



AVOID DATA MODELING SABOTAGES IN SUPPLY CHAIN ANALYTICS

WHY LEGACY DATA WAREHOUSES PREVENT TRUE INSIGHT

INTRODUCTION

Modern supply chains consist of multiple tiers of suppliers, manufacturers, warehouses, and distribution centers that work together to efficiently deliver products and value-added services to customers. These supply chains are dynamic and always evolving, constantly reacting to and attempting to predict consumer demand by optimizing product mixes, supply sources, and distribution channels.

The operations component of a supply chain is particularly intricate. It's a diverse web of interconnected systems and complicated business processes—such as procurement, manufacturing, logistics, warehouse management, order management, planning, product quality, and product life-cycle management—that span many separate departments across the organization. When working well together, these systems and processes minimize inventory issues and maximize customer satisfaction; when working against each other, however, they can cause catastrophic issues for the business.

Analytics is a powerful differentiator that can drive significant operational efficiencies by providing visibility into your supply chain. Unfortunately, most analytics report on a single, specific, siloed part of the supply chain and can't provide a cross-analytics view of the entire supply chain. On top of that, most traditional analytics platforms are plagued by cumbersome technology approaches—such as analytics data modeling—that largely prevent any kind of relevant, timely insight from emerging.

That's why a new approach to analytics which completely bypasses traditional data modeling is paramount to delivering the real-time insight and speed-of-thought queries across the entire supply chain that today's leaders need.

What is Data Modeling?

When the business asks a question of its data, IT has to gather all the required information into one place—a data model. This process of collecting data stored across an organization's systems is similar to designing and building a house. It's a rigid structure that's not easy to change.

But when you have additional questions of your data—outside of what you originally designed the data model to answer—you ideally want your enterprise analytics system to keep up without needing a major renovation. With data modeling, however, a major renovation is exactly what's required—each and every time.

Additionally, to speed up processing your query, the data included in the model is often just a summary. The details—often the very information business users want to drill into for context—are lost.

That's why approaches that use data modeling can't give supply chain users—and the business at large—the analytics and insights it wants.

THE 4 KEY ANALYTICS CHALLENGES FACING TODAY'S SUPPLY CHAINS

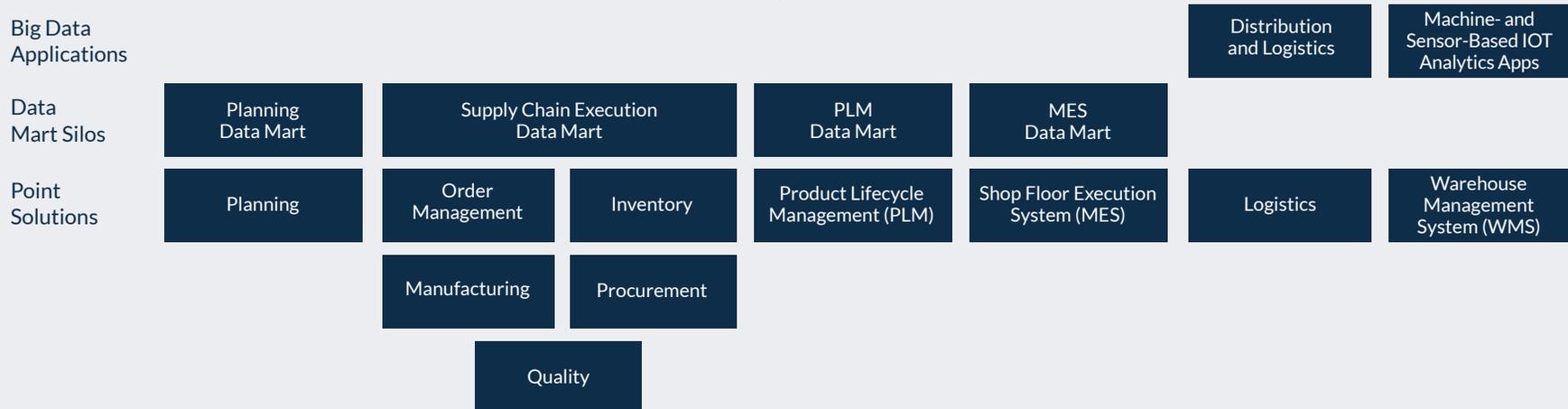
1. The large number and diverse nature of stakeholders and contributors. All of these different participants located at different stages of the supply chain result in many separate systems or applications in use, all attempting to source, store, validate, share, and understand data.

