Knowledge and Society: Societal Knowledge Management

Hotel Radisson Eurobuilding
Caracas, Venezuela

June 20, 2006

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Setting the Stage

When considering which actions are desired, the underlying motivator is the *Model of the Ideal.*

In society, the model of the ideal includes the governmental model, involvement of – and services provided to – its citizens.

The model includes society’s desired economic structure and performance and its relations with the rest of the world.
There Are Challenges!

In 2007 cities will be home to 50+% of the world's population – with ~20% living in city slums

UN and WHO: Urban poverty has severe economic and health impacts

In 2005 more people in Mumbay's slum than in all of Norway!
Setting the Stage

The viability of any society – its position in the world, its growth, and ability to provide for its citizens rests on the effectiveness of actions of its people, its enterprises and institutions, and its government.

That effectiveness results from the quality of available knowledge – its Societal IC: Personal, Business and Industrial, and National Knowledge Assets
Society and Knowledge – Why?

1. Societies rely on Societal IC to provide continued progress – knowledge growth – to improve conditions and ascertain its long-term viability

2. Societal IC must be balanced and provide broad support of all desired aspects of the economy

3. Good Societal IC is required for effective and competitive functioning of all its sectors

4. Targeted Societal IC is needed to foster development of healthy balanced cities, industrial developments, and distributed economical conditions
Societal KM Premises

1. Society behavior results from millions of *People Actions* that ideally must be effective

2. In a successful society *People Behave* to support the societal objectives

3. A successful society provides *Balance* between people’s lives and public demands

4. Effective people-actions are at the center of success and are *Knowledgeable* and *Informed*
So, How Does It Work?

Meta Ideas

Fundings and Opportunities

Example of Societal Value Creation:

The US in 1958 created the National Defense Education Act (NDEA) to fund higher education while at the same time providing business contracts to industries – small and large - to employ people at all levels to create:

Livelihoods for more people
Valuable goods and services
New knowledge (Societal IC)
So, How Does It Work?

Growing Knowledge

Educational Infrastructure

Conduct Personal Affairs

Provide Financial Assistance

Provide Seed Funding

Funds for Continued Growth

Profits from Economic Activities

Grow Enterprises

Pursue Education

Become Proficient

Obtain Employment

Earn Wages

Employment

Produce Goods & Services

Trade Goods & Services

Funds for Continued Growth

Competent Workforce

Enterprises Become Increasingly Sophisticated and Competitive
Examples of Societal Knowledge Flows

Knowledge Producers

- Daily Life Innovators
- Corporate Research
- Public Research Organizations
- Private Research Institutes
- University Researchers
- Nature as Teacher
- "KDD"
- Other Sources

Knowledge Holders

- Museum
- Libraries
- Knowledge Bases
- Industrie Experts
- Public Agencies

Knowledge Transfer Agents

- Professional Firms
- Universities Etc.
- Prim & Sec Schools
- Public Educational Services
- Communities of Practice
- Professional Societies
- Professionals Everywhere

Knowledge Consumers

- Private Industry Business NGOs etc.
- Public at Large
- Public Government & Admin

Information Distributors

- Media
- Books
- Special Publication
- 'Net
- People
- Special Services

Knowledge in Technology

Knowledgeable & Educated People

Knowledge in Software

Knowledge Flows

Information Flows
SKM Seeks to Provide

♦ **Personal:**
  Improved earnings potentials
  More effective personal decision making
  Raised quality of life

♦ **Industrial:**
  Greater competitive effectiveness
  Better products and services
  Benefits for customers and consumers

♦ **Societal:**
  More capable work force and economy
  Increased participation by knowledgeable citizenry
  Improved social and economic environments
  More desirable society for all
## What Are KM Options? – Objectives

<table>
<thead>
<tr>
<th>KM Objectives with Public Governance Focus</th>
<th>KM Objectives with Industry and Commerce Focus</th>
<th>KM Objectives with Private Citizens Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall KM Objectives</strong></td>
<td><strong>Increase knowledge-related capabilities of industrial and commercial entities:</strong></td>
<td><strong>Make citizens more knowledgeable:</strong></td>
</tr>
<tr>
<td><strong>Improve society’s functions, support of citizens, and its global competitiveness:</strong></td>
<td>➢ Promote globally proficient and competitive industry and commerce to improve and maintain society’s international competitive position</td>
<td>➢ Improve knowledge workers at all levels to increase local and global effectiveness of industry and commerce</td>
</tr>
<tr>
<td>➢ Create understanding and capabilities to make balanced society feasible and viable</td>
<td>➢ Build long-term IC to strengthen enterprises</td>
<td>➢ Make people able to improve quality-of-life</td>
</tr>
<tr>
<td>➢ Increase public servant proficiency and capabilities to provide efficient time- and cost-effective performance while strengthen quality and reliability</td>
<td>➢ Foster R&amp;D to build globally competitive products and services</td>
<td>➢ Facilitate better public sector interaction and support</td>
</tr>
<tr>
<td>➢ Improve societal governance in support of balanced society</td>
<td></td>
<td>➢ Build public knowledge-awareness and change knowledge-related cultural drivers</td>
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## What Are KM Options? – Initiatives

