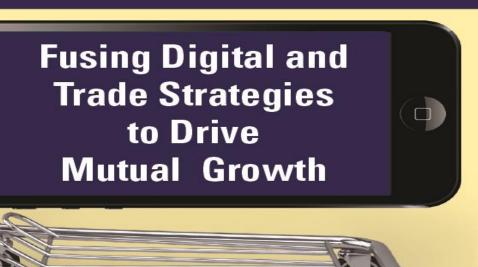


SPRING SUMMIT 2017



"Taking your TPM TPO and Advanced Analytics
Capabilities to the Next Level"

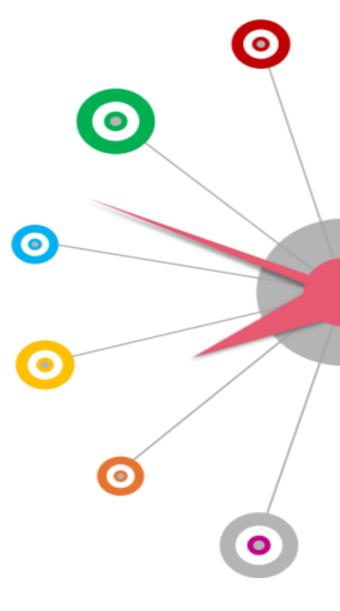
An Analytics Journey Past, Present and Future







- 1 It Starts with a Foundation Janet Dorenkott
- 2 Mondelez Intros and Company Overview
- Big Data Challenges Dan Woltman
- 4 The OSA Challenge David Kraus
- 5 Our Analytics Journey David Kraus
- 6 Key Learnings & Next Steps Dan & Janet











Understanding the "Advanced Analytics Continuum"

The power of an integrated data and analytics framework

Value to the Enterprise

Decision Science
Prescriptive

Predicting areas of concern. Artificial Intelligence. Machine learning. Take recommendations versus what was actually done to continue improving recommended actions.

Insight Generation Predictive Analytics Through an integrated analytics framework and by applying business rules, statistical models, visualizations, and industry specific context derive advanced analytics & actionable insights to predict areas that need attention.

Business Intelligence
Descriptive Analytics

Provide a comprehensive data reporting/dashboards framework, architecture and governance to deliver appropriate, timely and actionable information

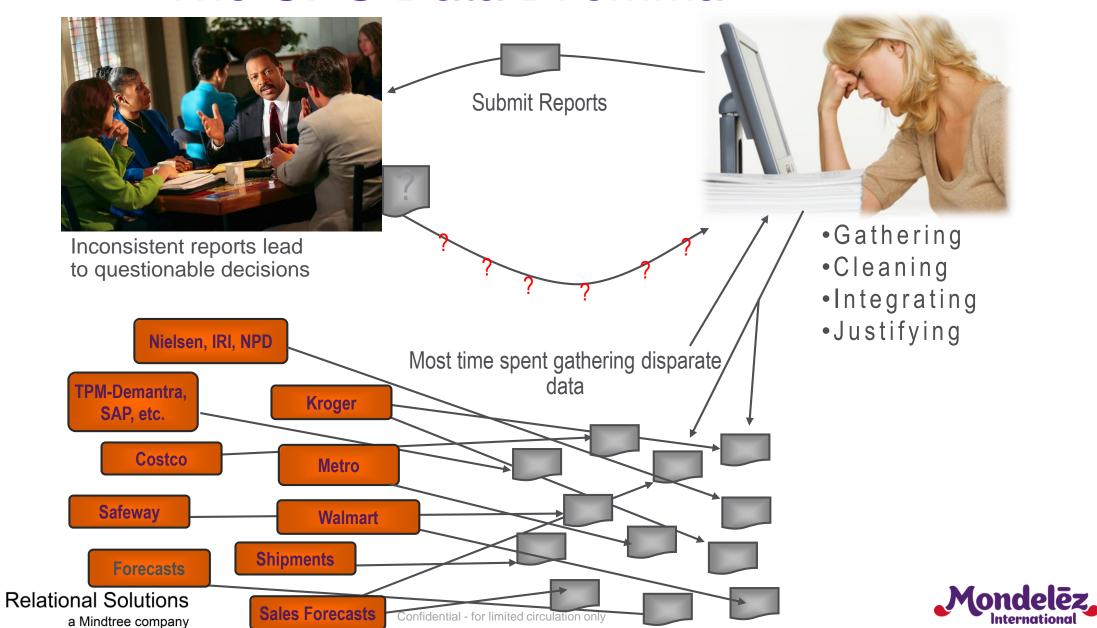
Managing Data DM, DI, MDM, DW, Big Provide a comprehensive data management framework, architecture and governance to achieve a "single version" of truth







