

ETD DIGITIZATION PROGRAMS: ISSUES, CHALLENGES AND GUIDELINES IN UNIVERSITY LIBRARIES

SANJAY SINGH

Abstract: ETD (Electronic Theses and Dissertations) Digitization Programs strategy is one step towards Digital India concept which converts thesis and dissertations in electronic format. The technological use in University Libraries and obsolescence issues are perhaps the most recognized of the challenges to ETD Digitalization Programs. This paper discussed the ETD digitization Programs: Issues, Challenges and Guidelines in University Libraries. Issues related to ETD digitations programs related to technology. This study also highlights the challenge and guidelines in ETD Digitization Programs.

Key words: Electronic, Theses, Dissertations, Digitization, Programs, Issues, Challenges, Guidelines, University, Library

Introduction: Today the environment in which we care for ETD Digitization programs are far more complex than it was even a decade ago. The purpose of Digitization programs is to protect information of enduring values for access by present and future generations. University Libraries and archives have served as one of their core functions. India and all country, where an array of specialized University Libraries, research institutions and research centers situated in almost all major subject areas. Theses and dissertation share known to be the important and unique source of information, of ten the only source for research work that does not find its way into various publication channels, because it is available in all University Libraries. Doctoral dissertations and Thesis are manifestation of result of three to five years and of intense work involving huge investment of resources, both mental and physical and infrastructure and other support from the universities Libraries. The theses collection in most of the Indian University libraries and InFLIBnet Shodh Ganga Project. University are kept in closed access and Open access, making it difficult for other students to access them. It is very most importance for all Research work and it is key part in Research Information.

What is ETD (Electronic Theses and Dissertation?)

ETD (Electronic Theses and Dissertation) are dissertation and theses prepared by Research students for submission as text-based and also submitted the soft copy document file or Adobe PDF (Portable

Document Format) files. ETDs contains on-text elements which can't be incorporated into conventional hard-copy theses and dissertations. Multimedia, sound, video, and hypertext links can also be included to expand and deepen the expression of ideas and the presentation of research. Importantly, ETDs give broad exposure to post graduate student as well as research scholars. It also promotes better research platform for exchange of ideas.

Bandra (2002) Identifies the merits of ETDs

- To Important for Research student and users to convey a perfect message through the use of multimedia and digitization Technology.
- To improve all higher education by allowing university students to produce digitization documents, use digitization programs university libraries and understand issues in E publishing.
- To increase the availability of all Research users for scholars and presentation it digitization programs, to lower the cost of submitting and digitization handling theses and dissertation.
- To empower University Libraries to unlock their information resources and advance digitization programs and digital libraries technology.

ETD Digitization Programs: The archiving of electronic format is hot information in

University Libraries and many institutional. Although all of these University Libraries differ greatly, all share an interest in what technology can offer. However, three main components make the long-term retention of electronic format use documents different from that of paper. First digital information has no in Nate paper backup, because consequently, there is little to fall beckon should format changes strand data in digitization programs. Second, digitization programs electronic document sere different from paper because access and delivery will change in the future. Archiving digitization Program and electronic documents is an active process, and the best digital format for using delivery is not necessarily the best format for retention database. At last finally, the digitization program and storage of paper documents are relatively straight forward processes that have remained relatively stable full time. The digitization program and retention of electronic documents is not quietuses impel. As there is little opportunity for University Libraries to anticipate format, changes will depend on a University libraries ability to maximize its flexibility.

Within the ETD digitization Program, long-term retention is an issue because few University Libraries consider long-term access issues when making format and procedural decisions about their programs. Currently, Indies all University Libraries rely on proprietary form it's for both document delivery and retention. Many large-scale digitization programs update in India and all country. As stated earlier, ETDs digitization programs use the different types of University Libraries are to make theses and dissertations in that they are born Electronic documents. This is what makes them simultaneously so it is use to many user so feared by others. Within the realm of the traditional thesis or dissertation, there is one digitization programs.

INFLIBNET ETD Digitization Programs in India:The project is first in India as a National Repository of Electronic Theses Dissertations (ETD) wherein all universities in India are expected to join after a Gazette

notification issued by UGC. Universities (Libraries) are signing MoU with the INFLIBNET Centre to join Shodh ganga project by giving a commitment for digitization of old theses as well as by hosting their current theses in the repository. The universities (Libraries) that sign-up MOU with the INFLIBNET Centre are given incentives in terms of funds for digitization of old theses and new as well as for setting up of ETD Labs. Besides, universities also get access to an anti-plagiarism software tool that detect plagiarism and thereby help in improving quality of theses. The project is unique to motivate universities and research scholars for digitization of theses and online submission of theses by research scholars. The project would grow as more and more theses are submitted to it, platform is improved to provide better search and discovery experience.

(www.inflibnet.ac.in)

Why was the ETD Digitization Started?

