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Knowledge Management and the Organization

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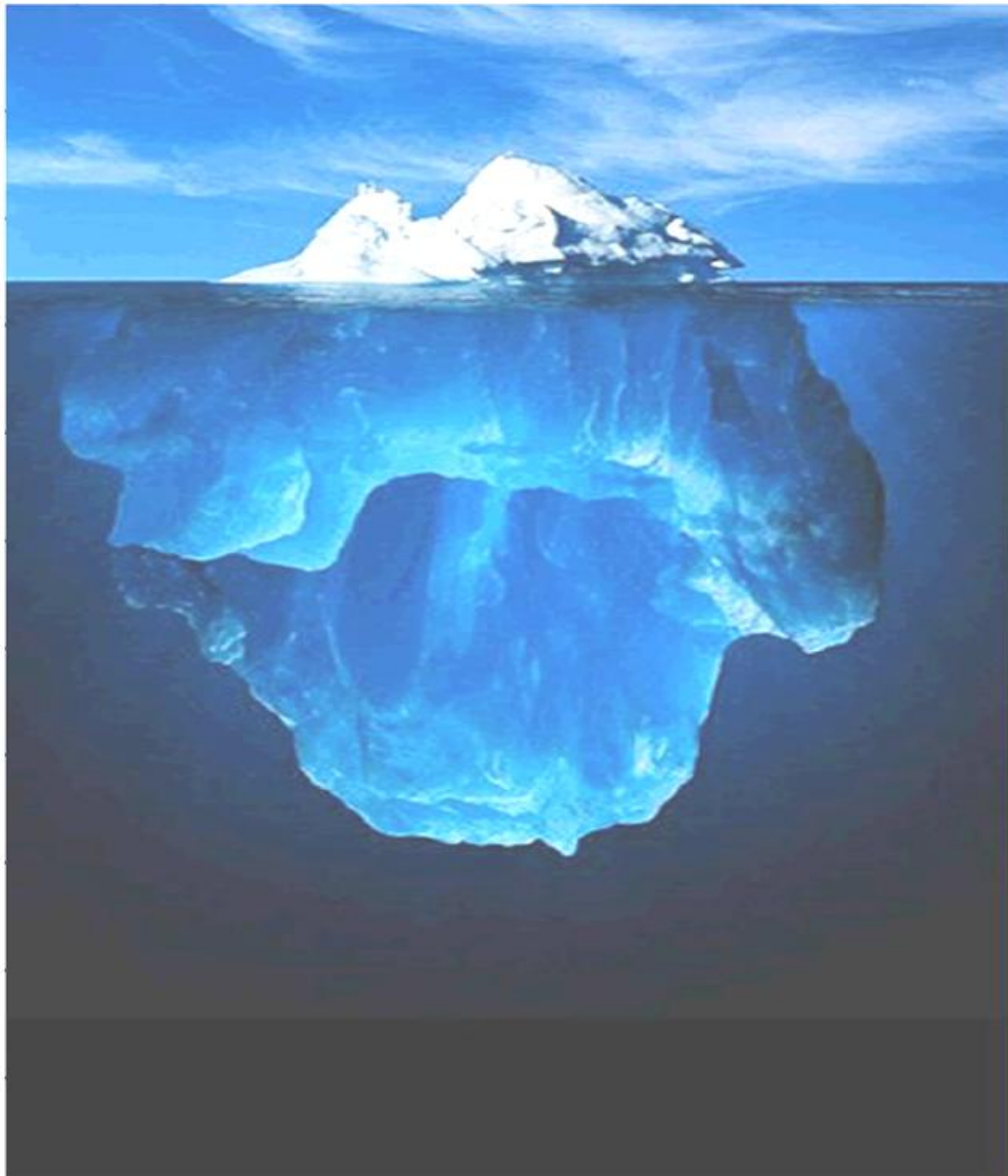
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Introduction

- Traditional value is based on net assets of the company
- New philosophy is that value of firm reflects value of knowledge in organization
- Knowledge is information about the interaction between firm and markets
- Knowledge is **understanding** in **minds** of employees or **stored** in organization about all organizational **processes**



Explicit

We have spoken or written only a small fraction of what we know.

Implicit

With help, we can talk about things that we know but have not yet expressed.

