

# INTEGRATING E-THESES INTO LOCAL SERVICES: A CASE STUDY OF SRM UNIVERSITY (CHENNAI) INDIA

P.Rajendran\*, B.Ramesh Babu<sup>@</sup>, S.Gopalakrishnan<sup>#</sup>

*\*Librarian, SRM University, Chennai, India, <sup>@</sup>Professor, Dept. of Information Science, Universtiy Madras,*

*<sup>#</sup>Asst.University Librarian, Anna University,MIT Campus. Chennai India*

## Abstract

In recent years, the research activities of Universities become very active and the dissemination of information to the scholars have become necessary. Automated information retrieval systems, enable to identify the availability of the information. It is necessary to integrate all theses collection of the universities, to avoid the duplication of research activities within the universities as well as in the global level. An electronic thesis is one more way to provide improved services to the users and offer them to access the information for their research work. SRM University campuses are located in three different places such as Chennai Campus-1, Campus-2 (50 KM away from campus-1) and Delhi (2000 KM away from both campuses) are de-linked from one another. This study was carried out to integrate the e-theses at SRM University and the feedback was collected from the users about the effectiveness.

Within the university, the results of research undertaken by Under Graduate, Post Graduate and Doctoral students presented in theses and dissertations are important information sources not only for researchers within the university but also in global level. A survey has been conducted about the user group opinion on electronic theses usage in all the campuses of SRM University and the results were analysed in detail. From the analysis, most of the users are preferred and appreciated the e-thesis network among the university and do away with the printed version. This study based on the authors' experience, briefly summaries the e-thesis networking process, providing a viable solution both for the library user groups and librarians. This study will be helpful or the librarians addressing the long term preservation needs in an academic environment. Further, this study also evaluates the utility of the converted electronic thesis and dissertations (ETD) too.

## Introduction

In recent years, the research activities of Universities become very dynamic and the dissemination of information to the researchers have become necessary. It is essential to provide resources in a speedy way by using technology to fulfil the requirements of researchers. In this context, Digital libraries can help to ensure access to these resources is facilitated by powerful Information Retrieval (IR) tools for searching and browsing, while enforcing any restrictions required by authors, faculty, publishers or other institutions involved, Digital libraies play a more dominant role in supporting and disseminating the information to the researchers. However, it is important to integrate all digital resources required by the researchers in order to deliver the right information at right time. This integration can also help to avoid the duplication of research activities within the academic institutions as well as at the global level.

The main aim of this electronic theses publication are:

- ❖ to improve graduates education by allowing students to produce electronic documents, use digital libraries, and understand issues in publishing.
- ❖ increase the availability of student research for scholars and preserve it electronically. To empower the students to convey richer messages through the use of multimedia and hypermedia technology and
- ❖ lower the cost of submitting and handling the theses and dissertations etc.

As library and information system developer created the technology landscape to the researchers to support their research. In this paper an attempt has been made to survey the extent of use of e-theses in SRM University Campuses located at Chennai and Delhi.

## **SRM University : A brief note**

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 University. Currently SRM University offers various Under Graduate, Post Graduate and Research programmes in Engineering Technology, Sciences and Humanities, Medicine, Bio-Technology etc., The course are offered are as follows:

### **Courses offered at SRM University**

#### **Faculty of Engineering and Technology**

School of Civil Engineering  
School of Mechanical Engineering

- ❖ Mechanical Engineering
- ❖ Automobile Engineering
- ❖ Aerospace Engineering
- ❖ Mechatronics

School of Electrical and Electronics  

- ❖ Electronics & Communication Engineering
- ❖ Telecommunication Engineering
- ❖ Electrical and Electronics Engineering
- ❖ Instrumentation and Control Engineering

School of Computing  

- ❖ Computer Science Engineering
- ❖ of Information Technology

School of Life Sciences  

- ❖ Biotechnology
- ❖ Biomedical Engineering
- ❖ Bioprocess Engineering
- ❖ Bioinformatics
- ❖ Genetic Engineering
- ❖ Food Process Engineering

School of Chemical Engineering  
School of Architecture and Interior Design

#### **Faculty of Medicine and Health Sciences**

- ❖ College of Dentistry
- ❖ College of Nursing
- ❖ College of Occupation Therapy
- ❖ College of Pharmacy
- ❖ College of Physiotherapy

#### **Faculty of Science and Humanities**

- ❖ Department of Mathematics
- ❖ Department of Physics
- ❖ Department of Chemistry

#### **School of Languages**

- ❖ Department of English
- ❖ Department of Foreign Languages

School of Commerce  
School of Education  
School of Biosciences  
School of Economics  
School of Computer Science  
School of Fine Arts

### **E-Theses Database at SRM University**

Within the university the results of research undertaken by doctoral, master students and under graduate reports and presented in theses and dissertations are important information source not only for the researchers within the university but also in elsewhere. In the Information and Technology era the publications like books, journals, newspapers, theses and dissertations has been move towards the electronic versions.