The CPG Data Dilemma

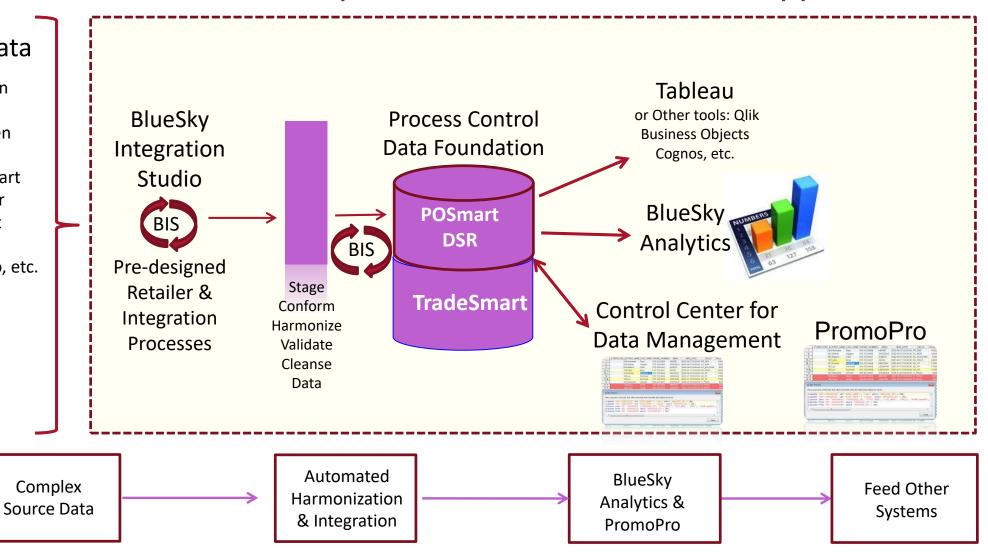




1st Create The Enterprise Foundation that will support all sources

Source Data

- Consumption
 - IRI
 - Nielsen
- Retailer POS
 - Walmart
 - Kroger
 - Target
 - CVS
 - Metro, etc.
- Master Data
- Trade
- Shipments
- COGS
- Orders
- Forecast









Intros & Bios



- Been at Mondelez for 19 years
- Extensive experience in retailer data and use cases involving this data. Previous roles include: S&OP/IBP, HQ Project Management, Customer Supply Chain
- Working with retailer direct data since 2010
- Located in Chicago, Illinois



- Been at Mondelez for 11 years
- Responsible for Computer Assisted
 Ordering and Data Visualization. Previous roles include: Transportation, DSD
 Operations, Supply Chain & Logistics
- Located in East Hanover, New Jersey







Overview of Mondelez International

- One of the world's largest snacks companies with \$26 billion in revenue
- Over 90,000 employees
- Operations in over 80 countries and sales in over 165 countries
- #1 position globally in Biscuits, Chocolate, and Candy; #2 position in Gum
- Over 60 Brands, with 7 topping \$1 billion and 44 that each generate \$100 million
- > 85% of revenue generated from fast-growing snacks categories
- Nearly 75% sales from outside North America
- > 70% of US revenue generated from Direct Store Delivery (DSD) business

Iconic Brands







Core Company Strategies

Unleash the Power of Our People

Transform Snacking Revolutionize Selling Drive Efficiency to Fuel Growth Protect the Well-Being of Our Planet







The "Big Data" Challenge

Goal: To utilize ePOS data to create a shelf driven, consumer focused supply chain.



