Leveraging Lean Logistics to Lead in the 21st Century!

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Agenda

- What is logistics and what is its goal?
- Barriers to lean
- Lean warehousing
- Lean tradeoffs
- Lean material handling & storage
- Design for logistics
- Sustainability via reverse logistics
What is Logistics?

- https://www.youtube.com/watch?v=VCh6HnXHKRc
What is the Goal of Logistics?

- The 9 R’s of the Perfect Order
- The perfect shipment: right quality & right quantity of the right item
- The perfect delivery: right time & right place to right person/department
- The perfect experience: right price, right documentation and right customer service
Barriers to Lean Logistics

- “lean is for manufacturing”
- “we’re special” or “that won’t work here”
- Traditional dysfunctional metrics
  - Cube utilization
  - Purchase price variance (PPV)
  - Pick rate
  - Beating the forecast
  - Focus on financials (v. customer service and/or quality)
Lean Warehousing

• Dock to stock
• Dock to dock
• Drop & hook
• Drop-ship
• Virtual warehousing
Lean Trade-offs

• Lean favors smaller lots
• Smaller lots translate to more deliveries
• Conflicting objectives
  • Operations efficiency
  • Low inventory investment
  • High customer service
• How can we eliminate trade-offs?
Lean Material Handling & Storing

- Lean warehouse design
- Location scheme
  - Fixed v. random v. zone
- Barcoding and/or RFID technology
- Automated Storage & Retrieval System (ASRS)
- ERP w/TMS, WMS, CRM, SRM, CPFR
Design for Logistics (DFL)

From the initial point of new product concept:

- Design for Procurement (DFP)
- Design for Manufacture & Assembly (DFMA)
- Design for Quality (DFQ)
- Design for Safety (DFS)
- Design for Transport (DFT)
- Design for Warehousing (DFW)
- Design for Reverse Logistics (DFRL)
Sustainability via Reverse Logistics

The reverse logistics hierarchy:

- Reduce
- Reuse
- Recycle
- Recover
- Responsible disposal
Does This Look Familiar?

- https://www.youtube.com/watch?v=28cJUHYYywE
Review

- What is logistics and what is its goal?
- Barriers to lean
- Lean warehousing
- Lean tradeoffs
- Lean material handling & storage
- Design for logistics
- Sustainability via reverse logistics
Summary

- Q & A
- Action item: develop your plan for leaning out your distribution network
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