Development of an E-Portfolio System in College of Arts and Sciences

Rationale/ Introduction

An E-Portfolio System is being implemented as part of a strategic initiative within the College of Arts and Sciences (CAS). This initiative is based on the concepts of Industrial Competitiveness, Smart Engineering, and Information and Communication Technology (ICT) and is in line with the way education is changing. This project has the potential to transform teaching practices, promote instructor collaboration, and offer organized assistance for professional fields. One significant issue with the existing educational system is that there is not a specific venue where instructors and staff can carefully showcase their methods of instruction and personal development to their respective responsibilities with paperwork and account. By identifying the value of such a system in streamlining school operations, improving management techniques, and enhancing the faculty and staff's overall educational experience, this research aims to close this gap.

Furthermore, the effort to implement an E-Portfolio System in the College of Arts and Sciences directly addresses SDG Indicator 8.2 for "Decent Work and Economic Growth." This translates into a move away from paper-based documentation and toward more efficient digital processes in the department's educational setting. By adopting this E-Portfolio System, it is not only merely to address the pressing need to cut down on paperwork, save time, and improve the quality of education at the College, but also to make a positive impact on the global agenda. This research contributes to the larger effort to achieve sustainable economic growth through the wise application of the internet, as well as to local educational objectives.

This research is conducted in the College of Arts and Sciences and focuses specifically on three key department areas: Department of Social Sciences, Department of Communication, and Department of Physical Sciences. The selected departments represent distinct layers in the college, and their faculty and staff are identified as the main recipients or beneficiaries of the proposed E-portfolio System. The purpose of implementing the system is to respond to the specific needs and requirements of each department, promoting a more systematic and modernized approach to academic practices in the university college.



On the other hand, the current manual transfer of documents and paperwork in the College, especially in three department areas, presents significant challenges. The lack of a systematic approach prevents effective performance of duties, leading to an inconvenient process.

Ultimately, the research's specific focus on reducing the difficulties related to faculty members' daily workflows is what makes it so important. In an environment where teaching strategies and professional development are critical, our E-Portfolio System seeks to offer educators an innovative platform to present their distinctive approaches to teaching, exchange useful feedback, and monitor their continuous professional development. In doing so, this study becomes an impulse for radical transformation, improving not only the College's operational effectiveness but also the faculty and staff overall educational experience.

Significance of the Study

This study is significant because it introduces a digital system to improve academic and administrative processes within the College of Arts and Sciences. By replacing paper-based documentation with an efficient digital platform, it enhances organization, storage, and retrieval of essential teaching materials.

Academically, the E-Portfolio System provides faculty members with an innovative way to present their teaching methods, monitor professional growth, and collaborate with colleagues. It encourages the exchange of ideas and best practices, ultimately enhancing the quality of education within the institution.

Administrators will benefit from the system's ability to efficiently manage faculty records, reducing paperwork and simplifying documentation processes. The secure framework ensures data confidentiality, making it a reliable tool for storing academic achievements and professional credentials.

Beyond the university, this study contributes to broader sustainability goals by promoting digital transformation in education. Reducing paper use supports environmental sustainability while also improving workflow efficiency. This initiative aligns with the university's goal of adopting modern technologies to enhance productivity and academic management.



Overall, the E-Portfolio System represents a step toward a more organized, efficient, and technologically advanced educational environment within the College of Arts and Sciences.

Scope and Limitations of the Study

- 1. This study focuses on the development and implementation of an E-Portfolio System designed specifically for the College of Arts and Sciences (CAS). The primary goal is to create a digital platform that enables faculty members to manage and showcase their professional portfolios efficiently. The system will facilitate document storage, streamline academic processes, and enhance the accessibility of teaching materials while ensuring security and data integrity.
- 2. The E-Portfolio System will be exclusively available to faculty members within the College of Arts and Sciences. It will provide a platform for instructors to upload, store, and manage learning materials, academic records, and other professional documentation. The system will also feature a secure login process, a dashboard for navigation, and designated departmental sections to categorize subjects and courses effectively. Authorized personnel will oversee system maintenance, ensuring smooth operations and data accuracy.
- 3. The system will allow faculty members to log in, view their profiles, upload and manage academic materials, and track their professional development. However, access to other instructors' resources will be restricted to maintain data confidentiality and integrity. Additionally, an export function will be implemented, enabling users to share documents in various formats for enhanced collaboration and curriculum management.
- 4. Despite its anticipated benefits, the E-Portfolio System has certain limitations. The system will be exclusively accessible to faculty members within the College of Arts and Sciences, meaning other university departments will not have access to its