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<tr>
<th>KM Initiatives with Public Governance Focus</th>
<th>KM Initiatives Focused on Industry and Commerce</th>
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<tr>
<td><strong>Short-Term Initiatives Less than One Year</strong></td>
<td>➢ Establish Communities of Practice (CoPs) for public servants (Police etc.) to increase their professional knowledge</td>
<td>➢ Provide society-wide IT-based communication and collaboration infrastructure for CoPs and Networks of Practice (NoPs)</td>
</tr>
<tr>
<td><strong>Medium-Term Initiatives 1-5 Years</strong></td>
<td>➢ Motivate and reward public servants for sharing knowledge and using other people’s ideas and expertise</td>
<td>➢ Support applied R&amp;D to develop globally competitive goods and services</td>
</tr>
<tr>
<td><strong>Long-Term Initiatives 5-25 Years</strong></td>
<td>➢ Create regulatory framework for patents and other intellectual property rights</td>
<td>➢ Facilitate basic research to create scientific options and globally competitive goods and services</td>
</tr>
<tr>
<td><strong>Very Long-Term Initiatives</strong></td>
<td>➢ Develop and adopt long-term IC-related national strategies and create supporting institutions</td>
<td>➢ Develop and adopt legal and policy infrastructure to foster industrial and commercial developments of key IC sectors</td>
</tr>
</tbody>
</table>
Work Becomes More Complex

1. Routine tasks (simple, repetitive, and well understood)
2. Logical or less common variations (transformations) of Routine Situations
3. Complex, yet expected extensions of routines integrated with external factors
4. Unexpected challenges (conditions), but with a mix of routines and external factors
5. Totally unexpected situations and non-routine challenges, yet within the larger job scope
6. Unusual challenges outside job scope

Frequency of Occurrences

- **Past Work**
  - Required Knowledge Can Be Explicated (Some Can Be Automated)
  - Some Abstract Knowledge Is Needed
  - Workers Need Additional Knowledge

- **Future Work**
  - Considerable New Knowledge Is Required

Complexity of Work

Candidates for Intelligent Automation

Potential for Delivering Work Requiring Greater Knowledge

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Good SKM Requires Deep Insights That Result from Comprehensive Models!

Societal Knowledge Management

Knowledge Workers

- Tacit Interaction Workers 41%
- Transaction Workers 44%
- Transformational Workers 15%

Societal KM Provides Opportunities to Participate

Globalization by People Everywhere

- New Management and Operations Practices
- World-Wide Communication Internet/WWW
- New Commercial Practices and Systems
- Effective World-Wide Logistics
- Sophisticated Customers
- More Knowledgeable People
- Demanding Stakeholders
- Sophisticated Suppliers

Situation

- New Management and Operations Practices
- Practical Objectives
- Methodology
- Domain Knowledge
- Working Knowledge
- Tacit Knowledge
- Subject Matter Experts
- Knowledge Map
- Knowledge Products
- Methodologies
- Conceptualization
- Metaknowledge
- Troubleshooting
- Situational Awareness
- Personal Knowledge
- Personal Wealth
- Sensemaking
- Decision Making
- Implementation
- Effective Action

Personal Knowledge

Action-Oriented Operational and Governance IC Assets

- Library
- Personal Mental
tasks
- Situation-Specific
- Metaknowledge
- Knowledge Strategies
- Situation-Specific
- Situational
- Personal Mental
- Mental Reference Models
- Situational
- Knowledge Strategies
- How to Proceed

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General Distribution of Work Efforts Throughout NovelCo, Inc.

Societal KM 2006/15

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KM’s Role Is Changing

♦ The Early Focus:
Strengthen Operations by Improving Knowledge and Its Availability with IT and LO

♦ The Emerging Focus:
People–Focus to Make the Enterprise Strategically and Operationally Competitive by Creating and Utilizing Knowledge and Understanding

“To Survive and Prosper You Need to Innovate Faster Than Your Competitors – It is Not Enough Only to Learn Faster!”
Strategic goal for 2010 set for Europe at the Lisbon European Council – March 2000:

"to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion."

Only focused Societal KM can achieve that!
Societal KM and Innovation Are Key

Every Enterprise Is Different.
Only Broad Knowledge and Deep Understanding Can Provide the Innovation and Adaptations Needed for Viability and Success!

People-Focused Societal KM Is the Innovation-Enabler by Providing the Driving Intellectual Capital Resources!