



Workshop on Knowledge Management DAY 1/morning

Ambedkar Institute of Productivity
Chennai, India
February 18-19, 2008

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Chief Expert, APO KM Survey



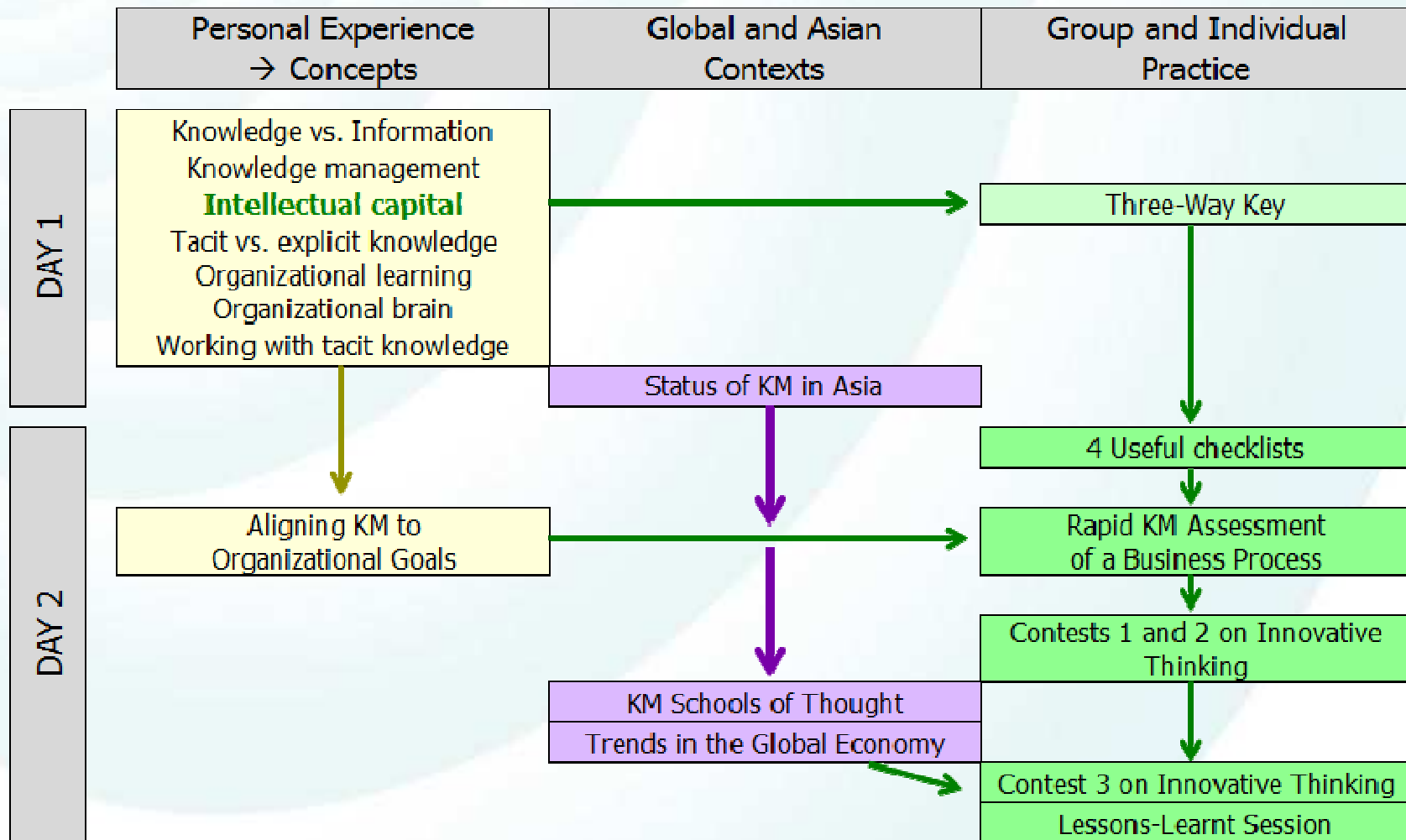
Objectives of Workshop

At the end of the two-day workshop, participants are able to –

- Understand and appreciate the value of innovating and managing knowledge in the context of fundamental trends emerging in the global knowledge economy, and
- Begin applying the intellectual capital framework to practical problems in the workplace.



Programme Flow





Module 1

"What Helps You Do Your Job Well?"

Connecting Knowledge Management to Performance



What Helps You Do Your Job Well?

What are the things, factors, types of people, qualities, conditions in or outside your organization, etc. that help you do your job well?

PROCEDURE:

- Write down 2-3 answers in metacards provided.
- Write in short phrases, using block lettering readable from a distance.
- Write only 1 answer per metacard.
- We will cluster and post your answers.
- We will then study and discuss the results.

3 E's

Knowledge Management is sourcing and deploying knowledge assets* for better work performance
*also called "intellectual capital"

embodied knowledge

Human Capital

embedded knowledge

Structural Capital

enculturated knowledge

Stakeholder Capital

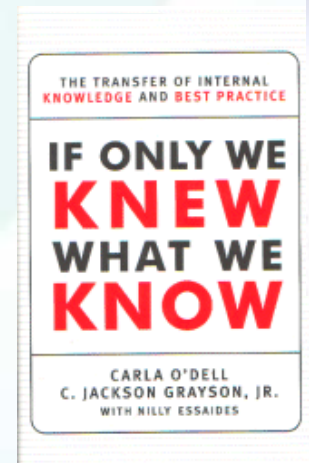
Tangible Assets

What Helps You Do Your Job Well

Definition of “Knowledge”

“Knowledge is information **in action.**”

— Carla O’Dell and C. Jackson Grayson, Jr. in: If Only We Knew What We Know



Definition of “Knowledge”

“Knowledge is information that changes something or somebody — either by becoming **grounds for action**, or by making an individual (or an institution) **capable of different or more effective action.**”

— Peter F. Drucker, in: The New Realities

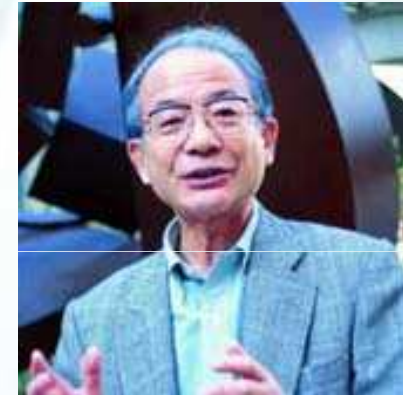




Definition of “Knowledge”

“Justified belief that increases an entity’s capacity for **effective action**.”

