

# Data Driven Futures

## The Opportunity and Pitfalls of Successful Analytics

**National Technology News Conference**

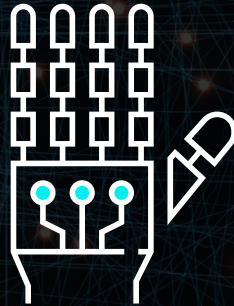
**Melissa Treier**

Vice President, Information Builders

November, 2019

**Information  
Builders**

# NEW DATA = NEW INTELLIGENCE



16ZB



2016

163ZB

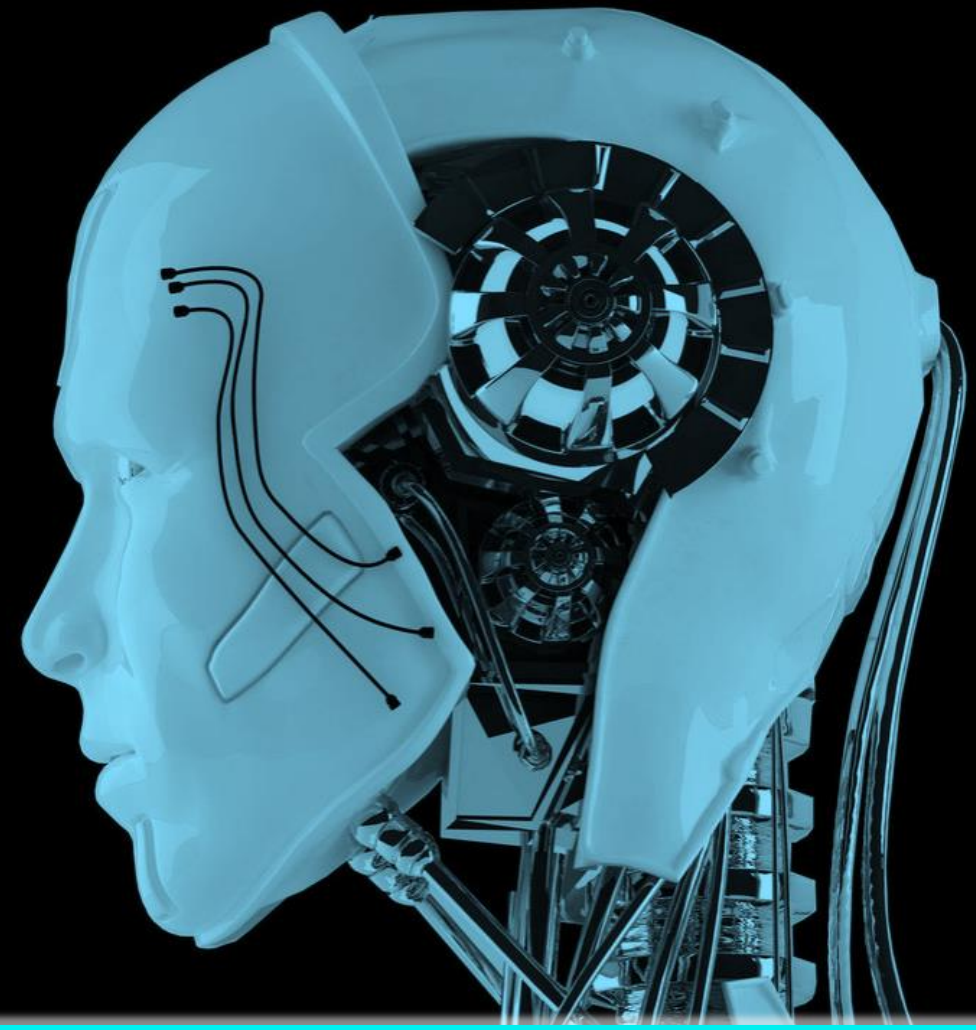
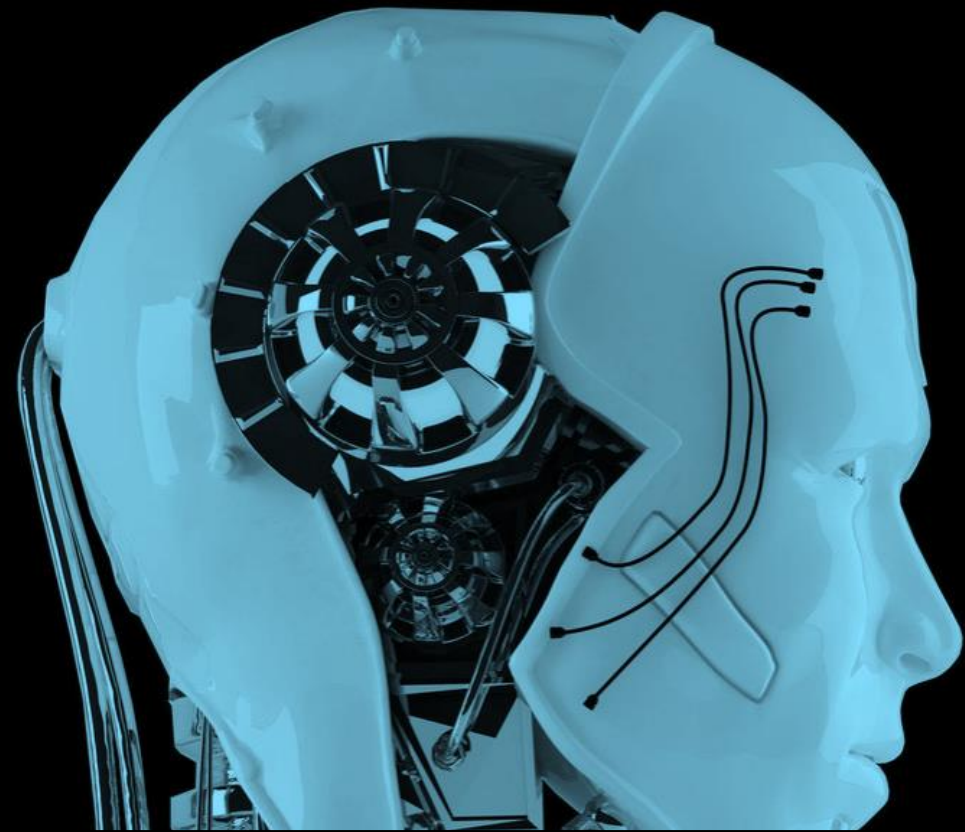


