

# Managing Fresh From Farm to Fork

How Trends, Regulation and  
Technology Will Impact Retailers

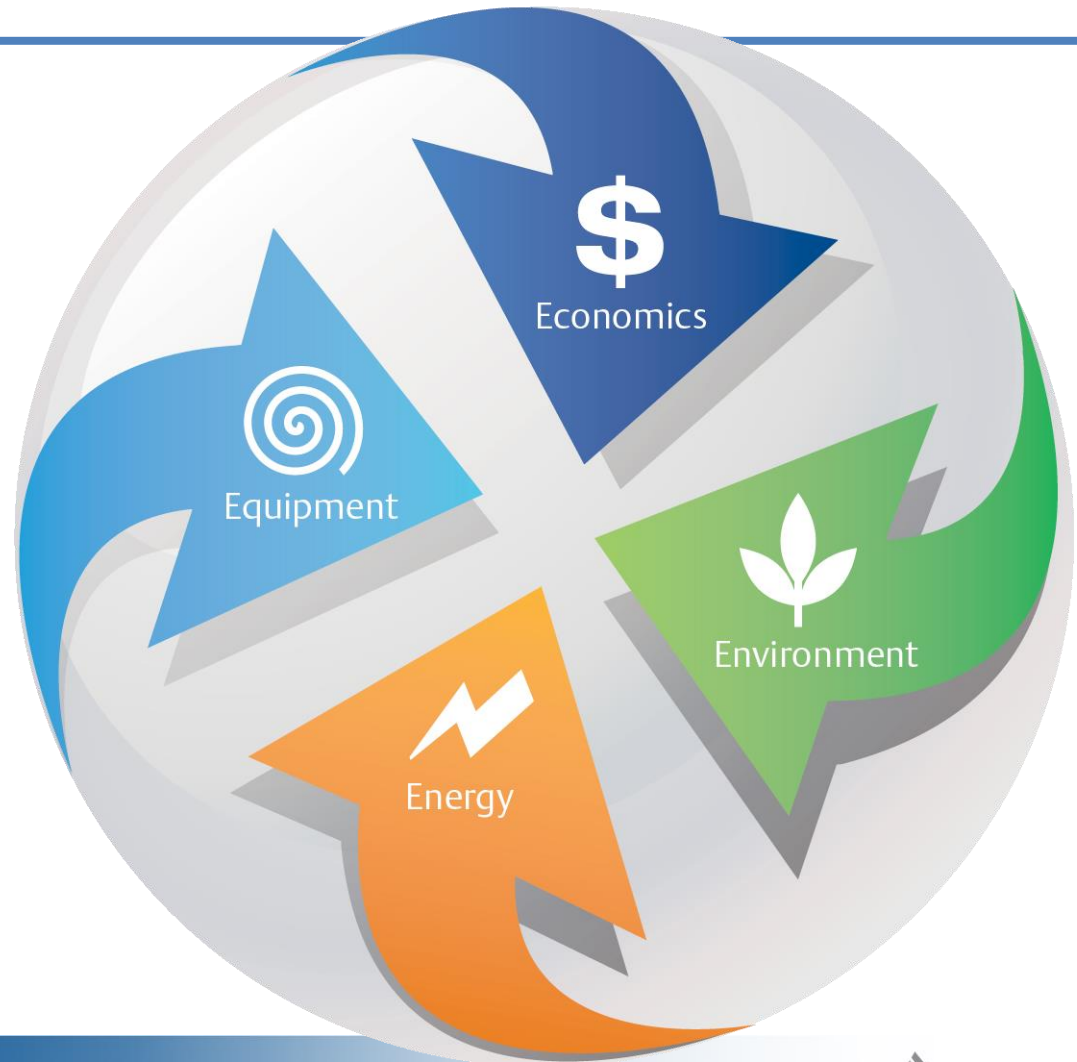
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# Fresh From Farm to Fork

## Today's Focus:

- Journey and Challenge
- Current and Emerging Regulations
- Today's Headlines
- Retailer Responses
- Unlocking Value



