

Capturing Cultural Requirements in the Design of a Website for an Aboriginal Community

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Statement of Originality

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to this copy of my thesis, when deposited in the University Library, being made available for loan and photocopying subject to the provisions of the Copyright Act 1968.

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Reece D George

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Publications

George, R, Nesbitt, K, Donovan, M & Gillard, P 2010, 'Identifying cultural design requirements for an Australian Indigenous website', in C Lutteroth & P Calder (eds.), *Proceedings of the Eleventh Australasian Conference on User Interface*, Australian Computer Society, Darlinghurst, Australia, vol. 106, pp. 89-97.

George, R, Nesbitt, K, Donovan, M & Maynard, J 2011, 'Focusing on Cultural Design Features for an Indigenous Website', *Proceedings of the Australasian Conference on Information Systems ACIS 2011*, paper 17, <<http://aisel.aisnet.org/acis2011/17>>.

George, R, Nesbitt, K, Donovan, M & Maynard, J. (2012), 'Evaluating Indigenous Design Features Using Cultural Dimensions', in H Shen & RT Smith (eds.), *Proceedings of the Thirteenth Australasian User Interface Conference (AUIC 2012)*, Melbourne, Australia. Australian Computer Society, CRPIT, vol. 126, pp. 49-58.

Abstract

This three year case study examines the key design features and methodology required to develop a website that best reflects the culture of an Indigenous Australian community. The study also considers general issues related to the representation and capture of Indigenous knowledge.

The Wollotuka project is grounded in previous contextual design work. The aim was to investigate two main questions: what key design features should be incorporated into a website to meet the requirements of an Aboriginal community and what culturally acceptable process can be used to capture these requirements?

The Wollotuka project adopted an iterative prototyping approach that built on previous knowledge concerning Indigenous design elements. The user-centred design process engaged closely with 12 members of the local Aboriginal & Islander community throughout the process. The ethnographic process included a focus group discussion and one-on-one interviews.

The final design incorporated a virtual tour of the building and the grounds. Within the tour are situated other key features such as storytelling, video, Aboriginal art, humour, music and dance, messages from community members, a facility for feedback and some simple interactive games.

Many existing guidelines for Aboriginal cultural design were affirmed in the study, including the use of simple language, local imagery and the provision of an interaction style appropriate to the Indigenous group. A number of helpful guidelines related to Aboriginal culture and design features were identified in the project.

The project also identified important guidelines regarding a culturally acceptable design process for an Indigenous community. Overall, the community-based design process used in the Wollotuka project met with approval from all members of the group. Interviews with the project participants highlighted the importance of this close community involvement in the design process. It can be concluded that the respect for traditions is paramount and that practices can vary significantly between varying Indigenous groups.

The design features identified as most appropriate to capture the cultural identity of the group were also evaluated, by considering them in terms of Hofstede's cultural model. Hofstede's cultural dimensions have been frequently used to study the way culture impacts on web design. Some correlations have been measured between Hofstede's cultural dimensions, including the structural and aesthetic design features used in websites from different cultures. To perform this final analysis, a survey of the community group was completed, to position them in terms of Hofstede's dimensions. A comparison was then made on the key design features identified from the Wollotuka project and the outcomes that might be expected, given the low position of the group on each of Hofstede's five cultural dimensions. The results of this analysis were mixed. There were some good correlations and some disagreements between the Wollotuka project findings and the results from previous studies.