



**ISM—Twin Cities, Inc.**



**Institute for Supply Management – Twin Cities  
Market Update for Corrugated Packaging  
May 17, 2023**

- About Myself and TPDgroup
- Corrugated Market Update (*Recent History to Now*)
- How Build Sustainable Savings for Today and the Future
- Questions and Answers

## Leadership Roles in Product Development, Purchasing, Supply Chain and Manufacturing



# About TPDgroup

- Service Organization Founded in 2008  
Specializing in Corrugated Packaging
- Based out of Minnesota with Coverage  
for All US Domestic Markets and  
Canada
- Helped Hundreds of Companies with  
Typical Savings Exceeding 15% on the  
Corrugated Category
- Focused on End to End Solution Beyond  
Purchase Price (*Total Cost*)



# Who We are Not

- Not a Box Manufacturer or a Supplier Sales Organization  
*(We are Focused on the Right Customer Supply Solution)*

- We Do Not Do Bids *(We do Use a Strategic Approach):*

- I. Customer Confidential Benchmark *(Output of our Should Cost Model)*



- II. Executive Summary Report of the Opportunity



- III. Strategic Negotiation with Agreed Upon Supply Solution



- IV. Bring the Savings to Life, Support Continuous Improvement



- We Not Paid by the Customer in Most Circumstances

# Want to Learn More? *(Connect with Us)*



# Corrugated Market Update



# Recent Market History - Context

## 2016-Mid 2020 (*Stable and Steady*):

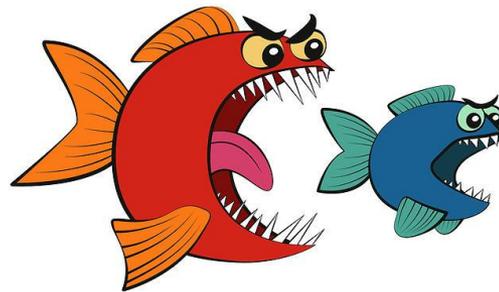
- One of the most stable periods in corrugated history with minimal price movements
- Balanced behaviors in the market with supplier/customer relationships being valued
- Box buying companies somewhat adverse to change or improvements beyond bid/pricing check behaviors
- Generally stable supply
- Stable customer behaviors relatively speaking



# The Pandemic Market

## Mid 2020 to Q4 2022 (*When it Rains it Pours*):

- Back half of 2020 was the highest 6 month period in corrugated demand history
- Paper shortage resulted in more demand than supply
- Additional paper mills brought online to meet this record demand
- Paper stabilized with new capacity, but then labor shortages kept supply de-stabilized
- Supplier “Peel off the Bottom” tactics (*favoring strategic and/or higher margin customers*)
- Extended lead times, delivery inconsistency, and unprecedented price increases
- Corrugated pricing elevated from 25%-40% higher outside of strategic agreements



# How the Pandemic Impacted the Market

## What Drove Such Dramatic Increases?: Use Corrugated of Materials

- COVID19 dramatically decreased traditional brick and mortar demand in favor of E-commerce (*March 2020-June 2020 Lockdown Peak*)
- Adoption rate of E-commerce experienced an accelerated adoption rate from all customer demographics
- E-Commerce utilizes up to 6x more corrugated materials than brick and mortar



Brick and Mortar  
Retail Master Carton



Ecommerce Home  
Delivery Carton

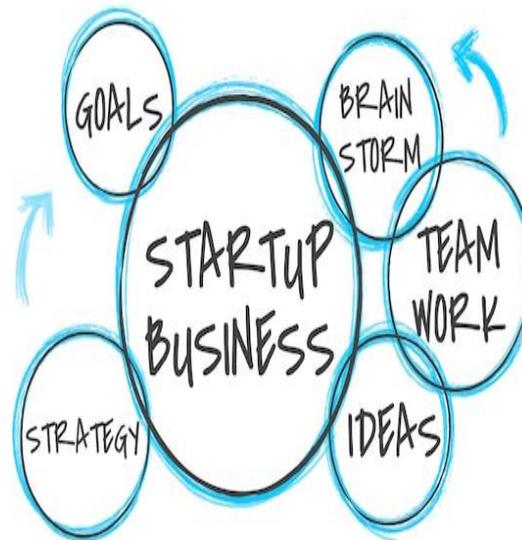
# How the Pandemic Effectuated the Market

