

THE MANAGEMENT AND USE OF DIGITAL LIBRARY
SERVICES IN EDUCATION AMONG POSTGRADUATE
STUDENTS IN IIUM GOMBAK

BY

FOUAD MERZOUK

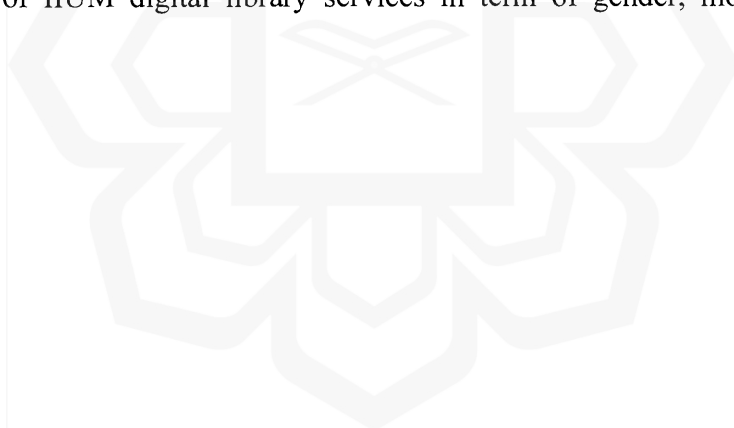
A thesis submitted in fulfilment of the requirement for the
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ABSTRACT

Most libraries nowadays have a collection of digital objects for organizing, storing, and retrieving the files and media contained in library collection. Digital Library is regarded as one of the recent developments in Library and Information Science, which help its user to seek information through the web browser. Digital Library is organized assortment of information, with its supported services and a place where the information is kept in digital format and can be retrieved over a network. Since last one-decade, researchers are focusing on the users of Digital Library to develop on a more efficient and effective system to provide quality service to users. The study aims at investigating the management of IIUM digital library, types of digital library services accessed by postgraduate students in IIUM Gombak, level of its utilization and patterns of utilization of IIUM library services based on gender, mode of study and Kulliyah. A quantitative approach has been adopted to answer the study's research questions and objectives. A survey questionnaire has been distributed over to 351 postgraduate students in IIUM, and analyzed using statistical methods in SPSS. Overall, the findings of the study indicate satisfaction with the management of the IIUM digital library. Furthermore, Online Databases appears to be the most popular digital service accessed by IIUM students. However, the students' utilization of digital library services in IIUM is considered low. In addition, the findings indicate no difference in the pattern of utilization of IIUM digital library services in term of gender, mode of study and Kulliyah.

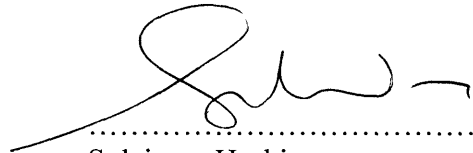


ملخص البحث

تحتوي معظم المكتبات في الوقت الحاضر على مجموعة من العناصر الرقمية لتنظيم وتخزين واسترجاع الملفات والوسائط الموجودة في مجموعة المكتبة. تعتبر المكتبة الرقمية إحدى التطورات الحديثة في علوم المكتبات والمعلومات، والتي تساعد مستخدميها على البحث عن المعلومات من خلال متصفح الأنترنت. المكتبة الرقمية هي مجموعة متنوعة من المعلومات، مع خدماتها المدعومة ومكان يتم حفظ المعلومات به في شكل رقمي ويمكن الوصول إليها واسترجاعها عبر الشبكة. منذ العقد الماضي، يركز الباحثون على مستخدمي المكتبة الرقمية قصد التطوير و الوصول إلى نظام أكثر كفاءة وفعالية لتوفير خدمة عالية الجودة للمستخدمين. تهدف هذه الدراسة إلى بحث واستكشاف سبل إدارة المكتبة الرقمية في الجامعة الإسلامية العالمية بماليزيا IIUM، وأنواع الخدمات الرقمية التي يتم الوصول إليها من قبل طلاب الدراسات العليا في فرع الجامعة IIUM Gombak، فضلاً عن تقصي مستوى استخدام الطلبة لخدمات المكتبة إستناداً للجنسين، ونمط الدراسة والكليات. تم تبني مقارنة كمية للإجابة على أسئلة البحث وأهدافه. تم توزيع استبيان على أكثر من 351 طالب دراسات عليا في IIUM، وتحليلها باستخدام الأساليب الإحصائية عن طريق البرنامج الإحصائي SPSS. بشكل عام، تشير نتائج هذه الدراسة إلى الرضا عن مستوى إدارة المكتبة. ومع ذلك، فإن استخدام الطلاب لخدمات المكتبة الرقمية في الجامعة IIUM يعد منخفضاً. كما أشارت النتائج إلى أن أغلب الطلاب بالجامعة يميلون لإستخدام قاعدة البيانات على الأنترنت مقارنةً ببقية الخدمات. كما أشارت النتائج لعدم وجود أية فروقات في أنماط استخدام خدمات المكتبة الرقمية بين الجنسين، وأنماط الدراسة، والكليات.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion; it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a thesis for the degree of Master of Education.