2025

Worldwide data will swell to **163ZB** by 2025 – **10X** the amount today

Average connected person will interact with devices **4,800** times per day – **1** interaction every **18**

**seconds**  
Enterprises will create **60%** of the world's data in 2025



**NEW INTELLIGENCE**

**= NEW CHALLENGES**

# AS DATA HAS INCREASED, ORGANIZATIONAL LIFE EXPECTANCY HAS DECREASED

**1955**

Average life  
expectancy for companies  
**75 years**

**VS**

**2017**

Average life  
expectancy for companies  
**15 years**

**In today's faster-paced, more competitive climate,  
how can organizations succeed and distance themselves?**

# DRIVING BUSINESS PERFORMANCE THROUGH ANALYTICS

**Breakaway companies** scale analytics by significantly outperforming in three categories:



Aligning on strategy




Building the right foundations of data, technologies, and people



Conquering the last mile by embedding analytics into decision-making and processes

***“Across industries, we see organizations investing heavily to integrate analytics throughout their entire business in an effort to capture a portion of the \$9.5 trillion to \$15.4 trillion of value we estimate analytics can enable globally.”***

**— McKinsey & Company**



***“Hiding within those mounds of data is knowledge that can change the life of a patient or change the world.”***

**Atul Butte,  
Stanford School of Medicine**

A woman with long brown hair and a man with a beard and glasses are looking at a laptop screen in a meeting. The woman is wearing a dark jacket and glasses, and the man is wearing a light blue shirt. The background is blurred, showing other people in the room.

***“Only 35 percent  
of companies  
polled said they  
'completely agree'  
that they've had”  
success with BI &  
analytics.***

# TOP 3 WORST PRACTICES THAT CAN LEAD TO POOR DATA AND ANALYTICS RESULTS

- 1 Depending on humans to operationalize insights**
- 2 Underestimating the importance of data prep**
- 3 Using tactical tools to support broad strategies**

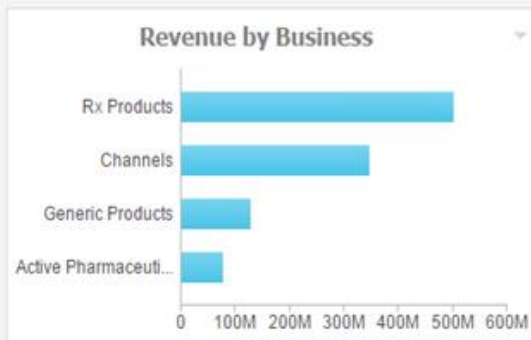
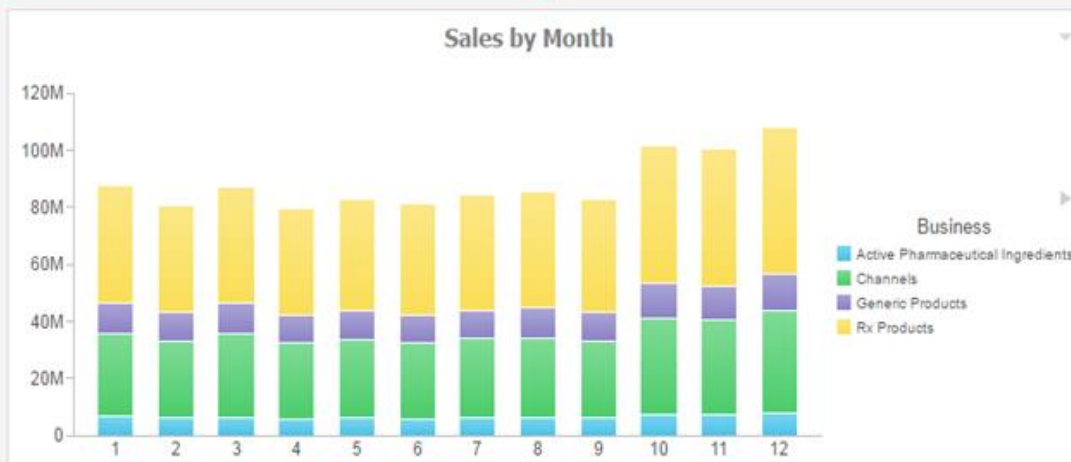
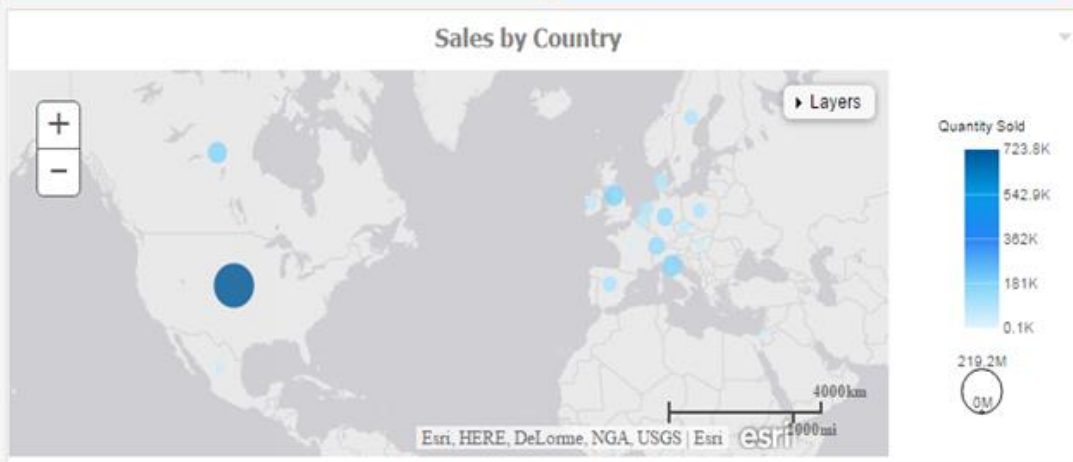