features. Furthermore, since it is a web-based platform, a stable internet connection is required for optimal functionality. Faculty members will have limited administrative privileges, ensuring that only authorized personnel can make significant modifications to the system's content and structure.

5. The study will primarily focus on the design, development, and testing of the system, utilizing HTML, CSS, PHP, and JavaScript. The evaluation process will be conducted based on the ISO 25010 framework to assess the system's functionality, usability, and security. The implementation plan will outline strategies for system deployment and long-term maintenance to ensure sustainability and effectiveness within the College of Arts and Sciences.

Objectives of the Study

The general objective of this study is to develop and design an E-Portfolio System exclusively for the College of Arts and Sciences.

Specifically, the study has the following objectives:

- Analyze the importance of assessing educator's data to understand its valuable insights and to identify the recurring trends, preferred approaches, and specific difficulties encountered when managing their professional portfolios. In addition, it will allow them to develop targeted solutions and support systems that address their needs directly.
- 2. Design the project with the following features:

a. Login Page

This feature will be used by the authorized personnel and users (instructors) for the purpose of accessing and using the system.

b. Registration

This functionality is designed to register instructors within the system and subsequently save their information in the database.

c. Dashboard

This will serve as the system's home page, where users can view the CAS department's forums and updates.

d. Department Page (Authorized Personnel)

These features consist of different courses and subjects within departments in CAS, where the authorized personnel can easily navigate the instructors.

e. Output Compliance Progress

The output compliance progress is for the reports or status of every department regarding the submitted requirements and documents of the faculty.

f. Profile Information

It consists of the basic information of the instructors; the logged instructors can see their handled subject and courses, learning materials, and other academic contents. Instructors can also edit their semestral information.

- Develop the project using the markup languages HTML and CSS, as well as the programming languages PHP and JavaScript to create a website and deploy it to a web server. To develop the system, use programming applications such as Visual Studio and Sublime.
- 4. Test and improve the projects to ensure functionality, usability, and security of the E-Portfolio System.
- 5. Evaluate the project based on ISO 25010.
- 6. Prepare implementation plan for the deployment of the project.

Expected Outputs



Development of an E-portfolio System in College of Arts and Sciences (CAS), aims to design and develop an electronic portfolio (E-portfolio) system for the College of Arts and Sciences at Cavite State University – Main Campus, Indang, Cavite. The system will facilitate the secure management and storage of processing documents and personal information for authorized faculty instructors. Its effectiveness will be evaluated in terms of functionality, suitability, usability, and security.

Moreover, the target beneficiaries of the project are the administrators and authorized faculty instructors of the College of Arts and Sciences. System will define two user roles: Administrators will be granted to have a complete system access, enabling managing information. Meanwhile, faculty instructors will have few and limited features to use. This allowing them to oversee their profiles, upload, and access learning materials, and utilize pertinent features.

E-portfolio system will be web-based and accessible through standard web browsers on desktop, ensuring ease of use and convenience for all users. It will encompass essential features accessing admin page, login and registration, profile information management, dashboard, department-specific sections, CRUD operations, and advanced search filters.

However, the e-portfolio system has some limitations. Accessing the system requires a stable internet connection. Additionally, authorized instructors are restricted from handling processing documents and downloadable resources.

Finally, the subsequent implementation of the study is exclusive to the College of Arts and Sciences, the overall structure of the system is only for the use of the CAS. Therefore, other colleges within the university are not covered in this study.

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