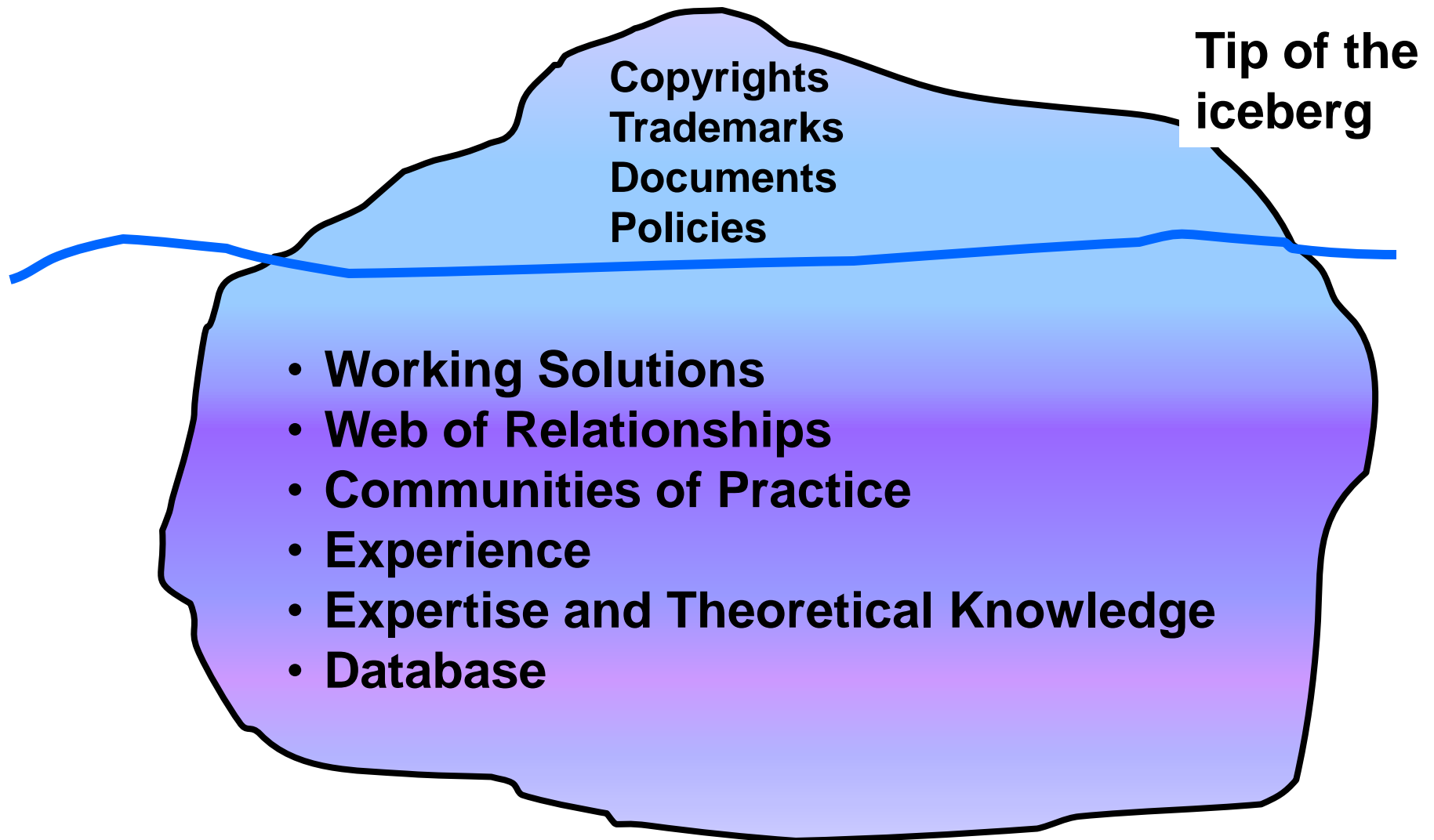
Tacit

We know more than we can say.



