



# CONFESSIONS OF 4 ENTERPRISE BI LEADERS

HOW FOUR COMPANIES AVOIDED EXPENSIVE  
STAR SCHEMAS, GAINED MASSIVE INSIGHT,  
AND UNLOCKED MILLIONS.

**incorta**

## INTRODUCTION

# THE 25-YEAR LEGACY BI DILEMMA

Business leaders need to rely upon integrated enterprise transaction data and analytics to make critical and ongoing decisions on issues like pricing, order planning, inventory management, and capacity planning. And those decisions depend heavily upon the availability and timeliness of application data.

In retail, for instance, an operating leader may ask questions related to the on-hand inventory of specific supplies across multiple store branches on Black Friday. A common yet unsatisfactory answer from IT to those types of questions is often, “We’ll get back to you in few weeks.” Why? Because the standard approach to enterprise business intelligence (BI) uses data warehouses and Extract Transform Load (ETL) processes—strategies that fundamentally are very slow, deliver incomplete and out-of-date data, and aren’t designed to easily integrate with complex data sources.

As a result, for more than 25 years, business leaders have resisted the urge to continually ask IT for the critical insights they desperately needed but knew were unattainable. But what if these same leaders could reimagine BI as a new approach that delivered full, source-level data fidelity in a fraction of the time—and with inherited security and governance—right to users’ fingertips? What if the regional manager in the above example could simply compare basket SKUs from this year against the previous two years—all the way down to the transaction level—to reveal pivotal sales trends?

This reimagined BI is real, and it’s available right now to help you make better, more timely decisions.

In this Success Guide, we’ll share confessions from BI Leaders at four industry-leading organizations that turned things around using modern, operational analytics. Find out how:

- Global communications semiconductor company Broadcom created innovative, self-service analytics that enable speedy access to information, for increased employee productivity and an improved bottom line;
- A global coffee company and coffeehouse chain better understands its business and massively improved its product profitability across 28,000 stores;
- Global security and home control systems market leader Nortek ignited “data curiosity” to convert China tariffs into a competitive advantage and solve complex issues via informed decision-making; and
- A Fortune 10 company uses Incorta to bypass data modeling and easily deliver highly complex operational reports.

## TRADITIONAL BI:

# THE UNPOPULAR FOUNDATION FOR DECISION SUPPORT

With traditional BI and its required ETL processes and data warehouses, source data is extracted from enterprise data stores, and converted into star schema and other models in a data warehouse for easy retrieval. It's an aged process, one plagued with issues.

### Insights take months instead of days.

Repetitive reporting activities—such as those involved with financial statements, inventory reporting, and process tracking—all followed this approach. But the time delays involved with moving data into a warehouse make this traditional BI approach reliable only when core data sets are static or when questions from business users don't change often. That's because, in dynamic and changing environments, an inability to easily drill down to up-to-date data can cost enterprises substantial amounts of money when answers to key questions arrive too late—or not at all.

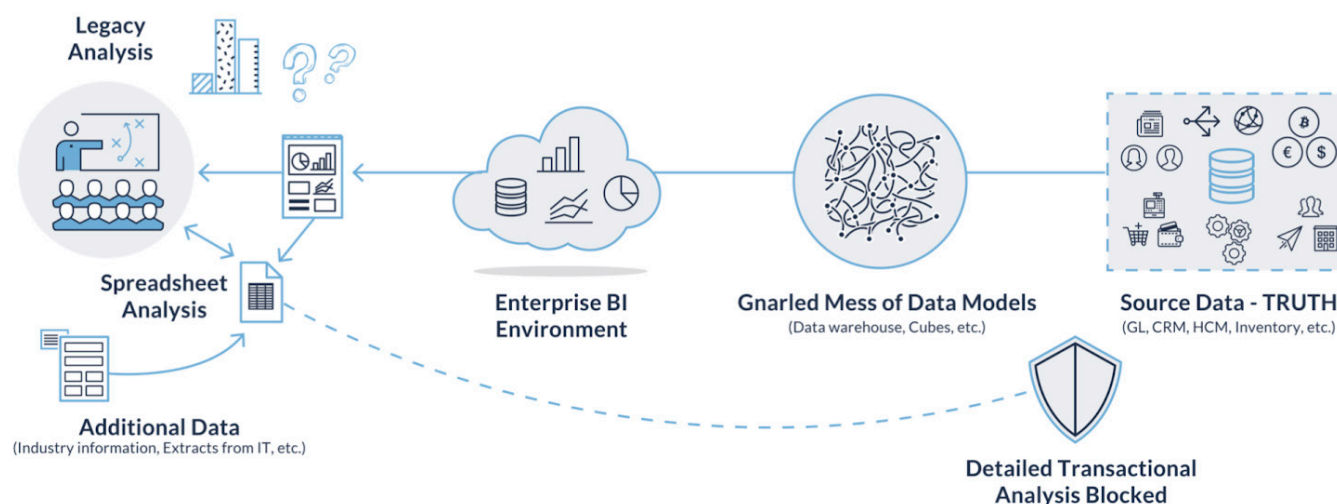
Supply chains, for example, are inherently complex, with various, disconnected business systems making it difficult to access accurate data when using a traditional BI approach.

