

CAPSTONE PROJECT · Winter 2026

CPS **Connect** Redesign

A UX research and redesign capstone project for Northeastern University's College of Professional Studies student engagement platform. From audit to usability study.



Agenda

01 Background & Overview

02 Project at a glance

03 11-week journey

04 Club management design

05 Design audit

06 The pivot

07 Original study plan

08 Redesigned study

09 Key findings

10 Live demo

Who We Are

A multidisciplinary team of Northeastern graduate students combining UX research, visual design, and digital strategy to improve CPS student life.

UX & Visual Design

Information architecture, wireframing, visual design systems, and interactive prototyping

UX Research

Heuristic evaluation, usability testing, user interviews, and data analysis

Digital Strategy

Project planning, stakeholder coordination, implementation roadmap, and impact measurement



Aishwarya Sivakumar



Drishti Ghanshani



Mingyue Xin



Jung-Tzu Chang



Yihong Jiang

Where We Started

The prior graduate student team laid crucial groundwork for our project through extensive discovery work. Their efforts provided valuable context and foundational research that informed our approach to the CPS Connect redesign.

01

Initial Discovery & Ecosystem Mapping

Comprehensive analysis of the existing CPS student engagement landscape and digital touchpoints

02

Stakeholder Interviews

Conducted interviews with students, club officers, and administrators to understand pain points

03

Draft Information Architecture

Developed wireframes and user flows for club discovery and event browsing

Gaps identified for our phase

No usability testing · No validated hi-fi designs · Undefined club workflows

Where we picked up

Testing · Refinement · Implementation planning

Project at a **Glance**

11

Weeks

Kickoff to final report

9 +

Audit Issues

Identified & resolved

1

Major Pivot

Mid-project redirect

50

Participants

Real CPS students

Tools & Technologies

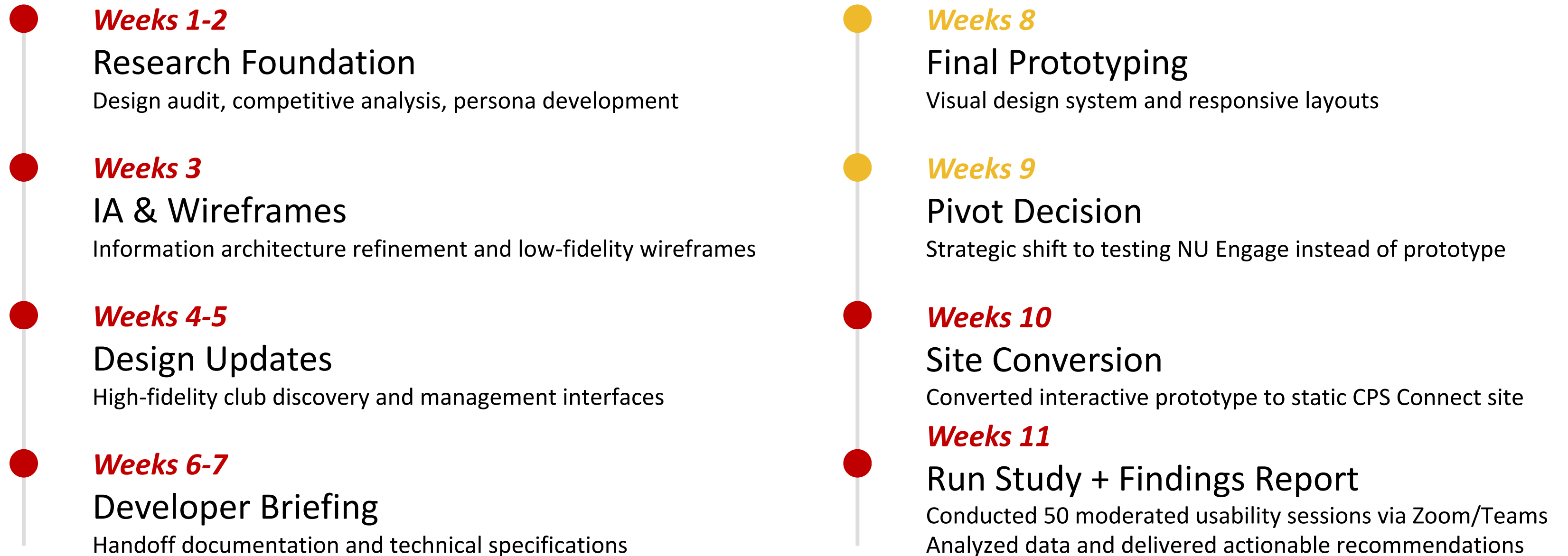
Design: Figma

Prototype: Figma/CSS interactive prototype

Research: Zoom/Teams for moderated sessions

Platform: CPS Connect (New static site), NU Engage for live testing

11-Week Journey



Red = completed · Amber = pivoted

Our Objective

To research, redesign, and validate improvements to the CPS student engagement platform. Making it easier for students to discover clubs, attend events, and feel connected to campus life.

1

Improve Discoverability

Make club and event discovery intuitive through better information architecture and search functionality

2

Validate with Real Users

Conduct moderated usability testing with actual CPS graduate students to gather authentic feedback

3

Align with Existing Systems

Ensure designs work within Northeastern's technical constraints and brand guidelines

4

Deliver Actionable Findings

Provide clear recommendations prioritized by impact and implementation feasibility

Our Design Goals

Core principles guided every design decision throughout the project, ensuring our solutions balanced user needs with technical realities.

01 Clarity First

Reduce the cognitive load. Students should understand what CPS Connect is and how to use it within second of landing on the page

02 Responsiveness

Design for the device students actually use, ensuring a seamless experience on mobile, tablet, and desktop.

03 Accessibility

WCAG 2.1 AA compliance ensuring all students can participate regardless of ability

04 Findability

Surface clubs and events through intuitive search, filtering, and category-based browsing, no dead ends.

05 Brand Alignment

Honor Northeastern's and CPS's visual identity: red, black, white, and clean typography throughout.

06 Feasibility

Design proposals must be realistic within the CPS platform's technical and administrative constraints.

Club Management

Core design challenge: how should students browse, filter, join, and manage their club memberships, and how should club officers manage their organizations?

Student Journey

- 01 Discover**
Filter clubs by category, size, and meeting frequency, and keyword search
- 02 Learn**
View club profile: description, upcoming events, club leader contacts
- 03 Join**
One-click membership request with SSO authentication
- 04 Engage**
See upcoming club events in personal dashboard; sync with calendar

Club Leader's Tools

Manage Members

Approve/decline requests, view member roster, assign roles

Post Events

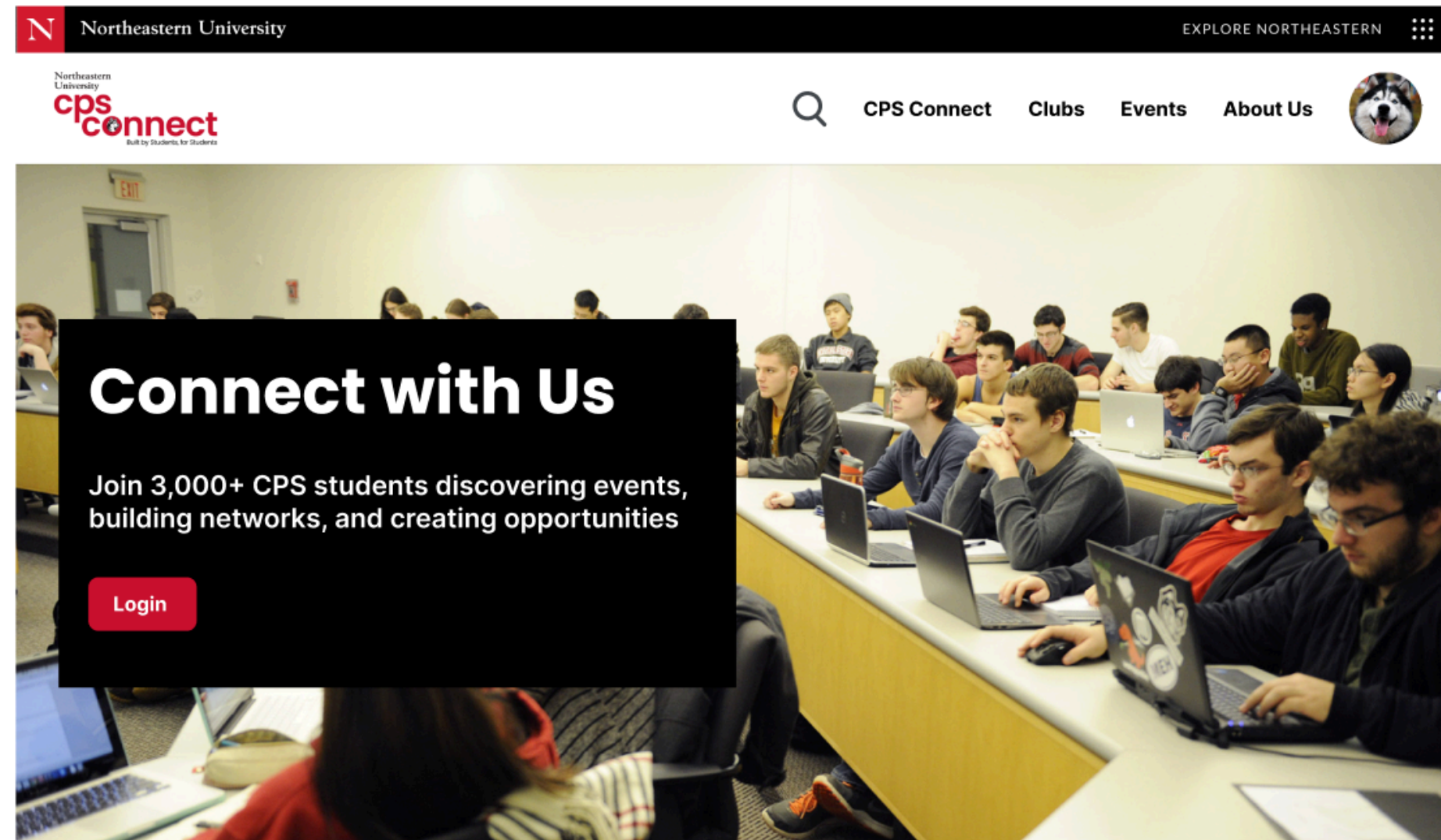
Create, edit, and publish events directly linked to the club page

