IT Educators: Seminar Management for it Faculty in Pangasinan State University – Alaminos City Campus

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ABSTRACT

Seminar means education, but for others, it is also an opportunity to interact with seasoned professionals and make strides in their career advancements. Organizing these seminars is becoming increasingly time-consuming for IT Faculty in Pangasinan State University - Alaminos City Campus (PSU-ACC) are having a difficult time handling the attendance, documentation, and reporting. Faculty invariably spend too much time manually tracking records of the seminars attended, obtaining certificates and compiling details in reports. This lost time could be very well spent on teaching or research. We propose the need for a Digital Seminar Management System that tracks all seminars attended, sends notifications, and generates reports automatically. With the use of the Rapid Application Development (RAD) methodology, the system has flexibility, takes intelligence into consideration and is able to anticipate the needs of the faculty and administrators. To determine what the faculty truly needs, we used a mixed-method approach; surveys, interviews, and direct observations. Because of limited personnel, it is hypothesized that a centralized database, real-time updates, paperless features, and time saving automation will reduce the amount of non-teaching work, and or paperwork done by faculty. Most importantly, the system will make it easier for teachers to track and manage all their paperwork in an organized manner. It also makes sure that participation in seminars is documented and accessible easily by the faculty, thus supporting self- professional development.

Keywords - Seminar management, IT Faculty, Seminar Attendance Tracking, Real-Time Update

INTRODUCTION

Accurate and efficient score tabulation is essential in competitions and events to ensure fairness, transparency, and participant satisfaction. Pangasinan State University - Alaminos City Campus has long relied on traditional manual tabulation methods, which are time-consuming, prone to errors, and cause delays in announcing results. These inefficiencies disrupt event proceedings and contribute to participant dissatisfaction [1].

To address these limitations, digital solutions for event tabulation have been developed. Existing systems, such as the Harvard Tab Program, attempted to offer automated alternatives but were criticized for their complexity and unreliability [2]. As event management continues to evolve, there is a pressing demand for systems that provide efficient, secure, and real-time data processing [3]. Studies have demonstrated the benefits of systematic tabulation systems. Capstone guide highlighted the value of online repositories for score tabulation to improve monitoring capabilities and result accessibility [4]. Lee and Kim demonstrated how automated event systems enhance participant experiences while ensuring transparency [5]. Ontua, Garcia, and Patel emphasized how digital tabulation solutions foster efficiency and participant engagement [6]. Naeem underscored the importance of secure data processing in ensuring accurate outcomes [7].

This study introduces Flexi, a web and mobile-based event tabulation system specifically designed to modernize event scoring at Pangasinan State University - Alaminos City Campus. By leveraging advanced digital technologies, the system addresses the inefficiencies of manual tabulation, enhances result accuracy, and improves participant engagement.

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By automating manual processes, the Flexi system seeks to modernize event tabulation, promoting fairness, transparency, and efficiency at Pangasinan State University – Alaminos City Campus. The study aims to assess the system's functionality, user-friendliness, and impact on the event management process.

METHODOLOGY

PSU - ACC IT Educators Seminar Management System Platform was developed using multiple strategies in responding to the unique issues and requirements from the IT faculty. In achieving this, the Rapid Application Development methodology was utilized to ensure that the system platform was both user friendly and effective.

The Digital Seminar Management System can easily be developed using RAD as a framework. Incorporating quick and extensive user tests alongside prototyping, ensures efficiency in the newly developed seminar management system. This technology will ensure all the seminar management processes at PSU ACC is well coordinated with the faculty in a very simple and easy manner.

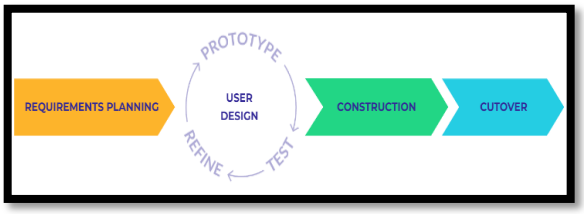

Fig. 1 Rapid Application Development Model

Throughout the Requirements Planning phase in RAD, users focus more on brainstorming requirements with stakeholders rather than collaborating with them closely. In this phase, the proponents work with the faculty members of IT Department, the Chairperson of IT Department, and the College Dean at PSU ACC to collect these detailed requirements for the Digital Seminar Management System.

In the User Design and Prototyping phase, RAD places an emphasis on developing a functional model as an initial step to structure the requirements. The RAD methodology also has the Construction phase which is repetitive and quick building of the system. Ensuring the system is developed rapidly and is able to respond to changing requirements or feedback perfectly captures the essence of RAD. In the RAD methodology, Cutover refers to the point of complete system integration and application of the system within the user environment and carries out all necessary operations and procedures.

The research is being done at Pangasinan State University – Alaminos City Campus (PSU-ACC) located in Alaminos City, Pangasinan. The validation of the IT Educators: Seminar Management for IT Faculty System and its acceptability focuses on administration which intends to be fulfilled by respondents with an adequate relevant knowledge to answer the interview and questions posed, as well as to provide sufficient feedback.

