Introducing Electronic Theses and Dissertations in Universities: An Indian Perspective

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Abstract

The changing electronic environment is forcing Indian Universities, to think about digitizing their theses and dissertations and introduce ETD Systems. A national level study was undertaken to analyze the present scenario in Indian Universities with focus on Ph D Research Scholars, Research Guides and University Librarians. The exact picture of doctoral theses collection, its usage, difficulties in access, academic and research community’s attitude towards digital archiving and electronic publishing are discussed. Few Universities have already started ETD Projects, and majority of them will be starting the projects soon. The need for an experienced national level agency for coordinating the work, national level policies from agencies like UGC, necessary financial and technical guidance etc are identified through the analysis. Most of the academics are supporting the idea of ETDs, but still a moderate majority is supporting its Global access through Internet.

0. Introduction

Indian Higher Education system built upon the British system, is one of the largest and oldest systems of higher education found anywhere in the world. As of now
there are 320 Universities, including affiliating Universities, deemed universities, open
universities, universities under I. C. A. R, I. C. M. R etc and institutions of national
importance like I. I. Ts and I. I. Ms which offer Doctoral Programs [1]. The creation and
use of digital information is increasing phenomenally all over the world, and the
electronic academic and scholarly communication process, becomes a reality in Indian
Universities through University Grants Commission’s UGC Infonet Program [2].
Therefore the stake holders are becoming more aware and started looking for more
resources and latest information. Librarians in India are also slowly setting their minds to
take up the challenges and actively getting involved in e-content creation of grey
resources and hosting them on institutional repositories for open access. This changing
environment forced Indian Universities, to think about digitizing their theses and
dissertations, since these resources belong to the Universities and are not widely
accessible outside the campus or Libraries.

1. **Need of the Study**

A world wide Literature search showed the increase in Ph Ds worldwide and its
importance in furthering academic research. The present scenario in the dissemination of
Doctoral research results, the problems faced during accessing them, the archival and
publication practices of Ph D Theses are solved by the introduction of ETDs as a
solution, world wide. It is with this context, there was a need to study the present scenario
in Indian Universities with the recent trend in electronic publication and open access.
Suggestion of an appropriate model was the part of the project, and this study will be
helpful for the model.

2. **Methods of the Study**

A survey was conducted at national level with focus on Ph D Research Scholars,
Research Guides and University Librarians, through specially designed Questionnaires.
Research Scholars and Guides were selected from the participants of INFLIBNET’s E-
Resources awareness programs conducted at INFLIBNET and at various Universities
across the country [3]. They were familiar with latest IT developments taking place in Information transfer and working with Universities, where electronic information culture has already emerged. 65 University Librarians, 88 Ph D Supervisors and 173 Ph D Scholars participated in this survey (See the table).

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Participants</th>
<th>Number of Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Librarians</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Ph D Supervisors</td>
<td>88</td>
<td>27</td>
</tr>
<tr>
<td>Ph D Researchers</td>
<td>173</td>
<td>27</td>
</tr>
</tbody>
</table>

3. Discussion

3.1 Average Number of Doctorates Awarded

It is found that out of 65 Universities, 29 (44%) awarded more than 2000 Doctorates and 56% Universities awarded less than 2000 Doctorates. Further study, though personal communications and Theses database at INFLIBNET, shows that, there are Universities who have awarded more than 20,000 Doctorates (like University of Calcutta) and more than 10,000 Doctoral Theses (like Banaras Hindu University). Through further analysis it is learned that newly established Universities or Universities with less number of departments, have less than 200 Doctorates awarded. It very clear that, Indian Universities altogether hold a huge volume of Doctoral Theses in their Libraries.

3.2 Importance of Ph D Theses in furthering doctoral research

Librarians rate their Ph D Theses collection, as a source for furthering University research. The value of information containing in these sources is underlined by 46 Librarians (71%), who have rated their collection with High Importance. Only 19 Librarians (29%) rated it with Medium Importance.
45 Guides (51%) rated the Ph D Theses with High Importance and 43 (49%) rated them with Medium Importance, in furthering research in their disciplines. But we should understand the fact that most of them consult the Ph D Theses during the conceptualization of research problems and literature research.