Edit Club Profile

Update description, images, meeting schedule, and contact info

Login Page

Allow student to log in with NU SSO



Everything You Need in One Place



Discover Events

Browse workshops, networking sessions, social gatherings, and professional development opportunities tailored for busy CPS students.

250+ Events Annually



Join Clubs

Connect with student organizations that match your interests, career goals, and academic programs across all campuses.

60 Clubs & Organizations

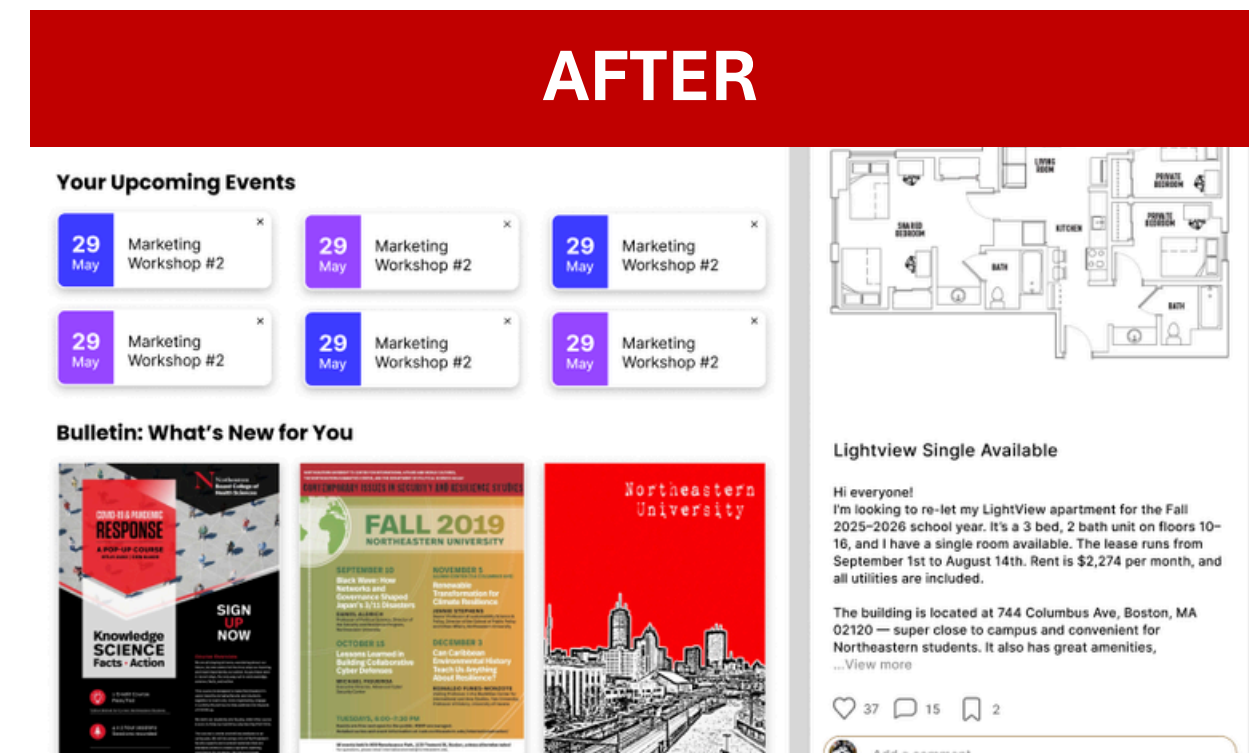
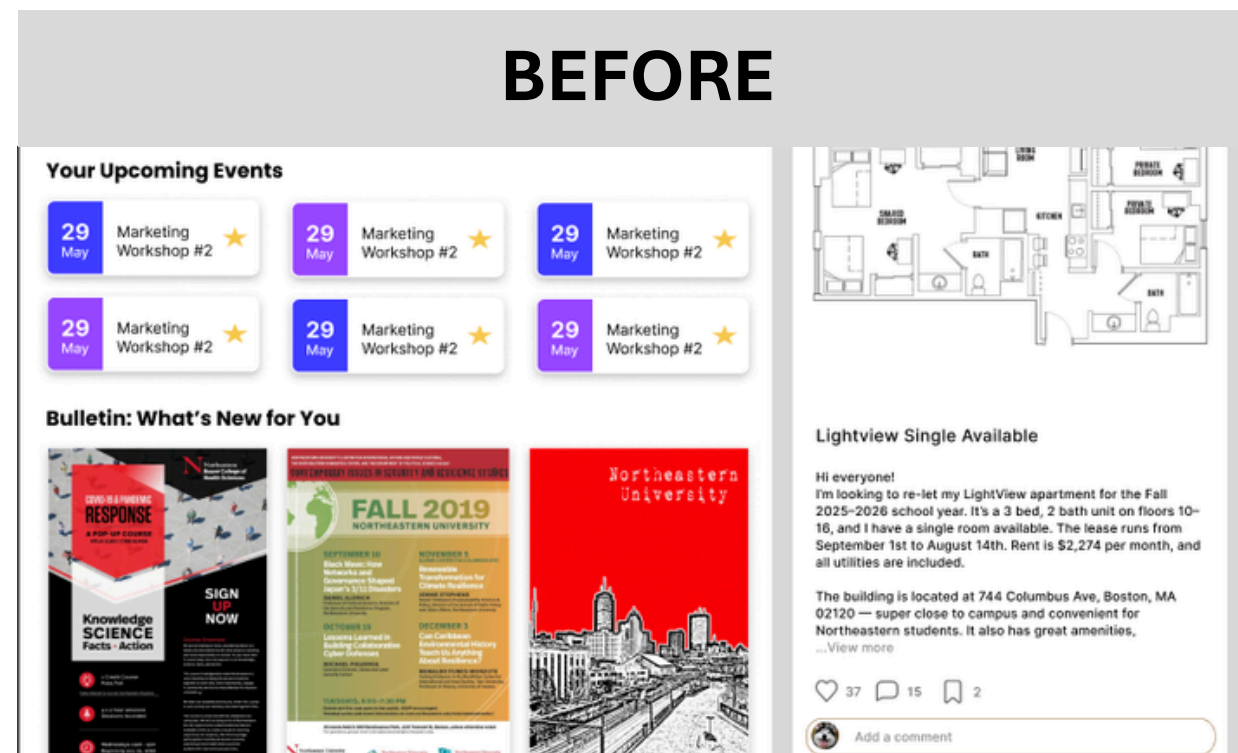


Stay Updated

Receive timely notifications about upcoming events, registration deadlines, and community announcements.