.....
Sulaiman Hashim
Supervisor

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a thesis for the degree of Master of Education.

.....
Mohd Shukri Bin Nordin
Internal Examiner

.....
Johan @ Eddy Luaran
External Examiner

This thesis was submitted to the Department of Curriculum and Instruction and is accepted as a fulfilment of the requirement for the degree of Master of Education.

.....
Mohamad Ridhuan Abdullah
Head, Department of Curriculum
and Instruction

This thesis was submitted to the Kulliyah of Education and is accepted as a fulfilment of the requirement for the degree of Master of Education.

.....
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DECLARATION

I hereby declare that this thesis is the result of my own investigation, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

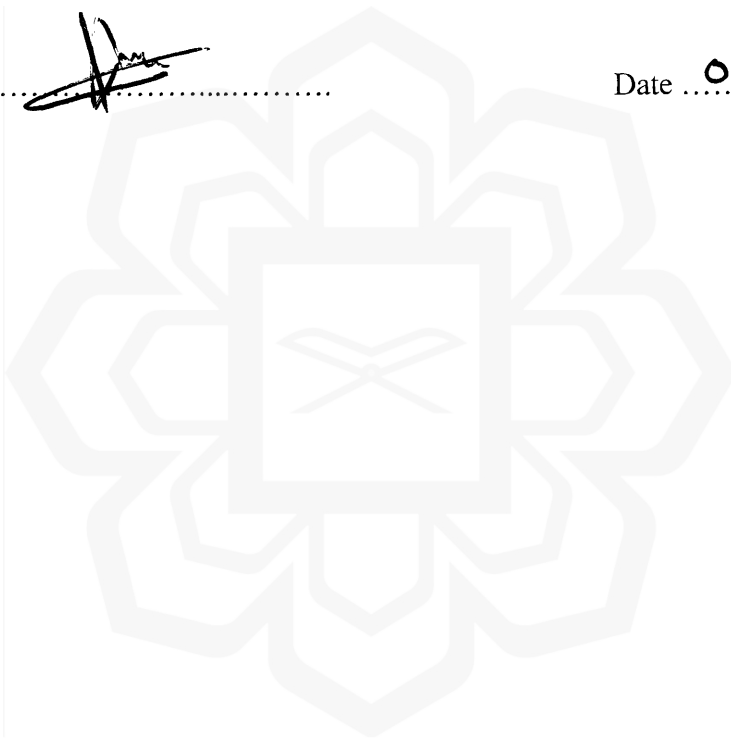
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This thesis is dedicated to my beloved parents

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Alhamdulillah, thank you Allah for all the blessing You had given me. The ability, courage, endurance, and patience You put inside me strengthening me in completing this study and research.

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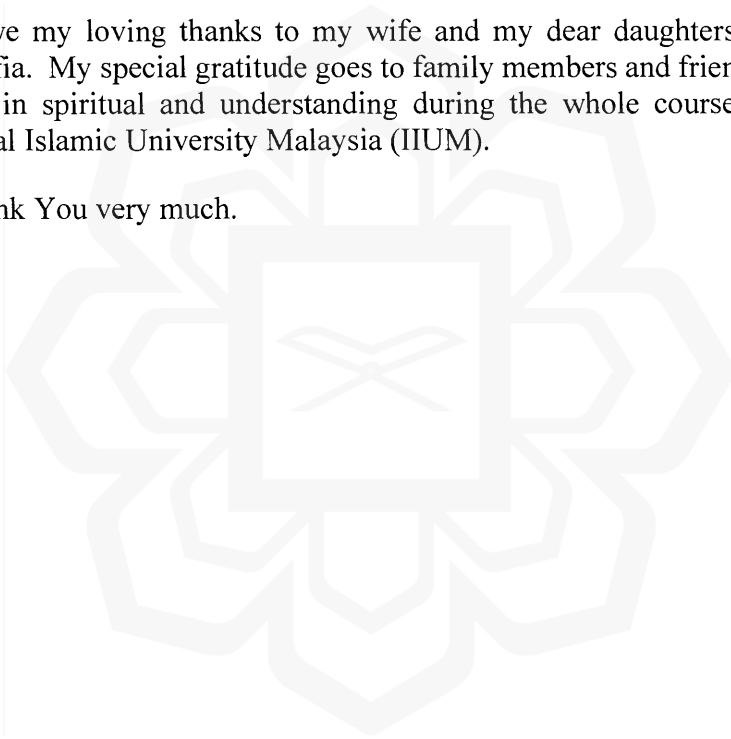


