MICHIGAN STATE
U N I V E R S I T Y

Project Plan Presentation
Supply Chain Induction Visibility Using Witron

The Capstone Experience

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From Students…
…to Professionals

Project Sponsor Overview

- Midwest Big-Box store
- Found in 1934 by Hendrick Meijer
- 14th largest private company in US
- First company to introduce General Mart
- Large Automated Warehousing
- Partnered with Witron

Project Functional Specifications

- Supply Chain issue for Palettes
  - Separate sources for tracking
- Meijer & Witron's System Unorganized
- 2 Databases (MITIS, Oracle)
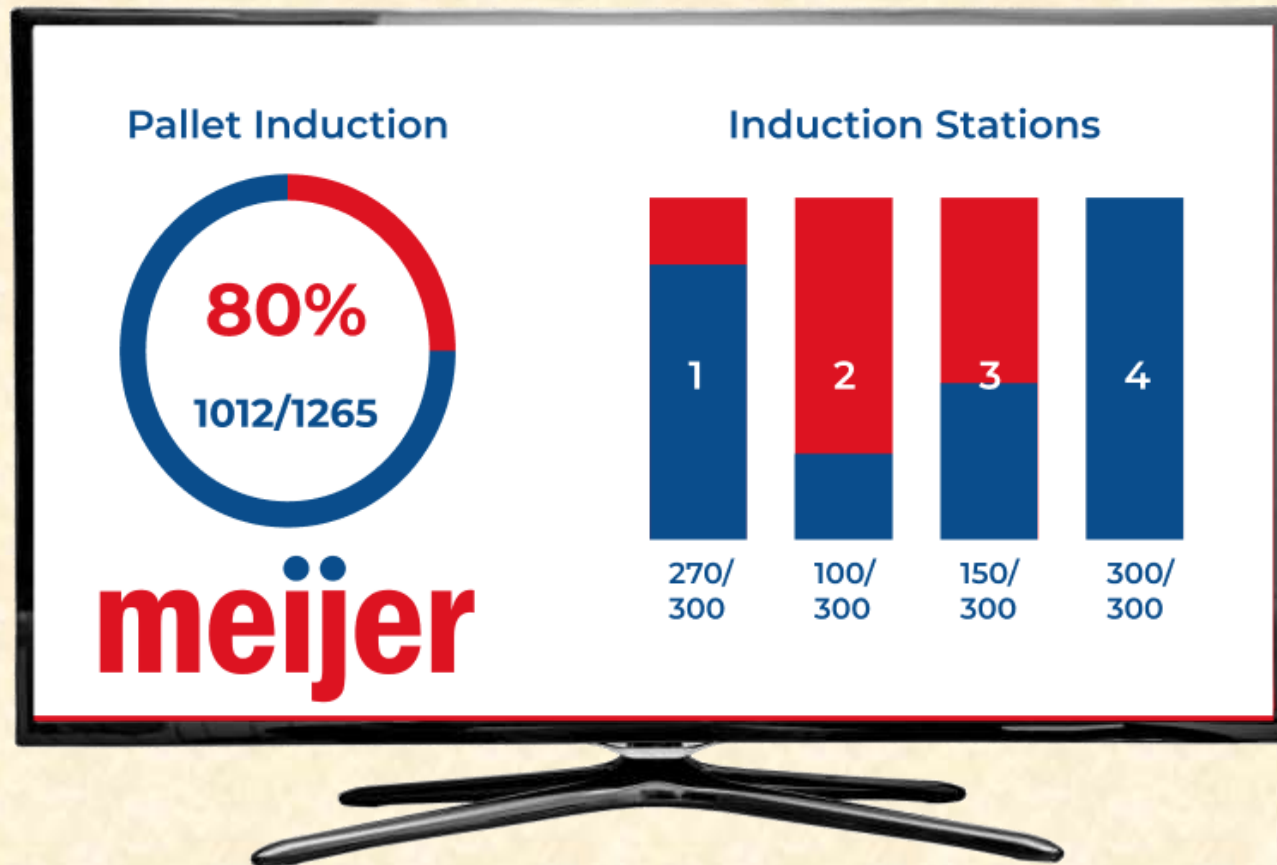- No efficient tracking for workers
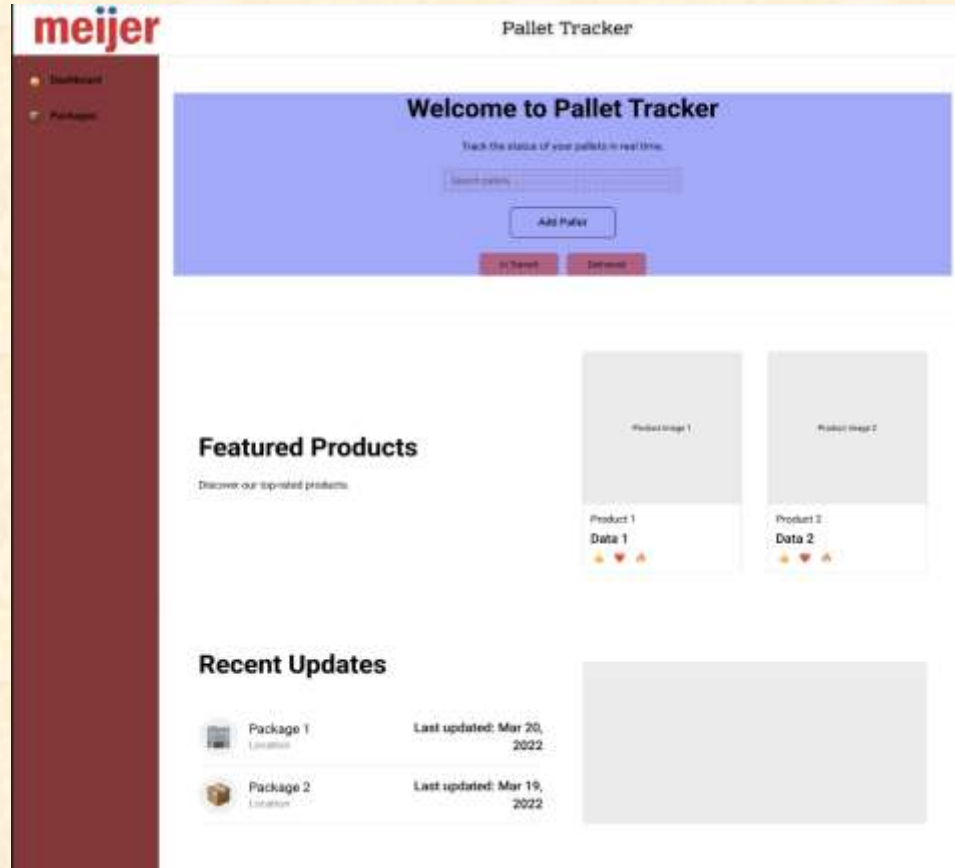
Project Design Specifications

