Managing People and Organizations

- Lesson Learned: Introduction - Strong People Focus, Emphasizing Broad and Deep Skills at GE
- Management & Technology Info
- Technology Organization & Competitive Advantages, Five Forces, Value Chain
- Changing Roles of Managerial Leadership
- Motivation and Technology Performance
- Formal Models of Motivation
- Leadership in Technology
- The Power Spectrum in Technology Management
- How to Make it Work: Suggestions for Increasing Effectiveness
- Conclusion
Managing People and Organizations

- Introduction - Strong People Focus, Emphasizing Broad and Deep Skills at GE
  - Imagine, Solve, Build, Lead
- Market Instinct
- Business Process
- Culture
- Competitive Advantages
  - Value Chain & System
  - Five Forces

Management & Technology Info

Yahoo CEO Set to Install Top-Down Management, by Jessica E. Vascellaro, WSJ, B1, Monday, Feb. 23, 2009:

- New CEO Carol Bartz - New Management structure
  - What would you do if you were me?
  - Reorganization: Company-wide reorganization aims to speed-up decision making and give Yahoo products a more consistent appearance by consolidating certain functions that have previously been spread out across company –like product development and marketing—into single, standalone department
  - Consolidate some functions
  - Give some of the international markets more autonomy over their own products
  - Strategic Issues – Task Force
    - Should Yahoo keep its Search Business
    - Chief Technology Officer, Aristotle Balogh, would expand his role to become head of product
      - CTO, Product Strategy, Product Strategy and Management
Management & Technology Info

A Scion Drives Toyota Back to Basics, by Norihiko Shirouzu and John Murphy, WSJ, Tue., Feb. 24, 2009:

- **Toyota Motor Corp’s incoming president, Akio Toyoda**: “It has gotten too fancy for its own good.”
  - Focus most of all, on abandoning Kakushin, or “revolutionary change,” current president Katsuaki Watanabe’s term for changing the way Toyota designed its cars and factories. It spawned technological advances, but led to cars that were often costlier to produce
  - Core idea: thrift and efficiency
  - Trim manufacturing capacity

Leadership Style: Genchi Genbutsu (現地現物)

- Get out of office and visit the source of the problem

Examples

- **Toyota’s Image – Affordability**
  - Pricing Strategy: $1,000 to $1,500 above what people would pay, slow Corola sales

- **Restraining new product features**
  - 2009 Prius option – a solar-powered ventilation system to keep interior cool when parked
  - Retailed price $28,000 compared with the current model $22,000
  - Anticipates stiff competition from Honda’s new low-priced hybrid
Management & Technology Info

A Scion Drives Toyota Back to Basics, by Norihiko Shirouzu and John Murphy, WSJ, Tue., Feb. 24, 2009:

- Examples
  - Shabu-Shabu Paint System – new technology
    - Lean manufacturing that shorten the painting process
    - Replacement of traditional system of slow dragging a car through a 115-foot-long bath of anticorrosion undercoating
    - Costs roughly 4 times as much to setup
  - Minimal improvement
    - A new ecological plastic
      - Emits less carbon dioxide over the course of its life
      - Costlier to produce

Management & Technology Info

Juniper Chief Faces Dilemma on R&D, by Ben Worthen, WSJ, Tue., Feb. 24, 2009:

- New CEO, Kevin Johnson, a former Microsoft Corp executive, Juniper Networks Inc
  - Need to slash costs to survive the downturn
  - A dilemma: Should he the roughly $800 million research budget, which eats up 20% of Juniper’s revenue but is fuel for innovation?
  - Reduce costs by $250 millions:
    - Trim the salary of every executive by 5%, his 10%
    - Froze merit increases, eliminated 100 jobs out of its 7,000-person workforce
  - If tech companied cut back R&D spending, they slow innovation and risk losing their place to others
Management & Technology Info

Juniper Chief Faces Dilemma on R&D, by Ben Worthen, WSJ, Tue., Feb. 24, 2009:

- Cisco R&D Spending
  - 13% of revenue, on most recent quarter
  - 12% during 2008 fiscal year
- Qualcomm – hold R&D spending flat, 2009
- Motorola – slash R&D budget, cash problems
- Juniper’s decision
  - Up R&D spending by 15% to about $840 million, 2009
  - Many of the investments will take years to pay off
  - Market shocked, Juniper shares have fallen 15% since Jan. 29, closing at $14.35 on Nasdaq Stock Market

Management & Technology Info

- CHIEF EXECUTIVE,
  [http://www.chiefexecutive.net/me2/default.asp](http://www.chiefexecutive.net/me2/default.asp)
  - The Next Generation CIO: A New Journey
- Services For the Global Enterprise - Opportunities in Security, Mobility, Wireless and Cloud Computing,
CEO Video Casts

CEO Casts Video. [Viewed 2/20/2009]

- 10th Annual CEO2CEO Summit Round Table – Next Generation Globalization, 5min 56 sec
- 10th Annual CEO2CEO Summit Round Table – Innovate or Perish, 5 min 55 sec
- The American CEO, 2 min 47 sec
- CEO Confidence Index Turns the Corner, 3 min 6 sec
- View from the Top, CNBC Exclusive, 3 min 38 sec
- Chief Executive’s Outlook, CNBC Exclusive, 3 min 22 sec
- CEO Confidence Reaches Four-Year Low, 3 min 4 sec
- CEO Sentiment Sours, 2 min 52 sec
- CEOs Speak Out, 4 min 7 sec
- 2008 CEO of the Year: Round Tables – Social Responsibilities, 6 min 44 sec
- The American CEO, 2 min 47 sec

CEO Video Casts (cont.)