99 Scholars (57%) rated Ph D Theses with high importance, 67 (39%) rated with Medium Importance and 6 (3%) said that it does not have any importance in furthering the research. 2 Scholars have not responded to this question. Further analysis shows that Research scholars from Science and Engineering faculties, especially from Chemical Sciences, rated Ph D Theses with Medium importance or no Importance. The factual and experimental based research style in these faculties can be the reasons or the less usage of Ph D Theses in these disciplines.

3.3 Awareness about the concept of ETDs

<table>
<thead>
<tr>
<th>Category</th>
<th>Aware</th>
<th>Not Aware</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Librarians</td>
<td>56 (86%)</td>
<td>9 (14%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Ph D Supervisors</td>
<td>53 (60%)</td>
<td>34 (39%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Ph D Researchers</td>
<td>96 (56%)</td>
<td>75 (43%)</td>
<td>2 (1%)</td>
</tr>
</tbody>
</table>

It is important to notice that Librarians in India are aware about latest developments like ETDs, and it is because of the wide availability of Internet and Electronic resources which provides up to date information faster than ever before. The less awareness among academics shows that enough awareness programs are required before initiating ETD programs in Indian campuses.

3.4 Availability of a Policy to collect e-format

Even though 86% of Librarians are aware about ETD Initiatives, only 22 Universities (34%) have adopted a policy to collect e-format of theses along with the submission of print copies. It has to be implemented in 43 Libraries (66%) and it is sure that they also have to adopt the policy in par with the emerging e-culture in Indian academic arena.
3.5 Supports to Online Access of Ph D Theses

<table>
<thead>
<tr>
<th>Category</th>
<th>Supporting</th>
<th>Not Supporting</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Librarians</td>
<td>31 (48%)</td>
<td>34 (52%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Ph D Supervisors</td>
<td>78 (89%)</td>
<td>9 (10%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Ph D Researchers</td>
<td>144 (83%)</td>
<td>26 (15%)</td>
<td>3 (2%)</td>
</tr>
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</table>

34 Librarians (52%) are still not supporting the idea of online access to the Ph D Theses and 31 Librarians (48%) are strongly supporting the idea. The confusions created by the fetus nature of ETDs and the gap in national level policies and frameworks in this direction may be the reasons for their non-supportiveness. But it is sure that online access will be the ideal solution, which will be supported by all Librarians in near future.

The majority of 78 Guides (89%) are supporting and only 9 (10%) are not supporting online access. One Guide did not respond to this question. This shows that the fear of academic resistance towards ETDs is not an issue in India [4].

144 Research Scholars (83%) are willing to provide online access to their Ph D thesis through a Digital Library, but a minority of 26 (15%) are not willing to do so. 3 Scholars (2%) have not responded to this question.

3.6 Online Access Policy of Ph D Theses

Out of 31 Librarians supported Online Access, 12 (39%) suggested the access can be provided only on Library LAN, 9 (29%) suggested Campus Intranet and only 10 (32%) are suggesting for Internet (Global Access), which is the only solution to avoid current difficulties in accessing Ph D Theses of Indian Universities. If we consider the total number of participants in this survey, only 10 out of 65 (15%) supporting Global access to their theses collection. If we analyse the existing ETD systems at International level, the Global access is provided by only 50% of the Institutions where others have
restricted the access only to their campuses. Open Access Initiatives are getting momentum in India and it is therefore can be predicted that Global access will emerge as the choice for avoiding the obstacles in physical access.

Out of 78 Guides supporting online access, 50 Guides (64%) are supporting for Global access over Internet, 19 (24%) are supporting access on Campus Intranet and 9 (12%) are supporting access only on Library LAN, to their student’s Ph D Theses. Majority of faculty members supports Global access to Indian Theses literature, and the negative opinions will get vanished along with the emergence of digital information environment in Indian campuses when they are fully covered under UGC Infonet programme.

Out of 144 Scholars who support online access, 96 Scholars (66%) preferred the Global access through Internet, 27 (19%) preferred access on Library LAN and 21 (15%) preferred Access on Campus Intranet. 44% Scholars are still not ready to provide Global Online access to their Theses. They may be ready to provide online access after a time gap, to publish articles, papers or books based on their research. If somebody wants to apply for a patent based on the research, especially in Technology disciplines, the research has to be kept unpublished.