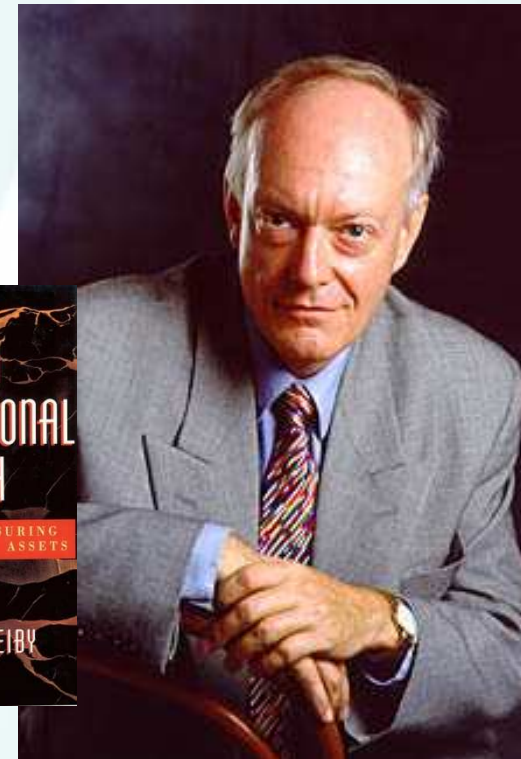
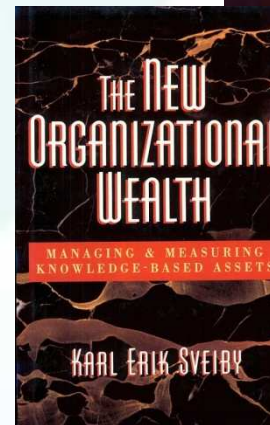
— Ikujiro Nonaka, Organization Science 5(1):14-37 (1994).



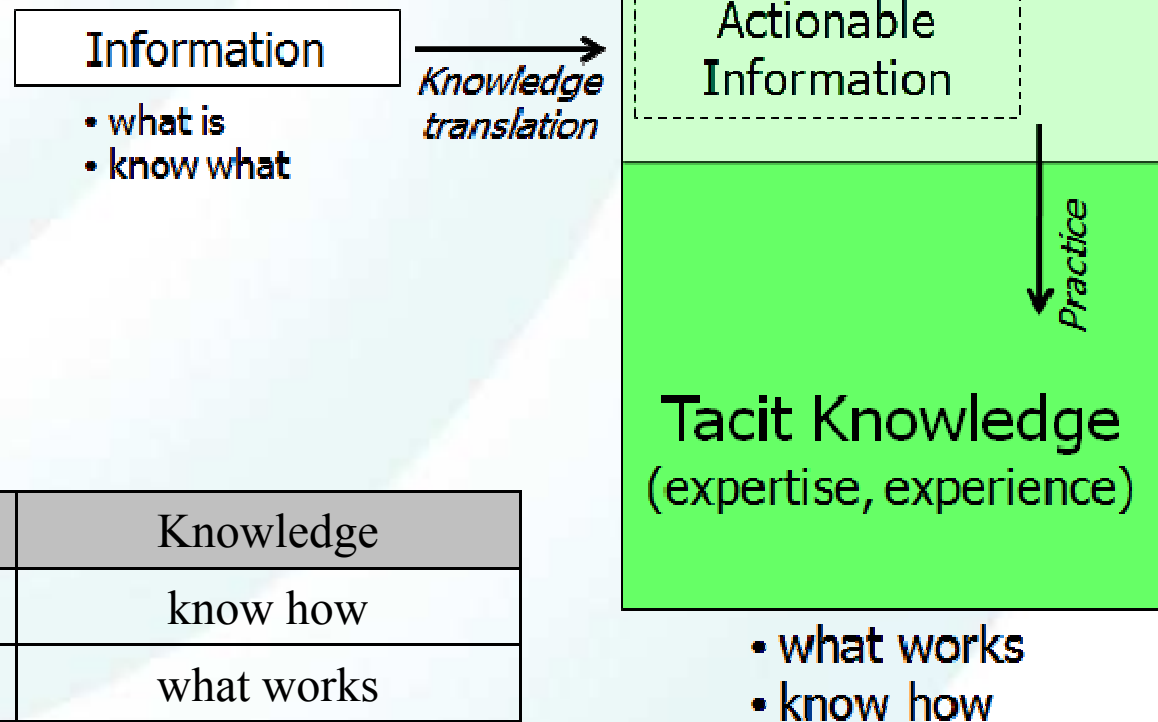
Definition of “Knowledge”

“I define knowledge as a
capacity to act.”

— Karl-Erik Sveiby
“The New
Organizational Wealth:
Managing & Measuring
Knowledge-Based
Assets”, 1997



Information vs. Knowledge



Information	Knowledge
know what	know how
what is	what works
interesting	useful

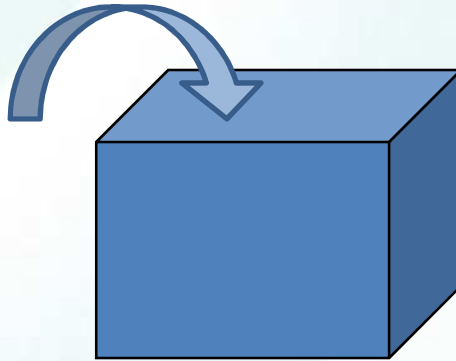


Module 2

"What Percent of Your Knowledge is Documented?"

The Importance of Tacit Knowledge

Imagine that copies of **everything you have ever written** and **all audio/videos of you speaking** are placed in a big box.

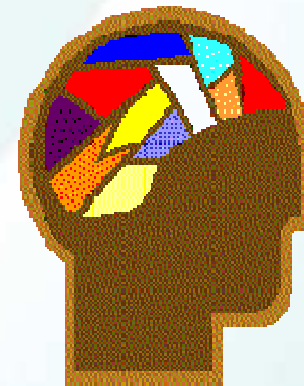
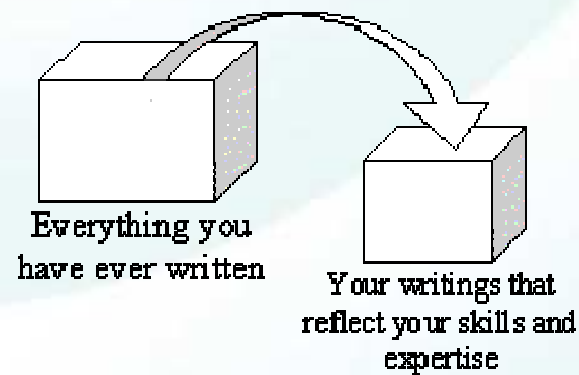


Record of your
writings and talks



*"Imagine next that the contents of the big box are classified. Those that reflect **your skills and expertise** are placed in a smaller box (the rest remain in the bigger box).*

Question: *Estimate what percent of the totality of your skills and expertise is in the smaller box?"*



What % of your total skills/expertise is documented in the smaller box?



Tacit Knowledge vs. Explicit Knowledge

Tacit Knowledge is –

- Unrecognized or
- Unexpressed or
- Undocumented

Examples:

- Expertise
- Indigenous knowledge
- Informal network of professional associates
- Informal work process of a production team

Explicit Knowledge is –

- Documented or
- Encoded or
- Recorded

Examples:

- Hardware and software
- Manuals
- Pharmaceutical formula
- Process controller
- Industrial robot



Tacit K >> Explicit K

- All explicit knowledge start as tacit knowledge in someone's head, but not all tacit knowledge gets codified.
- There are many things we can do well but cannot write down: we know more than we can tell.
- People have a tendency to hoard valuable tacit knowledge. Consequently,
 - **Less than about 5%** of knowledge of an employee is codified and stored in corporate knowledge repositories (David Hastings, Computer Associates).



Growth of **Tacit Interactive Jobs** in US

According to a McKinsey study of jobs in the United States:

- Jobs involving interactions requiring high tacit knowledge are growing **2.5 times faster** in 1998-2004 than jobs involving routine transactions.
- **70% of jobs created** in 1998-2004 require judgment and experience (“tacit interactive jobs”).
- In 2004, **41%** of the labor market are tacit interactive jobs.
- Tacit interactive jobs **pay 55-75% more** than routine transactional jobs.

