PRESERVATION OF DISSERTATIONS AND THESES IN ELECTRONIC FORM: A CASE STUDY OF SRM INSTITUTE OF SCIENCE AND TECHNOLOGY IN TAMILNADU (INDIA)

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ABSTRACT

This paper presents a case study of preserving the print version of the theses and dissertations into electronic form submitted to the SRM Institute of Science and Technology, a Deemed University in Tamilnadu (India). Dissertations and Theses are primary sources of information, accumulating every year in an academic environment. Storage and dissemination of traditional print version of dissertations become cumbersome process. Automated information retrieval systems, of course, enable to identify the availability of the documents. But print media limits content dissemination, a prime goal of the dissertation. Submission of electronic dissertations and theses therefore becomes very popular in developing countries. In India approach towards the practice of submitting Electronic dissertations is in infancy stage. An electronic dissertation is one more way to provide improved services of our users and offer them access to the dissertation information for the future research.

Key Word: Digitization, Electronic Theses,

1 INTRODUCTION

E publishing has developed rapidly over the past couple of years. Electronic publishing of books, journals theses and dissertations is a major development that is quickly causing changes in the industry. In recent years, the traditional publishing houses have also climbed on board and are converting of new releases and backlists into the available electronic delivery formats, including both Theses and Dissertations and print-on-demand technology. However, Adobe PDF is also a widely used format for Electronic Theses Dissertations.

The SRM Institute was established in the year 1985 as an Engineering College offering under graduate programmes. In the year 2002 it attained a status of Deemed University. Currently SRM Deemed University offers various PG and Research programmes in Engineering Technology, Sciences and Humanities, Bio-Technology etc., This article discusses the conversion requirements, the document attributes that can be the guaranteed of building digital collections with sufficient richness in the text/images useful for the long-term utility. The study also evaluates the utility of the converted electronic thesis and dissertations (ETD). This study is based on the authors' experiences and findings briefly summaries the ETD conversion process, providing a viable solution both for the library users and librarians addressing the long term preservation needs in an academic environment.

2 Why ETDs?

The following are the important necessity of the Electronic Theses and Dissertations requirement of the users.

- Current demand for access inhibited by physical restrictions and cost
- Most theses are 'born printed'

- Better presentation of research not available in paper format such as multimedia files, dynamic data presentation, programmes etc.,
- Less expense to authors like less printing, binding, paper etc.,
- Libraries: accommodating in small space and easy retrievals cataloguing, storage costs

3 SCOPE OF THIS PAPER

This paper presents the experience gained through on going project of converting the degree level theses reports of Engineering Science students. Further it explains the methodology for the creation of Electronics Theses and Dissertations such as converting/scanning the MS Word document to PDF files; Creation of content page; linking the PDF files to content page according to branch of Engineering Science. The projects of UG and PG projects submitted to has been considered. The experiences gained in this process are presented in this paper.

4 THESES CONSIDERED FOR THE PROEJCT

Initially the soft copy of the Theses of current academic year Post Graduate students are taken for trial basis and implemented to the use of members through intranet. After successful installation and usage, the hard copy of previous year theses 3000 works of Under Graduate and Post Graduate work are taken for this digitization work. The scanning process is completed 300 theses and included in the database for members use.

5 METHODOLOGY ADOPTED FOR CREATION OF ETD

The methodologies adopted for creating digital format are:

- Soft copies of the student's theses are obtained from departments in MS word format.
- Project works received from the members are different formats
- This can be complied all the files in one file.
- After compiling the files, it can be saved MS word format.

The different steps involved in the creation of ETD format are:

- MS word to PDF
- Creation of Content page in Auto Run Media Studio 4.0
- Linking all the PDF files to content page by branch wise

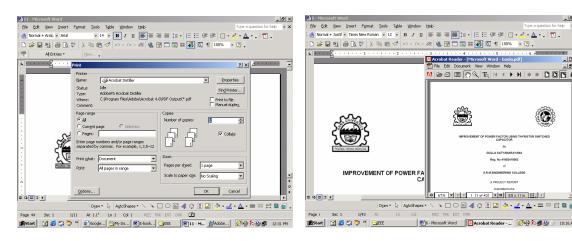
5.1 STEP - 1 FROM MS WORD TO PDF CONVERSION

After compiling the documents in one file it can be converted in to PDF files. The process of conversions of the word document to PDF, using Acrobat writer 4.0 is shown in Figure -1

- Select File option,
- Click Print,
- Find a pull down menu
- From the menu select an Acrobat Distiller press OK button.

The Acrobat Distiller started to convert the files from MS word to PDF files, after completion of the process PDF files open in the computer and it can be saved to the location. The converted document of MS Word to PDF will open in the same window shown in the Figure -2

Figure - 1 Figure -2



5.2 STEP - 2 CREATION OF CONTENT TITLE PAGE

Content page (Index) is to be created in AutoPlay Media Studio 4.0. Content page is contains the Name of the Department, Year, Title of the Theses and name of the student who has done the work. After completion of the above process link to be given to respective files.