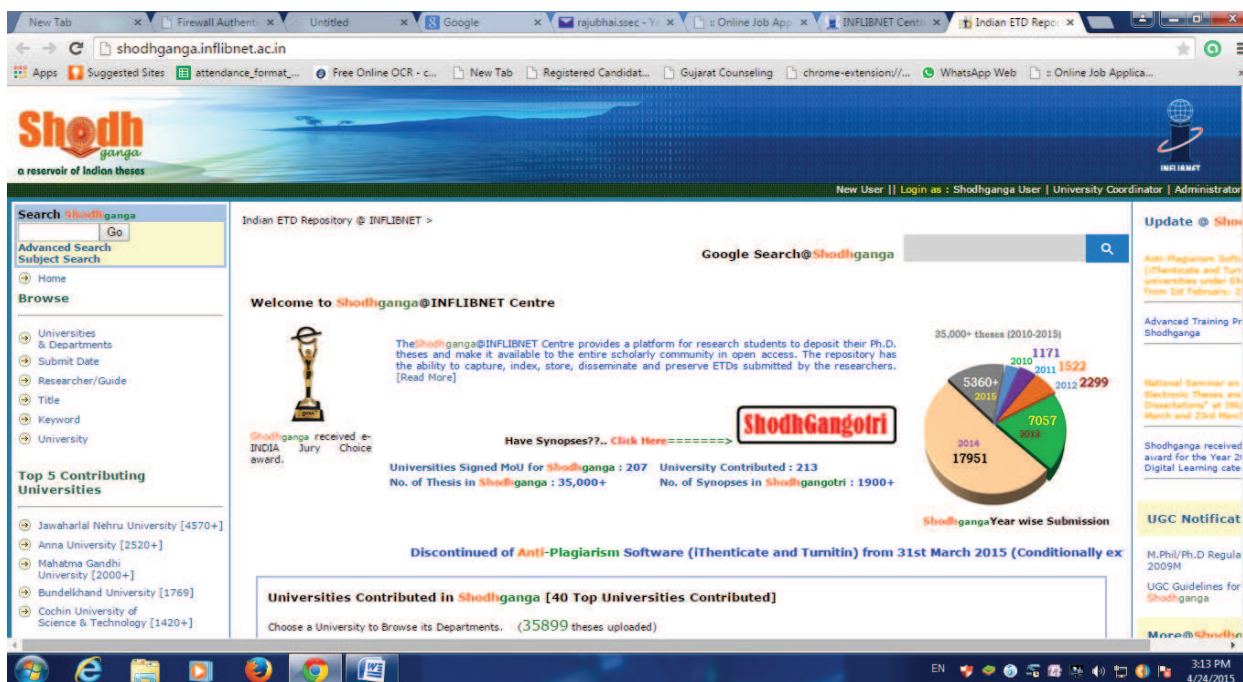
To encouraging and support Open Access to publically-funded research by becoming a part of an International movement on ETDs led by NTLTD and Open access Initiatives. To deter plagiarism in Theses submitted to universities.

(www.inflibnet.ac.in)

ETD Digitization Programs Objective:Theses and dissertations are known to be the rich and unique source of information, often the only source of research work that does not find its way into various publication channels. Theses and dissertations remain an un-tapped and under-utilized asset, leading to unnecessary duplication and repetition that, in effect, is the anti-theses of research and wastage of huge resources, both human and financial. The UGC Notification (Minimum Standards & Procedure for Award of M.Phil. / Ph.D Degree, Regulation, 2009) dated 1st June 2009 mandates submission of electronic version of theses and dissertations by the researchers in universities with an aim to facilitate open access to Indian theses and dissertation to the academic community worldwide. Online availability of electronic theses through centrally-maintained digital repositories

will not only ensure easy access and archiving of Indian doctoral theses but will also help in raising the standard and quality of research. This would overcome serious problem of duplication of research and poor quality resulting from the poor visibility and the unseen factor in research output. The responsibility of hosting, maintaining and making the digital repository of

Indian Electronic Theses and Dissertation, accessible to all institutions and universities, is assigned to the INFLIBNET Centre. "Shodhganga" is a national digital repository of Indian Electronic Theses and Dissertations to address this issue.(www.inflibnet.ac.in). Pls. find a screen shot of shodhganga in figure no. 1.



Screen shot of shodhganga in figure no. 1.

ETD Digitization Programs Issues: The mode of ETDs Digitization Programs submission and use in addition to the technology developmental level in the university libraries necessitated the Library management to consider some pertinent issues so as to justify its proposal and ensure a successful ETDs Digitization Programs implementation. They include: Digitization Technology, Production and Submission, Digitization Policy, Legal and Staff issues. Enough discussion and brain-storming was made on each of the above issues.