More complex jobs grow in the US as simpler jobs disappear due to:

- Streamlining of business processes
- Outsourcing to developing countries
- Automation



Examples of Knowledge

- Manuals
- Technologies, whether hardware or software
- Documented best practices
- Course programs, e-learning systems
- Process tools
- Portals and knowledgebases
- Formulas: pharmacy, cooking (recipe), engineering, etc.
- Directories of customers, suppliers and business allies

explicit knowledge

- Expertise, know-how, work experience
- Undocumented but efficient work processes
- Workable prototypes before blueprint or patent papers
- “Workarounds”
- “Tricks of the trade”
- Networks: professional, customer, industry
- Business alliances and strategic partnerships

tacit knowledge



Examples of Knowledge

structural capital

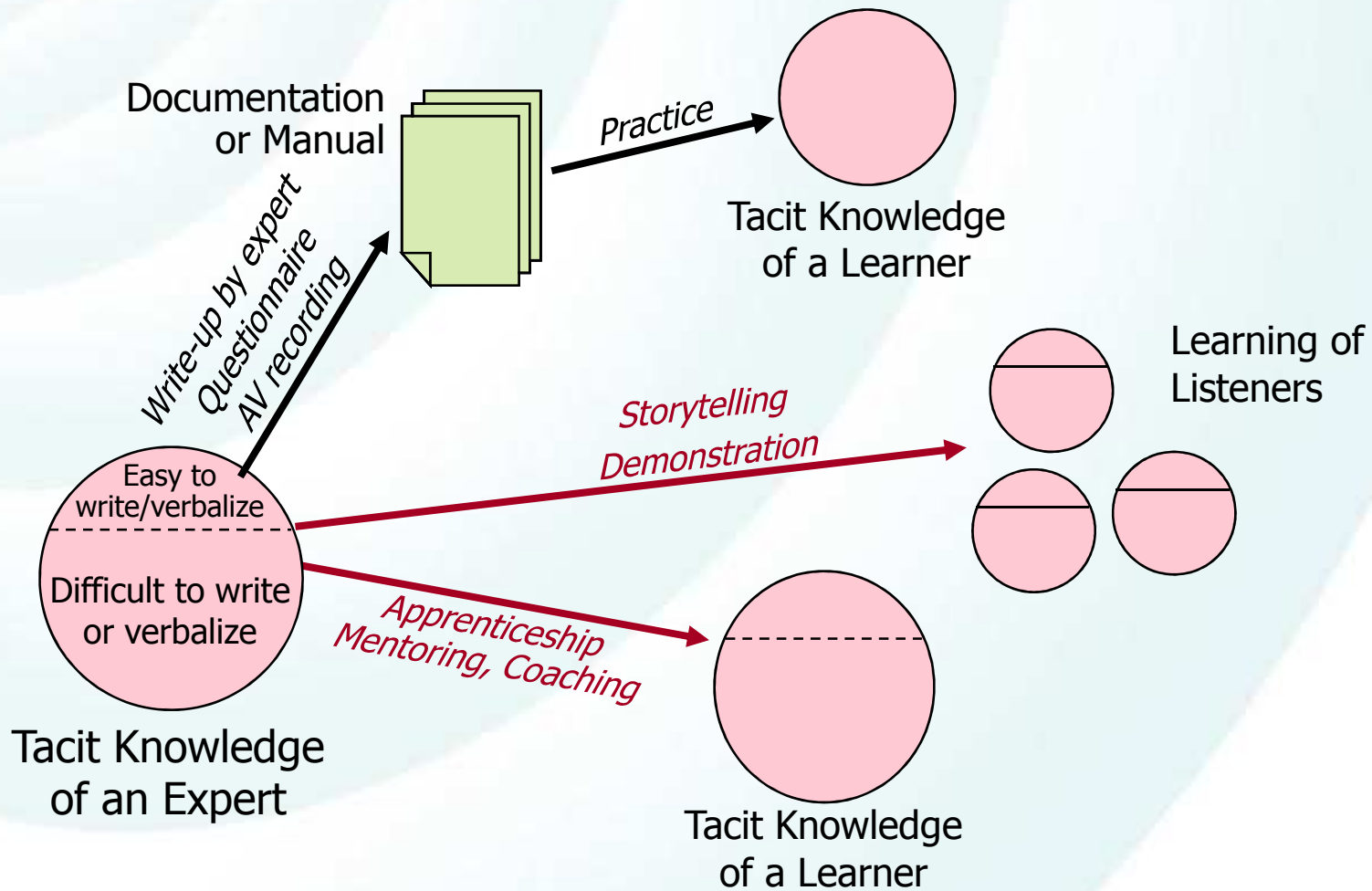
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human capital

- Expertise, know-how, work experience
- Undocumented but efficient work processes
- Workable prototypes before blueprint or patent papers
- “Workarounds”
- “Tricks of the trade”
- Networks: professional, customer, industry
- Business alliances and strategic partnerships

