Case Study: Council for the Management of Information Systems (CMIS)

Texas A&M University – Mays Business School

A Successful Conference – maybe too successful?

It was a brisk morning in early 2025, and the atrium of Mays Business School buzzed with the energy of students, faculty, and executives gathering for CMIS's annual conference, "Thriving in an AI World." Co-directors Dr. David Gomillion and Dr. Dwayne Whitten had spent months coordinating with sponsors, lining up speakers, and preparing student volunteers. The turnout was impressive—over 400 participants, including alumni and industry leaders from some of the Council's top corporate partners.

Yet behind the scenes, the cracks in CMIS's system were showing. Registration lists were scattered across spreadsheets and email threads. Faculty struggled to manage last-minute changes to speaker schedules. Students were confused about which workshops they had successfully signed up for, and industry recruiters asked for a single place to browse student resumes but were told it wasn't possible. The success of the conference only underscored the problem: CMIS had grown too large and complex to manage with ad hoc tools. To maintain its momentum, CMIS needed more than dedicated staff and student volunteers—it needed a centralized digital engagement platform that could bring together students, faculty, industry, and alumni in one place.

The question now was clear: How should CMIS design and prioritize this platform to sustain its mission and growth?

Background

The Council for the Management of Information Systems (CMIS) at Texas A&M's Mays Business School was established to create a bridge between industry and academia. For nearly two decades, it has helped shape the MIS curriculum, ensure industry relevance, and provide students with career opportunities. CMIS is governed by two faculty co-directors, Dr. David Gomillion and Dr. Dwayne Whitten, supported by staff coordinators, student volunteers, and an advisory board of industry partners. Membership includes companies from a range of industries including technology, consulting, energy, healthcare, and retail, who support CMIS financially and through active engagement. The Council's influence extends beyond classroom experiences. Events such as the MIS Mixer, Career Fair, Case Competitions, and the annual CMIS conference draw hundreds of students and corporate participants each year. CMIS also provides scholarships to outstanding students and

facilitates mentorship connections between alumni and current students. The success of CMIS has increased demand on its limited resources, creating tension between the scope of activities and the ability to coordinate them effectively.

Current Operations

CMIS relies on a patchwork of tools to manage its growing portfolio:
- Google Forms for event registrations
- Spreadsheets to track student sign-ups and resumes
- SurveyMonkey for case competition scoring
- Email threads to coordinate speaker schedules and mentor matches

While functional, these tools create inefficiencies and frustration:
- Registrations sometimes go missing
- Sponsors struggle to get timely access to student information
- Faculty spend hours merging data across platforms
- Administrators lack an easy way to produce engagement reports

Stakeholder Perspectives

"I was trying to sign up for two workshops, but I never got a confirmation email," said Alex Nguyen, a senior MIS student. "When I showed up, they told me the session was full."

"We love coming to Aggieland to recruit," noted Lisa Hernandez, an Exabyte sponsor. "But every time, it feels like we're reinventing the wheel. It's not scalable."

"For the case competition, I used three different tools—Google Drive, SurveyMonkey, and email," explained Professor Daniel Kim. "It works, but it's not efficient, and it doesn't give us the analytics we'd like."

"I want to mentor students," said Samantha Patel, class of 2018. "But I only hear about opportunities through LinkedIn or word-of-mouth. A single platform would make it much easier."

"At the end of each event, I spend days pulling together attendance numbers, sponsor touches, and student engagement data," admitted Maria Torres, CMIS coordinator. "It's hard to keep up, and we miss chances to show partners their impact."

Needs of the New System

The leadership team recognizes that the success of CMIS requires more than incremental fixes to existing tools. A comprehensive engagement platform must address the needs of

multiple stakeholders, from students and faculty to industry partners, alumni, and administrators. To support systems analysis and design, a detailed set of requirements has been compiled and prioritized. This expanded requirements specification is included in the Appendix to provide additional structure for drafting a Product Requirements Document (PRD).

Technology Approach

The CMIS Engagement Platform is envisioned to be an easy to use and easy to access system, leveraging existing staff familiarity with the AWS cloud. While both CMIS directors are technically savvy, they don't have the time to invest in a lot of customization or ongoing maintenance. They would like a student team to build out the system and have their student worker (an MIS student) maintain it.

