

Project Management Framework for the 2026 Pan American Conference in Transportation and Logistics Research

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Project Summary

The success of international academic conferences depends on efficient project management. A methodical approach is required because these events frequently involve several stakeholders, various locations, and intricate logistics. Organisers can maximise stakeholder participation, reduce risks, and increase efficiency by incorporating PMI-PMBOK practices. Due to its dual-site structure between Universidad Autónoma de Baja California (UABC) in Mexico and San Diego State University (SDSU) in the United States, the upcoming PANAM 2026, the XIII Pan American Conference on Transportation and Logistics Research, poses unique obstacles. Communication, infrastructure, and scheduling must all be seamlessly coordinated for this bi-national execution. Visa restrictions that impact accessibility, cross-border funds allocation, and regulatory compliance between jurisdictions are additional complications. A data-driven management system is critical for monitoring key metrics, research submissions, and resource allocation.

This study examines how well PMI-PMBOK applies to academic conference planning, with a particular emphasis on stakeholder management, scope, time, cost, risk, and quality. It suggests a framework for best practices that integrates digital transformation using interactive dashboards and centralised databases. This study intends to set a standard for upcoming PANAM conferences by using literature reviews, comparative analysis, and stakeholder interviews. A thorough framework founded on PMI-PMBOK principles is needed for PANAM 2026 to improve operational effectiveness and cross-border cooperation.

Problem Statement

Through resource allocation optimisation and the definition of distinct project stages, PMI-PMBOK principles provide a proactive framework. A data-driven strategy that incorporates interactive dashboards and centralised databases can improve resource management overall, expedite research submissions, and improve decision-making. Conventional academic conferences frequently depend on reactive planning, which results in inefficiencies. A more successful and well-organised event will be made possible using structured techniques. Structured approaches are necessary for project management in large-scale event planning to maximise workflows, resource allocation, and stakeholder communication. Integration management for goal alignment, stakeholder management for efficient communication, risk management for discovering possible disruptions, time management for effective scheduling, and quality management for upholding conference standards are among the PMI-PMBOK procedures that are pertinent to PANAM 2026.

Conference planning is improved by digital transformation using hybrid event formats, real-time dashboards, and AI-driven analytics. A successful dual-site event model is the 2006 Commonwealth Games in Melbourne, which demonstrates how organized project management techniques enhance efficiency and cooperation in multi-location events (Commonwealth Games Federation, 2006).

State-of-the-Art

Case studies that use PMI-PMBOK for event planning demonstrate increased effectiveness, lower risks, and greater collaboration among stakeholders. While research submissions and participant monitoring are made easier by tools like EasyChair, there are still issues with PMI-PMBOK's capacity to be adjusted for academic versus business conferences. Academic conferences require flexibility in funding and scheduling, but corporate gatherings frequently

have strict budgets and schedules.

Maintaining consistent attendee experiences, coordinating in real-time, and communicating across time zones are major obstacles in multi-site conferences. To improve flexibility and responsiveness, research is required to determine how PMI-PMBOK concepts might be modified for use in academic settings.

Objectives

Specific Objectives

1. Identify key logistical challenges of planning a multi-site international conference.
2. Assess the effectiveness of Integration, Stakeholder, Risk, Time, and Quality Management in event execution.
3. Analyse the role of digital tools like EasyChair in streamlining conference planning and decision-making.
4. Propose a structured framework that can be applied to future PANAM conferences.

Scope and Limitations

Scope:

- Application of PMI-PMBOK methodologies to PANAM 2026.
- Evaluation of digital tools, stakeholder engagement, and data-driven decision-making.

Limitations

- The study will not develop new software but will analyse existing digital tools.
- Research is limited to academic conferences and does not generalize to other event management contexts.

Proposed Methodology

Literature Review

The literature review will examine academic papers, conference reports, and PMI-PMBOK guidelines to understand the role of structured project management in academic conferences.

Examining previous PANAM conferences and large-scale multi-site events will identify logistical challenges and strategies for improvement. Case studies include:

- PANAM 2023 – Challenges in cross-border coordination.
- Melbourne 2006 Commonwealth Games – Effective use of structured methodologies in multi-location event management.

Using insights from the literature review and comparative analysis, a PMI-PMBOK-based framework will be proposed, incorporating:

- Integration Management – Aligning goals across SDSU and UABC.
- Stakeholder Management – Structured engagement of sponsors, participants, and regulatory bodies.
- Risk Management – Mitigation strategies for visa delays, funding constraints, and logistical disruptions.
- Time Management – Optimized scheduling and real-time tracking for event coordination.
- Quality Management – Establishing benchmarks for academic content and participant engagement.

Schedule of Activities

- Weeks 1-4: Literature review on PMI-PMBOK applications in conference planning.

- Weeks 5-6: Analysis of past PANAM conferences and stakeholder interviews.
- Weeks 7-9: Development of a customized project management framework for PANAM 2026.
- Weeks 10-11: Validation of the framework through case study analysis.
- Week 12: Finalization of the research paper.

Expected Results

- A structured PMI-PMBOK-based framework for academic conference management.
- Identification of best practices for planning international conferences.
- Assessment of digital tools for enhancing decision-making and logistical coordination.
- A benchmark framework for future PANAM conferences.