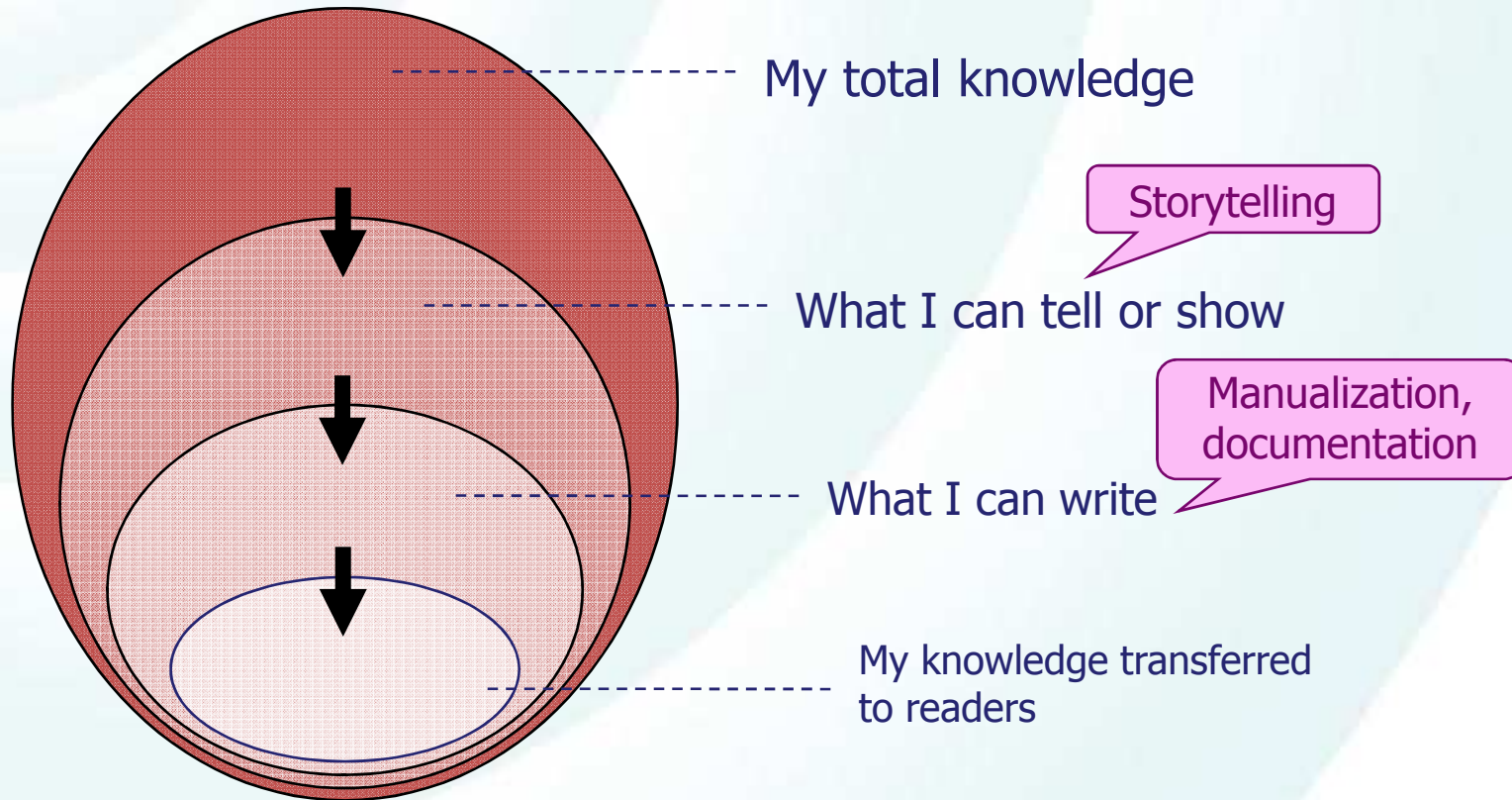
stakeholder capital

Transferring Tacit Knowledge



Storytelling is a KM Tool

Converting Tacit to Explicit Knowledge



I know more than I can tell; I can tell more than I can write.



Pros and Cons of Tacit vs. Explicit K

	TACIT KNOWLEDGE	EXPLICIT KNOWLEDGE
ADVANTAGES	<ul style="list-style-type: none">The highest stage of knowledge"Sticky" and difficult to stealMakes knowledge workers valuableSource of all explicit knowledgeOwner can recombine/adapt to needGrows with practiceWellspring of innovation and learningLinked to personality of owner	<ul style="list-style-type: none">Can be patentedVery easy to multiply and shareCan be owned by the companyMeasurable/observable to othersIndependent of personal factorsEasy to manageCan be analyzed quantitativelyEasy to facilitate with IT
DISADVANTAGES	<ul style="list-style-type: none">Cannot be patentedDifficult to shareNot owned by the companyLess visible or recognizableDifficult to "manage"Transfer process must be personalVery difficult to facilitate with ITDifficult to track or measureLost if the person leaves or dies	<ul style="list-style-type: none">Must be adapted to new contextsDoes not capture all tacit knowledge"Leaky" and easily stolenNot completely independent of humansDepreciates over timeSmall fraction of totality of knowledgeUtility depends on skill of userUtility changes if context changesMust be practiced to be owned by one



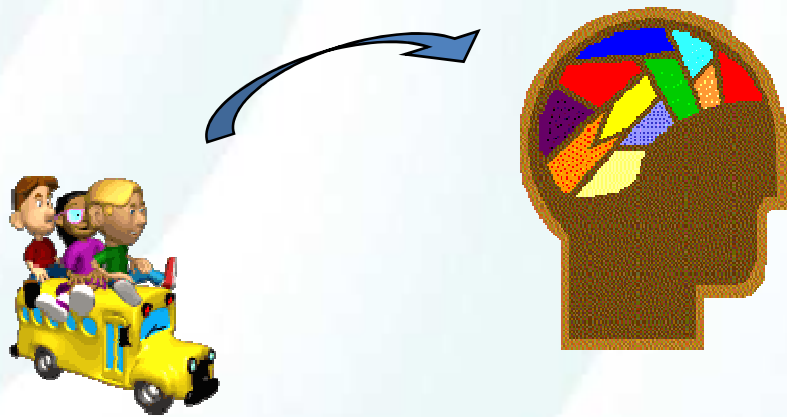
Knowledge Management vs. Information Management

- Information management (IM) deals with information objects, and with people-to-information interface but knowledge management (KM) deals with **both people-to-information and people-to-people interfaces.**
- KM attends to **both explicit and tacit knowledge**, while IM can handle only explicit knowledge.
- IM handles information for any purpose, but KM is concerned only with **what is useful for effective action.**



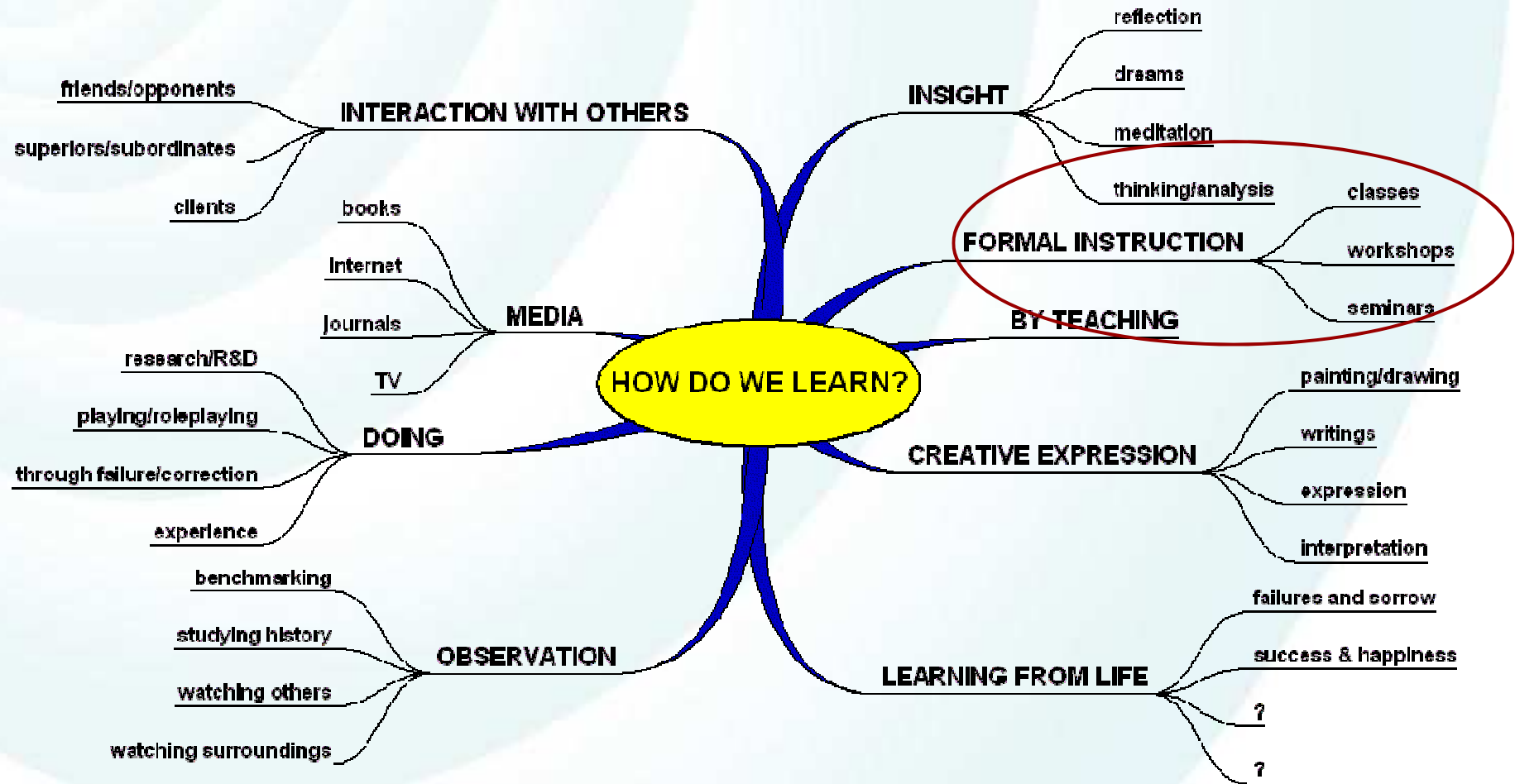
Module 3

Organizational Learning: Setting up a Living, Learning “Organizational Brain”