Other Considerations

- FERPA privacy laws
- Ease of use, especially for recruiting
- Fast deployment
- Minimal human resources available to dedicate to the project

Conclusion

As CMIS looked ahead to its Spring 2026 conference, Dr. Gomillion and Dr. Whitten faced a critical decision. The organization had grown well beyond what its fragmented tools could support, and the pressure to deliver seamless experiences for students, faculty, industry partners, and alumni was mounting. A bold investment in a centralized engagement platform could transform the Council's operations and elevate its reputation, but it would also require navigating budget constraints, technology risks, and adoption challenges.

Exhibits

Exhibit 1: Current CMIS Event Cycle

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│       Google Form Registration      │
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│      Spreadsheets Track Sign-ups    │
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│      Manual Attendance Tracking     │
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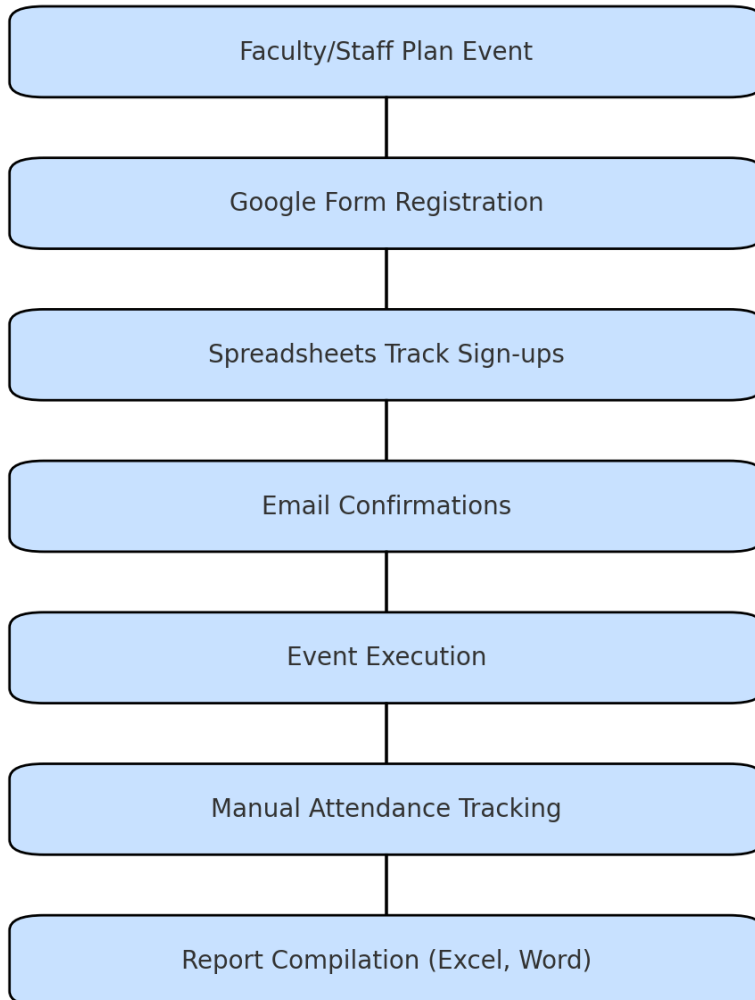
Exhibit 2: CMIS Sponsor Tiers with Current Sponsors

Tier	Sponsors
ExaByte	ConocoPhillips (founding member), Exabeam, Valero
PetaByte	No members currently listed
TeraByte	Booz Allen Hamilton, Chevron, GM, Grant Thornton, HBK Capital Management, Palo Alto Networks, PepsiCo, ShoWorks, Umbrage

Exhibit 3: Current vs Proposed System (Detailed)

Stakeholder	Current System	Proposed Platform Features
Students	Google Forms for registration; no integrated resume access; confusion over slots	Unified portal for resumes, job tracking, skill tagging, real-time event registration
Faculty	Fragmented tools (Google Drive, SurveyMonkey, email); lack of analytics	Automated competition management, scoring rubrics, feedback loops, engagement tracking
Industry Partners	Email scheduling for speakers; manual resume requests; inconsistent visibility	Tiered portal for sponsor access, event visibility, searchable student resumes
Alumni	Opportunities scattered via LinkedIn and word-of-mouth	Alumni portal for mentorship, giving opportunities, success stories, structured engagement
Administrators	Manual compilation of spreadsheets; limited metrics	Dashboards with real-time metrics, placement data, and customizable reports

