

# Knowledge Management

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# Contents

- *Definition*
- *How Knowledge is used?*
- *Knowledge Management Principles*
- *DM, IM, and KM Relationships*
- *Approaches to Knowledge Management*
- *Summary*

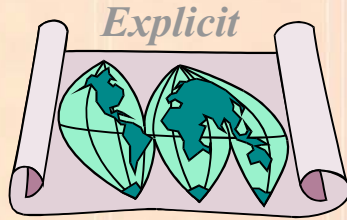
# Definitions

- **Data** = a set of discrete, objective facts about events (ex. structured records of transactions). The raw material of information.
- **Data** + meaning = **Information**
- **Information** + experiences + values + insight = **Knowledge**
- **Data** + **Information** + **Knowledge** = **Intellectual Capital**
- **Individuals** + common interest + sharing of **knowledge** = **Community of Practice**

# Definitions

- **Knowledge Management** is a management philosophy that facilitates the sharing and application of knowledge (on purpose) to attain a competitive advantage.
- The primary goal of knowledge management is to deliver the intellectual capacity of the company to knowledge workers who day-to-day make the decisions that in aggregate determine the success or failure of a business.
- **Knowledge Management** is not simply a set of web pages, a database, a document management system, or group-ware.

# Knowledge: How it is used



Set of data organized into a coherent and reusable form: **Information**.

Created by an expert.

- If that map maker and I share the same culture and background, I can use it.
- Otherwise, it is just useless **data**.
- If I cannot relate to it, then I have to risk it to fall back on the guide

Stored in some form of physical media.

- It can be bought and sold and stolen and measured.
- It can be used by almost anyone familiar with the vocabulary



Knowledgeable

- does not need to consult a map
- takes into account recent experience and current situations.
- relates my ability to his knowledge of the terrain.
- may use the map but uses it differently than I would.

Stored in humans - one or more individuals.

Leaves when the person leaves.

- Flexible and easy to apply to current situations.
- It is transmitted through conversation, relationships, training. Sharing always creates something new.