# Depending on Humans to Operationalize Insight

# OPERATIONALIZING INSIGHT?





### % Change by Business

Businesses	% Change
<a href="#">Generic Products</a>	33.51%
<a href="#">Channels</a>	32.16%
<a href="#">Rx Products</a>	31.00%
<a href="#">Active Pharmaceutical Ingredients</a>	30.92%
<b>TOTAL</b>	<b>31.73%</b>



# TARGET MARKETING PLATFORM

POWERED BY

## DATA SCIENCE & GIS



### Recommended Actions

- Boost Tailgate Hero promotion on social channels**  
Strong sales this month (+73.4%) and forecasting 213% ?12% sales growth.
- Expand Meal Kit promotion to Gen-X segment in California**  
The Gen-X segment showed the strongest interest (32% conversion) in EMEA. Promotion conversion in California is most strongly correlated with EMEA.
- Target Modern Classics recipes to Millennial segment**  
Click rate in Millennials segment increased 219% in last month's modern classics website hero spot. Sentimentality and Frugality were the most common words used on social channels as rationale.
- Expand in-store test kitchen concept to Pacific Northwest**  
Trial stores produced 329% increase in recipe sales, 192% increase in basket purchase amount and 73% increase in shopper visit duration.

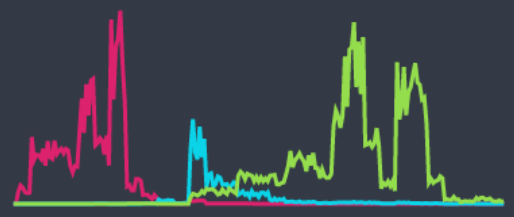
<p><b>Campaign ROI</b></p> <p>209.8</p> <p>-3% Change</p>	<p><b>Social Impressions</b></p> <p>181M</p> <p>-3% Change</p>	<p><b>Website Traffic</b></p> <p>198.5M</p> <p>+21% Change</p>	<p><b>Conversion Rate</b></p> <p>35.7</p> <p>+13% Change</p>
<p><b>Promotion ROI</b></p> <p>27.87%</p> <p>Meal Kit Infographic</p>	<p><b>Conversion Rate</b></p> <p>35.7</p> <p>Converted Leads for Rewards Card</p>	<p><b>Social Sentiment</b></p> <p>74.34%</p> <p>Favorability Rating</p>	<p><b>Click Rate</b></p> <p>131%</p> <p>Increase in activity</p>

### Alerts and Discussion

- Allison Volansky just shared a new data story: **Campaign Insights** 10m ago
- John Thompson: Great work team! The new Infographic promotion is FIRE! 15m ago
- Michael Bell: Please look at the ROI of the Facebook Channel. 25m ago



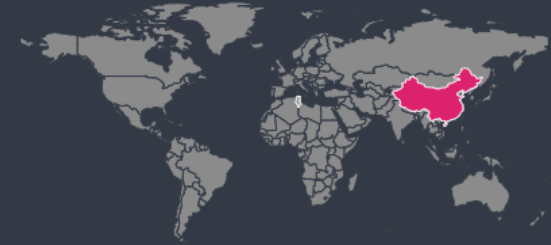
**Product Shortage**  
**Antihistamine**  
Pollen counts predicted to spike



**Inspection Delay**  
**24-36 Hours**  
Estimated delay of delivery



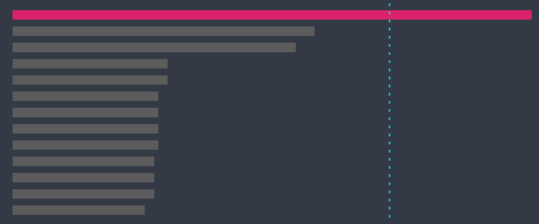
**Shipping Delay**  
**1-2 Weeks**  
Affects 7 Categories of Food



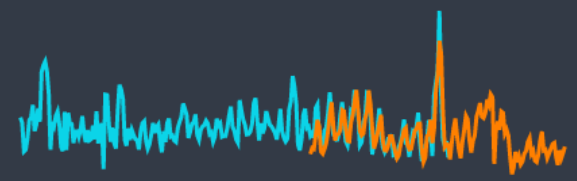
**Product Recall**  
**Romaine Lettuce**  
California FDA found E-Coli



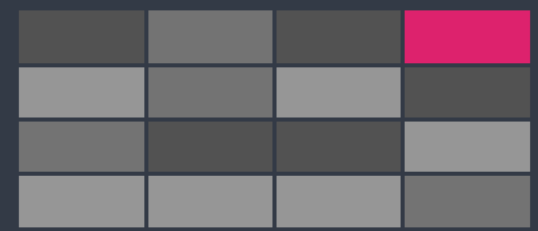
**Refrigeration Fail %**  
**80%**  
Threshold for preventative maintenance



