

22 TrailBlazers

Domain - ‘Event Execution & Post - Event Analytics’

Problem Statement - ‘Event Execution & Post - Event Analytics’

PS Description - ‘A centralized event management platform for end - to - end event execution with post - event analytics to measure performance and engagement’

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PREFACE

Event management involves more than just planning and conducting an event; it requires effective coordination during execution and accurate evaluation after the event concludes. In practice, many events rely on manual coordination, informal communication, and fragmented data collection, which makes it difficult to understand attendee behavior, engagement levels, and overall event performance.

The **Event Execution and Post-Event Analytics Platform** is proposed to address this gap by focusing on how events are actually managed in real-world scenarios. The platform aims to support smooth event execution by clearly defining roles, tracking participation and engagement during events, and consolidating execution data for post-event analysis. By connecting real-time execution activities with structured post-event insights, the platform helps stakeholders evaluate event success more reliably and apply learnings to improve future events.

This project emphasizes process understanding and coordination rather than technology choices, and is designed to reflect practical workflows, constraints, and responsibilities observed in event management.

Introduction

Events such as corporate conferences, workshops, product launches, and cultural programs require careful coordination among multiple stakeholders, including clients, event managers, on-site coordinators, and attendees. While significant effort is invested in planning these events, challenges often arise during execution due to limited visibility into attendee participation, engagement levels, and on-ground operations.

In many cases, critical event data—such as RSVP status, actual attendance, session participation, and operational issues—is tracked manually or across disconnected processes. This fragmentation makes it difficult to evaluate event performance accurately and to relate execution quality to final outcomes. Post-event reporting therefore relies heavily on manual interpretation and assumptions rather than concrete execution data.

The Event Execution and Post-Event Analytics Platform is introduced to address these challenges by providing a structured approach to managing event execution and evaluating outcomes. The platform focuses on clearly defined roles, coordinated workflows, and consolidated data collection during events, enabling meaningful post-event analysis. By bridging the gap between event execution and evaluation, the platform supports better decision-making, transparent reporting, and continuous improvement in event management practices.

User Requirements

The Event Execution and Post-Event Analytics Platform must support multiple user roles involved in managing and evaluating events. The key user requirements are outlined below.

Client / Organization

- Request and initiate events with defined requirements.
- Track event progress and review post-event analytics.
- View consolidated attendee feedback and performance summaries.

Administrator

- Review event requests and assign event managers.
- Manage user roles, access control, and event ownership.

Event Manager

- Plan event agendas and engagement activities.
- Monitor live execution and track attendance.
- Analyze session-wise engagement and event success metrics.
- Review on-site issues and prepare post-event reports.

Attendee

- RSVP and check in to events.
- Participate in sessions and engagement activities.
- Submit feedback during or after the event.

On-site Event Coordinator

- Verify attendee check-ins and manage crowd flow.
- Coordinate sessions and report operational issues.
- Escalate critical issues to the event manager.

4) SYSTEM REQUIREMENTS :

(i) FUNCTIONAL REQUIREMENTS

Client / Organization

Allow the client to:

- Register on the platform
 - Request an event by submitting basic event details
 - Provide event requirements to the assigned event manager
 - View the final event performance report
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Administrator

Allow the admin to:

- Review event requests submitted by clients
 - Assign an event manager to a client's event
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Event Manager

Allow the event manager to:

- View client event requirements
- Create and manage the event agenda
- Configure engagement activities such as polls and Q&A

- Monitor event execution activities
 - Analyze RSVP, attendance, and engagement data
 - Evaluate success metrics such as attendance rate and engagement level
 - Generate and submit the event performance report to the client
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Attendee

Allow attendees to:

- RSVP for an event
 - Check in to the event
 - Participate in engagement activities such as polls, Q&A, and feedback
 - Exit the event with attendance recorded
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On-site Event Coordinator / Supervisor

Allow the on-site coordinator to:

- Verify attendee check-in
 - Manage entry, exit, and crowd flow
 - Report operational issues
 - Escalate reported issues to the event manager
-