24/7 Platform Access

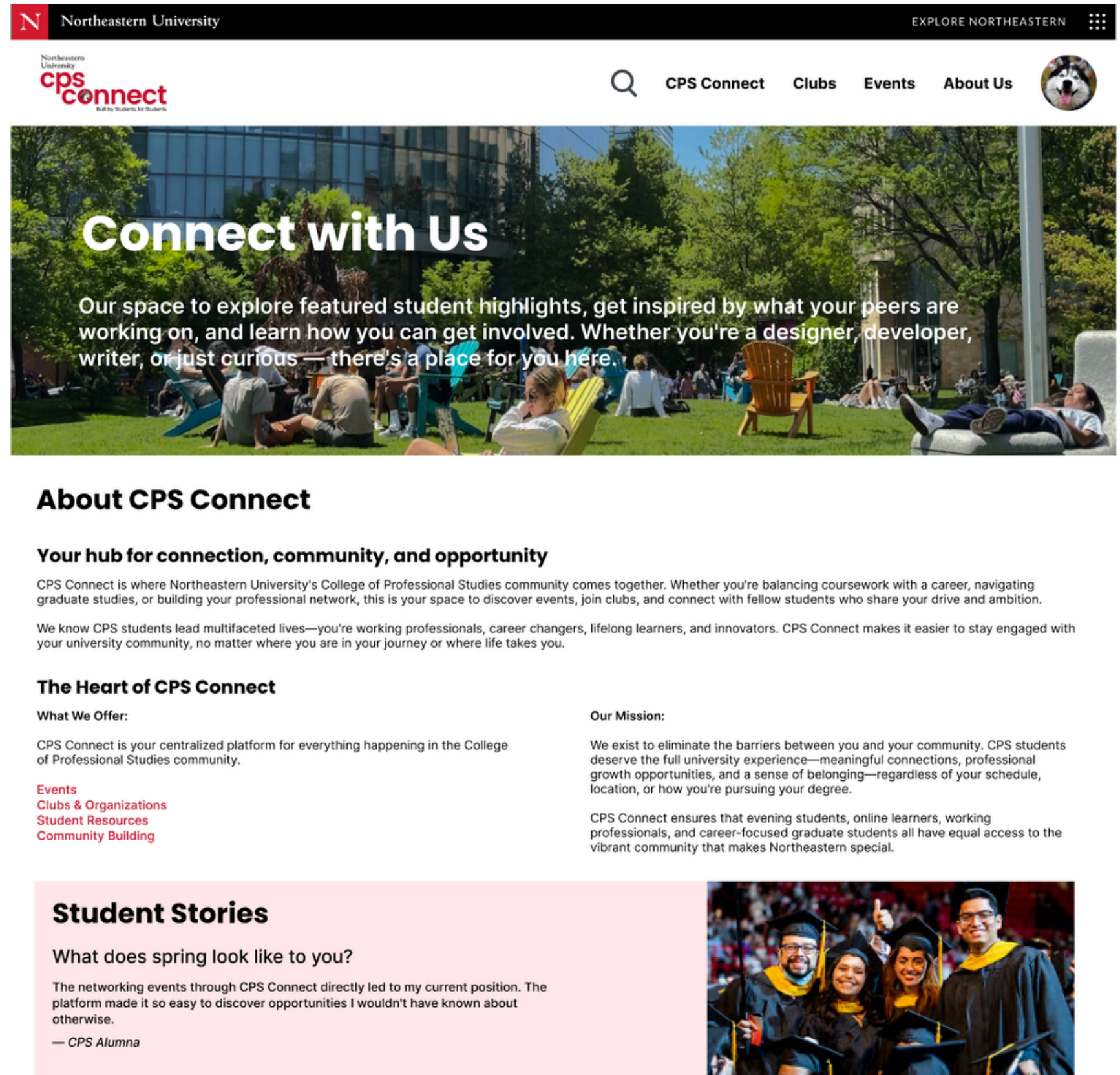
Home Page



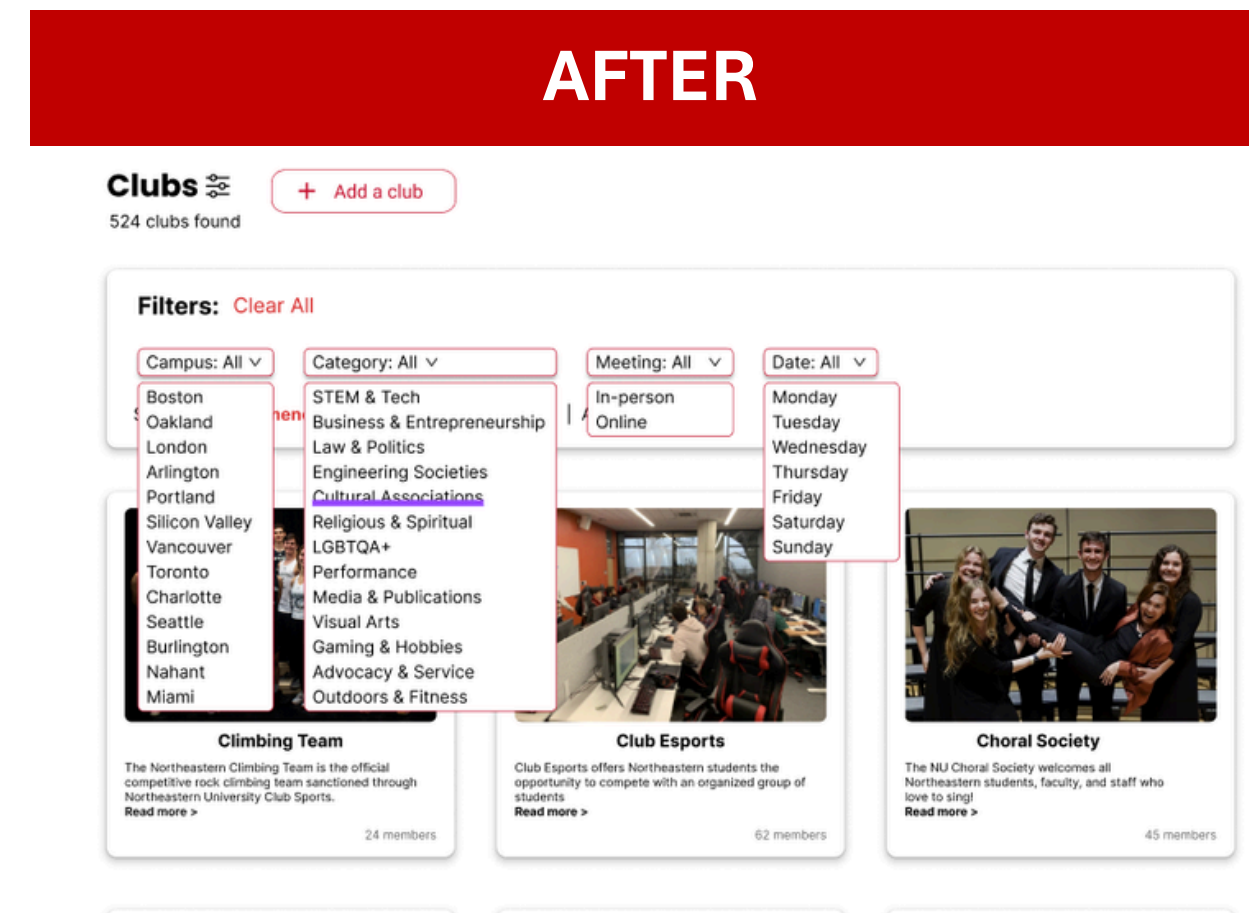
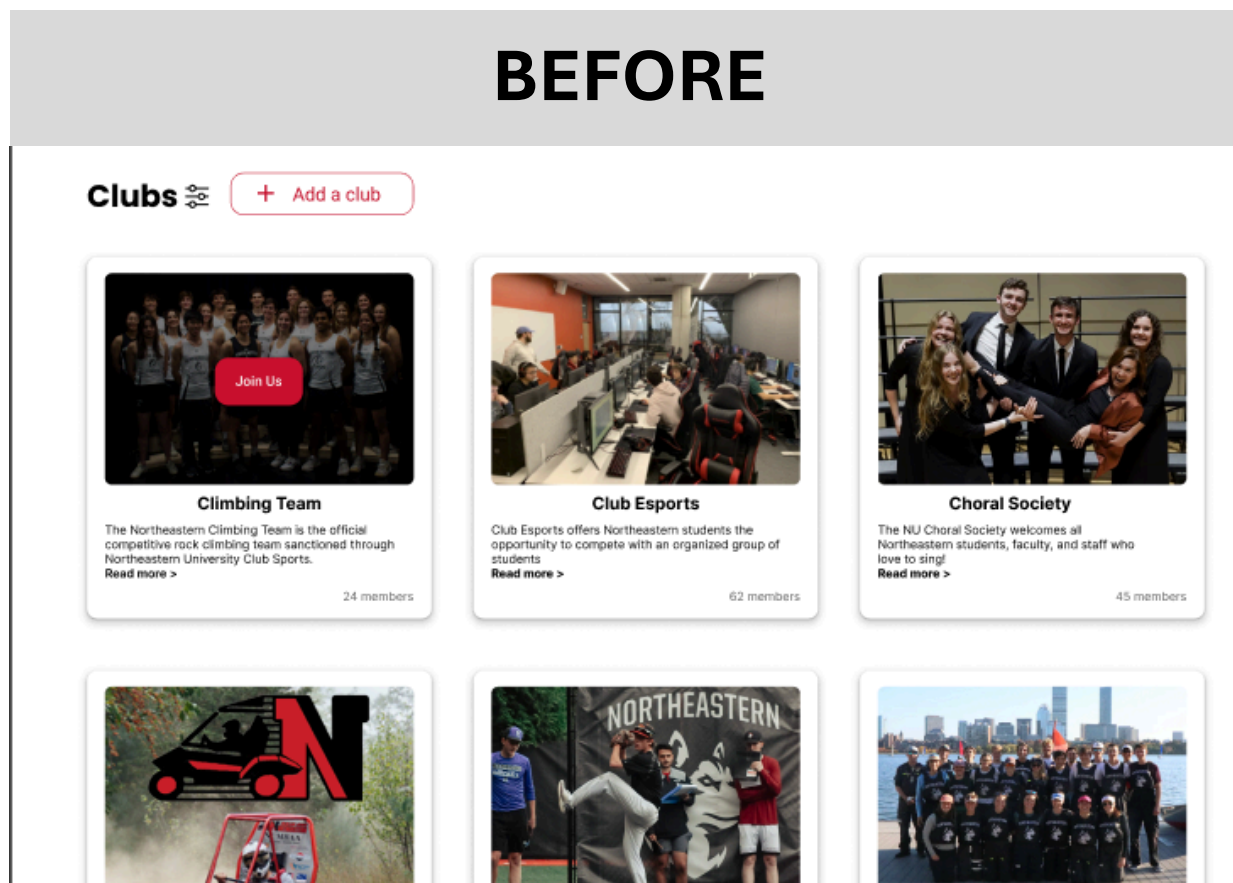
Removed the star element from event cards after identifying it as a redundant and confusing UI pattern

About Us

To give students a clear introduction to CPS Connect by communicating the platform's **purpose, offerings, and mission** in plain language, reducing confusion for new and returning users.



