MICHIGAN STATE UNIVERSITY

Project Plan Presentation
UWM IT Goals Dashboard

The Capstone Experience

Team UWM

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From Students…
   …to Professionals

Project Sponsor Overview

- Nation's largest mortgage lender, headquartered in Pontiac, MI
- Founded in 1986 (originally Shore Mortgage)
- #1 Overall & Purchase Lender in the U.S. (2025)
- Industry leader in mortgage technology and broker partnerships

UWM®

UNITED WHOLESALE MORTGAGE

Project Functional Specifications

- Create a dynamic dashboard to replace static tables
- Displays monthly and year-to-date progress
- Integrates API updates for automated data
- Key Benefits:
    - Boosts employee productivity – daily user visits
    - Simplifies progress inputting and tracking
    - Makes data visual and engaging
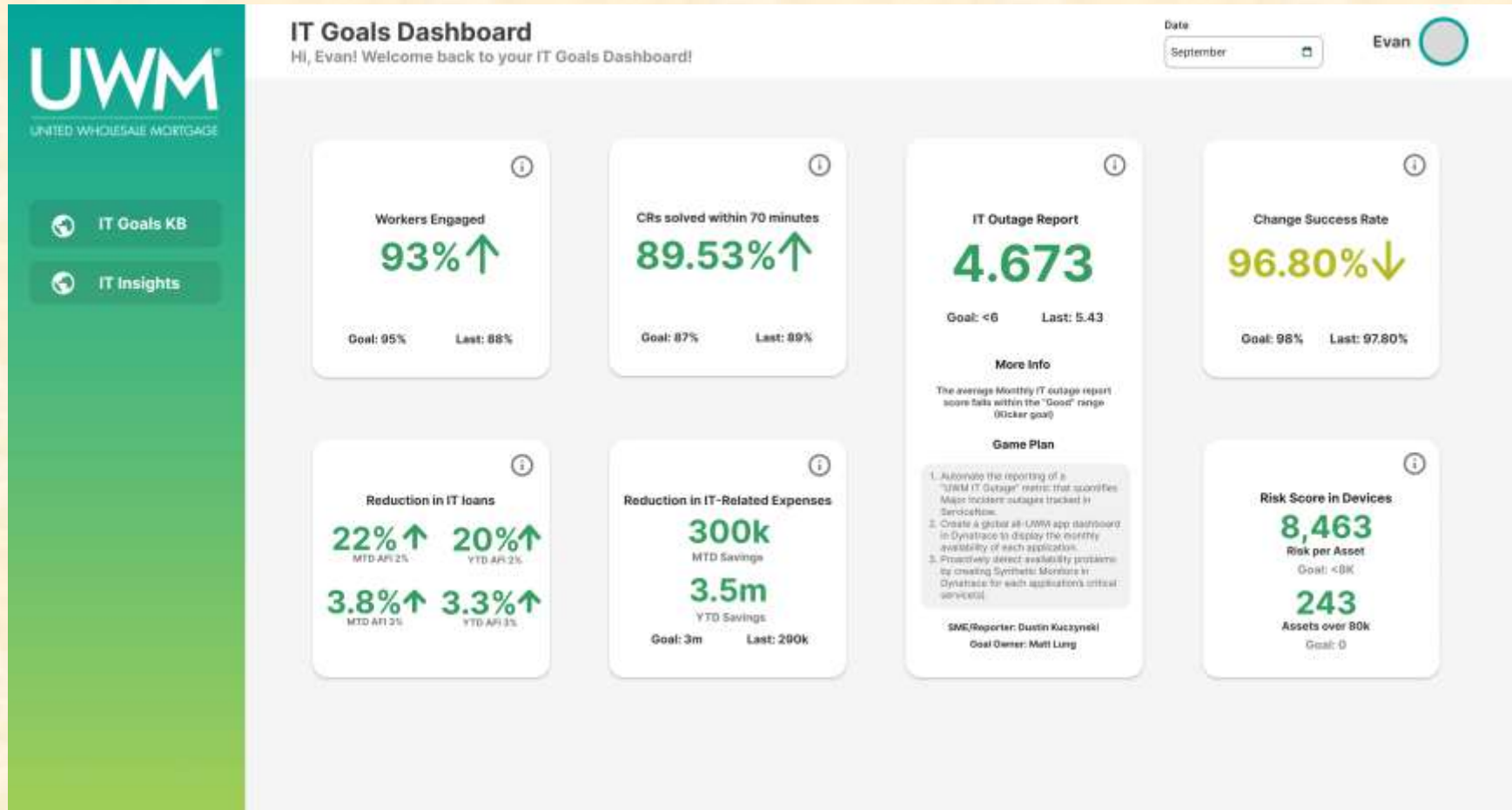   - Assist resource allocation