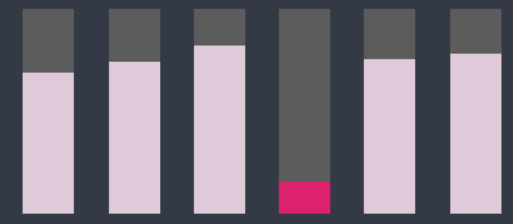
**Demand Forecast**  
**12.7%**  
Higher than previous period



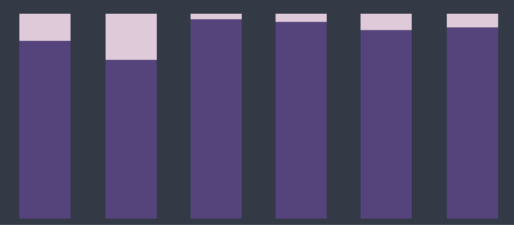
**Item Location Error**  
**Aisle A17**  
Heavy item at risk for damage



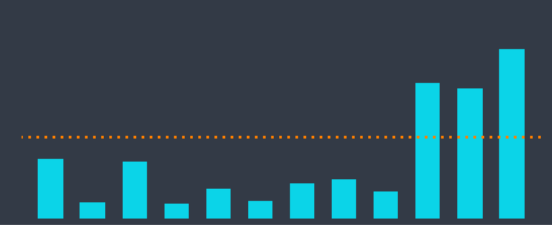
**Demand Variation**  
**-48.9%**  
Compared to forecast



**Available Capacity**  
**9.4%**  
Below desired threshold of 15%



**Co-Mingled Locations**  
**16.32%**  
Above desired threshold



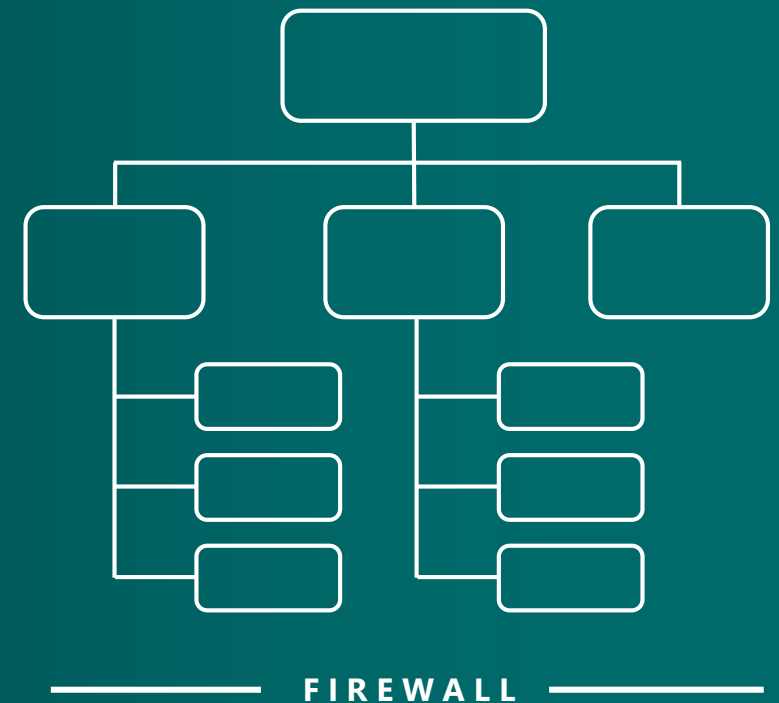
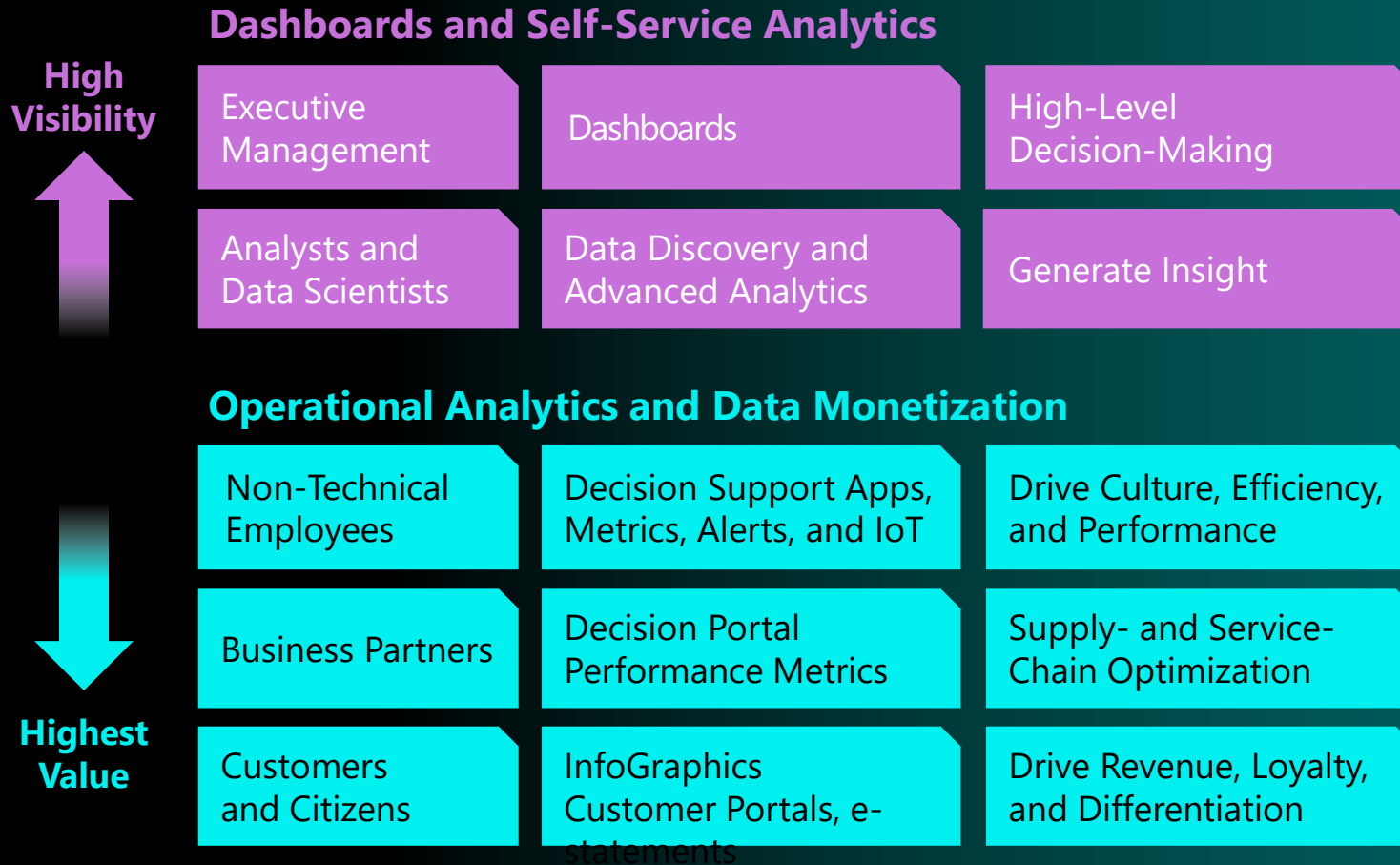
**New Product Demand**  
**Southwestern Beef Tacos**  
Meal Kit outperforming forecast by 78%