### Data and security models are lost.

Not only is data delayed, but most often it is incomplete. In a traditional BI process, data architects select which tables (sources) to use to provide data to the business analysts. In doing so, they pre-suppose some questions and summarize the information provided. In an effort to reduce latency, they also reduce data fidelity (depth). With these details gone, users only can drill down so far before they exhaust the data—the very answers they need are lost.

Also at risk are existing security rules. Flattening data often results in loss of the row-level security context. This causes deployment delays from security models needing to be rebuilt in the data warehouse.

*Dissatisfied with the uninformed decision making forced by legacy BI, business leaders at the following four companies adopted a new approach to enterprise BI—one that reimagines BI altogether—so they can avoid future million-dollar misses from their enterprise analytics.*



## REAL-WORLD CASE STUDIES:

# THE BUSINESS BENEFITS OF REIMAGINED BI

### **Reaping Massive Benefits from “Go-To” Analytics**

*Visibility into data from newly acquired businesses is gold.*

#### **A Global Communications Semiconductor Company**

Broadcom business units make important decisions each day, so they rely upon critical insights generated from data residing across a variety of software solutions, such as Workday and Oracle EBS. And they need to quickly integrate and understand volumes of data from the companies Broadcom acquires on a regular basis.

#### **The Analytics Problem**

Executives wanted self-service reporting in Excel, but—despite significant investment in a traditional data warehouse and multiple data marts—it typically took 3-4 months to deploy a new business report that integrated data from Oracle and other enterprise applications. In addition, because of the complex transformations required to summarize and model data, adding a new dimension in a star schema required an average of 4-6 weeks development time.

Constant updates to organization, location, or product data from source applications is an inevitable, persistent reality. Broadcom knew it needed a better analytics solution—one that would dramatically cut down cost and time to insight. In addition, enabling self-service and easy maintenance was the only way to reduce the workload on its technical team. A modern analytics platform offering a new approach was the only viable solution.



Now that we’re using Incorta, our users are blown away by how fast they’re getting the information they need. It used to take 8 to 12 weeks to get a report from request to production. With Incorta, business users can do that on their own, instantaneously.



#### **Fast Success from a Modern Analytics Platform**

Broadcom chose the Incorta analytics platform to meet its lofty data insight goals. With Incorta, Broadcom easily combines data from crucial enterprise software applications, internal point solutions, and newly acquired companies to quickly deliver what business users need.

- Speeding up joins against even the most complex data sets helped reduce the time required to generate reports from hours to seconds.
- New reports now are created in days, not months.
- Broadcom’s CEO and more than 300 other users have instant, self-service access to operating analytics in Incorta, with source-level data fidelity and security remaining intact.
- Users can quickly create new or update existing analytical applications that incorporate new data from mergers and acquisitions.

This data-driven approach sped up how quickly Broadcom can integrate the companies it acquires, and—as a result—more quickly delivers to shareholders return on acquisitions.

Ajit Oak, Sr. Manager of BI  **BROADCOM**

## REAL-WORLD CASE STUDIES: THE BUSINESS BENEFITS OF REIMAGINED BI

### ***Profitability Insights for Complex EBS Data Brew Higher ROI***

*Global retailer saves millions and increases product profitability.*

#### **A Coffee Company and Coffeehouse Chain**

A global coffee company with annual revenues of more than \$20 billion knew it needed a good global picture of product profitability. But, with more than 28,000 locations across 70 countries serving millions of customers every day, getting intraday insight into the health of retail activities—and better understanding local, regional, and national tastes—were impossible challenges to overcome with a legacy BI approach.