# The Fresh Challenge Includes . . .

*Big, High-Stakes Impact Areas for Participants and Retailers*

**\$990BILLION**



ANNUAL GLOBAL  
FOOD LOSS/WASTE

... safeguarding world food supply

... optimizing business effectiveness

**\$32BILLION**



ANNUAL ENERGY SPEND  
IN GLOBAL MARKETS

... reducing energy consumption

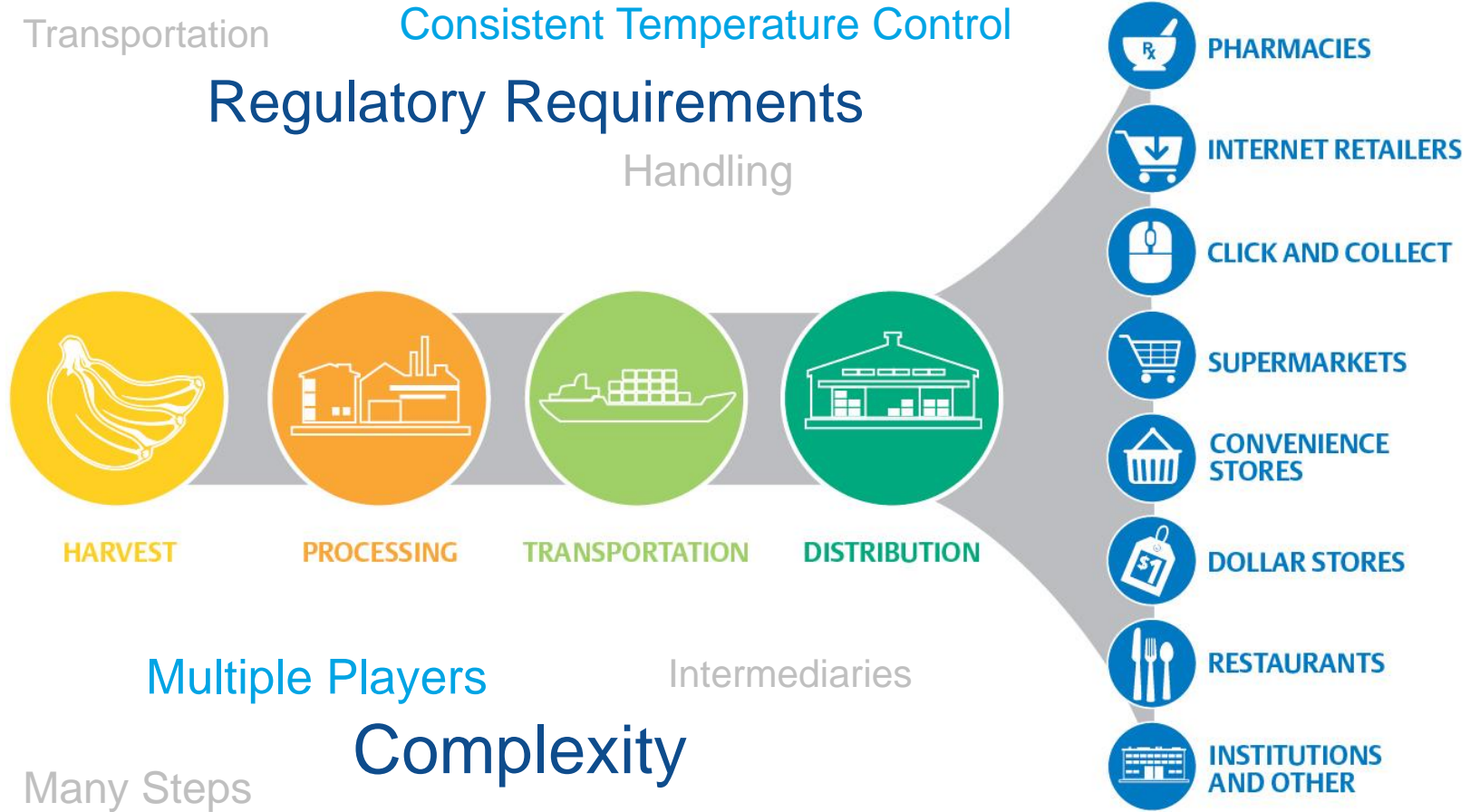
... protecting the environment

**\$18.2BILLION**

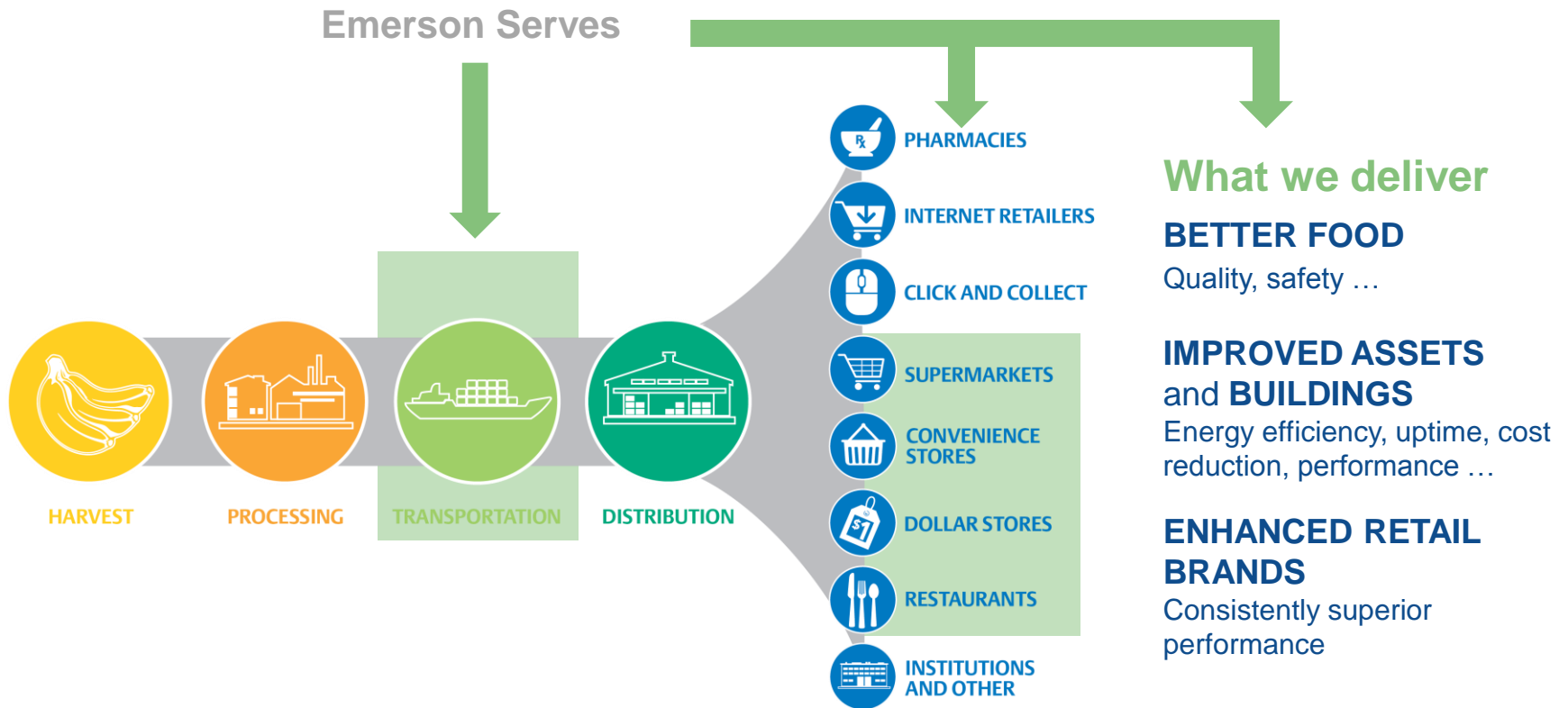


ANNUAL FACILITY  
MAINTENANCE COST

# The Journey: Fresh From Farm to Fork



# The Challenge: Fresh From Farm to Fork

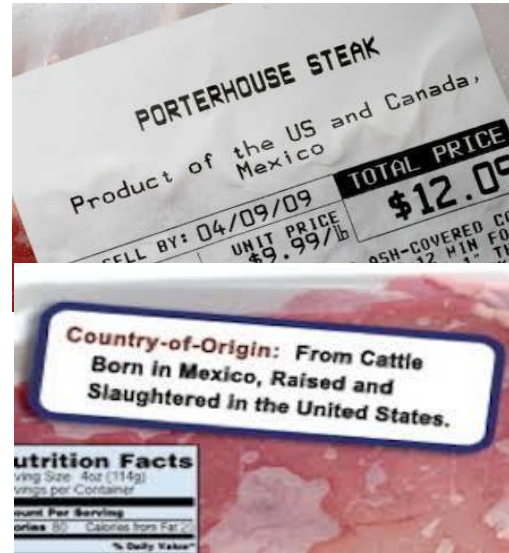


