

## **UKG Pro Forecasting**

# Take the guesswork out of workforce planning with the power of UKG AI

UKG Pro® Forecasting (formerly UKG Dimensions® Forecasting) takes the guesswork out of scheduling the right number and mix of people by analyzing trends and patterns using your own business data such as sales volume, seasonal changes, holidays, and more. Powered by UKG Bryte™ AI, our patented, self-tuning machine learning (ML) algorithms generate accurate forecasts you can use to build optimized schedules that meet business demands and improve your bottom line.



#### Accurate volume forecasting

Forecast dozens of volume drivers and an unlimited number of categories, locations, and volume driver combinations at a highly granular level with unprecedented accuracy.



### **Deep ML insights**

Our patented ML algorithms reduce the need for manual intervention by automatically surfacing projected volume variances to help you stay on target.



#### **Optimized schedules**

Schedule the right people for the forecasted volume defined by your labor standards and demand forecasts.



## Key features

- ML-driven models learn from historical data and automatically adapt to emerging patterns to deliver unprecedented forecast accuracy.
- Highly accurate labor forecasting ensures appropriate intraday headcount by store and by department.
- An exclusive Al-powered scheduling engine ensures that the right people with the right skills are scheduled in the right place at the right time.
- Configurable dataviews allow users to quickly assess forecast accuracy, schedule effectiveness, and the impact on customer service.

## Key benefits

- Forecast accurate demand in 15-minute intervals.
- Automatically capture the impact of dozens of volume drivers at the most granular department and category levels.
- Routinely pool data across the organization, analyze special events, and improve the intelligence of the scheduling engine over time.
- Align staff coverage with fluctuating business demand, minimize wasteful overstaffing, and avoid unplanned overtime costs.
- Help stores make better decisions in real time by leveraging the latest in AI and ML.

## **Product Updates**

## **New Algorithms**

UKG Pro Forecasting now features additional algorithms, offering greater nuance and expanded modeling options for achieving the highest degree of accuracy.

**ML Algorithm:** This patented algorithm, the original ML version built into UKG Pro Workforce Management Forecasting, has been proven in the field to offer a heightened accuracy compared to traditional algorithms such as Daily Trend and Exponential Smoothing.

**Hyperparameter Optimization:** UKG's first-generation ML algorithm now includes hyperparameter optimization, a process that finds the hyperparameters of a learning algorithm that deliver the best performance. This optimization process is applied before training to ensure the set hyperparameters, whose values control the learning process, are refined for greater accuracy in the resulting model.

**Automatic Selection Model:** This ensemble approach automatically chooses from 13 different algorithms, offering a significant increase in available options compared to earlier releases.

#### **New Machine Learning Model Explorer**

Transparency is critically important in the application of ethical AI. However, the 'black box' computational environment of ML can be a challenge for data science teams looking to gain a deeper understanding of how models are built.

UKG is the first human capital management solution provider to create a new ML Model Explorer that offers analysts the ability to explore and understand the resulting machine learning model. Analysts can now dig into which features are important in creating the model across the entire training dataset. Graphs that leverage SHAP (SHapley Additive exPlanations) allow any data scientist to easily identify and understand how models are built.

## **New Graphical Forecasting User Interface**

At UKG, we want to help managers easily understand what's going on with their business. That's why we now offer a new Forecast Planner view that lets managers see volume forecast data graphically. Managers can view trends over the course of the week and compare actual and forecasted results. In addition, they can build custom dataviews that contain different data elements.

For even greater convenience, managers can make this graphical user interface (UI) their home page or set it with favorites, so it's loaded and ready to display the data they want to see for the day.

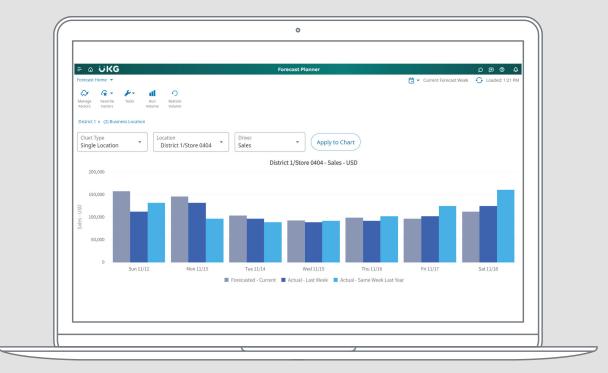


Figure 1: New Graphical UI in Forecast Planner

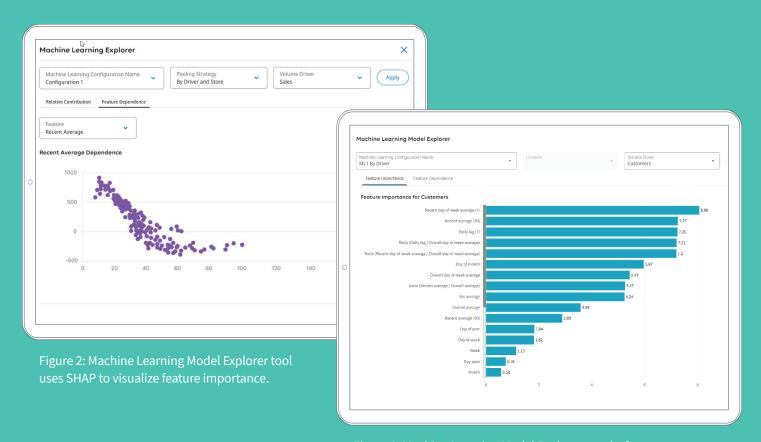


Figure 3: Machine Learning Model Explorer graphs feature Importance and Dependence for any volume driver.