Knowledge Assets

Codified Knowledge Assets (Legally Owned)





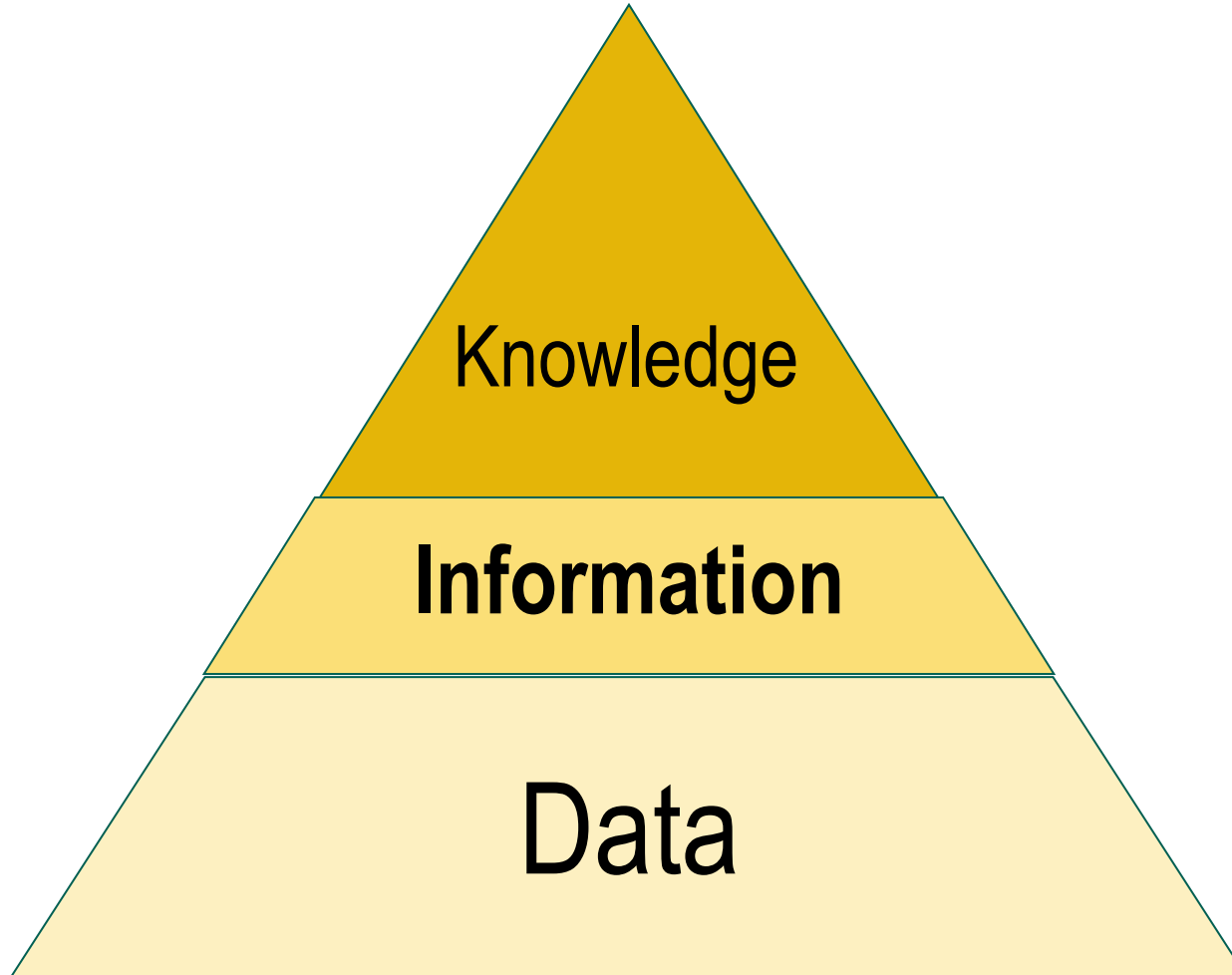
Theory of Organizational Knowledge Creation

- **Tacit knowledge is personal, context-specific, and therefore hard to formalize and communicate.**
- **Explicit or codified knowledge is transmittable in formal, systematic language.**

Tacit Knowledge (Subjective)	Explicit Knowledge (Objective)
Knowledge of experience (body)	Knowledge of rationality (mind)
Simultaneous knowledge (here and now)	Sequential knowledge (there and then)



Knowledge Hierarchy





Data

- Raw data is the simplest and most abundant component of a knowledge management system
- “Data on its own has no meaning...”

Source: [The Free On-line Dictionary of Computing](#)



Information

- Once organized and defined, data becomes information.
- “Data on its own has no meaning, only when interpreted by some kind of data processing does it take on meaning and become information.”

Source: [The Free On-line Dictionary of Computing](#)



Knowledge

- Information that has been processed.
- “If information is data plus meaning then knowledge is information plus processing.”

