

Data & Information

- ◆ "Data are facts, observations, or measures that have been recorded but not put into meaningful context. A single musical note is data."
- ◆ Then data becomes information as soon as it is put into a context, and linked to an object.

Data that has been arranged in a systematic way to yield order and meaning. A series of notes arranged into a tune is information."

Data to Information: The Five Cs

Condensed

Data is summarized in more concise form,
and unnecessary data is eliminated

Contextualized

We know why the data was collected

Calculated

Tabulate, relate and data to form bases for
analysis

Categorized

The basis of Analysis is known

Corrected

Errors have been removed, missing ‘data-holes’ have been accounted for

What is Knowledge?

Knowledge is reasoning about information and data to actively enable performance, problem - solving, decision - making, learning, and teaching.

(Beckman, T 1997)

Definition of Knowledge

Knowledge is a mix of framed experience, values, contextual information, expert insight and intuition that provides an environment and framework for evaluating and incorporating new experiences and information. It originates in individuals' minds but is often embedded in organizational routines, processes, practices, systems, software and norms.

Elements of Knowledge

KNOW

- ◆ Be Aware of
- ◆ Be Familiar with
- ◆ Be Acquainted with

L

L
E
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N

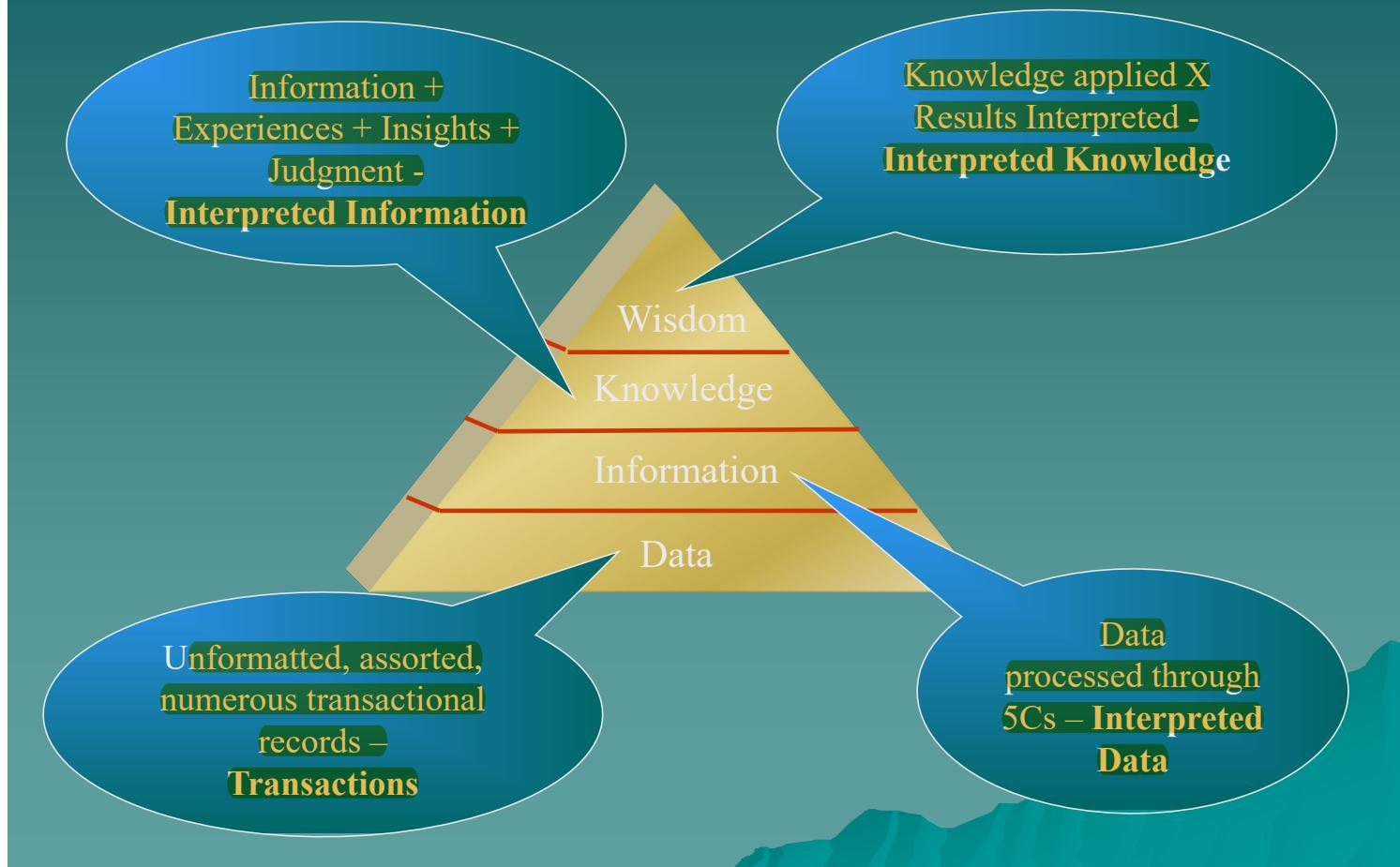
EDGE

- An intense or striking quality (a quality or factor which gives superiority over close rivals)
- A slight advantage over somebody/ something

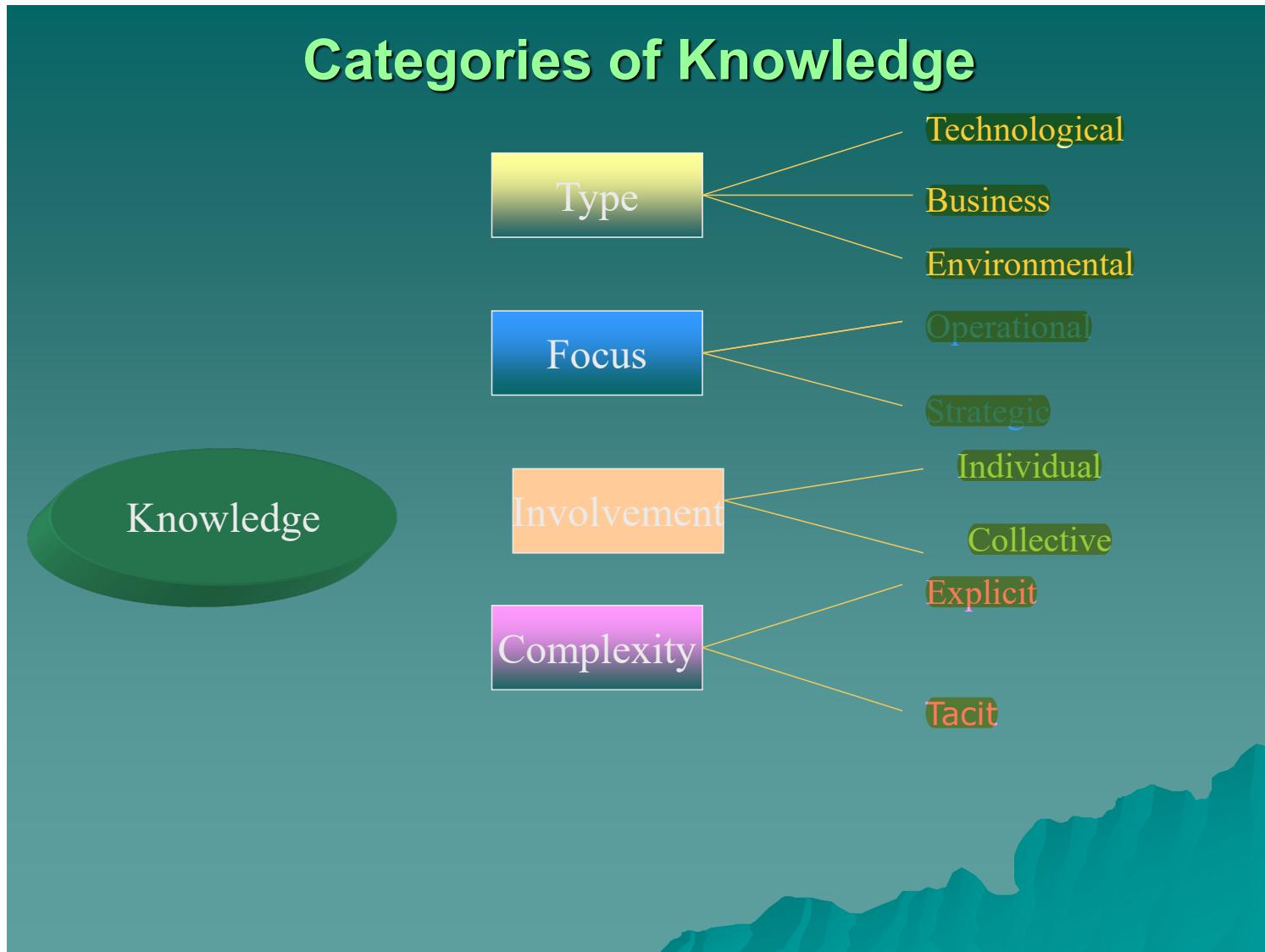
- To be Informed
- To gain Knowledge, Skill or Ability
- To be Skilful

- The term KNOWLEDGE is a process of learning to know to have an edge over others.