#### **The Analytics Problem**

The coffee chain needed to rapidly ingest and analyze up-to-date, granular, detailed transactional inventory data from Oracle EBS for more than 100 products—analysis that included identifying stores running low on inventory for a particular item and determining total product cost based on costs incurred with suppliers, costs related to procurement processes, and costs related to distribution processes. But the scale and complexity of the company's EBS data was massive—nearly four million records needed to be analyzed as a result of weekly data aggregations occurring over the span of three years.

The coffee company knew it needed to optimize profitability by minimizing costs, and its existing three-month analysis process wasn't up to the task. They needed a platform that could quickly deliver real-time reporting and analytics capabilities in a cost-effective way, utilizing in-house skills and a flexible technology stack with enterprise-level security.

“Speed of delivery, flexibility, and the ability to utilize our in-house skill set were three factors in our selection of Incorta.”

IT Director ”

#### **Fast Success from a Modern Analytics Platform**

After considering a combination of enterprise data warehouses and traditional BI tools—both on-premises and in the cloud—the company selected Incorta to help it understand product profitability based on store location, channel, product, and other factors.

- Managers self-serve, using Incorta to fully understand profitability per store and per item, easily manipulating the data as needed.
- Users can perform analysis at any level within the product and geography hierarchy, and easily drill down to specific sales, waste, or inventory level records.
- Leaders use Incorta-driven insights to decide when to introduce or retire products based on store-specific shopping patterns.
- Reports now are available to view within seconds and can be downloaded within minutes, saving hours of time.
- Incorta's accelerated implementation timeframe of only 10 weeks came in well below the budgeted 12-month implementation timeframe.

As a result of this clear success, the coffee company now plans to use Incorta to improve its repair and maintenance reporting.

“We eliminated the need for the pre-processing and extraction of data, which explains how we completed the project in only four months and saved \$800,000.”

IT Director ”

## REAL-WORLD CASE STUDIES:

# THE BUSINESS BENEFITS OF REIMAGINED BI

### *Solving Complex Issues with Informed Decisions and Real-Time Data*

*Igniting data curiosity and mitigating million-dollar impacts from China tariffs.*

#### **The Global Market Leader in Security and Home Control Systems**

As a global leader in security, home automation, and personal safety systems and devices, Nortek Security and Control constantly faces threats to its business model from new competitors. To maintain market leadership, Nortek leaders needed to quickly understand which distribution channels, which customers, and which of their 10,000 products were most profitable—all while attempting to integrate complex data sets and legacy data warehouses from 10 recent acquisitions, and prevent new China tariffs from negatively impacting its business.

#### **The Analytics Problem**

Like business analysts at many companies, busy Nortek analysts continually wasted precious time manually manipulating and analyzing data on their own. Compounding the problem were the laborious tools with which they had to work, and the fact that the data they needed was spread across a variety of systems, including Oracle NetSuite ERP and legacy data warehouses. In addition, Nortek's data warehouse/ETL solutions gobbled up tons of time as administrators constantly had to reconfigure databases and refactor ETL processes in a constantly changing environment.

If that weren't enough, new and looming China tariffs represented one of the biggest challenges the company had ever faced: many product lines from Nortek's factory in China risked having 25 percent tariffs levied on them, and proposed tariff categories, rates, and dates constantly changed. Plus, analysts' ability to drill down into products, customers, or the supply chain—or do robust “what-if” or scenario analysis—was limited.

Responding to China tariffs the right way meant Nortek could continue its profitable growth; getting it wrong could mean losing millions of dollars, and putting customer relationships and product lines at risk.

“

Because of the power of Incorta, we are proactive rather than reactive in our response to the tariff situation—we make precise, focused decisions instead of having to resort to broad-brush reactions across the whole business.

”

Senior VP of IT  **NORTEK**™

### Fast Success from a Modern Analytics Platform

Neither NetSuite nor Microsoft Power BI proved flexible or capable enough to do the kind of data analysis Nortek needed. Nortek turned to Incorta to transform how it analyzed data and made material business decisions, and to help it strategically address the tariff situation.