Source: [The Free On-Line Dictionary of Computing](#)



An Example to Clarify...

- “1234567.89’ is data.
- ‘You’re bank balance jumped 8,087% to \$1,234,567.89’ is information.
- ‘Nobody owes me that much money’ is knowledge.”

Source: [The Free On-Line Dictionary of Computing](#)



- Knowledge covers (Quinn):
 - “Know What”
 - “Know How”
 - “Know Why”

(Possible to add “Know When”)
- Knowledge is critical for national economies
- Drucker suggests knowledge is an organization's most valuable resource

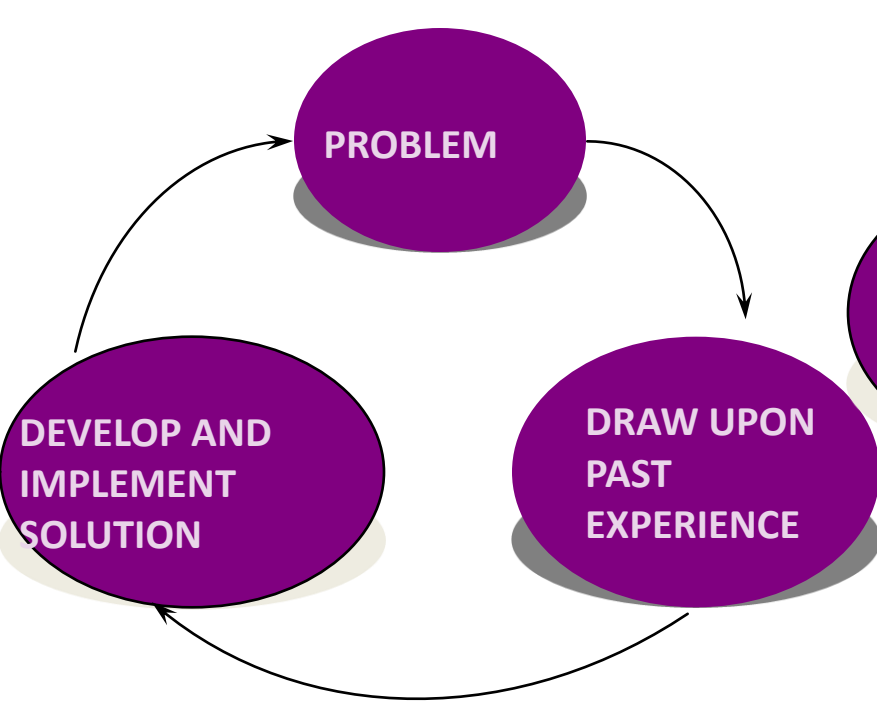


Learning

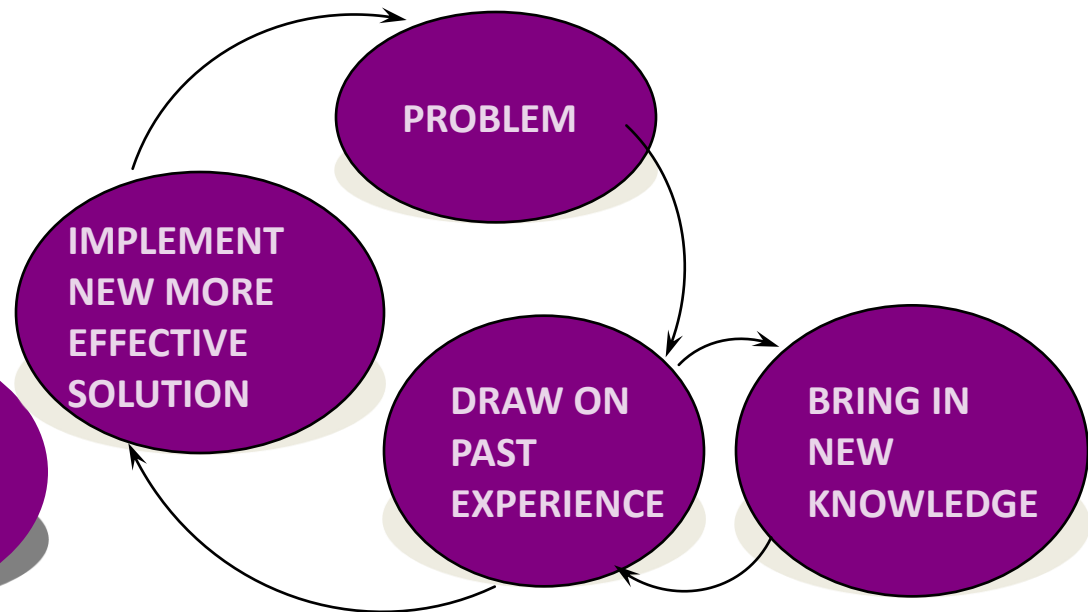
- By using learning, individuals acquire new knowledge
- Narver proposes: learning permits identification of new ways of offering superior products/services
- Woodruff proposes: learning is route to delivering superior customer value
- De Guess believes organizational learning is the only real source of competitive advantage