The electronic format of theses and dissertations can save printing charges for students, shelf space in libraries, and shipping and handling expenses in universities. The printed dissertations and theses are occupying more space in the library year by year. The Central Library was planning to change proposed form from June 2003, to switching over from paper to electronic. The existing printed theses are scanned and storing them on the Library server. Now the Library has a database containing all the theses and dissertations.

Central Library of SRM University launched Electronic Thesis and Dissertations database in the year 2005 along with 1500 full-text dissertations. During the year 2005-2006, another 600 theses report has been added in the database. At present, a total number of dissertations available in the University 4316 are an electronic format (PDF Files). The dissertations database contains links to the respective dissertations. The distribution format is PDF. The author assigns a copyright agreement with the library giving it the right to copy and distribute the dissertation in the Intranet/Internet.

### **Quantum of Theses available at SRM University**

| <b>Table-1</b>                             |        |    |           |           |               |             |
|--|--------|----|-----------|-----------|---------------|-------------|
| <b>Quantum of Theses at SRM University</b> |        |    |           |           |               |             |
| <b>Campus</b>                              |        |    | <b>UG</b> | <b>PG</b> | <b>M.Phil</b> | <b>Ph.D</b> |
| Chennai                                    | Campus | -1 | 2347      | 1246      | 2             | 16          |
| (Kattankulathur)                           |        |    |           |           |               |             |
| Chennai                                    | Campus | -2 | 85        | --        | --            | --          |
| (Ramapuram)                                |        |    |           |           |               |             |
| Delhi                                      | Campus |    | --        | 620       | --            | --          |

The data in the Table – 1 shows the number of theses and dissertations available in the university. Since the Chennai campus 2 established recently, there is no PG and M.Phil and Research courses offered in this campus

### **Objectives of this study**

1. To survey the extent of the usage of e-theses by the scholars of SRM University and its campuses located at Chennai Campus -1, Campus - 2 and Delhi;
2. To examine the feasibility of networking e-theses in SRM University;
3. To analyse user opinions about the integration of e-theses of SRM University

This study is confined to the SRM University campus of Chennai Campus -1 and Chennai campus 2 and Delhi campus. One hundred questioners each have been distributed to the final year students of B.Tech and Post Graduate, M.Phil and Research scholars of all branches of engineering in three university campuses. Out of 300 questioners distributed 257 have responded and the response rate is 85.66%.

### **Data Analysis and Discussion**

The collected data has been analysed to fulfil the stated objectives. For this purpose, SPSS software (Statistical Package for the Social Sciences) package has been used for the analysis of data.

**Table - 2**  
**Campus wise distributions of Respondents**

| <b>Campus</b>     | <b>No. of Questiners distributed</b> | <b>Total No. of Repondents</b> | <b>%</b> |
|-------------------|--------------------------------------|--------------------------------|----------|
| Chennai Campus -1 | 100                                  | 97                             | 97%      |
| Chennai Campus -2 | 100                                  | 79                             | 79%      |
| Delhi Campus      | 100                                  | 81                             | 81%      |
|                   | 300                                  | 257 (85.66%)                   |          |

It is seen from the Table 2 that a maximum number of respondents (97) from SRM Main Campus, followed by Delhi Campus (81) and Ramapuram Campus (79). It is observed that 85.66% are responded.

**Table -3**  
**Classification of Respondents by Campus Vs Sex**

| Sl.No. | Campus             | Sex           |              | Total        |
|--------|--------------------|---------------|--------------|--------------|
|        |                    | Male          | Female       |              |
| 1      | Chennai Campus - 1 | 59<br>60.82%  | 38<br>39.18% | 97<br>37.74% |
| 2      | Chennai Campus - 2 | 53<br>67.09%  | 26<br>32.91% | 79<br>30.74% |
| 3      | Delhi Campus       | 51<br>62.96%  | 30<br>37.04% | 81<br>31.52% |
| Total  |                    | 163<br>63.42% | 94<br>36.53% | 257          |

It is seen from the Table 3 that, out of 257 respondents 163 (63.42%) were Male, followed by 94 (36.53%) Female. As far as the Campus wise classification the response rate is 37.74% from Chennai Campus -1, 30.74% from Chennai Campus-2 and 31.52% from Delhi Campus as shown in table 2.