D I K W Relationship



Categories of Knowledge



Knowledge – Explicit, Tacit

-
- Explicit Knowledge is that component of knowledge that can be codified and transmitted in a systematic and formal language. documents, databases, web mails, charts, portals etc
 - Tacit Knowledge is personal, context-specific knowledge that is difficult to formalize, record or articulate; it is stored in the heads of the people. It consists of various components, such as intuition, beliefs and values, judgment, and experience, truth, and error. The tacit component is developed by trial and error intelligence. The tacit component is developed by trial and error intelligence. The tacit component is developed by trial and error intelligence. The tacit component is developed by trial and error intelligence. The tacit component is developed by trial and error intelligence.

Building Blocks

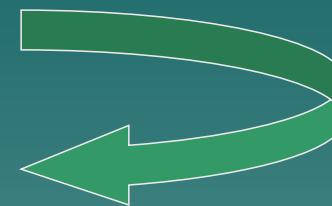
KNOWLEDGE



Explicit

↓
Recorded

Procedures, Manuals,
Documents, Practices....



Tacit

↓
Residing in
Peoples' Heads

Skills, Ideas,
Experience....

Definition of Knowledge Management

- Knowledge Management (KM) is the creation, distribution and exploitation of knowledge to create and retain greater value of core business competencies.
- KM addresses business problems particular to your business – whether it is creating and delivering innovative products or services; managing and enhancing relationships with customers, partners and suppliers; or improving work processes.

- ◆ primary goal : To facilitate opportunistic application of fragmented knowledge through integration.
- ◆ KM is a newly emerging, interdisciplinary business model dealing with all aspects of knowledge within the context of the firm, including knowledge creation, codification, sharing, and how these activities promote learning and innovation. In practice, KM encompasses both technological tools and organizational routines in overlapping parts.

Knowledge Assets

An organization's schematic and content knowledge resources, including knowledge held by the organization's participants, various artifacts belonging to the organization (e.g., documents, manuals, videos), the organization's culture, and its particular infrastructure of roles, relationships, and regulations.

Knowledge Worker

A knowledge worker (also referred to as an intellectual worker or brain worker) is a person employed due to his or her knowledge of a subject matter, rather than their ability to perform manual labor.

The term was coined by Peter Drucker in 1959, as one who works primarily with information or one who develops and uses knowledge in the workplace.

Major Drivers behind KM

- ◆ Globalization of Business
- ◆ Learner organizations
- ◆ Corporate Amnesia
- ◆ Technological advances

The Knowledge Economy

- ◆ The new source of wealth is knowledge, and not labor, land, or financial capital. It is the intangible, intellectual assets that must be managed.
- The key challenge of the knowledge-based economy is to foster innovation.

Definition

- ◆ Knowledge economy is one that creates, disseminates, and uses knowledge to enhance its growth and development.



The Knowledge Economy

For several decades the world's best-known forecasters of societal change have predicted the emergence of a new economy in which brainpower, not machine power, is the critical resource. But the future has already turned into the present, and the era of knowledge has arrived.

--"The Learning Organization," Economist Intelligence Unit

The Knowledge Economy

The knowledge economy is a system of consumption and production that is based on intellectual capital. In particular, it refers to the ability to capitalize on scientific discoveries and applied research.

The knowledge economy represents a large share of the activity in most highly developed economies. In a knowledge economy, a significant component of value may consist of intangible assets such as the value of its workers' knowledge or intellectual property.

The Knowledge Economy

Developing economies tend to be heavily focused on agriculture and manufacturing, while highly developed countries have a larger share of service-related activities. This includes knowledge-based economic activities such as research, technical support, and consulting.

The knowledge economy is the marketplace for the production and sale of scientific and engineering discoveries. This knowledge can be commodified in the form of patents or other intellectual property protections.

