“Manufacturing Renaissance”

- Prospects for a competitive Industry -

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Head of Manufacturing Industry
Deloitte Germany
Hanover, 8th April 2013
Comments Today Drawn From Two Primary Sources

2 year Collaboration with The World Economic Forum

5 year Collaboration with The Council of Competitiveness
### World Economic Forum

**Task Force Members and Subject Matter Advisors**

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<th>Project Task Force and Global Advisory Council on Advanced Manufacturing</th>
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The Future of Manufacturing Initiative delivered on two aspects:

1. The World of Manufacturing Competitiveness today
2. Key Trends shaping future Global Competition
Does Manufacturing Still Matter? The Answer is: YES!

Identified Manufacturing Correlations*

- Directly determines the ability to accelerate economic development
- Drives rapid growth in many emerging economies
  - knowledge and capabilities accumulated
  - economic infrastructures in place
- Leading to more and more global competition for talent
- Developed nations must advance their manufacturing capabilities, knowledge and skills
  - Drive further Innovation
  - Stay competitive

Source: Harvard and MIT Media Lab Economic Research on Economic Complexity
The Atlas of Economic Complexity; Hausmann and Hidalgo, 2011

Example: Thailand ‘Tree’ Maps`
Advanced Manufacturing is “The” Driver of Economic Prosperity

Changes in Economic Value Add Structure

Source: Harvard and MIT Media Lab Economic Research on Economic Complexity
Manufacturing GDP growth is driving higher total real GDP for emerging economies over the most recent past.
Increasing challenges for developed Economies

Source: Deloitte Touche Tohmatsu Limited and U.S. Council on Competitiveness, 2013 Global Manufacturing Competitiveness Index
Recap: What has happened and where are we today?

Globalization Drivers Manufacturing

- Free Trade Proliferation
- Digital Technology Infrastructures
- The Rise of a New Global Middle Class
- Global Disaggregation of Manufacturing Supply Chains

Rapid globalization has changed the economic fabric of the world and manufacturing supply chains, in profound and significant ways.
Global middle class growth will precipitate a dramatic shift in consumption over the coming decades

- Global demand growth from middle class US$ 21 trillion to US$ 56 trillion by 2030 (x 2.6)
- 80% of growth from Asia
- Potential for significant changes in supply chains around the world

Source: OECD Development Centre 2010
New “demand centers” are emerging as populations of middle class consumers grow around the world.

Source: Unites States Energy Information Administration (2011)
Key drivers for change going forward

- Rising protectionist politics
- Exposure to currency volatility
- Fading labor rate arbitrage

Supply Chain Reconfiguration toward Countries and Regions with the right Combination of favorable Competitiveness attributes
2013
Global Manufacturing Competitiveness Index

Over 550 CEO Respondents around the World

• Competitiveness today

• Competitiveness 5 years from now!
Our Global Manufacturing Competitiveness model defines ten major drivers of a nation’s competitiveness.

Source: Deloitte and U.S. Council on Competitiveness, 2010 Global Manufacturing Competitiveness Index
The top fifteen: China leads and even stronger in 5 years; Germany only European Country left in Top 15

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The most important driver of a nation’s competitiveness

#1 Talent Driven Innovation

Rank
1  • Quality & availability of researchers, scientists, engineers
2  • Overall quality and availability of skilled labor
15 • Quality of primary & secondary schools to produce sufficient student populations proficient in science, technology and math
28 • Quality of colleges & universities… and their partnerships with business in research and innovation
40 • Effective & efficient immigration policies

The competitiveness DNA for high performing companies is changing

- Innovation culture
- R&D Capabilities
- Availability of skilled workforce
- Product engineering capabilities
- Productivity of workforce
- Overall quality of human resources
- Manufacturing processes and capabilities
- Brand Image
- Leadership and management
- Strength of balance sheet

Source: Deloitte and Council on Competitiveness
Market and customer requirements for high performing companies are changing as well

- Overall customer perceived value
- Delivery speed
- Responsiveness of customer service/support
- Perceived quality of customer sales experience
- Innovative product design and features
- Speed of getting products to market
- Total delivered price of products
- Competitiveness of product pricing
- Breadth of products
- Effectiveness of global marketing programs

The Future of Manufacturing: Competition for resources, capabilities and on public policy

Infrastructure

Raw Materials

Innovation

Public Policy

Foreign Investments

Alternative Energies

The best Human Capital
The Story Continues
Manufacturing for Growth report to be released soon

Globally Competitive Public Policy
- Defines strategic public policy recommendations to stimulate high-multiplier manufacturing sector growth in six focus countries and common themes and recommendations across nations

Partnering for Competitiveness
- Highlights best practice examples of public-private collaboration to enable innovation and technology and promote human capital

Value Chain Analysis
- Illustrates product value chains in three industries to demonstrate the value, jobs and skills created by manufacturing sectors

Public Release Date
May 2, 2013
Manufacturing for Growth - Executive Participation

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Vermeer Corporation

Vinod K. Dasari
Managing Director
Ashok Leyland Limited

Liang Haishan
Executive VP
Haier Group Company

Haruo Kawahara
Chairman
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