Likely Evolution From Fragmented Approaches to End-to-End Solution

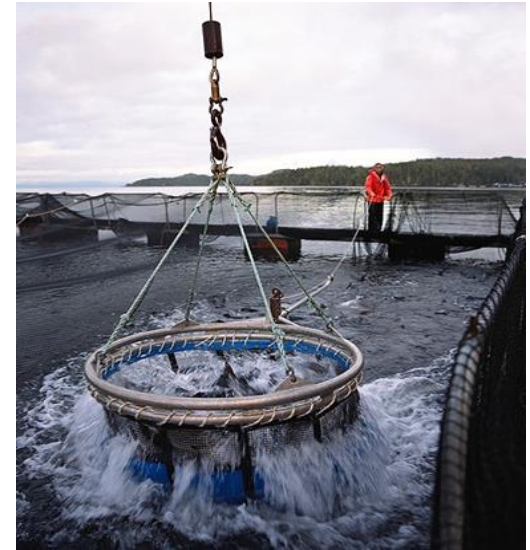
# Regulation Requires Sharper Focus



**Food Safety:** More than five years after President Obama signed the **Food Safety Modernization Act** into law in January 2011, food companies and **retailers will finally start having to comply** with some of its most significant rules. The FDA published the final rules in **fall 2015, giving large companies one year** to come into compliance.

