Optimized to Ship—ways to get your packaging right-sized
Ryan Gaither, *International Sales Executive, BillerudKorsnäs*
Net sales approx.

2.7
Billion USD

Business areas

Operating profit approx.

232.5
Million USD

First-class materials

EMEA
Solna, Sweden
Americas
Portland, OR
Asia Pacific
China – Shenzhen

4,400
Employees

2018 figures
Serving

2,800
OEM factories

70+
packaging suppliers

• China
• Vietnam
• Indonesia
• Cambodia
• Bangladesh

187
Million boxes delivered in 2017

2018 figures
How much air are you currently shipping?
Key objectives

› Increase freight density
› More pairs of shoes per CBM/container
› Material reduction
› Reduce complexity for OEM factory
› Realize substantial cost savings in optimized freight
Key objectives

- Increase freight density
- More pairs of shoes per CBM/container
- Material reduction
- Reduce complexity for OEM factory
- Realize substantial cost savings in optimized freight
Key objectives

› Increase freight density
› More pairs of shoes per CBM/container
› Material reduction
› Reduce complexity for OEM factory
› Realize substantial cost savings in optimized freight
Box price vs. box cost
There are savings across the supply chain

- **Supplier**
  - Reduced damage
  - Reduced trucking to port

- **Origin operations**
  - Reduced container freight station costs

- **Carrier**
  - Reduced spend on ocean and air

- **Brokerage**
  - Reduced spend on brokerage due to fewer entries

- **Inbound transport**
  - Lowered trucking costs
  - Reduced drayage cost

- **Distribution center**
  - Improved capacity due to fewer inbound receipts
  - Reduce corrugate spend by increasing carton reuse

- **Outbound transport**
  - Reduced spend on outbound deliveries

- **Retail**
  - Improved back-room capacity
  - Reduced handling
Getting down to work
Establish a baseline

Collect as much raw data as possible
(style, description, gender, size, annual volumes, current carton assignment, etc.)

Establish influential shoe styles, sizes and fit parameters
Workflow

DC Visit
- Review and measure as many shoes as possible

Compare
- New data against original master list

Design
- New carton suite

Determine
- New carton assignments to SKUs

Test
- Bring sample of new carton suite for fit test and brand approval

Develop
- MOCs for new approved carton suite
One size does not fit all.
SKU to new carton assignments

New carton assignments are created and shared with Brand and OEM factories
SKU to new carton assignments

New carton assignments are created and shared with Brand and OEM factories

Carton Optimization  Goldilocks Zone  Suite Simplicity
Cape load plans

Every new carton’s updated MOC outside dimensions compared to previous MOC outside dimensions to show freight improvement

**BEFORE:**
- 12 units per carton
- 648 cartons per container
- 7,776 units per container

**AFTER:**
- 12 units per carton
- 816 cartons per container
- 9,792 units per container

**Increased Density:** 25.9%
Impacts of e-commerce
In 2019, e-retail sales accounted for 14.1 percent of all retail sales worldwide. This figure is expected to reach 22 percent in 2023.
Why We're Choking on Amazon Cardboard

Do e-commerce companies Amazon to ship small objects in huge boxes? Really?

By Leonid Breindel

September 19, 2019, 4:00 AM

What A Waste: Online Retail's Big Packaging Problem

29,577 views | Jul 28, 2018, 09:37am

E-Commerce: Convenience Built on a Mountain of Cardboard

The New York Times
A review of packaging across sectors revealed the following data:

- 61% Had no branding on or inside the packaging
- 55% Did not reflect the value of the brand
- 55% Had no returns information
- 41% Used too much packaging
- 30% Were not a good fit for the product
- 24% Were not easy to open

*Research conducted by Macfarlane Packaging*
Has a negative returns experience ever resulted in not shopping with the retailer again?

<table>
<thead>
<tr>
<th>AGE</th>
<th>18-25</th>
<th>26-35</th>
<th>36-45</th>
<th>46-55</th>
<th>56-65</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>60%</td>
<td>57%</td>
<td>50%</td>
<td>45%</td>
<td>36%</td>
<td>30%</td>
</tr>
</tbody>
</table>
Where to make improvements
Revisit the size and purpose of your shipping cartons
Utilize re-sealable features
Graphic messaging
Minimize non-sustainable elements
What is sustainable packaging?