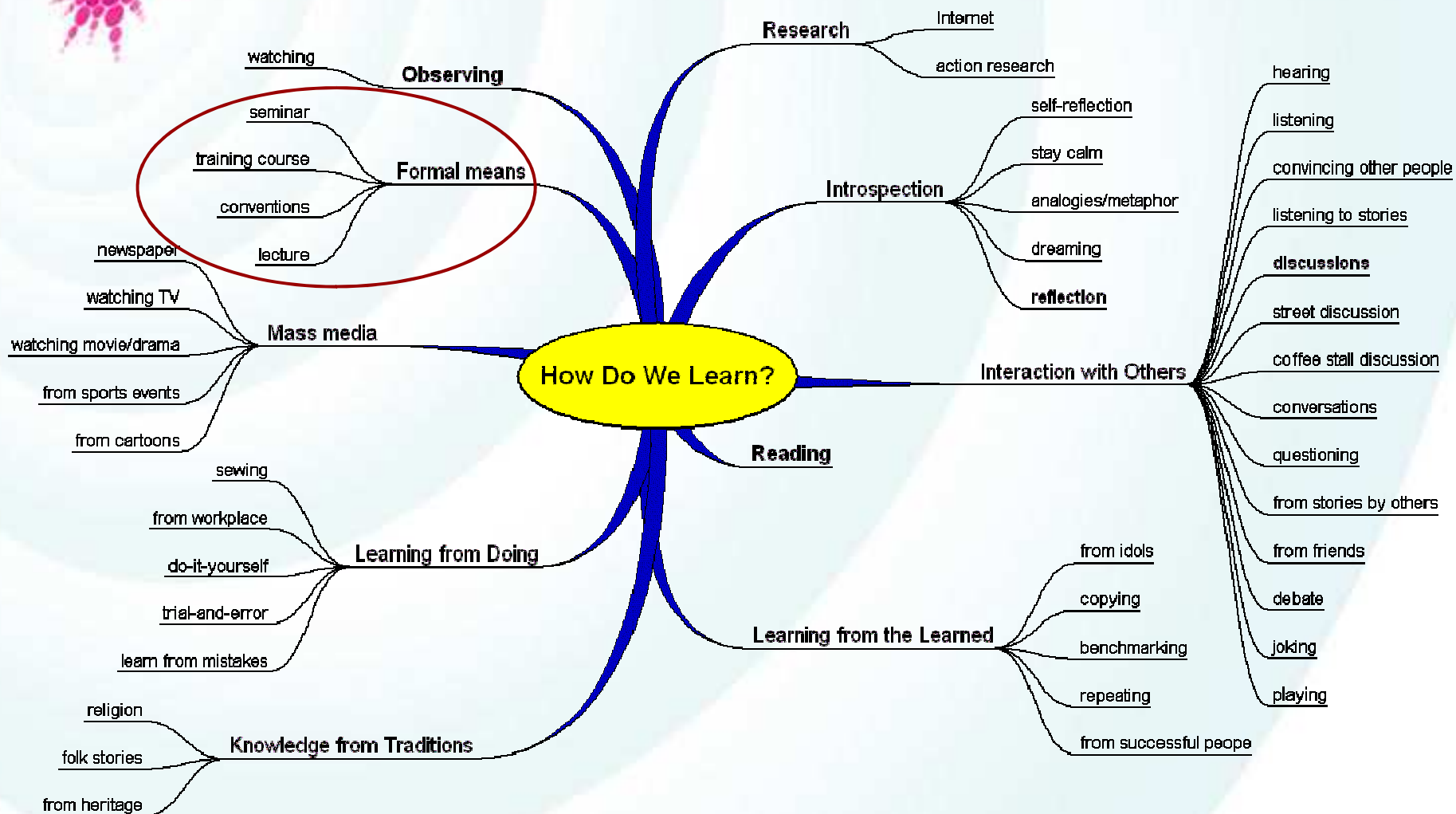


Poll: *What percent of what you know now came from your formal schooling and trainings?*

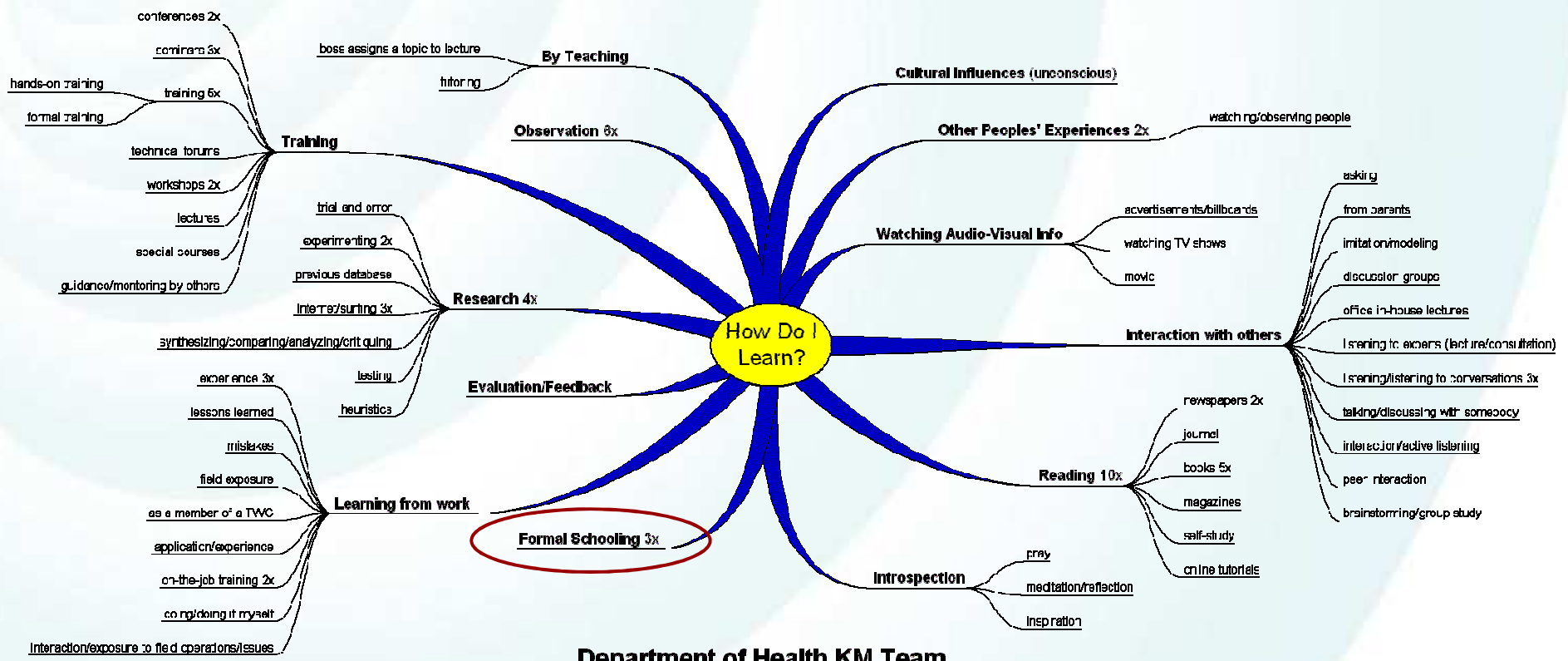
A Group Mind Map



SEAMEO INNOTECH Workshop on Self-Management
in the Age of ICT, 16 July 2004



SEAMEO INNOTECH Course on Futuristics in Education
23 August 2005



Department of Health KM Team
November 14, 2005



Think About It...

