



Student Organization Portal for Pangasinan State University

Kathleen Jane G. Esteves¹, Leo Gabriel V. Villanueva²

^{1,2}Pangasinan State University- Urdaneta City Campus
Urdaneta City, Pangasinan, Philippines

Article Info:

Received: 10 Feb 2026; Revised: 28 Feb 2026; Accepted: 2 March 2026; Available Online: 13 March 2026

Abstract - Student organizations play a significant role in fostering leadership, collaboration, and student engagement within the university community. However, many student organizations at Pangasinan State University (PSU) experience difficulties in communication, collaboration, event management, and resource handling due to the use of fragmented and outdated systems. This study aimed to develop a Student Organization Portal for PSU that centralizes organizational processes and improves operational efficiency among student organizations. The study utilized the Scrum software development methodology to guide the iterative planning, development, testing, and evaluation of the system. The proposed portal provides features such as organization announcements, event management, document sharing, member registration, calendar scheduling, and facility reservation. Through the implementation of these functionalities, the system enhances communication, collaboration, and accessibility of organizational resources among officers and members. Findings of the study revealed that the developed Student Organization Portal improved the management of student organization activities by providing a centralized and user-friendly platform. The system minimized communication delays, improved coordination among members, and streamlined administrative processes. The study concluded that the Student Organization Portal is an effective solution for improving organizational operations and student engagement within PSU.

Keywords - Student Organization Portal, Scrum Methodology, Student Organizations, Information System.

INTRODUCTION

The adoption of digital platforms for student organization management has gained traction in higher education institutions worldwide. Studies indicate that digital governance enhances efficiency, transparency, and accountability in institutional processes [3]. Research on student records digitization in Philippine universities also underscores the importance of data accessibility and management in supporting institutional operations [5].

Student organizations play an essential role in higher education institutions by promoting leadership, collaboration, social engagement, and holistic student development. Extracurricular involvement significantly contributes to students' personal growth, communication skills, and civic participation. In universities, student organizations serve as platforms

where students can develop teamwork, leadership competencies, and professional skills beyond classroom instruction [7].

Within Pangasinan State University, student organizations contribute greatly to campus life by organizing academic, cultural, and social activities that strengthen student involvement and university engagement. However, despite their importance, many organizations still rely on fragmented communication channels such as social media platforms, emails, bulletin boards, and messaging applications to manage organizational activities. Organizations that lack centralized information systems often experience inefficiencies in communication, delays in coordination, and poor information accessibility [4].



The absence of an integrated digital platform creates challenges in disseminating announcements, managing organizational documents, scheduling activities, and monitoring member participation. Ineffective information management can negatively affect organizational productivity and collaboration [2]. Similarly, organizations utilizing outdated manual processes are more vulnerable to communication gaps, redundant tasks, and operational inefficiencies [6].

In educational institutions, web-based portals have become valuable tools for improving organizational management and communication. Centralized online systems enhance collaboration, accessibility of information, and operational efficiency among users [1]. Moreover, automated systems reduce administrative workload and improve the overall user experience by streamlining repetitive tasks and centralizing resources.

To address these challenges, this study proposes the development of a Student Organization Portal for PSU. The portal aims to provide a centralized web-based platform where student organizations can efficiently manage announcements, events, membership records, document sharing, and facility reservations. Features such as calendars, collaboration tools, and event registration systems are expected to improve communication and operational coordination among officers and members.

The development of the Student Organization Portal aligns with the growing need for digital transformation in educational institutions. By automating organizational processes and centralizing information, the study seeks to enhance efficiency, promote student engagement, and strengthen collaboration within student organizations. Ultimately, the proposed system aims to improve the overall student organization experience within PSU while supporting a more connected and technologically enabled university environment.

MATERIALS AND METHOD

This study utilized the Descriptive and Developmental Research Design in developing the Student Organization Portal for PSU. The descriptive method was used to identify, analyze, and understand the existing challenges encountered by student organizations in terms of communication, collaboration, event management, and resource handling. Meanwhile, the developmental research technique focused on the design, creation, testing, and evaluation of the proposed web-based portal intended to address the identified organizational problems.

The descriptive aspect of the study enabled the researchers to gather relevant information regarding the current practices and difficulties experienced by student organizations within Pangasinan State University. Data gathering was conducted through interviews, surveys, and consultations with the Dean of Student and Alumni Affairs, student organization officer, and advisers. The collected data helped determine the specific system requirements and functionalities needed for the portal.

