An Analytics Journey
Past, Present and Future
AGENDA

1. It Starts with a Foundation – Janet Dorenkott
2. Mondelez Intros and Company Overview
3. 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
EDM, DI, MDM, DW, Big Data
Provide a comprehensive data management framework, architecture and governance to achieve a “single version” of truth.

Data Driven Organization Maturity

Relational Solutions
a Mindtree company

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The CPG Data Dilemma

Inconsistent reports lead to questionable decisions

Most time spent gathering disparate data

• Gathering
• Cleaning
• Integrating
• Justifying

Submit Reports

Nielsen, IRI, NPD
TPM-Demantra, SAP, etc.
Kroger
Costco
Metro
Safeway
Walmart
Forecasts
Shipments
Sales Forecasts

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

1st Create The Enterprise Foundation that will support all sources

BlueSky Integration Studio
Pre-designed Retailer & Integration Processes

Process Control Data Foundation
Stage Conform Harmonize Validate Cleanse Data

TradeSmart

POSmart DSR

Control Center for Data Management

PromoPro

Tableau or Other tools: Qlik Business Objects Cognos, etc.

BlueSky Analytics

Feed Other Systems

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Intros & Bios

Dan Woltman
- 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

David Kraus
- 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
- Silos
- Costs
- Bandwidth

Cultural Challenges
- Change Management
- Excel / Spreadsheet Culture
- Long-tenured Processes

Technical Challenges
- 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.”

BENEFITS TO IMPROVED OSA PERFORMANCE

- Customer Loyalty
- Customer Satisfaction
- In Store Efficiencies
- Revenue Improvement
- Partnership b/w Retailer & Supplier
- Forecast accuracy
- Reduced Costs
- Inventory Optimization

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

To improve OSA performance, we have a number of strategic initiatives and projects

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 actions
- Improve order quality by suggesting order quantity based on advanced demand forecasting

Guidelines available at PeopleHub > Microsites > Marketing Hub
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.

**Descriptive**
- Query & Reporting
- OSA Reporting
- POS Data Availability

**Diagnostic**
- Insights & ID Opportunities
- Root Cause Analysis
- OOS Alerts

**Predictive**
- Anticipate & Prevent
- Predictive OOS
- Suggested Orders

**Prescriptive**
- Optimize

Imagine If...
- Labor: What if we could get more done in less time through targeted work?
- Waste: What if we could reduce waste by better anticipating consumption?
- OSA: What if our shelves were stocked at all times?
- Sales: What if we never left sales opportunities on the table?
- Inventory: What if we could get the right product to the right place at the right time?
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

3 Clicks to an Insight
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
Trade Dashboards

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

Welcome to possible