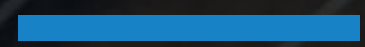


alteryx

# 8 Areas of Your Supply Chain That Can Create Growth Right Now



# 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 disruption.

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 data.

Which isn't easy.

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

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

And we're going to take a look at 8 key areas you can focus on to improve your supply chain, the roadblocks in our way, and the actions you can take to achieve them and gain an advantage over your competitors:

# Contents

- Forecasting Demand
  - 7 Eleven ..... 3
- Evaluating Performance
  - Amway ..... 4
- Deploying Prescriptive Forecasts
  - Bridgestone..... 5
- Increasing Organizational Visibility
  - Coca-Cola ..... 6
- Ensuring Forecast Accuracy and Optimal Inventories
  - Ingersoll Rand ..... 7
- Reducing Markdowns, Out-of-Stocks, and Returns
  - The Home Depot ..... 8
- Identifying Which Machines Require Service
  - Cargill ..... 9
- Incorporating On-Machine Data
  - Bendix..... 10

MAIN FOCUS:

# Forecasting Demand

Respond to panic buying, shifts in customer demand, and raw material shortages.

## The Goals

- Respond to panic buying, shifts in customer demand, and raw material shortages
- Change and improve supply chain data and analysis processes to help adjust

## The Roadblocks

- Lack of clear line of sight into customer consumption behaviors
- Highly dependent on 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

## The Example

- [7-Eleven](#)

## 7 ELEVEN

### 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 process took two days

### ACTIONS THEY TOOK

Use Alteryx to automate key processes

### THE ROI

Reduced process time from 2 days to 1 hour and used time savings to focus on critical revenue impacting use cases

MAIN FOCUS:

# Evaluating Performance

Understand how market forces impacted revenue, margin, and growth.

## 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

## The Example

- [Amway](#)

## AMWAY

### AMWAY'S GOAL

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

### ISSUES AND FACTORS

Forecasting application model involved a time-consuming and complex data preparation

### ACTIONS THEY TOOK

Data scientist automated the process and developed Macros within Alteryx to accomplish 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

Determine the impact market shifts and organizational supply volatility had on company reputation and brand value.

## The Goals

- Determine the impact market shifts and organizational supply volatility have on company reputation and brand value
- Utilizing 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, or resources for incorporating real-time information, data science, machine learning, and predictive modeling

## The Actions To Take

- Implement analytics automation with server to centralize and govern cross-departmental information and analytics
- Upskill staff and reduce time-to-insight through automated machine learning

## The Example

- Bridgestone

## BRIDGESTONE

### 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 3-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

Increase stakeholder visibility of departmental performance (sales, customer service, etc.) for organization and measure how each responded to market shifts and volatility.

## The Goals

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

## The Example

- [Coca-Cola](#)

## COCA COLA

### 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 5 percent and out of stocks decreased by 39 percent

MAIN FOCUS:

# Ensuring Forecast Accuracy and Optimal Inventories

Procure and maintain optimal inventories of raw materials to meet demand.

## 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

## The Example

- [Ingersoll Rand](#)

## INGERSOLL RAND

### INGERSOLL RAND'S GOAL

Quickly answer stocking level questions for \$60M of inventory

### ISSUES AND FACTORS

Manual processes prevented timely answers 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 automate the manual processes of problem-solving the root causes of over and under ordering

### THE ROI

All inventory can now be stratified at the item level in under three minutes, giving Ingersoll Rand leaders visibility into actionable drivers behind inventory

MAIN FOCUS:

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

Adapt to sudden shifts  
and shocks in customer  
buying patterns.

## 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

## The Example

- The Home Depot

## THE HOME DEPOT

### THE HOME DEPOT'S GOAL

Reduce markdowns, out of stocks, and returns while increasing sales analysis frequency for 160,000 SKUs across 2,500 locations

### ISSUES AND FACTORS

Current processes examine metrics for only 5 percent of total merchandise every two weeks

### ACTIONS THEY TOOK

The Home Depot used Alteryx to automate analysis, updating metrics 10 times per day for 100 percent of SKUs

### THE ROI

Reported a 4 percent lift (\$3B) in top-line sales, added millions to their bottom line, and doubled margins per store



MAIN FOCUS:

# Identifying Which Machines Require Service

Monitor and manage maintenance events to improve asset reliability and machine service and parts scheduling.

## 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

## The Example

- [Cargill](#)

## CARGILL

### CARGILL'S GOAL

Consistently identify machines requiring service within facilities

### ISSUES AND FACTORS

Salt production maintenance managers relied on a complex, manual, and disjointed machine service analytical process where individual facilities collected, reported, and shared outputs manually — all contributing to a poorly performing predictive maintenance model

### ACTIONS THEY TOOK

Cargill used Alteryx to automate the overall reporting process

### THE ROI

Improved time-to-predict maintenance events by 75%, proactively addressed issues before downtime, avoided production delays and lost sales, improved asset reliability, and more effectively scheduled and prioritized work, allowing maintenance management staff to focus on preventive measures

MAIN FOCUS:

# Incorporating On-Machine Data

Incorporate metrics from multiple sources and technologies to plug gaps in machine and asset maintenance that prevent cost-effective service.

## 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 and service that ultimately benefits customers

## The Example

- [Bendix](#)

## BENDIX

### 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 labeled 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





alteryx

## Learn more in our webinar series:

Accelerating your  
Customer-Centric Supply Chain

[LEARN MORE](#)