- **Optimized for the supply chain**
  - Packaging size optimization
  - Lightweighting
  - Higher freight density

- **Optimized materials**
  - Use of certified, renewable & recyclable materials
  - Materials reduction

- **Brand building**
  - Reduced carbon footprint
Thank You!

Ryan Gaither
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503.720.8468
Appendix
Onboarding and ongoing performance management is a critical component to our partnerships to establish the right KPIs to help you reach your goals.

<table>
<thead>
<tr>
<th>Performance Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Volume &amp; Spend</strong></td>
</tr>
<tr>
<td>• Spend &amp; Volume by Carton Type, Region &amp; Factory</td>
</tr>
<tr>
<td>• Actual weighted average reporting</td>
</tr>
<tr>
<td><strong>Sustainability &amp; Social Responsibility</strong></td>
</tr>
<tr>
<td>• Total fiber consumption</td>
</tr>
<tr>
<td>• FSC/PEFC material used by country &amp; brand</td>
</tr>
<tr>
<td>• Recycled content used by country &amp; brand</td>
</tr>
<tr>
<td>• Sustainability Tool “Thinkstep”</td>
</tr>
<tr>
<td>• Supplier CSR reporting and visibility</td>
</tr>
<tr>
<td><strong>Quality</strong></td>
</tr>
<tr>
<td>• Defect rate (DPM)</td>
</tr>
<tr>
<td>• Preventive Action</td>
</tr>
<tr>
<td>• Corrective Action</td>
</tr>
<tr>
<td><strong>Service</strong></td>
</tr>
<tr>
<td>• On Time Delivery</td>
</tr>
<tr>
<td>• Responsiveness</td>
</tr>
<tr>
<td>• Innovation activities</td>
</tr>
</tbody>
</table>
Common packaging issues

- Over-sized shipping cartons *(bad fit)*
- Cumbersome to handle *(plastics)*
- Graphic messaging
- Not easy to open or to return
- Over packing *(air-fills, peanuts, etc.)*
- Not reflecting the value of the brand
Convergence or Divergence: How to wrestle with buying global trade and logistics software in a hyper-speed market

Eric Johnson, Senior Editor, Technology, Journal of Commerce
Convergence or Divergence:
How to wrestle with buying global trade and logistics software in a hyper-speed market

FDRA Footwear Trade Distribution and Customs Conference
Oct. 28, 2019
Agenda
From Logistics Networks to Supply Chain Networks

2000-era software providers being acquired or merged.
Shippers want platforms, not individual solutions.
Are those platforms integrated or linked by strategic partnerships?
Core issue these days: use an established provider or a startup?
Old Three-Legged Stool of GTM
New Three-Legged Stool of GTM

Coordinating the:

Physical flow
Compliance flow
Data flow
Can Logistics and Compliance Functions Be Merged?
What systems do you currently use?

- Purchase Order (PO) Management system: 62.8%
- Freight Payment/Audit system: 57.1%
- Transportation Management System (TMS): 51.4%
- Freight Visibility system: 45.7%
- Inventory Management system: 45.7%
- Freight Procurement system: 34.2%
- Customer Relationship Management (CRM) system: 34.2%
- Global Trade Management (GTM)/Trade Compliance system: 28.5%
Do you manage too many systems?

- Yes: 34.4%
- No: 57.1%
- No opinion: 8.5%
AI (and maybe Amazon?)
Trade Compliance Automation?

Amazon buys INLT in September
AI’s role in classification
Process automation for customs entries
Lines of BCO Contract Control

The degree to which BCOs control ocean freight contracts and shipment management is entirely dependent on how much they want to outsource to their 3PLs.

- Fully Insourced: BCO handles all logistics activities.
- Cargo under management: 3PL* provides shipment services.
- Named account: 3PL* agent agreement.
- Fully Outsourced: 3PL* freight capacity and shipment services.

