



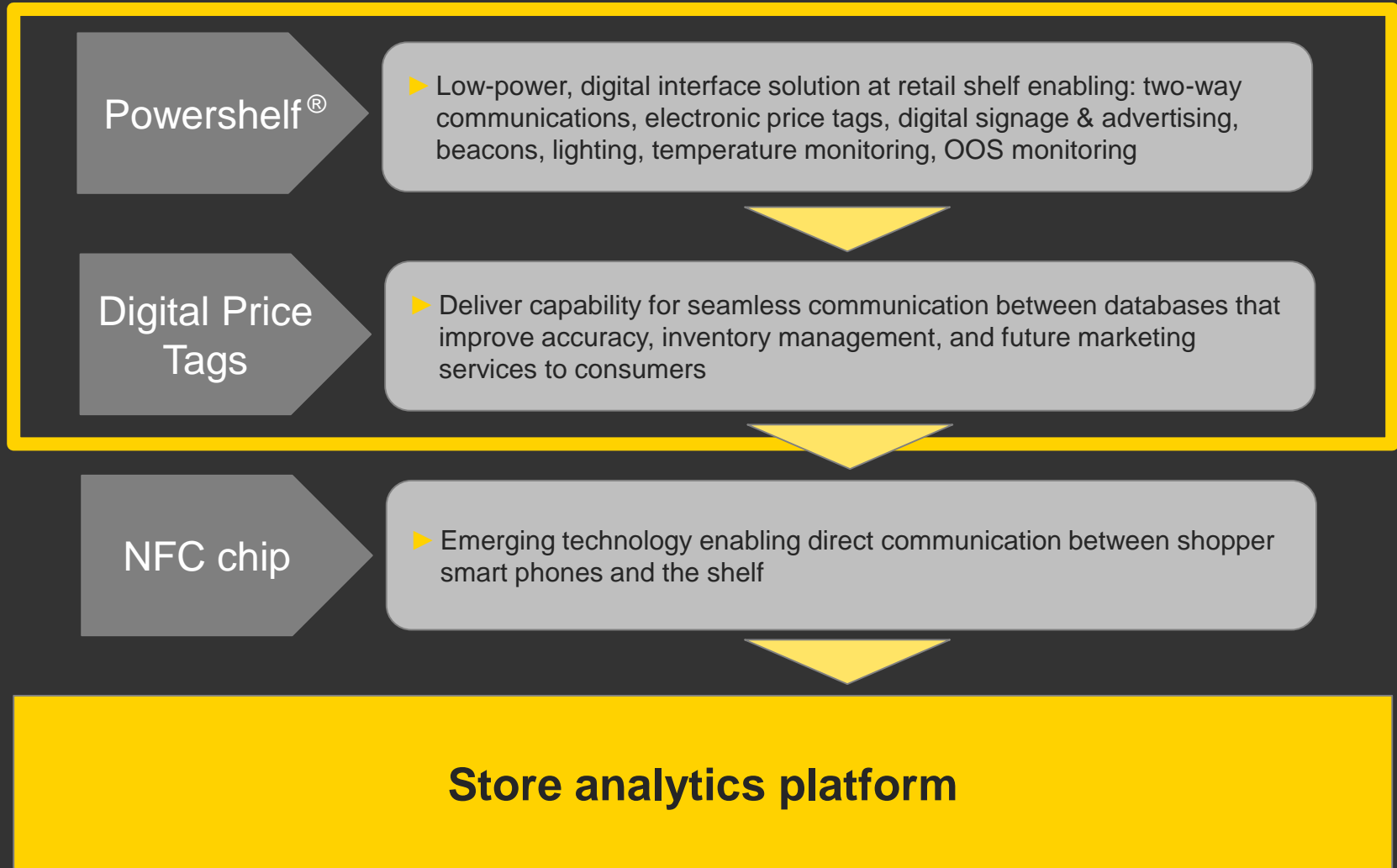
# Bringing the internet to the last 1,000ft of retail

