



University of Science and Technology



College for Graduate Studies & Academic Advancement

## **Proposal for the establishment of the National digital Record of theses and dissertations - sudNDR**

Thesis submitted in Partial Fulfillment of the Requirements for the  
Degree of Master of Information System

**Prepared by**

**Hussam Aldeen Hamd Abdalla**

**Supervisor**

**Dr. Ahmed Salahaldeen Abdalla**

**November 2014**

## Abstract

Research aimed to develop a national digital record for Studies and researches, theses and papers that have been approved in Sudanese universities, and as a basic purpose for studies research's activity in our country and the secondary purpose as a mechanism to verify the innocence of the study.

Research used descriptive and applied approach in achieving the objectives of the study, in addition to analysis and design systems approach in the use of the existing system, and used in the research methods of Personal observations and interviews and access to publications and scientific online in the compilation of information on the subject of the study.

The study arrived to the possibility of building a national digital record of the theses – **SudDNR** .

Research recommended to link **SudDNR** with the national library like NDLTD .

## المستخلص

هدف البحث الي تطوير سجل رقمي قومي للدراسات والابحاث والرسائل والاوراق التي تمت الموافقة

عليها في الجامعات السودانية ، وذلك بغرض اساسي في دراسات النشاط البحثي بالبلاد وكغرض

ثانوي كألية للتحقق من براءة الدراسة .

استخدم البحث المنهج الوصفي والتطبيقي في تحقيق اهداف الدراسة ، بالإضافة الي منهج تحليل

وتصميم النظم في استخدام النظام القائم ، واستخدمت في البحث اساليب الملاحظة والمقابلات لشخصية والاطلاع

علي النشرات العلمية والانترنت في تجميع المعلومات عن موضوع الدراسة.

وتوصلت الدراسة الي امكانية بناء سجل رقمي قومي للرسائل - SudDNR .

اوصي البحث بربط SudDNR بالمكتبات العالمية للرسائل البحثية مثل NDLTD .

## 1.1. Overview

The scientific research is the most important means of development and progress , and development of the countries and communities , therefore focused on developed countries to developing scientific research and accorded the most attention for its solutions to many of the problems and issues and challenges they facing , although scientific research it is still faces a lot of obstacles , that adversely affect the quality of writing some of the research presented, especially in recent times, and one of these problems is the repetition in the writing of some of the research presented and duplication of ideas and content and objectives, and that the lack of benefit from the research carried out by academics by the authorities and institutions, whether public and private establishments may be an additional factor in the crash the desire of these academics in writing new research or development research effecting advance.

The publication of scientific studies and scientific research of the most important standards used globally in enhancing the level of scientific production, where there was no value to science if they are not published for the benefit of everyone, "Science is a global trend and that knowledge is not the homeland her thanks to the use of communication technologies and information" that facilitated communication between scientists and researchers regardless of geographical barriers, "Publishing is

ransom science and knowledge" ,but this publication Science accompanied by many problems, in the form of repeat writing scientific research, and the violation of intellectual property rights relative to the adoption of a number of researchers published studies, or the proportion of the ignorance of the owners of these studies the lack of precise investigation by researchers and academics to ensure the independence of their research and studies that are going to embark on writing.

## **1.2. Problem statement**

This research deals with the phenomenon of the high proportion of repeat writing scientific research and theses , by academics studying for master's degree and doctoral in sections of Graduate Studies, and the marked deterioration in the writing of this research, and the weakness of research material provided, and the mechanism that can follow to deal with such problems, and that causes the first to these problems is the lack of diligence of these academics in the production of new ideas, where the only researcher to conduct modifications on research ancient and change in the content and then delivered from the non-observance of the laws of intellectual property, which is a violation of scientifically finished clarity, where it is difficult to discover that this research replicated or had some amendments, and so for many reasons, such as lack of hand unspecified investigation, including the validity of this research and Independence and uniqueness, in the absence of a comprehensive record of scientific thesis and



treatises, be dealt with as a reference legal to confirm the independence of that thesis, will not end these problems, but will worsen more than that, and despite from the efforts of the great UNESCO that have adopted the idea of digitization wealth Theses accumulated in Sudanese universities, but the interaction on the part of some universities was very frustrating, where did not make the majority of universities any positive results on the subject of the digitization of scientific thesis and dissertations, and did not take the initiative, even worthwhile thing, but some of them made progress deserves praise and appreciation, but still a large proportion of Sudanese universities in immune digitization of electronic messages for university despite the importance of the subject.

Hence, the research problem can be formulated on the body the following question:

- What are the problems caused by the lack of a unified national registry of digital thesis and scientific dissertations ?
- What The importance of the availability of theses and dissertations in digital form ?
- What are the policies that must be followed to shift from traditional to digital format for thesis and dissertations ?

