

alteryx

**E-BOOK**

# 8 Ways To Transform Your Supply Chain With Alteryx



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# Introduction

Analytics can't unload a cargo ship stuck at sea. They can't hire more drivers to ship materials and supplies. And they can't solve every problem caused by the pandemic and disruption.

But analytics can help you become customer-centric and perform better financially by adapting in real-time to shifting customer demand and sudden disruptions.

With analytics, you can create a customer-centric supply chain. And customer-centric supply chains outperform others. According to Supply Chain Quarterly, having one helps you deliver 13% more growth than your peers.

But that requires knowing what your customers need, and knowing what your customers need requires analyzing internal and external data — at scale.

## Which isn't easy.

Ever-changing customer needs can make demand forecasts inaccurate. Shifting customer purchasing behavior creates havoc with inventory and assortment. And both of those are dependent on machines staying up and running.

So, while analytics can't unload cargo, hire drivers, or end disruption, it can help you with the crucial areas of your supply chain that you control.

We're going to explore eight key areas you can focus on to improve your supply chain and empower customers and the actions you can take to overcome your roadblocks and gain an advantage over your competitors.



## MAIN FOCUS

# Forecasting Demand

## The Goals

- Anticipate and respond proactively to panic buying, shifts in customer demand, and raw material shortages
- Implement reliable and repeatable data and analytic processes that require fewer manual tasks and reduce human error

## The Roadblocks

- Lack of clear line of sight into customer preferences and consumption behaviors
- Little to no data collaboration with suppliers and a lack of insight into external factors impacting supplier capacity

- Highly dependent on scarce professionals responsible for supply chain processes

## The Actions To Take

- Streamline new and ongoing processes to improve forecasting accuracy and timeliness
- Automate and centralize data and analytic processes to increase transparency and access

### 7-Eleven's Example



## 7-ELEVEN'S GOAL

Test and validate that an AI-forecasting model performed as expected relative to on-shelf availability targets before rolling out to thousands of stores

## ISSUES AND FACTORS

Current analytic process took two days

## ACTIONS THEY TOOK

Used Alteryx to automate key analytic processes

## THE ROI

Reduced analytic process time from two days to one hour and used time savings to focus on critical revenue-impacting use cases

## MAIN FOCUS

# Evaluating Performance

## The Goals

- Understand how market forces impact revenue, margin, and growth
- Gather metrics that measure the quality and efficiency of analytics projects, including business value, time-to-value, and productivity

## The Roadblocks

- Lack of organizational access to internal and external demand signals
- Determining business value, time-to-value, and productivity requires extra analysis

## The Actions To Take

- Centralize and democratize organizational analytic assets and processes
- Work with teams to create automated processes and scheduled reporting for key metrics

### Amway's Example



### AMWAY'S GOAL

Buffer against supply and demand variability to achieve service level targets plus reduce cost

### ISSUES AND FACTORS

Forecasting application model involved time-consuming and complex data preparation

### ACTIONS THEY TOOK

Data scientist used self-service analytics to automate the entire analytic process and developed macros within Alteryx to accomplish their goals

### THE ROI

Cut millions of dollars in safety stock inventory costs across 325 locations while meeting customer demand targets

## MAIN FOCUS

# Deploying Prescriptive Forecasts

## The Goals

- Determine the impact market shifts and organizational supply volatility have on company reputation and brand value
- Utilize historical and real-time data for commercial applications, machine learning, data science, and predictive modeling

## The Roadblocks

- Time required to gather and mix data from multiple departments and form brand reputation and value analysis
- Lack of budget, staff/specialization, and resources for incorporating real-time information, data science, machine learning, and predictive modeling

## The Actions To Take

- Implement Alteryx Analytics Automation to centralize and govern cross-departmental information and analytics
- Upskill staff and reduce time-to-insight through easy-to-use self-service analytics and automated machine learning



