

ADAPT Demand and Forecast

ADAPT Forecast & Demand



A sophisticated modelling tool that powers predictions with expert precision using the latest technology for unrivalled accuracy. ADAPT produces machine learning enhanced forecasts and the ideal labor models to strategically manage operational costs.

Azure powered machine learning analyses and overlays data to predict accurate sales and metric volumes for the months and even years ahead. It produces bottom-up budgets for the business that improve accuracy yet save time, money and effort. ADAPT forecast and demand can be deployed together or independently.

Problems

- Daily forecasts are OK (just about) but not at the hourly and 15-min level
- **2.** Can't forecast out far enough, I lose accuracy. I can't forecast well for new stores that have no trading data.
- 3. Multiple systems, heavily manual and reliant on individuals, inconsistency
- **1. Reliant on individuals** who know what to do to perform forecasting and demand processes
- 2. I can't easily see what the **impact of changes** I want to make are.
- 3. Hours and \$ don't match and I get called all the time

Solves

- 1. Forecasts are produced at the level they are available and can be aggregated
- 2. Can forecast 53wks out and maintains accuracy. New stores algorithm learns from all store opening history
- 3. ADAPT was built to be integrated with other systems and be a source of truth other systems use
- 1. As a SaaS solution ADAPT creates a single workflow that everyone can follow, along with job automation
- 2. Powerful what-if engine allows changes and their impacts on the hours and \$ to be modelled.
- 3. Constrain-to-budget functionality maintains the relationship between the work and the \$



ADAPT Forecast



ADAPT Forecast uses bespoke machine learning algorithms alongside external and internal data points to produce a

significantly more accurate forecast than traditional techniques.

Machine Learning to increase accuracy

- Model Training
- Deep Learning
- Clustering
- Bias Learning

Produce Forecast

- For any chosen period up to 53wks
- Forecast at 15-minute level

Review & Edit

- Review outliers and remedy
- Edit forecasts
- Export for demand planning or other system/ reporting tool

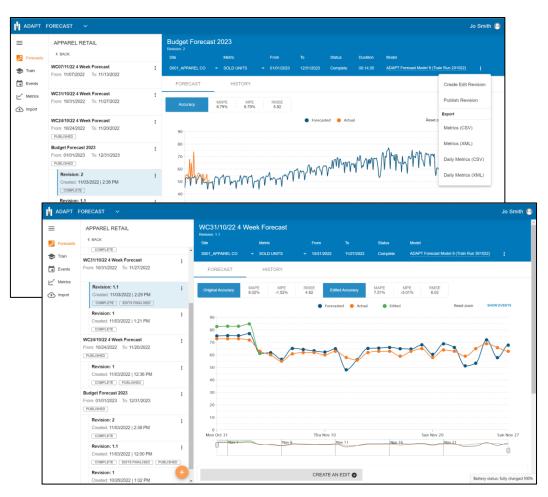
Data Points:

Point of Sale Metrics

- Transactions
- Items
- Sales
- Dept level metrics etc.

Drivers

- Store Characteristics
- Geolocation
- Events data
- Promotion data
- Marketing data
- Renovations data
- Weather data
- Economic data



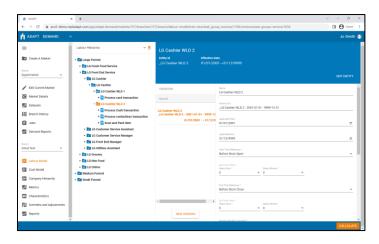
ADAPT Demand



ADAPT Demand is a labor modelling engine built in Azure that quickly produces labor demand curves at 15-minute level to enable a Workforce Management solution to optimize employee scheduling.

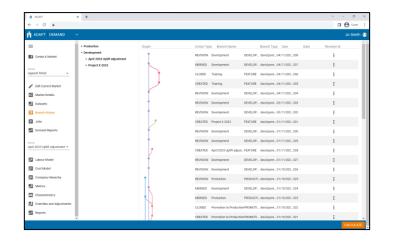
Labor Model

- Generate 15-minute level store labor budget
- Highly scalable calculation engine powered by Azure
- Supports complex calculations in labor modelling
- Establish the cost to operate
- Keeps a record of each major calculation step and archives the results of every scenario calculated
- Data can be exported to any WFM system



'What If' Scenarios - Branching

- Extremely powerful branching model to determine impact of changes in your business processes
- Create a feature branch and run scenarios in isolation from Production prior to applying changes
- Model operational initiatives to scale out the benefit and ensure its realisable
- Model version control without standing up multiple instances



Reporting

- Create & connect interactive dashboards to reveal business opportunities to turn into real high return business projects
- · Visualise, iterate and decide
- Integration with BI reporting tools brings unparalleled insight into business performance