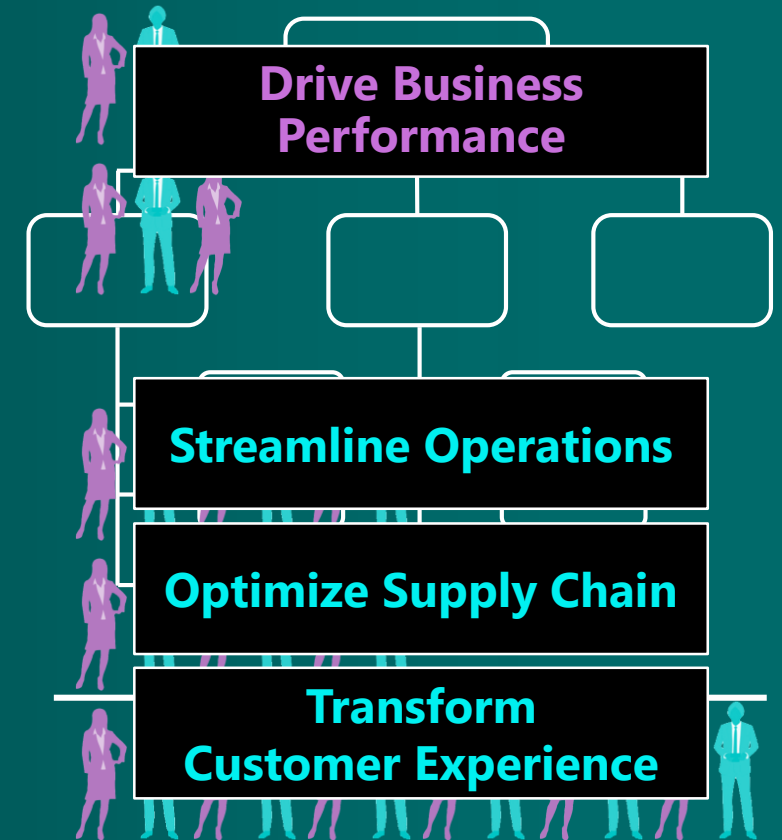
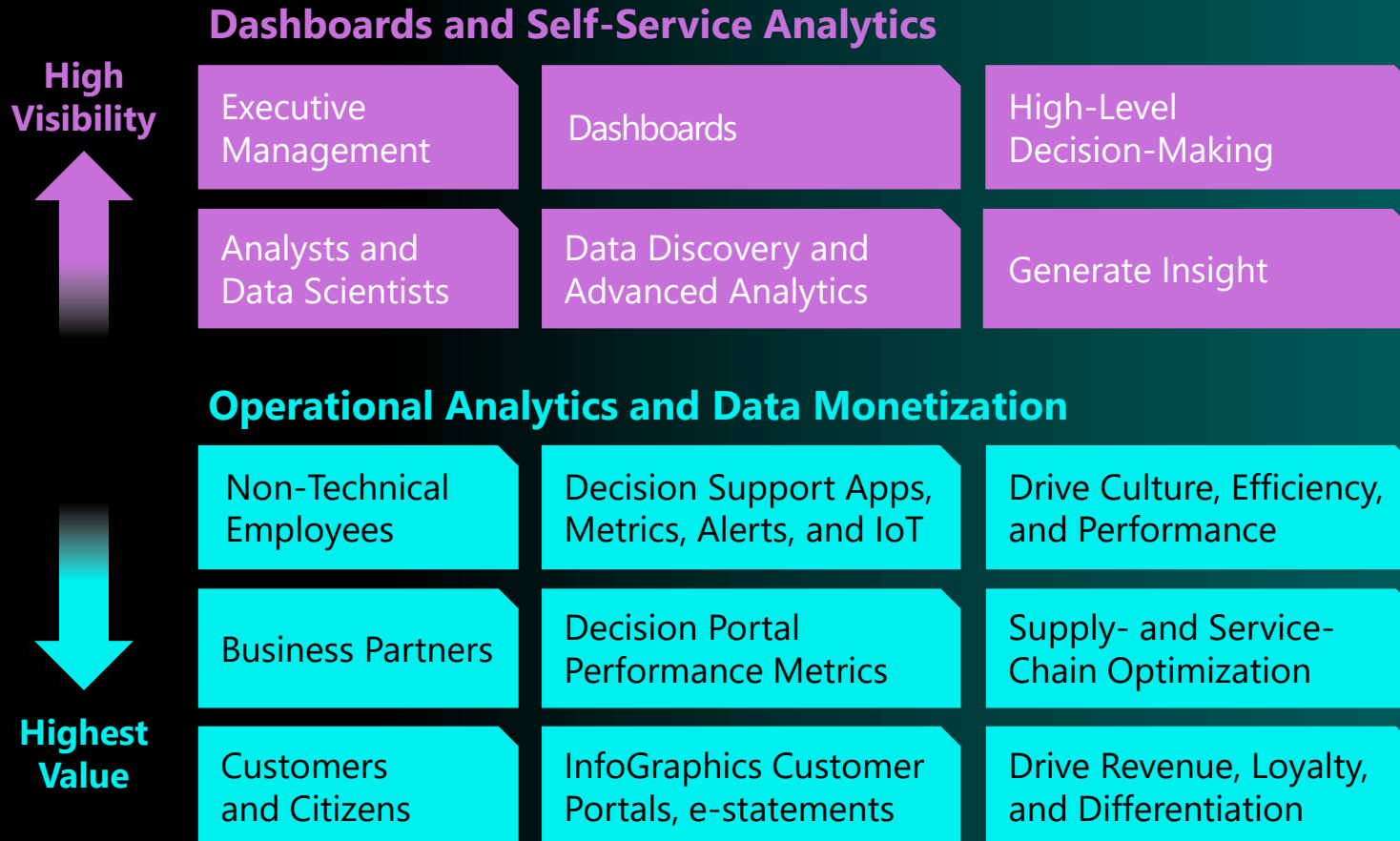
**Product Forecast Error**  
**24.2%**  
Compared to forecasted amount