- Live Dashboard solution
  - Friendly user interface
  - Viewable from a distance
  - Sign in Page
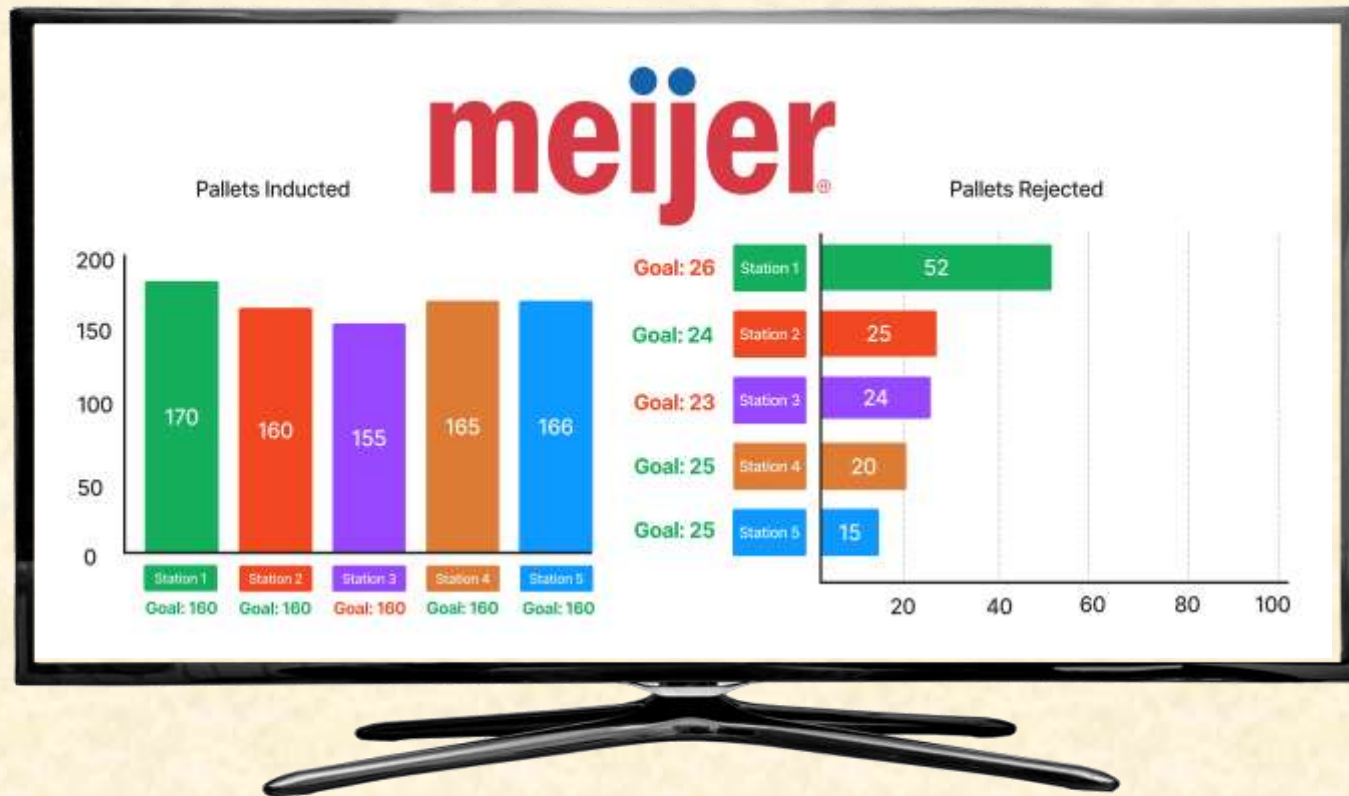   - Access advanced induction statistics
  - Mobile Support