The developmental aspect of the research emphasized the systematic process of developing the Student Organization Portal using the Scrum Software Development Methodology. Scrum is an Agile development framework that promotes iterative development, continuous collaboration, flexibility, and regular feedback throughout the system development process. The methodology allowed the researchers to continuously improve the system based on user evaluation and testing results.

The development process consisted of the following phases:

1. Planning and Requirement Analysis

The researchers conducted initial investigations to identify the common issues encountered by student organizations. Information gathered from respondents was analyzed to determine

the necessary system features and functional requirements of the portal.

2. Product Backlog Preparation

A product backlog was created containing the list of desired system functionalities such as user authentication, organization management, announcements, event scheduling, document sharing, calendar integration, and facility reservation.

3. Sprint Planning

The system development was divided into several sprint cycles. Each sprint focused on specific modules and functionalities to ensure organized and manageable system development.

4. System Development

During each sprint, the researchers performed coding, interface design, database integration, and implementation of system functionalities. Incremental development allowed continuous improvement and refinement of the portal.

5. Testing and Evaluation

The developed system underwent functionality testing, usability testing, and user evaluation to identify system errors, performance issues, and areas for improvement. The Dean of Student and Alumni Affairs, organization advisers, selected student organization officers and students evaluated the system based on usability of the system.

6. Deployment and Final Revision

After successful testing and evaluation, the Student Organization Portal was finalized and prepared for deployment. Necessary revisions and improvements based on user feedback were implemented to ensure system effectiveness and user satisfaction.

The use of descriptive and developmental research techniques combined with the Scrum methodology enabled the researchers to develop a functional, user-centered, and efficient Student

Organization Portal that addresses the operational needs of student organizations within PSU.

RESULTS AND DISCUSSION

The development of the Student Organization Portal for PSU successfully addressed the major challenges encountered by student organizations in communication, collaboration, and resource management. The developed system provided a centralized platform where organizations could efficiently manage announcements, events, membership information, and organizational documents.

The following section presents the visual interface of the developed portal, followed by a detailed analysis of its usability and administrative impact.

A. System Interface

To provide a clear understanding of the portal's architecture and user experience, the researchers documented the final output of the system.



Figure 1. Student Organization Portal Home Dashboard

Figure 1 presents the Home dashboard of the Student Organization Portal for PSU, featuring a centralized layout for viewing the latest announcements, upcoming calendar events, and quick access buttons for managing organizational activities and profile settings.

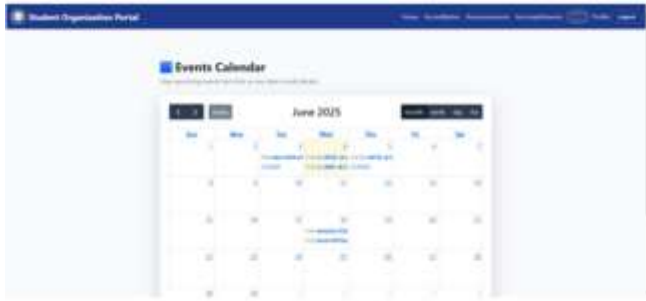


Figure 2. Student Organization Events Calendar

This module centralizes activity scheduling through an interactive calendar, enabling users to navigate monthly views and manage event details to prevent scheduling conflicts and eliminate manual tracking.



Figure 3. Organization Profile Management Interface

In this section, student leaders can manage institutional details, including organization name, adviser information, type, and contact details. The interface allows for real-time updates and logo customization, ensuring that organizational records remain current and accurate.



Figure 4. OSAA Administrative Oversight Dashboard

The Office of Student and Alumni Affairs (OSAA) side of the portal provides high-level administrative oversight. It summarizes the status of all organizations, pending accreditations, and university-wide announcements, allowing for more proactive community management.



Figure 5. Organization Account Status Management

This administrative module figure 5, allows the admin to browse through all registered student groups and manage their account status (Active, Inactive, or Pending). This ensures that only officially recognized organizations can utilize university resources.



Figure 6. Accomplishment Report Review Module

To enhance transparency and accountability, the portal includes an accomplishment report management system. Administrators can review digital submissions from organizations, track submission dates, and provide direct feedback, replacing traditional paper-based auditing.



