

ACS Meetings APP – Case study

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Executive Summary

The ACS Meetings App is a critical digital tool for thousands of attendees, speakers, exhibitors, and organizers at ACS National Meetings. Despite its importance, the app has consistently faced negative feedback, citing navigation challenges, onboarding gaps, technical glitches, and limited engagement features. With more than half of attendees being first-time participants, these shortcomings posed significant barriers to their conference experience.

This project aimed to investigate these challenges and provide ACS with actionable recommendations for improvement. Through a structured approach—including a usability audit, competitor benchmarking of ~20 event apps, in-depth user interviews, journey and affinity mapping, and persona development—the research uncovered role-specific pain points across the attendee journey.

The outcomes included both **short-term recommendations** (e.g., improved onboarding flows, persistent navigation, timezone automation) and **long-term strategic opportunities** (e.g., AI-powered session recommendations, multi-event support, enhanced networking tools). Deliverables such as usability reports, competitor research, journey maps, personas, and a comprehensive research presentation provided ACS with clear direction for elevating the Meetings App.

Ultimately, this project not only highlighted where the ACS Meetings App stands today but also outlined a roadmap for transforming it into a more inclusive, user-friendly, and engaging platform that supports the diverse needs of its global audience.

Problem Statement

The **ACS Meetings App** serves as the primary digital touchpoint for thousands of attendees, organizers, speakers, and exhibitors at ACS National Meetings(Conference). Despite its central role, the app has consistently faced negative feedback from users, citing challenges such as poor navigation, ineffective filtering, onboarding gaps, and technical glitches. With over half of attendees being first-time participants, these usability issues create significant barriers to engagement and diminish the overall meeting experience. To address these concerns, it was essential to conduct in-depth research into the end-to-end attendee journey, uncovering user needs, pain points, and opportunities for improving the ACS Meetings App and, by extension, the conference experience itself.

My Role and Contribution

As a Business Analyst Intern, my role centered on understanding the challenges of the **ACS Meetings App** and driving research to uncover actionable improvements in user experience. My contributions spanned across multiple phases problem framing, usability

evaluation, competitive benchmarking, user research, and synthesis into strategic insights.

I began by reviewing prior research and performing a **usability audit** of the latest app version. As a first-time user myself, I documented critical UI and navigation issues that highlighted the difficulties new attendees face when engaging with the app. These findings were consolidated into a report and presented to key stakeholders, which resulted in approval to move forward with in-depth user research.

Next, I led a **competitor analysis** across ~20 event management apps, categorizing them into direct competitors (nonprofit organizations like IEEE, WHO, AACR) and indirect competitors (commercial apps such as Whova, Eventbrite, AWS Events). This benchmarking revealed that while the ACS app outperformed most nonprofit counterparts, it lagged behind commercial platforms in personalization, networking, and advanced engagement tools. These insights shaped the next phase of research focusing on attendee experience gaps that ACS could address.

Together with a UX Research Intern, I co-designed and executed **user interviews** with diverse participant groups including students, professionals, speakers, organizers, and exhibitors. We developed a facilitation guide emphasizing open-ended questions to surface motivations, behaviors, and pain points across the three phases of the attendee journey: **before, during, and after the meeting**. During interviews, one of us facilitated while the other mapped live insights into **journey maps on Lucid**, ensuring both qualitative richness and structured documentation.

Following data collection, I contributed to the **synthesis phase** by creating an **affinity map** and conducting both qualitative and quantitative analyses to validate patterns. This process helped us identify five personas grouped into three archetypes *First-Time Explorers*, *International Attendees*, and *Experienced Professionals* each representing distinct user needs and frustrations.

Finally, I supported the creation of a **consolidated journey map** and a comprehensive presentation that distilled our findings into clear recommendations. These included short-term improvements such as better onboarding and persistent navigation, and long-term opportunities like AI-powered personalization, unified app versions, and enhanced networking tools.