- Initial, critical dashboards were delivered to C-level leadership within only three weeks of starting the project, with the Incorta platform deploying into full production in only six weeks.
- Real-time data analysis lets analysts quickly identify which distribution channels, customers, and products are most profitable.
- The executive team was able to do all of the analysis they needed—and consider all of their options—in order to reprice thousands of products across thousands of customers within 16 hours of the final publication of the third tranche of China tariffs in September 2018.
- Proposed tariff implications were easily understood and proactively addressed, minimizing the tariffs' negative impact on Nortek's bottom line.
- Team members can interact in real-time with any part of the business value chain: supply chain and country of manufacture, warehouse and inventory levels, customer pricing and profitability, product line analysis, etc.
- Management decided to permanently shut down Nortek's legacy data warehouses after Incorta proved its ability to deliver a more sophisticated, flexible, and robust next-generation data analytics solution for the company.

This data-driven approach sped up how quickly Broadcom can integrate the companies it acquires, and—as a result—more quickly delivers to shareholders return on acquisitions.



“

The fact that Nortek could implement Incorta enterprise-wide in six weeks and make thousands of difficult decisions related to China tariffs in a matter of hours is mind-bogglingly awesome.

”

Senior VP of IT  **NORTEK**™

## REAL-WORLD CASE STUDIES:

# THE BUSINESS BENEFITS OF REIMAGINED BI

### **Complex, Operational Reports Delivered in Only Seconds**

*Fast integration, insights, and ease of use encourage adoption.*

#### **A Fortune 10 Consumer Electronics Manufacturer**

Senior management at this fast-growing consumer electronics manufacturing company knew access to secure, timely data is essential to making fast, informed business decisions. Unfortunately, accurate reporting on data from the various existing systems spread across their organization was proving to be an ugly, seemingly insurmountable challenge.

#### **The Analytics Problem**

Static, homegrown reports took hours to run and often slowed down other mission-critical applications, forcing users to wait to run large reports at night or on weekends. In addition, existing, legacy reporting tools—including Informatica and SAP BusinessObjects—demanded special skill sets to operate, required 8-12 weeks to build new reports, and took too much time and effort to maintain. More importantly, they didn't enable easy queries, drill down, and data filtering by non-technical users—they delivered only static, graphical, summarized reports at pre-determined times to pre-determined people.

The manufacturer needed a better way to integrate and analyze data from all of the company's critical internal applications—including MongoDB—and easily apply custom security models while empowering business users to create and modify interactive, complex reports and dashboards on their own.

“ We saw up-to-date reports only a few days after beginning the deployment—not weeks or months like with other systems—and we could return new queries across billions of records in just seconds.

Senior Engineering Manager



#### **Fast Success from a Modern Analytics Platform**

After multiple attempts to meet the business requirements using existing reporting and analytics tools such as Tableau, the manufacturer selected Incorta. Deployed in only 10 days, Incorta delivered immediate insights and business benefits.

- Non-technical users easily build and modify reports and dashboards from HR data, such as accruals.
- Near real-time reports leveraging integrated data are delivered in only seconds.
- Dashboards are delivered 80 times faster than predecessors, and dashboard refreshes increased from one per day to more than 96, improving productivity and response time.
- Interactive dashboards empower users to access transactional details and filter data on-the-fly based on any data dimension, providing greater insights than what's delivered in single, tabular reports.
- Authorized users gained complete access to transaction details based on their privileges, speeding up analytical application rollout.
- Custom, legacy reports that degraded transactional system performance were replaced.

“ Incorta significantly reduces report development and testing time because it's very easy for a non-technical user to create and format the report themselves, without needing help from technical resources.

Senior Engineering Manager



# INCORTA'S UNIFIED DATA ANALYTICS PLATFORM

*Reimagined BI Delivers Multi-Million Dollar Savings*

**Query all business data, at any scale, in subseconds: No modeling or flattening.**

The limitations of the traditional BI stack in meeting the urgent needs of operating leaders are pervasive and well-known. Most technologies developed to “modernize” BI environments do little more than alleviate through automation some of the pain of ETL processes—the BI stack’s inherent slowness and limitations remain.

That’s why Incorta completely reimagined BI altogether. With a completely new approach, Incorta delivers in days—not weeks or months—operating analytics from enterprise application data without any loss of fidelity or security.

In this way, Incorta encourages business users to follow their curiosity into details, and easily self-serve their report and dashboard needs as requirements change.