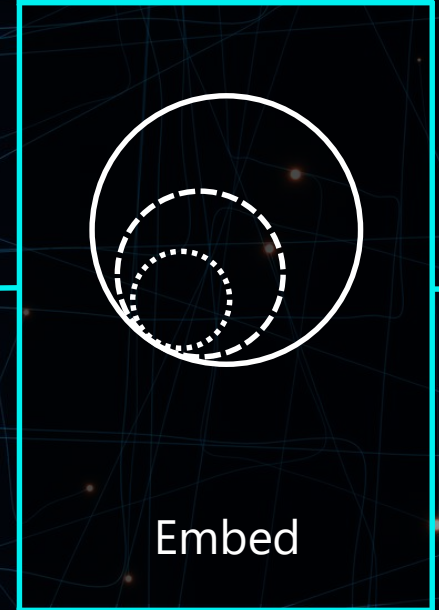
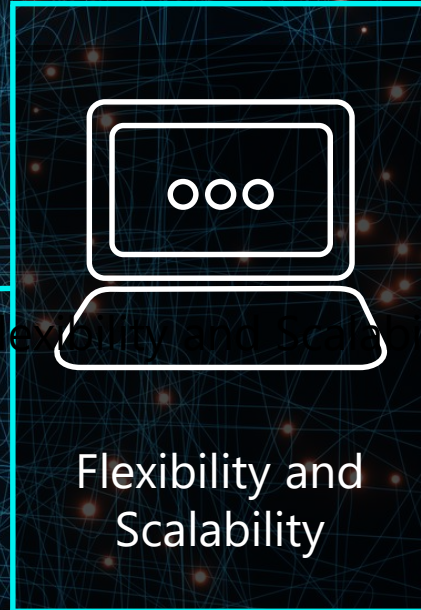
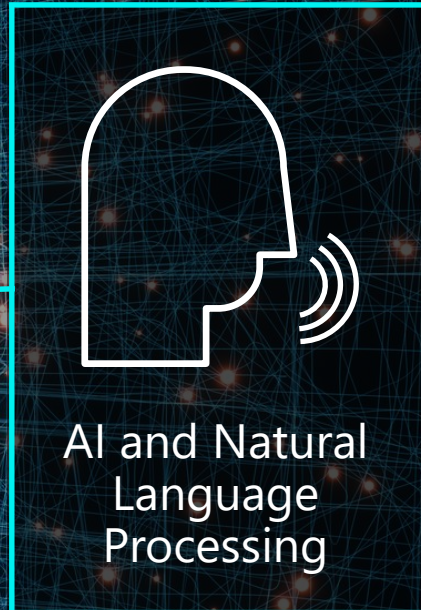
# OPERATIONALIZATION REQUIRES YOU TO MAKE INSIGHTS AVAILABLE TO ALL STAKEHOLDERS