Exhibit 5: CMIS Growth Metrics

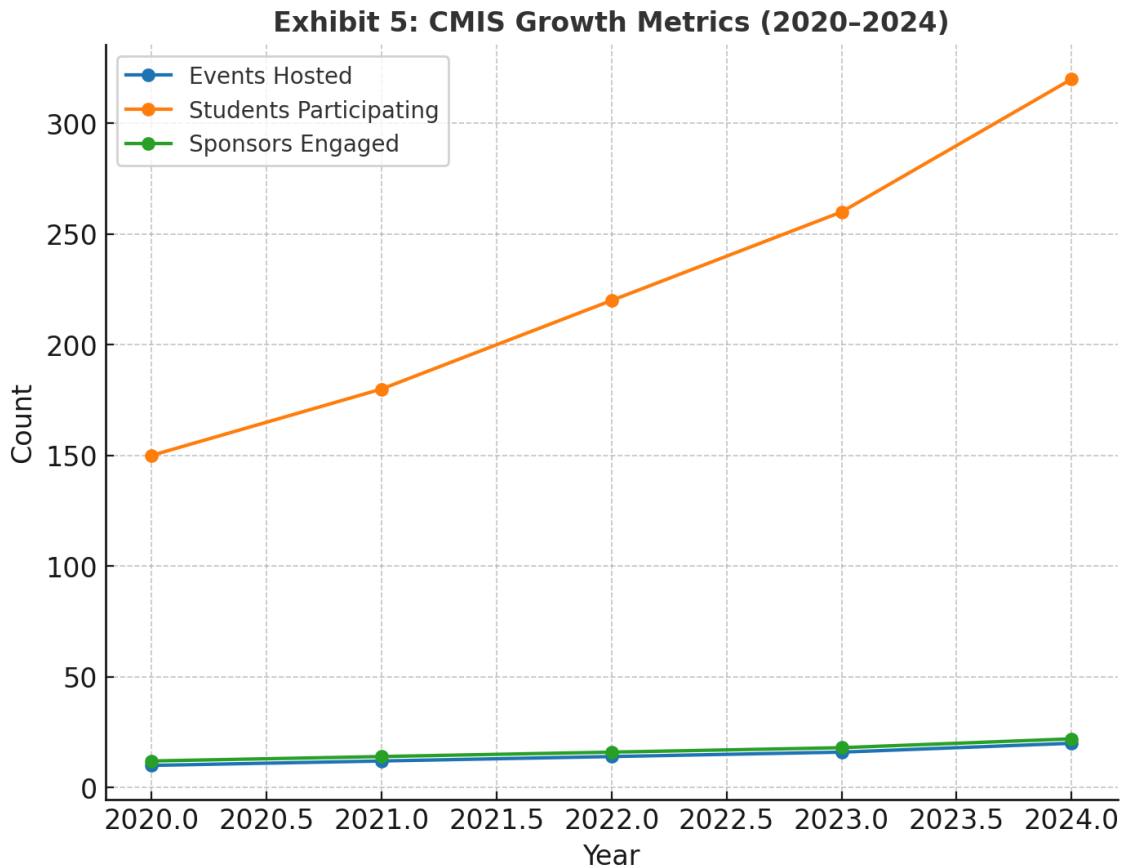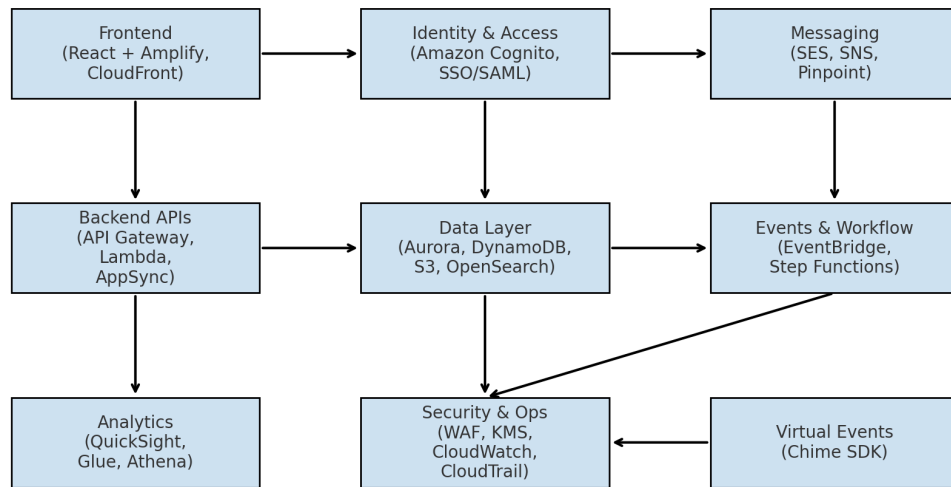**Exhibit 5: CMIS Growth Metrics (2020–2024)**