Opportunity: Develop ability to manage and obtain insights on 55 million

points of availability in stores.







Identifying Challenges & Obstacles

Organizational Challenges



Cultural Challenges



Technical Challenges



Silos

Costs

Bandwidth

Change Management

Excel / Spreadsheet Culture

Long-tenured Processes

Big Data

Access / Structure

Capabilities







Millions of data points need to be managed































A Brief Intro...

On Shelf Availability

OSA IS ABOUT PROVIDING PRODUCTS WHEN & WHERE THE CONSUMER WANTS IT.

"Despite years of good-faith efforts by manufacturers & retailers, the out-of-stock rate remains a stubborn 8% (on avg.) w/ OOS for promoted items often exceeding 10%. That represents potential revenue loss of 8-10% or more in an industry already challenged with rising costs to serve the customer."



Size of the Prize @Mondelez: If we can get to 98% OSA, it's worth \$20MM in addressable opportunity at our top 10 retailers







Our Journey to OSA Performance

Understand and Assess Processes and Data Stand Up Big Data Environment and Analyze Root Cause Collaborate with Field Sales Commercialize: Address Root Causes with Big Impacts Improve Retail Execution Cause

Understand and Assess Processes and Data:

 Gain insights into the processes and data requirements to measure and improve OSA

Stand Up Big Data Environment and Analyze Root Cause:

- Stand up platform for big data discovery and analytics
- Identify high-level root causes for out-of-stock events at retail stores

Collaborate with Field Sales:

 Retailer HQ account teams and field sales need to align on planograms, delivery and merchandizing schedules

Improve Retail Execution:

- Small batch test and learning activities with field sales reps
- Integration to technology in the field (Alerts & Mobile Viz)

Commercialize:

- Tasks for sales reps enable them to take quick corrective action
- Improve order quality by suggesting order quantity based on advanced demand forecasting