Analytics & Reporting

Allow the system to:

- Record RSVP counts for each event
 - Record actual attendance based on check-in and check-out
 - Record participation data for engagement activities
 - Compare RSVP and actual attendance
 - Identify sessions with high and low attendee engagement
 - Store attendee feedback for post-event evaluation
-

(ii) NON-FUNCTIONAL REQUIREMENTS

Usability

Ensure:

- Ease of use for non-technical users such as event managers and on-site coordinators
 - Clear navigation for different roles (client, event manager, attendee)
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Performance

Ensure:

- Support for multiple attendees interacting simultaneously during live sessions
 - Recording of check-in and participation data without noticeable delay
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Reliability

Ensure:

- No loss of attendance and engagement data during the event
 - Continuation of event execution activities even if analytics are reviewed later
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Security

Ensure:

- Role-based access control (client, admin, event manager, attendee)
- Restricted access to event analytics for authorized event managers only

Scalability

Ensure:

- Support for events of different sizes, from small webinars to large exhibitions
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Maintainability

Ensure:

- Updates to event details and agendas without impacting completed events
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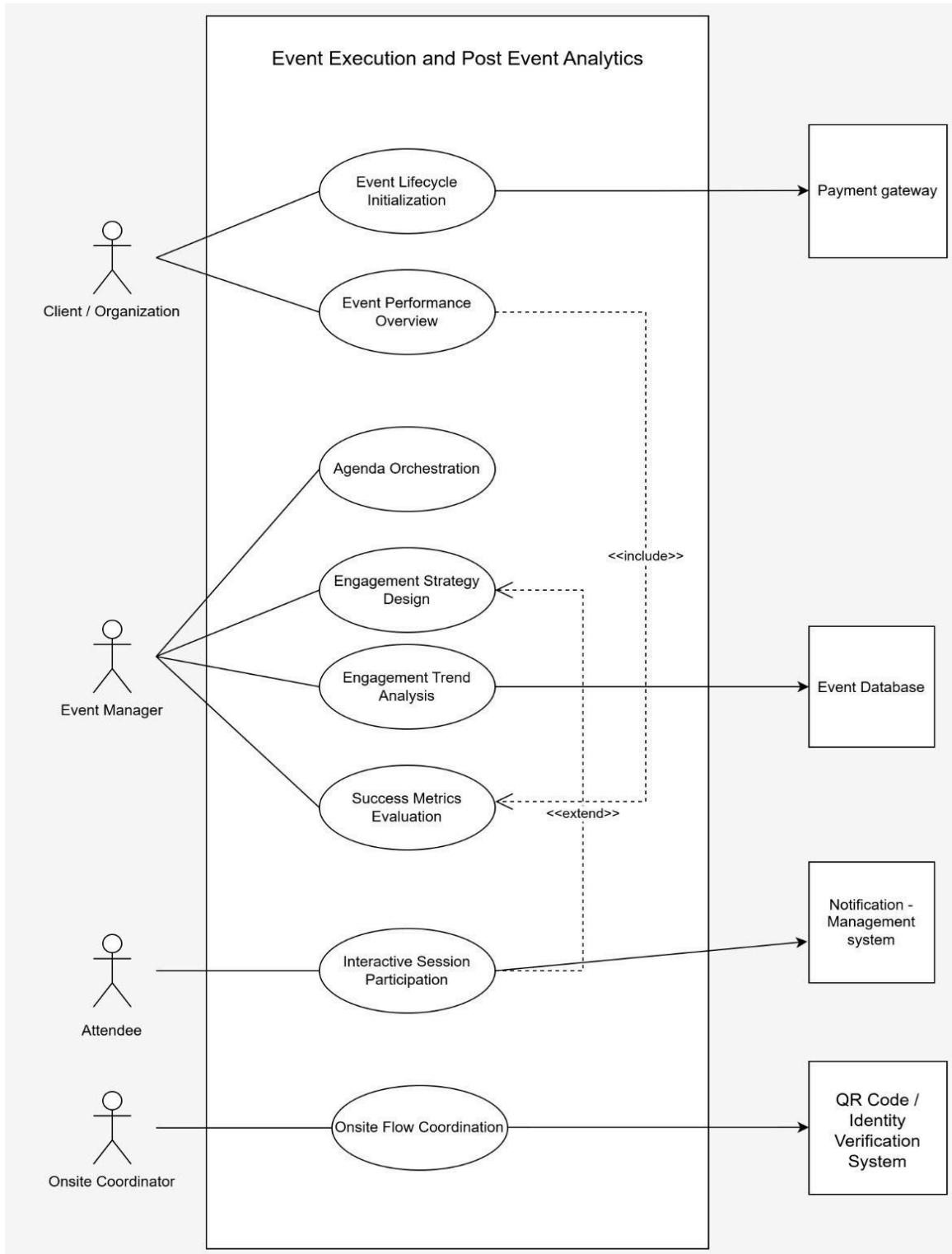
Constraints

