# Arkieva One-Plan Demand Management Solutions

Proactive Response. Real Time Collaboration.



### Plan to Better Meet Demand with Arkieva

Arkieva One-Plan Demand Management Software solutions create an integrated platform for a synchronized demand management process that promotes real-time synergy across the organization. Build One Common Plan that enables a proactive response to market changes, interactive collaboration, and a continuous improvement process.



# Arkieva One-Plan Demand Management



# Demand Management Solutions for Increasing Customer Delight



### Demand Analysis

- Historical Analysis
- Understand
   Exception Items
- Clean History
- Segment Portfolio
- Life Cycle

  Management



### Baseline Forecast

- Statistical Baseline
- Forecast Methods
- Forecast Metho
- Quantified
   Assumptions
   (Price, Market Share,



#### Forecast Collaboration

- Aggregation and
   Disaggregation
- Disaggregation Collaborative
- Philosophy
   Overrides and
- Scenario

  Management



#### S&OP

- Volume & Value
- What-If Scenario Management
- S&OP Meeting

  Manager
- Financial
- Assumption
   Tracking



### Performance Management

- Forecast Accuracy
   Massurement
- Forecast Value Add (FVA)

## Proactively Respond to Demand

In today's competitive marketplace, to continuously delight your customers and increase your profitability, you need to proactively sense changing marketing trends to respond quickly to fluctuating market demand.

### With an improved demand management process with Arkieva, you can:

- Increase on-time shipments by 20%
- Reduce inventory by 15%
- Achieve a 17% higher perfect order fulfillment
- Trim cash-to-cash cycle by 35%
- Reduce stock outs by 90%

# How Can Arkieva Help You Respond Better to Demand?

Dynamic Demand Analysis

- Demand Segmentation
- Product Segmentation
- Life Cycle Management

Flexible Demand Sensing & Shaping

- Sales Prediction
- Macro-economic and Causal Forecasting
- Social Sensing and Analysis
- Promotions Planning

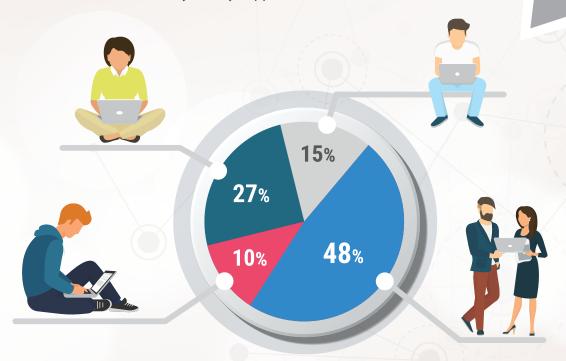
Optimized
Demand
Planning &
Performance
Management

- Automated Forecasting and Demand Modeling
- Performance Management
- Demand Scenario Planning and Executive Summary

# Dynamic Demand Analysis

### **Demand & Product Segmentation**

Easily segment your customers and products according to volume and revenue with the Arkieva Demand Analyzer. Identify trends and causes of demand variability as they happens. Which customers are the most profitable?



### Discover your most profitable products or customers.

- Track and reduce late shipments by at least 20%
- Identify & transition obsolete products proactively
- Slice and dice data to uncover low-service levels
- Perform ABC product or customer profiling on-the-fly
- Create dynamic views to track changing demand trends

Who should get the highest service level?

# Product Life Cycle Management

### Gain a Competitive Advantage

Proactively manage your product life cycle and gain a competitive advantage with the Arkieva Life Cycle Management module. **Reduce your time to market for new products**, and create phaseout plans for end-of-life products to increase profit and improve savings.



## Discover Obsolete Products. Create a Shorter Time to Market for New Products.

- Discover products that have not sold recently
- Create dummy product codes and generate forecasts for new products
- Use New Product Diffusion Algorithms to plan supply before product codes are available
- Easily re-align products, customers, and locations that are in transition
- Improve forecasting and better manage seasonal products

How do we forecast for our new product?