Digitization Technology: Digitization Programs Consideration was given to the Digital hardware, software and network Technology requirements for the ETDs initiative. Digitization Hardware requirements which include client and servers, workstations, storage media, printers technology, digital camera,

scanners, Barcode Technology's well as CD/DVD Micro Digital Systems have been made available for University Libraries Digitization Programs in the ICT Unit of the University Libraries. There was University Libraries and all wide network at that time but Local Area Network and Intra net exists in the University libraries. ETDs specialized application. However, the decision was to convince the University Libraries to start ETDs Digitization programs with the easily available word processing applications which can be converted to Portable Document Format (PDF). Open Source and other software applications like the use of Extensible Markup Language (XML), Hypertext Preprocessor (PHP), Standard Generalized Markup Language (SGML), and other database platforms like Procite, Space; Greenstone-printing could be adopted. Basic computer knowledge by students, faculty and all users was not recognized as a challenge. The University Libraries had designed and implemented basic

ICT skill training for faculty and Research students.

Production and Submission: It was agreed by the University Libraries management that submission of ETDs could all branches with the adoption of little electronic enhancement as print text stored electronically on external storage. There is Digitization Programs production use in new Digital Technology and new ICT tools. Online database production and submission which incorporates links to materials on the World Wide Web or multimedia elements as well as full blown innovative hypermedia documents. This idea is supposed to facilitate University Libraries Digitization Programs management acceptance of the project and will encourage adoption by Research students and all library staff.

Digitization Policy: The University Libraries Digitization policy on responsibilities, decision making, philosophy and technical procedures involved in the Digitization Programs, submission and use of Theses and Dissertation need to be reviewed. The proposal was to substitute Research students' submission of four print copies with one print copy and four electronic (CD-ROM) copies with proper digitization guidelines.

Legal: The issue of Intellectual property right was the most critical in all the world. The University Libraries has always been silent on copyright ownership of Thesis and Dissertations. It is taken for granted that the copyright is owned by the University Libraries as part of the requirement for the award of degree to its Research students and P.G. students. However, the ETDs will present a different challenge. The decision on this was left for the University community and UGC -University Grant Commission.

Personnel: University Libraries staffs that are knowledgeable in handling of Thesis and Dissertations in the library, who are also skilled in ICT and Digitization Programs will be involved. Consideration was also given to all staff of the University Libraries ICT Librarian who will provide hardware and software support.

Library Presentation to the University Rules: ETDs issues by the University Libraries management were presented in University librarian. The University librarian presented the issues and proposed approach to a Vice-

Chancellor, Deans of types of Departments of university, Representatives of academic Professor and Students. Theses and Dissertation Copies are given in English and proper language. It is also give Soft file (CD-DVD) in proper Guideline format.

ETD Digitization Programs: Challenges: The management of digitization Programs assets presents new challenges to the University Libraries in terms of administering complex hardware and software, New net work technology, Library Staff, Library Policy, Budget but mass digitization has not changed the basic services of library.

- Trained Manpower
- Duplication
- Quality of Metadata
- Indian Language Content
- Robust OCR
- Historic Documents
- Search in Presence of Errors
- Document Image Compression and Delivery
- Human-Computer Interaction
- Non-text Media
- Constantly changing software and hardware
- Funding/ Budget
- Computer Phobia
- Technical Expertise
- Inadequate Technology Infrastructures
- Technological Obsolescence
- Refreshing
- Emulation
- Continuous Migration
- Lack of Legislation/Policy
- Deterioration of Digital Media
- Legal Aspects
- Constantly Changing Software and Hardware
- Technical Expertise
- Duplication
- Government Rules and Standards
- Electronic Tools and Hardware Policy
- Copy right Act and Rules

ETD Digitization Programs: Guidelines: ETD Digitization Programs Guidelines are very most importance role in University Libraries. Because all digital database create in proper rules in the world and it was very useful to access at proper time.

Following Guideline for ETD Digitization Programs has been recommended by author:

- Prepare the Manuscript
- General formatting requirements for ETD. Double Space, Typeface size and style, Margins, Pagination, Page number & required Section, order of pagination, Table of contents, List of table, Figures, Abbreviations.
- Title page
- Copyright page
- Reader approval page
- Abstract Page
- Table of contents
- Appendices
- References
- Multiple volume works
- Charts, Graphs and tables.
- Photography
- Permission to use copyrighted material
- Review the final draft with the person responsible for proper Department
- Meet the declines for submission complete all other degree requirements

before formal library submission

- Submit your thesis/ dissertation University Library copy electronically

Conclusion: University Libraries has the greatest advantages of ETDs for avoiding duplication in research work, for quick access and retrieval of information, promoting resource sharing, and providing a permanent solution to the problems of physical space. In the India as per great Digitization Programs Digital data baseis made to all University Libraries and submitted for coordination by a central agency of Government of India .INFLIBNET is no waking steps in this direction. It has started developing a complete national union catalogue of ETDs in India. The Programs name is Sodhganga it is biggest project in India so it is very useful to all Research users and to do research work in more than research area. Electronic Thesis and Dissertation Digitization Programs: Issues, Challenges and Guidelines points has been discussed in this paper.

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Sanjay Singh, Library Assistant, Banaras Hindu University India.
Email: sanjaybhu196@gmail.com