

# AI-Based Workforce Scheduling and Rostering Platform

Transforming workforce management through AI-driven scheduling automation – delivering measurable efficiency gains across multi- location retail operations.

## CLIENT OVERVIEW

A leading retail organization in the beauty and personal care segment, operating multiple store locations nationwide. The organization required a scalable, intelligent approach to workforce planning and scheduling to ensure smooth day-to-day store operations while reducing the administrative burden on store managers.

## BUSINESS CHALLENGES

The obstacles hindering operational excellence

Manual and time-consuming rostering process across multiple store locations

High dependency on store managers for schedule coordination and conflict resolution

Frequent scheduling conflicts and errors leading to operational disruptions

Inefficient workforce utilization across stores with uneven shift coverage

Difficulty in scaling scheduling operations as the business expanded

Lack of data-driven insights for strategic workforce planning

## OUR SOLUTION

An intelligent, end-to-end workforce scheduling platform

We designed and deployed a comprehensive AI-based rostering platform that transforms how the organization plans, generates, and manages employee schedules – replacing manual processes with intelligent automation.

### Key Solution Components

- Developed an AI-powered rostering agent on the Domo platform to automate schedule generation
- Built a custom front-end application using React.js for intuitive user interaction and management
- Analyzed historical employee data including attendance, leave, and performance metrics
- Generated optimized daily and weekly schedules automatically using AI algorithms
- Integrated with Domo APP\_DB and datasets for centralized, real-time data management
- Automated roster creation to significantly reduce manual intervention
- Ensured conflict-free scheduling and efficient workforce allocation across all locations



### Capabilities Delivered

<b>AI-Powered Rostering Agent</b> Intelligent scheduling engine built on Domo that analyzes patterns and generates optimized rosters automatically.	<b>Custom React.js Interface</b> Purpose-built front-end application enabling managers to review, adjust, and approve schedules with ease.	<b>Historical Data Analysis</b> Leveraged attendance, leave, and performance data to generate context-aware, data-driven schedules.
<b>Automated Schedule Generation</b> AI-generated daily and weekly rosters eliminating hours of manual planning and coordination.	<b>Centralized Data Management</b> Seamless integration with Domo APP_DB and datasets for a single source of truth across stores.	<b>Reduced Manual Intervention</b> End-to-end automation of roster creation, freeing managers to focus on strategic priorities.
<b>Conflict-Free Scheduling</b> Built-in validation ensures zero scheduling overlaps and optimal workforce allocation at all times.		

## BUSINESS IMPACT

Measurable outcomes that drive business value

**70–80%**

Reduction in Manual Scheduling Effort

**30–40%**

Improvement in Workforce Utilization

Minimized scheduling errors and conflicts across all store locations

Improved operational efficiency with real-time, data-driven scheduling

Enhanced team productivity through intelligent automation

## TECHNOLOGY STACK

React.js

Custom front-end application

Domo App Studio

Platform for AI agent development

Domo APP\_DB

Centralized data storage

Domo Datasets

Data integration & management

## VALUE DELIVERED

From manual rostering to intelligent, scalable workforce automation

By combining AI-driven scheduling with a modern, intuitive interface, we enabled the organization to dramatically reduce manual effort, eliminate scheduling conflicts, and unlock data-driven workforce planning at scale. The platform positions the client for continued growth – with a scheduling infrastructure that adapts as operations expand.