## **Supply Chains:**

### What Have We Learned From the Past So We Can Move Towards the Future?

April 27, 2023



Jenny Patzlaff, LCB UWEBC Supply Chain Practice Director jenny.patzlaff@uwebc.wisc.edu



Matt Kossen Director of Logistics matthew.kossen@subzero.com





uwebc.wisc.edu

## Jenny's Career Highlights

#### Wisconsin Native

• From New Berlin, WI

#### Graduate of U-W Madison School of Business

BBA - Marketing Major; International Business minor

### **Target Corporation Veteran**

Merchandising, Logistics, Imports, Technology, Data

### RateLinx Rookie

Culture, Development, Client Engagement, Sales

#### **UW Consortium Collaborator**

Bring people together to discuss supply chain



### **UWEBC Collaborative Learning Community (Members):**

#### AE Business Solutions Alliant Energy

Amcor Flexibles North America American Family Insurance American Girl AriensCo Associated Bank **Badger Meter Brady Corporation Brunswick Corporation** Church Mutual CIG Clarios **CNH** Industrial **Colony Brands Cree Lighting** CROPP / Organic Valley **CUNA Mutual Group** Delta Dental of Wisconsin Demco EDCi Endries International **Exact Sciences** 

#### FarWell

GE HealthCare Generac Great Lakes Educational Loan Services

#### Greenheck

Harley-Davidson Hy Cite

#### Inpro

Jewelers Mutual Insurance Company J.J. Keller & Associates Kohler Co. Kohl's Komatsu KW2 Lakeside Foods Lands' End

Laughlin Constable Mason Companies Master Lock Company Medica Menasha Corporation/ORBIS MGE Miller Electric Mfg. Co. Milwaukee Tool National Guardian Life Insurance Company (NGL) NeuGen, LLC Northwestern Mutual **Oshkosh Corporation** pc/nametag Plexus Promega **Regal Rexnord Regal Ware Rockwell Automation** SAP Sargento Foods Schneider Sentry Insurance Snap-on Sonic Foundry **Spectrum Brands Springs Window Fashions** Sub-Zero Group, Inc.

TDS U.S. Venture UW Credit Union UW Health **VF** Corporation Vollrath WEC Energy Group Werner Electric Wick Buildings Wisconsin Manufacturers & Commerce Wisconsin Manufacturing **Extension Partnership** Wm. K. Walthers, Inc. **WPS Health Solutions** Zendesk



## Matt's Career Highlights

#### **Midwest Native**

• From Fremont, MI but I have lived in WI longer!

### Graduate of Michigan State University Eli Broad Graduate School of Management

MBA – Supply Chain and Information Systems concentration

### Miller Brewing Company

Transportation and Freight Payment

### Kohler Company – Kallista Faucets

 Customer Service, Forecasting and Planning, Trade Compliance and DC Operations

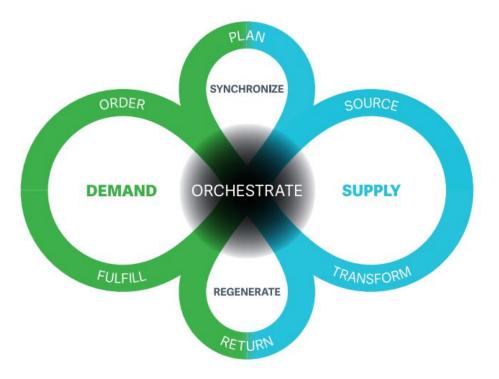
#### Sub-Zero Group Inc

Transportation, Trade Compliance and DC operations



### What have we learned?

- The good news: The fundamentals of Supply Chain have not changed
- The volatility of demand (and supply) have changed due to changes in the global trade network but the formulas and principals still work

