



Energy Consumption Dashboard Overview

This presentation presents a detailed Energy Consumption Dashboard that visualizes real-time energy usage across campus buildings through IoT and sensor data. It highlights the design thinking process in five stages, showcasing how data-driven insights can enhance energy management and promote sustainability on campus.



Understanding User Energy Monitoring Needs

Understand User Needs

Conduct interviews and surveys with facility managers and staff to identify their energy monitoring requirements and pain points related to energy usage.

Analyze Current Issues

Investigate existing systems and processes to outline challenges stakeholders face in monitoring and managing energy consumption.

Gather Data

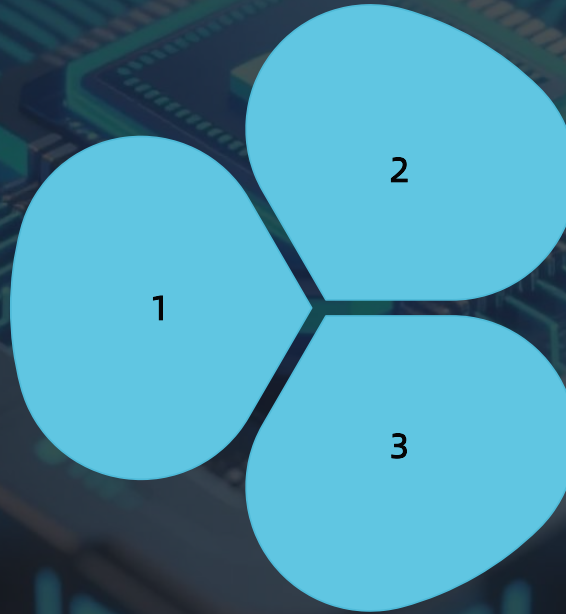
Collect qualitative and quantitative data about energy consumption patterns to understand typical usage across different campus buildings.

Define Key Problems in Energy Management

During the Define phase, key problems related to energy management are identified. This includes analyzing user needs and synthesizing insights to tackle core issues. User personas are created to better understand and address the needs of primary users, ensuring the dashboard is tailored to their requirements.

Identify Key Problems

Synthesize insights to define key issues like lack of real-time data.



Create User Personas

Develop profiles for dashboard users such as facilities managers, students, and faculty.

Articulate a Problem Statement

Draft a clear statement that encapsulates the challenges addressed by the dashboard.

Ideate

Brainstorm Solutions

Host brainstorming sessions to generate a wide range of ideas on how the dashboard can visualize energy consumption in an intuitive way.

Consider Technology Options

Explore various IoT sensor technologies and dashboard visualization tools that would best capture and display data effectively.

Sketch Initial Concepts

Generate rough sketches of potential dashboard designs, focusing on the layout, key metrics to be displayed, and data visualization types.





Prototype Development

1

Develop a Low-Fidelity Prototype

Create initial wireframes and mockups of the energy consumption dashboard.

2

User Feedback Sessions

Conduct feedback sessions with potential users to gather insights.

3

Iterate Design

Refine the prototype based on user feedback to enhance user experience.

Testing and Iteration for Energy Dashboard

1

Conduct Usability Testing

Deploy the refined prototype in a pilot environment.

2

Collect Performance Metrics

Evaluate dashboard performance for data accuracy and usability.

3

Iterate and Improve

Refine dashboard design based on testing outcomes.