# ETDs on Public Domain: Cyber Security and Intellectual Property Rights Issues

Alaknanda Rajawat, Dept. of Law

S.P.S. Shekhawat, Professor, Dept. of Law

Manoj Kumar K, Scientist-E(CS)

#### Introduction

This research paper investigates how electronic theses and dissertations (ETDs), cybersecurity, and intellectual property rights (IPR) intersect. It examines the impact of technology and the internet on accessibility, protection, and misuse of information in the public domain. The paper emphasizes the importance of cyber law in safeguarding IPR and addressing cybersecurity threats. It aims to identify challenges and propose solutions related to the public domain, IPR, and cybersecurity.

#### **About ETD**

The adoption of Electronic Theses and Dissertations (ETD) represents a notable advancement in academia driven by digital technology. Previously, theses and dissertations existed in print, limiting access to a small audience and taking up physical library space. The internet and digital tech have revolutionized how research outputs are shared, accessed, and preserved, expanding opportunities for dissemination.

## **About ETD**

An Electronic Thesis and Dissertation (ETD) is a digital version of a graduate student's scholarly thesis or dissertation, typically submitted for a higher academic degree. ETDs replace traditional paperbased theses and dissertations and offer benefits like improved accessibility, global reach, costefficiency, and eco-friendliness. They align with the open access movement, facilitating the free sharing of knowledge and global research collaboration.

Legal issues surrounding cyber security, copyrights, and Intellectual Property Rights (IPR) in Electronic Theses and Dissertations (ETD) are subjects primarily confined to academic and public discourse. ETDs represent the digital evolution of traditionally printed theses and dissertations. These scholarly documents, such as PhD Theses and MPhil/PG Dissertations, are produced by graduate students as part of their academic requirements for advanced degrees.

Copyrights for these works are typically shared between the researcher and the affiliated institution. Some researchers opt to transfer copyright to their institutions, while others retain intellectual property and copyright ownership. In the digital age, safeguarding intellectual property rights becomes paramount, especially as the transition from print to digital platforms for ETDs widens accessibility. However, this transition to online open access platforms also exposes ETDs to issues like content duplication and plagiarism.

The protection of intellectual property rights is critical in the digital realm, encompassing not only the creative works but also innovations embedded in academic publications, particularly in the context of PhD Theses and Dissertations. As these publications have shifted from print to digital formats, the primary motivation is to make them accessible to a broader audience through open access modes. While this approach enhances accessibility, it simultaneously exposes ETDs to vulnerabilities, notably content duplication and plagiarism. These issues are of concern as they can compromise the originality and integrity of academic works.

Addressing these challenges requires a multifaceted approach that combines legal measures with technological solutions. Intellectual property rights, which grant ownership and protection for intellectual creations, play a pivotal role in safeguarding the rights of researchers and their affiliated institutions. Legal frameworks are needed to define and enforce these rights in the digital age. Furthermore, technological tools should be developed to detect and prevent content duplication and plagiarism on open access platforms. By tackling these legal and technological aspects, the academic community can ensure the integrity and security of ETDs in the digital landscape.

Safeguarding the intellectual property and copyright of Electronic Theses and Dissertations (ETDs) is essential, especially in open-access platforms. While open access aims to share knowledge, it can lead to copyright violations. Shodhganga, an Indian repository housing 461,000+ PhD Theses, faces misuse, which raises concerns about the protection of original works in the digital realm.

Online platforms have made it easy to copy and distribute copyrighted content without the owner's permission. Intellectual property rights play a crucial role in safeguarding creators' works in the digital domain. However, some individuals exploit noncommercial licenses, using ETDs for profit, which poses legal challenges.

This paper delves into the legal and technical measures needed to ensure the legality of ETDs. It seeks to strike a balance between open access and copyright protection. By addressing the challenges of the digital era, the paper aims to find ways to protect academic works effectively.

To protecting the intellectual property and copyright of ETDs in open-access platforms is a complex issue, but it is crucial for the academic community. The paper sheds light on these challenges and suggests solutions to maintain the integrity of research in the digital age.

The research involved a web-based investigation utilizing keywords related to open access, plagiarism, and copyright in Electronic Theses and Dissertations (ETDs), resulting in around 250 records. A specific focus was placed on the "Penal provisions for infringement of Copyright" as per The Copyright Act, 1957. It was noted that even on international platforms, the intellectual property of individuals is not always adequately protected.