### 1.3. The importance of Search

That science loses its meaning if it were not a tangible benefit, as well as not interested in science if not exchanged by scientists to find out the opinions of others from researchers and academics from criticism or accolades or any philosophies again, all of this was the publication is way more important and more useful for the promotion of science on the one hand , and scientists on the other hand , and the availability of scientific publishing and are the main factor in the development of studies and scientific research in all its forms, and the only way out of the problems of violations of scientific problems such as redundancy in the idea of writing dissertations.

Hence acquires proposed importance for being addresses a very important topic, a topic archive Theses in electronic form, with the possibility made available for use through a comprehensive record of research and scientific studies to improve researchers and scientific research, as the subject of research of new trends for a number of university libraries in a number of countries around the world.

I daresay that this research is gaining importance for addressing the subject of very sensitive , that a mechanism of protection of intellectual property laws in preparation for the establishment of special courts for Computer crimes and technology, which are among the state's policies and orientations toward upgrading education towards the direction of technical , which fit chronologically with attitudes toward the concept of e-government .

And research also acquire important because it deals with the subject of digitization and the availability of Sudanese scientific thesis and dissertations locally and globally, and build a database of research and one shared by everyone, in previous studies was the subject of archived thesis one of the recommendations advocated by a number of Sudanese researchers, it came in a scientific paper titled reality search scientific institutions of higher education in Sudan in 2010 following paragraph: (The record for the unified national thesis of Graduate Studies awarded by the various Sudanese universities (which is still under discussion in the study phase) remain absent and the need for it to become an urgent requirement.)[1]

The topic is gaining importance because it focuses on the most important sector , a sector of scientific research, which counts a lot in the attic of the country produce scientific ideas and suggestions that benefit the country in various fields and designated out of the crises and difficulties.

## **1.4. Objectives of the study**

1.4.1 - Study the current situation of the Sudanese university archived theses.

- count the number of theses in the Sudanese universities most Productive research.
- Limitation universities that publish scientific theses electronically.

1.4.2 - The study and analysis of the open-source software archiving.



- Comparison of open source systems and choose the best suited for archiving theses.
- The structure of the chosen system and its features description.
- The basic standard which must be followed to apply the system.

1.4.3 - The establishment of a comprehensive electronic reference for all the research and studies that the Sudanese have been approved for Degrees in the department of Graduate Studies using the chosen system .

- Design Comprehensive database for each thesis and dissertations.
- Design a web page to provide contact for all research.

## **1.5. Research questions**

To achieve the goals of this study were asked a number of research questions, which are as follows:

- 1- What is the current status of scientific research in Sudan and what is the role of graduate studies in the development?
- 2- What is the location of the Sudanese university libraries of electronic archiving?
- 3- What is the importance of the digitization of theses and scientific dissertations , and the importance of templates made available in electronic?

- 4- What are the global achievements in the field of electronic archiving (local and global)?
- 5- What proportion of global production compared to the digitization of thesis and scientific dissertations with domestic production?
- 6- What are the policies to be followed to catch up with developed countries in the delivery of digital content?
- 7- What's the use of electronic publishing?

## **1.6. Research methodology**

The study relied on a descriptive approach, case study, and system analysis and design approach, in achieving the goals of the study and to answer its questions, it is the approach best suited, which can be applied in such studies, where the approach to data collection on the subject of the study (National Digital Record for scientific theses and dissertations in Sudanese universities) in order to reach a deeper understanding, and knowledge of all aspects of the parties.

As for the collection of data has been relying on many of the methods and tools:

**1.6.1** personal observation to develop a scientific research currently free of renewal, putting the country in the back of the countries due to lack of intellectual production,

and see the bulletins global and scientific papers on topics archiving and electronic libraries and achievements of scientific and global put those states in the lead.

**1.6.2** personal interviews for a number of deans and librarians and heads of databases to obtain the facts current status of electronic archiving, and the status of theses and dissertations in university libraries, in addition to the latest statistics about the numbers that have been converted from traditional format to digital format, and stand on the reasons stopped some libraries continue archiving electronic theses and scientific treatises.

**1.6.3** Comprehensive review of the events of the published intellectual output in both Arabic and English in the field of electronic archiving, print it, or whether what is available in databases, or published on the Internet in order to build a frame of mind in this study [2] .

## **1.7. Research Terms**

1.7.1- National Register means the electronic database containing all the thesis and scientific treatises for graduate students.

1.7.2- Academics: intended their master's and doctoral students in graduate studies.

1.7.3- Researchers: they are professors and assistant professors participants.

1.7.4- Electronic Archiving: is the process of transfer and the introduction of the traditional file to different media of computers, so it can be stored for long periods, such as strips of magnetic or optical disks, so that is also used as a tool back up if you have lost the original files from storage media traditional or paper.[3]

## **1.8. Structural research**

1.8.1- Chapter One: Introduction General for Electronic Archiving.

1.8.2- Chapter two: The literatures and previous studies.

1.8.3- Chapter three: implementation.

1.8.4- Chapter four: results and recommendations.

1.8.5- Chapter five: references.