3.7 Present Availability of ETD System

It is a matter of happiness that 18 Indian University Libraries (28%) already started creation of ETD Systems, but the majority of 47 (72%) still have not started. The unavailability of Infrastructure and technical expertise are the reasons, and it is sure that it will be vanished along with the emergence and full operation of projects like UGC Infonet.
3.8 Future Plans for ETD System

It is clear that the majority of 30 Librarians (61%) are planning to create ETD System by the year 2005 and 19 (39%) do not have immediate plans to go for ETD System. It is a matter of fact that the wide awareness of ETDs and its benefits among Librarians and the ever demanding electronic culture in Universities accelerate them to go digital in terms of resources and services.

3.9 Supports Needed for ETD System

Out of the 65 respondents, 36 Librarians (19%) demand sufficient policies from Universities, 32 (17%) demand Infrastructure support, 28 (15%) demand Policies from Government bodies like UGC and 27 (15%) demand for Technical expertise. Few of them also demand supports from academics and financial support, where 12 Librarians said they do not require any kind of supports. These Universities have sufficient infrastructure, funding and technical expertise, which are in forefront of digital revolution.

3.10 Obstacles in Creating ETD System

Obstacles identified by Librarians in the creation of ETD System in India. Out of 65, 33 Librarians (51%) identified Copyright Problems are the main obstacles to create ETD Systems. 25 (37%) identified Infrastructure Problems, 23 (35%) identified Plagiarism, 20 (31%) identified Lack of Funding, 15 (23%) identified Lack of Expertise or Lack of Administrative supports as the obstacles. Few of them identified Lack of Supports from Students and Faculty and a very few declared that there are no obstacles in creating ETDs in their Universities. The above mentioned problems need to be resolved by Governmental agencies like UGC, ICAR, ICMR, AICTE etc by having common accepted policies and framework, sufficient financial support and spreading the benefits of ETDs among academic and researcher community. There may be obstacles which have to be addressed at Institutional level or regional level.
4. Conclusion

The survey was aimed to initiate a discussion and to know the attitude towards going electronic theses among Indian academic and research community, where the idea of electronic theses are gaining much attention day by day. Through this survey and data analysis in this article, an attempt is made to reflect the exact picture of doctoral theses collection, its usage, difficulties in access, academic and research community’s attitude towards digital archiving and electronic publishing etc in Indian Universities. It is found that access to Ph D Theses is still facing lots of problems, especially for accessing collection from other Universities. Few Universities have already started ETD Projects, and majority of them will be starting the projects soon. The need for an experienced national level agency for coordinating the work, national level policies from agencies like UGC, necessary financial and technical guidance etc is identified through the analysis. Most of the academics are supporting the idea of ETDs, but still a moderate majority is supporting its Global access through Internet.

Even though there are issues and concerns from every corner, the study clearly shows the trend towards the creation, organization and dissemination of information in electronic means. In the near future, every Indian University will collect electronic format of Ph D Theses and host them in a Digital Archive, which will be accessible through campus intranet or through Internet, according to their access policies. Since this idea is in the initial stages, it is better to have a common policy accepted by all Universities, in terms of format, workflow, software, accessing and archiving policies, which will help them to share this valuable resource through a national level platform identified by Governmental agencies working in this area, like INFLIBNET. University Grants Commission is already working for a policy stipulation to be implemented in all Indian Universities, as mandatory to collect and host Theses in e-format [5].

In the last few years, the Open Access phenomena has strongly embarked upon using ICT for sharing of rich and valuable content through different modes like; computer networks, intranet, internet and interoperable web sites. In this context, sincere
effort is made in identifying the issues and problems and lack of coordination and uniformity in the Indian scenario, which prompted to investigate into the system while making a comparison with the already developed scenario and come out with an ideal model suiting to Indian circumstances and be a partner in the global village of Open Access.

5. **References**

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3. INFLIBNET, Information and Library Network *(Visited November 30, 2005)*. URL: http://unicat.inflibnet.ac.in/econ/mindex.htm
