Website Globalisation: Analysis of Australian, Chinese and New Zealand University Websites

Francisco Moura, Dr Kenneth R. Deans, Jinhong Xie
University of Otago

Abstract

This paper discusses three countries universities' use of their websites to communicate to prospective international students. The authors analysed the level of globalisation of 41 Australian, 46 Chinese and eight New Zealand universities websites. The results revealed a low level of globalisation and that overall, universities rarely customise their site when promoting themselves to prospective international students. This is surprising, given the benefits of website localisation reported by previous researchers.

Introduction

Attracting new foreign students and staff is a vital process for universities to grow and develop both financially and intellectually. The University of Otago (www.otago.ac.nz) in New Zealand, for example, has an average nearly 2,500 international students every year, from over twenty countries, in undergraduate and postgraduate levels. Also, according to 'Education Counts', an institution responsible for providing information about the educational sector in New Zealand, in 2008 the total number of international postgraduate students enrolled in universities, institutes of technology and polytechnic and public providers exceeded 31,000 people (www.educationcounts.govt.nz).

Moreover, the attraction of new international students is also relevant for the local economy of the institution's town or city. According to the Australian 'Department of Education Employment and Workplace Relations', higher education represents the largest international student sector in the country, reaching 34% of all enrolments in 2008. In this same year, 43% of those enrolments were from Chinese and Indian students alone, demonstrating the importance of these markets for Australian universities (www.deewr.gov.au).

However, universities in Australia and New Zealand face two main challenges in attracting new students: the existing competition of the sector and the geographical distance from other countries and continents. Therefore, having an effective online communication becomes a necessary step for universities to reduce the uncertainties and perceived risks faced by prospective students during their decision making process, and may represent a competitive advantage.

Communicating to many distinct audiences is a complex process. The internet is not a culturally neutral medium (Chau, Cole et al. 2002; Singh, Zhao et al. 2003; Singh and Matsuo 2004; Callahan 2005; Singh and Boughton 2005). Cultures naturally reflect their own values on their websites and have differences and preferences when it comes to website design (Ahmed, Mouratidis et al. 2008; Petrie, Power et al. 2009). Also, it was shown that different cultures have distinct responses to web content when it comes to attitude toward the site (Singh, Fassot et al. 2006; Singh, Fassott et al. 2006), e-loyalty, satisfaction and trust (Cyr and Bonanni 2005; Cyr, Bonanni et al. 2005; Cyr 2008), and website quality (Tsikriktsis 2002). As consequence, the adaptation of elements of the site to address cultural differences of target

markets has become a widely discussed topic in academia, but still not commonly adopted in the market (Tixier 2005; Singh, Toy et al. 2009).

According to Singh and Boughton (2005) "website globalisation incorporates two complementary processes; web internationalisation is about developing a global web template to support front-end customisation, and web localisation is concerned with leveraging this global web template to create country-specific web pages" (p.7).

As described, website localisation involves the adaptation of content and structure to fit the needs and characteristics of target audiences (Esselink 2006; Petrie, Power et al. 2009). Research has shown that website localisation has a positive impact on attitude towards the site (Singh, Furrer et al. 2004), on purchase intention (Luna, Peracchio et al. 2002), time spent on the site (Barber and Badre 1998), satisfaction (Cyr, Bonanni et al. 2005) and intention to revisit the site (Luna, Peracchio et al. 2002). The main reason for the success of this process is that by adjusting the site to the preferences, needs and values of a culture, the user requires less cognitive effort in the task of decoding the message and in consequence has more positive evaluations and understanding of the information (Luna, Peracchio et al. 2002).

Arising from this, the objective of this paper is to *analyse the level of globalisation of Australian, Chinese and New Zealand universities websites*.

Methodology

Website globalisation can be investigated under two perspectives: the back stage level and the front stage level (Singh and Boughton 2005). The back stage refers to the development of templates for the localisation process, while the front stage deals with the global or local elements that are featured on the sites, such as language options, display of country versions of the site, adaptation of formats, and others. For this study, the authors adapted the front stage website globalisation levels created by Singh and Boughton (2005), as their original evaluation addressed company sites and some items and general aspects did not relate to universities.