Project Design Specifications

The IT Goals Dashboard will allow department members to view goal progress based on the month and year selected
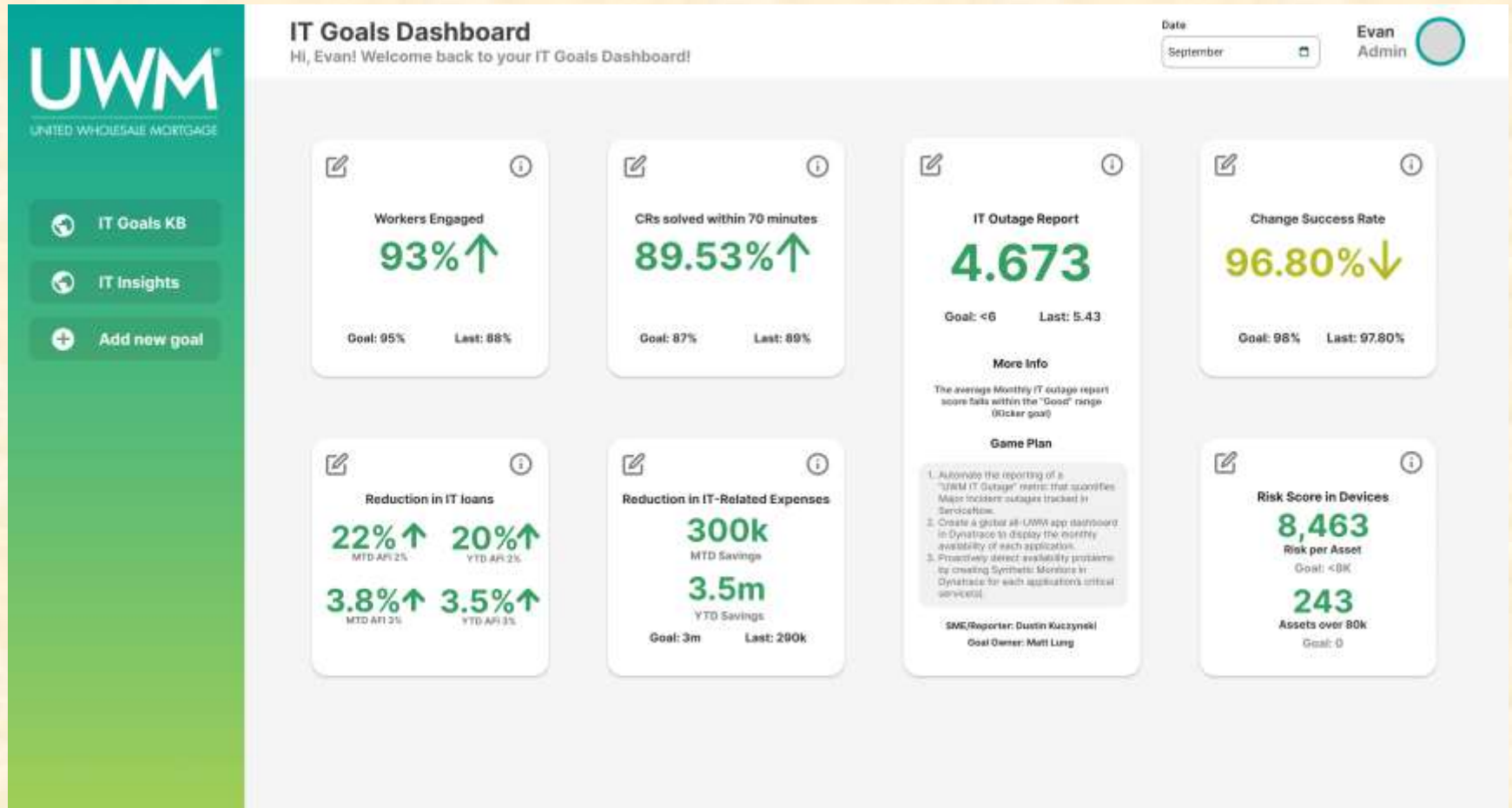
- Admins can edit and add new goals
