CONSOLATRIX COLLEGE OF TOLEDO CITY, INC.

Magsaysay Hills, Población, Toledo City

RESEARCHHUB: A RESEARCH PROJECT MANAGEMENT SYSTEM FOR CONSOLATRIX COLLEGE OF TOLEDO CITY, INC.

By

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APPROVAL SHEET

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PROJECT APPROVAL SHEET

TITLE OF PROJECT

RESEARCHHUB: A RESEARCH PROJECT MANAGEMENT SYSTEM FOR CONSOLATRIX COLLEGE OF TOLEDO CITY INC.

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BRIEF DESCRIPTION OF THE PROJECT

ResearchHub is a web-based platform that streamlines academic research project management. It allows students to submit manuscripts, enables teachers and others to review and provide feedback, and helps administrators organize and store approved research in a categorized public repository for reference and future study.

FEATURES OF THE PROJECT

- Research project submission: Students can submit their research project online.
- Approval workflow: Administrators can review and approve on submitted research project before storing in the public repository.
- Research public repository: A centralized digital archive to store research documents and final manuscripts. Documents are organized and categorized by research fields.
- Provide comments and feedback: Others can provide comments and feedbacks on the reviewed project.

APPROVED BY

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INTRODUCTION

In today's academic setting, managing and presenting research projects in an organized and accessible manner is increasingly essential—especially for higher education institutions that integrate capstone research into their curricula. In most schools, students are required to conduct and submit research as part of their academic progression. However, the existing process for research submission, evaluation, and feedback remains manual and time-consuming.

ResearchHub offers a modern solution. This web-based research project management platform is specifically designed to streamline research workflows for students, faculty, and administrators. Through ResearchHub, students can digitally submit their research proposals and final outputs, monitor their status, and access an online repository of approved studies. Teachers and administrators are provided with tools to review, approve, and provide timely feedback on submissions, while maintaining proper records of every research activity.

In addition to streamlining internal processes, ResearchHub also opens a public research repository where approved studies can be browsed by fellow students, researchers, and even external users. Visitors can use these published studies as references and leave comments or feedback, creating an interactive academic environment that promotes knowledge-sharing and constructive critique.

The project aims to evaluate the effectiveness of ResearchHub in terms of usability, system design, and user satisfaction. CCTC students, faculty reviewers, and select public users participated in system testing to assess its relevance and performance. The study also considers the users' previous experience with similar platforms and how that shapes their perception of ResearchHub.

The core objective of this project is to provide a centralized digital environment that enhances research management, supports academic collaboration, and improves the overall quality and accessibility of student research at CCTC.

1.1 Background of the Study

The internet has developed into a vital educational resource, providing both schools and students the means to communicate, access information, and better organize their academic workloads. Effective academic management systems are becoming more and more necessary as learning environments continue to move toward digital solutions, particularly in the field of research. As articulated, traditional paper-based documents are progressively giving way to their electronic counterparts in modern settings [1].

Research significantly enhances academic learning by contributing new knowledge, which is essential for students in CCTC to complete their course requirements. However, the lack of access to prior research projects or final manuscript papers within the institution is a problem that students encounter. As a result, students have limited access to reference materials when conducting their research. Moreover, without a centralized platform, there is no efficient way to store, manage, or showcase the institution's collective research.

To solve this problem, a system called ResearchHub: research project management system was developed. The purpose of this system is to store students' final research or thesis papers online. This system aims to serve as a web-based digital repository where students can submit their final research manuscripts. These research projects become publicly available on the platform after being uploaded and authorized by an administrator. Other students and users can read the studies, use them as references, and even provide feedback. This aligns to the idea of Okon et al., that building a comprehensive web based digital repository system will help users to manage all phases of the information lifecycle, and most importantly, to simplify the authoring and creation process so that wider population can participate [2].

This project promotes openness in academic work and helps ensure that students' efforts are maintained and valued beyond the classroom. ResearchHub aim0s to support student researchers by giving them better tools and easier access to valuable research resources that are important for their own academic progress.

1.2 Problem Statement

In the evolving landscape of higher education, especially in research-oriented academic programs, student research plays a crucial role in developing critical thinking, communication, and investigative skills. However, despite the importance of research in academic institutions, there exists a persistent gap in providing a structured and efficient digital platform for research proposal submission, evaluation, feedback, and archiving.

At Consolatrix College of Toledo City, Inc., the traditional method of research management is largely manual—often involving printed submissions, scattered feedback, and delays in communication between students and their research advisers or panel members. These outdated processes hinder timely reviews, increase the risk of misplaced documents, and limit access to completed studies for future reference.

ResearchHub was developed as a direct response to these challenges. It is a web-based research project management system aimed at streamlining the research lifecycle—from submission to approval and public archiving. While the system introduces core features such as digital submissions, review workflows, status tracking, and a research repository, it is essential to evaluate its usability, design effectiveness, and overall user satisfaction to ensure that it truly addresses the academic and operational needs of its users.

This study specifically aims to assess whether ResearchHub is user-friendly and accessible to both students and faculty, to examine the effectiveness of its core features, and to determine if satisfaction levels vary between different user types. Furthermore, it seeks to explore the correlation between the system's design quality, ease of use, and overall satisfaction to identify potential areas for enhancement. Addressing these issues will provide valuable insights into improving ResearchHub's functionality and its impact on research engagement, transparency, and institutional efficiency.

1.3 Objectives

The objective of this study is to develop a web-based system known as ResearchHub: Research Project Management System. This study aims to achieve the following objectives:

1. To provide a centralized online platform where students can upload their final research manuscripts.
2. To make students research studies accessible to all users for educational and reference purposes.
3. To promote collaborative learning by allowing feedback and discussion on submitted works.
4. To support students with limited access to academic resources by offering a wide range of past research papers.

