Knowledge Sharing
A New Business of the 21st Century
The Getting of Wisdom

Presentation Objectives

1. To describe the internal and external knowledge sharing strategies of Xerox
2. To provide a framework—definitions, examples, and concepts—that can be used to customise and/or develop an organisational strategy
3. To develop new business relationships with Education Providers utilising our Knowledge Sharing Tools to add value

Agenda

1. Examples in Education
2. The Knowledge Based Economy
3. Xerox: Documents and Knowledge
4. More Examples
   - Eureka
   - Knowledge Sharing @ Work
   - Xerox Knowledge Tools
5. Strategy "Tips"
6. Summary and Q&A
"Knowledge is Power"
Sir Francis Bacon
1561 - 1626
"Future History may well remember those who shared their Knowledge, as they will also, have shared their Power"

"Knowledge sets Man free and gives him Power"
Aristotle
384BC - 322BC

Knowledge and wisdom, far from being one, Have at times no connection. Knowledge dwells In busy nights with thoughts of other men: Wisdom, in wise attention to their own, Knowledge a rule, impenetrable to the base. The more materials with which wisdom builds, Till enriched, and approved, and chieflty to itself. Does but procure when it seems to enrich. Knowledge is proud that he has learned so much: Wisdom is humble that he knows no more.
William Cowper
1731 - 1800

Is it just about Sharing Knowledge?

A Working Schools Example
Wayne Finger-Lakes BOCES - DocuShare Case Study
- Profile: Group of 45 School Districts in Northern New York State (www.edutech.org)
- Market: K-12 Education
- Specific Applications:
  # Curriculum development - allowing teachers to collaborate remotely in the development of curriculum content rather than having to physically meet to share information
  # School to home communications - allowing teachers and administrators to share information with the entire community
  # Standards Availability - allowing State education standards to be accessible to all who need them

"All of a sudden, a twenty-four lane Communications Highway replaced what felt like a gravel road" said Dr Joseph Marinelli, District Superintendent of Wayne Finger-Lakes BOCES

A Working Schools Example
Imlay Schools - Shared Calendars

With the T-1 line and the Internet you can share calendars internally through Microsoft's Outlook
Get DocuShare!
Post calendars for school events, sports, facilities, and lunch menus on the WWW.
“Knowledge Is the New Currency”

- In the digital economy, knowledge is the new portable currency
- Knowledge appreciates in value through sharing
- Knowledge “flow” creates new opportunities and new markets
- Knowledge is dynamic

E-communities, E-learning & E-commerce

What is this e Community

Definition: e Community
Groups passionately held together by a sense of fellowship or common purpose, dedicated to the creation and application of new knowledge.

Knowledge ➔ E-learning

- With the move from an Agrarian to an Industrial Economy, the small rural school house was supplanted by the big brick urban schoolhouse. Four decades ago we began to move to another economy, but we have yet to develop a new educational paradigm, let alone create the ‘schoolhouse’ of the future, which may be neither school nor house.

Jim Botkin and Stan Davis: Monster Under the Bed
A new paradigm is required to incorporate knowledge as a strategic asset and embed know-how in products, services and solutions.

The new economy is a knowledge economy and the key assets of every firm become intellectual assets.

Information is not the same as Knowledge:

- **Data**: Unorganised Numbers, Words, Sounds or Images
- **Information**: Data arranged or processed into meaningful patterns
- **Knowledge**: Information put into productive use, made actionable
- **Wisdom**: Knowledge and Experience applied practically

Xerox: Capturing not so Ancient Knowledge

> Fuji Xerox Australia donates Digipath/DocuShare to University of South Australia Hawke Ministerial Library.
**What is a Document?**

**DOCUMENT** Information Structured for Human Comprehension

**KNOWLEDGE** Information Made Actionable

**Knowledge and Documents Flow**

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**What is Knowledge?**

KNOWLEDGE = Information Made Actionable

**DOCUMENT** = Information Structured for Human Comprehension

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**Document-Centric**

"The four C's all turn critically on the document.

How does knowledge get created?
How does knowledge get captured?
How does knowledge get consolidated?
How does knowledge get communicated?

Document: The DNA of Knowledge

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**Our Strategic Direction**

**Total Quality Management**

- Quality for Survival (TQM)
- Customer Focus
- Continuous Improvement
- Benchmarking the Best

**Business Process Re-engineering**

- Global Competitive Advantage
- Efficiency's Embrace
- Technology Replaces Workers
- Restructuring takes place

**Knowledge Management**

- Ignites Growth, Expansion, Innovation
- Best Practices Sharing

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**NCISA Barossa Valley Adelaide July 15th 2000**

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**Andrew C Scott-Adelaide 2000**
Managing Knowledge

Creating a thriving work and learning environment that fosters the continuous creation, aggregation, use and re-use of both organisational and personal knowledge in pursuit of new business value.

Paul Allaire, Chairman

Knowledge Sharing is the way (social) and means (technical), by which an individual, team, organisation and/or community connects and communicates to continually create, innovate, learn and act.

Identify and close the Knowledge Gap

Where is?... Who knows?... Who can?... Who will?...
We know.
We can help.
The Knowledge Gap

Where is your Knowledge Gap?

What best practices do we have?
What did we learn?
Who knows most about this?
Where will new business come from?
What promises did we make?
I have seen this problem before. But where?
Stop! I don't need more information. I need results!
Is anyone else working on this?
How does that compare with what we are doing in Adelaide?
Do we have the right information to make this decision?
What promises did we make before this?
I don't have time! I don't have time!

Barriers To Sharing

- I already told them. They don't listen or do anything.
- How many times do we have to fix the same problem?
- Will I become dispensable if I share all I know?
- Who else cares about this? Who do I share with?
- I am concerned someone will get credit for my ideas!

Knowledge Is Multi-dimensional

- Explicit knowledge is captured in documents
- Tacit knowledge is in the minds of people
  comes from experiences
  is embedded in practice
- Knowledge resides in the “practices” of communities

What Knowledge and Where Is It?

Knowledge Embedded in Community Practice

- "My intelligence does not stop at my skin; rather, it encompasses my tools (paper, pencil, computer), my nonverbal memory (contained in files, notebooks, journals), and my network of associates (office mates, professional colleagues, others I can phone, or send electronic messages to)"

Howard Gardner, Frames of Mind: The Theory of Multiple Intelligences
Our Research Continues

Top 10 Domains for Knowledge Management

- Learning
- Knowledge Sharing
- Communication
- Collaboration
- Information
- Knowledge Management
- Literacy
- Metrics
- Methods
- Technologies

Elements of a Knowledge Environment

- A Knowledge Base
- Communities of Practice
- A Knowledge Infrastructure
- Promotion, Recognition, Learning
- Skills/Competency

Change Model

- Social — begins with people, practices and communities
- Technical — tools and technology are enablers that create the infrastructure (architecture) to support and facilitate knowledge sharing, transfer and collaborative work

Trust
- Relationships
- Sharing practices
- Intrinsic motivation

- Laptops
- Browsers
- Search engines
- Web connection

Eliminate the Barriers to Knowledge Sharing
A Story About Knowledge Work

- Document machines and the CSEs who fix them
- PARC research goal: to develop an expert system for CSEs
- However, researchers took a different tack: understanding work practice and community life

An Expert System for CSEs

- PARC design assumptions
  - We can model the machine accurately
  - We can predict what the problems could be
  - We can show CSEs the optimal path for identifying the cause of any problem
- Solution: "Knowledge in a Box"