Clubs Page



+ Filtering by campus, category, meeting day, and date, allowing students to narrow down clubs by category

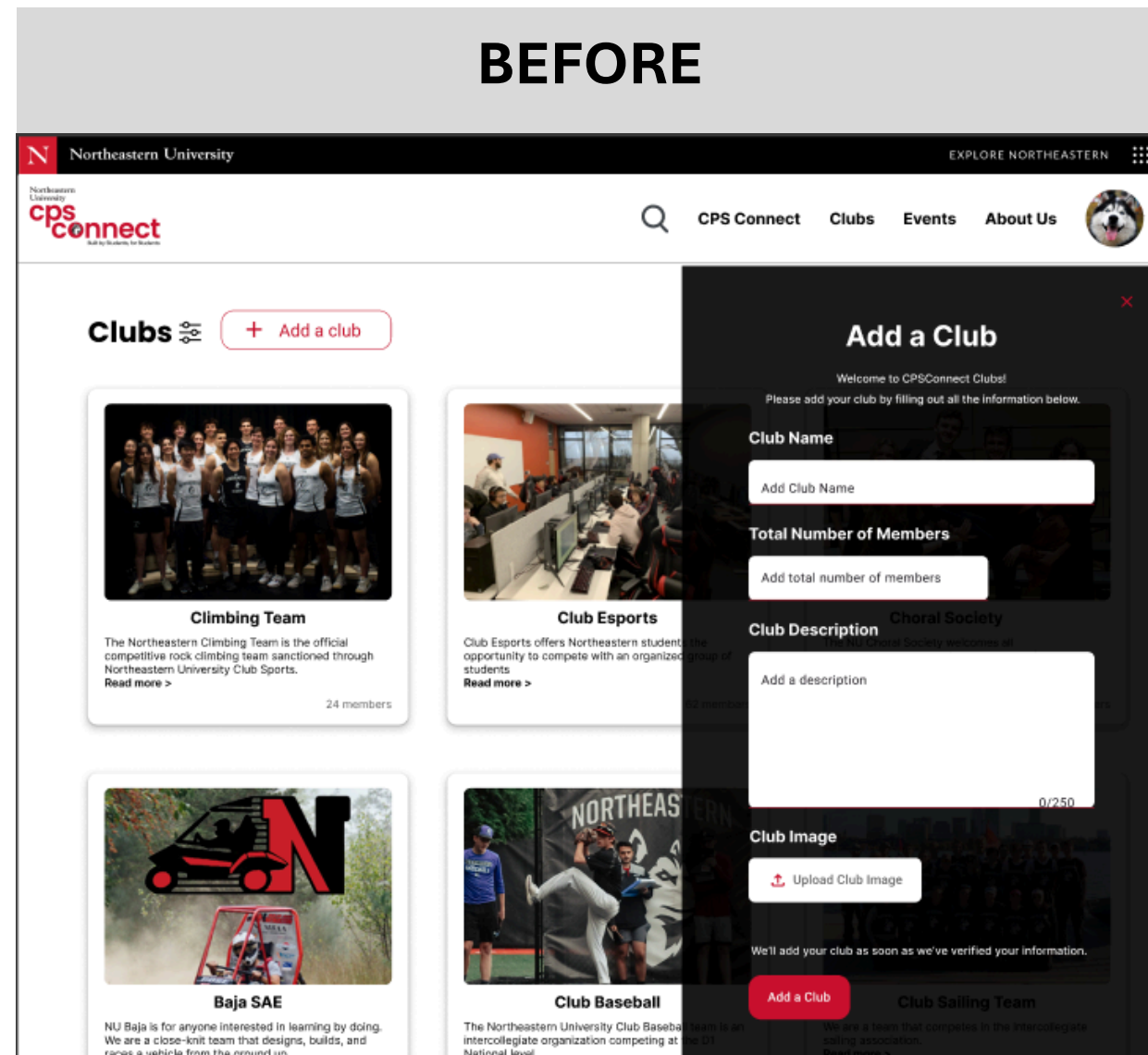
Individual Club Page

NEW ADDITION

- **Leadership contacts upfront**
- **Stats: size, frequency, events/month**
- **Next meeting details visible**
- **Social links & virtual options**

The screenshot shows a web page for the Tech Innovators Club. At the top, there's a navigation bar with the Northeastern University logo and 'cps connect' branding. Below the navigation, the page title is 'Tech Innovators Club' under the heading 'Organizations / Club Esports at Northeastern University'. A sub-heading reads 'Engineering Societies | Boston Campus'. A brief description follows: 'Exploring emerging technologies through hands-on projects, speaker series, and hackathons'. There are social media icons for Facebook, Instagram, and LinkedIn, along with a 'Join Us' button. A statistics section features four cards: '245 Total Members', '2018 Year Founded', 'Weekly Meeting Frequency', and '8 Events This Month'. A large image shows a gaming setup with 'NORTHEASTERN ESports' branding and a husky logo. Below the image is a 'Next Meeting' section for Thursday, February 19, 2026, at 7:00PM-9:00pm in Churchill Hall, Room 402, with a Zoom link. Two columns at the bottom contain 'About the Club' (with mission and what we do sections) and 'Leadership Team' (listing Aisha Kumar as President and David Lee as Vice President).

Create a Club



Create a New Club

[← Back to Club Page](#)

Congratulations! Your Club Has Been Submitted!

Thank you for creating Tech Innovators Club on CPS Connect.

Under Review

Your club submission is being reviewed by the CPS Student Activities team. Please allow up to 48 hours for approval. You'll receive an email notification once your club is approved and live on the platform.

You can edit your club information at any time before approval.

Basic Information

[Edit](#)

Club Name
Tech Innovators Club

Status
Pending

Year Founded
2018

Photo
techinnovators.jpg

Category
Engineering Society

Campus Location
Boston Campus

Meeting Day
Recurring - Weekly - Tuesday

Meeting Time
6PM - 8PM

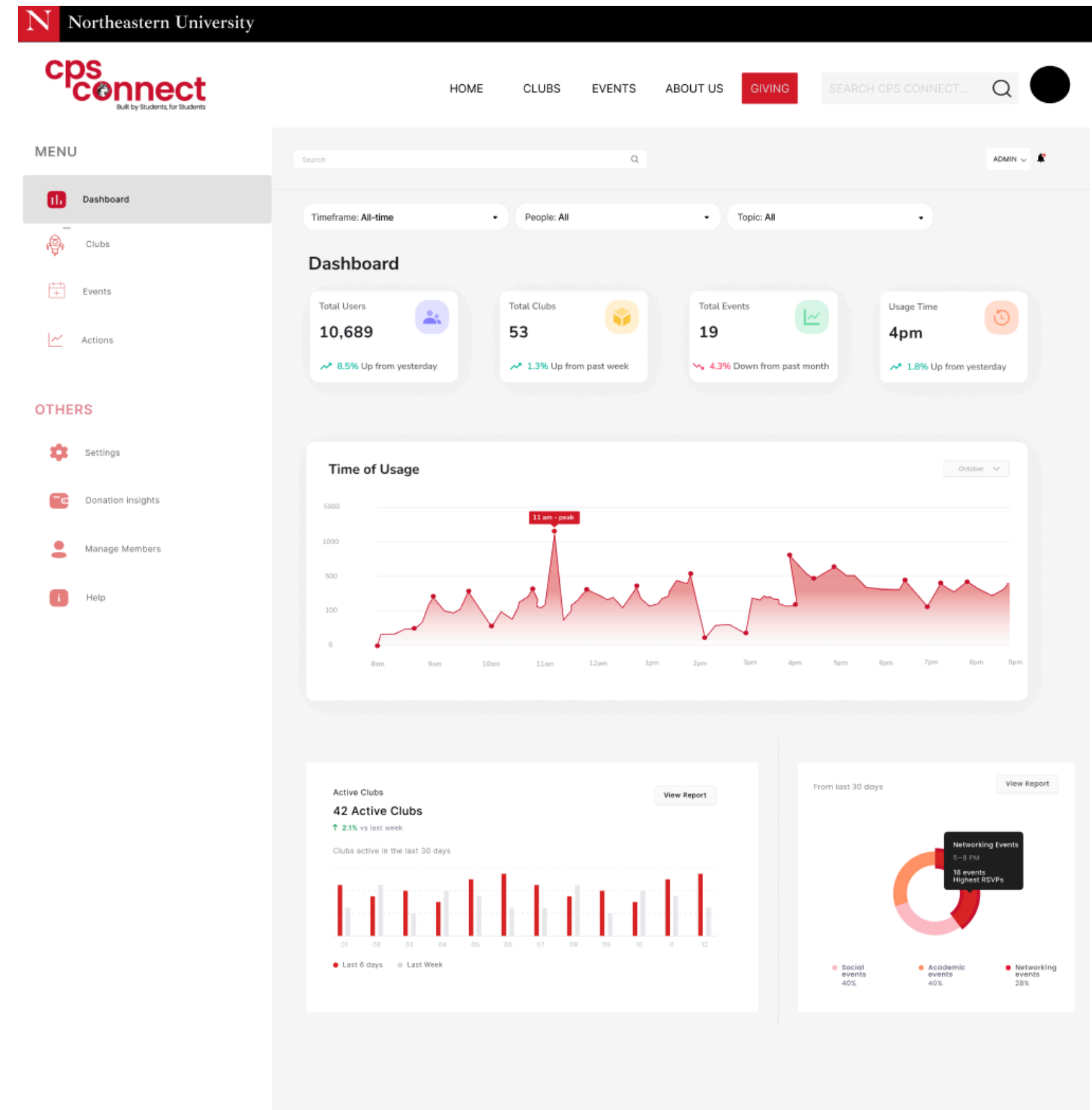
+ Structured form with review & approval workflow

