

# Reshoring:

Bringing manufacturing back home now!

NTMA/PMA Purchasing Fair 10/29/10

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# Definitions

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- Reshoring: Bringing work back to the U.S.
- Antonym: Offshoring
- Synonyms: Backshoring and Onshoring
- Nearshoring: Includes U.S., Canada & Mexico

# Reshoring Initiative Objectives

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- **Change the Sourcing Mindset:**
  - From: “Offshored is Cheaper”
  - To: “Local Reduces the total Cost of Ownership.”
- Train:
  - OEMs why to source local
  - Vendors how to “sell” local sourcing
- Do the best we can on the unlevel field now!

# The Industry-Led Initiative Provides

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- Free Total Cost of Ownership (TCO) Software for OEMs and vendors
- Online Library of 49 reshoring articles
- Linked NTMA/PMA Purchasing Fairs
- Media coverage: WSJ, USATODAY, IW, CBS, CNBC, etc.

# Logical Foundation

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60% of manufacturers:

- Apply “rudimentary” total cost models
- Ignore 20% or more of the total cost of offshored products\*

51% of companies found no financial benefit in offshoring\*\*

Sources:

\* Archstone Consulting survey, American Machinist Mag., 7/16/09

\*\* Supply Chain Solutions, Grant Thornton, Jan. 2010 survey.

# TCO Estimator Software: 18 Cost Factors \*

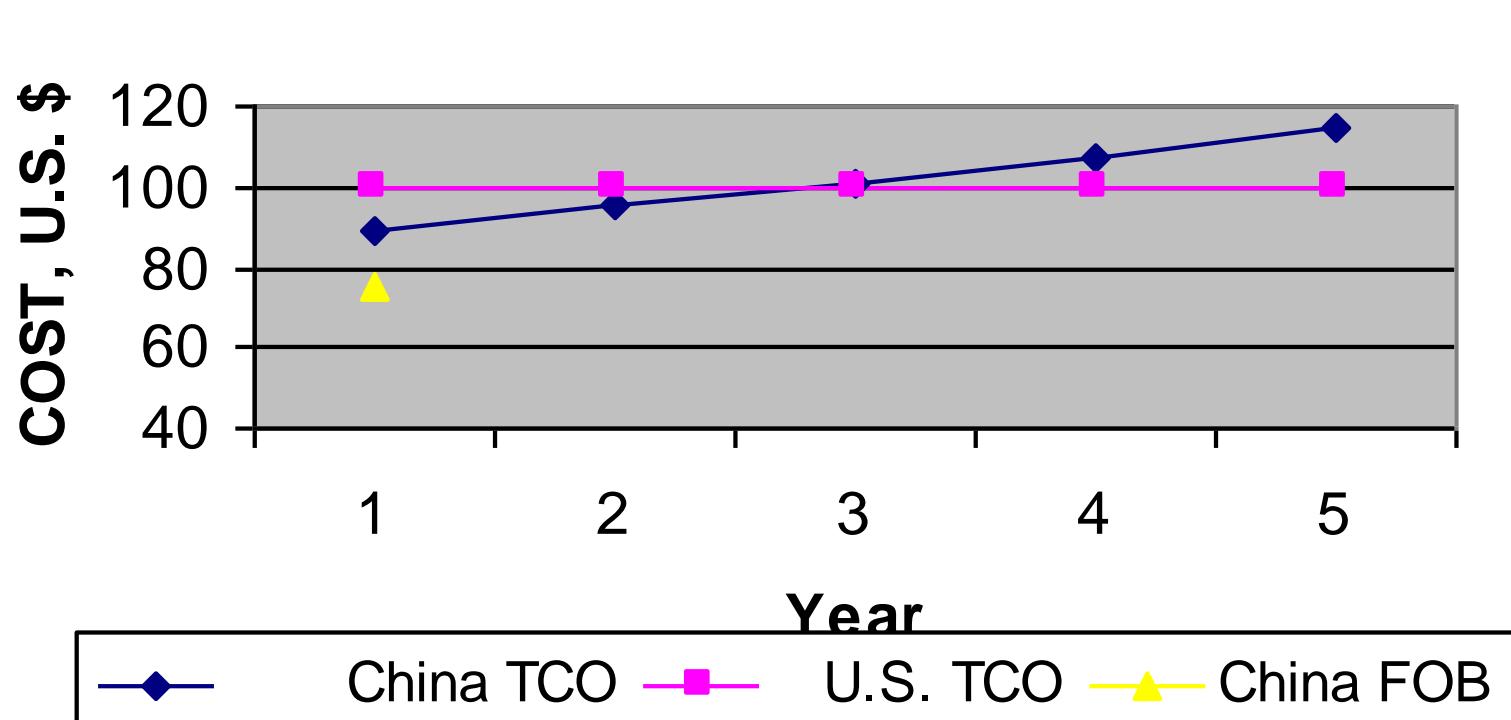
- FOB Price
- Packaging
- Duty
- Freight: air, surface, all fees
- Inventory: en-route, cycle, safety stock, obsolete
- Local warehousing
- Travel
- Rework/quality
- Product liability
- IP risk
- Impact on innovation
- Prototype
- Forecast wage inflation and currency appreciation