- We learn more from work and from life than we do formally from school and trainings.
- Much of our learning is unconscious, unplanned and informal.
- Learning is happening practically 24/7.
- We devote less resources and less technology to learning from work/life than learning from school.
- We learn more from work and from life, yet we tend to associate “learning” more with schooling and training.



A question –
How long is
On-The-Job-Training
in your organization?



Think About It...

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- Much of our learning is unconscious, unplanned and informal.
- Learning is happening practically 24/7.
- We devote less resources and less technology to learning from work/life than learning from school.
- We learn more from work and from life, yet we tend to associate “learning” more with schooling and training.
- **Everyone – all of us – are still undergoing On-the-Job-Training!**

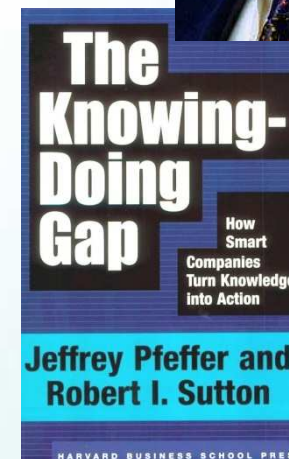


“Knowing-Doing Gap”

Stanford Professors Jeffrey Pfeffer and Robert Sutton noted that despite:

- 1,700 business books published yearly (1996 data)
- \$60 billion spent on training
- an estimated \$43 billion spent on management consultants, and
- 80,000 MBAs doing business studies,

the *changes in actual management practice is, correspondingly, disappointingly little.*

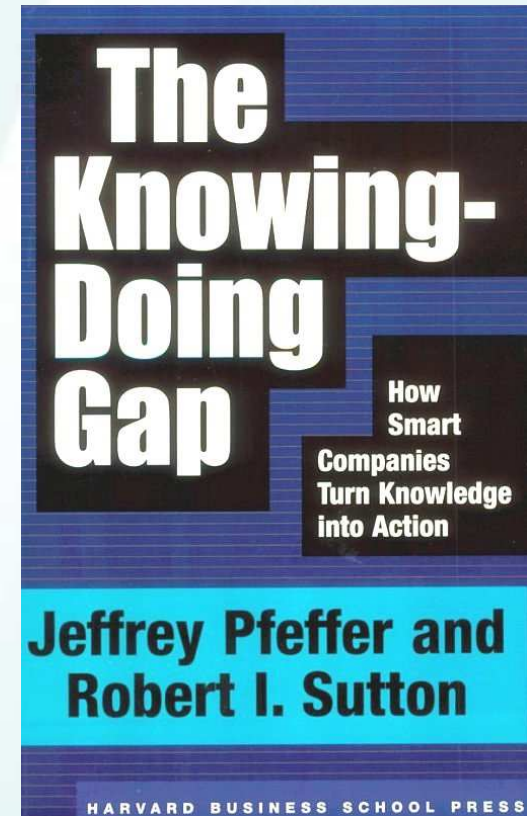




Conclusion of 4-Year Study

After four years of studying this “knowing-doing gap”, they concluded:

*“...one of the most important insights from our research is that knowledge that is actually implemented is much more likely to be acquired from **learning by doing** than from learning by reading, listening, or even thinking.”*





Think More About It...

- Knowledge acquired outside the workplace is less likely to be actually used than knowledge acquired in the workplace.
- Learning must take place as close as possible to the work context.
- Every day, we are acquiring knowledge in the workplace, although we are not always aware of our learning processes.
- We learn more or we forget less if learning-in-action is a deliberate, planned or conscious process (e.g. a “lessons-learned meeting” – the last module)



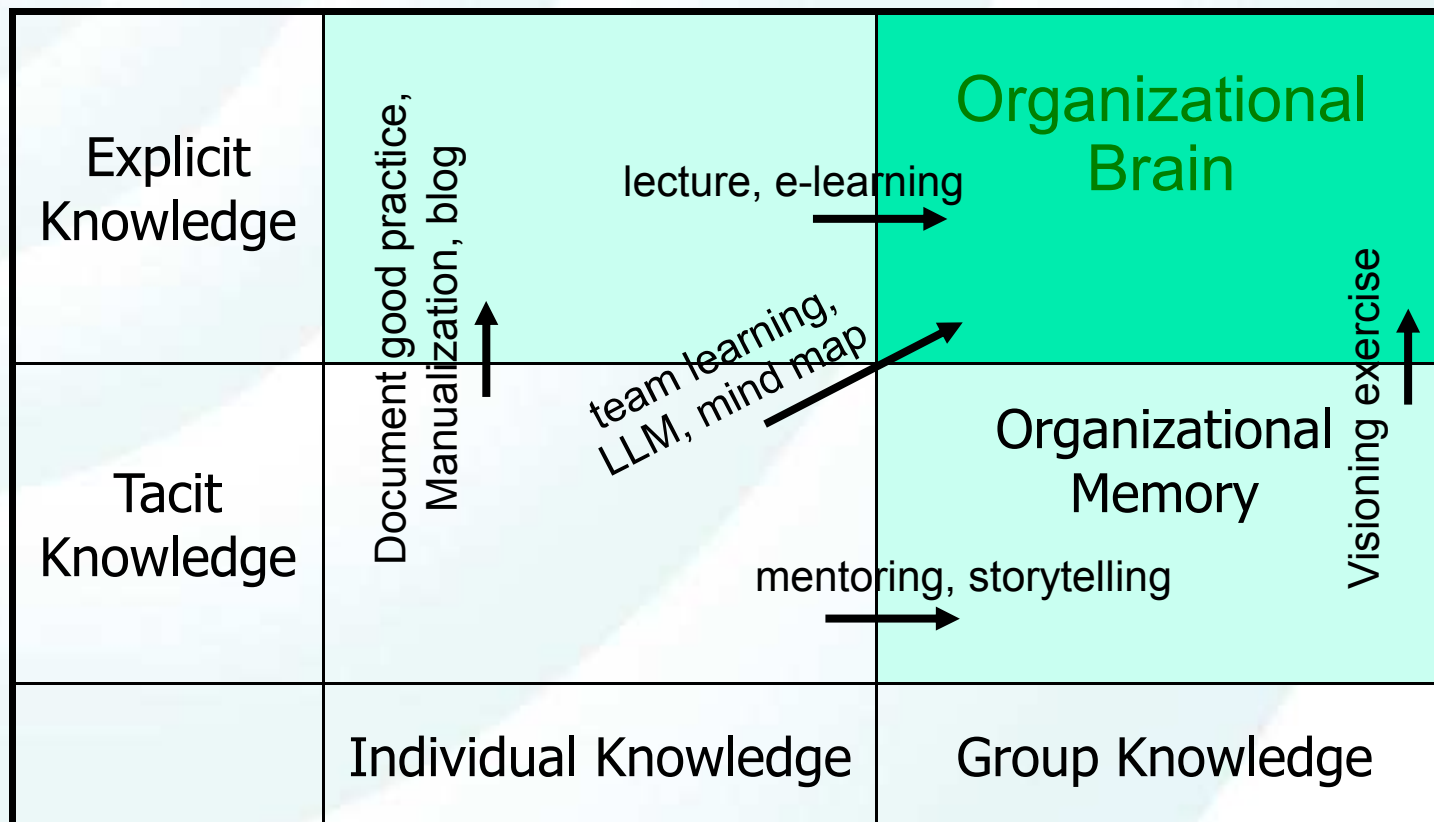
What is the technology of learning
from/while working?