2. The lack of real-time data. Supply chain leaders and analysts have a hard time accessing up-to-date data reconciled across the various systems, such as inventory and order management.

3. How to quickly and accurately distill supply chain data into relevant, meaningful insights that can help guide business decisions. Even if business users are able to gather the data they need from various systems or modules, they're still burdened by determining how to properly integrate that data, and are unable to build the reports and dashboards they need without involving data architects.

4. Traditional analytics are too rigid. Supply chain leaders and analysts need to be able to easily investigate issues by following a fluid, real-time data trail—to do this effectively, they need to be able to dynamically alter existing and create new queries and insights on their own.

Today's supply chains maintain a multitude of applications, each producing data critical to business success.



THE PROBLEM WITH DATA MODELING & DATA WAREHOUSES

Many companies invest in analytics point solutions for a distinct set of information or processes—such as an inventory system that provides information on concurrent stock levels and recent inventory turnover—or systems with data mashup capabilities that create combined data sets. With either of these two approaches, tech resources and analytics power users face a harsh reality where they have to undertake a long, complicated data modeling process to complete even the most basic analysis:

- Extract Transform Load (ETL) data from all the systems of record, such as enterprise resource planning (ERP) and scheduling systems like Oracle E-Business System (EBS) or Oracle Advanced Supply Chain Planning (ASCP);
- Create a data warehouse or purpose-built data mart structures (to answer specific types of questions);
- Map that data into an enterprise business intelligence (BI) environment;
- Finally grant access to users; and
- Start the process all over again when new questions, new data, or any other changes arise. Even after all of this work and investment, however, these systems tell only part of the story, can't meet the analytic needs of non-technical business users, and can't provide end-to-end visibility across the supply chain.

Instead, what manufacturers need is a supply chain analytics platform that:

- Seamlessly works across multiple modules and systems;
- Expedites the analysis process while empowering line-of-business users with self-service, exploratory discovery across all facets of data;
- Eliminates IT's ongoing involvement in the analysis process; and
- Allows for easy expansion and customization as the business demands.

That's what a truly revolutionary, modern supply chain analytics platform does. And that's where Incorta comes in.

INCORTA: A MODERN APPROACH TO SUPPLY CHAIN ANALYTICS

As a modern supply chain analytics platform, Incorta allows for full transactional data access without the complexity of costly data transformations. It:

- Eliminates the need for analytics data modeling;
- Enables non-technical user self-service; and
- Dramatically shortens—by 10-100 times—both the incremental and overall analytics processes.

Incorta sources and harmonizes data from the different supply chain systems of record—such as ERP, supply chain management (SCM), shop floor execution systems, and planning systems—and can source data from these systems at different velocities (streaming, near real-time, batch, etc.) as needed.

Incorta also provides a series of packaged supply chain applications for out-of-the-box data access, reporting, and analysis, and enables users to easily tie together data from different subject areas. For example, initial analysis might lead a user to question the Days-On-Hand of their critical items or components. But Days-On-Hand is not just an inventory KPI—it needs to take into consideration forecast data. With Incorta, it's simple to tie together those two sets of information to arrive at an accurate picture of the Days-On-Hand situation.

ONLY INCORTA GIVES SUPPLY CHAIN ENTERPRISES...

No data warehouse modeling. No star schemas, no elaborate ETL, and no flattening of data means more flexible, accurate analytics delivered 10-100 times faster than other solutions.

Answers in under a second. Results return in sub-seconds—even on complicated, join intensive queries—encouraging a more flexible, exploratory conversation with the data.

Up-to-the-minute data. Source system data refreshes as quickly as every five minutes—no lengthy data reshaping and overnight batch updates required. Easy, intuitive search lets users easily uncover insights and analyze data on their own.