Figure — 3

SRM Institute of Science and Technology
Deemed University

SRM Nagar Kattackulathur Kancherpuran Dist. Pm 603 203
URL: www.srmaniv.ac.in e-mail: srmec@venl.com

THESES AND DISSERTATIONS

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Ph.D

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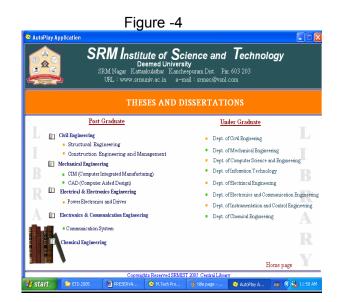
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5.3 STEP – 3 CREATING LINKS TO PDF FILES TO CONTENT PAGE BY DEPARTMENT WISE

After creating the Content Page (index) of the project titles it can be opened in AutoPlay Media Studio 4.0 window as show in the Fig. 4 & 5.

Figure - 5

SRM Institute of Science and Technology
Demend University
SEM Nagar Restlandshiller Resistance parameters for the Student

Title of the project

Title of the project

Topological Optimization in the Design Process of Multivality V skede
Advanced Meanfaturing Pleaning for Many Production of Institutent Custer

Topological Optimization in the Design Process of Multivality V skede
Advanced Meanfaturing Pleaning for Many Production of Institutent Custer

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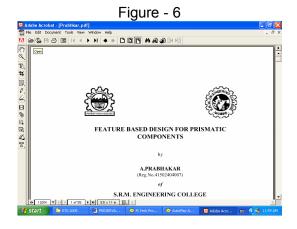


Fig. 5 shows the title of the project and name of the person who have done that project work. Clicking the required projects, the selected project will open in the same window as a PDF file as shown in the fig - 6

6 PROBLEMS IN ETD CREATION

While developing ETD the author confronted the following problems.

- Font Issues
- Lack of a Standard format
- Digital Rights Management (DRM)
- Reproduction of Graphics
- Reader Hardware

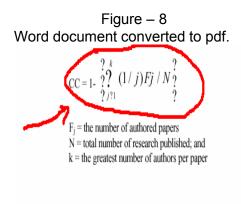
6.1 Font Issues

Fonts are both an advantage and a disadvantage for ETD. However, fonts on a computer screen at sizes equal to those used in printed materials are not easy on the eyes shown in the figure 7. After scanning the clear images of the letters are not captured and therefore many times, an editing work has to be made.

(Scanned document)

Increasing population and industrialization requirements for basic needs and the water mu sources are polluted by many ways. The major industries eliminate wastewater as effluent after

Figure – 7



6.2 Lack of a Standard format

Different combinations of hardware and software are better or worse for different types of content. That guarantees that there will be multiple formats supported by different vendors trying to take advantage of specific markets each reader has his or her own format.

6.3 **D**igital Rights Management (DRM)

Protecting an author's copyright is one of the prime concerns when distributing books via electronic format. Although copying an entire book is now possible, the cost and inconvenience of doing it manually has kept this type of piracy to a minimum. But when coping is as easy as duplicating a file, piracy becomes a major problem.

6.4 **R**eproduction of Graphics

Full colour graphics, complex tables, and figures are not easily reproducible on small screens. Some ETD formats don't even support the inclusion of images. All of these factors make reproduction of graphic elements on many ETD a challenge.

6.5 **R**eader Hardware

The problem associated with ETD is Reader hardware and software itself major problem for using e books. ETD readers range in size from a small handheld PDA to a desktop computer and dedicated readers are relatively expensive when compared to the price of a book. Of course, many people a already own personal computers and laptops, but the change in habits required by these devices has already been mentioned as a problem. The variety of incompatible hardware, software, and formats also leads to a problem. Since many ETD formats are not interchangeable, a consumer must choose carefully when purchasing a platform or they might not be able to read the books that they want.

7 SUGGESTIONS

Based on the experience, the authors propose the following suggestions:

- Needs uniformity in format of print version
- Soft copy shall be in a standard format, with regard to layout; references citations; font etc..
- Distinction shall be made between Bibliography and Reference in the thesis

8 CONCLUSION

Electronic Theses Dissertations have a great role in making the libraries and information centers. ETD and E-journals would become very practical media of dissemination of information. Electronics publishing, or e- publishing, uses new technology to deliver books and other content to readers. Because the technology allows publishers to get information to readers quickly and efficiently, it is causing major changes to the publishing industry, as we know it. It will also impact they way we read, offering new hardware and software devices. We are only beginning to see the ramifications of e- publishing. E publishing is a very broad term

that includes a variety of different publishing models, including electronics theses and Dissertations (ETD), print-on-demand (POD), email publishing, Wireless publishing electronics ink and web publishing. More types of e-publishing are sue to be develop in the near future.

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