* Cargo moves on 3PL (or 3PL agent) contract.

Source: IHS Markit

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Few Container Lines Provide Instant Quotes

The world's top container lines are largely lagging when it comes to providing shippers with an e-commerce interface to look up instant ocean freight rates.

<table>
<thead>
<tr>
<th>Container Line</th>
<th>Instant Quote Tool</th>
<th>Quote Request Available</th>
<th>Shipping Schedules Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maersk Line</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>MSC</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>COSCO</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CMA CGM</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Hapag Lloyd</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ONE</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Evergreen Line</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Yang Ming</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>PIL</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>NMM</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ZIM</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Wan Hai Lines</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Only three of the Top 12 container lines in the world allow shippers to get instant quotes, although more than half allow shippers to submit electronic rate requests.

Five of the Top 12 carriers offer no electronic quoting capability or any functionality to accept electronic rate requests.

Most of the Top 12 carriers require shippers to contact them electronically or via email for rate inquiries.

The Path to Dynamic Pricing

Carriers want to avoid commoditizing prices and protect their relationship with high-volume shippers.

Dynamic contract rates are a way for carriers to connect directly with newand/or low-volume shippers.

Freight forwarders, themselves, might also see the benefits of a direct relationship with high-volume shippers.

Big shippers are moving to digital transactions that improve their relationship-based leverage.

Some legacy forwarders offer instant quotes based on internal rate databases, while startups are developing special software that connects carriers and shippers.
The Future of Ocean Freight Procurement

• Will digital tools simply create a migration of spot to instant quoting?
• Will BCOs feel their volume leverage is diminished in digital environments?
• Will forwarders/NVOs be able to express their differentiation through instant quoting tools?
• Will instant quoting tools be used mostly for price discovery/market benchmarking?
Data is the Real Product

Products are either:

• Free
• Subscription-based
• Transaction-based
• Licensed
What Type of System is a Shipper After?

Data  Optimization  Connectivity
Who is responsible for logistics innovation?

- Software providers
- 3PLs (NVOCCs, freight forwarders, freight brokers)
- We are
Takeaways

• GTM an underutilized tool
• AI likely to significantly impact routine trade compliance
• Dynamic freight: What’s the lure?
• Shipper options are proliferating, not being replaced
• Value your data, but don’t overvalue it
Like a Good Neighbor, Cargo Insurance is There
Moderated by Kevin Bruning, Import Compliance Manager, Clarks
Like A Good Neighbor, Cargo Insurance is There

Footwear Trade Distribution and Customs (FTDC) Conference

October 28, 2019

General Average, Cargo Insurance & Answers to Questions that usually aren’t asked until its too late!

Presented by:
Keith Sanchez, Partner/DVP, Avalon Risk Management, Inc.
Captain Sam Wadhwani, President, Transit Risk Management, Inc.
Jeff Hall, Principal/PI, Transit Risk Management, Inc.
General Average 2019

Already this year, there have been 9 notable fires cases most resulting in General Average.

Yantian Express
Year Built 2002, 100,003 dwt
Date of loss: 1/3/19
GA Declared: 1/25/19
202 containers are a total loss

APL Vancouver
Year Built 2013, 115,060 dwt
Date of loss: 1/31/19
GA Declared: 2/7/19
947 containers affected

E.R. Kobe
Year Built 2001, 68,196 dwt
Date of loss: 2/24/19
GA Declared: 3/12/19
General Average – An Introduction

Think of it this way… an airplane you are traveling on incurs some damage, luckily no one was hurt but the destruction is evident. Before exiting the aircraft, the captain announces that no one can leave the plane until they’ve paid for a percentage of the damage based on their net worth, and if you can’t pay, the airline will sell you to the highest bidder.
General Average - The Concept

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- 
- 
- 
-
General Average – How Does it Work?

• All freight is seized!

• Value of the voyage is determined (vessel value plus value of all cargo on the vessel.)

• Participation is determined (the percentage that the value of your cargo bears to the value of the voyage.)

• The loss amount is determined.

• Participation percentage is applied to the loss amount to determine security deposit.