Considering the difficult task faced by university websites of communicating to a wide number of countries, one might expect them to have more than just a single site. As consequence, for this research the levels of globalisation refer to the 'web presence' of the universities and not a single site. In other words, it was considered all the official content provided on the web through all versions of the sites offered by each university. The five levels adapted from Singh and Boughton (2005) are as follows:

Standardised web presence (1) - The same site, content and language for both domestic and international students. No country specific information. No focus on target markets.

Proactive web presence (2) - Does not offer other versions of the site with different language options or country versions of the site, but provides content for international students in country specific web pages, PDF files or other formats. Low or no level of localisation. Differs from standardised web presence because it provides content in other languages.

Global web presence (**3**) - Offers a different version(s) of the site with relevant information devoted to prospective students in other language options. However, there is no focus on target markets, or localisation of web pages, all content is in English or other languages. Differs from proactive web presence because it offers other version of the site in other languages.

Localised web presence (**4**) – Offers country versions of the site or specific country web pages, with multiple language options and some are purely translated. It takes time to locate country specific web pages. Some level of localisation, such as country specific time, date, zip code, number formats, or depiction of information focused on students from the country version. Differs from global web presence due to the focus on a target market and level of localisation.

Highly localised web presence (**5**) – Offers highly developed and localised country specific websites and not just a few country specific web pages. Existence of country specific global templates reflected in the country-specific URL like .de (Germany), .uk (United Kingdom), and .jp (Japan), or web address that relates to the target country. Country specific websites are listed and are easy to find and navigate. They differ from localised in terms of ease of navigation and have a greater extent of localisation.

The research consisted of an investigation of the level of globalisation of Australian, Chinese and New Zealand university websites through a content analysis (Kassarjian 1977), using an adaptation of the levels developed by Singh and Boughton (2005). Content analysis has been frequently used on the investigation of websites (Adam, et al. 2002; Singh and Matsuo, 2004; Singh, et al. 2006). The sites analysed involved a sample of 95 university sites; 43 from Australia, 46 from China and eight from New Zealand. After extensive training of the website globalisation levels, two coders carried out the analyses. In order to achieve inter-judge reliability, a pre-test was developed with the two coders analysing 15 sites, and the result revealed an overall reliability of 86%, considered satisfactory by Kassarjian (1977). The final investigation was conducted in June, 2010. The unit of analysis was the entire site of all versions provided by each university. In accordance to the method developed by Singh and Boughton (2005), the universities were scored on a scale from 1 to 5, according to the level of globalisation of their sites. Standardized web presence was ranked 1; proactive as 2; global as 3; localised as 4; and highly localised as 5.

Findings

The overall result of 2.23 in table 1 indicates that the localisation process is still not widely adopted by universities from the three countries investigated. Despite the importance of attracting new international students, the development of websites specifically designed to cater to the needs and preferences of international target markets is still far from being common practice among universities of these countries. Instead, Australian (overall score 2.19) and New Zealand (overall score 1.50) universities have adopted the strategy of communicating mostly in English for all audiences, which may not facilitate the information search process of potential international students.

Country	Mean (Extent of Website Globalisation)	N	S.D.
Australia	2.19	41	1.24
China	3.02	46	0.33

New Zealand	1.50	8	0.53
Total	**2.23**	**95**	**0.7**

Table 1: Result of the Level of Globalisation

The Chinese universities were ranked the highest, (overall score 3.02), with a score that classifies them as having a globalised level of web presence. This result was largely expected, since Chinese is mostly just spoken in China, and by having only a Chinese version it would lose many potential new students.

The analysis also revealed that the majority of Chinese universities have a culturally neutral version of their sites in English. They do not focus on specific markets, and show a very low level of localisation. The only university that ranked with a 'highly localised web presence' in this study was the Murdoch University in Australia, as result of the Chinese version of their site.

Overall, only 11 out of 41 Australian and five out of 46 Chinese universities have other country versions of their sites. At the time of this research, no New Zealand University had a country version of their site (see Table 2).