# Arkieva Demand Analyzer



# Flexible Demand Sensing & Shaping

### Sense Early Warning Market Signals

Identify customer order trends to improve near-term forecasting by more accurately sensing demand signals. Reduce short-term forecast errors by up to 40-50% and increase inventory accuracy by 15-20% with the Arkieva demand sensing and shaping tools.

### Flexible Demand Sensing and Shaping Solutions:

- Sales Predictor
- Macro-economic Forecasting Analysis
- Social Sensing and Analysis Tools
- Promotions Planning

### Predict Your Next Customer Order

Powered by advanced predictive analytics, the Arkieva Sales Predictor provides the tools needed to sense demand and improve near-term demand signals. Gain visibility into untapped sales opportunities and increase your revenue earning potential with sophisticated demand data analysis and sales prediction features.

### **Gain Visibility into Untapped Sales Opportunities**

### Average Order Interval Analysis

Easily identify gaps between actual and projected customer orders. The Arkieva Sales Predictor automatically calculates sales probabilities to help you know when it's time to proactively reach out to customers who have yet to place promised or projected orders.

### Customer Inventory Level Prediction

Stay ahead of the curve and continuously delight your customers by determining inventory at the customer level using the Arkieva Sales Predictor's average order interval analysis and average daily usage rates.

### Cross-Sell Opportunity Identifier

Increase sales potential by using Sales Predictor to discover products that should be offered to customers based on past buying patterns. The Sales Predictor provides analytical tools for identifying products bought by similar customers and products often bought together using a market basket analysis.



### Arkieva Sales Predictor

Increase Revenue. Delight Your Customers.

- Identify your typical order frequency and associated variability
- Get an estimate of your customer's product usage
- Discover the current days of supply at the customer level
- Determine when your customer orders are late ahead of time
- Increase revenue and customer satisfaction by proactively reaching out to customers

# Macroeconomic Forecasting Analysis

# Track Macroeconomic Indicators to Improve Forecasts

Your business is affected by many external factors that can impact your demand forecasts. The Arkieva macro-forecasting analysis tool uses a regression based forecasting engine to help you analyze a variety of external factors that may affect your business. These external factors often allow businesses to identify early warning signs or leading indicators to improve your existing forecast.

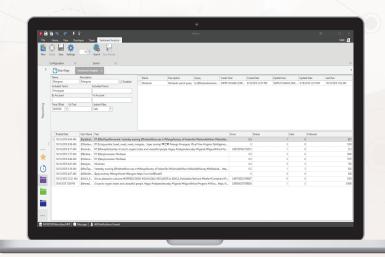
# Arkieva Social Sensing and Sentiment Analyzer

# Gain the Visibility Needed to Sense Social Signals – As They Happen

The Arkieva Social Sensing and Sentiment Analyzer uses social media listening and monitoring features that track specific keywords, analyze the results for relevant keywords, and then attribute a sentiment score to show how a conversation can negatively or positively affect your business. This allows you to track and react, in real-time, to social conversations. Which customer orders are late?

**Macroeconomic Forecasting Analysis Features** 

- Adjust forecasts based on weather changes and natural calamities
- Adjust short-term sales forecasts, raw materials procurement, production plans and distribution plans to meet changing market conditions
- Determine the best-fit forecasting method by factoring in all leading indicators or external factors using the causal forecasting engine at any data hierarchy or aggregation level.



# Arkieva Social Sensing and Sentiment Analyzer

Track, Analyze, and Align Your Social Signals with Your Demand Plan in Real-Time.

Your customers are always on. Therefore, you need to be able to sense and instantly react to changes caused by a result of customer social interactions online. When a product suddenly increases or decreases in demand as a result of unplanned social activity, you need to be able to quickly adapt your demand and supply plans.

What happens when a new or existing product suddenly increases in popularity (goes viral)?

### Improve Your Social Sensing and Demand Planning

#### Sense demand in real-time

Create a better process for tracking demand and sensing signals by using customer interactions shared via social media.