- Organizational learning has roots in psychology, management science, strategic management, production management, and sociology
- Learning is not sufficient, must be translated into new knowledge that can **upgrade** core competence
- “**Double Loop**” learning permits greater flexibility and adaptive response when compared to “**Single Loop**” learning



(a) Single Loop Learning

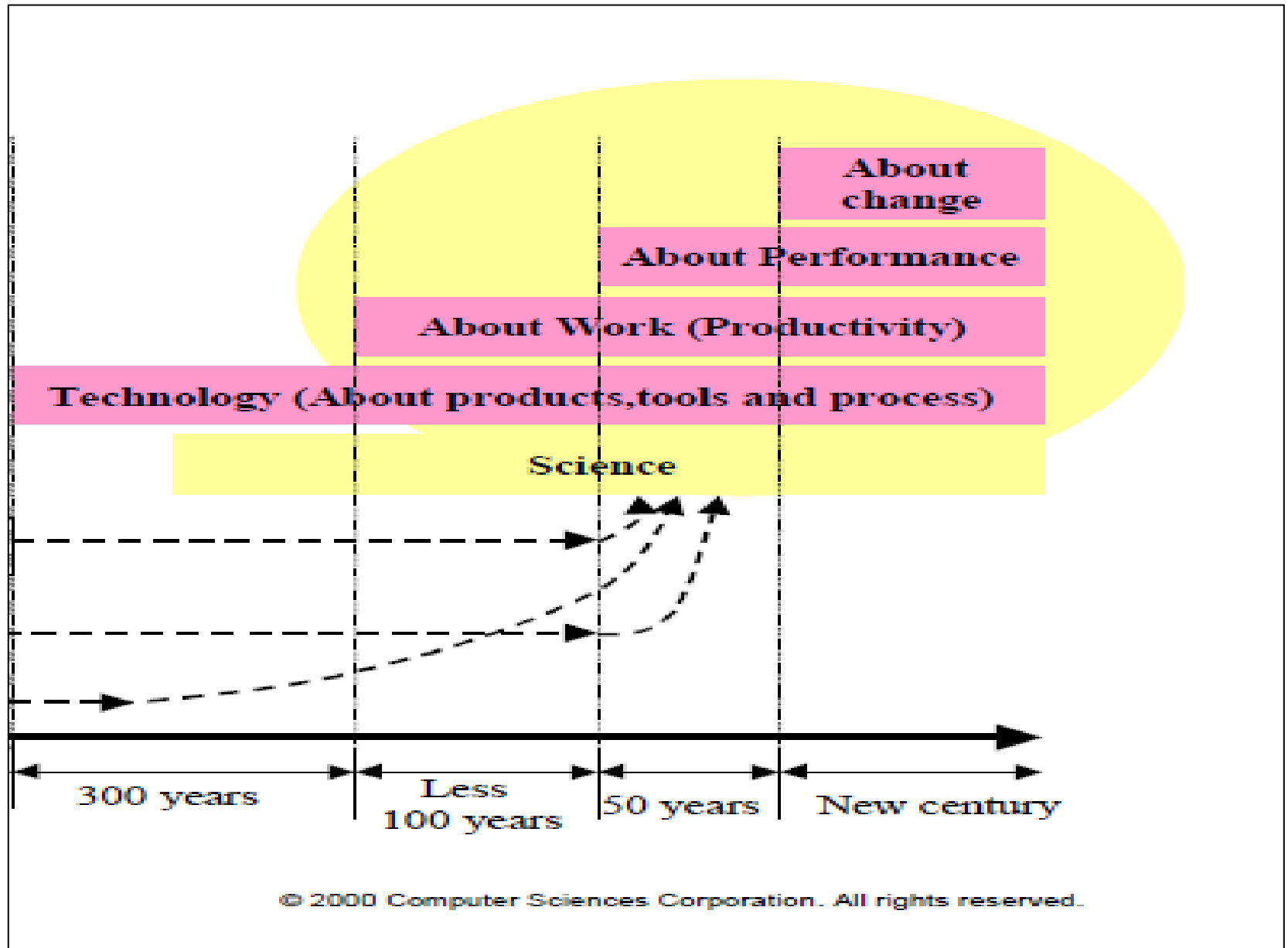


(b) Double Loop Learning

ALTERNATIVE LEARNING STYLES



Knowledge Transformation





Two Kinds of Knowledge

- Explicit Knowledge
- Tacit Knowledge



Explicit Knowledge

- “As a general rule of thumb, explicit knowledge consists of anything that can be documented, archived and codified, often with the help of IT.”
- Examples of Explicit Knowledge include:
 - Any step-by-step process that has been documented
 - Company policies and manuals

Source: “The ABC’s of Knowledge Management”



Tacit Knowledge

- “... The know-how contained in people’s heads.”
- Examples of Tacit Knowledge:
 - Knowing how to hit a baseball
 - Knowledge in any job where you can skip steps/contacts to get what you need more quickly

Source: “The ABC’s of Knowledge Management” and Reference 5.



What is Knowledge Management?

“Knowledge management involves the capture of your organization’s information and experience so that it becomes part of your organization’s **know-how** and **expertise** which can be **pooled**, **disseminated** and **used** by your **skilled** staff in doing and winning profitable business.”

Source: www.retaininternational.com



**KM focuses
on
processes**

**Acquiring
knowledge**

**Creating
knowledge**

**Sharing
knowledge**

**Cultural and technical
foundations that support them**



Knowledge Management can be viewed in terms of:

- **Culture** – The biggest enabler of successful knowledge-driven organizations is the establishment of a **knowledge-focused culture**
- **People** – how do you increase the ability of an individual in the organisation to influence others with their knowledge