Ensure:

- Analytics performed without automated or AI-based tools
- Reliance on manually interpreted participation and attendance data

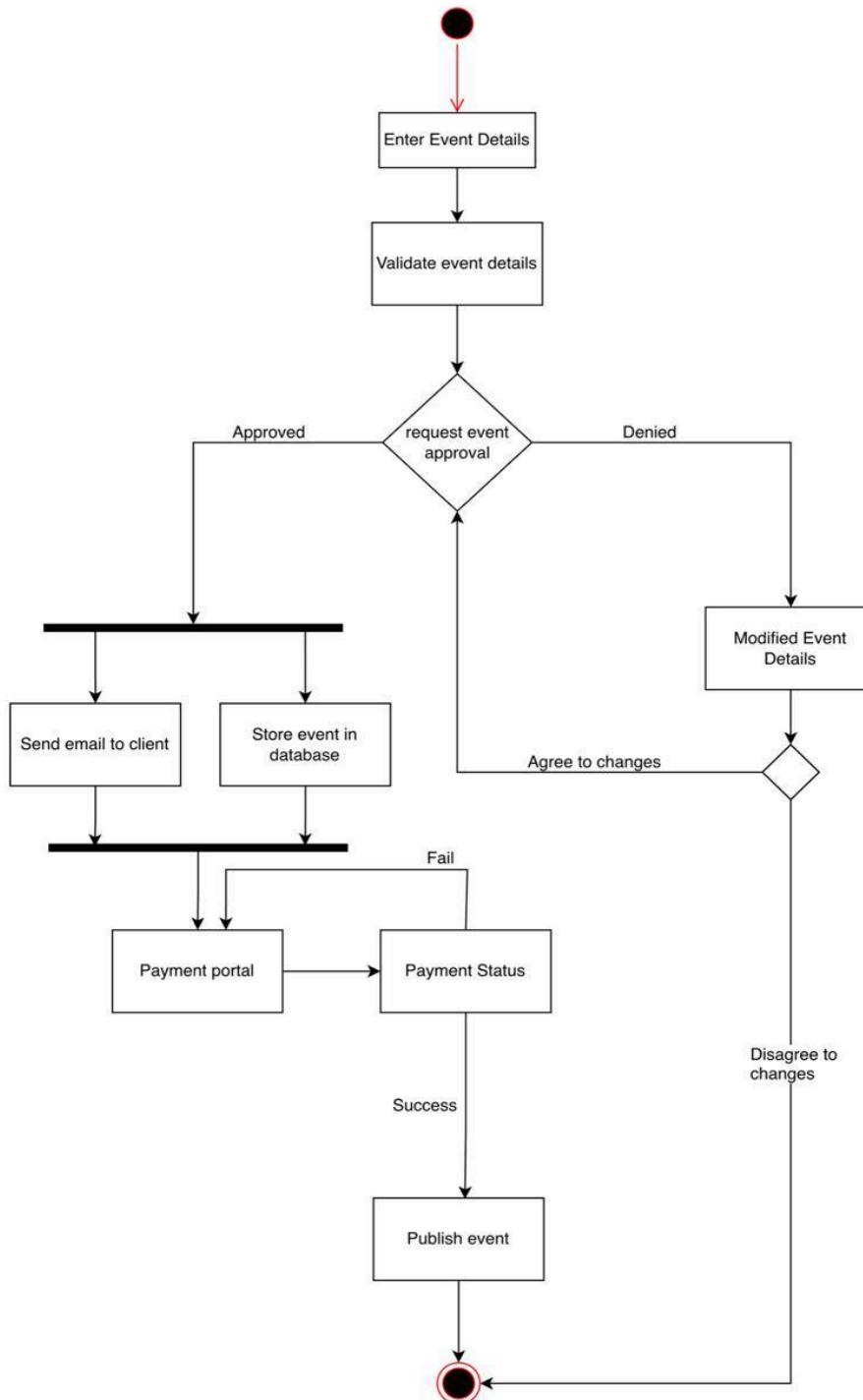
5) UML DIAGRAMS :