FMI Midwinters Conference

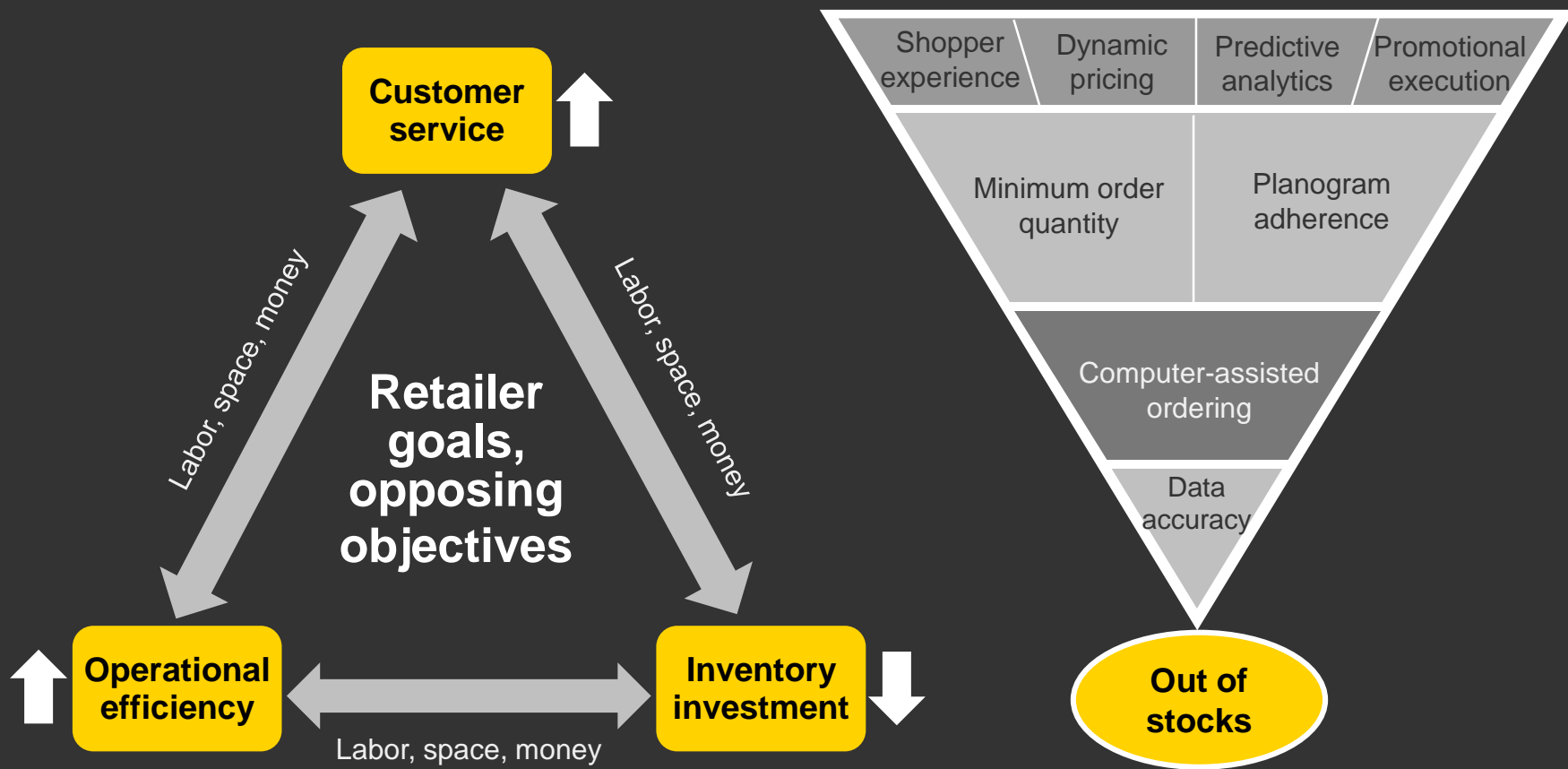


Building a better  
working world

# Smart shelving technology allows powerful elements to transform customer relationships



# Benefits of new digital technology allow retailers to meet objectives more efficiently



Initial Pilot results underpin the already published EY industry business case, which identifies a 10 month payback for retailers and manufacturers on costs associated with digitization of the store shelves

# Game-changing pilot confirms strong benefit from technology implementation

## Out-of-stocks

Out-of-Stocks are a key industry focus area representing a **\$50B** global sales opportunity



## Participants



## Pilot program

<b>231</b>	<b>4</b> <b>GIANT EAGLE</b>	<b>2</b>	<b>2</b>
SKUs	Ohio Giant Eagle stores	Test	Control

3 Categories:

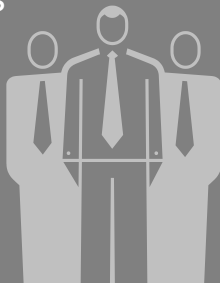
Yogurt, beer, sports drinks

- ▶ Heavily promoted
- ▶ Regular back-stock
- ▶ DSD
- ▶ 700 daily data points

## Players involved

Joint Task Force to measure OOS variance between test and controls stores

- ▶ EY
- ▶ Compass Marketing
- ▶ Giant Eagle
- ▶ Manufacturers
- ▶ FMI
- ▶ University of Maryland



## Objectives

Testing: Nov '15 – Jan '16

- ▶ Validate EY's business case
- ▶ Evaluate technology
- ▶ Measure OOS with new level of accuracy
- ▶ Identify new business practices
- ▶ Publish case studies with actionable insight for trading partners