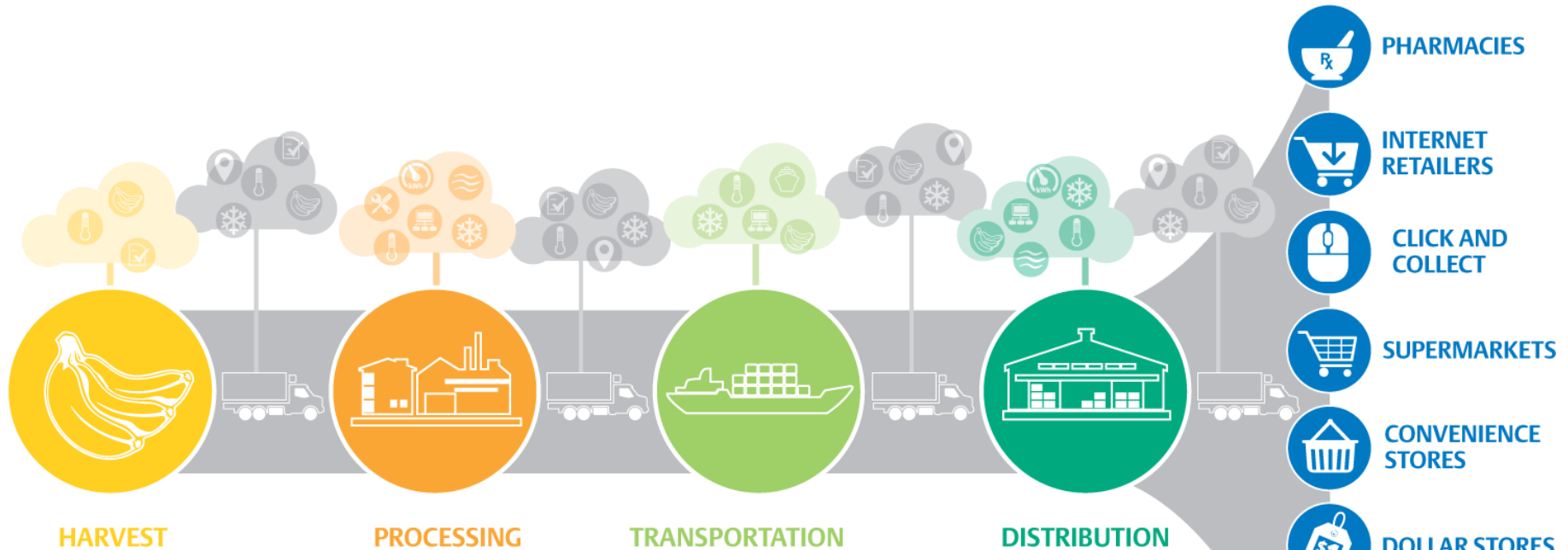


**Global Trade:** The WTO ruled that **Canada and Mexico may impose retaliatory tariffs** of more than \$1 billion because **COOL does not comply with U.S. trade commitments**. COOL was **repealed** by Congress. Now, senators are **pushing the Voluntary Country of Origin Labeling Act** of 2015 as a solution.



**National Regulation:** U.S. lawmakers instructed the **FDA to forbid the sale of genetically engineered salmon** until the agency puts in place labeling **guidelines to disclose whether a fish has been genetically altered** — a victory for advocates who have long opposed such foods from reaching Americans' dinner plates.

# Food Data Is Captured, but Not Shared



## Data Requirements

- Product temperatures
- Case temperatures
- Cargo temperatures
- Refrigeration performance
- Always-ready connections
- GPS position, tracking

# Retailers Must Continue “Fresh” Positions

**Fresh food sales are increasing,** along with consumer buzz and interest in eating and living well. With sales growth in fresh perimeter departments (meat, deli, produce, bakery and seafood) surpassing center-store mainstays, today’s retailers can’t afford to ignore fresh. In the U.S., **99% of grocery shoppers buy fresh products,** and **fresh perimeter aisles** have become places where **grocers establish their identities.** Whether it’s sophisticated restaurant-style foodservice offerings in deli or a wide variety of fresh produce, **retailers can use fresh to win consumers within an increasingly crowded retail market.**

— AC Nielsen report, June 2015





# Many Supermarkets Are Connected, Ready

## Emerson Perspective

- 2M+ IoT Devices
- 20K locations
- 7/24 connectivity
- Monitoring operation, temperature, food quality, and more
- 75GB data daily
- 100TB database for insight development