- Users can view detailed information about each goal
- Ability to load prior years and months analytics
- Follows UWM's Branding Standards
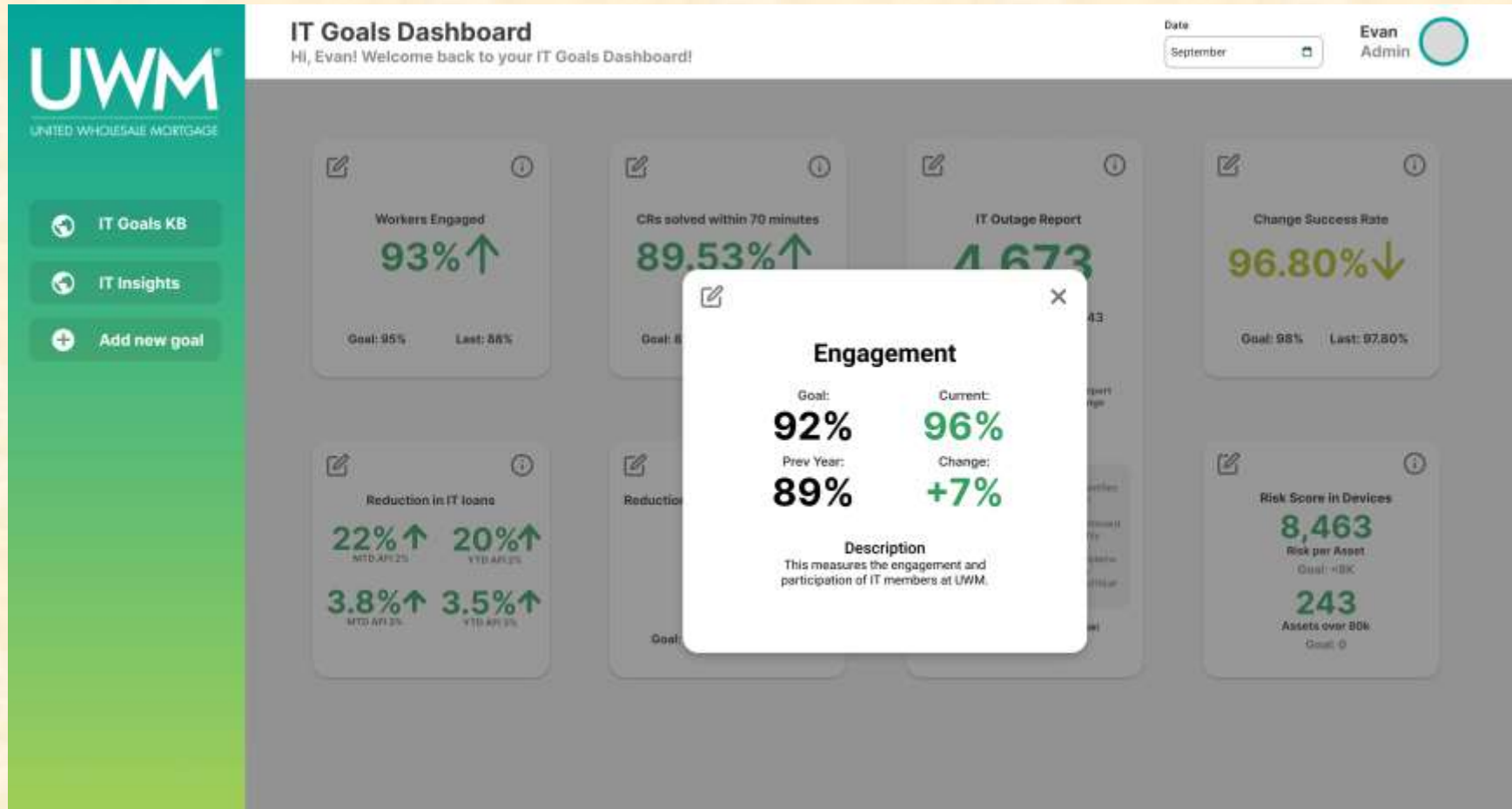
Screen Mockup: User-Side Dashboard View

