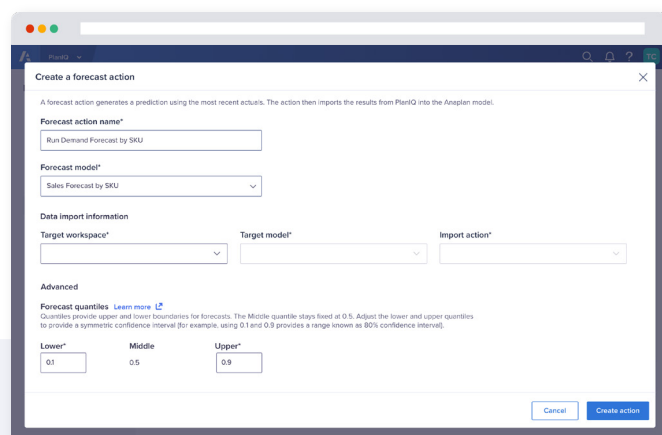# Anaplan PlanIQ™

Drive accurate decisions with seamlessly integrated ML-based forecasting

Executive summary

Business leaders face an ever-growing set of challenges spanning from the need to rapidly grow business, accurately predict future demand, and anticipate unforeseen market circumstances. With increasing volumes of data across the organization, it can be difficult for decision-makers to zero-in on the necessary data and extrapolate the proper insights to make a positive impact on planning cycles and outcomes. To further exacerbate the problem, many analytics tools leverage primarily high-level historical data, forcing decision-makers to re-forecast from scratch as soon as unforeseeable market shifts hit.

With Anaplan PlanIQ™, teams across finance, supply chain, sales, and human resources can make highly-accurate decisions with intelligent forecasting. This solution combines Anaplan's powerful Connected Planning platform with advanced intelligent ML capabilities and deep learning algorithms to generate accurate future forecasts, fast.

Anaplan PlanIQ overview

PlanIQ leverages Amazon's best of breed intelligent forecast engine, as well as Anaplan-native algorithms such as multi-variate linear regression (MVLR), to help customers make more informed predictions while expending fewer resources. In 70% of predictions, ML or statistical-based forecasts are proven to deliver either the same or greater accuracy than an expert.[1]

PlanIQ can ingest up to three types of data to deliver a predictor. While only one type of data is required to forecast, adding two other sets can help the forecast learn and output more tailored forecasts to a specific scenario. The intelligent capabilities work to automatically learn and train forecast models to increase accuracy. This also allows users to create new forecasts with recent data, eliminating the need to retrain new models at each time.

Key decision-makers can rely on Anaplan platform capabilities within PlanIQ to get a deeper understanding of future drivers, predictions, and understand the impact of "what-if" scenarios. PlanIQ enables planners to model multiple scenarios to shape future demand across a variety of industries and use cases, helps speed analysis, optimize plans, and eliminates siloed decision-making—all without requiring data science expertise.

> In **70%** of predictions, ML or statistical forecasts deliver the same or greater accuracy than an expert.[2]

Speed intelligent, accurate decisions

PlanIQ delivers benefits that help teams achieve intelligent decision-making. Customers can improve accuracy of their predictions, make forecasting more accessible, and automatically track new insights.

Drive forecast accuracy

PlanIQ has the power to improve forecast accuracy by up to 50%. Backed by ML capabilities via the industry-leading Amazon

Using forecast engine and Anaplan's own advanced statistical algorithm such as multi-variate linear regression (MVLR), decision-makers can evaluate multiple scenarios, predict results, and drive future outcomes based on greater volumes of historical, internal, and external data.

In addition, teams can create experiments and forecasts fast. In fact, they can seamlessly increase data volume to make predictions more accurate and continuously improving forecasts. Forecasting team can leverage CloudWorks to bring even more internal and external data directly into PlanIQ, from AWS S3 or Azure Blob, further driving forecast accuracy without having to first move the data into Anaplan. Adding more data to the forecast can improve the outcomes with PlanIQ.

Simple setup and easy access

Decision-makers can easily access intelligent insights via PlanIQ. Since this solution doesn't require any special expertise to configure, deploy, and operate, it helps democratize intelligent forecasting, empowering more users to unlock new insights. Now, decision-makers can visualize and examine results in Anaplan from every angle to fully understand the key drivers behind their choices. With feature importance, decision-makers can understand how each driver impacts their forecast results, making analysis and decision-making easier and faster.

