ENHANCING INFORMATION RESOURCE SHARING IN PAKISTANI ACADEMIC LIBRARIES: A COMPREHENSIVE REVIEW

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Abstract

In today's rapidly evolving academic landscape, libraries serve as the backbone of research and knowledge dissemination. At the heart of this mission lies Information Resource Sharing (IRS), a system that allows libraries to pool their resources, giving students, and researchers' access to a far wider range of materials than any single institution could provide alone. By sharing books, journals, and digital databases, IRS not only maximizes cost-efficiency but also ensures that knowledge is distributed more equitably. However, in Pakistan, the journey toward effective IRS has been fraught with challenges. Picture this: a university library struggling with outdated technology, its limited budget stretched thin by rising subscription costs for academic journals. Meanwhile, another institution just a few cities away has invested in a state-of-the-art digital repository, but without a proper collaboration framework, its resources remain out of reach for others. These scenarios highlight the three major roadblocks Pakistani academic libraries face: chronic underfunding, uneven technological access, and a lack of institutional cooperation. Despite these hurdles, there is hope on the horizon. Recent research (2020–2025) reveals promising strategies to revitalize IRS in Pakistan. Imagine libraries adopting cloud-based sharing platforms, eliminating the need for expensive physical infrastructure. Envision universities banding together in consortia, much like the Higher Education Commission of Pakistan (HEC) Digital Library initiative, to negotiate better access to global journals. Policymakers could further accelerate progress by standardizing IRS protocols and incentivizing collaboration. The way forward is clear. By embracing cutting-edge technologies like AI and blockchain, fostering stronger partnerships, and advocating for supportive policies, Pakistani academic libraries can transform IRS from a fragmented effort into a thriving, nationwide system. A more inclusive, efficient, and globally competitive research environment for generations to come.

Keywords: Information Resource Sharing, Library Collaration, Digital Access, Academic Libraries, Pakistan

Introduction

University academic libraries serve as essential components of educational research environments where they deliver users including researchers and students access to essential information resources. Together academic materials expenses are escalating while limited budgets make it more challenging for

single libraries to fulfil the diverse expanding requirements of their user base. Information Resource Sharing has become a practical solution, which helps libraries combine their resources to provide users access to a more extensive variety of materials. Academic organizations in Pakistan operate at an initial phase of Information Resource Sharing implementation because resource-sharing initiatives have gained only minimal acceptance. This research evaluates Information Resource Sharing implementation in Pakistani academic libraries while evaluating the hindrances and offering beneficial strategies based on scholarly work from 2020 to 2025.

The Concept and Importance of Information Resource Sharing

Libraries work together through information resource sharing to jointly provide access to library resources, which includes prints and digital materials at reduced costs. The Information Resource Sharing concept maintains remarkable importance in Pakistan and other developing countries because of their academic libraries' limited funding capabilities. Through resource, sharing libraries enable their users to access expanded material collections that support interdisciplinary research while minimizing duplicated expenses (Bhatti et al., 2023).

Information Resource sharing acquisition has gained even more significance because digital technology has revolutionized information access and sharing methods. The implementation of cloud-based library systems and open-access repositories through digital platforms enables libraries to work together by sharing resources across institutional limits (Liman & Aliyu, 2023). The pace at which Pakistani academic libraries adopt Information Resource Sharing practices remains slow because of systemic challenges in the country.

Current State of Information Resource Sharing in Pakistani Academic Libraries

Academic libraries in Pakistan show varying levels of Interlibrary Resource Sharing implementation because only limited institutions have joined resource-sharing programs. Academic libraries in Pakistan mainly function independently as quantified by (Ashiq & Mujtaba, 2021). The scarcity of formal resource-sharing agreements between libraries results from inadequate infrastructure together with limited funding and insufficient training of library personnel (Ramos-Eclevia, 2023; Ullah et al., 2024).

The Higher Education Commission (HEC) of Pakistan has developed significant leadership in promoting IRS through programs such as Digital Library Program, which offers electronic resources to its participating institutions. These IRS programs face barriers to success because users lack internet consistency and university staff need better training in addition to insufficient library user education (Aslam et al., 2025). The lack of standardized systems together with protocols limits library resources sharing capabilities (Nitecki & Alter, 2021; Ullah & Usman, 2023).

