Distributed Logistics and Automation

Presented by:
Tompkins International
James A. Tompkins, PhD
Chairman and CEO,
Tompkins International and MonarchFx
Disclaimer

• All of the information in this presentation is the result of Tompkins International’s research of public information.

• There is no information being presented today that comes from any proprietary source.

• Tompkins International does not discuss information about their clients, unless that information has been published.
Objectives

• Gain knowledge of Automation & Technology (Growth & Development)

• Learn the current state of inventory – Positioning, Leverage & Fluidity (Demand Predictions)

• Understand the evolution from Omnichannel to Unichannel Retail

• Learn what is Bricks & Clicks (Customer Shop)
Today’s Mission

Answer the Questions:

• What is the Digital Imperative?

• What is the Disruption Cycle?

• What are the 5 Logistics Essentials that result from the Digital Imperative and the Disruption Cycle?

• What are the Big Picture Impacts of the 5 Logistics Essentials that you must address going forward?
The Digital Imperative

1. We are engaging in a new era of business:

Agriculture → Industrial → Digital

2. Digital Technology is changing all businesses

- New products
- New services
- New business models
The Digital Imperative (continue)

3. It is essential that all organizations vigorously pursue digitalization.

4. Today we have the opportunity to start anew, to build an entirely new world.

5. Organizations that take control of the Disruption Cycle will surpass the organizations that pursue continuous improvement.
The Digital Imperative says that Organizations that Pursue Continuous Improvement will Become...

THIS IS NOT NEW!

- For the last 20 years, only 50% of the top performers sustain their leadership for a decade.

- Consider the S&P 500 Index:
  - 1957—2006: 8 Firms Replaced each Year
  - 2007—2010: 4 Firms Replaced each Year
  - 2011—2017: 22 Firms Replaced each Year
  - 2015—2017: 28 Firms Replaced each Year
The Disruption Cycle IS:
Disruptive Innovation

1. The Pursuit of the Disruption Cycle with **Innovation & Boldness**.

2. A high stakes game, with high rewards.

3. Not a high risk game; in fact, the certainty of high risk is to NOT traverse the Disruption Cycle, but rather to be **Risk Averse** and to embrace resistance to change.

4. The process of changing the world an innovation, a disruption at a time.
5 Logistics Essentials

- Blurring of Lines
- Distributed Logistics and Inventory Placement
- Anti-Brittle
- Automation
- Economies of Scale
Blurring of Lines

• What do the terms Retailer, Wholesaler, Manufacturer, Brand and Distributor mean in 2019?
• What do the terms B2C and B2B mean in 2019?
• What do the terms in-store and online mean in 2019?
• What do the terms Multi-channel and Omnichannel mean in 2019?
• What do the terms Brick & Mortar and eCommerce mean in 2019?
Blurring of Lines

• It is not about Bricks vs. Clicks, it is about Bricks AND Clicks.

• All Brands must be manufacturers and retailers.

• All Retailers must be manufacturers and brands.

• It is about the Four U’s
  - Uni-Channel
  - Uni-Marketing
  - Uni-Technology
  - Uni-Logistics
Distributed Logistics and Inventory Placement

- Direct To Consumer (D2C) is Shopping. Stores are about Personalization and Experiences.
- In traditional Direct To Consumer it is about fast and expensive OR slow & cheap, but the market wants Fast and Cheap.
- The only way to do Fast and Cheap is to have Distributed Logistics.
- The challenge of Distributed Logistics is Inventory Stock (the square root inventory law).
- Must use a Pull/Demand Driven Replenishment that does not deal in inventory stock, but in Inventory Flow.
Anti-Brittle

• The ability to predict the future is more difficult today than ever before.

• The development of solutions that are based on faulty future predictions results in brittle solutions.

• Anti-Brittle solutions are modular, flexible, agile, and portable.

• Firms pursuing the Disruption Cycle must deploy anti-brittle solutions.

• Anti-Brittle solutions allow for optimal solutions to be deployed over time to meet the short term requirements for that time.
Automation

- Unit Load principle is no longer true. The future for all commerce must handle eaches, cases, and pallets.
- Each distribution demands high levels of automation.
- Automation must be anti-brittle.
- Automation must be about ROI and labor savings.
- To meet these requirements future material handling systems will move from traditional systems to robotic systems.
Economies of Scale

• To be successful in blurring the lines you must deploy economies of scale.

• To be successful with Distributed Logistics you must deploy economies of scale.

• The success of Distributed Logistics results from Smart Inventory and transportation economies of scale.

• The ultimate tool to address anti-brittleness is to deploy economies of scale.

• To justify automation organization you must deploy economies of scale.
Key Takeaways

• The digital imperative requires the pursuit of the disruption cycle.

• The pace of the world of commerce is continuing to accelerate.

• Commerce of tomorrow demands the blurring of lines, distributed logistics and inventory placement. Anti-brittle/automated solutions and the broad deployment of economies of scale.

• The future will be more fun than the past but will be a whole new ballgame.
For More Information

Jim Tompkins: jtompkins@tompkinsinc.com
Website: www.tompkinsinc.com

Visit ProMat Booth #S4250