- **Structure** – the business processes and organizational structures that facilitate knowledge sharing
- **Technology** – It needs to be chosen only after all the requirements of a knowledge management initiative have been established (a crucial enabler rather than the solution).



The Value of Knowledge Management

- Opportunities are from intellectual rather than physical assets.
- To get the most value from a company's intellectual assets, KM practitioners maintain that **knowledge** must be **shared** and **serve** as the **foundation** for **collaboration**.
- **Yet better collaboration is not an end in itself;** without a **business framework**, KM is meaningless at best and harmful at worst.



The Value of Knowledge Management, cont.

- Consequently, an effective KM program should help the organization do one or more of the following:
 - Foster innovation by encouraging the free flow of ideas;
 - Improve decision making;
 - Improve customer service by streamlining response time;
 - Boost revenues by getting products and services to market faster;
 - Enhance employee retention rates by recognizing the value of employees' knowledge and rewarding them for it;
 - Streamline operations and reduce costs by eliminating unnecessary processes



can result in improved **efficiency, higher productivity** and **increased revenues** in practically any business function.



Knowledge Management Drivers

Knowledge Attrition

costs of employee turnover were a staggering \$2.2 billion per organization. Much of this cost is due to knowledge attrition, which can be effectively minimized using knowledge management techniques.

Despite the economic downturn, voluntary employee turnover remains high. A recent survey by The Global Consulting Firm Deloitte Research revealed an average voluntary employee turnover rate of 20 percent with 81 percent of organizations citing employee turnover as a critical issue. Estimated annual

Knowledge Merging

corporate communications require the merging of disparate and often conflicting knowledge needs.