Admin Dashboard

NEW ADDITION

- **Centralized approval queue**
- **Usage analytics & trends**
- **Member management view**
- **Event category breakdown**

Designed an admin dashboard to centralise club creation requests and streamline approvals, giving administrators a clear overview of pending submissions.



Why We Pivoted

Midway through, we discovered NU Engage was already live and students were already using it.

Before

Testing our prototype

No guaranteed adoption path

After

Testing static CSP site

Findings CPS can act on today

Discovered NU Engage → Converted to Static Site

Two rapid decisions that re-shaped the final third of the project.

- **Platform Review**
During a stakeholder check-in, we learned students were already using engage.northeastern.edu for club discovery and event registration.
- **Audit of NU Engage**
We ran a quick comparative audit on NU Engage, which addressed several of our redesign goals but had its own usability issues worth studying.
- **Strategic Redirect**
Studying NU Engage would produce actionable, immediately applicable findings — making the research far more impactful.

Converting to Static Site

Why Convert?

Our interactive prototype was no longer the primary test artifact. We repurposed it as a static reference document, a visual record of our design decisions and rationale.

Reframe, Not Abandon

No work was wasted. The prototype, the audit, and the design system all informed the new static site usability study and findings.

Original Study Plan

We designed a rigorous moderated usability study to test whether our redesigned prototype reduced friction in club discovery and event registration.

Participants

25

CPS grad students
Mixed domestic & international

Tasks

5

Find club · Register event
Contact officer · Save to calendar

Method

Think-aloud

Zoom/Teams · 45–60 min
Post-task survey (5 questions)

*Before we discovered NU Engage was live. **That changed everything.***

Redesigned Study Plan

We adapted the usability study to test NU Engage directly by preserving methodological rigor while shifting the artifact under test.

1

New Test Artifact

Replaced our prototype with engage.northeastern.edu as the live test environment; no login is required for browsing tasks.

2

Revised Task Scenarios

Tasks rewritten to reflect NU Engage's actual structure while searching clubs, finding events, accessing sign-in help.

3

Updated Screener

Screener updated to recruit students who had not previously used NU Engage, ensuring fresh, unbiased navigation behaviours.

4

Post-Task Survey

SUS (System Usability Scale) + 3 custom questions added to quantify ease-of-use and satisfaction with NU Engage specifically.

Usability Testing Plan

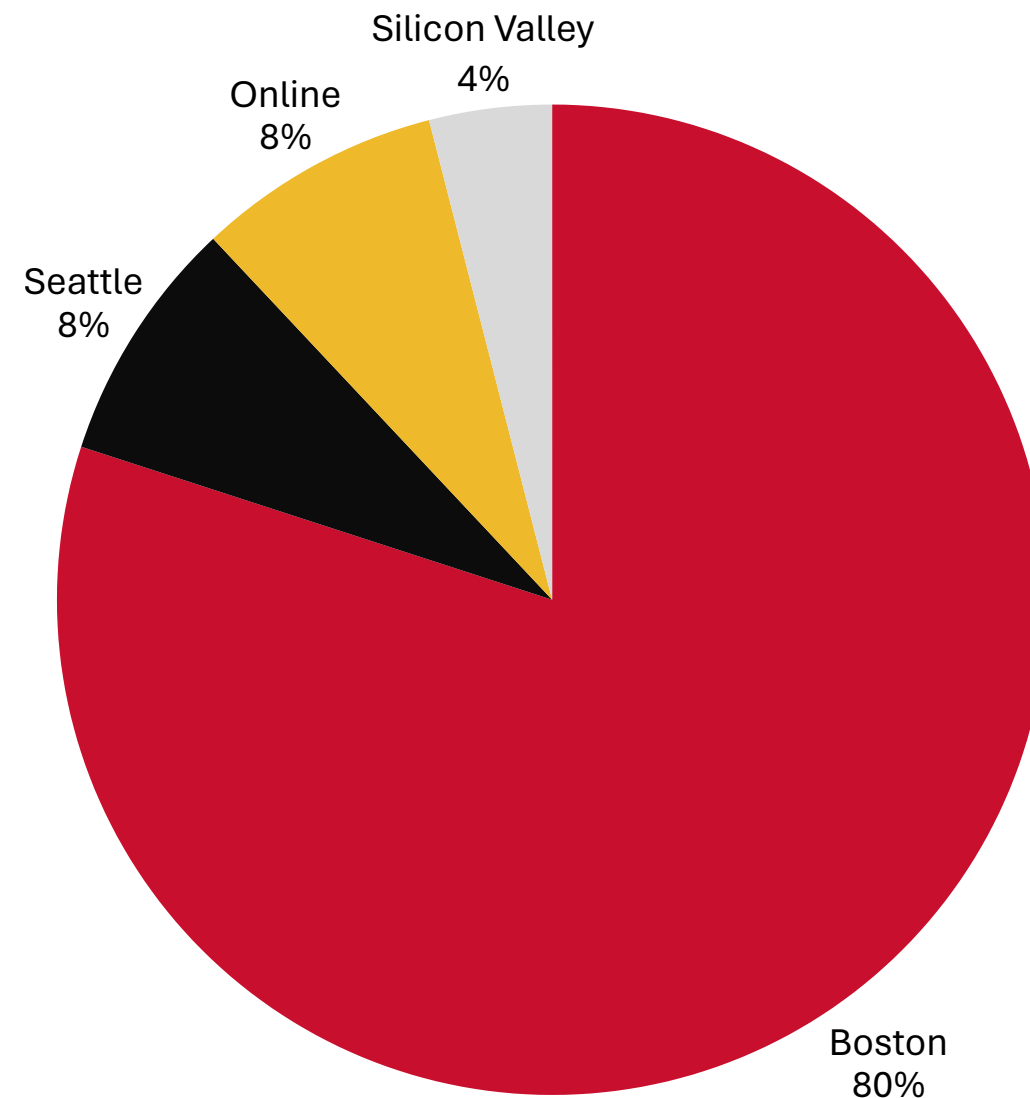
Testing Type

Moderated usability testing + structured interviews (remote via Zoom/Teams)

Testing Goals

- *Validate clarity, trust, and perceived activity of CPS Connect*
- *Identify usability gaps in navigation, discovery, and participation*
- *Understand engagement drivers for both students and club leaders*