## BRIDGESTONE'S GOAL

Create accurate, long-term forecasts

## ISSUES AND FACTORS

Data used for analysis included multiple sources and types

## ACTIONS THEY TOOK

Used Alteryx to combine sales history with consumer car registration, locations, and demographics to create a three-year demand forecast by store cluster

## THE ROI

Increased average sales uplift per store by \$3 million while reducing special order item costs with more accurate forecasting

## MAIN FOCUS

# Increasing Organizational Visibility

## The Goals

- Increase stakeholder visibility of departmental performance (sales, customer service, operations, etc.) for the organization and measure how each responded to market shifts and volatility
- Assess assortment performance and inventory levels, plus streamline inventory management, manufacturing materials management, and procurement

## The Roadblocks

- Creating multiple reports requires extensive, time-consuming data preparation and analysis, plus incorporation and understanding of new factors driven by demand swings

- Third-party partners, vendors, and retailers may use multiple data types and systems for inventory levels, materials, and assortment

## The Actions To Take

- Empower each department to automate reporting processes within and share results to a centralized dashboard
- Identify analytics platforms that can easily import and automate the processing and analysis of multiple data types and reports

### Coca Cola's Example



## COCA-COLA'S GOAL

Collaborate with one of its largest retail partners to address inventory concerns while also growing its beverage category with new ideas for promotions, assortment, and product introductions

## ISSUES AND FACTORS

Retail associates scanned shelves for inventory several times daily and provided this data to vendors manually, hurting product availability

## ACTIONS THEY TOOK

Coca-Cola used Alteryx to automate the process and address replenishment while delivering insight to field reps to help focus store visits on top-performing products, new products, and promotions

## THE ROI

Sales increased five percent and out-of-stocks decreased by 39 percent

## MAIN FOCUS

# Ensuring Forecast Accuracy and Optimal Inventories

## The Goals

- Procure and maintain optimal inventories of raw materials to meet demand
- Assess forecasting accuracy based on retail orders and shipments for procurement

## The Roadblocks

- Demand shifts are hard to predict and can leave inventories understocked or overstocked, leaving customers disappointed
- Creating multiple forecasts and adjusting them with new information requires continuous updates to processes and, if applicable, predictive modeling

## The Actions To Take

- Increase time-to-insight for reporting stocking questions and inventory levels
- Automate machine learning modeling to keep demand and supply departments in sync

### Kraft Heinz Example

# KraftHeinz

## KRAFT HEINZ'S GOAL

Fulfilling surging consumer demand post-pandemic.

## ISSUES AND FACTORS

Manual processes and lack of trustworthy data prevented data-driven insights and led to supply being out of sync with demand and supply for in-demand products never being guaranteed.

## ACTIONS THEY TOOK

They used Alteryx to build a repeatable workflow with trusted and vetted data, allowing leaders to make confident inventory forecasts.

## THE ROI

Supply decisions are now much more data-driven, and the data team has saved 5,500 analyst hours with Alteryx.

## MAIN FOCUS

# Reducing Markdowns, Out-of-Stocks, and Returns

## The Goals

- Adapt to sudden shifts and shocks in customer buying patterns
- Increase sales analysis frequency to reduce markdowns, out-of-stocks, and returns

## The Roadblocks

- Delayed reports create misalignment between locations and product deliveries
- Current analytic processes use small percentage sample of inventory for insights and, if applicable, prescriptive modeling for all SKUs

## The Actions To Take

- Increase sales analysis frequency to understand what customers are buying in real-time
- Expand analytic capacity and automate key processes to use data for 100% of SKUs to create accurate reports of inventory

### Roquette's Example



**ROQUETTE**

*Offering the best of nature™*

## ROQUETTE'S GOAL

Rapidly process and unlock insights from large datasets to supply a demanding and rapidly growing market

## ISSUES AND FACTORS

250 production processes emitted between 500 and 3000 records every 30 seconds, and hundreds of hours were spent manually exporting Excel spreadsheets. Roquette needed a way to consolidate, process, and analyze disparate data sources and enable strategic decision-making at scale