Country	Universities With Country Versions Websites	Country Specific Content	N
Australia	11	26	41
China	5	5	46
New Zealand	0	3	8
Total	**16**	**34**	**95**

Table 2: Web Content of Universities

From the analysis of the different versions of the university sites, Australian universities' focus on the Asian market is clear (37 versions out of 24). However, despite the existence of five Japanese versions sites, for example, Japan is not even ranked in the first 15 countries in terms of international student enrolment in Australian higher education institutions in 2009, according to the Australian Department of Education, Employment and Workplace Relations (www.deewr.gov.au). India for example, which according to the same source represents the second highest outbound market with 17.5% of international enrolled students in 2009, did not have a single targeted website. Curtin University of Technology stood out by having 13 different country versions of their site, although not highly localised.

Chinese universities have not shown great development of country specific sites. However, from a total of eight foreign versions (out of 46 investigated), six are focused on Asian countries (four Japanese versions and two Korean versions) and the other two are Saudi Arabian versions. This finding is supported by the origin of most foreign students in Chinese universities. According to Ministry of Education of the People's Republic of China (www.moe.gov.cn) over 65% of the international students are from within Asia.

Discussion

The first finding to be discussed is the low level of globalisation of Australian, Chinese and New Zealand university websites. By communicating in an homogenised way for broad

audiences, these institutions are not considering the preferences and needs of different markets, which may affect the decision making process of prospective students. Interestingly, these results concur with other industry sectors, such as entertainment, hotel and e-commerce, which also lacked on localising of their existing sites and creating new versions for specific markets (Tixier 2005; Singh, Toy et al. 2009).

Another issue is the attempt by universities to address to target countries by providing superficial content. It was found that many universities use PDF and Word files, presentations in flash, and single web pages to provide content in other languages. However they often failed to specify which audience they were communicating to. Also, in most cases the existence of this kind of information was not indicated on the initial page of the sites, and was frequently complicated to find, making the user's navigation of the site more difficult. Additionally, it has to be remembered that the user will often not be an expert or native speaker of the language. Therefore there is a need for further investigation into the extent to which these attempts at providing content for international students under these circumstances may assist them or create a negative perception of the university.

Overall, it is revealed in this paper that Australian, Chinese and New Zealand universities are still at an early stage of development when it comes to promoting themselves on the web to foreign markets. Simply having a website is not the key for success (Palmer 2002). Researches have provided various indications on how to localise site to reach target audience effectively (Baack and Singh 2007; Mushtaha and Troyer 2009), and these should be considered. Website localisation has shown to be successful, as it reduces the user's cognitive effort on decoding the message on the site and as consequence causes positive perceptions of the site and institution (Luna, Peracchio et al. 2002; Luna, Peracchio et al. 2003). Therefore, Australian, Chinese and New Zealand universities should reconsider their online communications to attract new international scholars.

Finally, it may be argued that there are various other possibilities for universities to communicate globally with prospective students and staff, such as social media sites (Twitter and Facebook, for example). However, most of these social network sites have clear limitations, not allowing users to freely design the structure, and in most cases the structure that is offered limits the content that can be exposed. In this sense, websites are still the main official form of self presentation of universities on the web.

Limitations and Future Studies

The development of websites is guided mainly by the universities communication objectives. During the analysis, all universities included in the sample were expected to have an explicit objective of attracting international students, which may not be true. Second, the level of localisations of cultural values of the country version sites (Singh, Zhao et al. 2003; Singh and Matsuo 2004; Baack and Singh 2007) was not investigated, and should be considered on future studies. Another limitation of this study is that it was not investigated the quality and appropriateness of translation. This represents a very important element of the localisation of websites and should also be considered for future studies (Liubinienė and Mykolaitytė 2007). At last, it is suggested the investigation of the impacts of different levels of website globalisation on the perception of prospective students towards sites and universities, and the investigation for the reasons for the low level of globalisation of Australian, Chinese and New Zealand university websites.

References

Adam, S., Mulye, R., Deans, K. R., Palihawadana D., 2002. e-Marketing in Perspective: A Three Country Comparison of Business Use of the Internet. Marketing Intelligence & Planning, 20(4), 243-251.

Ahmed, T., Mouratidis, H., Perston, D., 2008. Website Design and Localisation: A Comparison of Malaysia and Britain. International Journal of Cyber Society and Education 1(1), 3-16.

Baack, D. W., Singh., H., 2007. Culture and web communications. Journal of Business Research 60(3), 181-188.

Barber, W., Badre, A., 1998. Culturability: The Merging of Culture and Usability, 4th Conference on Human Factors and the Web Basking Ridge NJ.

