structure is poor, if menu frame and links is difficult to understand, or if the checkout is complex, then a buyer's can experience cognitive overload. As analyzed by Bolchini and Paolini (2004) users can experience cognitive overload if they face too many links on the web.

Religious Attitude

Religious attitude may affect a buyer's perception of the confidence to buy online. As noted by Isa et al. (2009) Muslims users purchase faster on websites designed for their own cultures. An experiment was done to ask the users to purchase religious books in online books and the results were significant in faster purchasing (Isa et al., 2009). Unfortunately, little research has been performed in this area until now.

Serviceability

B2C e-commerce sites are different from other types of websites because they show some extra issues such as actions of purchasing. Particularly, Serviceability that includes customer services, customer feedback, shopping time, privacy, range of offering, competitive price and transaction processes mechanism including payment collection, processing and product delivery (Ranjbarian et al., 2012). Therefore, the B2C e-commerce should be designed, keeping in mind the serviceability aspects of the necessary functional requirements in addition to the ease of use, learn ability and visibility aspects.

Trust

Here the trust we mean the 'online trust' that can be developed by the buyers when making online purchasing. Safavi (2009) has explored that the success of e-commerce is not only depends on technical solution but also on social dimensions such as privacy, trust, usability and accessibility. According to Bolchini and Paolini (2004) trust in a web vendor is viewed as a significant behavioral belief that directly influences buyer attitude, and indirectly affects behavioral intentions for online transactions.

Social Networking Elements

With the global popularity of social networking e-commerce websites are integrating social networking elements to reach their target customers and achieve

their business goals effectively (Sun, 2011). The social networking elements may include such as online chat, product review and ranking, recommendation to friends. The familiarity of B2C e-commerce will increase with help of social networking and can positively affect the online-trust. Because the use of social elements can empower the buyer's to shop online.

Buyer's intention to use B2C e-commerce may positively relate to social network. Social networks will affect the online trust of a buyer. For-example, people in collectivist's culture such as Pakistan are more likely to perceived reputation from a word-of-mouth recommendation while individualist cultures like Australians are more likely to take independent decisions. The relationship of online buyers in B2C environment with social networking seems that Online-Trust will create positively influence in Pakistan cultures.

Conclusion and Future work

For a website to convey business information successfully to the international users, the designers must be aware of the factors that ensure acceptability in other cultures. One of the factors such as localization, the researcher's believes that it gives a website the ability to attract their target users and may convert them to trusty customer (Al-Badi and Mayhew, 2010). Therefore, the e-commerce should be designed, keeping in mind the ease of use, learn ability and visibility aspects in addition to the functional requirements.

The literature shows a significant understanding how to integrate user centered design principles in cross cultural e-commerce applications. Many researchers and organizations have published their own sets of guidelines regarding usability. Making a query "e-commerce design guidelines" into a Google returns about 24,600,000 hits (in June 2012). However, the presentation of e-commerce web design features is not

conveyed through serviceability to the global user's perception in accordance to web accessibility guidelines. Serviceability in terms of online buyer satisfaction and social media services needs to be performed and there is still a need to investigate the best way of designing B2C e-commerce websites considering the cross cultures. Cross-cultural characteristics in e-commerce web design are important and have a constant investigation in recent years for improvement.

Therefore, a framework for cross-cultural e-commerce website is needed to address serviceability and business nature. By using the proposed framework the right standards can be chosen by the web designer to fulfill needs of the online buyers efficiently and effectively and will engage them across cultures. This study has some obvious limitation. A mixed method approach (Qualitative and Quantitative) is required to document and observe online buyer behavior within a particular context to draw research implications.

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References

- Al-Badi, A. H. & Mayhew, P. J. (2010). "A Framework for Designing Usable Localised Business Websites," *Communications of the Ibima*, 2010, 24.
- Bolchini, D. & Paolini, P. (2004). "Goal-Driven Requirements Analysis for Hypermedia-Intensive Web Applications," *Requir Eng.*, 9, 85-103.
- Casaló, L. V., Flavián, C. & Guinalfú, M. (2011). "The Generation of Trust in the Online Service and Product Distribution: The Case of Spanish Electronic Commerce," *Journal of Electronic Commerce Research*, 12, 199-213.
- Chelule, E., Herselman, M. & Van Greunen, D. (2010). "E-commerce Usability: Do We Need Guidelines for Emerging Economies?," *Iadis International Interfaces and Human Computer Interaction*, 19-26.
- Chu, J. & Yang, G. (2010). "A Culture-Based Study on Information Density of E-commerce Websites," *Computer Design and Applications (Iccda) 2010 International Conference On*, 25-27 June. V4-60-V4-63.
- Clemons, E. K., Jin, F., Ren, F., Wang, Y. & Wilson, J. (2012). "The Special Challenges of Ecommerce in China: A Preliminary Investigation of Sufficient Conditions for Generating Adequate Consumer Trust for Initial Launch," *System Science (Hicss)*, 2012 45th Hawaii International Conference On, 4-7 Jan. 4562 - 4571.
- Costa, C. (2006). "Cultural Factors and Usability User Expectations for the Location of E-commerce Web Objects Case Study in Portugal," [Online]. Available: http://ucf.ulusofona.pt/PAPERS%20UCF_61049/CCosta_NewMediaV180906%20Istanbul.pdf [Accessed 09 May 2012 2012].
- Downing, C. E. & Liu, C. (2011). "Assessing Web Site Usability in Retail Electronic Commerce," *Computer Software and Applications Conference (Compsac), 2011 IEEE 35th Annual*, 18-22 July 144-151.
- El-Said, G. R. (2006). "The Role of Culture in E-commerce Use for the Egyptian Consumers," *Information & Communications Technology, 2006. Ict '06. Iti 4th International Conference On*, 10-12 Dec. 1-1.
- Ferreira, R. (2002). *Culture and E-commerce: Culture Based Preferences for Interface Information Design. Master of Science, Virginia Polytechnic Institute and State University.*

