Lean Logistics & Supply Chain Networks:

8 Guiding Principles
Lean Logistics & Supply Chain Resources

- **Building a Lean Fulfillment Stream**
  - Available at [lean.org/bookstore](http://lean.org/bookstore)

- The “Building a Lean Fulfillment Stream” Workshop
  - November 9, 2010 in Los Angeles, CA
  - Details at [lean.org/fulfillment](http://lean.org/fulfillment)
Today’s Presenters

Robert Martichenko
• CEO, LeanCor, a provider of third-party logistics & supply chain services
• Co-author *Building a Lean Fulfillment Stream*, LEI’s latest workbook
• Began lean journey at Toyota Motor Manufacturing Indiana
• Over 15 years of lean supply chain and third-party logistics experience
• LEI faculty member, instructor John Cook School of Business at Saint Louis University, and the Georgia Tech Supply Chain & Logistics Institute
• Leancor.com
Today’s Presenters

Kevin von Grabe

- Vice President, Lean Deployment, LeanCor, responsible for logistics engineering, transportation management, and project management
- Co-author *Building a Lean Fulfillment Stream*
- Lean logistics journey includes working on the greenfield start ups of Toyota Motor Manufacturing Indiana and Jabil Circuit in Hungary and China.
- Career includes materials management, transportation, consulting, and third-party logistics
- LeanCor.com
Principles of the Lean Fulfillment Stream

- **Eliminate all the waste**
  - Eliminate waste to increase value

- **Make customer consumption visible**
  - Build and Ship to the cadence of customer demand

- **Reduce lead time**
  - Increase flexibility

- **Create level flow**
  - Goods and information moving on a flow based on customer demand
Principles of the Lean Fulfillment Stream

- **Use pull systems**
  - Avoid overproduction and excess inventories

- **Increase velocity and reduce variation**
  - Move smaller lots more frequently

- **Collaborate and use process discipline**
  - Create problem solving culture

- **Focus on Total Cost of Fulfillment**
  - Systems Thinking to achieve quantum results
Lead Time = Value + Waste

Lead Time is Only Made of Two Things!
The Ultimate Business Model

Build to order = No overproduction so what’s the problem?

Supply LT + MLT + OL < Customer LT = BTO

Supply LT + MLT + OL > Customer LT = Forecast
The defining characteristic of a system is that it cannot be understood as a function of its isolated components. First, the behavior of the system doesn't depend on what each part is doing but on how each part is interacting with the rest ...

*Kofman and Senge, 1993*
Processes Want to Fall Apart

In a system, a process that occurs will tend to increase the total entropy of the universe.

Second law of thermodynamics
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