(i) Use Case Diagram :

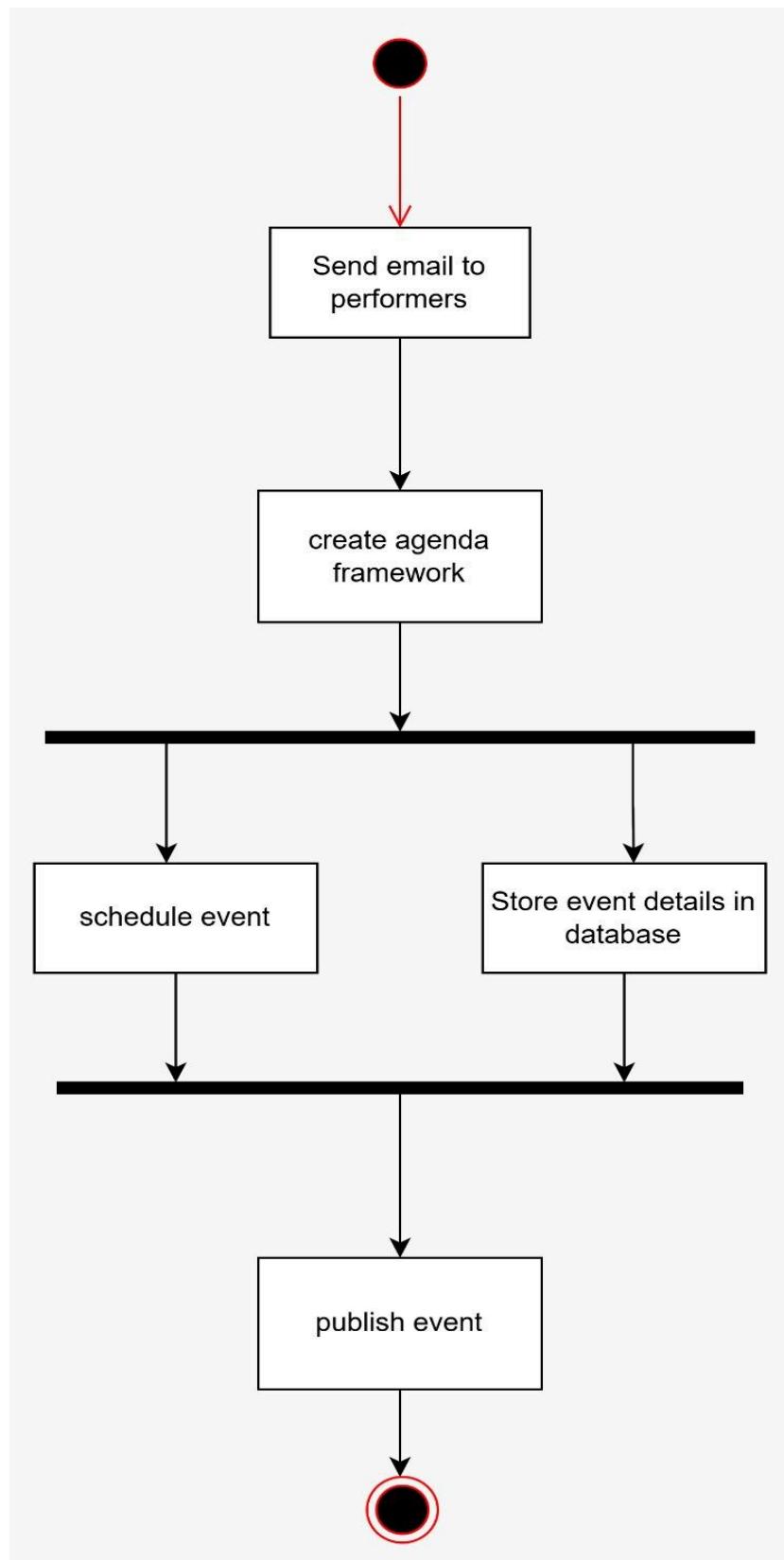


(ii) Activity diagrams :