### Identify positive and negative demand signals

The Arkieva Sentiment Analysis Solution assigns a sentiment score to each social media post, allowing you to easily analyze and identify positive or negative drivers of demand.



### Join customer conversations

Track keywords or hashtags that your customers are using and join conversations to better shape demand.



### Give weights to social interactions

A post by a celebrity with millions of followers might make a huge impact on your sales. Easily identify accounts and posts with the highest social media followers and shares to get ahead of possible demand implications.



### Arkieva Promotions Planner

# Harmonize Promotions Visibility. Determine Financial Impacts Immediately.

Running promotions to increase sales is an essential part of the product marketing process. The Arkieva Promotions Planner provides powerful forecasting analytics tools that help you quickly align your promotions with your demand or supply. Discover which promotions yield the best return on investment and create an improved forecast that avoids overstocks or understocks using what-if- scenario analysis to help you better prepare for different situations.



### Optimize Your Promotions

## One Harmonized Tool for Promotions Planning

Gain access to one harmonized promotional planning tool that integrates your transactional, demand, financial, and supply planning data.

### Improve Promotional Visibility

Attain clear visibility on promotional status and possible volume impact throughout a promotion's entire campaign to help better align production plans.

# Opportunity Gap Analysis

Improve overall financial health by focusing on opportunity gaps, such as possible product cannibalization effects, to ensure that promotions produce desired financial outcomes.

## Track Revenue and Profitability

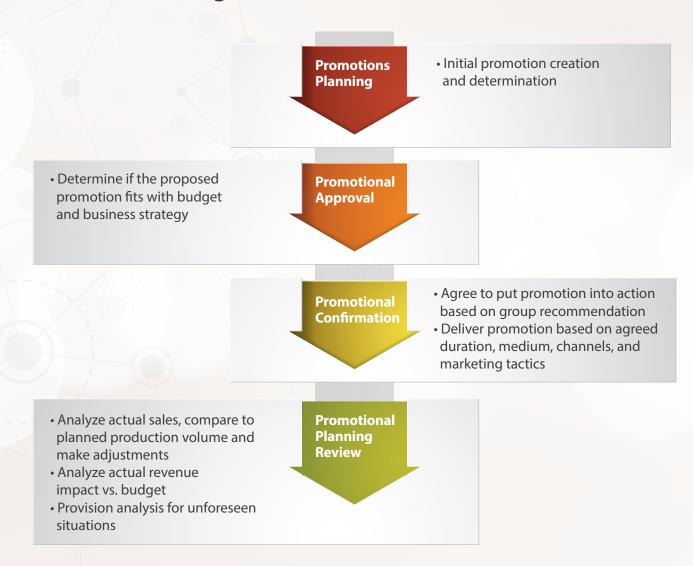
With the Arkieva Promotions Planner, you can integrate your financial plans, making it possible to immediately visualize impact and track campaign costs, including overhead, store discounts or national level of specific campaigns after promotions are complete.

## **Promotions Volume Analysis**

Using sophisticated data mining tools based on historical and statistical forecasting, the Arkieva Promotions Planner allows you to quickly identify volume impacts of promotions at an SKU level.

# Arkieva Promotions Optimization Process

Promotions Optimization Throughout the Entire Promotions Planning Process



### Collaborate in Real-Time

### Collaborate to Improve Demand Management

Arkieva demand planning solutions provide all the essential collaboration tools for building an effective and collaborative demand planning process.

### Arkieva Collaborative Demand Management Solutions Provide:

- One centralized database and repository to reconcile and manage multiple users working on demand planning data, standardize process flows, and procedures
- ✓ Multiple security levels to enforce organization security and access rules
- A globally scalable process for collaboration that can be replicated easily

# Automated Forecasting Tools for Real-Time Collaboration

### Create Real-Time, Cross-Functional Forecasting Synergy.

Forecasting is an essential step for creating a harmonized demand planning process. This requires synergized cross-functional collaboration. Arkieva provides automated forecasting solutions to eliminate manual and cumbersome forecasting processes while providing a centralized repository and solution for creating a One-Plan forecasting process.