Since 1990, the annual value of mergers has risen 100 fold reaching a combined \$15 trillion in 1999. Over \$2,000 deals were announced, eight the number of 50 years earlier and more than 30 times as many as in 1980. The recent flurry of corporate mergers coupled with the increased need to integrate global

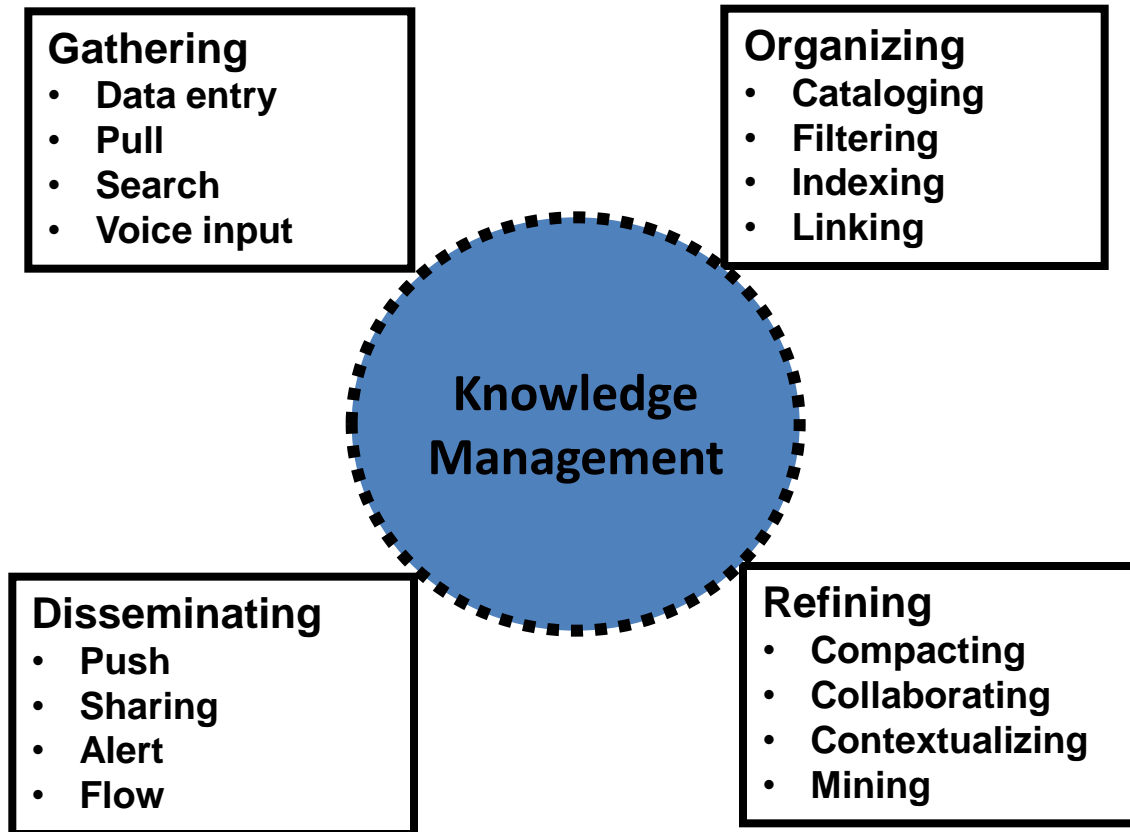
Content Management

E-Government

E-Learning



The World of Knowledge Management



Source: Adapted from Jeff Angus and Jeetu Patel, Knowledge-Management Cosmology, Information Week, March 16, 1998, p. 59.



Managing

- Information Technology permits more effective acquisition, storage and distribution of knowledge
- Nonaka divides knowledge into:
 - Tacit (in minds of employees)
 - Explicit (documented and stored)
- Zack proposes that explicit knowledge consists of:
 - Declarative knowledge which is shared understanding
 - Procedural knowledge of processes
 - General knowledge
 - Specific knowledge

Technologies That Support Knowledge Management





Knowledge is acquired or captured using intranets, extranets, groupware, web conferencing, and document management systems.

An **organizational memory** is formed by refining, organizing, and storing knowledge using structured data warehouses.

Knowledge is distributed through education, training programs, automated knowledge based systems, expert networks.

Knowledge is Applied for further learning and innovation via mining of the organizational memory and the application of expert systems such as decision support systems.