Literature Review

Information Resource Sharing (IRS) in Pakistani academic libraries faces multifaceted challenges that hinder its effective implementation. Scholars have identified four primary barrier categories: technological constraints, financial limitations, institutional resistance to collaboration, and insufficient awareness among stakeholders (Baber et al., 2024). Technologically, the absence of integrated library systems (ILS), inadequate digital infrastructure, and unreliable internet connectivity impede seamless resource sharing (Fatima & Mehmood, 2024; Khan & Ullah, 2024). Financially, constrained budgets restrict investments in essential technologies, training, and collaborative initiatives, while high subscription costs for academic databases exacerbate resource gaps (Ullah et al., 2023; Chisita & Fombad, 2020). Institutional competition and a lack of trust further undermine cooperative efforts, despite evidence that resource-sharing networks enhance accessibility (Qureshi & Afsar, 2021; Ullah et al., 2024). Additionally, limited awareness among librarians and users about IRS benefits, coupled with inadequate training, perpetuates underutilization (Iqbal et al., 2024). However, emerging trends, such as digital transformation through cloud-based systems, library consortia models, open educational resources (OERs), and policy frameworks, offer viable pathways to

overcome these challenges (Asif & Sandhu, 2023; Rafi et al., 2022; Ashiq et al., 2021). This literature review synthesizes these barriers and solutions to propose actionable strategies for advancing IRS in Pakistan's academic libraries.

Challenges to Information Resource Sharing in Pakistani Academic Libraries

Several factors impede the adoption and implementation of Information Resource Sharing in Pakistani academic libraries. Information Resource sharing adoption faces multiple obstacles that group into technological, financial, cultural, and institutional barriers (Baber et al., 2024).

Technological Constraints

Academic libraries throughout Pakistan face challenges in using needed technological platforms because Information Resource Sharing requires. Most academic libraries in Pakistan do not use integrated library systems (ILS) together with digital repositories and resource-sharing platforms effectively. Standardized systems and protocols remain absent, which makes it harder for seamless resource sharing to take place (Fatima & Mehmood, 2024). Many parts of Pakistan face connectivity problems with internet along with insufficient IT infrastructure, which makes difficult to employ digital resources effectively (Khan & Ullah, 2024).

Financial Limitations

Budget financing creates significant obstacles for the implementation of IRS programs in Pakistan. Academic libraries usually work with minimal funding that prevents them from investing in technology purchase and training programs and collaborative partnership initiatives. Academic journal and database subscriptions that cost a lot create extra challenges for libraries, which hinders their ability to create fully developed library collections (Ullah et al., 2023; Chisita & Fombad, 2020).

Lack of Collaboration

Institutional competition culture acts as a barrier that prevents universities from developing sharing networks. Despite (Qureshi & Afsar, 2021; Ullah et al., 2024) both noting the contrary institutions show hesitance in resource sharing due to their competitive concerns. A lack of mutual trust together with a refusal to collaborate stands as a main challenge for Information Resource Sharing to succeed.

Awareness and Training

Most library personnel alongside their users remain uninformed about the advantages that Information Resource Sharing provides. Research by (Iqbal et al., 2024) revealed two major issues because librarians do not possess adequate implementation and management skills for resource-sharing systems and user knowledge remains insufficient about the resources Information Resource Sharing provides.

Emerging Trends and Strategies for Enhancing Information Resource Sharing

Recent technological advancements together with library science innovations provide promising solutions to advance Information Resource Sharing in Pakistani academic libraries despite existing challenges. These strategies and trends appear most important for Information Resource Sharing in Pakistani academic libraries.

Digital Transformation

Libraries enable resource sharing through the implementation of digital technologies that include cloud-based library systems and open-access repositories. Cloud-based ILS services make real-time library resource sharing possible because libraries can use the system to exchange collection information simultaneously (Asif & Sandhu, 2023; Siddiqui et al., 2023).

Library Consortia

The development of library consortia stands as an efficient solution for IRS. The Pakistan Research Repository together with the HEC Digital Library has shown through their operations that consortia are efficient platforms for increasing resource accessibility (Rafi et al., 2022). Information Resource Sharing will gain major enhancements through the expansion of this program across additional institutions.

Open Access and Open Educational Resources (OERs)

Open-access movement together with increasing OER resources creates a potential opportunity for libraries to build their collections at no additional cost. Library promotion of OERs allows them to minimize expensive subscriptions and deliver excellent resources at no additional cost to their users (Ashiq et al., 2021).