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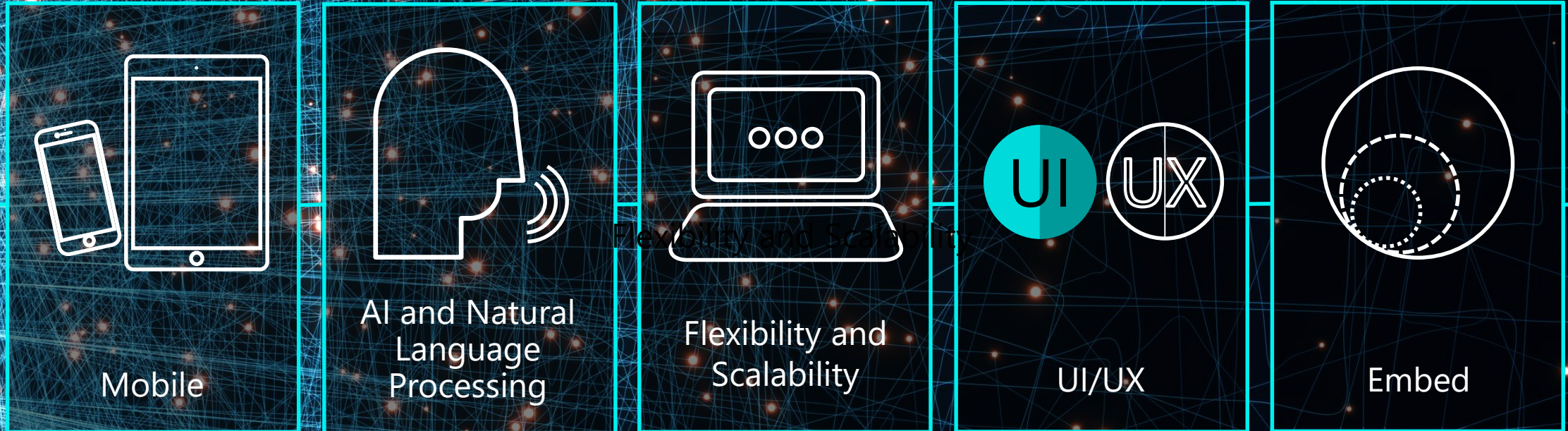
# INCREASE ADOPTION AND UTILIZATION OF BUSINESS ANALYTICS TOWARDS DIGITAL TRANSFORMATION



**60%** of end users leverage embedded analytics on a regular basis compared to only **21%** user adoption of standalone self-service analytics



# INCREASE ADOPTION AND UTILIZATION OF BUSINESS ANALYTICS TOWARDS DIGITAL TRANSFORMATION



**84%** of respondents say time spent in app increased after embedding analytics

## EMBED TO DRIVE ADOPTION AND VALUE

*“Our give-away, take-away ratio is the best in the business. This is because our analytic capabilities enhance the user experience for our customers and streamline business processes for our company.”*



ROSNET



# **Underestimating the Importance of Data Prep**

# INFUSE INTELLIGENCE FOR A SMARTER BUSINESS

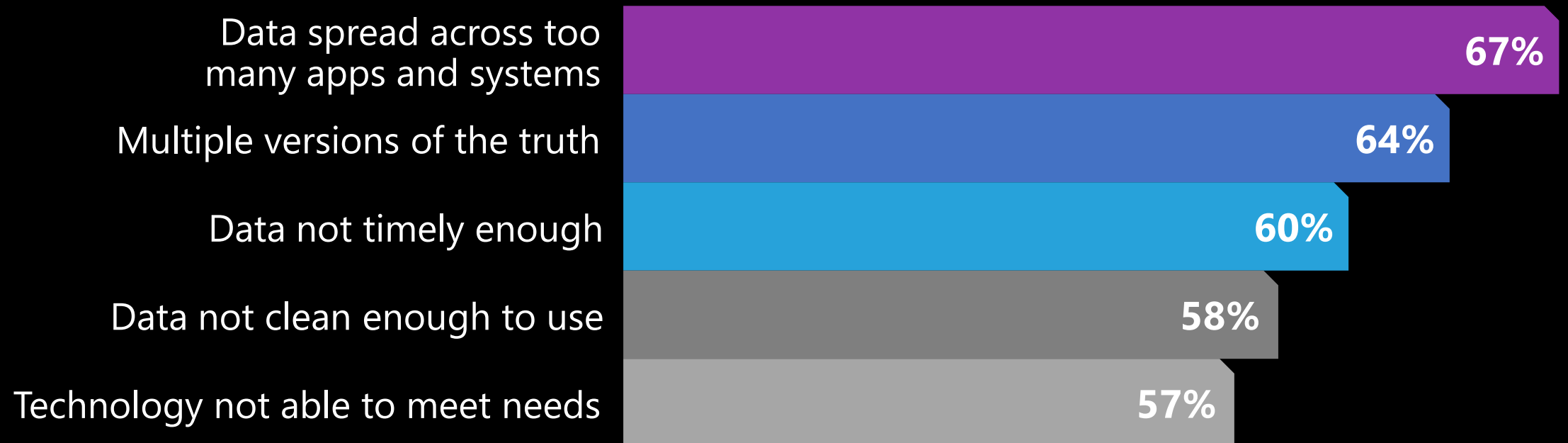


Less than **33%** trust the analytics they generate from their business operations. Yet the vast majority say these insights are critical to their business decision-making.