# Pilot achieved significant reduction in rate and frequency of out-of-stocks

## Test results show improvement

- ▶ On-shelf availability increasing
- ▶ OOS reaction time decreasing
- ▶ # stock out instances decreasing
- ▶ Loss of sale exposure decreasing

Measurement	Variance
On-Shelf Availability	113 bpt improvement
OOS Reaction Time	3.49 hours reduction
# Daily Stock Out Instances*	11 fewer instances
Loss of Sale Exposure	\$1,705 decrease

## Average % Unavailable

Product Category				
Sports Drinks	Test 1	Test 2	Control 1	Control 2
1 - Thursday	Green	Yellow	Red	Yellow
2 - Friday	Green	Yellow	Green	Yellow
3 - Saturday	Yellow	Yellow	Yellow	Yellow
4 - Sunday	Green	Orange	Red	Orange
5 - Monday	Orange	Orange	Red	Orange
6 - Tuesday	Green	Yellow	Green	Orange
7 - Wednesday	Green	Yellow	Orange	Orange

Product Category				
Yogurt	Test 1	Test 2	Control 1	Control 2
1 - Thursday	Green	Green	Green	Orange
2 - Friday	Yellow	Green	Green	Green
3 - Saturday	Orange	Yellow	Green	Green
4 - Sunday	Orange	Red	Green	Orange
5 - Monday	Red	Green	Yellow	Yellow
6 - Tuesday	Orange	Yellow	Orange	Red
7 - Wednesday	Orange	Orange	Green	Yellow

## Total Lost Sales (\$)

Product Category				
Beer	Test 1	Test 2	Control 1	Control 2
1 - Thursday	Green	Red	Green	Red
2 - Friday	Yellow	Yellow	Yellow	Red
3 - Saturday	Yellow	Orange	Green	Orange
4 - Sunday	Green	Yellow	Green	Yellow
5 - Monday	Green	Green	Green	Yellow
6 - Tuesday	Green	Green	Yellow	Yellow
7 - Wednesday	Green	Yellow	Green	Orange

\*Testing period included holiday season so # of instances increased over time, however control store instances increased at higher rate than test stores

# Pilot achieved significant reduction in rate and frequency of out-of-stocks

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## Unprecedented amount of data available

- ▶ Predictive Analytics will provide real value
- ▶ Discover root causes of OOS through patterns in data
- ▶ OOS by manufacturer, OOS by date, promotional impact
- ▶ Increased data accuracy and cleanliness in POS changes how stores will be audited, disrupting the business model

## Giant Eagle pilot next steps

- ▶ Continue four store Columbus test
- ▶ Extend data collection period to capture more statistically valid results
- ▶ Allow store teams to continue to refine operational changes
- ▶ Flush out cost / benefit analysis & long-term retail application strategy
- ▶ Expand sensors to additional categories
- ▶ Install sensors in convenience store

## Results by category

- ▶ Understand what items go out of stock at what time, how frequently, and for how long
- ▶ Benefit at store level in assignment; schedules based on OOS patterns

### Yogurt

- ▶ Highest unavailability on Tuesday and Wednesday
- ▶ OOS duration improvement: OOS duration decreased by 50% in 1st week and continues to improve

### Beer

- ▶ Highest rate of unavailability Thursday-Sunday
- ▶ No alerts shared with DSD, to date (next step)

### Sports Drinks

- ▶ Faster fill rate: Avg OOS duration was 4.1 hours less in test stores than in control stores
- ▶ OOS duration improvement: OOS duration improved by 5.2 hours in test stores versus baseline period

# Size of prize of bringing internet to retail is payback in 10 months. How to capitalize on this opportunity...



## Industry business case benefits

- ▶ For an average, \$50 million a year grocery store, total return on investment is estimated to be 10 months\*
- ▶ This estimate focuses largely on OOS as the driver of sales growth, but also includes some conservative estimates on value created by dynamic pricing, promotional execution and effective merchandising



## Industry cost estimate for average store

- ▶ Conservative estimates are \$1.5 million implementation costs for average grocery store
- ▶ These estimates include digital labels throughout the store, and smart shelves for the top moving SKUs



## Industry opinion

- ▶ Conducted Forbes Insights survey of 72 retail executives
- ▶ 76% believe in-store digital technologies help with inventory management - replenishment being top reason for OOS issues
- ▶ 46% will prioritize investments in new technologies / predictive analytics in next 2 years



## Next steps

- ▶ Pilot, learn, adjust
- ▶ Work with thought leaders and experts
- ▶ EY and Compass Marketing partnership has developed and is ready to engage and address
- ▶ Approach opportunity with EY's analytical prowess and process framework

Revolutionizing the industry



\*Business case was developed utilizing EY's rigorous guiding principles and analytical methodology. Ultra conservative industry estimates were incorporated and validated through the Giant Eagle pilot, external data, and Forbes Insights survey data

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# Appendix