1.4 Purpose of the Study

ResearchHub's primary goal is to empower students by providing them with easy access to a reliable database of research papers. In addition to preserving the institution's research outputs and enhancing academic performance, this approach makes sure valuable student contributions are not lost over time and can be used in the future.

The target users of ResearchHub include:

1.4.1 Undergraduate Students:

Students can utilize ResearchHub to upload their completed research papers, explore

past studies for references, review related academic work, and receive valuable feedback from peers—all in one accessible platform.

1.4.2 Academic Staff and Research Advisers

Academic staff and research advisers can support the visibility and accessibility of completed research within the academic community and use the platform by leaving comments or observations for general feedback purposes.

1.5 Definition of Terms

ResearchHub – A web-based research management system designed for Consolatrix College of Toledo City, Inc.

Research Paper – A structured academic document presenting original research, findings, or analysis on a specific topic.

Submission – The process of uploading research documents (e.g., final papers) to the system.

Feedback – Comments given by other users.

Student – A primary user who submits research papers.

Admin (Administrator) – A user with full access rights that manages system settings, user accounts, reviews, workflows, and generates reports.

Research Repository – A digital archive within the ResearchHub system where approved and finalized research papers are stored and made publicly accessible for reference, review, and citation.

Chapter 2

THEORITICAL BACKGROUND

This chapter discusses the theories and literature review of the ResearchHub.

2.1 Theories

The development of ResearchHub is supported by a combination of educational, technological, and data-driven theories. These theoretical foundations were used to shape the system's functionalities, user experience design, and analytical capabilities. Specifically, this study draws from constructivist and experiential learning theories to foster active student engagement, the Information Systems Success Model to assess system effectiveness, and machine learning principles to enhance discoverability and data-driven insights.

2.1.1 Portfolio Showcasing

Constructivist Learning

Proposed by Jean Piaget and further developed by Jerome Bruner [8], this theory emphasizes that learners construct knowledge through experiences and reflection. In ResearchHub, this is reflected in how students develop their research, submit it digitally, and gain insights through peer and teacher feedback. The repository also promotes independent and active learning by allowing students to explore past research studies as references.

Application: ResearchHub encourages reflective learning as students upload work, receive feedback, and iterate based on evaluations—mirroring real-world academic processes.

Experiential Learning

Introduced by David Kolb [9], experiential learning is a cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation.

ResearchHub enhances this by simulating real-world research publication and review environments.

Application: The process of submitting research, receiving comments, and learning from reviews provides students with valuable experience akin to real academic or professional scenarios.

2.1.2 Data Analytics

Information Systems Success Model

This model evaluates information systems based on system quality, information quality, service quality, use, user satisfaction, and net benefits [10]. In the case of ResearchHub, these dimensions assess the system's usability, user experience, and effectiveness in streamlining research management.

Application: ResearchHub is evaluated in terms of its impact on improving submission workflows, transparency in feedback, and overall system usability by students, teachers, and admins.

Learning Analytics

Learning analytics involves the measurement and analysis of data about learners to optimize learning [11]. In ResearchHub, analytics on submission frequency, reviewer activity, and most-viewed studies can inform institutional improvements and individual performance.

Application: Teachers and admins can use data visualizations or downloadable reports to assess research trends, student participation, and research topic popularity.

2.1.3 Machine Learning

Recommendation Systems Theory

This theory supports personalized content suggestions based on user behavior or preferences. In ResearchHub (if implemented), machine learning could be used to recommend relevant references or previous research papers based on categories or user interaction [12][13].

Application: When students search the repository, the system can suggest related reviewed studies, improving efficiency and promoting deeper engagement with academic materials.

2.2 Literature Review

This section of the paper reviews the literature studies that support the development of ResearchHub.

In recent years, academic institutions have increasingly adopted digital solutions to preserve and manage student research outputs. Doromal and Soberano [1] created a Capstone Archiving Management System with a reference and citation generator, emphasizing the value of supporting academic writing practices in addition to preserving research works. This type of system enables ResearchHub, which intends to store completed manuscripts and provide future students with quality academic material.

The work of Okon et al. also presents a web-based repository for academic papers that prioritizes digital preservation, user interaction, and centralized access [2]. By showing how digital archives may simplify sharing information and reduce duplication of research topics, their work supports the need for platforms such as ResearchHub. In line with ResearchHub's objective of enabling students to upload their defended and approved research projects, Parente et al. [3] also stress the importance of archiving student outputs through a specialized system that permits manuscript submission and storage.

Additional solutions strengthen ResearchHub's relevance in a Philippine academic setting. An academic research archive system with a searchable and classified interface for research access was created for an institution by Gayatao et al. [4]. Similarly, Cofino, Enquilino, and Salao [5] suggested the R2S platform, which was created especially for Philippine higher education institutions. Their work emphasizes the institutional necessity for a research repository that improves access and prevents repetition of research titles—both of which are key goals of ResearchHub.

Broader implementations of academic repository systems also provide information for improving ResearchHub’s long-term viability. Through creating a collection of e-books and e-journals, Bernisca, Tamayo, and Roa [6] showed how digital systems can be scaled to accommodate a wide range of scholarly content. Meanwhile, Sarawan et al. [9] optimized the submission and storage of student projects by implementing lean principles into the archiving process. ResearchHub plans to incorporate usability, resource management, and long-term maintenance into its system design, as these studies indicate their significance.

The reviewed literature primarily supports the creation of ResearchHub, a research project management system that provides an organized, searchable, and user-friendly digital repository that addresses limited access to student manuscripts. With knowledge gained from current systems and repository models, ResearchHub is in a position to support academic transparency, accessibility, and institutional research output preservation.

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