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CHAPTER ONE

INTRODUCTION

Education is the pathway to success. The education academy holds a huge responsibility to shape, mold and nurture the generation of tomorrow through the acquisition of knowledge. Though we would commonly hear that education starts from home, we cannot deny the importance of the academic institution consisting not just teaching and learning in class but also the availability of facilities that encourage learning such as the library. The physical reference of books, manuscripts, scholarly works that are now being replaced by the virtual library or known as the digital library, fulfil the need not just on the existing and prospective students but also lecturers, academic and non-academic staffs. Various authors (Trivedi, 2010; Candela et al., 2007) define the digital library as the virtual bank of a collection of writings in the digital form that is available and accessible using computers and technological gadgets. The information is stored virtually in the web and have no boundary of the extent of its accessibility.

This has created a whole new different world with the existence and emergence of this highly advanced technology where all kind of information is being accumulated and kept virtually. This development has also spiked the interest and need of the mass for information that is easily available and accessible online, as this can be searched and attained at the fingertips. On top of that, digital library is the future vision. The unification of computer networks along with numerous configuration and design of technology is what the global underlying framework is trying to shape as we move forward towards a better and easier life.

Theng (2004) stated that compared to the internet web, digital libraries are more systematic in terms of its organization and composition. This is the reason why many education reformists, including educational institutions, governmental authority and private corporations, are spending a fortune to experiment, develop, and install the digital library globally. Chowdhury (2010) continues to highlight the advantage of digital library as it allows convenience in assessing the best information when the correct tools and services are employed. The functionality and usefulness of digital library do not stop there. Digital library offers practicality in multifaceted scopes such as image processing, administrating and micromanaging documents, web services, restoring and improving information and the new level of interaction between human and computers.

Due to its multidisciplinary nature, the definition of digital library is tailored based on the researcher's background and major. To a computer scientist, digital library is defined as a chain and connection of information system while to librarians, digital library simply means an advanced level and expansion of the old traditional, physical library (Chowdhury & Chowdhury, 2002).

The end-user of the digital library utilizes this resource in order to obtain the massive number of information so that the most accurate, related and detailed information can be gained productively and effectively (Singh, 2003) without having the need to be present at the physical library. Jeng (2005), on the other hand, describes digital library as a directory or bank that not only stores content and library collections digitally but also aid users in searching for the desired content or information whereby this database is conveniently and almost effortlessly accessible via the web. With its many positive usage, digital library is not merely just a virtual space to collect and store information, but when it is used together as an organizing tool, digital library will be

able to serve its many purposes to more users in different form such as creating, propagating, navigating and safeguarding information. Soergel (2008)'s idea is in line with Singh (2003) that the effectiveness of the digital library cannot be exercised unless its functionality as a collection of digital information is integrated simultaneously with being a tool to organize information due to the boundless magnitude of information available online. The effectiveness of the digital library usage is in the sense that it can connect the digital content with its management service which will assist the process of searching, listing and segregating or combining the vast information into a smaller, related and precise result from the complex search.

1.1 BACKGROUND OF THE STUDY

The International Islamic University Malaysia (IIUM) library provides useful digital library services for its users; students and non-students, academic and non-academic staffs. These digital collections are significant for the teaching and learning process and are certainly crucial in an academic institution. The IIUM library not only benefits those who are from within the IIUM community such as students, lecturers and staffs, but it is also accessible and open to the public. As a higher education institution, IIUM students have produced several theses are available for reading and downloading through the school digital library. These theses are academically produced by graduates of IIUM which comprise both the local Malaysians and international students in different topics based on their respective *kulliyyah* (faculty) and personal interests. Final examination papers, conference presentations, unpublished theses and journals are also easily accessible for students. The digital collection of academic papers in IIUM started in 1986 and continues to add into its digital collection until now.

