The Necessary Revolution: How Individuals and Organizations Are Working Together to Create a Sustainable World

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About the Authors

Peter Senge was named as one of the 24 people who had “the greatest influence on business strategy over the last 100 years” by the Journal of Business Strategy.

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"Once we rid ourselves of traditional thinking we can get on with creating the future."

James Bertrand
The Challenges we face today

- Energy & Transportation
- Material waste & Toxicity
- Scarcity of Food and Water
Principles for Sustainability

1. Substances extracted from the earth crust cannot systematically increase in nature
   - Fossil based emissions

2. Substances produced by society cannot systematically increase in nature
   - CFC (Chlorofluorocarbon), solid waste

3. The physical basis for the productivity and diversity of nature must not be systematically deteriorated
   - Deforestation, loss of top soil

4. People are not subject to conditions that systematically undermine their capacity to meet their needs
   - Education, clean water
Learning Capabilities for Systemic Change

Sustainable World

Collaborating Across Boundaries

Creating Desired Futures

Seeing Systems

Sustainable World

Needs of Future Generations

Generative Organizations
Life Beyond the Bubble

Industrial Age
- Fossil Fuels
- Global Production
- Huge Waste
- Standardization
- Maximize Income

Energy
- Sun

Food
- Local
- No waste

Materials
- Diversity

Variety
- Build Relationships

Social Well-Being

Nature like Systems
The Real “Real” World

New Form of Capitalism

Economy
Society
Environment

Economy
Society
Environment
The Business Rationale for Sustainability

- There is significant **money to be saved**
- There is significant **money to be made**
- You can provide customers with a **competitive edge**
- Sustainability is a **point of differentiation**
- You can shape the **future of your industry**
- You can become a **preferred supplier**
- You can **change your image and brand**
Zero to Landfill; for the Shake of our Children

- Cradle-to-Cradle & Biomimicry
- Living System Business Model
- Waste for production becomes the raw material for new products
- The goal is **Zero Waste**
  - Toyota, Subaru
  - Xerox, Nike
  - EU (BMW/Audi/WW) policies “if you make it you own it forever”
Transforming Corporations

Five Stages of Emerging Drivers

- Non Compliance
  - Regulatory Demands / Enforcement
  - Public Pressure

- Compliance
  - Regulatory Demands / Enforcement
  - Public Pressure

- Beyond Compliance
  - Eco-Efficiencies
  - Regulatory Threat
  - PR Crisis

- Integrated Strategy
  - Business Opportunities
  - Risk Management

- Proactive
  - Purpose / Mission
    - Align with Core Values

LONG-TERM PROFITS
Sustainable Value Creation Matrix

**Clean Technology**
- Develop the sustainable competences of the future
- Innovation and Repositioning

**Pollution Prevention**
- Minimize Waste and emissions
- Cost and risk reduction

**Sustainability Vision**
- Create a shared road map from meeting unmet needs
- Sustainable Growth Trajectory

**Product Stewardship**
- Integrate stakeholder views into business process
- Reputation and Legitimacy

**Sustainable Value Matrix**
- **Internal**
  - Disruption
  - Clean Tech
  - Footprint

- **External**
  - Climate Change
  - Resource Depletion
  - Poverty

- **Today**
  - Pollution
  - Material Consumption
  - Waste

- **Tomorrow**
  - Civil Society
  - Transparency
  - Connectivity
System Thinking Iceberg

- **Events**: What just happened?
- **Patterns/trends**: What’s been happening? Have we been here before?
- **Systemic Structures**: What are forces at play contributing to this patterns?
- **Mental Models**: What about our thinking allows this situation to persist?

**Steps**:
- **React**
- **Anticipate**
- **Design**
- **Transform**
Mobilizing Others

Effective Team Members

Mover
Advocates position or action

Opposer
Firm but respectful, advocating in a different direction

Follower
Clear, takes the proposition further and offers sincere emotional support

Bystander
Observe and offers comments that bring another perspective
Conclusion

“Give a man a fish and he will be fed; teach him how to fish and he will feed himself; give him a fishing business and he will overfish”

P. Senge

“We cannot solve problems by using the same kind of thinking we used when we created them”

A. Einstein
What I liked About the Book

• The authors do not take extreme positions
• The authors offer guidelines (Toolboxes) to start your own change
• It presents encouraging stories (examples) about change and sustainability
• The authors encourage collaboration across boundaries (governments-ONGs-stakeholders-corporations)
References


Books