Examples Knowledge Economy

Academic institutions, companies engaging in research and development (R&D), programmers developing new software and search engines for data, and health workers using digital data to improve treatments are all components of a knowledge economy.

Intellectual Capital

Intellectual capital is the value of a company's employee knowledge, skills, business training, or any proprietary information that may provide the company with a competitive advantage.

Intellectual capital is considered an asset, and can broadly be defined as the collection of all informational resources a company has at its disposal that can be used to drive profits, gain new customers, create new products, or otherwise improve the business. It is the sum of employee expertise, organizational processes, and other intangibles that contribute to a company's bottom line.

Intellectual Capital

The knowledge economy addresses how education and knowledge—that is, "human capital"—can serve as a productive asset or business product to be sold and exported to yield profits for individuals, businesses, and the economy.

This component of the economy relies greatly on intellectual capabilities instead of natural resources or physical contributions. In the knowledge economy, products, and services that are based on intellectual expertise advance technical and scientific fields, encouraging innovation in the economy as a whole.

Intellectual Capital

The World Bank defines knowledge economies according to four pillars:

Institutional structures that provide incentives for entrepreneurship and the use of knowledge

Availability of skilled labor and a good education system

Access to information and communication technology (ICT) infrastructures

A vibrant innovation landscape that includes academia, the private sector, and civil society.

Intellectual Capital

Intangible Assets could be any asset that can be or cannot be measured, but is used by a company to its advantage.

- ◆ An intangible asset if measured and valued for become the intellectual capital of the company.
- ◆ *Skilled people & their competencies (knowledge / expertise), market positions, goodwill, recognition, achievements, patents, contracts, support, collaborations, brand value, leadership, and loyal customer bases.*
- ◆ Knowledge, collective expertise, goodwill, brand value and patents are not regularly shown up on conventional financial statements.

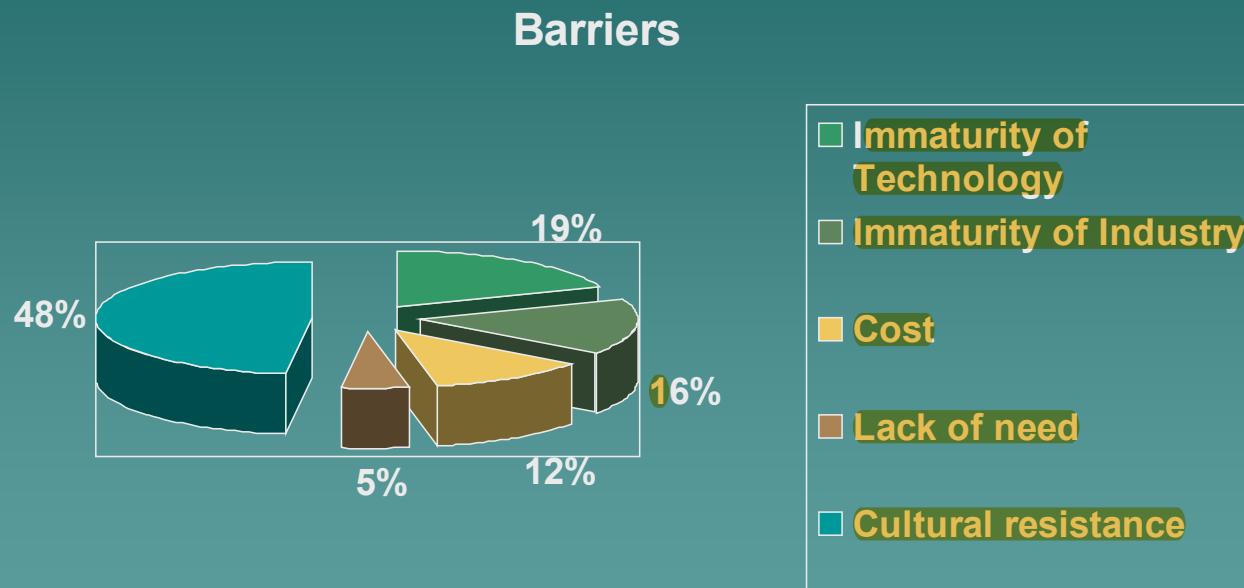
Intellectual Capital

- ◆ Relational capital: All relations a company entertains with external subjects, such as suppliers, partners, clients (brands, ...), research centres, etc.;
- ◆ Human capital: The sum total of the useful knowledge of your employees and your customers with more emphasis on knowledge and competences residing with the company's employees;
- ◆ Organizational capital: Collective know-how, beyond the capabilities of individual employees. E.g.: information systems; policies; intellectual property.