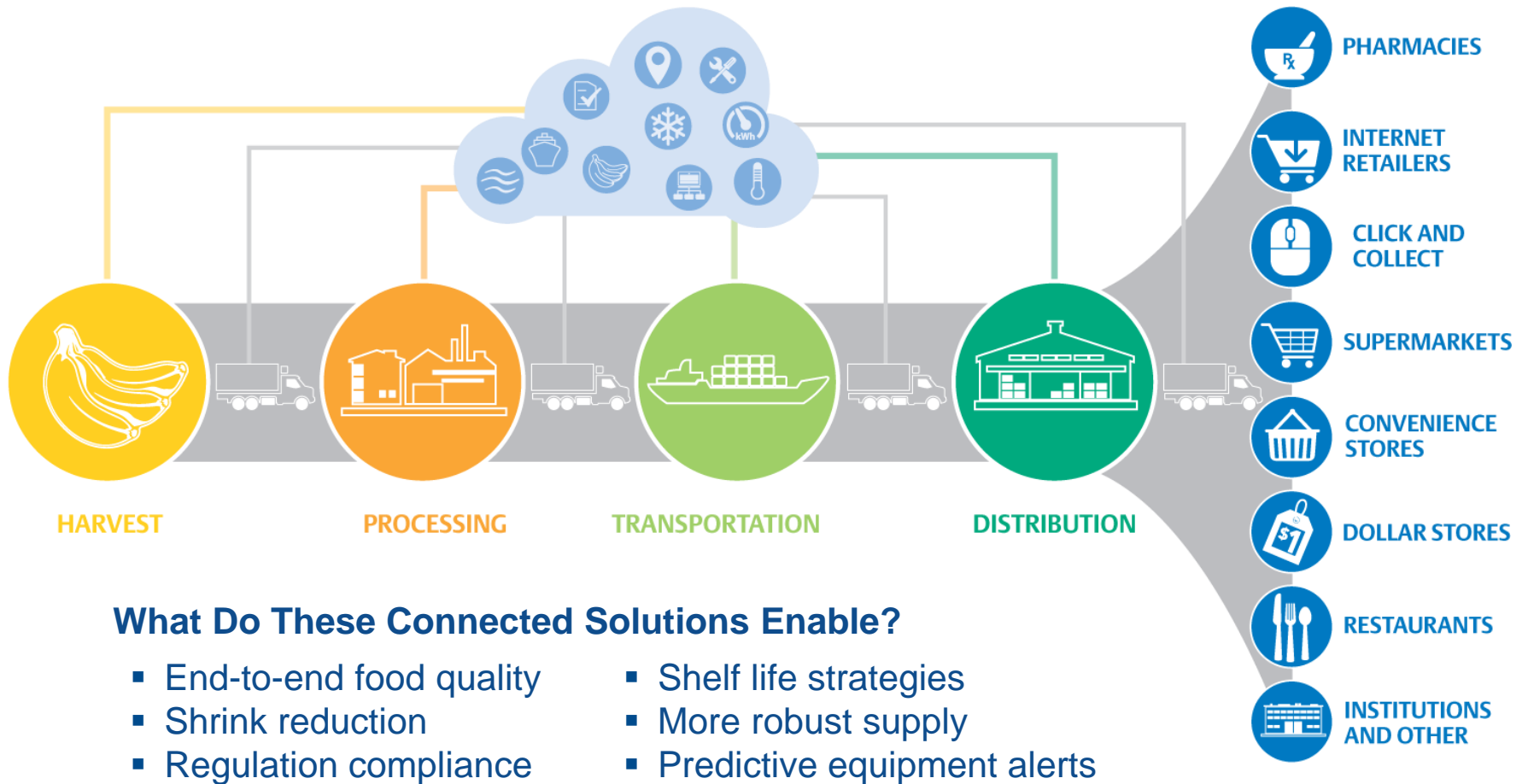


# Cold Chain Participants Remain Uncertain

- **FSMA will have a direct impact on manufacturing facilities,** central kitchens, distribution centers, food imports and even transportation. — *FMI report*
- **FSMA has only SOME impact upon the retail sector** of the food industry (e.g., grocery stores, restaurants, cafeterias and other vendors). — *NDSU research*
- **Retailers are responsible** for ensuring products they sell are sourced only from FSMA-compliant suppliers. — *Progressive Grocer column*



# Holistic Collection, Storage, Analytics and Insight Solutions Will Emerge



## What Do These Connected Solutions Enable?

- End-to-end food quality
- Shrink reduction
- Regulation compliance
- Shelf life strategies
- More robust supply
- Predictive equipment alerts

# A Retail Playbook — From A to W

**Global retailers may drive an end-to-end solution through their supply chains or own initiatives.**

**Amazon Fresh** rolled out in Seattle in 2007. The company spent six years honing its approach before **expanding to Los Angeles, New York, Philadelphia, San Francisco and suburban areas** like those of New Jersey and northern California. If it ever wants to become the world's largest retailer, Amazon is eventually going to have to figure out grocery-grocery retail is the largest channel in the world. **Amazon will likely maintain its grocery delivery** in its current form, testing and **tweaking on a market-by-market basis until the company figures out an optimal strategy.**

**Wal-Mart Stores Inc.** is “cutting out the middle man” to reduce produce transit and improve quality. The retailer announced the produce initiative following some direct sourcing of fruits and vegetables in recent years. Walmart **plans to source 80 percent of its fresh produce directly.** The company set up satellite buying offices in growing regions and made **improvements to transportation and logistics** through the distribution system. The company also launched a new marketing campaign which is **reinforcing its 100 percent satisfaction guarantee for fresh produce** purchased in stores.

# A Connected Cold Chain Drives Value for Participants — Including FSMA Alignment



Energy

- **Efficient fleet and asset management** in transportation
- **Optimize** operation in refrigerated holding



Equipment

- **Greater uptime** with advanced diagnostics, planned maintenance
- **Lower** emergency repair **costs**



Environment

- **Reduce food waste** through improved handling
- **Lower carbon footprint** in cold chain food management



Economics

- **Reduce liability** of foodborne illness
- **Grow sales** profitably in fast-growing fresh categories



# And Attacks High Stakes Challenges . . .

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MAINTENANCE COST

... safeguard world's food supply

... reduce energy consumption

... optimize business results

... protect the environment

# Thank You!

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## Questions?

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