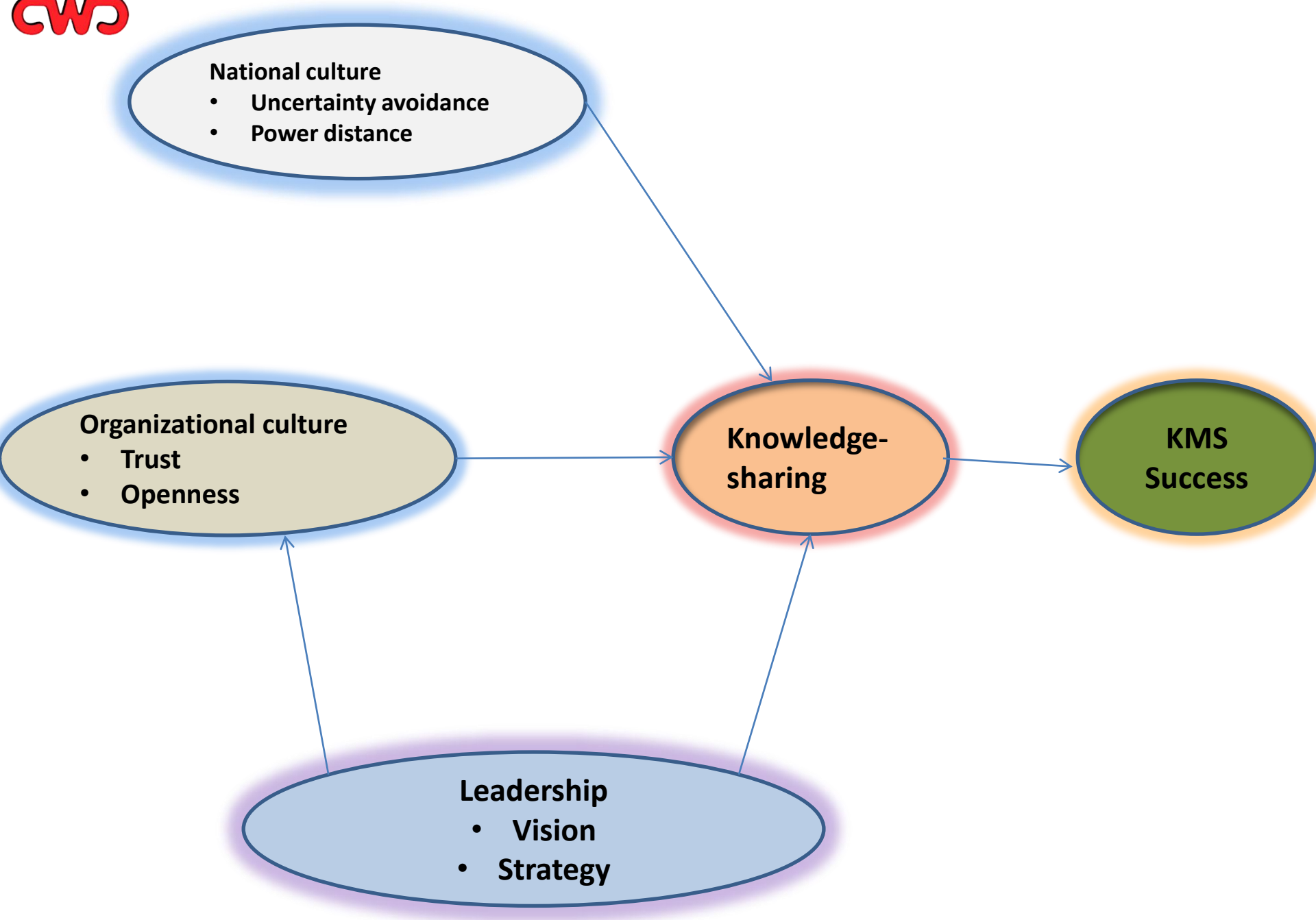
All of these stages are enhanced by effective workflow and project management.

**Knowledge encompasses attitudes and views of
employees**

**Views are influenced by employee
interactions**

**Knowledge will influence actions of
employees**

**By sharing knowledge, performance can be
enhanced**





Factors Leading to Success and Failure of Systems

- Success
 - Organizations must assess need
 - System needs technical and organizational infrastructure to build on
 - System must have economic value to organization
 - Senior management support
 - Organization needs multiple channels for knowledge transfer
 - Appropriate organizational culture
- Failure
 - System does not meet organization's needs
 - Lack of commitment
 - No incentive to use system
 - Lack of integration



Summary

- Organizations are realizing that intellectual capital or corporate knowledge is a valuable asset that can be managed as effectively as physical assets in order to improve performance.
- The focus of knowledge management is connecting people, processes and technology for the purpose of achieving corporate objectives.
- The database professionals of today are the Knowledge Managers of the future, and they will play an integral role in making these connections possible.