Screen Mockup: Simple User Interface
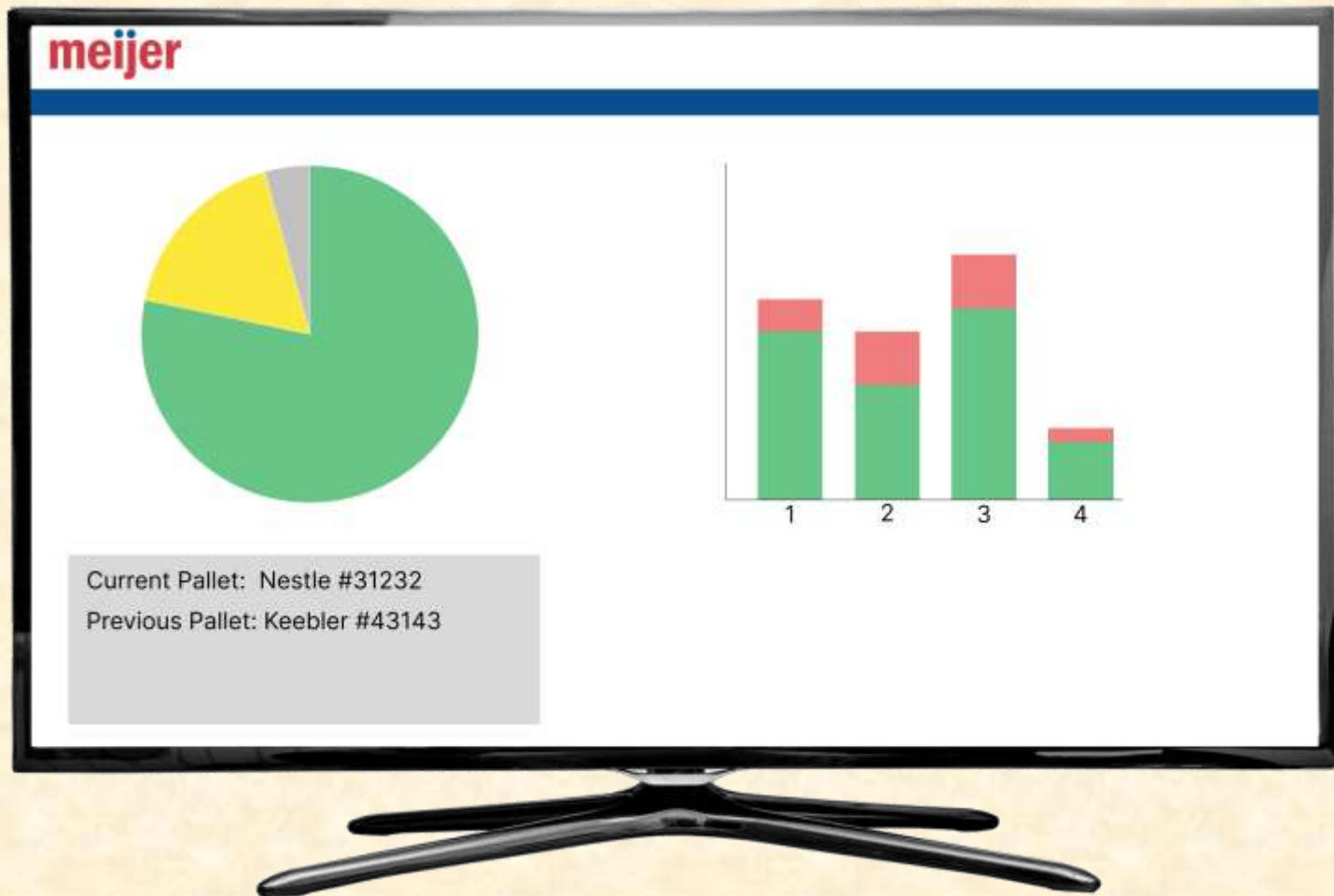
Screen Mockup: Admin Page
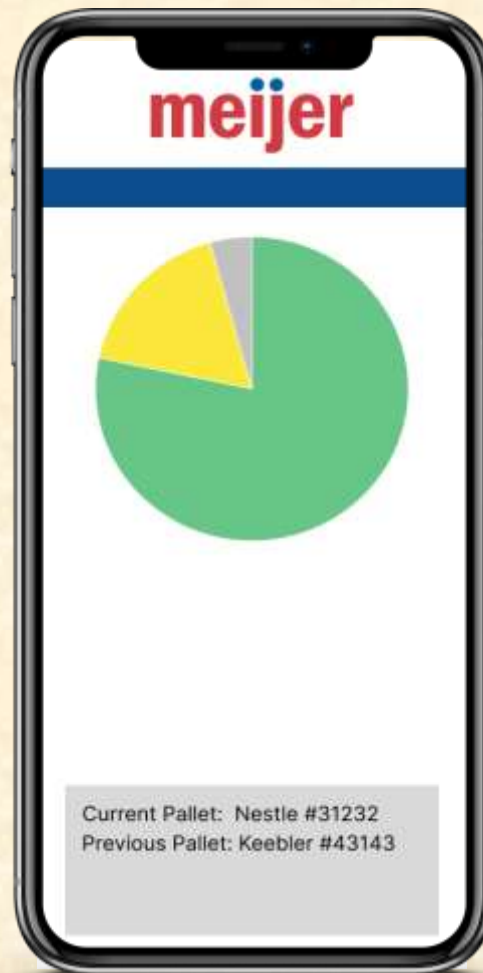
Screen Mockup: Alternate UI

