

Demand Forecasting

Manual forecasting methods such as spreadsheets may work when you have a single location or even a few locations. However, they can't handle the scale and complexity of an organization with numerous locations or omnichannel operations where each location has its own characteristics such as items for sale, traffic patterns, channels like drive-up, buy online, pick-up in-store, or geographic considerations like proximity to local attractions. Manual methods also make it almost impossible to analyze external data that can impact demand, like local events or weather.

Businesses don't know which channels are surging or not on any given day and can't react quickly enough to changes. Discrepancies often lead to lost revenue, lower productivity, higher payroll costs, and employee attrition.

THE LEGION SOLUTION

With Legion WFM, demand is automatically predicted across all customer touchpoints and locations, enabling intelligent automation. Legion Demand Forecasting makes it easy to adjust to dynamic business changes and model what-if scenarios, such as adjusting total budget hours, easily changing inputs, and enforcing operating labor models.

Intelligent Automation

Legion has designed a fully automated infrastructure that handles the end-to-end data ingestion process, model (re)selection, model (re)training, and forecast generation to help even the largest organizations achieve new levels of data accuracy.

Legion's fully automated Demand Forecasting is based on mature data science and has been in production for over seven years. The Legion WFM Demand Forecasting engine automatically delivers consistent, accurate forecasts weekly across all locations and channels to increase productivity and profitability across all your omnichannel operations.

Learning patterns from historical data, demand forecasting predicts future values based on those patterns and automatically handles the scale and complexity of your business.

Key Features

- **Intelligent Automation:** Get advanced forecasting technology—productized and automated. Forecasts continuously improve as new data becomes available. Updated forecasts and labor guidance are instantly generated while allowing human intervention.
- **Precision:** Factor in your unique labor model and staffing policies.
- **Accurate:** Legion's AI-powered intelligent Demand Forecasting engine automatically uses machine learning to compute highly accurate, scalable, and consistent demand forecasts at several levels—channel, dataset, location, or SKU—in 15-minute, 30-minute, or daily increments.
- External data and **customer event data** are automatically used to train the ML models for the greatest accuracy.

Benefits

- **Increased accuracy:** [Forrester Research](#) found that Legion delivers a significant 10% improvement in forecast accuracy, and each 1% improvement in demand forecast accuracy can lead to a .5% reduction in labor costs.
- **Increased revenue:** [McKinsey research](#) shows that a 10-20% improvement in labor forecast accuracy could translate into a 5% reduction in inventory costs and yield a 2-3% increase in revenue.
- **Faster decision-making:** Retail demand forecasting provides real-time insights into demand trends, enabling businesses to make faster decisions and instantly create optimized schedules.
- **Increase labor efficiency:** By using advanced analytics and machine learning algorithms to analyze demand data, businesses can optimize their labor efficiency and avoid the financial impact of overstaffing and understaffing.
- **Operate with greater agility:** Develop what-if scenarios for new channels, deployment strategies, and other demand drivers.

More Precision Brings Better Results

Legion demand forecasts are tailored to your specific business needs and provide new levels of accuracy at—the channel, location, or SKU level in 15-minute, 30-minute, or daily increments. During the setup phase, our data science experts integrate your unique data through direct API or FTP integrations, such as historical sales in POS and traffic counters. Our unique ML approach provides specific models and forecasts for every driver so you can forecast items, traffic, sales, transactions, and more by channel and location. Legion measures the predictability of each driver to deliver precise forecasts per driver.

Industry Leading Accuracy

Forecasting models that lack true machine learning (ML) are often only capable of learning a few patterns and rely on manual adjustments to accommodate other patterns.

Legion's advanced ML-based forecast engine automatically learns many time-based patterns in historical data and adjusts automatically for seasonality and holidays. Legion Demand Forecasting uses an ensemble of supervised machine-learning models, several statistical models, and unsupervised models. That results in a permutation of several hundred options, and the best set of ensembles is then selected based on accuracy. The selected models are then customized for your unique data sets. Forecast results are monitored and compared with projections to retrain the ML model and continually improve it.

Legion Demand Forecasting continuously learns, improves, and adapts to deliver highly accurate results in changing conditions. As new data is available throughout the week, labor is recomputed so you can compare an improved forecast and labor plan to what was previously published. You can adapt and react quickly to business changes by continuously reforecasting and regenerating labor guidance. And, with Legion, forecast editing can be done at a manager level or centrally to combine human judgment with Legion's AI.

External Events Pre-Integrated

Legion WFM synthesizes historical and current information about how customers buy. Weather and local events are automatically syndicated and pre-integrated, so you don't have to run complex calculations, pay high data fees, or use manual processes. External data and customer event data are automatically used to train the ML models for the greatest accuracy. And you can integrate your unique staffing policies and local laws. Demand forecasting ensures you understand the impact of demand influencers by driver, channel, and location so you know exactly what type of labor you need every hour of every week.

Related Products

- Labor Budgeting
- Labor Optimization
- Automated Scheduling

Create Better Labor Plans

Legion WFM takes the auto-generated, highly accurate demand forecasts and creates an optimal labor plan automatically. No more mapping between labor models used by finance for forecasting and operations for scheduling. With no manual steps or “lost in translation” data issues, Legion creates an optimized labor plan for your business.

What's Different About Legion's Demand Forecasting

Legion WFM enables intelligent automation to precisely predict demand across all customer touchpoints in 15-minute, 30-minute, or daily increments. Legion's approach to demand forecasting includes highly specific forecast models tailored to each dataset, and it uses external data within our automated and scalable infrastructure. You get much higher accuracy levels than other methods—and it's all automated. What does this mean for you and your business? With Legion WFM, you can:

- Improve and intelligently automate demand and labor forecasts.
- Increase forecast precision so you can create optimal labor plans and better schedules.
- Achieve industry-leading forecast accuracy at a data set level by channel.
- Automatically incorporate external data and customer event data for the greatest accuracy.

Legion's auto-generated, highly accurate demand forecasts generate optimal labor plans, budgets, and schedules across all touchpoints, freeing managers to spend more time with employees and customers—resulting in happier employees and increased revenue.

And, because the platform is modular, you can tackle specific challenges, like forecasting inaccuracy or unengaged employees, independently and regardless of your current WFM contract so you can gain the accuracy you need immediately. Get up and running in weeks with no rip-and-replace or change management required.

Ready to compare our forecast accuracy to your existing solution and against predictability scores? Let us prove what we can deliver for your company by taking our [Demand Forecasting Accuracy Challenge](#).

About Legion

Legion Technologies delivers the industry's most innovative workforce management platform, enabling businesses to maximize labor efficiency and employee engagement simultaneously. The award-winning, AI-native Legion WFM platform is intelligent, automated, and employee-centric. It's proven to deliver 13x ROI through schedule optimization, reduced attrition, increased productivity, and increased operational efficiency. Legion delivers cutting-edge technology in an easy-to-use platform and mobile app that employees love. For more information, visit <https://legion.co> and follow us on [LinkedIn](#).

INTELLIGENT AUTOMATION | POWERED BY LEGION WORKFORCE MANAGEMENT