Answer: **Organizational Learning**

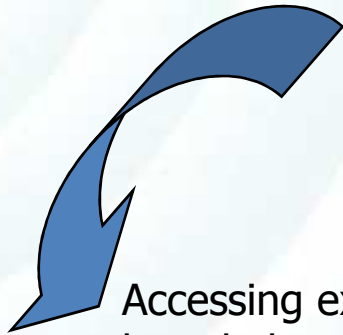


Organizational Learning Processes

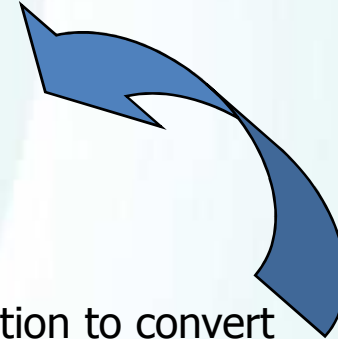
Individual tacit K → Group explicit K → back to individual tacit K



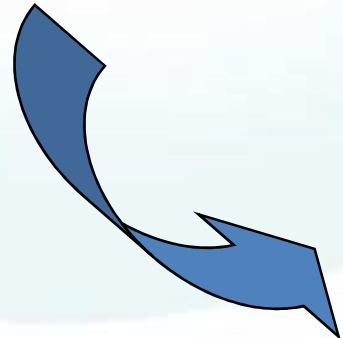
Explicit group knowledge



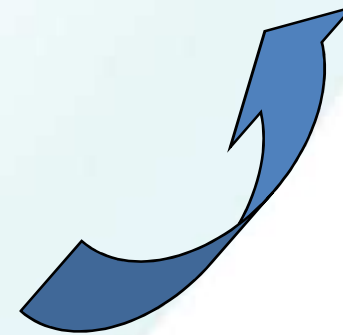
Accessing explicit knowledge to plan practice



Group reflection to convert tacit to explicit knowledge



Gaining individual tacit knowledge from practice



Learning-in-Action

CALL: Center for Army Lessons Learned (US Army)



The screenshot shows the CALL website homepage. At the top, there is a navigation bar with the CALL logo on the left and the U.S. Army Combined Arms Center logo on the right. Below the navigation bar are several menu items: "About CAC", "CAC Headquarters", "Major Subordinate Organizations", "Functions", "Centers", "Schools", and "Special Activities". Below the menu items are four links: "Request Information or a CALL Product", "Site Map", "Report a Broken Link", and "Give Us Your Feedback".

The main content area is divided into three columns:

- Left Column:** A box with the text "DOD USERS click here to log in" and a link "Log in problems Click Here". Below this is a section titled "CALL Resources" with a list of links: "CALL's Mission", "Contact CALL", "Frequently Asked Questions", "Lessons Learned Sites", "Links", "Military Domain Search", "News & Reference", "Schools", "Search CALL Archives", "Search Engines", "Thesaurus", and "Training and Doctrine".
- Middle Column:** A section titled "Front Page Photos" featuring a photo of a military vehicle with a crane lifting a large stack of boxes. Below the photo is the caption "(Courtesy Army Images)" and "Last Updated: Sep 7, 2007 (dmm)". Below the photo is a quote: "When war does come, my advice is to draw the sword and throw away the scabbard. Stonewall Jackson".
- Right Column:** A section titled "Search this Site" with a search box and a "go" button. Below this is a section titled "Items of Interest" with a list of links: "Handbook 07-34: PRT Playbook NEW!", "Family Readiness Group Handbook", and "Lessons Learned Course". Below this is a section titled "Important Links" with a list of links: "Army Campaign Plan", "Army National Guard", "Army Outreach", and "Army Reserve". At the bottom of the right column is a small photo of a soldier with a child and a link titled "Family Readiness Group Operations and Spouse Assistance".

At the bottom of the page, there is a footer with the following text: "Links: USA.Gov | Army Homepage | **TRADOC** Victory Starts Here! | CAC | More US Army Links". Below this is another line of links: "Army Links: AKO | Army Recruiting Command | Warrant Officer Recruiting | Go Army | Army ROTC". At the very bottom, there is a line of links: "About our site: Mission Statement | Security Notice | Visitors Information | External Link Disclaimer | Contact CALL WebTeam | Site Map". Below this is a final line of text: "Questions about Fort Leavenworth? Contact Public Affairs Office".