Unparalleled, inherited security. Row-level security from source system data is preserved—enforcing consistent security policies across users, sessions, and applications—and encryption with detailed audit logs enforce governance.

Scalability and flexibility. Incorta is built on an elastic architecture; can massively scale up and out; can be deployed in the cloud or on premises; and can be deployed alongside or as a replacement for Oracle EBS analytics and operational reporting tools.

SUPPLY CHAIN ANALYTICS SUCCESS: SHUTTERFLY, INC.

As the leading manufacturer and digital retailer of high-quality, personalized products and services in the online image publishing market, Shutterfly, Inc. needs to keep its supply chain buyers and planners focused each day on the highest-priority items requiring attention—items which often relate to inventory issues such as stockouts and “excess and obsolete (E&O)” inventory. Balancing a highly variable customer demand curve with Just-In-Time (JIT) inventory and on-demand manufacturing is no easy task, and its existing analytics process was failing to meet Shutterfly’s high expectations.

Despite these challenges, the Shutterfly supply chain team had a lofty goal of reducing stockouts by 50 percent or more in calendar Q4 2018 compared to the same period in 2016. And they knew their current reporting mix of Excel spreadsheets and Oracle tools wasn’t going to enable them to meet this goal.

- They received updated data only once or twice daily.
- They were able to measure only four KPIs per day, with limited and latent outcomes.
- Marrying data between the order management and supply chain planning systems was tedious, manual, and error-prone.
- Inventory analysts spent the majority of their time as manual data collectors, resulting in analysis becoming a secondary task they often didn’t have time to complete.

“Incorta is the greatest thing since sliced bread for a supply chain leader. It empowers the organization, it streamlines workflows, and it really enables employees to get to the heart of their roles and their jobs.”

JOSH MILLER,
VICE PRESIDENT OF SUPPLY CHAIN, SHUTTERFLY, INC.

Shutterfly needed to build automated exception workflows and dashboards into its procurement process, and they couldn’t wait a year for their project to rise to the top of the technical team’s work queue.

That’s when the Shutterfly supply chain team turned to Incorta.

Using Incorta, Shutterfly—in only six weeks—was able to insert streamlined exception management workflows into its supply chain processes in order to reduce stockouts and E&O expenses. Dashboards displaying EBS and ASCP data now direct Shutterfly buyers and planners to their highest-priority activities at any given time.

SHUTTERFLY'S INCORTA-POWERED DASHBOARDS.

With Incorta, buyers and planners spend more time understanding key data insights and less time manually running and combining reports on Oracle EBS data. Additionally, EBS-sourced supply chain information now is readily accessible automatically in only seconds, rather than after hours of manual compilation as previously required.

And, more importantly, in only a year—and a year ahead of schedule—Shutterfly exceeded its goal of reducing stockouts by 50 percent, instead reducing them by 91 percent!

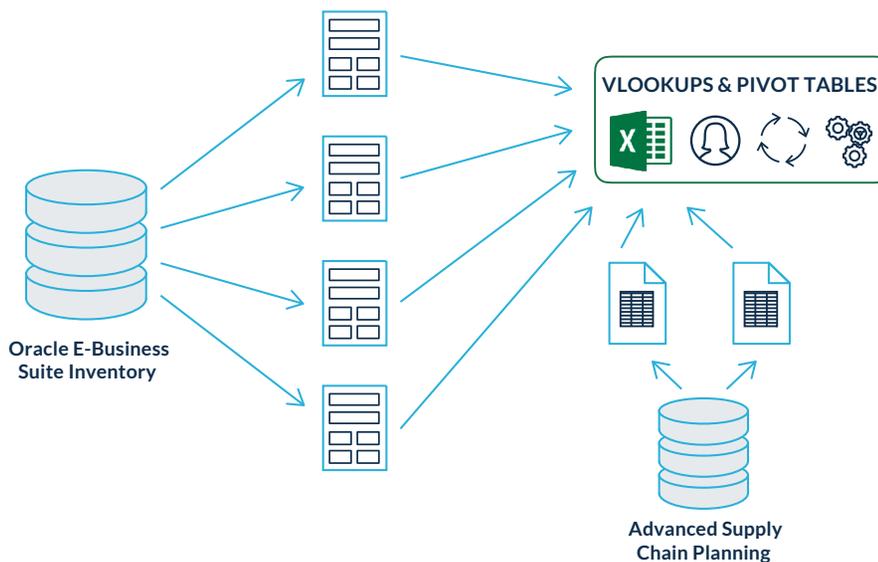
“Before Incorta, buyers and planners on my team spent hours every day running reports. Now, we can get that information from Incorta in less than a second.”