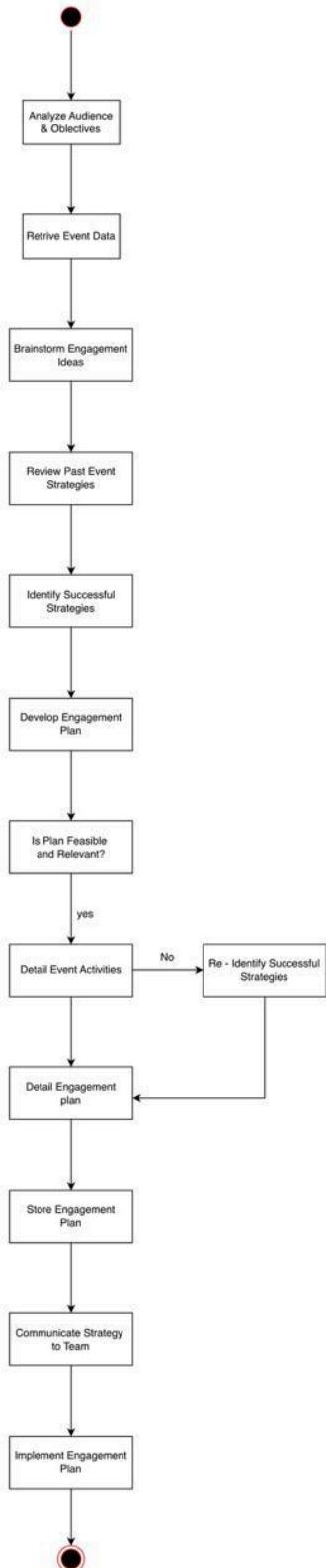
Client / Organization : Event Life Cycle Initialization :