Exhibit 6: Reference Architecture & Timeline

The following diagram and timeline summarize the proposed AWS architecture and phased implementation plan for the CMIS Engagement Platform.
(This exhibit is intended to provide students with a structured starting point for technology planning discussions.)

Exhibit 7: AWS Reference Architecture

This exhibit shows a simplified three-column by three-row alignment of the CMIS Engagement Platform's AWS reference architecture. Each row represents a logical layer of the system (frontend, processing, analytics), and arrows represent flows between modules.

Exhibit 7: AWS Reference Architecture for CMIS Engagement Platform

Frontend (React + Amplify, CloudFront)	→	Identity & Access (Amazon Cognito, SSO/SAML)	→	Messaging (SES, SNS, Pinpoint)
Backend APIs (API Gateway, Lambda, AppSync)	→	Data Layer (Aurora, DynamoDB, S3, OpenSearch)	→	Events & Workflow (EventBridge, Step Functions)
Analytics (QuickSight, Glue, Athena)		Security & Ops (WAF, KMS, CloudWatch, CloudTrail)	←	Virtual Events (Chime SDK)

Appendix A: Expanded Prioritized Requirements List

Module	Stakeholders	Key Features	Concerns & Constraints	Opportunities	Dependencies	Priority
Student Career Portal	Students, Industry Partners, Faculty, Administrators	Resume repository with version history, job status tracking, skill tagging, profile completion prompts	FERPA compliance, usability, integration with career services	Recruiter access, placement analytics, branding opportunities	Secure login integration, resume standards	Highest
Event Management System	Students, Faculty, Industry Partners, Administrators	Online registration, invitations, waitlist management, feedback forms	Hybrid support, usability, data integrity	Event analytics, sponsor engagement reports	Integration with student profiles	Highest
Case Competition Platform	Faculty, Students, Judges, Administrators, Industry Partners	Team registration, submission uploads, judge scheduling, rubric scoring, structured feedback	Confidentiality, scoring transparency, faculty usability	Performance archive, sponsor showcase	Event Management System, Analytics Dashboard	Highest
Industry Speaker Exchange	Faculty, Industry Partners, Administrators	Faculty posting tool, tiered sponsor access, speaker proposal portal, searchable directory	Fair enforcement of tiers, adoption risk	Stronger faculty-industry ties, incentive for sponsorship	Accurate sponsor tier data, integration with comms	Secondary

Module	Stakeholders	Key Features	Concerns & Constraints	Opportunities	Dependencies	Priority
Mentorship Marketplace	Students, Alumni, Industry Partners, Administrators	Matching algorithm, meeting cadence suggestions, recognition system, messaging/scheduling	Avoid overloading mentors, privacy of interactions	Alumni goodwill, improved student readiness	Alumni portal	Secondary
Research Collaboration Hub	Faculty, Industry Partners, Graduate Students	Faculty project postings, industry problem submissions, joint publication tracking	IP rights, variable student involvement	Joint grants, enhanced CMIS reputation	Faculty buy-in, legal frameworks	Later
Alumni Engagement Portal	Alumni, Students, Administrators	Career progression tracking, success story submissions, connection tools, giving opportunities	Opt-in participation, avoid donation-only perception	Community building, fundraising support	Integration with TAMU alumni records	Later
Analytics & Communications Dashboard	Administrators, Faculty, Sponsors	Real-time metrics, role-based dashboards, automated communications, repository of past comms	Data security/privacy, risk of overload	Accreditation reporting, sponsor ROI, continuous improvement	Data pipelines from other modules	Later