Figure 7. Administrative Event Creation and Scheduling

Figure 7 shows that Admin can utilize this specialized calendar to create and broadcast events targeted at specific organizations or the entire university population. This centralized scheduling tool reduces the bureaucratic delays associated with manual event approval

B. System Usability Scale (SUS) Result

To evaluate the technical performance system, the researchers conducted a targeted interview with the Dean of Student and Alumni Affairs, student organization officer, and advisers and administered a System Usability Scale (SUS) survey to evaluate technical performance. To ensure a comprehensive evaluation, data were gathered from three (3) different campuses of PSU, providing a diverse representative sample of the university's organizational landscape.

To assess the system's overall usability, a SUS questionnaire was administered to a total of 19 respondents. The SUS is a widely used tool for measuring user perception of system usability based on a 10-item Likert scale.

Table 1.SUS Evaluation Results

Participant Group	Number of Respondents	Avg. SUS Score	Interpretation
Dean of Student and Alumni Affairs	3	88.5	Excellent (Grade A)

Student Organization Officers	10	91	Excellent (Grade A+)
Student Organization Advisers	6	85.5	Excellent (Grade A)
Overall Average	19	88.3	Excellent (Grade A)

The overall average SUS score of 88.3 confirms that the portal is highly effective across diverse administrative and student roles.

Deans rated 88.5, the high score from the Deans of Student and Alumni Affairs reflects the system's ability to provide high-level administrative oversight and streamline processes.

The highest rating came from the student organization officers which is 91.0 rating. This demonstrates that the portal successfully addressed their daily operational needs, particularly in real-time communication and document management.

The "Excellent" rating from organization advisers 85.5 highlights the system's reliability in tracking reports and ensuring transparency in organizational activities.

The convergence of these "Excellent" ratings across three different campuses indicates that the Student Organization Portal for PSU is not only technically sound but also strategically aligned with the needs of the entire university community, confirming that the system is easy to learn, user-friendly, and efficient across diverse user types.

CONCLUSION

The study concluded that the Student Organization Portal for PSU is an effective solution for improving communication, collaboration, and resource management among student organizations. The system successfully centralized organizational



processes, minimized communication gaps, and streamlined administrative tasks such as event management, membership coordination, and document sharing.

The use of the Scrum methodology contributed significantly to the successful development of the portal by enabling iterative improvements and continuous user feedback integration. The developed system provided a user-friendly and efficient platform that enhanced organizational productivity and student engagement.

Overall, the Student Organization Portal has the potential to strengthen organizational operations within PSU and contribute to a more connected and digitally supported student community.

RECOMMENDATION

Based on the findings and conclusions of the study, the following recommendations are proposed:

The university may officially adopt and implement the Student Organization Portal across all recognized student organizations within PSU.

Future developers may enhance the system by integrating mobile application support for easier accessibility and real-time notifications.

Additional features such as financial management, attendance analytics, and online voting systems may be incorporated to further improve organizational operations.

Regular system maintenance and updates should be conducted to ensure system reliability, security, and performance.

Training and orientation programs should be provided to student leaders and members to maximize the utilization of the portal.

Future researchers may conduct further studies to evaluate the long-term impact of the portal on student engagement and organizational performance

REFERENCES

- [1] Alharbi, S., & Drew, S. (2014). Using the Technology Acceptance Model in understanding academics' behavioural intention to use learning management systems. *International Journal of Advanced Computer Science and Applications*, 5(1), 143–155.
- [2] Dennis, A., Wixom, B. H., & Roth, R. M. (2019). *Systems Analysis and Design*. Wiley.
- [3] Haenlein, M., Kaplan, A. M., & Schoder, D. (2022). Higher education governance and leadership in the digital era. *Education Sciences*. Retrieved from MDPI.
- [4] Laudon, K. C., & Laudon, J. P. (2021). *Management Information Systems: Managing the Digital Firm*. Pearson Education.
- [5] Purcia, E. L., & Velarde, A. (2022). Student registration and records management services of the three private universities in the Philippines: Basis for academic records digitization. *American Journal of Multidisciplinary Research and Innovation*, 1(4). Retrieved from AJMRI.
- [6] Sommerville, I. (2018). *Software Engineering* (10th Edition). Pearson Education.
- [7] UNESCO. (2021). *Education and Student Development Programs*.

Please Include Contact Information:

NAME: Kathleen Jane G. Esteves

Contact No: +639267002482

Email Address: kjesteves.urdaneta@psu.edu.ph

NAME: Leo Gabriel V. Villanueva

Contact No: +639338117950

Email Address: lvillanueva@psu.edu.ph