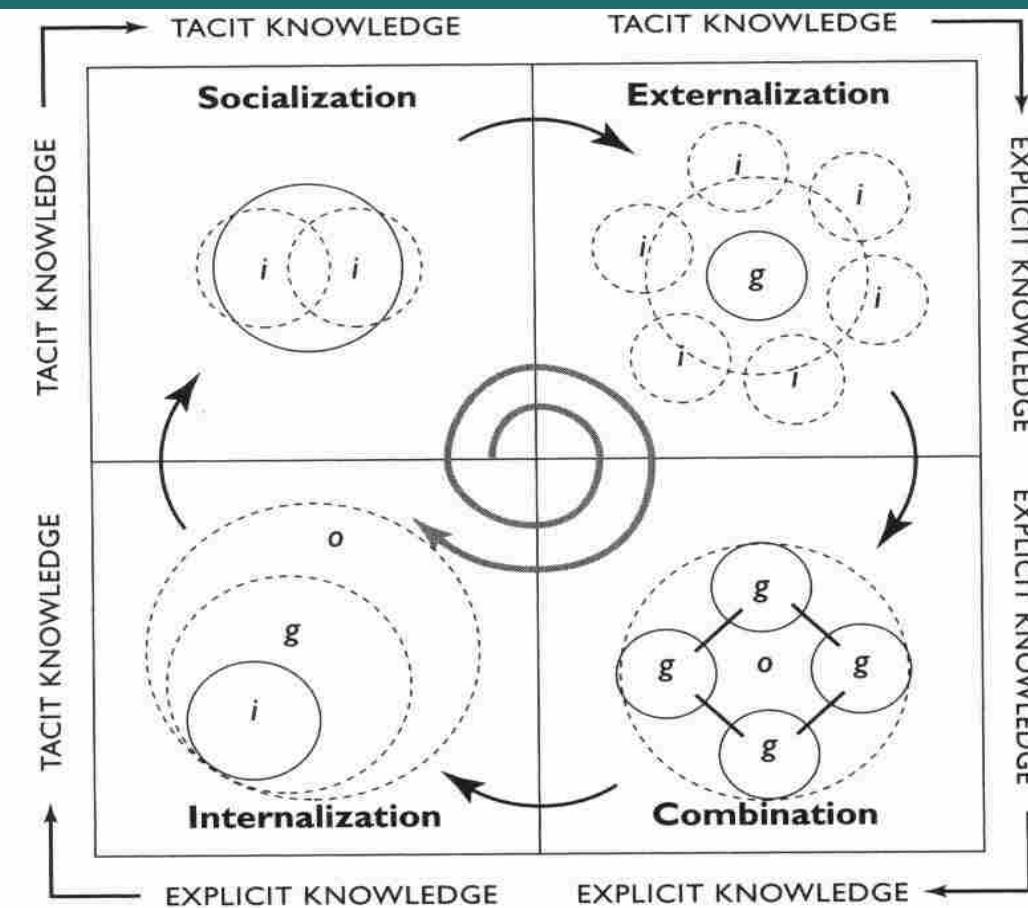
Characteristics of Knowledge Management

- ◆ Pervasive
- ◆ Formal management
- ◆ Involves management of organization
- ◆ Consists of integrated processes
- ◆ Technology serves as backbone
- ◆ Disciplinary approach

Barriers to Knowledge Implementation



MODEL OF KM



i: individual
g: group
o: organization

Externalization

DEFINITION

The U.S. Army troops that arrived in Haiti in 1994 was to remove guns and ammunition from many rebel towns.

> After Action Review(AAR) from First Attempt:

- The soldiers recognized considerable resistance.
- One soldier noted that he had observed few dogs in the town.
- Someone else had noticed that the Haitians were fearful of large German Shepherds that were used by the military police(MP).
- The third person suggested to borrow some dogs from the MP so that in disarming the next town they could use the dogs out front with the hope of reducing the resistance.

> After Action Review from the second town:

- It was noted that the villagers were more cooperative when in their homes than they were in the street.

Wonders of Knowledge Management