# COMMON CHALLENGES OF INFORMATION MANAGEMENT

## Barriers to Information Management

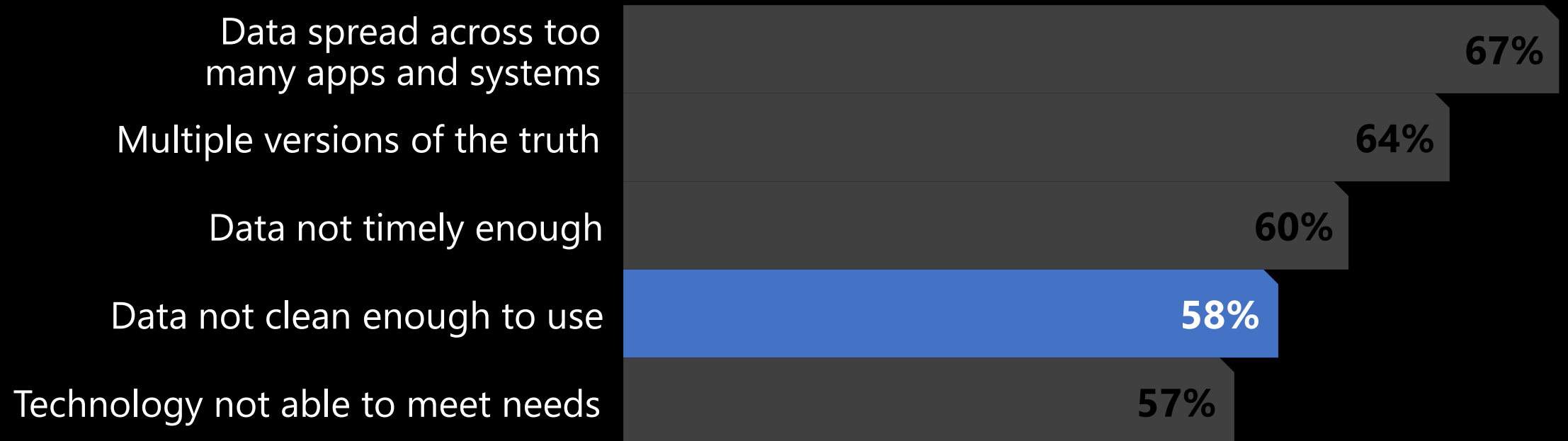
Address disparate and dirty data, and its timeliness



# COMMON CHALLENGES OF INFORMATION MANAGEMENT

## Barriers to Information Management

Address disparate and dirty data, and its timeliness



# WE'LL JUST WORK AROUND THE DATA QUALITY ISSUE

- **Adds unnecessary cycles to the process**
  - A recent survey cited **31%** of analysts and data scientists claim to devote up to three hours a day cleaning data
- **Trust is lost**

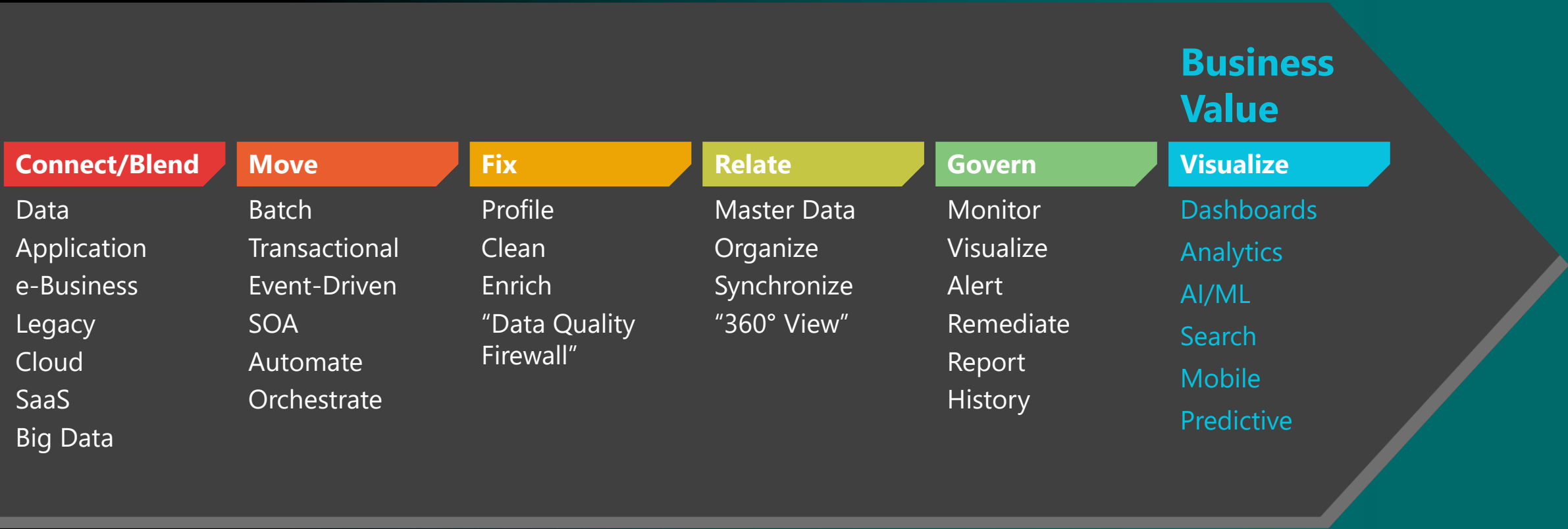


# **MARKET SHIFT**

*from* PURE  
SELF-SERVICE  
*to* GOVERNED  
SELF-SERVICE







# TRUSTED INFORMATION IN ACTION

## MERGERS AND ACQUISITIONS

*“Without Information Builders, we would not be able to outsource certain functions, or acquire new companies as effectively as we do. And those activities are paramount to our success.”*

**Siebe Talma**  
**Global Director**





# Using Tactical Tools to Support Broad Strategies

# WHAT DO USERS WANT?

## TOOLS vs APPS



# TOOLS AND APPS



**IT Developers**



**Power Users**



**Business Analysts**



**Management**



**Operational Employees**



**Business Partners**



**Customers**

# INTELLIGENCE IN ACTION: PREDICTIVE POLICING

*“If police officers have the right information to make better decisions, citizens will directly benefit.”*

**Ružena Allas**  
**Police Expert Analyst**  
**PBGB**

POLITSEI



## LEVERAGING DATA FOR GOOD

*“WebFOCUS helps United Way offices share best practices, identify opportunities for improvement, and better utilize the resources and contributions of our worldwide team.”*

**Lisa Bowman**  
**EVP and CMO**  
**United Way Worldwide**



# 3 KEYS TO UNLOCKING THE VALUE OF YOUR DATA



Create a trusted  
information foundation



Increase utilisation and  
adoption of analytics



Innovate with analytics  
(monetise data)





**THANK YOU**