Audience Demographics

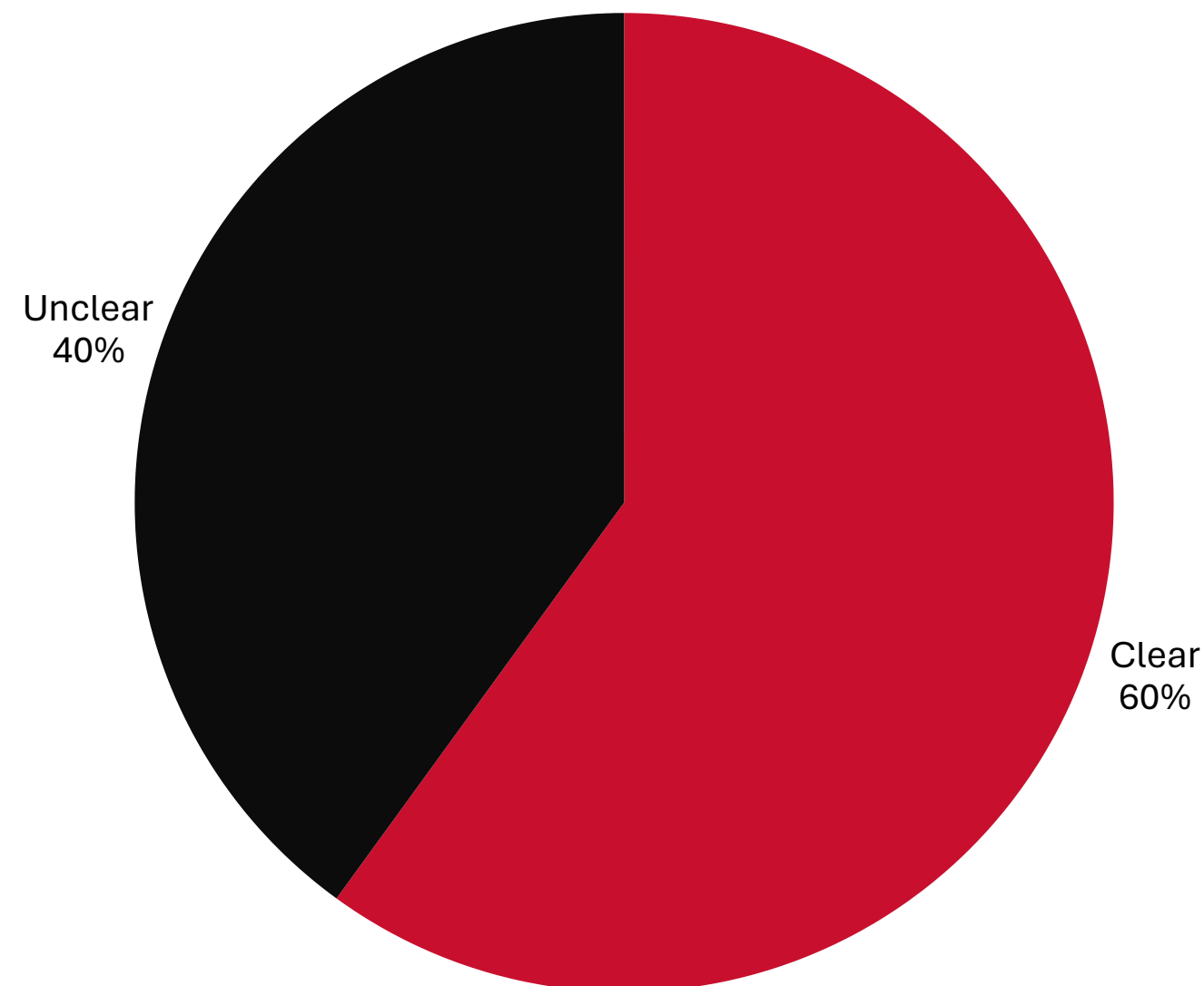


Methodology

- *Participants: CPS students (grad/undergrad, part-time/full-time) + club leaders*
- *Sample Size: Target 50–60 (≈25 students, 25 club leaders)*
- *Duration: 30–45 mins per session*
- *Format: Screen-sharing + think-aloud protocol*
- *Data Captured: Behavioral cues (hesitation, clicks vs scroll, confusion), qualitative feedback*

First Impressions: **Clarity of Platform Purpose**

**Was the purpose of the platform clear on first glance?*



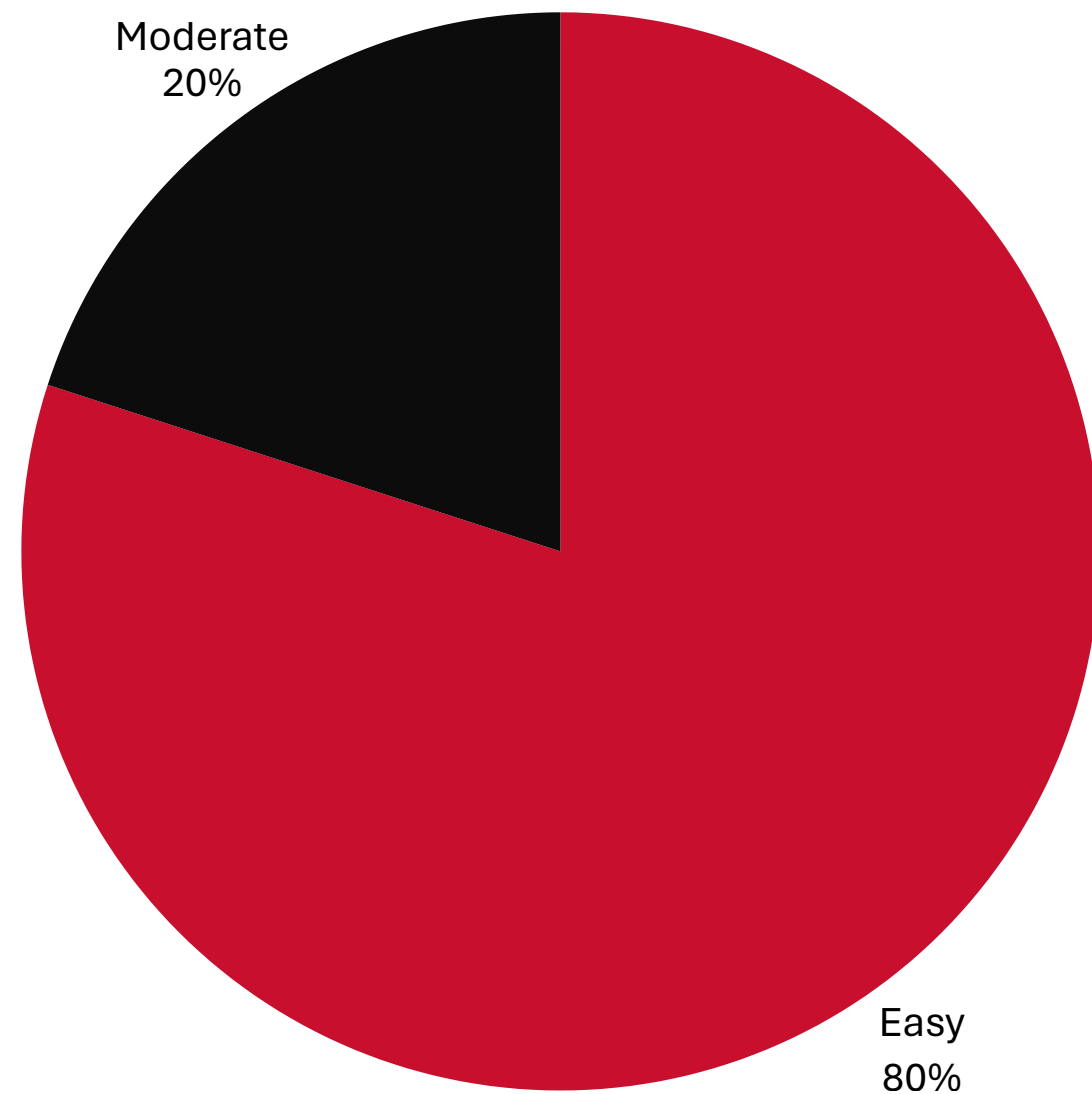
Key Insight

A significant portion of users required additional exploration to understand the platform's purpose - indicating a need for stronger first-touch communication.

Only **60%** of users immediately grasped the **platform's value**. The remaining 40% needed to click around before understanding what CPS Connect offers, suggesting that onboarding copy, hero messaging, and visual hierarchy need refinement.