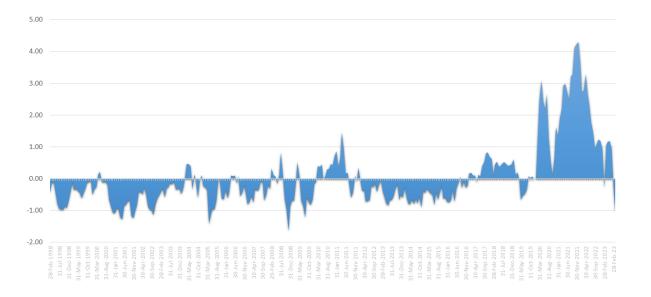


Same "SCOR" – Supply Chain Operations Reference



## What have we learned?

- The so-so news: Business is cyclical
- Good times never last (neither do bad times) but the swings are coming more frequent
  - Knowing when and how to pivot is critical to survival.
    - Actionable data is the key
    - The Supply Chains that can see the change and act the fastest will win



Supply Chain Global Pressure Index (1998 – 2023)



## What have we learned?

The bad news: Black Swan events can and will continue to happen

Supply Chain Insights

#### Over the Decade, Same Problems With No Resolution



**Top Five Elements of Business Pain for Respondents** 

Base: HAVE A S&OP PROCESS -- Total (n=107)

- Doing nothing is an option but not a good one
- Better options:
  - ✓ Re-Shoring
    - Reduce lead times and trans-ocean exposure
  - ✓ Dual Region/Port-Sourcing
    - Reduce supplier volatility and regional/port instability
  - $\checkmark~$  Reduce SKU's and stock locations
    - Reduce demand volatility by aggregating demand
    - Higher interest rates will drive up the cost of capital (and Inventory!)
  - $\checkmark$  Improve visibility up and down the supply chain
    - "Knowing is half the battle" GI Joe
    - Project 44 and Four Kites are a good start but more development is needed
    - Al and Blockchain will transform the Supply Chain discipline in this area

NOTE: All these options come with benefits but also trade-offs



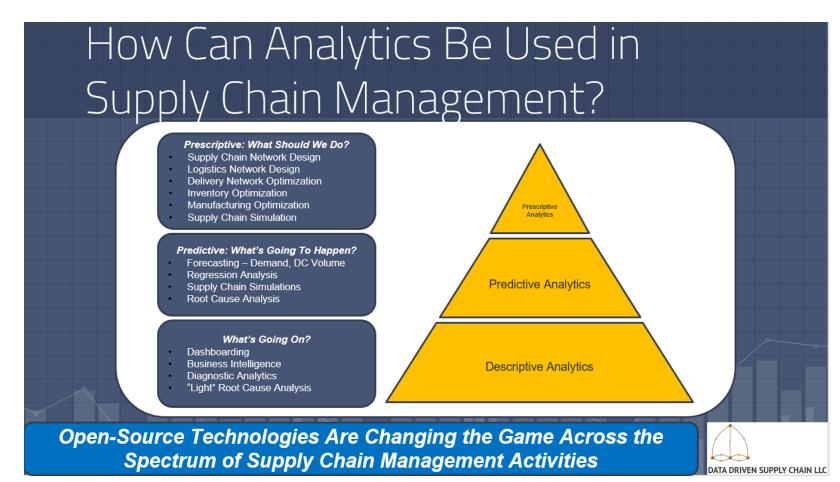
- Final considerations
- ✓ Understand the cost and benefits of each option

- Strength in one means sub-optimizing another area
- Cannot be strong in all three
- Q: Which way has your supply chain moved?





- Final considerations
- ✓ Leverage data to drive decisions





- Final considerations
- ✓ Determine the sequence of options to move into before you need to move





### Effective Collaboration – Coordinate, Communicate, Anticipate

### From This:



### To This:





### Thank you!



### Jenny Patzlaff, LCB

UWEBC Supply Chain Practice Director jenny.patzlaff@uwebc.wisc.edu



#### Matt Kossen Director of Logistics <u>matthew.kossen@subzero.com</u>