Xerox-France moved from average to European benchmark performer

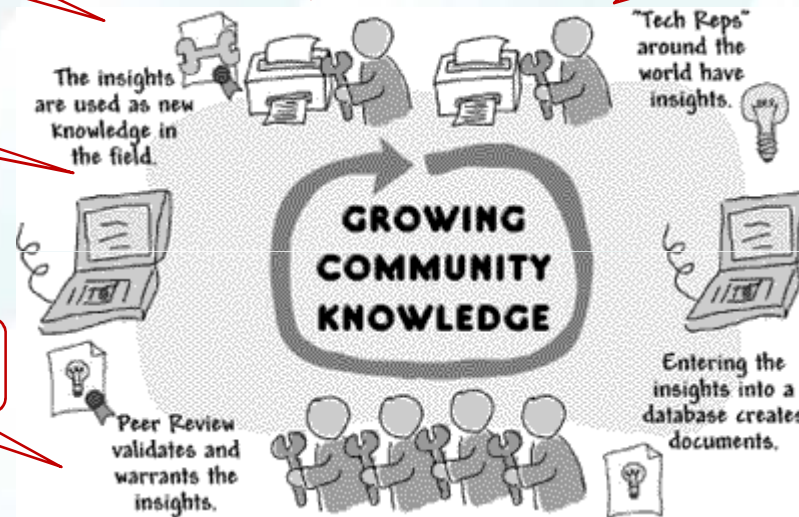
\$ 6-8 million savings per year

19,000 technicians;
50,000 calls per day

36,000 validated solutions after 4 years

About 90% are accepted

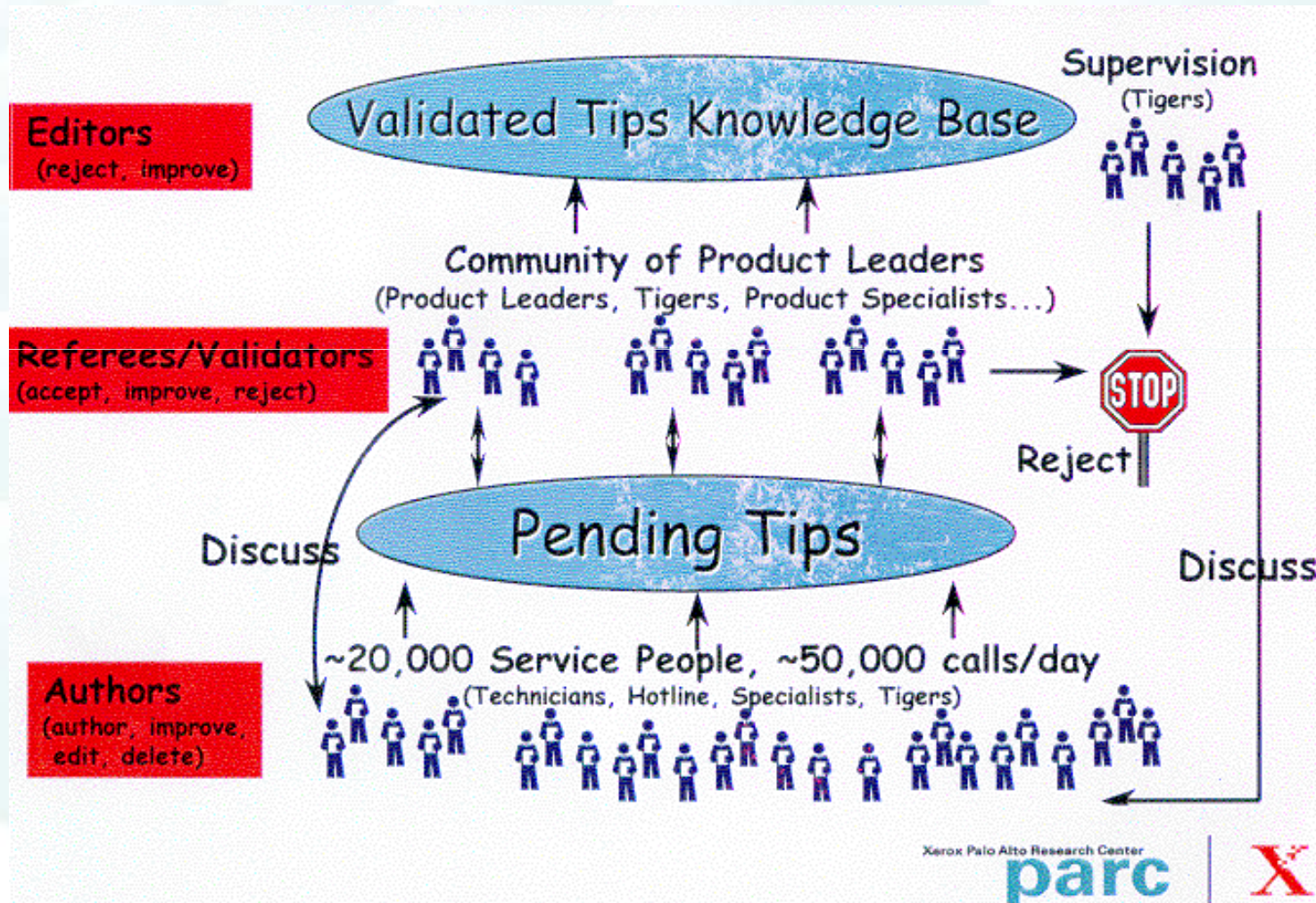
600 tips submitted per month



Flow of Knowledge Across **Eureka System** of Xerox

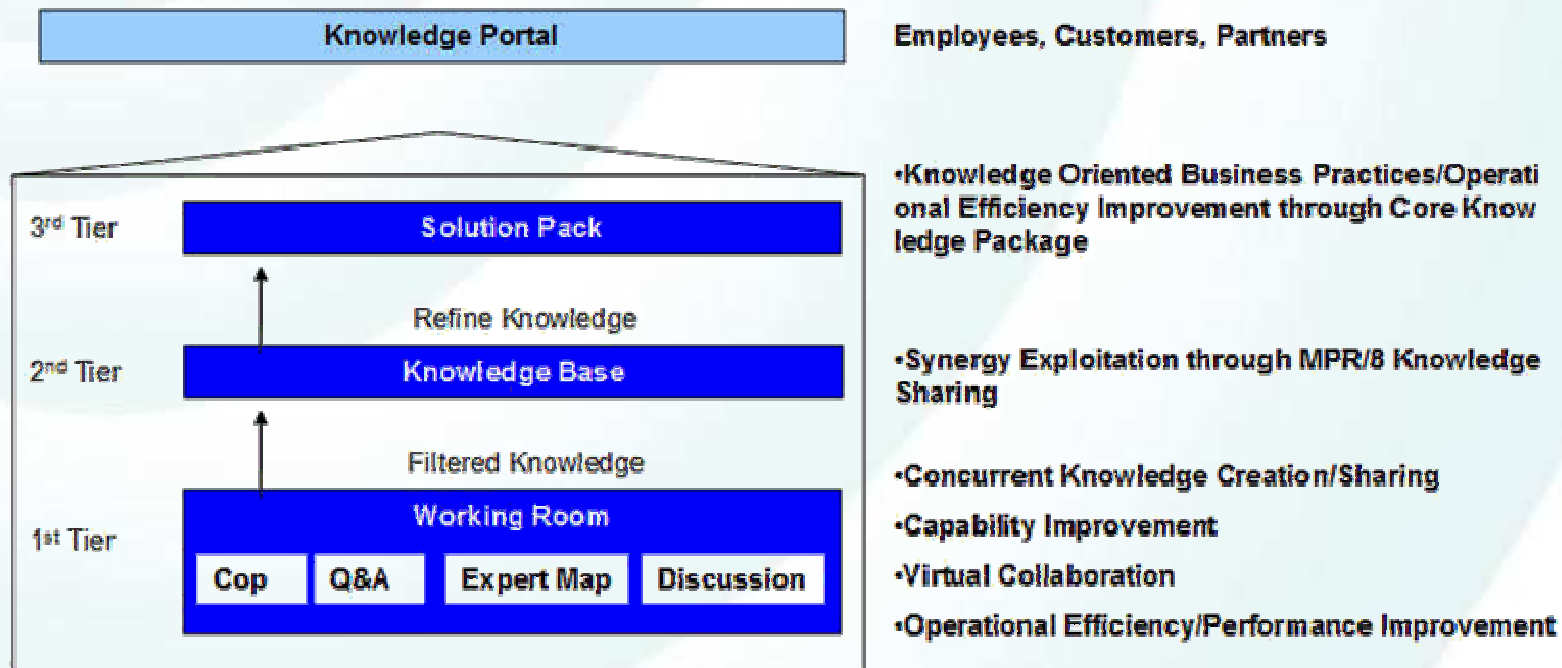
Sources: "Eureka: Wissensmanagement im technischen Kundendienst bei Xerox" ((Knowledge management among customer service technicians of Xerox) by Andreas Reininghaus, Harald Minrath (http://www.symposion.de/wm-ph/wm-ph_05.htm) and "Eureka! Xerox Has Found It" by Steve Barth (<http://choo.fis.utoronto.ca/mgt/KM.xeroxCase.html>)

Validation Process



Another Validation Process

SK Corporation (Korea)



Source: "SK Corporation" by Jung Hoon Derick Sohn. In: Knowledge Management in Asia: Experiences and Lessons. Tokyo: APO (to be published)



A question to ponder during lunch break –

How Do I Learn?

What are the many different ways that I do (or that happen to me) from which I learn?