Through this process, I learned how to combine structured analysis with empathetic listening to translate user challenges into actionable design insights. This project not only sharpened my analytical and research skills but also directly contributed to ACS's vision of creating a meetings app that better serves its diverse global audience.

Approach & Methodology

To address the usability challenges of the ACS Meetings App and uncover opportunities for improvement, a multi-phased research methodology was followed. The approach

combined usability evaluation, competitive benchmarking, and user-centered qualitative research, ensuring both breadth and depth of insights.

1. Problem Framing & Usability Audit

The project began with defining the core problem and reviewing existing research on the ACS Meetings App. A structured usability audit of the latest app version was conducted to identify immediate UI/UX barriers, navigation issues, and onboarding challenges from a first-time user's perspective. This exercise established a baseline understanding of usability gaps.

2. Competitive Benchmarking

To contextualize ACS's position in the event app landscape, a competitor analysis was conducted across ~20 applications. Competitors were categorized into:

- Direct competitors: nonprofit scientific societies (e.g., IEEE, WHO, AACR).
- Indirect competitors: professional and commercial event platforms (e.g., Whova, Eventbrite, AWS Events).

This benchmarking highlighted that while the ACS app outperformed nonprofit peers in features, it lagged behind commercial platforms in personalization, networking, and engagement tools.

3. User Research through Interviews

A series of in-depth user interviews formed the core of the methodology. Participants represented diverse roles: students, international attendees, experienced professionals, speakers, organizers, and exhibitors. To ensure comprehensive coverage, interviews were structured around the three key phases of the attendee journey:

- Before the Meeting: planning, registration, travel logistics, and app onboarding.
- During the Meeting: navigation, scheduling, networking, and in-app experience.
- After the Meeting: follow-ups, certificates, networking continuity, and app re-engagement.

4. Journey Mapping & Affinity Mapping

Insights from interviews were captured in journey maps created in Lucid. Each journey detailed attendees' activities, goals, emotions, pain points, and tools across phases. To synthesize findings, an affinity mapping process was applied, clustering recurring patterns and behaviors into key themes.

5. Persona & Archetype Development

Based on thematic analysis, five personas were identified and grouped into three archetypes: First-Time Explorers, International Attendees, and Experienced Professionals representing distinct user mindsets and needs.

This framework provided a structured lens to evaluate role-specific challenges and tailor recommendations.

6. Synthesis & Insights

The final stage integrated qualitative themes with quantitative validation. Findings were consolidated into a comprehensive journey map and translated into actionable recommendations for ACS, ranging from short-term fixes (improved onboarding, persistent navigation) to long-term strategic opportunities (AI-driven personalization, multi-event support, in-app networking).

Key Deliverables & Outcomes

The project generated a set of deliverables that not only documented research but also provided actionable insights for ACS to enhance the Meetings App.

1. Usability Audit Report

- Documented critical UI/UX issues, navigation barriers, and onboarding gaps.
- Outcome: Helped stakeholders understand first-time user challenges and secured approval to proceed with deeper research.

2. Competitor Analysis (Report & Presentation)

- Benchmarked ACS against ~20 direct (nonprofit societies) and indirect (commercial platforms) competitors.

- Outcome: Positioned ACS within the event app landscape, showing it was stronger than nonprofit peers but lagging behind commercial platforms in personalization and networking.

3. User Interviews & Journey Mapping

- Conducted structured interviews across diverse attendee types (students, international participants, experienced professionals, speakers, organizers, exhibitors).
- Created detailed journey maps capturing behaviors, goals, tools, emotions, and pain points across *pre-, during, and post-meeting* phases.
- Outcome: Revealed role-specific needs and uncovered recurring friction points in navigation, onboarding, and engagement.

4. Affinity Mapping & Thematic Analysis

- Clustered qualitative data into themes and pain point categories using affinity maps.
- Outcome: Enabled pattern recognition across attendees and grounded findings in data, reducing bias.