**Table -4**  
**Classification of Respondents by Campus Vs Courses**

| <b>Campus</b>      | <b>U G</b>   | <b>P G</b>   | <b>M.Phil</b> | <b>Ph.D</b>  | <b>Total</b> |
|--------------------|--------------|--------------|---------------|--------------|--------------|
| Chennai Campus - 1 | 39<br>40.20% | 38<br>39.18% | 7<br>7.22%    | 13<br>13.40% | 97           |
| Chennai Campus - 2 | 61<br>77.22% | 0            | 6<br>7.59%    | 12<br>15.19% | 79           |
| Delhi Campus       | 36<br>44.44% | 32<br>39.51% | 5<br>6.17%    | 8<br>9.88%   | 81           |

Table 4 reveals that classification of respondents by Course Vs Campuses. In Chennai campus – 1, 39 (40.20%) respondents belongs to Under Graduate, followed by 38 (39.18%) Post Graduate, 13 (13.40%) belongs to Ph.D and 7 (7.22%) of M.Phil. programmes.

In Chennai Campus - 2, 77.22%, respondents belongs to under Graduates followed by Ph.Ds 12 (15.19%) and 7.59% Master of Philosophy. In Delhi campus, 44.44% of Under Graduate, 39.51% Post Graduate, 9.88 in Ph.D Scholars and 6.17% M.Phil were responded.

## E-Theses awareness

The respondents have answered a few questions whether they know about the electronics theses, the conveniences about the usage, reading conventions and availability for access etc.

The data in table 5 shows the usage about the electronic theses analysed by campus wise. 90 (35.03%) respondents in Chennai campus-1 are aware about the electronic theses availability, followed by 75 (29.18%) Delhi and 70 (27.24%) from Chennai Campus 2. In other words, 91.45% of the respondents using, e-theses available in the respective campuses.

With regard to the search conveniences 87.17% have responded that the E-theses are convenient for their use. In Campus wise analysis, 83 (32.30%) in the Chennai Campus 1, followed by 72 (28.02%) in Delhi Campus and 69 (26.85%) in Chennai Campus 2 have responded. About the reading convenience there are 86 (33.46%) have answered from Chennai campus 1, followed by 71 (27.63%) each from Chennai Campus 2 and Delhi Campus.

**Table – 5**  
**Classification of respondents by Campus wise**

| <b>Description</b>                                    | <b>Chennai Campus-1</b> | <b>Chennai Campus-2</b> | <b>Delhi Campus</b> | <b>%<br/>n = 257</b> |
|---|-------------------------|-------------------------|---------------------|----------------------|
| Have you used the e-theses available in the library?  | 90<br>35.03%            | 70<br>27.24%            | 75<br>29.18%        | 235<br>91.45%        |
| Is e-Thesis convenient for you to search?             | 83<br>32.30%            | 69<br>26.85%            | 72<br>28.02%        | 224<br>87.17%        |
| Is e-Thesrs convenient for you to read?               | 86<br>33.46%            | 71<br>27.63%            | 71<br>27.63%        | 228<br>88.72%        |
| Can you access the e-Theses available in other campus | 90<br>35.02%            | 71<br>27.63%            | 75<br>29.18%        | 236<br>91.83%        |
| Can you access in all the time (i.e 24x7)             | 76<br>29.57%            | 69<br>26.85%            | 71<br>27.63%        | 216<br>84.05%        |

With regard to the accessibility of theses available in other campuses, 90 (35.02%) have answered from the Chennai campus -1 followed by 71(27.63%) from Delhi Campus and 69 (26.95%) from Chennai Campus -2, in other words 88.72% of the respondents said that e-theses is ideal for reading also. For the accessibility of e-theses through internet 76 (29.57%) have positively responds from Chennai campus -1, followed by 71 (27.63%) in Delhi Campus and 69(26.85%) in Chennai Campus -2, in other words 84.05% of the respondents were answered pasitively that electronic theses and dissertations are made available throuth internet.

## Networking of e-theses

In order to provided the information to the researchers, networking of campus libraires are more important. For integrating the electronics theses available in the Campus Libraries, the user opinion has been sought and the responses are given in table 6.