The research methodology delved into the primary penal provisions applicable to infringements of Intellectual Property Rights (IPR) and Copyright. Sections, provisions, punishments, and consequences were meticulously studied in the context of ETD-related issues. Notably, several cases were identified where e-commerce vendors faced scrutiny for displaying licensed and copyrighted content, including one instance where a thesis was being sold on multiple international websites.

More than 10 cases were meticulously analyzed in the paper, with a focus on the breach, the relevant legal sections, provisions, procedures, punishments, and consequences, including penalties under various acts. The research explored the legality of framing charges under the Copyright Act, particularly sections 63 and 63A, which stipulate punishments for knowingly infringing or abetting copyrighted works.

Furthermore, it was found that thousands of cases have been registered with The World Intellectual Property Organization (WIPO). The paper provided detailed information on two specific cases, shedding light on the costs associated with unauthorized selling of copied books. This research underscores the critical importance of safeguarding intellectual property and enforcing copyright laws in an increasingly digital and interconnected world.

To address the issues and challenges identified in the analysis of problems related to Electronic Theses and Dissertations (ETDs) on both national and international platforms, several crucial changes are recommended. First and foremost, it is proposed that a plagiarism check report should be made mandatory for all ETD publications before they are awarded or uploaded into ETD repositories. This step aims to ensure the originality and authenticity of academic work, promoting academic integrity.

It is suggested that research institutions establish a dedicated legal cell within their Research Cells. This legal cell would be responsible for monitoring ETDs and taking legal action against publishers and writers of plagiarized content. This proactive approach empowers institutions to protect the intellectual property rights of their researchers and maintain the integrity of ETD repositories.

Creating awareness of Intellectual Property Rights (IPRs) and the consequences of infringement should be prioritized on both national and international levels. This awareness can be incorporated into educational curricula and research programs, ensuring that individuals are well-informed about their rights and the legal repercussions of copyright violations.

Nations are encouraged to take the initiative to protect the IPRs of individuals not only at the national but also at the international level. Collaborative efforts between countries can strengthen the legal framework for safeguarding intellectual property, offering a more comprehensive approach to protecting creators' rights. In the realm of technology, it is proposed that tools be developed to identify instances of copy-paste data and data manipulation through synonyms and antonyms. Such software can aid in detecting and preventing plagiarism, further ensuring the integrity of ETDs.

The development of software or mechanical tools that allow data to be uploaded to open access platforms but prevent unauthorized copying is suggested. This would provide an additional layer of protection to ETDs and other digital content, reducing the risk of content theft and misuse. Lastly, it is recommended that existing laws, both at the national and international levels, be strengthened to a degree that instills a sense of apprehension in potential wrongdoers. Stringent legal measures can act as a deterrent, discouraging individuals from engaging in copyright infringement and other unlawful activities.

Electronic Theses and Dissertations (ETDs) are typically made available for public access in open-access repositories, making them susceptible to unauthorized copying and sharing on various online platforms. While plagiarism checking tools are valuable resources, they come with inherent limitations, particularly in dealing with regional language content and server availability during content checks. To address this, it is suggested that the Indian model and policies, which mandate a similarity check before awarding theses by institutions, should be adopted as a standard practice across all ETD repositories. This can enhance the protection of academic content from unauthorized duplication.

To further safeguard ETDs and other digital academic works, there is a need for technology-based mechanisms that can effectively prevent content copying. Exploring options such as the Share-Alike (CC by SA) license, which encourages sharing with proper attribution, can be beneficial. This approach promotes responsible sharing while respecting intellectual property rights.

In the academic sphere, institutions are encouraged to reevaluate their research ecosystems and consider implementing dedicated legal cells to address content infringements by online users regularly. The cases highlighted in this paper, reported by research scholars themselves, emphasize the importance of a unified national-level mechanism to regularly verify the content of ETDs against open-access sources. This proactive approach ensures the quality and integrity of research content, contributing to the socio-economic and cultural development of the nation.

As awareness of Intellectual Property Rights continues to grow, it becomes increasingly important for the research community to be sensitized to the risks of content theft and copying from ETD repositories. This heightened awareness can lead to the production of high-quality research content and further advance the socio-economic and cultural development of the nation. Slowly but steadily, individuals are recognizing the significance of protecting intellectual property rights in the academic and digital landscape.

## Thank You ETD,2023

Ms. Alaknanda Rajawat Jagannath University, Jaipur