## **The Incorta Advantage**

- Integrated data in only days—without mapping, modeling, or any of the other activities that drive long, frustrating deployment delays
- Self-service availability of source-level data granularity, combined with all the relevant history
- Data security and governance equal to or better than that available with traditional BI



## HOW IT WORKS

*Incorta's Direct Data Platform—available on-premises or via the cloud—allows IT to respond to the most complex BI requests within only minutes. Its unique Direct Data Mapping™ technology seamlessly scales analytics for large and complex data sets, eliminating the need for data modeling, unnecessary parts of ETL, and pre-aggregations.*

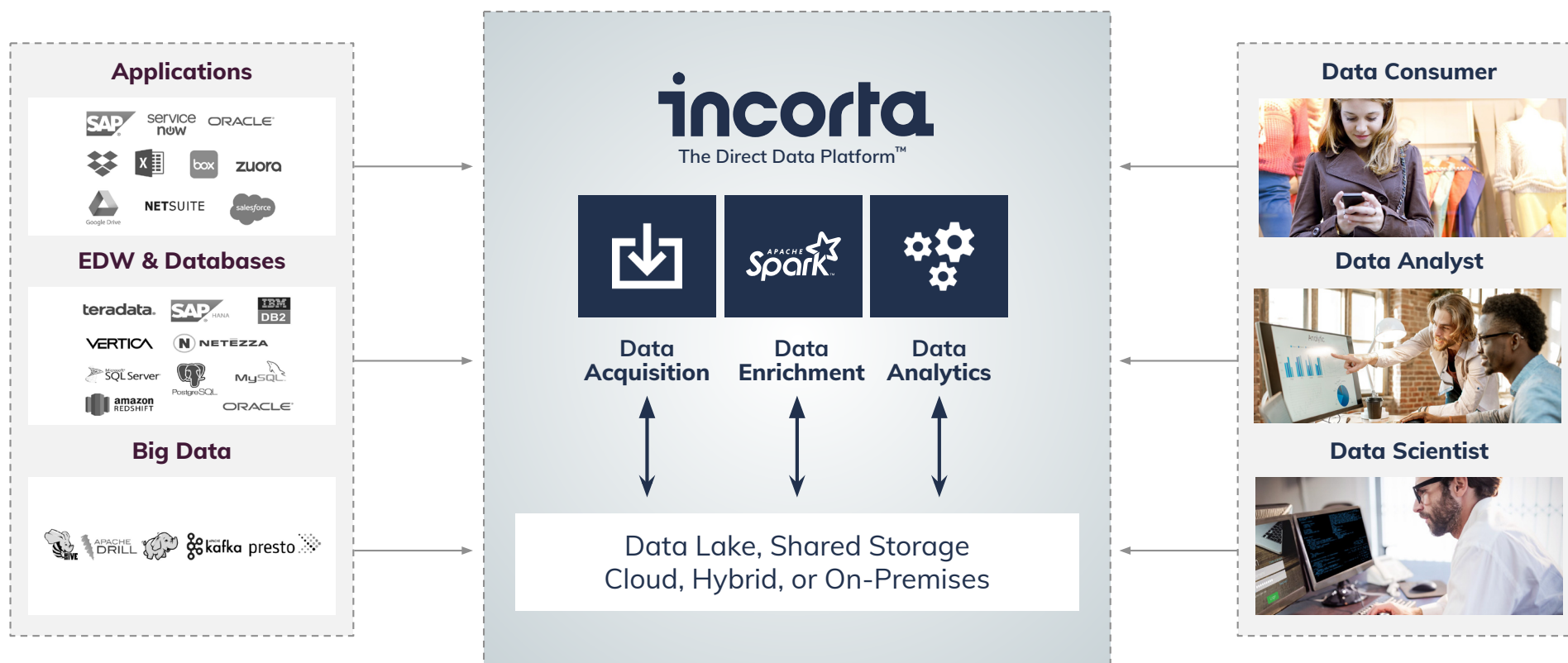
### Unifying the 3 Tiers of Traditional BI into a Single Analytics Platform

**No more ETL.** Incorta doesn't force users to design star schemas or flatten data sets because it dynamically ingests data from multiple sources in real-time and can analyze in sub-seconds large data sets requiring 10+ joins. Users also can ingest source application schemas in their entirety, without needing the parts of ETL that ingest only subsets of the source.

**No more data warehouse.** Incorta creates a secure, durable data store that serves multiple workloads, and uses compression to dramatically reduce data size.

**No more pre-aggregations.** Incorta's Direct Data Mapping speeds joins by up to 100x, and delivers highly interactive dashboards via its visualization suite or third-party visualization tools such as Power BI, Tableau, and Microstrategy.





*Incorta easily processes large volumes of complex data, thus minimizing ETL and completely eliminating the need for data modeling.*



# 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>