Teams can also easily convert data into a forecast engine-friendly format, completely avoiding tedious manual data preparation processes and saving time. A simplified process for integrating first and third- party data into forecasts, both from Anaplan and from cloud sources (coming H2 2023) means that teams can spend less time processing data, and more time analyzing and making more informed decisions.

Simple setup and easy access

Companies can easily scale intelligent forecasting across use-cases and data-sets, enabling data driven growth for the entire business.

By housing the intelligent forecasting solution directly in Anaplan, companies can eliminate additional processes for moving data in and out of Anaplan to perform their forecasts, saving valuable time and allowing teams to focus on value-add activities. Customers can choose to leverage data from their Anaplan environment or directly from cloud sources. This also means that to expand intelligent forecasting to new use cases, all business-users need to do it add additional data to other PlanIQ models.

The continuous learning native to intelligent forecast engines means that forecasts evolve and adjust over time, allowing users to scale solutions forwards in years and horizontally across the business.

Key PlanIQ features

- Easily select Anaplan data for model training

- Train forecast models automatically or manually

- Attain highly-accurate metrics in an accessible format

- Gain transparency into automated configurations

- Understand what drives forecast results

- Validate model training data automatically

- Schedule operations and manage forecast quotas to match your forecasting cycle

- Support ad-hoc predictions

- Compare forecasts with actuals automatically

Derive greater insights across industries

PlanIQ works across a range of industries and can help teams realize a breadth of new use cases. Teams across finance, human resources, sales, and supply chain can harness the power of intelligent forecasts.

Finance: Financial planning

Financial planning can be a lengthy process that produces variable results. With so many categories, it's impossible to deliver accurate manual forecasts due to the quantity of drivers that can impact results.

PlanIQ pulls in data from Anaplan models and automatically chooses the best ML prediction model for the data, saving hours of manual effort. Meanwhile, ad-hoc analysis allows analysts to determine the drivers that increase prediction accuracy.

Human resources: Workforce planning

The sheer volume of variables required for manual workforce planning makes it difficult to predict. For example, forecasting the number of skilled dialysis staff needed at a clinic during the holiday season can be a time-consuming process that yields inaccurate results.

PlanIQ transforms workforce planning from a time-consuming manual exercise to one that is flexible and quick. Organizations can leverage a transparent, automated process to accurately predict future staffing needs.

Supply chain: Demand planning

Rapidly changing market dynamics make it difficult to accurately predict the demand for a specific product. For example, inaccurate predictions about the amount of a product needed in a specific store results in excess waste of resources and reduced margins.

PlanIQ enables users to connect large volumes of historic data with internal data to accurately forecast demand for a product, decreasing waste. The ability to run ad-hoc analysis on key drivers means that demand planners can optimize their plans to successfully meet business goals.

Use cases across functions

Finance

- Revenue forecasting
- Financial planning

Supply Chain

- Demand planning
- Inventory planning
- Operations planning

Human Resources

- Workforce planning
- Attrition forecasting

Boosting forecast accuracy in real-world scenarios

Supply Chain

Challenge: A large APAC retailer of food and hygiene products wanted to improve demand volume forecasts to tighten inventory levels, improving bottom line. While existing solution is fairy accurate (90%), they wanted to increase that accuracy. Additionally, the implementation of current solution was long and very technical, taking multiple weeks to set up.