• Shipper or their cargo insurer pay twice, for the initial contribution then for a bond covering future adjustments to that estimate.
Sample General Average calculation

- $40 million Sacrificed Cargo + Expenditures
- The loss represents 20% of the contributing value
- Cargo owners must contribute 20% of respective cargo values
- A shipper with a $100,000 shipment must pay $20,000
- HOWEVER ….. if insured, the insurance company puts up security and cargo is released.
- GA claims take years to resolve.
General Average Loss – Yantian Express Timeline

- **MV Yantian Express**
  - Deck fire on January 3, 2019
  - Crew was evacuated on January 5, No injuries. 4 tugs.
  - Hapag-Lloyd declared GA on Jan. 25
  - Richards Hogg Lindley appointed as Average Adjuster
  - Vessel towed to Freeport Bahamas on Feb. 4

where average adjusters determined financial loss
General Average Loss-Yantian Express
General Average Loss-Yantian Express

• 420 containers are a total loss

• Salvage and General Average Securities Determined
  • Average Security: 28%
  • Salvage Security: 32.5%
  • 60.5% CASH DEPOSIT FOR UNINSURED CARGO

A cargo owner with a cargo worth $100,000 has to pay $60,500 to get their goods!!!
General Average – Hidden costs

• Delay - finding a port, unloading & sorting
• The great unknown (is my cargo OK?)
• LCL Freight - has everyone in my container paid?
• More delay - has my shipment missed delivery deadlines?
• Lost profit, lost opportunity - is my profit covered?
General Average will never go away, so how do we make that less painful?

•

•

•
Containership Fires - Problems Facing the Industry

- Recent cases have reopened the conversation about the difficulties of preventing and extinguishing fires on the open sea.
- Ships are larger with more varied cargo.
- Crew are ill-equipped to deal with these fires.
- Fire-fighting tugs are often days or weeks away.
- Prevention is difficult, with rising problems with misdeclared cargo.
- IMDG Code is evolving to impose stricter rules on dangerous goods (DG.)
Containership fires - Problems Facing the Industry