Navigation Experience

**How easy was it to navigate the platform?*



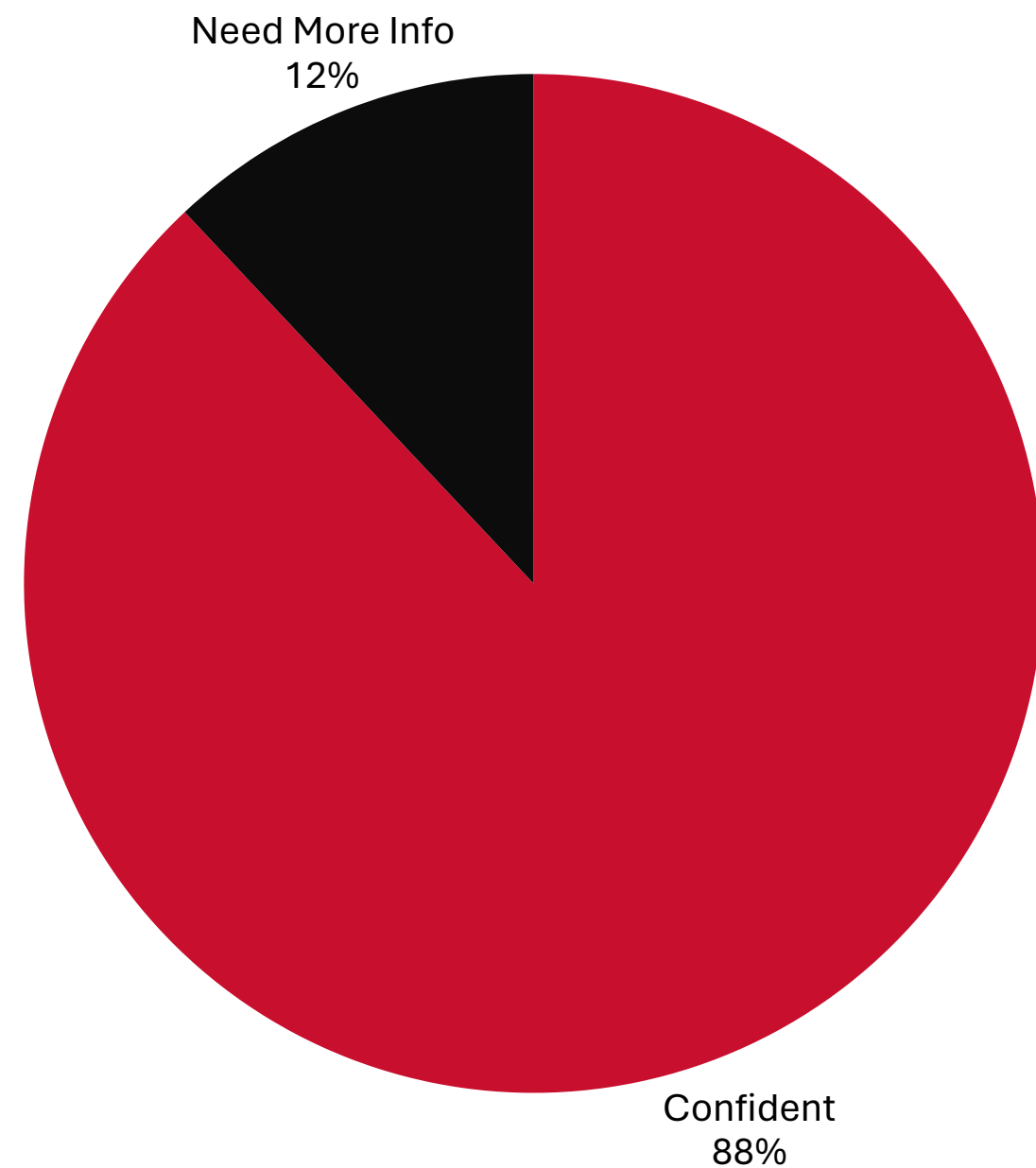
Key Insight

Most users found navigation intuitive, but some friction still exists in discoverability and overall flow.

80% of users rated navigation as easy — a strong signal that the information architecture is largely sound. The 20% reporting moderate difficulty points to specific pain points in discoverability, labeling, and deeper menu structures worth investigating.

User Confidence in Joining Clubs

**How confident do you feel joining a club through this platform?*



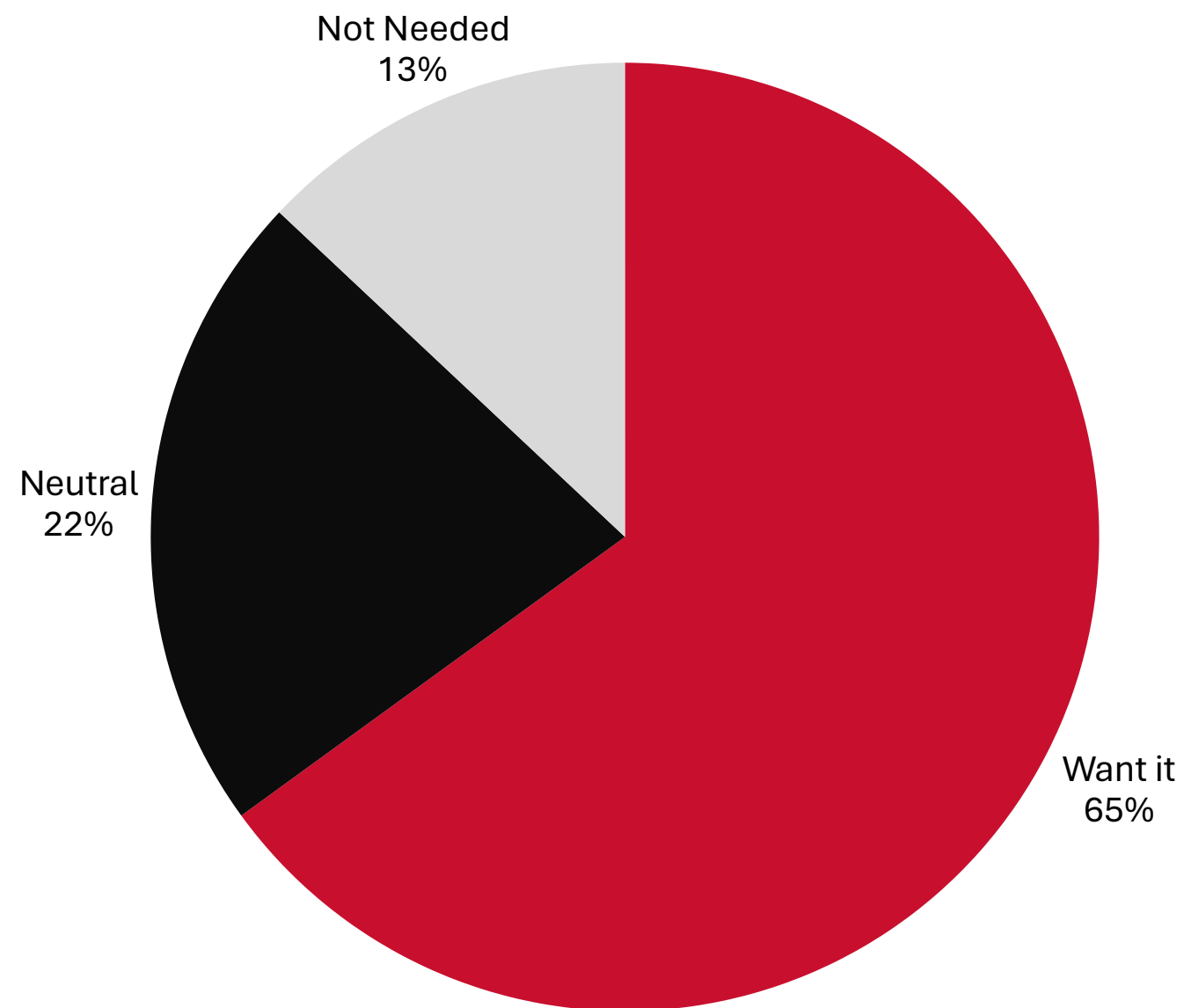
Key Insight

While users feel generally confident, missing information and trust indicators still impact final decision-making for some.

88% of users feel confident enough to join a club — a very positive signal. The 12% who need more information likely lack visibility into meeting schedules, membership expectations, or social proof. Adding trust signals and richer club profiles could close this gap.