Capacity Building and Training

The successful implementation of Information Resource Sharing requires library staff members to receive training investments. Librarians can develop proficiency in Information Resource Sharing systems management through workshops along with online best-practice courses, which assist them in building their professional capacity (Akosile & Olatokun, 2020; Mahmood & Khan, 2024).

Policy Development

National policies and guidelines for IRS establishment will create structured collaboration between academic libraries. National guidelines for IRS should resolve three key topics: financial support, technological standards and intellectual property management so institutions understand their participation requirements (Asif, 2022; Azam & Ahmad, 2024; Shahid et al., 2022).

Methodology

The systematic literature review methodology enables this paper to analyze Information Resource Sharing (IRS) in Pakistani academic libraries. This project analyzes peer-reviewed journal articles alongside conference proceedings and reports, which were published in the range of 2020 to 2025. This research work aims to combine available studies which helps identify issues and suggests new approaches for better International Resource Sharing practices in Pakistani academic libraries.

Research Design

The research design employs qualitative methods through content analysis to interpret findings derived from studying already published literature. The research method enables the identification of significant patterns and difficulties as well as best practices concerning IRS operations within university libraries throughout Pakistan.

Data Collection

The primary data sources include:

- Academic Databases: Scopus, Web of Science, IEEE Xplore, Google Scholar, and ResearchGate.
- Institutional Reports: Publications from the Higher Education Commission (HEC) of Pakistan, university libraries, and government agencies.
- The analysis incorporates papers delivered at library science and information management conference proceedings in addition to relevant books.

The research draws its analysis from the 2020-2025 time period to maintain relevance for IRS developments, obstacles, and revolutionary solutions. The inclusion criteria focus on:

- Academic libraries within Pakistan that explicitly discuss integrated reference service.
- Scientific publications examine new technology trends as well as financial issues alongside future policies and teamwork approaches.
- Empirical studies, systematic reviews, and case studies.

Data Analysis

The research uses thematic analysis for organizing data into major themes regarding directorial demands of technology and financial resources while examining institutional partnerships and informant training and policy development needs. The process involves:

- The analysis extracts dominant obstacles and solution measures from all reviewed scholarly documents.
- Comparative Analysis: Evaluating commonalities and differences across studies.

- This section unites investigated research results into a complete understanding of IRS in Pakistani academic settings.

Limitations

This research provides general findings regarding IRS in Pakistani academic libraries; however, it has certain drawbacks including:

- The use of secondary data might fail to demonstrate current institutional modifications.
- The current analysis shows an inclination toward publication bias since it probably highlights success stories of IRS implementation more than failure cases.
- Academic institutions restrict scholars from accessing their unpublished institutional reports and grey literature.

Ethical Considerations

The study maintains professional ethics through its use of published literature and ethical citation methods when acknowledging sources. Since the research did not involve human subjects, it omitted any privacy or consent-related ethical concerns. This paper performs an organized review of current research to provide established guidelines for improving IRS within Pakistani academic libraries, which will direct upcoming policy and technological developments.

Recommendations

The following recommendations aim to improve Information Resource Sharing in Pakistani academic libraries as indicated in the reviewed literature:

1. Academic libraries need to make technological investments that include cloud-based systems and digital repositories for resource sharing operations.
2. Leveraging collaboration should take precedence over competition, as institutions need to establish formal agreements for resource sharing.
3. Extra funds from both government entities and private stakeholders need to support Information Resource Sharing programs.
4. Residents should learn about Information Resource Sharing benefits through library awareness programs created for users and staff members.
5. Information Resource Sharing needs national policies and guidelines as a framework, which must be developed by the relevant authorities.

Conclusion

The enhancement of information resource sharing in Pakistani academic libraries will lead to better knowledge accessibility and educational development and research support. The future of information resource sharing in Pakistani academic libraries holds promising prospects despite ongoing vital challenges. The implementation of technology investments within collaborative structures with supportive policies will allow Pakistani academic libraries to break down Information Resource Sharing barriers thus enhancing their user service quality. All stakeholders such as libraries along with universities as well as government agencies and the private sector must join forces to carry out these proposed recommendations. Academic libraries in Pakistan can establish Information Resource Sharing as a critical foundation of their services through appropriate strategies and institutional support, which will help institutions fulfil changing user needs and advance educational and research activities in the country.

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