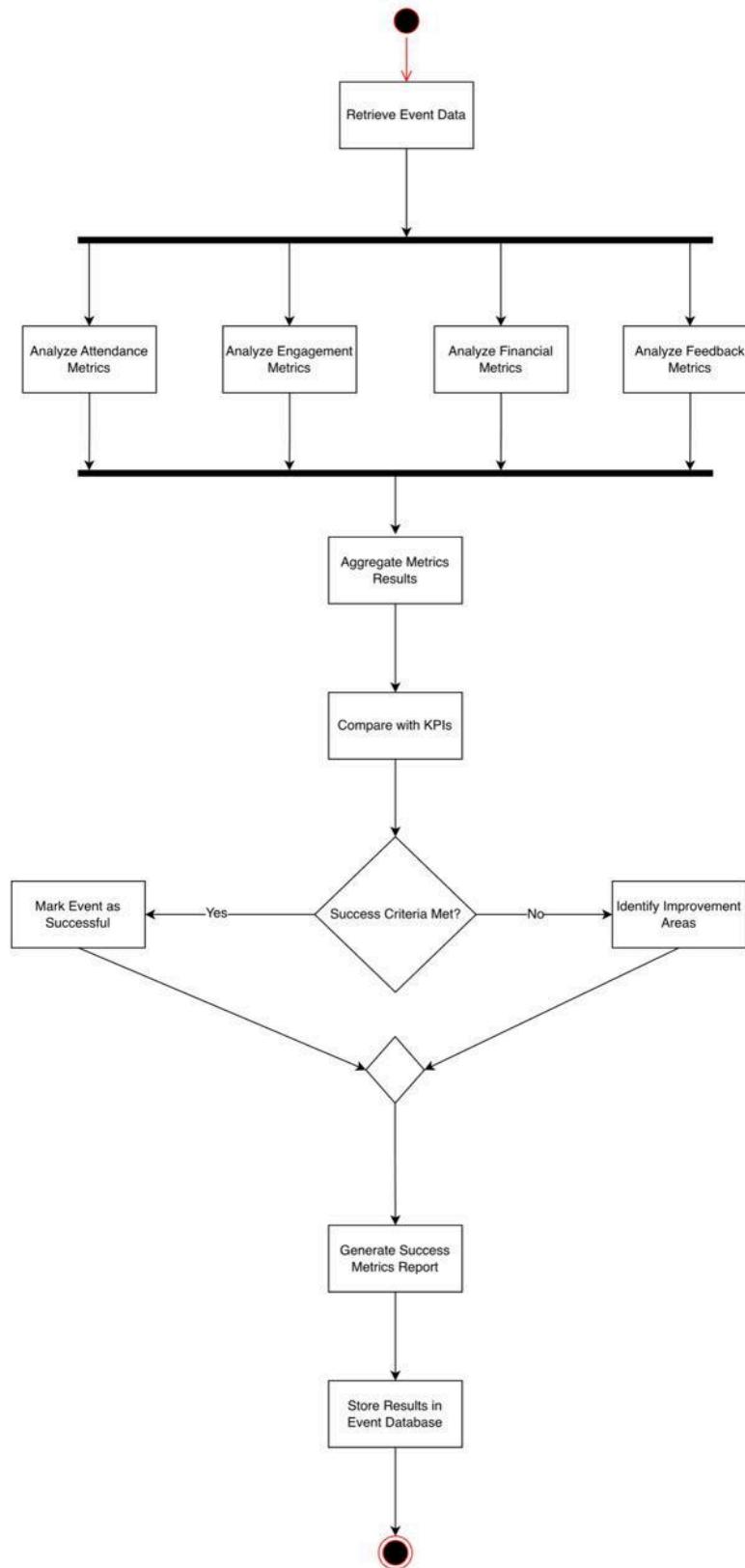
Event Manager : Agenda Orchestration :



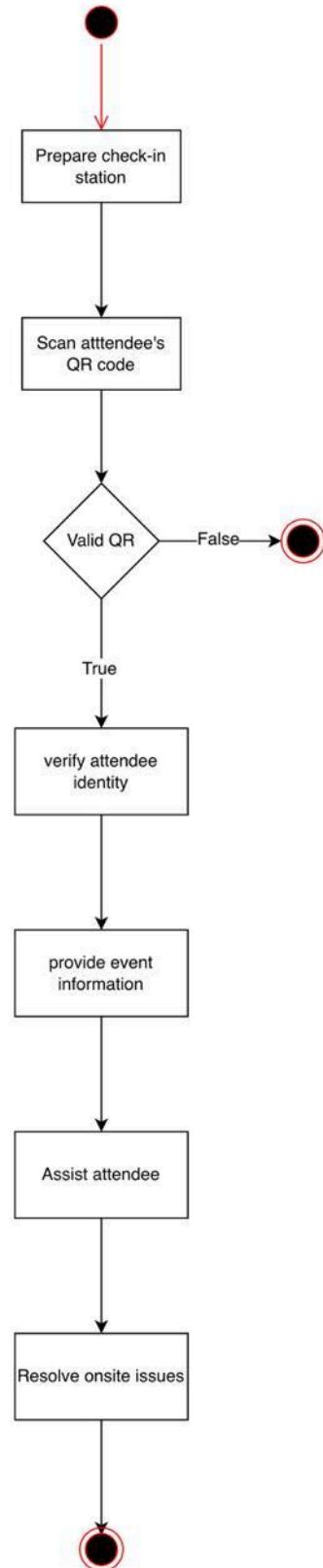
Engagement Strategy Design :



