

The Role of the Shingo Prize in the Development of the Manufacturing Industry

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Agenda

- What is the Shingo Prize?
 - What is "Lean Enterprise Management"?
 - What are "Shingo Metrics"?
 - What is the Impact of the Shingo Prize?
 - What is the Future of the Shingo Prize?
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Shingo Prize Origins

- ❑ Founded 1988, Utah State University
 - ❑ Honoring Shigeo Shingo, Japanese Consultant to the Toyota Production System
 - ❑ Focused on “Lean/Flexible Manufacturing” or “Lean Enterprise Management”
 - ❑ Scope is North America (US, Canada, and Mexico)
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Operation of Shingo Prize

- ❑ Secretariat, Utah State University
 - ❑ Board of Governors (25)
 - ❑ Board of Examiners (150)
 - ❑ Plant Level (not corporate) and Research Prizes
 - ❑ Evaluates against a standard, not the other applicants
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Research Prize

- Books
 - Journal Articles
 - Multimedia Presentations
 - Recent Average: 8 prizes per year
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Business Prize

- Recent Average: 12 recipients per year
 - US plants, 65%.....Mexico plants, 35%
 - Auto and Auto Parts Industry, 60%
 - Other Industries: Aerospace, Furniture, Medical Equipment, Electronics
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Examination Process

- Prepare Achievement Report (up to 100 pg.)
 - Score Achievement Report (3-5 examiners)
 - Site Visit?
 - Score Site Visit (3-5 examiners)
 - Prize? Finalist?
 - Examiner Reports
 - Presentation of Award at Conference
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Annual Conference

- Keynote speakers
 - Recipients present their best practices
 - Awards given at banquet
 - Local plant tours
 - March 26-30, 2007, Jacksonville, FL !!
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Criteria: Enablers

- Leadership (75 points)
 - Empowerment (75)
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Criteria: Core Operations

- Manufacturing Strategy (50)
 - Innovation (50)
 - Partnering (100)
 - Manufacturing Operations (250) !!
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Criteria: Results

- Quality (75)
 - Cost and Productivity (75)
 - Delivery (75)
 - Customer Satisfaction and Profitability (75)
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Shingo Prize Philosophy

- "Manufacturing Excellence"
 - Shingo, tools
 - Henry Ford, inventory
 - Role of 6 Sigma
 - Drivers lead to Results
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Shingo Quote

“The best approach is to dig out and eliminate problems where they are assumed not to exist”

“Lean Thinking”

- Customer Value
- Value Stream
- Flow
- Pull
- Perfection

Womack and Jones: Simon & Schuster,
1996

Major Guides to Lean

- Housekeeping (5S)
 - Waste Elimination
 - Standardization
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Improvement Magnitude

- Productivity up 367% in 3 years
 - Cycle time reduced from days to hours
 - Lead time reduced from 6 months to 4 hours
 - Inventory turns of 220 per year
 - Manufacturing space reduced by 80%
 - First-pass yields of 99.5%
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Shingo Metrics Check-Off

- Trend of performance
 - Level of performance
 - Choice of measures
 - Feedback and Use of measures
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Quality Measures

- Rework
 - Customer ppms
 - First-pass yield
 - Unplanned scrap
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Productivity/ Cost Measures

- Inventory turns (raw, WIP, finished)
 - Value Added / Payroll
 - Manufacturing cycle time
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Delivery Measures

- Shipped on-time
 - Customer lead time
 - Premium freight
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Customer Satisfaction Measures

- Market share
 - Reorder rate
 - Surveys/ awards/ customer audits
 - Field performance
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Profitability Measures

- Operating Income / Sales
 - Operating Income / Manufacturing Assets
 - Only 4% of total score (driver principle)
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Other Key Measures

- Training magnitude
 - Suggestions
 - Safety data
 - Supplier quality
 - 5S scores
 - Maintenance data
 - Energy productivity
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Impact of Shingo Prize

- Supports NAFTA
 - company integration
 - Mexico excellence
 - Promotes benchmarking (recipients, examiners)
 - Carries companies beyond tools
 - Accounting revolution (drivers, inventory)
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Future of Shingo Prize

- Workshops
 - Public Sector Prize
 - State Awards (US and Mexico)
 - Certification (AME, SME)
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For More Information:

www.shingoprize.org