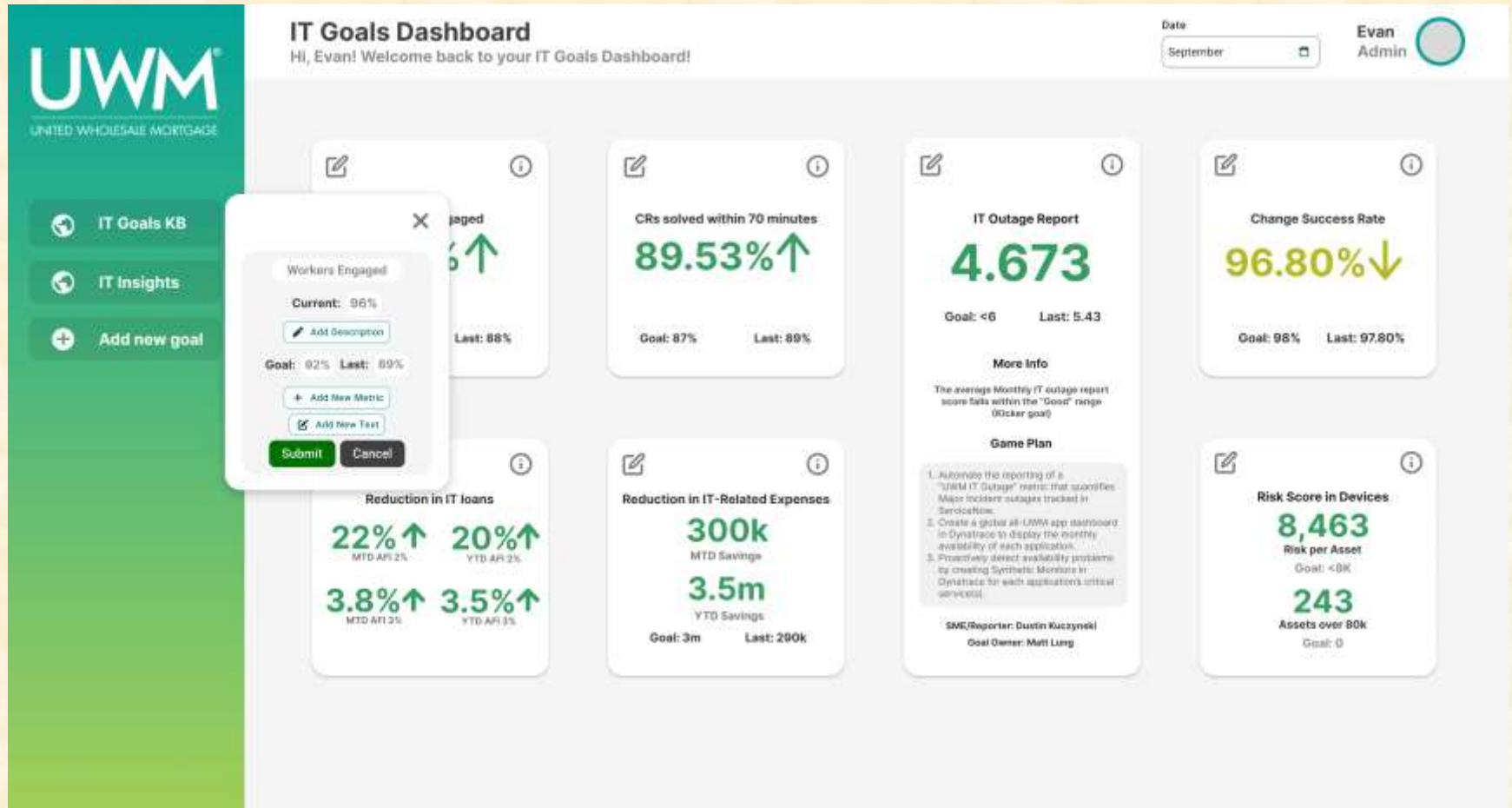# Screen Mockup: Admin-side Dashboard View