The IIUM final examination papers are a collection of past year questions from different faculty that helps to give an idea to the current students on the style, design and pattern of the final examination questions as the questions are usually recycled and slightly changed from the previous years. The examination papers are available for different subjects from several faculties; some in Arabic and the rest is in English. The final examination papers started to be collected digitally since 2000.

Apart from final examination papers, the university's library keeps a collection of manuscripts on a different study such as astronomy, Arabic language, Islamic literature and many more. These manuscripts are obtainable in many different languages including Urdu, Persian and Arabic, both in printed and non-printed layout.

These materials that are available via the digital library consist of subject matter that not only discusses the theoretical and fundamental aspects but also the mechanics of the study. An example is in Islamic Economics, the field relates Islamic values within the secular economy and the suitable Islamic avenue when dealing with the challenges in the economy setting. Economy, other than political and social play a great influence in a society, therefore having a universal and comprehensive approach from the Islamic perspective is key. The manuscripts of these different field of study consist of monographs, journals and articles, and conference papers in different languages. IIUM students and staffs are able to access to this information simply by downloading through the digital library that can be acquired anywhere within the school area. All web-accessible database which IIUM Library subscribes to is accessible either from inside or outside the campus. The database still requires a username and password even though the users are inside the campus.

In this day and age of the digital world, being able to access to scholarly work online is important to complete one's work efficiently. People are more inclined to

searching and assessing academic information virtually, first and foremost before going through the piles of physical copy of the books, theses and manuscripts available at the library. Most of the published and unpublished theses, journals and articles are reachable online, even academic papers from before the technology boom in the 19th century.

Therefore, it can be concluded that digital libraries are a necessity, particularly in the academic world, as they are very helpful and functional (Borgman, 2000) to accomplish quality and applaudable work. Another noteworthy benefit of digital library is championing educational learning virtually by providing the necessary and related material and data for research and educational basis (Adams & Blandford, 2002).

Li and Furht (2014) stated that digital libraries are systems that combine the machinery of digital computing storage and communication, in which the content, and software needed to reproduce, emulate and extend that services of collecting, cataloguing, finding and disseminating information offered by traditional libraries based on paper and other materials. “They also viewed digital libraries as systems providing a community of users with coherent access to a large, organized repository of information and knowledge.” The ability of the user to access, reorganize, and utilize this repository is enriched by the capability of digital technologies.

1.2 STATEMENT OF THE PROBLEM

Making digital library a part of education and making it accessible and beneficial to the public (Smith, 2006) has been carried out actively in the United Kingdom and the United States since the past ten years (Ying, 2003). Its development and implementation continue until today. A substantial amount of research in this area is still lacking especially in Malaysia as the exploration of the digital world (Kiran, 2006) on the east

part of the world is considered very new compared to the western side. To date, there is only three significant research linked to IIUM digital library, based on the quick search using the school digital database. The three studies were by Bagudu (2006), Che Harun (2006) and Alotaibi (2016). While these researches investigated on student perception; usage, perceived usefulness and satisfaction; and users' perceptions respectively, there has been no study on the management of the IIUM digital library services nor pattern of its utilization among IIUM students. Therefore, this research paper aims to add to the body of knowledge apart from filling the lacuna that exists by examining the management of the IIUM online digital library services as well as identifying the utilization pattern among postgraduate students of IIUM.

1.3 RESEARCH OBJECTIVES

The study aims to examine the management of IIUM digital library and the types of digital library accessed by postgraduate students in IIUM Gombak. Furthermore, this study will also seek to investigate the level of utilization of the digital library services among postgraduate students in IIUM Gombak and identify the pattern of digital library utilization by assessing the difference in utilization based on the student's gender, program, Kulliyah and mode of study. Specifically, there are four main objectives that will be achieved through this study:

- a) To determine how IIUM digital library is being managed.
- b) To determine the types of digital library accessed by the postgraduate students in IIUM Gombak.
- c) To determine the level of utilization of the digital library services among postgraduate students in IIUM Gombak.

- d) To identify the pattern of digital library utilization in terms of postgraduate student's gender, program, Kulliyah and mode of study

1.4 RESEARCH QUESTIONS

To help achieve the research objectives, four research questions will be used to guide the study:

- a) How is the digital library service being managed?
- b) What types of digital library services accessed by the postgraduate students in IIUM Gombak?
- c) What is the level of the utilization of digital library services among postgraduate students in IIUM Gombak?
- d) Is there any discernable pattern among postgraduate students in their utilization of the digital library services in term of gender, program, kulliyah and mode of study?