5. Personas & Archetypes

- Consolidated five personas into three archetypes—*First-Time Explorers*, *International Attendees*, and *Experienced Professionals*.
- Outcome: Provided a framework for designing tailored features and role-based onboarding flows.

6. Final Research Presentation

- Synthesized all findings into a comprehensive presentation for stakeholders, including journey maps, personas, competitor benchmarks, and recommendations.
- Outcome: Delivered short-term “quick wins” (e.g., persistent navigation, onboarding videos) and long-term strategic opportunities (e.g., AI-powered session recommendations, multi-event support, in-app networking).

Documents

- [Competitor Analysis Report](#)
- [Competitor Analysis Presentation](#)
- [Affinity Mapping](#)
- [User Journey Map](#)
- [Final presentation](#)

Outcomes & Impacts

The project delivered outcomes that went beyond documentation—helping ACS gain clarity on the Meetings App’s shortcomings, positioning in the market, and opportunities for growth.

1. Organizational Impact

- The **usability audit and competitor analysis** created a shared understanding among stakeholders of where the ACS Meetings App stands: stronger than nonprofit peers, but behind commercial platforms in personalization and engagement.
- Findings from **user research and journey mapping** provided ACS with an evidence-based framework to guide decision-making, ensuring future app updates address real attendee needs rather than assumptions.
- By presenting both **quick wins** (e.g., persistent filters, onboarding videos, time zone sync automation) and **long-term opportunities** (e.g., AI-driven session recommendations, unified multi-event app, in-app networking), the project laid the foundation for a clear product improvement roadmap.

2. User-Centered Impact

- Research surfaced critical challenges faced by different attendee groups:
 - *First-time attendees* struggled with overwhelming schedules and poor onboarding, leading to recommendations for role-based onboarding flows.
 - *International attendees* faced visa, housing, and logistical barriers, resulting in suggestions for earlier communication, financial support guidance, and pre-meeting orientation resources.
 - *Experienced professionals and exhibitors* lacked strong networking tools, informing recommendations for LinkedIn integration, in-app attendee directories, and post-event reconnection features.
- These insights ensured that future app iterations would be more inclusive, accessible, and supportive of diverse user roles.

3. Strategic Impact

- The project positioned ACS to **compete more effectively** in the event app landscape by identifying gaps where nonprofit apps fall short and highlighting opportunities to adapt proven features from commercial platforms.
- Recommendations for **personalization, AI-powered tools, and networking support** gave ACS a vision for transforming its app from a basic scheduling tool into a comprehensive digital experience hub for its attendees.

4. Personal & Professional Impact

- For me, this project was a first deep dive into user research, allowing me to gain hands-on experience in usability auditing, competitor benchmarking, journey mapping, and affinity mapping.
- Collaborating with a UX Research intern and ACS stakeholders improved my ability to structure insights, communicate findings effectively, and translate research into strategy.
- Most importantly, I learned how to approach problem-solving empathetically balancing data with user stories to drive impactful recommendations.

Conclusion

The ACS Meetings App research project demonstrated the value of combining **usability evaluation, competitive analysis, and user-centered research** to uncover actionable insights. By capturing the real experiences of first-time attendees, international participants, experienced professionals, and exhibitors, the project ensured that recommendations were grounded in evidence rather than assumptions.

The findings positioned ACS to move forward with confidence: addressing immediate usability barriers, learning from best practices in commercial event platforms, and investing in long-term enhancements that will strengthen its competitive edge. More importantly, the project emphasized the importance of role-specific support and inclusive design in shaping meaningful attendee experiences.

For me, this internship project was both a learning journey and a professional milestone. It strengthened my skills in research, synthesis, and stakeholder communication, while contributing tangible value to ACS's mission of fostering stronger engagement at its national meetings. The outcome is not just a set of recommendations—it is a pathway for ACS to reimagine its Meetings App as a truly indispensable tool for its diverse and global community.