Screen Mockup: Information Modals
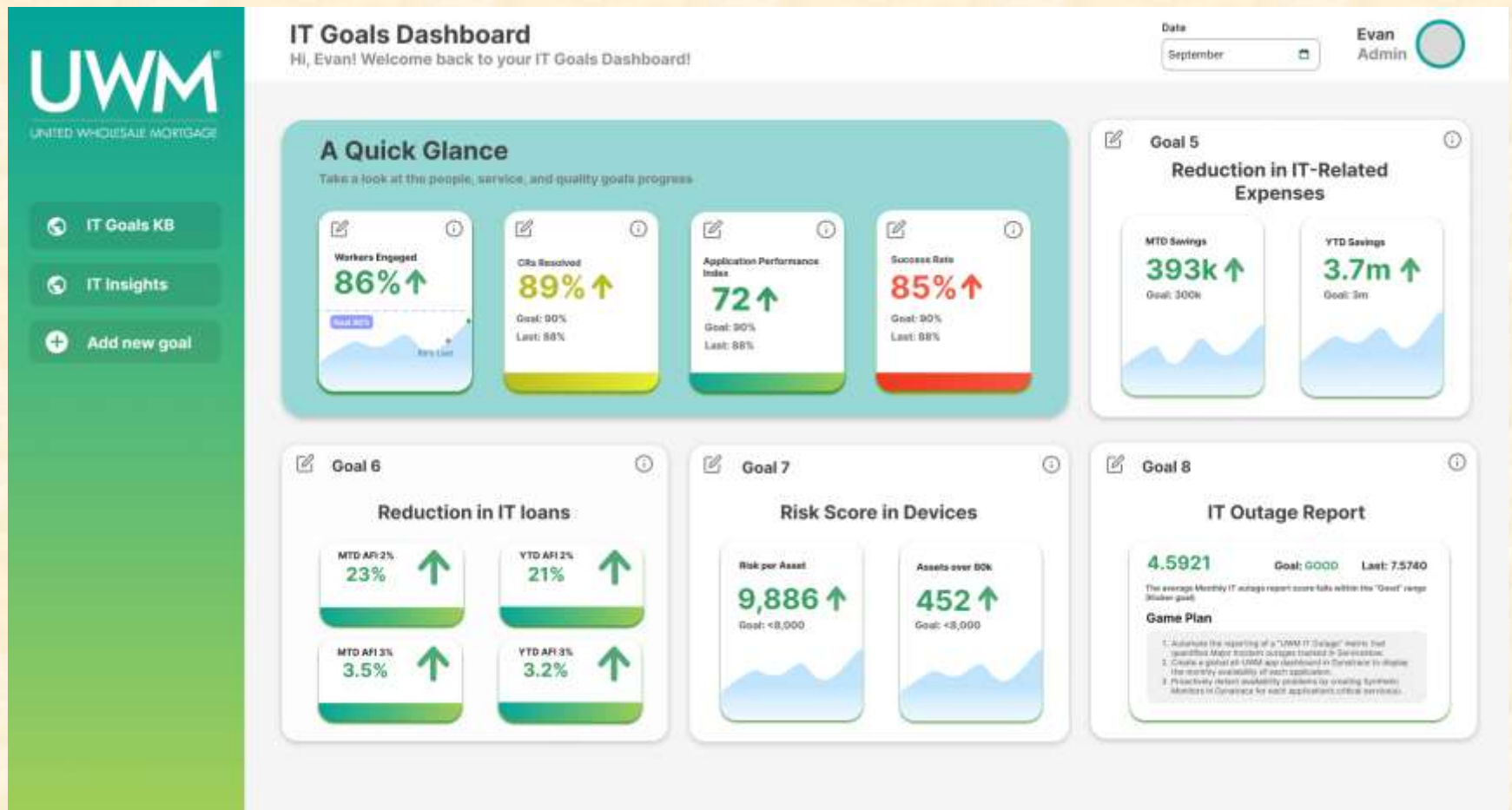
Screen Mockup: Admin-side Edit Modal