Table 1. Respondents of the study

Respondents	Number of Respondents
IT Department Faculty	6
IT Department Chairperson	1
College Dean	1
Document Custodian	1
Total Respondents	9

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RESULTS AND DISCUSSION

Identification of Problems in Seminar Attendance Reporting:

The IT faculty's attempt to prepare their quarterly or annual report on seminars attended appeared to be quite complicated. A primary challenge was the absence of standardized procedures for data collection, inadequate attendance documentation, and the late furnishing of attendance information by the teaching staff. Such discrepancies impeded the documentation team's capacity to prepare correct reports in a reasonable time. In addition, working without a central office led to more problems than solutions since the office relied on slow, manual, inaccurate, and overly laborious methods which later caused deadlines to be missed. These problems are very telling of pathologies in the IT faculty's existing processes and point to the need for more optimized solutions for data on the faculty's workload.

Acceptance level of the developed system:

As previously stated, the system was analyzed by three IT faculty members, and one representative from the College of Education and one representative from the Development and Communication Center. The evaluation board had to check six indicators: functionality, reliability, usability, effectiveness, maintainability, and portability. The overall weighted mean score of 3.73 (table 2), suggests that users consider it to be within the efficient range of the normal satisfaction level (the system is ready to be deployed).

Table 2. System Evaluation for the Overall Weighted Mean

Tabulation		
Functionality	3.6	Good
Reliability	3.67	Very Good
Usability	4.0	Excellent
Efficiency	3.6	Good
Maintainability	3.7	Very Good
Portability	3.8	Very Good
Overall Mean:	3.73	Very Good

Functionality (Weighted Mean: 3.6 – Good) Compliance and accuracy exhibited disparity where the system performed well in accuracy (4.0 – Excellent) but not so much in compliance (3.2 – Fair) which suggests some level of consistency with the compliance standards. Security (3.6 – Good) and suitability (3.6 – Good) also provided pointers for improvement for instance safeguard and feature development would have to be improved to satisfy the user's requirements.

Table 3. System Evaluation According to Functionality

Functionality	Mean	Description
Suitability – Useful for its purpose but needs improvement.	3.6	Good
Accuracy – Highly precise and reliable in generating data.	4.0	Excellent
Compliance – Some areas don't fully meet standards and expectations.	3.2	Fair

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Security – Adequate protection but could use more advanced safeguards.	3.6	Good
Weighted Mean:	3.6	Good

Reliability (3.67 – Very Good): The system performed well in recoverability scoring (3.8 – Very Good) and fault tolerance (3.6 – Good) as business operations would be least affected during the time when errors occur.

Table 4. System Evaluation According to Reliability

Reliability	Mean	Description
Maturity – Stable with minimal errors under normal use.	3.6	Good
Fault Tolerance – Handles minor issues without disrupting functionality.	3.6	Good
Recoverability – Recovers quickly after problems, ensuring minimal downtime.	3.8	Very Good
Weighted Mean:	3.67	Very Good

Usability (4.0 – Excellent): Very good scores in operability (3.8 – Very good) do indicate that the system is very easy to use and understand (4.2 Excellent) as well as learn (4.0 Excellent) but system design could benefit from some changes in order to further reduce the burden on a user's workflow.

Table 5. System Evaluation According to Usability

Usability	Mean	Description
Understandability – Concepts are easily recognized.	4.2	Excellent
Learnability – quick and easy for new users to get familiar with.	4.0	Excellent
Operability – The system is easy to use or operate.	3.8	Very Good
Weighted Mean:	4.0	Excellent

Efficiency (3.6 – Good): A 3.6 (Good) rating warranted both time and resource behavior. These results indicate moderation under the condition of ordinary use but there is some indication of optimization during times of peak usage.

Table 6. System Evaluation According to Efficiency

Efficiency	Mean	Description
Time Behavior – There is a fast response time in the system.	3.6	Good
Resource Behavior – Manage resources well but may need optimization during peak times.	3.6	Good
Weighted Mean:	3.6	Good

Maintainability (3.7 - Very Good): We noted that stability was impressive (4.0- Very Good), but the analyzability score (3.4 - Good) indicated that better diagnostic tools would be useful for troubleshooting.

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Table 7. System Evaluation According to Maintainability

Maintainability	Mean	Description
Analyzability – Errors are manageable, but better tools could help.	3.4	Good
Stability – Sensitivity to modification.	4.0	Very Good
Weighted Mean:	3.7	Very Good

Portability (3.8 - Very Good): The system performed well in all environments (adaptability: 3.8, conformance: 4.0), however, some aid may be required for the more complex setups (installability 3.6 – Good).

Table 8. System Evaluation According to Portability

Portability	Mean	Description
Adaptability – Works well across different environments.	3.8	Very Good
Installability – Easy to install, tough complex set ups may need support.	3.6	Good
Conformance – Performs consistently on various platforms.	4.0	Very Good
Weighted Mean:	3.8	Very Good

DISCUSSION

The solution provided directly attends to the problems reported by creating a centralized digital system that reduces manual labor and delays. Given its high usability and reliability scores, it is expected to improve the workflow processes and the accuracy of data captured. The moderate scores in compliance and security suggest that these are important aspects that need to be worked on in order to meet the chamfers of the institutions.

CONCLUSION

In conclusion, developing and applying the system is a milestone in the modernization of seminar administration at PSU-ACC. Lessening the administrative load and automating the system's reporting features allows faculty members to concentrate on their primary duties of teaching, research, and self-development, while the institution's efficiency and accountability is maintained.

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