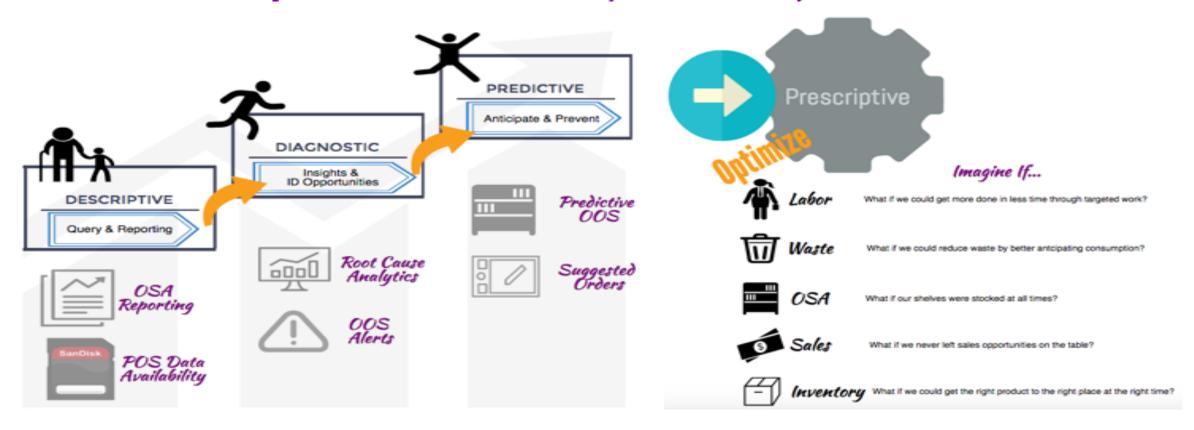






Tools to Combat Out of Stocks

Evolution of Capabilities: Our Analytics Journey



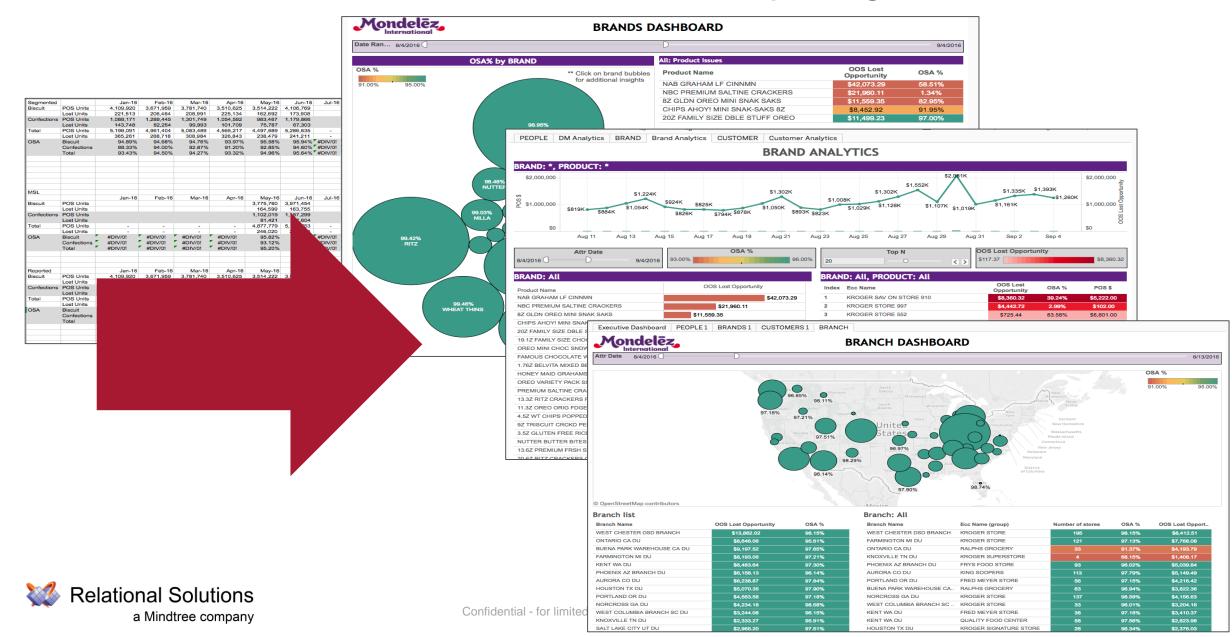
We're laying the building blocks to new capabilities that enable next level insights, predictive analytics, and business improvements.







From Excel to Visualization Reporting.....