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Technology Organizations & Competitive Forces

- Potential Entrants
- Threat of New Entrant
- Bargaining Power of Suppliers
- Industry Competitors
- Rivalry Among Existing Firms
- Bargaining Power of Buyers
- Threat of Substitute Products or Services
- Substitutes

Source: A revised version of the Fig 1-1 The Five Competitive Forces that Determine Industry Profitability, from the book ME, Porter's Competitive Advantage, 1985, The Free Press.

Technology Organizations & The Generic Value Chains

- Market Instinct
- Business Process
- Culture
- Value Chain & System
- Five Forces
The Value Chain & Competitive Advantages

- The Value Chain
  - Primary Activities
    - Inbound Logistics, Operations, Outbound Logistics, Marketing & Sales, Service
  - Supporting Activities
    - Firm Infrastructure
    - Human Resource Management
    - Technology Development
    - Procurement


Key Aspects of Competitive Strategies

*Source: A modified version of Fig. 1.1 The Wheel of Competitive Strategy developed in the book entitled Competitive Strategy by Michal E. Porter, The Free Press, 1998*
Technology Organizations & Business Strategy

- Three Generic Strategies^2
  - Cost Leadership (Overall Cost)
  - Differentiation strategy
  - Focus (or niche strategy)
    - Cost Focus
    - Differentiation


Changing Roles and Managerial Leadership

- Core Management Issues
  - Manage Technical Work Content
  - Manage Talent
  - Manage Knowledge
  - Manage Information
  - Manage Communication
  - Manage Collaboration and Commitment
  - Build a Supportive Organizational Environment
  - Ensure Direction and Leadership
Changing Roles and Managerial Leadership

Core Management Issues

- Manage Technical Work Content
  - Staffing
  - Skill Sets
  - Professional Development
  - Support Technologies
  - Experimental Learning

Changing Roles and Managerial Leadership

Core Management Issues (cont.)

- Manage Talent
  - People, Idea, Action – Produce great results
  - Personnel Policies and Award Systems
  - Management Activities
    - Search out
    - Attract
    - Developed
    - Maintained
### Changing Roles and Managerial Leadership

#### Core Management Issues (cont.)

- **Manage Knowledge**
  - Knowledge Factories
    - Buy, trade, transfer, sell
  - New Products & Services
  - Set up Support Systems and Manage
    - Development
    - Processing
    - Filtering
    - Sharing
    - Transferring

Knowledge to achieve business values

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### Changing Roles and Managerial Leadership

#### Core Management Issues (cont.)

- Manage Technical Work Content
- Manage Talent
- Manage Knowledge
- Manage Information
- Manage Communication
- Manage Collaboration and Commitment
- Build a Supportive Organizational Environment
- Ensure Direction and Leadership

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**Motivation and Technology Performance**

- Sixteen Professional Needs that Affect Technology-Based Performance
- Implication of Organizational Performance
- Motivation as a Function of Need Satisfaction
- Motivation as a Function of Risks and Challenges
- Manage in the Range of High Motivation

**Formal Models of Motivation**

- The Nature of Motivations
- Earlier Theory of Motivation
- Maslow’s Hierarchy of Needs
- Herzberg’s Two-Factor Theory
- Vroom’s Expectancy Theory
- Reinforcement Theory
- Operant Conditioning
- How to Manage
Leadership in Technology

- Rensis Likert and the Michigan Studies
- The Managerial Grid
  - GE’s Commitment-Competence Grid
- Situational Leadership Theory
  - Fiedler’s Contingency Theory of Leadership
  - The Project Life Cycle Model
- Perspective on Engineering and Technology Management

The Power Spectrum in Technology Management

- Motivation, Managerial Power, and Performance
- Power Sharing and Dual Accountability
- Role of Salary
- Correlation to Technology Management Performance
  - Management Implications
How to Make it Works: Suggestions for Increasing Effectiveness

- Six Suggestions
- Understanding Motivational Needs
- Adapt Leadership to the Situation
- Accommodate Professional Interests
- Build Technical Expertise
- Plan Ahead
- Provide a Role Model

Table 5.3 Criteria for Managing Effectively in a Technology-Based Organization

- Clear Task Assignment
- Earlier Project/Mission Involvement and Ownership
- Priority Image
- Team Image
- Effective Work/Project Planning
- Process Definition and Team Structure
- Work Challenge, Professionally Stimulating Work
- Senior Management Support
- Clear Communication
## How to Make it Works: Suggestions for Increasing Effectiveness

Table 5.3 Criteria for Managing Effectively in a Technology-Based Organization (continue)

- Commitment
- Leadership Positions
- Reward System
- Problem Avoidance
- Personal Drive and Leadership

## Conclusion