## What Drove Such Dramatic Increases?: Labor Shortages

- The Baby Boomers generation continued to retire and exit the workforce which is not being replaced by the same quantity of workers
- Lockdowns, working from home, and stimulus incentives changed the labor market participation and conclusions of how are still debated
- There was not enough people to convert boxes, make paper, and even transport it to keep up with demand leading to unprecedented increases in pricing



36% increase in Age 65+ 2010-2020  
13% of Population to 16.5% 2010-2020



US New Business Applications 2.58 million in 2011 to 5.39 million in 2021

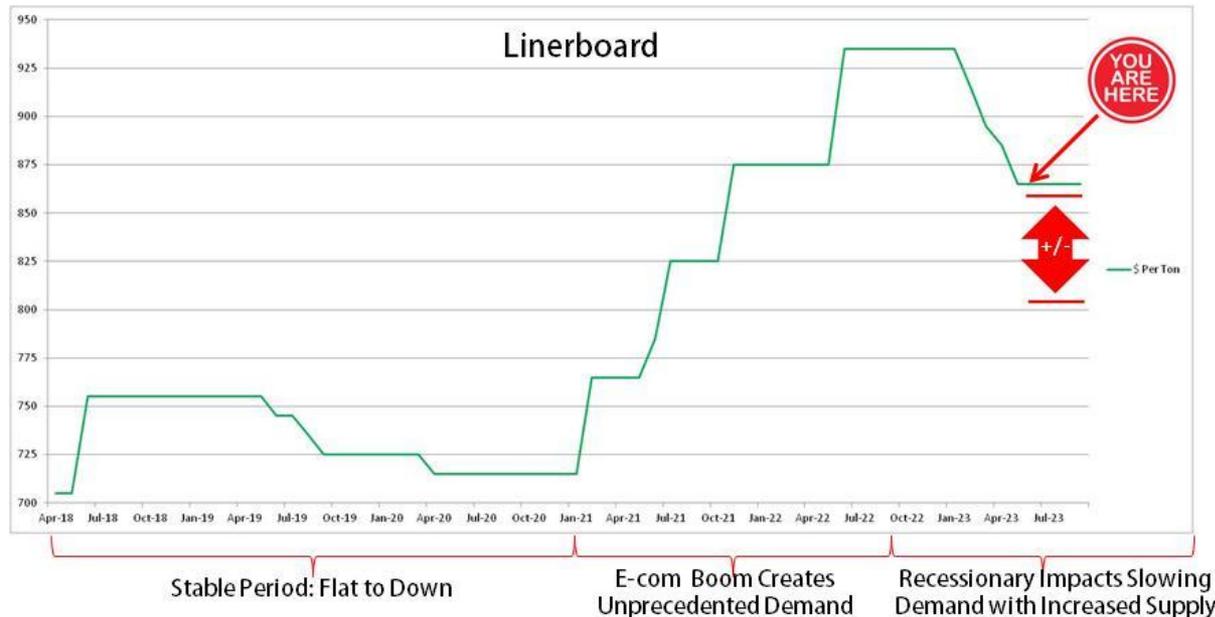


Automation Lead Times Increased to 9 months to 1 year+ 11

# The Corrugated Market Today

## Q1 2023 to Today (Excess Supply Market Conditions):

- Leading indicators are showing we are in a recession period with lower demand
- We are seeing suppliers hedging pessimistically (*leading indicators of decreases*)
- Hidden undercurrent is the labor shortage that is masked by current low demand
- We currently are in an **OPTIMAL WINDOW** to create substantial savings and strategic agreements
- **Our Projected Outlook:** 5% to 10% additional decreases are realistic for the balance of 2023