### **Collaborate to Improve Forecasts**

- Quickly and easily identify inputs from disparate user groups
- Assign the right security and access levels based on assigned data responsibilities
- Work offline or online by, using offline and online Excel collaboration
- Collaborate on-the-go with Arkieva Sales Central and Insights mobile application
- Track Time-Phase Forecast Value Add (TPFVA) and Forecast Value Add of each input and use the information
  to determine how to consolidate forecasts and generate the best possible demand plan

# Automated Forecasting And Modeling Engine

#### Automate Your Forecast.

Generating an accurate forecast for every combination of product, market, and region is both an art and, science requiring great precision. The Arkieva Automated Forecasting Engine automatically generates a baseline forecast using demand modeling **statistical forecasting algorithms** to help you determine the best-fit forecasting method and demand plan.

#### **Determine the Best-Fit Forecast**

- Choose from 100+ forecasting methods to determine the best forecasting method or combination that works best for your specific product, market, and region combination
- Integrate all other aspects of your demand planning process from product segmentation to lifecycle management
- Run multiple planning scenarios based on different data attributes, including, product families, ship-to, sold-to, market channel, location, and others
- Easily collaborate using a unified tool, and make adjustments and additional reconciliations whenever it's needed.

# Discover Actionable Insights Create a Continuous Improvement Demand Management Process.

The key to creating a continuous improvement process for your demand planning initiatives involves tracking, measuring, and using the insights gained to enhance the decision making process.

### Transform Data to Actionable Insights.

Gain the visibility needed to transform data to actionable Insights with the Arkieva Demand Management reports and dashboards.

- Track forecasts at different snapshots: The Arkieva Demand Management Solution
  provides a unified tool for capturing all forecast inputs during different snapshots in time.
  This allows you to track the performance of all forecast inputs through different
  forecasting cycles during the forecasting process.
- Measure actionable forecasting metrics: Measure actionable forecasting metrics including Forecast Value Add (FVA) and Time Phased Forecast Value Add (TPFVA).
- Gain forecasting accuracy visibility at any detail level: Find out if your forecast
  inputs are your overall forecast accuracy at any desired detailed level,
  allowing you to disaggregate and aggregate as needed.
- Monitor potential issues: Use the early warning metrics provided to track and improve performance management by flagging potential issues that could cause disruptions.



# Performance Management

### Reduce Forecasting Bias. Increase Accuracy.

Measuring the accuracy and efficacy of the forecasting process is essential to improving the entire demand planning process. The Arkieva Performance Management solution provides you with a variety of accuracy metrics to help you measure forecast accuracy and bias throughout the entire forecasting process.

### **Improve Performance by Tracking Forecast Metrics**

- Mean Absolute Percent Error (MAPE)
- Mean Absolute Deviation (MAD)
- Volume Weighted MAPE
- Min-Max Inventory
- Forecast Value Add (FVA)
- Time Phased Forecast Value Add (TPFVA)
- Forecast Bias

### What is the Arkieva S&OP Suite?

# One Centralized, Integrated Planning Platform. Full Scale Customization Flexibility.

The Arkieva software solution suite is a one-plan S&OP system that creates a synergized sales and operations planning process. The solution empowers manufacturers to better plan to meet or exceed customer expectations by providing integrated, configurable solutions for product segmentation and analysis, demand, inventory, supply and executive S&OP management and execution.

"Through the implementation of Arkieva, we've successfully reduced the sales & operations planning process from weeks to days, producing actionable statistical analysis enabling us to deliver more value to the company."