Callahan, E. 2006. Cultural Similarities and Differences in the Design of University Web sites. Journal of Computer-Mediated Communication 11, 239-273.

Chau, P., Y. K., Cole, M., Massey, A., P., Montoya-Weiss., M., O'Keefe, R., M., . 2002. Cultural Differences in the Online Behavior of Consumers. Commun. ACM 45(10), 138-143.

Cyr, D. 2008. Modeling Web Site Design Across Cultures: Relationships to Trust, Satisfaction, and E-Loyalty. Journal of Management Information Systems 24, 47-72.

Cyr, D., Bonanni, C., 2005. Gender and Website Design in E-Business. International Journal of Electronic Business 3, 565-582.

Cyr, D., Bonanni, C., Bowes, J., Ilsever, J., 2005. Beyond trust: Web site design preferences across cultures Journal of Global Information Management 13(4), 25-54.

Esselink, B. 2006. The Evolution of Localization. In: Pym, A., Perekrestenko, A., Starink, B. Translation Technology and its Teaching. Servei de Publicacions Tarragona, Spain. 21-30.

Kassarjian, H. H., 1977. Content Analysis in Consumer Research. Journal of Consumer Research 4, 8-18.

Liubinienė, V. and I. Mykolaitytė, 2007. Linguistic and Cultural Adaptation of English Websites into Lithuanian Studies About Languages Kalbų Studijos 10: 47-52.

Luna, D., Peracchio, L. A., Juan, M. D. de, 2002. Cross-Cultural and Cognitive Aspects of Web Site Navigation. Journal of the Academy of Marketing Science 30, 397-410.

Luna, D., Peracchio, L. A., Juan, M. D. de, 2003. The Impact of Language and Congruity on Persuasion in Multicultural E-Marketing. Journal of Consumer Psychology 13(1/2), 41-50.

Mushtaha, A., Troyer, O. D., 2009. Cross-Culture and Website Design: Cultural Movements and Settled Cultural Variables. Internationalization, Design and Global Development Springer Berlin. Heidelberg, pp. 69-78.

Palmer, J. W., 2002. Web Site Usability, Design, and Performance Metrics. Information Systems Research, INFORMS: Institute for Operations Research 13, 151-167.

Petrie, H., Power, C., Song, W., 2009. Internationalization and Localization of Websites: Navigation in English Language and Chinese Language Sites. In: Internationalization, Design and Global Development Springer Berlin, Heidelberg, pp. 293-300.

Singh, N., Boughton, P. D., 2005. Measuring Website Globalization: A Cross-Sectional Country and Industry Level Analysis. Journal of Website Promotion 1(3), 3-20.

Singh, N., Fassot, G., Chao, M. C. H., Hoffmann, J. A., 2006. Understanding international web site usage: A cross-cultural study of German, Brazilian and Taiwanese online consumuers. International Marketin Review 23(1), 83-97.

Singh, N., Fassott, G., Zhao, H., Boughton, P. D., 2006. A Cross-cultural Analysis of German, Chinese and Indian Consumers' Perception of Web Site Adaptation. Journal of Consumer Behaviour 5(1), 56-68.

Singh, N., Furrer, O.F.G., Ostinelli, M., 2004. To Localize or to Standardize on the Web: Empirical Evidence from Italy, India, Netherlands, Spain, and Switzerland. Multinational Business Review 12(1), 69-88.

Singh, N., Matsuo, H., 2004. Measuring Cultural Adaptation on the Web: A Content Analytic Study of U.S. and Japanese Web Sites. Journal of Business Research 57(8), 864-872.

Singh, N., Toy, D. R., Wright, L. K., 2009. A Diagnostic Framework for Measuring Web-site Localization. Thunderbird International Business Review 51(3), 281-295.

Singh, N., Zhao, H., Hu, X., 2003. Cultural Adaptation on the Web: a Study of American Companies' Domestic and Chinese Websites Journal of Global Information Management 11(3), 63-80.

Tixier, M., 2005. Globalization and Localization of Contents: Evolution of Major Internet Sites Across Sectors of Industry. Thunderbird International Business Review 47(1), 15-48.

Tsikriktsis, N., 2002. Does Culture Influence Web Site Quality Expectations? An Empirical Study. Journal of Service Research 5(2), 101-112.