Screen Mockup: Web Homepage

Screen Mockup: Simple Dashboard
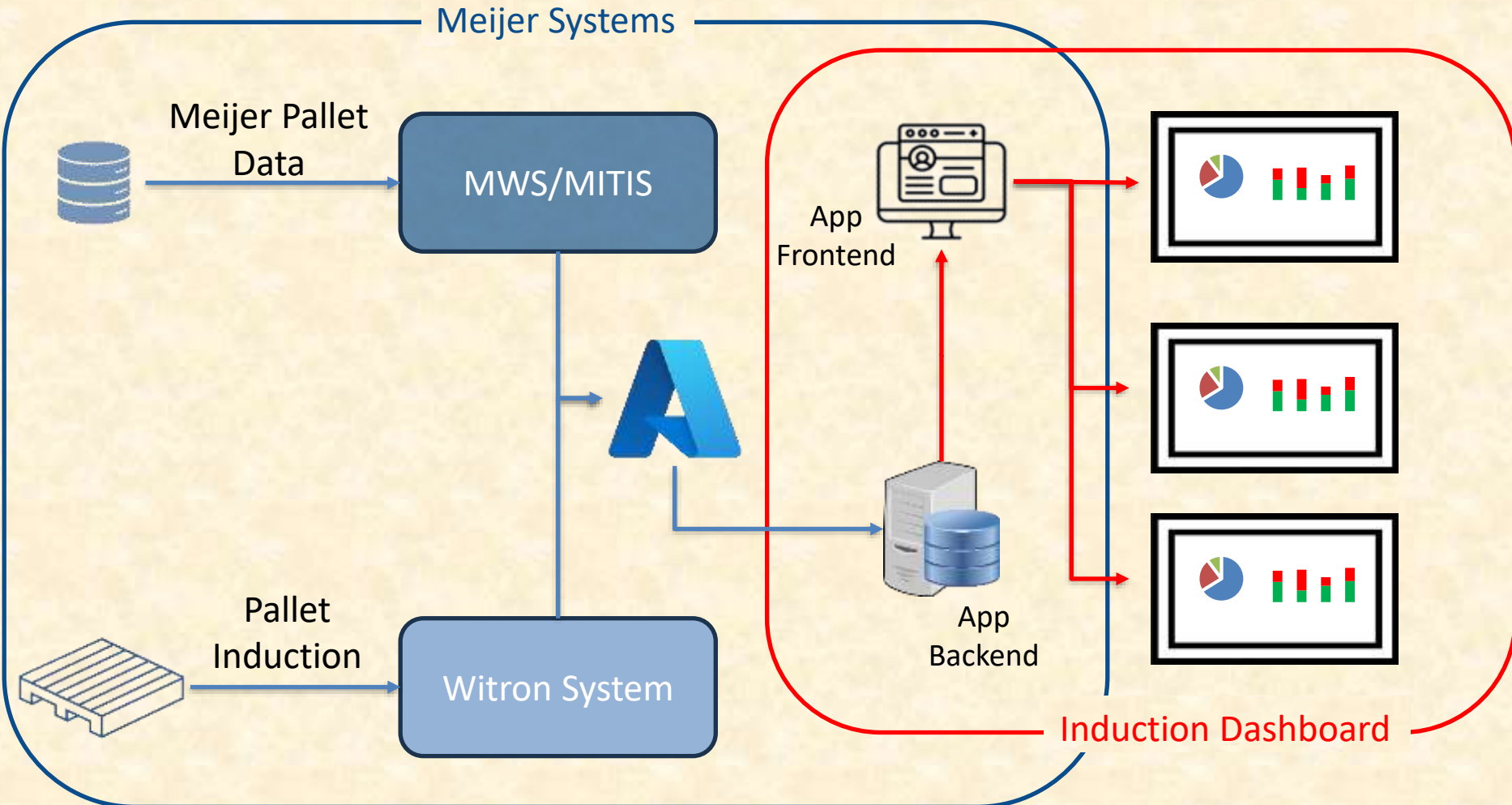
Screen Mockup: Mobile Dashboard

Project Technical Specifications

- Web application

- Databases/Information
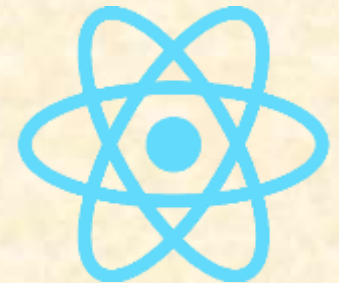 - Witron – Oracle DB
  - MWS – API based

Project System Architecture

Project System Components

- Hardware Platforms
  - 50-Inch Display
- Software Platforms / Technologies
  - React
  - Node.js
  - Microsoft Azure
  - Docker
  - .NET Framework

Project Risks

Integrating Witron and Meijer Databases

- Need to integrate Witron and Meijer databases into Azure
- Communicating with Meijer/Witron and creating mock databases

Real Time Data Manipulation and Updates

- Dashboard requires constant updates
- Research real-time updates and communicate with Meijer if needed

Efficient Data Access

- Data presented on Dashboard should be efficient / accurate. If data is scraped from website, performance issues could ensue. API's are not promised
- Working with Witron to gain efficient access to data source

Unique Design

- Dashboard propped 10+ Feet in the air, visibility could be unclear
- Experiment with display and poll potential users for feedback/readability of dashboard

Questions?