## ACTIONS THEY TOOK

Implemented Alteryx across supply chain departments for automated data preparation and machine learning

## THE ROI

1,000x improvement for a process that involved the manual export of 3,000 Excel spreadsheets, turning a 100-hour project into a three-minute process. Now, teams across the organization are adopting Alteryx for similar efficiency gains

## MAIN FOCUS

# Identifying Which Machines Require Service

## The Goals

- Monitor and manage maintenance events to improve asset reliability and machine service and parts scheduling
- Measure impact of machine service on sales, customer service and satisfaction, and product service and quality

## The Roadblocks

- Disjointed manual and complex analytic processes across multiple facilities, each with individualized reports and shared outputs
- Poor predictive maintenance modeling capabilities due to lack of budget for experienced people and/or poor reporting processes that hinder prescriptive analysis

- Machine downtime that results in costly production delays

## The Actions To Take

- Automate reporting processes across multiple facilities to improve asset reliability and customer satisfaction
- Add or increase prescriptive modeling processes through faster reporting and analysis to increase predictive accuracy

### Siemens' Example



## SIEMENS' GOAL

Analyze power plant to prevent unnecessary costs, such as excessively high material expenses

## ISSUES AND FACTORS

With several thousand various measures, more than 5,000 different data sets, and over 8,000 employees in the business unit, the investigations were complex and time-consuming, with spreadsheet macros taking several hours to run. As a result, analyses were almost obsolete by the time the results were available

## ACTIONS THEY TOOK

Used Alteryx to automate repetitive data tasks, automatically update Tableau dashboards every three hours, and help employees focus on analysis instead of manual data work

## THE ROI

More employees, including management, trust and use the data because it's always up to date. With teams across the org confident in the data and its currency, plant operational costs can be optimized relative to supply and demand

## MAIN FOCUS

# Incorporating On-Machine Data

## The Goals

- Incorporate metrics from multiple sources and technologies to plug gaps in machine and asset maintenance that prevent cost-effective service
- Create a streamlined technical and analytical approach to machine and asset maintenance processes

## The Roadblocks

- Large volumes of data from sensors, machines, and manually reported surveys and inspections
- Separate data storage systems and different data types, including potential hand-written and scanned documents

## The Actions To Take

- Increase ability to input data of multiple types, sources, and sizes plus convert images and text to digital formats
- Analyze data and apply findings to improve gaps in machine service and maintenance to provide cost-effective service that ultimately benefits customers



## BENDIX'S GOAL

Gain a better understanding of the large volume of visual data Bendix captured from commercial vehicles equipped with the SafetyDirect system

## ISSUES AND FACTORS

Customers of this system were required to review video of any roadgoing events after they occurred and manually label their severity

## ACTIONS THEY TOOK

Automated the process and shared workflows internally to classify events based on learning analytic models to deliver immediate insights to managers of commercial vehicle fleets to improve safety and driver performance and preventative maintenance programs

## THE ROI

Reduced process time by half and integrated Python for additional benefits. Now, any team member, regardless of technical background or skill, can drive analytic project development.

## Learn more in our webinar series

[Accelerating your Customer-Centric Supply Chain >](#)

## Discover more ways you can use Alteryx to transform your supply chain

[Explore Use Cases >](#)

## Uncover your most valuable use cases

[Use Case Discovery Guide >](#)



## Ready to experience AI-powered analytics?

Start a 30-day free trial of the Cloud or Desktop version of Alteryx

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## About Alteryx

Alteryx powers actionable insights with the AI Platform for Enterprise Analytics. With Alteryx, organizations can drive smarter, faster decisions with a secure platform deployable in on-prem, hybrid, and cloud environments. More than 8,000 customers globally rely on Alteryx to automate analytics to improve revenue performance, manage costs, and mitigate risks across their organizations.

To learn more, visit [www.alteryx.com](http://www.alteryx.com).

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