- Goethals, F. G., Carugati, A. & Leclercq, A. (2009). "Differences in E-commerce Behavior between Neighboring Countries: The Case of France and Belgium," *Sigmis Database*, 40, 88-116.
- Guo, S., Wang, M. & Leskovec, J. (2011). "The Role of Social Networks in Online Shopping: Information Passing, Price of Trust, and Consumer Choice," Proceedings of the 12th Acm Conference on Electronic Commerce. San Jose, California, Usa: Acm.
- Hasan, L. & Abuelrub, E. (2011). "Assessing the Quality of Web Sites," *Applied Computing and Informatics*, 9, 11-29.
- Hayes, A. (2005). Understanding Customers is Key to Building an Effective Website [Online]. *AH Digital FX Studios*. Available: www.ahfx.net/weblog/18 [Accessed 27 April 2012].
- Hofstede, G., Hofstede, G. J. & Minkov, M. (2010). Cultures and Organizations: Software of the Mind, *Intercultural Cooperation and Its Importance for Survival Mcgraw-Hill*.
- Isa, W. A. W. M., Noor, N. L. M. & Mehad, S. (2009). Culture Design of Information Architecture for B2C E-commerce Websites. Proceedings of the 1st International Conference on Human Centered Design: Held as Part of Hci International 2009. *San Diego, Ca: Springer-Verlag*.
- Kang, K. (2009). "Supportive Web Design for Users from Different Culture Origins in E-commerce," *Internationalization, Design and Global Development*. In: Aykin, N. (Ed.). *Springer Berlin / Heidelberg*.
- Kang, K. & Araújo, J. (2006). "Cultural and Requirement Aspects on International E-commerce Sites," Eee'06- The 2006 International Conference On E-Learning, E-Business, Enterprise Information Systems, E-Government, and Outsourcing, Las Vegas Nevada, Usa,
- Kang, K. & Kovacevic, L. (2012). "The Effect of Culture on Emotions and Trust of Websites," *Journal of Internet and E-Business Studies*, 12.
- Kang, K. & Qian, Y. Y. (2010). "Innovative Communication in Global Tourism E-commerce Sites- A Cultural Aspect," *Advanced Communication Technology (Icact)*, 2010 The 12th International Conference On, 7-10 Feb. 1440-1444.
- Kang, K. S. (2005). "Considering the Cultural Issues of Web Design in Implementing Web-Based E-commerce for International Customers," The Fifth International Conference on Electronic Business, Hong Kong, 323-327.
- Kurnia, S. (2008). Exploring E-commerce Readiness in China: The Case of the Grocery Industry. Proceedings of the Proceedings of the 41st Annual Hawaii International Conference on System Sciences. *IEEE Computer Society*.
- Li, H, Sun, X. & Zhang, K. (2007). Culture-Centered Design: Cultural Factors in Interface Usability and Usability Tests. *Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing*, 2007. Snpd 2007. Eighth Acis International Conference On, July 30 2007-Aug. 1. 1084-1088.
- Liao, H., Proctor, R. W. & Salvendy, G. (2008). "Chinese and Us Online Consumers' Preferences for Content of E-commerce Websites: A Survey," *Theoretical Issues in Ergonomics Science*, 10, 19-42.
- Lituchy, T. R. & Barra, R. A. (2008). "International Issues of the Design and Usage of Websites for E-commerce: Hotel and Airline Examples," *J. Eng. Technol. Manag.*, 25, 93-111.
- Mohd, W. A. R., Noor, N. L. & Mehad, S. (2010). "The Information Architecture of E-commerce: An Experimental Study on User Performance and Preference," *Information Systems Development*. In: Papadopoulos, G.

A., Wojtkowski, W., Wojtkowski, G., Wrycza, S. & Zupancic, J. (Eds.). *Springer Us*.

Oh, J.- M., Lee, Y. S. & Moon, N. (2011). "Towards Cultural User Interface Generator Principles," Proceedings of the 2011 Fifth Ftra International Conference on Multimedia and Ubiquitous Engineering. *IEEE Computer Society*.