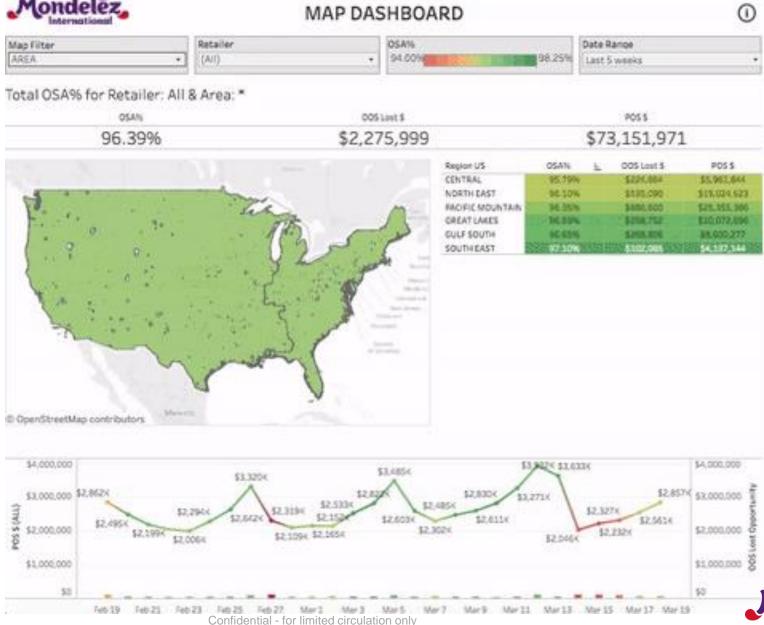




Next Level Visual Reporting



- **Executive Views**
- **Custom Maps**
- Drill down reporting

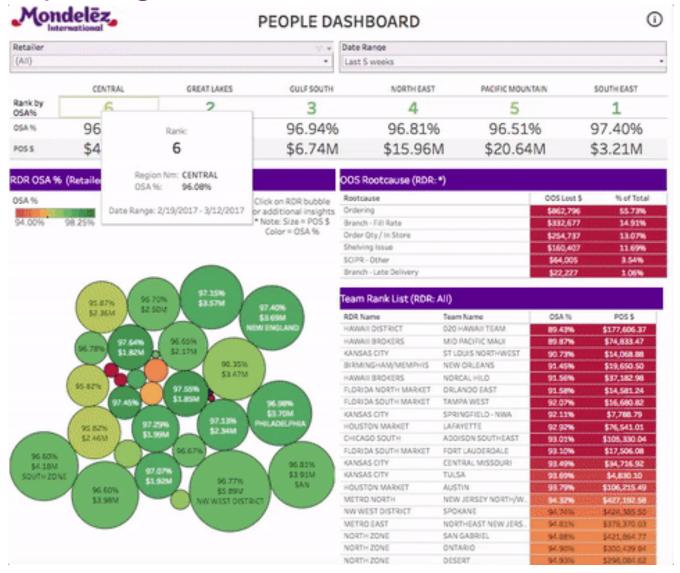






Accountability Reporting

- Ownership Views
- Team Rankings
- Drill down reporting











Root Cause Analytics

- Customer Filters
- Multiple Slices
- Granular Level Detail









Key Learnings & Next Steps

Key Learnings:

- 1. It all starts with asking the right questions
- 2. In order to create an effective tool you need to "roll up your sleeves and get dirty"
- 3. Engage cross functional stakeholders early & often. Share progress as it happens.
- 4. Quick Test and Learns
- 5. Put the tool in the hands of the right people

Next Steps:

- 1. Rollout current tools to all ePOS data retailers
- 2. Integrate addition retailers on ePOS program
- 3. Integrate the following data:
 - a) Trade Plans
 - b) Basket
 - c) Social Media





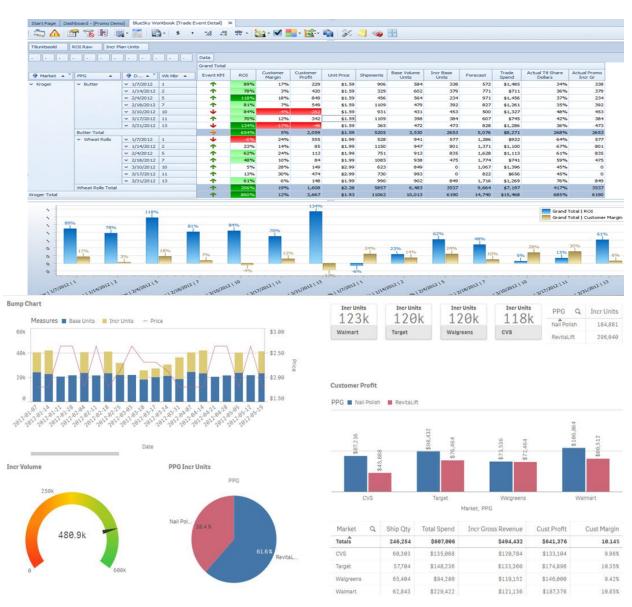


Future Plans Include Trade Integration with COGS for Trade ROI & JBPS



a Mindtree company

Trade Dashboards





Questions?

Welcome to possible