Solution: Using PlanIQ, the retailer ran a forecast for 10,000 SKUs for one region over 8 months. They were able to bring in not just the historical data to forecast, but also attributes about the SKUs to add context for the ML algorithms to use. With PlanIQ, the retailer improved their forecast accuracy by 1.4%, with estimated savings of U.S.$4 million in just the one region. Additionally, they were able to set up the forecast in only ½ day, cutting implementation down considerably.
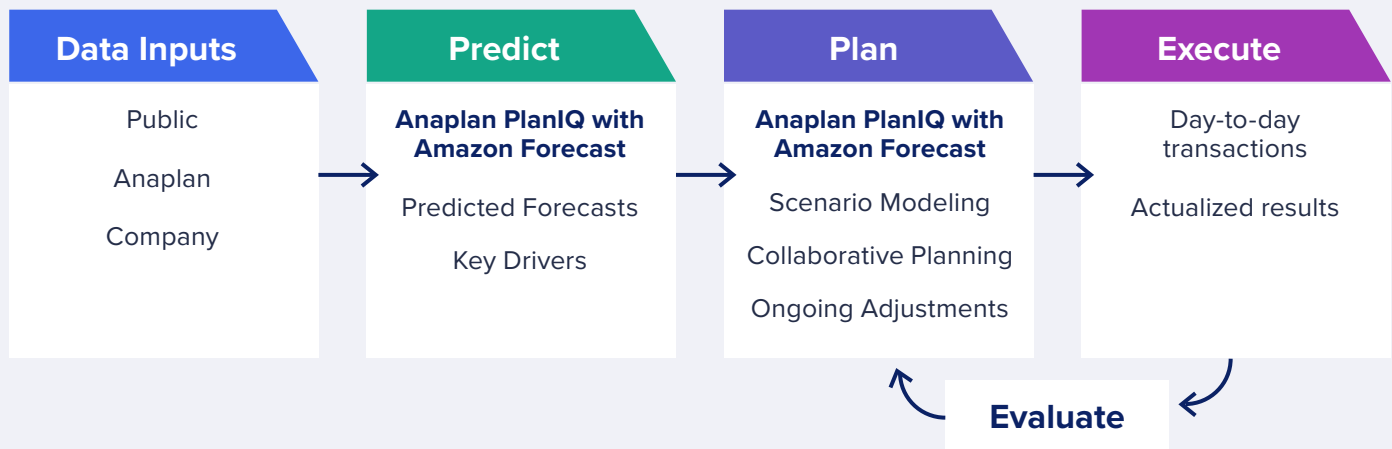
Workforce Planning

Challenge: A British health services provider wanted to improve the accuracy of their workforce staffing by better forecasting the call volumes to their service lines. Any increase in accuracy means that they can better serve the community. Their current process is very manual and is prone to manual errors resulting in data discrepancies between the data used for the forecasts and the actuals in Anaplan.

Solution: The health services provider ran a PlanIQ PoC for 1-years forecasts across all their services. PlanIQ forecasts were 13% more accurate than their existing soltuions, which allows the provider to train the right people for the job in advance of needing them, cutting down the requirement to hire expensive contractors. Since the data is pulled directly from Anaplan into PlanIQ, the data discrepancies are no longer an issue.

Fianance Planning

Challenge: Bed manufacturing company wanted to improve their top-line forecasts to minimize inventory issues, such as shortages and obsolescence, and improve customer service. Their previous statistical forecasting process was time consuming to maintain and couldn't forecast at daily granularity, making it difficult to manage inventory and service staffing levels.

Solution: The team built daily and weekly forecasts with PlanIQ for top-line sales, market level, and product class for 15 different product categories. PlanIQ allowed the team to easily explore and iterate forecasts, identifying the drivers with greatest impact—improving forecast accuracy by approximately 40%, which also improved customer experience with more accurate delivery and service.

Data Inputs	Predict	Plan	Execute
Public	**Anaplan PlanIQ with Amazon Forecast**	**Anaplan PlanIQ with Amazon Forecast**	Day-to-day transactions
Anaplan	Predicted Forecasts	Scenario Modeling	Actualized results
Company	Key Drivers	Collaborative Planning	
		Ongoing Adjustments	

Evaluate

Conclusion

The mounting pressures decision-makers face to expand business in the midst of volatile markets is not expected to ease anytime soon. The only choice is to adapt to a new reality of unforeseen changes, which can be easier said than done. However, a powerful intelligent forecasting solution increasingly adopted by industry leaders can help decision-makers gain a competitive edge.

PlanIQ with Amazon Forecast and PlanIQ native algorithms empower teams to more nimbly anticipate change and make more informed plans. Embedded intelligent forecasts from Plan IQ with Amazon Forecast provides the continuously accurate predictions and automated analysis to a larger set of business users—delivering everything key leaders need to not only keep pace, but stay ahead.

[1] Marc Rodt and Gerhard Unger, *"The Power of Algorithmic Forecasting,"* BCG, December 5, 2019.

[2] Ibid.

About Anaplan

Anaplan is a transformative way to see, plan, and run your business. Using our proprietary Hyperblock™ technology, Anaplan lets you contextualize real-time performance, and forecast future outcomes for faster, confident decisions. Anaplan enables connected strategy and planning across your enterprise to move your business forward. Based in San Francisco, Anaplan has over 200 partners and more than 2,000 customers worldwide including Bayer, Google, ServiceNow and Shell.

To learn more, visit Anaplan.com