Screen Mockup: Add New Goal Modal

Screen Mockup: Stretch Goal
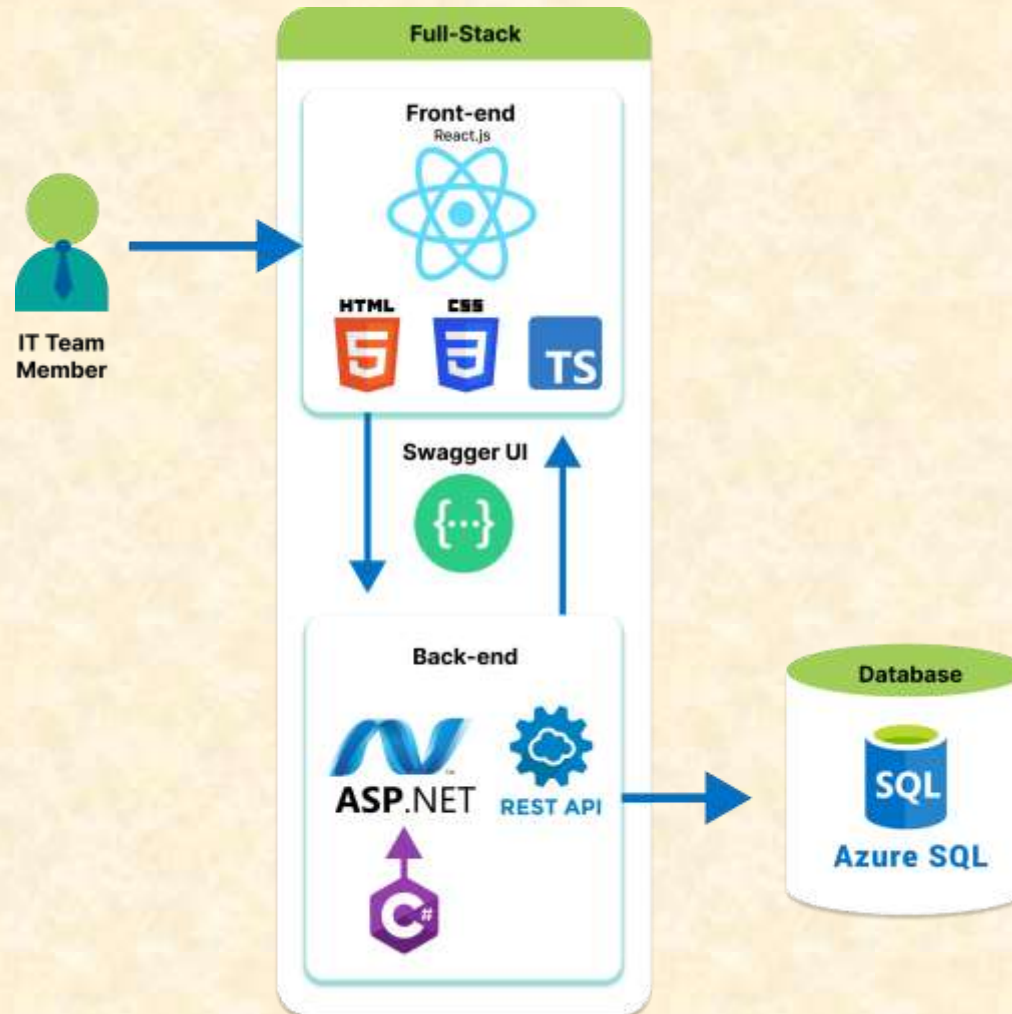
Project Technical Specifications

- React
- Swagger UI
- **ASP**.NET Core
  - Microsoft C#
- REST API
- Entity Framework Core
- Azure SQL server

Project System Architecture

Project System Components

- Hardware Platforms
  - UWM Proprietary Laptops
- Software Platforms / Technologies
  - Port
  - Jira
  - Visual Studio Code & Visual Studio
  - Swagger API
  - Docker
  - Azure SQL

Project Risks

- UWM Proprietary Packages and Software Restrictions
  - Must develop on UWM laptops
  - UWM approved tools
- Building off codebase which is outdated and malfunctioning
  - Codebase contained deep architectural errors
  - Remake codebase using functional pieces, testing frequently
- Admins can input incorrect/corrupt data
  - Can make new goals and change existing data points
  - Extensive test cases and edge case handling
- Graphs must handle different metric types
  - Goal metrics are of various forms
  - Create distinct formulas for metrics

Questions?