Poong, Y.- S., Talha, M. & Eze, U. C. (2007). "A Flower Analogy of E-commerce Infrastructure Development in Malaysia and Singapore," Proceedings of the Ninth International Conference on Electronic Commerce. Minneapolis, Mn, Usa: Acm.

Purwati, Y. (2011). "Standard Features of E-commerce User Interface for the Web," *Journal of Arts, Science & Commerce*, 2, 77-87.

Rambo, K., Liu, K. & Nakata, K. (2009). The Socio-Cultural Factors Influencing Online Female Consumers in Saudi Arabia. Proceedings of the 2009 International Conference on Computational Science and Engineering - Volume 04. *IEEE Computer Society*.

Ranjbarian, B., Fathi, S. & Rezaei, Z. (2012). "Factors Influencing on Customers' E-Satisfaction: A Case Study from Iran," *Interdisciplinary Journal of Contemporary Research in Business*, 3, 1496-1511.

Roggio, A. (2008). The Importance of Web Accessibility for Ecommerce [Online]. Available: <http://www.getelastic.com/the-importance-of-web-accessibility-for-ecommerce/> [Accessed September 2012].

Safavi, R. (2009). "Human/Social Factors Influencing Usability of E-commerce Websites and Systems," Application of Information and Communication Technologies, 2009. Aict 2009. International Conference On, 14-16 Oct. 1-5.

Sivaji, A., Downe, A. G., Mazlan, M. F., Soo, S.-T. & Abdullah, A. (2011). "Importance of

Incorporating Fundamental Usability with Social & Trust Elements for E-commerce Website," Business, Engineering and Industrial Applications (Icbeia), 2011 International Conference On, 5-7 June. 221-226.

Smallman, W. (2006). 'Should E-Commerce Websites Support Web Accessibility By Law?,' [Online]. Available: <http://www.blahblahtech.com/2006/11/should-e-commerce-websites-support-web-accessibility-by-law.html> [Accessed September 2012].

Smith, A., Dunckley, L., French, T., Minocha, S. & Chang, Y. (2004). "A Process Model for Developing Usable Cross-Cultural Websites," *Interacting with Computers*, 16, 63-91.

Su, Q.- Y. & Adams, C. (2005). Will B2C E-Commerce Developed in One Cultural Environment Be Suitable for Another Culture: A Cross-Cultural Study between amazon.co.uk (Uk) And dangdang.com (China). Proceedings of the 7th International Conference on Electronic Commerce. Xi'an, China: Acm.

Sun, H. (2011). "Designing for Social Commerce Experience as Cultural Consumption," Proceedings of the 4th International Conference on Internationalization, Design and Global Development. *Orlando, Fl: Springer-Verlag*.

Swamynathan, G., Wilson, C., Boe, B., Almeroth, K. & Zhao, B. Y. (2008). "Do Social Networks Improve E-Commerce?: A Study on Social Marketplaces," Proceedings of the First Workshop on Online Social Networks. *Seattle, Wa, Usa: Acm*.

Tan, J., Tyler, K. & Manica, A. (2007). "Business-To-Business Adoption of Ecommerce in China," *Inf. Manage.*, 44, 332-351.

Teh, P. L. & Ahmed, P. K. (2011). "Moa and Tra in Social Commerce: An Integrated Model," *Industrial Engineering and Engineering Management (Ieem)*, 2011 IEEE International Conference on, 6-9 Dec. 1375-1379.

Teh, P.- L. & Ahmed, P. K. (2012). Understanding Social Commerce Adoption: An Extension of the Technology Acceptance Model. *Management of Innovation and Technology (Icmit)*, 2012 Ieee International Conference On, 11-13 June. 359-364.

Thatcher, S., Foster, W. & Zhu, L. (2006). "B2B E-commerce Adoption Decisions in Taiwan: The Interaction of Cultural and Other Institutional Factors," *Electron. Commer. Rec. Appl.*, 5, 92-104.

Tian, R. G. & Lan, X. (2009). "E-commerce Concerns: Cross-Cultural Factors in Internet Marketing," *Electronic Commerce and Business Intelligence*, 2009. Ecbi 2009. International Conference On, 6-7 June. 83-86.

Wang, Q. (2011). "Usability Research of Interaction Design for E-commerce Website," *E-Business and E-Government (Icee)*, 2011 International Conference On, 6-8 May. 1-4.

W3C. (2005). Introduction to Web Accessibility. [Online] Available: <http://www.w3.org/WAI/intro/accessibility.php> [Accessed June 2012]

Yap, A. Y., Das, J., Burbridge, J. & Cort, K. (2006). "A Composite-Model for E-commerce Diffusion: Integrating Cultural and Socio-Economic Dimensions to the Dynamics of Diffusion," *Journal of Global Information Management*, 14, 17-38.

Yoon, C. (2009). "The Effects of National Culture Values on Consumer Acceptance of E-commerce: Online Shoppers in China," *Inf. Manage.*, 46, 294-301.

Zou, Y., Zhang, Q. & Zhao, X. (2007). "Improving the Usability of E-commerce Applications Using Business Processes," *Software Engineering, IEEE Transactions on*, 33, 837-855.