**Table – 6**  
**Benefits of Networking of E-theses by campus wise**

| Campus             | To know existing research |            |           |           |           | To select a topic |            |           |           |          | To avoid duplication |           |           |          |          | To give new ideas |            |           |          |          |
|--------------------|---------------------------|------------|-----------|-----------|-----------|-------------------|------------|-----------|-----------|----------|----------------------|-----------|-----------|----------|----------|-------------------|------------|-----------|----------|----------|
|                    | H                         | S          | A         | NS        | NO        | H                 | S          | A         | NS        | NO       | H                    | S         | A         | NS       | NO       | H                 | S          | A         | NS       | NO       |
| Chennai Campus - 1 | 26                        | 44         | 16        | 7         | 4         | 25                | 50         | 14        | 7         | 1        | 29                   | 34        | 32        | 2        | -        | 24                | 37         | 29        | 4        | 3        |
| Chennai Campus - 2 | 12                        | 33         | 20        | 10        | 4         | 17                | 33         | 20        | 8         | 1        | 18                   | 31        | 29        | 1        | -        | 23                | 33         | 23        | -        | -        |
| Delhi Campus       | 18                        | 33         | 22        | 6         | 2         | 26                | 40         | 6         | 8         | 1        | 12                   | 26        | 38        | 2        | 3        | 15                | 37         | 29        | -        | -        |
| <b>Total</b>       | <b>56</b>                 | <b>110</b> | <b>58</b> | <b>23</b> | <b>10</b> | <b>68</b>         | <b>123</b> | <b>40</b> | <b>23</b> | <b>3</b> | <b>59</b>            | <b>91</b> | <b>99</b> | <b>5</b> | <b>3</b> | <b>62</b>         | <b>107</b> | <b>81</b> | <b>4</b> | <b>3</b> |

H – Highly satisfied S – Satisfied A- Average NS-Not satisfied NO- No Opinion

It is seen from the table 6 that, most of the respondents appreciated the networking of university campuses to access the theses and dissertations. Further it is observed from the table that, they got facilitated in identifying on-going research in the campuses and selecting the topics of research through networking.

**Table -7**  
**Benefits of Networking of E-theses by course wise**

| Campus       | To know existing research |            |           |           |           | To select a topic |            |           |           |          | To avoid duplication |           |           |          |          | To give new ideas |            |           |          |          |
|--------------|---------------------------|------------|-----------|-----------|-----------|-------------------|------------|-----------|-----------|----------|----------------------|-----------|-----------|----------|----------|-------------------|------------|-----------|----------|----------|
|              | H                         | S          | A         | NS        | NO        | H                 | S          | A         | NS        | NO       | H                    | S         | A         | NS       | NO       | H                 | S          | A         | NS       | NO       |
| UG           | 32                        | 58         | 26        | 12        | 6         | 38                | 59         | 24        | 15        | 0        | 30                   | 45        | 58        | 2        | 1        | 34                | 59         | 41        | 1        | 1        |
| PG           | 14                        | 30         | 18        | 4         | 4         | 12                | 43         | 8         | 5         | 2        | 10                   | 29        | 27        | 2        | 2        | 15                | 28         | 23        | 2        | 2        |
| M.Phil       | 4                         | 7          | 5         | 2         | 0         | 6                 | 5          | 3         | 3         | 1        | 7                    | 5         | 6         | 0        | 0        | 4                 | 8          | 6         | 0        | 0        |
| Ph.D         | 6                         | 15         | 7         | 5         | 0         | 12                | 16         | 5         | 0         | 0        | 12                   | 12        | 8         | 1        | 0        | 9                 | 12         | 11        | 1        | 0        |
| <b>Total</b> | <b>56</b>                 | <b>110</b> | <b>56</b> | <b>23</b> | <b>10</b> | <b>68</b>         | <b>123</b> | <b>40</b> | <b>23</b> | <b>3</b> | <b>59</b>            | <b>91</b> | <b>99</b> | <b>5</b> | <b>3</b> | <b>62</b>         | <b>107</b> | <b>81</b> | <b>4</b> | <b>3</b> |

H – Highly satisfied S – Satisfied A- Average NS-Not satisfied NO- No Opinion

The data on table 7 shows that the course wise respondents about the usefulness of the electronic theses and dissertations. Further it is observed from the table that masters and research students to prefers to refere electronic form of theses more.

## Conclusion

Theses and Dissertations are more important for the reference of the researchers to proceed their work without duplication of the research. Form the above analysis, it is inferred that, all the members prefer to use electronic theses and dissertations, since it is very easy and quick to access the information. About 91.45% respondents are aware about the electronic theses available in their respective libraries and they are using it for the research purpose.

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