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Tharitpong Fuangvut
University of Wollongong

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Campus Portals: a Framework for Development Accommodating End-users' Online Activities

*A thesis submitted in fulfilment of the
requirements for the award of the degree of*

DOCTOR OF PHILOSOPHY

from

THE UNIVERSITY OF WOLLONGONG



by

THARITPONG FUANGVUT

*B.BA (Business Computer),
M.Com (Business Information Systems)*

INFORMATION SYSTEMS

2005

CERTIFICATION

I, Tharitpong Fuangvut, declare that this thesis, submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in Information Systems Discipline, School of Economics and Information Systems, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

Tharitpong Fuangvut

30 August 2005

ABSTRACT

A Campus Portal is an exciting recent phenomenon forming part of the new generation of online services for all stakeholders in institutions of higher education. Conceptually the general notion of a Portal should be to be distinguished from that of other Web-based applications and the traditional Intranet of the institution. The literature review in Phase One of this research indicates that the major distinguishing characteristics of a Campus Portal are: (i) personalisation, by which end-users are only able to access information and online services pertinent to their activities, and (ii) customisation, by which end-users are able to select their preferred information channels and optional online services.

The major objective of this research is to propose a development methodology specifically suitable for Campus Portal projects. While there are many accepted development methodologies for traditional and Web-based Information Systems, no clear body of knowledge on the development of Campus Portals has yet been recognised. Additionally, as this is a new area, the definitions, terms, concepts and important issues agreed to by academic researchers and practitioners, are still evolving. This research, therefore, needs to clarify and identify some important issues regarding Campus Portals and their development, prior to composing the development methodology. In the second and third phases of the research, two studies were carried out, a preliminary study and a case study. These generated more understanding of the issues and extended the body of knowledge on Campus Portals, especially concerning their development.

The preliminary study explored and investigated the online services and Campus Portals of 40 higher education institutions' sites in Australia, New Zealand, the USA, the UK and Canada. The findings of the preliminary study show that there are no standard patterns in the function of personalisation and customisation in Campus Portals. A set of research questions were then put forward to drive further investigation into design and implementation issues regarding the personalisation and customisation functions of Campus Portals.

The case study was conducted in an Australian university among the major stakeholder groups, namely, the development team and the end-users (students and academic staff). For the study of the development team, interviews were used to gather information on their current practices and their vision for the future direction of the Campus Portal. Students were the primary focus of the end-user study, from whom data was collected using a survey to build up usage patterns of their online activities. In addition, a group of academic staff were interviewed to obtain data from their perspective to identify and clarify some important issues. The results and findings in this phase of the research contribution to the body of knowledge on Campus Portals and their development.

In the final phase of the research, the review of existing development methodologies was continued filtering them through a set of identified criteria based on the findings of the two studies. Finally, the most appropriate development methodology was selected and modified in order to support the requirements identified in this research as critical for the development of a Campus Portal. The result was proposed as a Campus Portal Development Methodology (CPDM) fulfilling the main objective of the research.

PUBLICATION FROM THE RESEARCH

1. Fuangvut, T. and Hasan, H. (2005) 'Accommodating Inter-generational Stakeholders in a Campus Portal', *European and Mediterranean Conference on Information Systems (EMCIS2005)*, Cairo, Egypt, June 7-8, 2005.
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