1.5 SIGNIFICANCE OF THE STUDY

Significance of the study is being described as the benefits and advantages that are obtained from this study. There are many types of significance of the study for this research.

The benefit to Management of the University and Academic Libraries

The finding of this study will provide information on how IIUM digital library services are being managed, which can be used by the management of the university to further improve the management of these services. The research findings will be able to add to

the evaluation and assessment of the academic library development. It will make the academic libraries more understanding about perceived conditions of library management in the implementation of digital library.

Practical Contribution

This study will contribute to potential future research in this area by producing new findings in the management and utilization of the digital library. Future researchers interested in this scope of the study can decide whether to validate the findings, review and revise or strengthen the findings regarding the management and use of digital library.

Methodological Contribution

The research design in this study which includes the instrument used to measure the variables can be replicated using different variables or adding more variables to the existing research or performed using a different environment or sample size on digital library management improvement.

1.6 LIMITATION OF THE STUDY

This study will focus on the postgraduate students in International Islamic University Malaysia (IIUM) who are using digital library services in fulfilling their needs to gather information. This group of students was chosen for this study on the assumption that the postgraduate students usually need more information for their assignments and research that lead them to utilize the digital library services more frequently in obtaining information for academic purpose. The difference between the undergraduate and postgraduate students is that at the postgraduate level, acquiring knowledge is usually

done independently as the scope of research is deeper hence require a vast of information connected together to produce a desirable end result – a quality, well-researched paper (Dingley, 2010).

At the International Islamic University Malaysia (IIUM) Gombak campus, there are eight faculties that are located on this campus. There are Kulliyyah of Education, Kulliyyah of Engineering, Kulliyyah of Architecture & Environmental Design, Kulliyyah of Languages and Management, Kulliyyah of Islamic Revealed Knowledge and Human Sciences, Kulliyyah of Information & Communication Technology, Kulliyyah of Economics and Management Sciences and Ahmad Ibrahim Kulliyyah of Laws.

This study was conducted among the postgraduate students from IIUM main campus in Gombak only. This is due to the time constrain, logistics constrain, and also because Kuantan Campus has its own different library. Whatever finding derives from this study will not be generalized to other IIUM campuses and is not comparable with other digital libraries services in other universities.

1.7 DEFINITIONS OF TERMS

Academic Library

Academic library is referred to as a library connected and bind to the education institution that assist the school's teaching and learning program, apart from being utilized by students, staffs and academicians to guide, support and defend their scholarly works.

Digital Library

Digital library is a collection of information and references that is similar to the traditional library. The only difference is that the digital library is available virtually in the digital form but it still carries out the same role as a physical library would including organizing, cataloguing, and giving access to users to the immense information.

Electronic Resources

Electronic resources are information documented electronically such as images/graphics, video presentation, music and sounds, and numbers. Electronic resources usually include elements that exist in other forms of materials for various purposes such as reviewing other chapters.

Library

A library is not just a physical place to keep the hard copy of books and references but a library is a bank of information that is conveniently accessible to the crowd for purchasing, borrowing and returning books. A library is a one-stop center for people to access knowledge and information that might not otherwise be available anywhere else. Libraries also keep a collection of newspapers, maps, historical documents, audiobooks and many more.

Library management

Library management is the process and action of micromanaging issues and challenges within the library community and the management professionals. Library management is not limited to the mundane administrative and managerial task such as cataloguing,

but it includes organizing a fundraising event in order to manage the whole library system and provide a quality service to the public.

Management

Management is managing people within the organization to accomplish certain goals and values by utilizing the available resources.

Online Database

The online database is a collection of information stored virtually and is a web-based system. The collection in the database is usually accessible via subscription or online purchasing through the web.

Online Digital Library Resources

Online digital library resources are a collection of information that can be accessed through the Internet.

1.8 SUMMARY

Chapter 1 starts with a brief introduction of digital library in the education setting and continues with the background to the study. The problem statement addresses the gap of studies in the management and utilization of the digital library hence the need for this study to contribute to the body of knowledge. The research objectives and research questions are the drivers that guide this study so that it remains within its scope of interest. This chapter also includes the significance of the study, conceptual framework, practical and methodological contribution and the delimitation of the study. The

definition of terms is clearly defined to help operationalized the variables and specifying the scope of the research in order to make this research feasible.