Feature Expectations: **Centralized Calendar**

**Do you want a centralized calendar to track club events?*



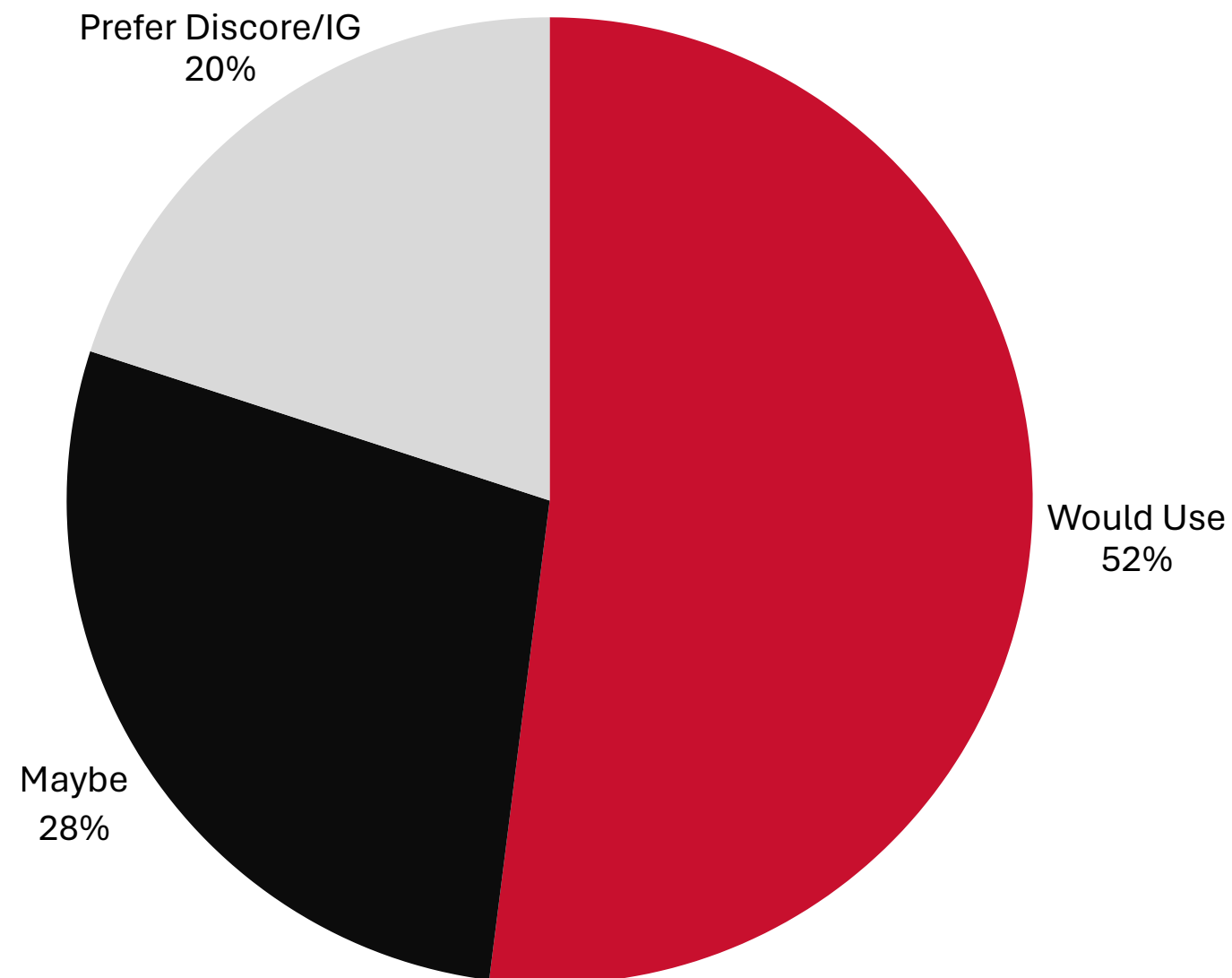
Key Insight

A centralized event calendar is a key expected feature - critical for increasing repeat engagement and habitual platform use.

Nearly **two-thirds** of users actively want a shared calendar. This feature directly supports repeat visits by surfacing upcoming events at a glance. Without it, users are forced to seek out event info elsewhere — increasing drop-off risk.

Chat Feature Adoption

**Would you use CPS Connect's native chat instead of Discord or Instagram?*



Key Insight

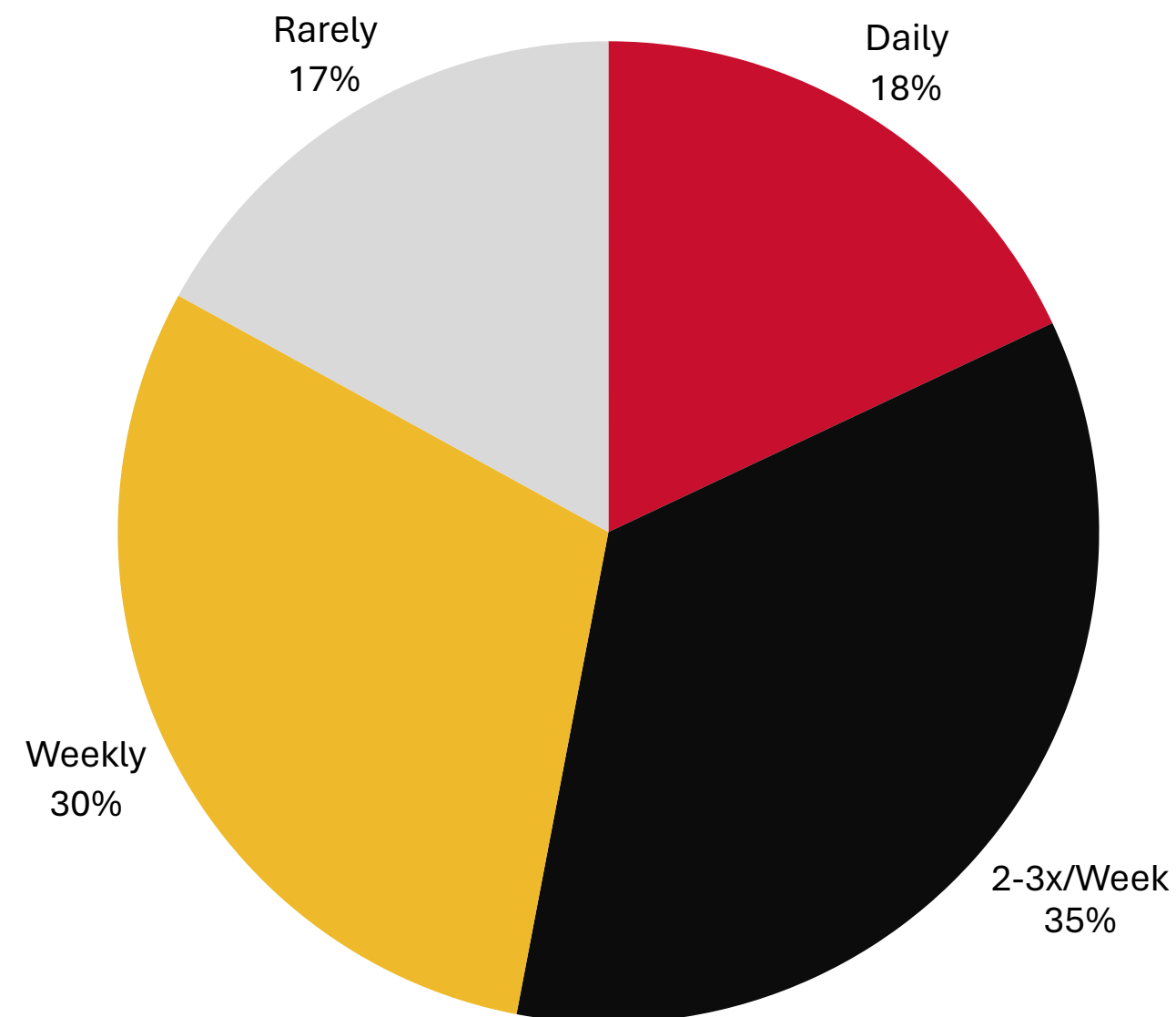
Users show genuine openness to native chat, but existing social platforms still hold strong behavioral and habitual pull.

52% would actively use native chat, and another 28% are persuadable.

This 80% addressable audience is an opportunity — but success depends on offering clear utility that Discord and Instagram don't: unified club context, event threads, and official announcements.

Expected Usage Frequency

**How often would you realistically use this platform?*



Key Insight

Most users fall into moderate usage patterns - suggesting a need for stronger engagement loops to drive habitual, daily

83% of users plan to visit at least weekly — a healthy baseline.

However, only 18% anticipate daily use. Closing that gap requires persistent value: notifications, event reminders, dynamic content, and features that reward return visits.

How Both Performed

Site A - Original Redesign

8.6 / 10



Site B - New Static Site

9.2 / 10



Key gap: 40% of Site A users didn't immediately grasp the platform's purpose v.s only 4% on New Static Site

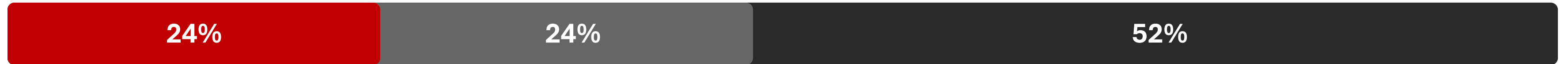
What We Observed

Would you use a native CPS chatbot?

Site A - Original Redesign



Site B - New Static Site



Yes Maybe Prefer Discore/Instagram etc.

Search First

Users went straight to search, skipped browsing

Trust signals

Checked "Last Updated" & upcoming events

Mobile-first

Most expected phone access

4 Priorities for CPS

PRIORITY 1

Activity Badges

"Active" indicator for clubs posting in the last 30 days: builds trust before joining

PRIORITY 2

Master Calendar

Centralized "My Schedule": all registered events in one view

PRIORITY 3

Onboarding Tour

Brief tour on first visit: closes the 40% purpose-clarity gap from Site A testing

PRIORITY 4

Notification Hub

Official comms on CPS Connect: let Discord handle informal community chat

THANK YOU

From Audit to Answers

This project moved from a design problem to real, validated research, producing findings that CPS can act on today. Every pivot, every decision, every session brought us closer to a platform that truly serves its students.

12

WEEKS

50

PARTICIPANTS

NORTHEASTERN UNIVERSITY · COLLEGE OF PROFESSIONAL STUDIES · MS DIGITAL MEDIA · 2026

DEMO

CPS STUDENT LIFE

N NORTHEASTERN UNIVERSITY
College of Professional Studies

[Clubs](#) [Events](#) [NU Engage](#)

[Visit NU Engage](#) →

CPS STUDENT LIFE

Clubs & Events

Discover 825+ student organizations and hundreds of events at Northeastern University's College of Professional Studies. Build connections, develop skills, and make the most of your CPS experience.

[Explore Clubs](#) →

[View Events](#) →