— Michael Morris, Global Supply Chain Process Leader, OWENS CORNING

Envision your optimized supply chain and see it come to life with Arkieva

### Arkieva End-to-End S&OP Solutions

A fully advanced software solution suite for creating a one-plan S&OP process

#### **SALES & OPERATIONS PLANNING (S&OP)**

- Supply Chain Visibility
- Executive Dashboards with KPIs
- Performance Management
  - Alerts & Notifications
- S&OP Meeting Agenda
- · Analytics & Reporting
  - S&OP Meeting Preview
- Big Data Analytics
- Business intelligence
- OneNote Integration

### **FINANCE**

- Financial Forecasting
- Budgeting
- Strategic Planning
- Financial Reconciliation
- Price Volume Mix Analysis
- Long Term Asset Planning
- Financial Driven Demand
- Supply Balancing

#### **DEMAND PLANNING**

- Statistical Forecasting Engine
- Adaptive & Collaborative Planning
- · Macro-Economic Forecasting
- Sales Prediction
- Demand Sensing
- Performance Measurement
- Forecast Value Add: Time Phased
- Promotions & Event Planning
- Sentiment Analysis
- Segmentation
- Trend Analysis
- Life Cycle Management
- Portfolio Segmentation



#### **ARKIEVA INSIGHTS**

- Mobile Device Support
- Dashboards & Reports
- Multi-Enterprise Collaboration

#### **INVENTORY PLANNING**

- Visibility and Trends
- Policies and Analysis
- Inventory Optimization
- Single & Multi Echelon

#### **SUPPLY PLANNING**

- Rough Cut Capacity Planning
- Replenishment Planning
- Distribution & Resource Planning
- Purchase Planning
- ATP Engine

#### Supply Optimization

- Margin Profitability
- Strategic Network Optimization
- Route & Freight Planning
- Bulk Transport Optimization
- Cutting & Blending Optimization
- Multiple Bill of Materials
- Energy Consumption Optimization

#### Scheduling

- Production Scheduling
- Tank Scheduling
- Product Wheel Scheduling
- Job Scheduling

### ARKIEVA PLATFORM



#### INTEGRATION

- CRM & ERP Integration
- Database Integration
- Microsoft Excel & Access
- Multi Enterprise Planning



### **DEPLOYMENT**

- DEPLOTMENT
- On-Premise
- Hybrid

· Cloud



#### **FEATURES**

- In-Memory Engine
- Bespoke Modules
- Social Collaboration
- · Security & Single Sign On



#### **PLANNER FEATURES**

- Slice & Dice
- · Work Flow Modeling
- Exception Based Planning
- Comment Management
- What-If Scenario Analysis

### Who is Arkieva?

# More Than a Supply Chain Technology Company

Arkieva is more than a supply chain software technology company. We are a team of dedicated data scientists, software developers, and supply chain optimization consultants with one simple goal – to help manufacturers improve results through better supply chain planning. To achieve this goal, we create the link between people, process, and technology by providing easy-to-use, configurable, collaborative planning solutions that encourage a more synergized planning process.

"From an IT standpoint, the Arkieva software tool is easier to maintain and a lower cost tool to support than what we had previously."

— Steve Vice, IT Manager INEOS

Experience an Integrated Supply Chain Planning Process. Improve Visibility.

## A Dedicated Guide Throughout Your Improvement Journey

No matter where you are in your improvement journey, Arkieva provides the needed guidance to help improve your supply chain process. Each Arkieva implementation comes standard with a process improvement roadmap and a dedicated Supply Chain Practice Director to provide guidance throughout your continuous improvement journey.

Arkieva is beneficial even for fresh product "if you have production variation and some storage time. This is the next wave of supply chain management."

— Harold Upton, VP, Strategic Business Processes, Sunsweet

Focus on improving supply chain results.
We will do the rest.

### Contact us

### Arkieva North America (Headquarters)

5460 Fairmont Drive, Wilmington, DE 19808, USA Phone: +1 302 738 9215 Fax: +1 302 454 7680

### Arkieva Asia-Pacific

4th Floor, New Berry Commercial Bejai Kapikad Road Mangalore - 575004 India. Phone: +91 824 4299215

### Arkieva Europe

Bredestraat 4, B-2000 Antwerpen Belgium Phone: +32 3 232 2391