•

•

•
## Major Fire Cases in Recent Years

<table>
<thead>
<tr>
<th>NO.</th>
<th>VESSEL</th>
<th>DWT</th>
<th>TEU</th>
<th>LOSS - DATE</th>
<th>REGION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MSC Flaminia</td>
<td>85,823</td>
<td>6,750</td>
<td>14-Jul-12</td>
<td>North Atlantic</td>
</tr>
<tr>
<td>2</td>
<td>Amsterdam Bridge</td>
<td>54,405</td>
<td>4,380</td>
<td>09-Sep-12</td>
<td>Arabian Gulf and approaches</td>
</tr>
<tr>
<td>3</td>
<td>Hansa Brandenburg</td>
<td>23,493</td>
<td>1,740</td>
<td>15-Jul-13</td>
<td>Indian Ocean</td>
</tr>
<tr>
<td>4</td>
<td>Zim Rotterdam</td>
<td>116,499</td>
<td>10,062</td>
<td>23-Aug-13</td>
<td>Red Sea</td>
</tr>
<tr>
<td>5</td>
<td>Maersk Kampala</td>
<td>93,617</td>
<td>6,802</td>
<td>28-Aug-13</td>
<td>Red Sea</td>
</tr>
<tr>
<td>6</td>
<td>Northern Guard</td>
<td>53,860</td>
<td>4,319</td>
<td>06-Apr-14</td>
<td>Arabian Gulf and approaches</td>
</tr>
<tr>
<td>7</td>
<td>Maersk Londrina</td>
<td>99,778</td>
<td>8,700</td>
<td>25-Apr-15</td>
<td>Indian Ocean</td>
</tr>
<tr>
<td>8</td>
<td>Hanjin Green Earth</td>
<td>140,973</td>
<td>13,092</td>
<td>01-May-15</td>
<td>Suez Canal</td>
</tr>
<tr>
<td>9</td>
<td>Maersk Karachi</td>
<td>94,769</td>
<td>6,690</td>
<td>14-May-15</td>
<td>British Isles, North Sea, English Channel, Bay of Biscay</td>
</tr>
<tr>
<td>10</td>
<td>Kamala</td>
<td>29,277</td>
<td>2,011</td>
<td>11-Jul-15</td>
<td>Japan, Korea and North China</td>
</tr>
<tr>
<td>11</td>
<td>Maersk Seoul</td>
<td>108,344</td>
<td>8,401</td>
<td>19-Jul-15</td>
<td>Arabian Gulf and approaches</td>
</tr>
<tr>
<td>12</td>
<td>Cape Moreton</td>
<td>37,883</td>
<td>2,742</td>
<td>12-Sep-15</td>
<td>South China, Indo China, Indonesia and Philippines</td>
</tr>
<tr>
<td>13</td>
<td>Safmarine Meru</td>
<td>61,392</td>
<td>4,154</td>
<td>08-May-16</td>
<td>Japan, Korea and North China</td>
</tr>
<tr>
<td>14</td>
<td>CMA CGM Rossini</td>
<td>73,235</td>
<td>5,782</td>
<td>15-Jun-16</td>
<td>Arabian Gulf and approaches</td>
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<tr>
<td>15</td>
<td>CCNI Arauco</td>
<td>113,174</td>
<td>9,000</td>
<td>01-Sep-16</td>
<td>British Isles, North Sea, English Channel, Bay of Biscay</td>
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<tr>
<td>16</td>
<td>API Austria</td>
<td>77,807</td>
<td>6,350</td>
<td>13-Feb-17</td>
<td>East African Coast</td>
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<tr>
<td>17</td>
<td>MSC Daniela</td>
<td>162,867</td>
<td>13,798</td>
<td>04-Apr-17</td>
<td>Arabian Gulf and approaches</td>
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<tr>
<td>18</td>
<td>Maersk Honam</td>
<td>162,051</td>
<td>15,226</td>
<td>06-Mar-18</td>
<td>Arabian Gulf and approaches</td>
</tr>
<tr>
<td>19</td>
<td>SSI Kolkata</td>
<td>13,784</td>
<td>1,118</td>
<td>13-Jun-18</td>
<td>Bay of Bengal</td>
</tr>
<tr>
<td>20</td>
<td>Yantian Express</td>
<td>100,003</td>
<td>7,506</td>
<td>03-Jan-19</td>
<td>United States eastern seaboard</td>
</tr>
<tr>
<td>21</td>
<td>API Vancouver</td>
<td>115,050</td>
<td>9,200</td>
<td>31-Jan-19</td>
<td>South China, Indo China, Indonesia and Philippines</td>
</tr>
<tr>
<td>22</td>
<td>FR Kobe</td>
<td>68,196</td>
<td>5,762</td>
<td>24-Feb-19</td>
<td>Hong Kong and China</td>
</tr>
</tbody>
</table>
Is there a Solution?

• Self regulation by the industry? Maersk is already doing it.

• Government regulation? Think SOLAS VGM or 24hr Rule!!

• Further DG restrictions?
Common Cargo Insurance Misconceptions & Frustrations With INCOTERMS

• Clarification of cargo insurance assumptions
  Won’t the carrier just pay my claims?
  All cargo insurance is pretty similar, right?
  In order to reduce costs, I am considering insuring for less than the full value of my shipment

• Working through frustrations with INCOTERMS
  Transfer of risk vs. title
  Payment terms specified elsewhere
  Scope of cargo insurance
  How can I protect my interests?
Confusion on Cargo Insurance

Risks do not end when title transfers

- As buyer, be careful on prepayment for all or part of the order.
- Selling on Open account abroad or domestically— are you protected by the buyer’s insurance?
- What about your brand image, product liability, or contract terms?

The answer: Contingency Insurance
In the case of imports, control your own destiny, not your supplier

- Prepayment for all or some.
- What about your brand image, product liability, or contract terms?

The answer: Get your own insurance or get Contingency Insurance
QUESTIONS?

FOR MORE INFORMATION, CONTACT:

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Email: ksanchez@avalonrisk.com