# How to Optimize During this Period?

## Trends that are Delivering Results:

- Treat Suppliers Strategically – Avoid bids, partner to find win/win solutions, and understand the what and why
- Research continuous improvements opportunities that are often overlooked
  - Freight Analysis
  - Order Quantity/Frequency/Inventory Strategy
  - Box Materials and Technologies with Printing
  - Collaboration with Supplier About Their Passion and Pain Points to Unlock Solutions
- Remember generally the supply community was in the same boat as customers during the volatile market
- Avoid forcing change from the top down, but gain feedback from stakeholders and help them understand a vision they can relate to and support
- Practice the Golden Rule and be consistent – If you help make supplier costs predictable they will help you as well



# Continuous Improvement Examples (*Trends*)

## Design – White to Kraft Liner:



# Continuous Improvement Examples (*Trends*)

Inventory and Operations Management - (*Build/Hold/Ship/Hold*):



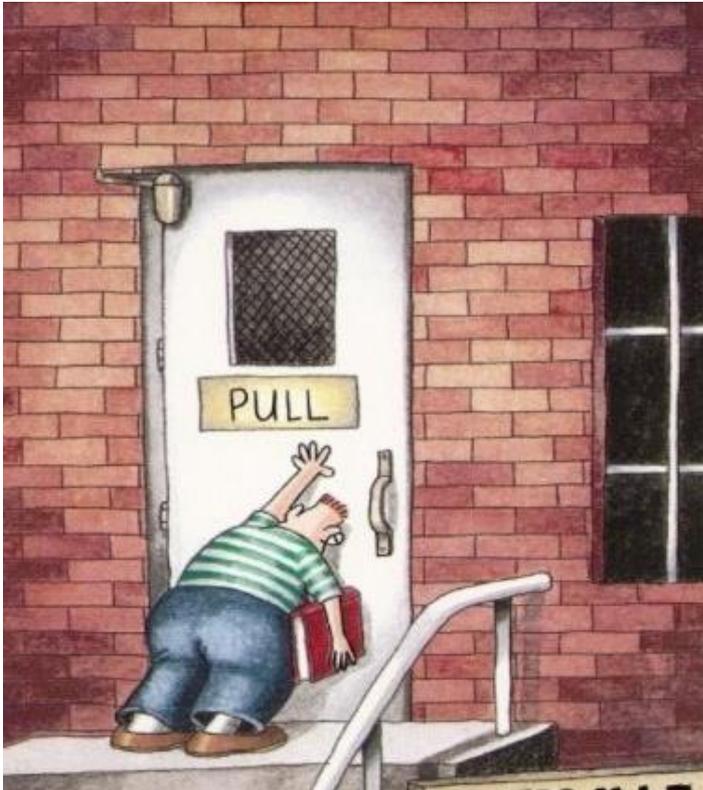
## Lowering Supplier Costs and Yours – Ask What and Why



Theme: Avoid Letting Short Term Replace Long Term Sustainability

# Continuous Improvement Examples (*Trends*)

## Process Mapping – Kaizen Events to Help All Links of the Supply Chain Learn to See and Have a Voice



**DON'T WORRY!  
I GOT YOUR BACK.**



**Focus on the Process, Not People**

# Continuous Improvement Examples (*Trends*)

Trays – Coupled with Labels Utilizing Less Corrugated Materials



# Continuous Improvement Examples (*Trends*)

## Re-Using Boxes – Reducing Purchase Need



# Questions and Answers



# Appendix

# Why Customers Utilize Our Service

- Results (*We have a Track Record of Success*)
- Our Expertise, Unique Knowledge, & Leverage
- No Cost for Results\*
- Time (*We do the Heavy Lifting*)
- Strategic Agreements (*Moderating Increases and Credit for Decreases*)



\*Packaging Corporation of America is the only company that requires the customer to pay us, and in rare occasions the customer requests to be the source of payment

# Why Suppliers Work With Us

- Our Strategic Match Methodology
- Our Process Lowers Cost of Acquisition/to Serve
- Innovation Towards Improvements and Problem Solving (*Holistic Thinking*)
- Balanced Supply Agreements (*Provides Cost Predictability for both Supplier and Customer*)



# Recent Success Stories

- Detroit, Michigan: 26% Savings (*> than \$1 Million Annually*)
- Buena Park, California: 14% Savings (*>than \$500K Annually with 18% Inventory Reduction*)
- Miamisburg, Ohio: 16% Savings (*>than \$200K Annually*)

