

THE APPLICATION OF LIBRARY 2.0 CONCEPT
FOR ENHANCING THE LIBRARY OPAC

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**THE APPLICATION OF LIBRARY 2.0 CONCEPT
FOR ENHANCING THE LIBRARY OPAC**

**A Thesis submitted to the College of Arts and Sciences (CAS) in partial
fulfillment of the requirement for the degree Master of Science
(Information and Communication Technology)
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**by
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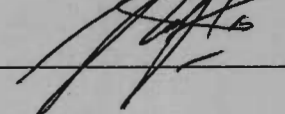
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ABSTRAK

OPAC merupakan perkhidmatan Perpustakaan konvensional yang mengamalkan pendekatan komunikasi maklumat sehala. Kajian ini menerangkan secara ringkas konsep dan aplikasi Web 2.0 dan Library 2.0 meliputi definisi, teknologi yang digunakan dan laman web terpilih yang mengaplikasikan konsep Web 2.0. Konsep Library 2.0 memberi keutamaan kepada pengguna perpustakaan untuk berkongsi pengalaman dan pandangan mereka terhadap koleksi dan perkhidmatan perpustakaan. Konsep ini boleh diaplikasikan untuk meningkatkan keupayaan OPAC dan meningkatkan kepuasan pengguna terutamanya generasi kini.

‘Enhanced OPAC’ melibatkan pelaksanaan fungsi baru dalam sistem pencarian maklumat, penggunaan teknologi terkini untuk pertukaran data antara sistem aplikasi berbeza, kandungan tambahan yang memberi penerangan lanjut berhubung dengan bahan dalam koleksi perpustakaan, menggunakan aplikasi Web 2.0. Pengguna akan memperolehi maklumat yang lebih terperinci berkaitan bahan dalam koleksi perpustakaan dan boleh menyumbang pandangan mereka terhadap koleksi perpustakaan di masa hadapan. Survey awal menunjukkan pustakawan UUM amat berpusas hati dengan konsep yang diperkenalkan dan bersedia untuk menggunakan sistem ini pada masa depan.

ABSTRACT

OPAC is the conventional library service that only allows for one-way flow of information. This project presents an overview of Web 2.0 and Library 2.0 including its definition, technologies involved and sites currently advocated as examples of Web 2.0. Library 2.0 gives library users the power to share their experiences. Library 2.0 can be summarized as being user-driven that enables attracting users to enrich information resources. Library 2.0 concepts can be implemented to enhance OPAC and increase users' satisfaction especially for new generation.

Enhanced OPAC involved the implementation of new function for search engine, the advancement in exchanging data with other application and services, additional content which is used to describe the materials in library collections, capability to utilize external content services, and the application of Web 2.0 tools. Users are able to get more descriptions about items in a library collection and will be able to contribute their opinions about the library collection in the future. Pilot survey shows that UUM Librarians are very satisfied with the concept of Enhanced OPAC and are willing to use it in the future.

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LIST OF ABBREVIATIONS

AJAX	Asynchronous JavaScript and XML
ALA	American Library Association
APA	American Psychological Association
API	Application Programming Interface
CMS	Content Management System
CSS	Cascading Style Sheet
HTTP	Hypertext Transfer Protocol
IE	Microsoft Internet Explorer
IEEE	Institute of Electrical and Electronics Engineers
ILS	Integrated Library System
IM	Internet Messaging
IS	Information System
IT	Information Technology
LINTAS	Library Information Technology Automated System
MARC	Machine Readable Catalog
NCIP	NISO Circulation Interchange Protocol - Z39.83
OCLC	Online Computer Library Center
OPAC	Online Public Access Catalog
PHP	PHP: Hypertext Preprocessor
PSB	Perpustakaan Sultanah Bahiyah
RSS	Rich Site Summary
SIP	3M Standard Interchange Protocol
SMS	Short Messaging System
SQL	Structured Query Language
TAM	Technology Acceptance Model
TOC	Table of Content
URL	Uniform Resource Locator
UUM	Universiti Utara Malaysia
WebOPAC	Web version of Online Public Access Catalog at UUM
WWW	World Wide Web
XHTML	Extensible Hypertext Markup Language

APPENDICES

- APPENDIX 1 INTEGRATED LIBRARY SYSTEM (LINTAS) DRIVER
- APPENDIX 2 COMMENTS AND RATING SOURCE CODE
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CHAPTER ONE

INTRODUCTION

1.1 Background

Academic libraries are implementing technological based library service to enhance the effectiveness of information delivery to library users. This involved the application of information technology to provide electronic oriented services such as reference service, online public access catalog (OPAC), document delivery, virtual library and digital library. Libraries are responsible in managing library information resources, services and facilities. Nowadays, the challenging role of academic libraries is to provide effective access to relevant information in timely manner.

Library catalog is a common tool used by library users in finding information resources held by the library. Since 1982, the National University, University of Malaya, Nanyang Technological Institute (Singapore) and followed by North Malaysia University have contributed record to a computer output microfilm (COM) catalog (Mitchell, 1994). Library catalog using computer applications plays significant role in providing access point to library materials such as call numbers, items status and locations. Over the years, various library systems offered improved searching interface with user-friendly features.

New application technology has contributed to participative and collaborative content development. This development is portrayed in the application system such as blogs, Rich Site Summary (RSS), podcasting, wikis, and Instant Messaging (IM) services (Carter, 2007; Hastings, 2007; Lankes, Joanne, & Scott, 2007). Popular platforms such as Friendster and Facebook provide excellence opportunities for Internet users to contribute and share their views and experience with the public, or so called communities.

The contents of
the thesis is for
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