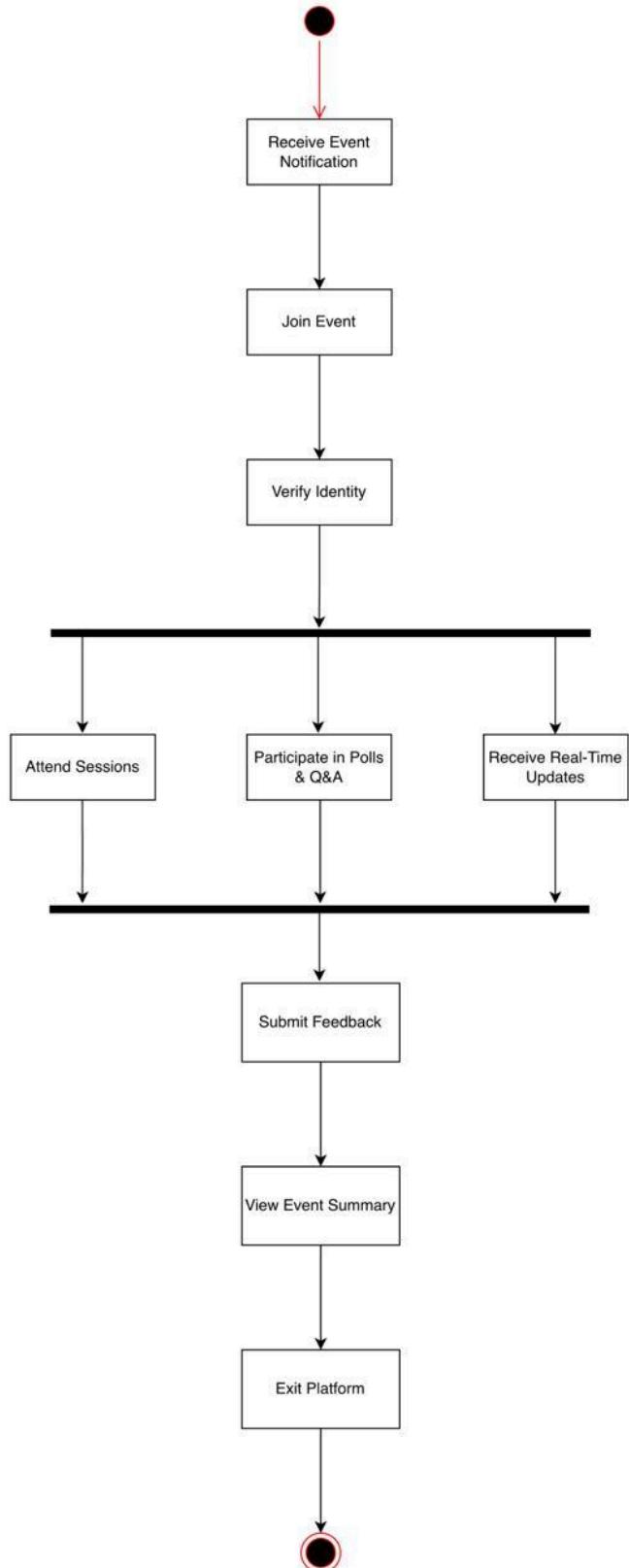
Success Metrics Evaluation:



On-site Coordinator : Onsite Flow Coordination :



Attendee : Interactive Session participation:



(iii) Sequence Diagram :