RACHEL MCCUTCHEON
DIRECTOR OF SUPPLY CHAIN MANAGEMENT AND PROCUREMENT, SHUTTERFLY, INC



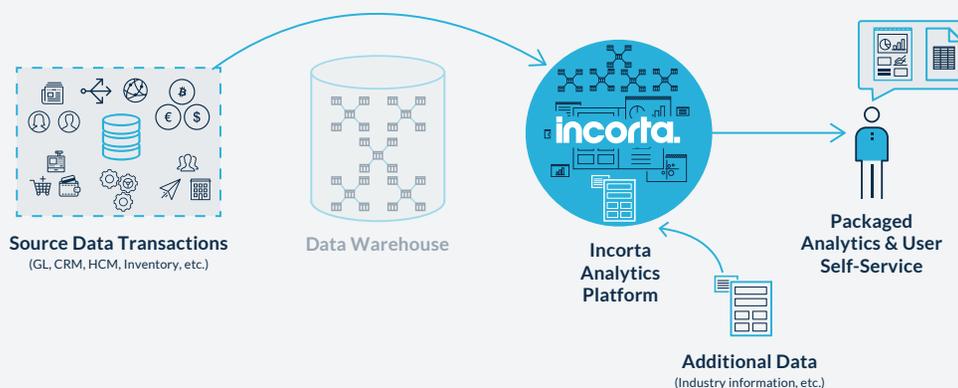
HOW INCORTA ELIMINATED SUPPLY CHAIN ANALYTICS BOTTLENECKS AT SHUTTERFLY

Before Incorta, Shutterfly had a complex process involving databases and Excel spreadsheets that only yielded four KPIs.



Only
4
KPIs

After Incorta, Shutterfly enjoys a streamlined process that delivers user self-service, meaningful insight, and 15 KPIs.



Now
15
KPIs

THE POWER OF INCORTA SUPPLY CHAIN ANALYTICS AT SHUTTERFLY

- Shutterfly was able to exceed their Q4 2018 stockout goal a year early, moving from 75 stockout incidents in 2016 to only seven stockout incidents in 2017.
- In only six weeks, Shutterfly deployed five customized applications that joined supply chain, purchase order, accounts receivable, and other critical system data.
- Shutterfly supply chain analysts now receive updated information every 15-30 minutes, rather than static, outdated data via spreadsheets.
- Shutterfly recouped its entire three-year investment for software and services in only 90 days.
- Shutterfly analysts now focus on analyzing data, rather than gathering and manually manipulating it.

Find out more about how Incorta helped Shutterfly optimize its supply chain—watch the [“Shutterfly: Optimizing the Supply Chain with Real-Time Oracle EBS Data”](#) webinar.

Short
6
WEEK
DEPLOYMENT

Only
1
QUARTER TO
RECOUP COST

From
75
STOCKOUTS
FY2016Q4

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To Only
7
STOCKOUTS
FY2017Q4

THE DIRECT DATA PLATFORM™

incorta

ABOUT INCORTA

Incorta is the data analytics company on a mission to help data-driven enterprises be more agile and competitive by resolving their most complex data analytics challenges. Incorta's Direct Data Platform gives enterprises the means to acquire, enrich, analyze and act on their business data with unmatched speed, simplicity and insight. Backed by GV (formerly Google Ventures), Kleiner Perkins, M12 (formerly Microsoft Ventures), Telstra Ventures, and Sorenson Capital, Incorta powers analytics for some of the most valuable brands and organizations in the world. For today's most complex data and analytics challenges, Incorta partners with Fortune 5 to Global 2000 customers such as Broadcom, Vitamix, Equinix, and Credit Suisse. For more information, visit <https://www.incorta.com>