# Example Assumptions: a Part

Chinese unit price	\$80	Product liability*	0.50%
U.S. unit price	\$100	IP risk*	2%
# units/year	12,000	Innovation*	0%
unit weight, incl. packaging, lbs	2	Trips/yr	2
shipment size, units	1,000	Prototype cost*	\$5,000
product life, yrs	5	Obsolescence, mos.*	2
Packaging*	0	Wage inflation, annual*	8%
Payment on shipment	Yes	Currency appreciation, annual*	5%
Quality*	2%		

\* Chinese differential vs. U.S.

# TCO Comparison Example: a Part



# Deming on Total Cost \*

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- “End the practice of awarding business on the basis of price tag. Instead, minimize total cost.”

Source: 4<sup>th</sup> key principle for management,  
“Out of the Crisis”, W. Edwards Deming

# Offshoring contributes to Waste

<u>Toyota Wastes</u>	<u>Offshoring Contributors</u>
Overproduction	Large batch shipments
Waiting	Uncertain delivery/Inconsistent quality, port, customs
Transport	12,000 mi. inbound, 6,000 return (boat ½ full)
Overprocessing	More packing and unpacking
Inventory	In transit, cycle, safety stock, uncertain delivery and quality
Motion	Large batches require a customer warehouse. Travel, e.g. 2-3 weeks, 2-3X/yr
Defects	Much higher than local sources, extra inspection of materials and tolerances

# Offshoring contributes to Instability

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- Weather
- Port strikes
- Loss from mishandling
- Language problems
- Pirates \*

# Offshoring contributes to Overburdening

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- Travel
- 2 am phone calls \*

# Other LLCC supply chain issues

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- Impact of large batches and distance:
  - Offshoring → commoditization
  - Reshoring → differentiation

# Reshoring Facilitates Clustering

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- Innovation
- Partnering
- Communications
- Lean supply chain
- DFMA

# Reshoring and Government

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- Status:
  - TCO software in Cong. Wolf's HR 5980
  - Discussions with Dep. Assist. Sec. Perez, MEPs, EDA
  - Trying to set up local reshoring tests in Flint, OH, AZ and IL \*
  - Encouraging Pres. Obama to broaden focus from exporting to include reshoring!

# Initiative Will Affect Policy

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- Survey supply chain managers:
  - What cost factors are considered?
  - What is the price elasticity of the offshoring/onshoring decision? \*
- Become the **national source** of actionable information on the size, motivation, decision processes and industry mix of U.S. offshoring and reshoring.

# Requests of Vendors

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- Talk TCO
- Use the Estimator to help customers compare costs

# Requests of OEMs

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- Try the TCO Estimator
- Help improve the Estimator
- Make sourcing decisions based on TCO, not just price
- Check our Library to see what your industry is doing
- Consider how a stronger home market benefits your sales
- Attend the Fairs!
- Bring some offshored work to the Fairs

# Requests of OEMs and Vendors

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- Submit successful reshoring cases \*
  - Good publicity
  - Good for the country

## Vendors: Maximize the value of proximity: Beat the LLC competitors

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- Early Involvement, Partner, DFMA
- Show technology, lean, NTMA 6S Program, automation
- Respond to phone calls timely
- Provide great customer support
- JIT delivery

# Vendors: Maximize the value of proximity: Beat the LLCC competitors

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- Guarantee delivery
- Help solve assembly issues
- Guarantee the integrity of supply base
- Focus on IP parts
- Automate

# Presentations

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- 9/28 National Press Club
- 11/11 American Mfg. Summit
- 11/18 AME Annual Convention
- 12/7 AFS Sales Training Session
- 12/9 NTMA/AMBA/BTC, W. MI
- 1/20 PMA Roundtable, Independence
- 3/10 SME Milwaukee Chapter
- 3/30 CAPM Forum, Conn.
- 4/13 or 14 Amerimold, Chicago



## For more information on the Fairs

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For more information and to help the  
Reshoring Initiative slow the offshoring flood now

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