*Tacit*

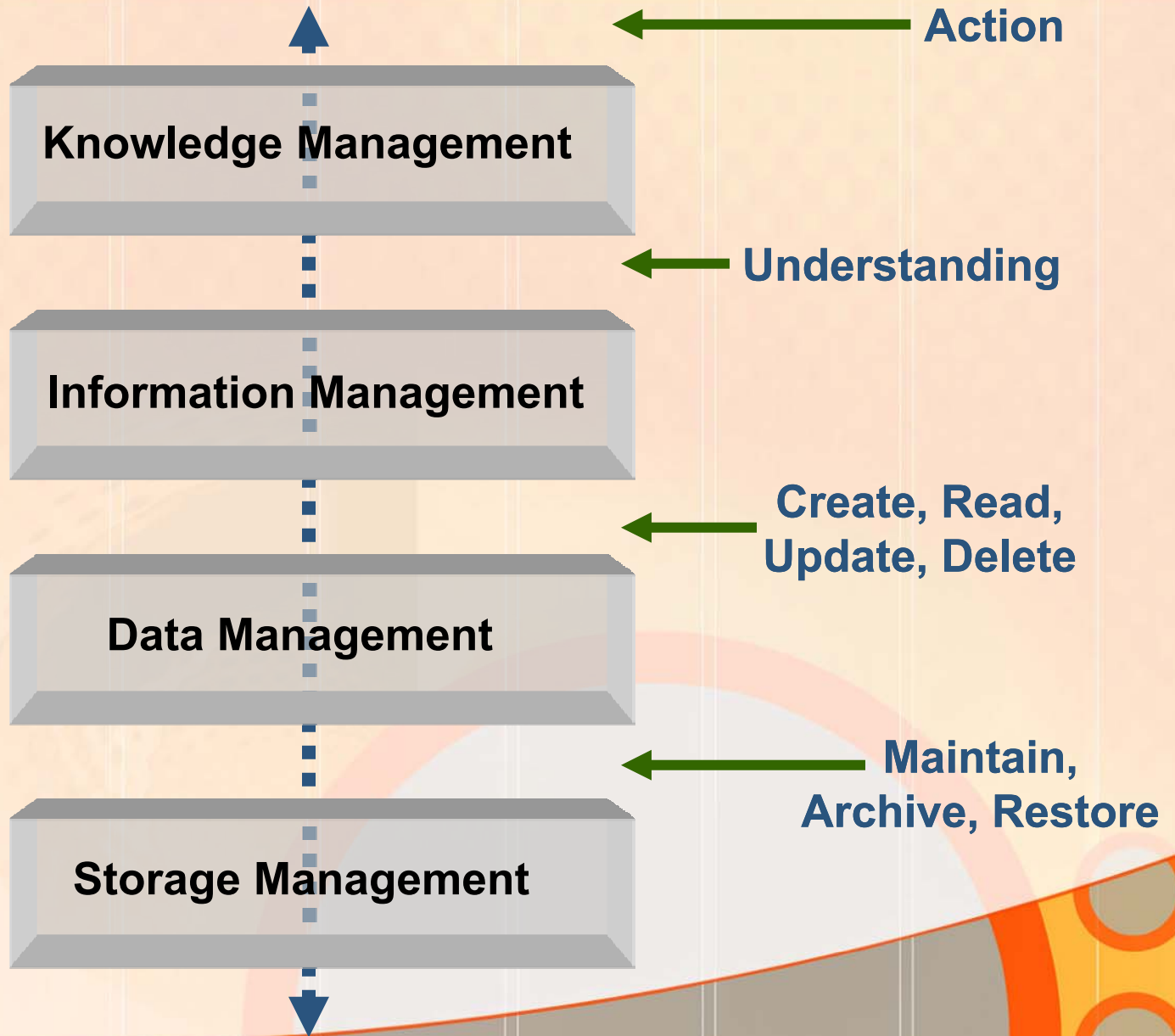


# Knowledge Management Principles

## Example: British Petroleum

Knowledge Management Principles	BP's Virtual Teamwork Program
Knowledge originates and resides in people's minds.	Members of knowledge communities were identified, then linked by technology
Knowledge sharing requires trust.	Relationships were built through actual and virtual face-to-face meetings.
Technology enables new knowledge behaviors.	Technology was used for communication and collaboration; training emphasized goals, not hardware and software.
Knowledge sharing must be encouraged and rewarded.	Training and upper-management support emphasized the importance of new behaviors.
Management support and resources are essential.	Upper management initiated project and authorized funds and the core team.
Knowledge initiatives should begin with a pilot program.	Five test groups allowed for variety and clear, limited goals.
Quantitative and qualitative measurements are needed to evaluate the initiative.	Savings and productivity increases were quantified: expanding virtual team use and participant enthusiasm were qualitative measures.
Knowledge is creative and should be encouraged to develop in unexpected ways.	In addition to having specific goals, the project left room for the unexpected.

# Relationships



# Approaches to Knowledge Management

Tacit Knowledge



Explicit Knowledge

## Facilitated Transfer

- Mentors and Coaches
- Matchmakers
- Knowledge Shoppers
- Indexers, Content Stewards
- Organizational Development
- Stand up training

## Knowledge Services & Networks

- Help Desk
- Communities of Practice / Cross Functional Teams
- Sharing Fairs
- Brown bags
- Working existing networks

## Self-Help +

- Case-base troubleshooting
- Web Search
- Yellow Pages
- Best Practice Databases
- Chat
- CBT

Resources Required

Source: O'Dell, APQC

# Selecting Appropriate Methods to Deliver Knowledge

## One-on-One, Person-to-Person

- Job Rotations (Rotate Novices)
- Job Rotations (Rotate Experts)
- Roving experts
- Apprenticing programs
- On-site experts as part of team (Pooling of expertise)
- Expert networks
- "Water Cooler" Discussions
- "Big brother" or Sponsor relationships
- Collaborative teams

## One-to-Many, Real-Time, Person-to-Person

- Classroom training sessions
- Classroom education sessions
- Video-based lectures
- Video-based interactive lectures

## Passive Repositories (Documents)

- Procedures manuals
- Text books
- White papers
- Flyers on specific topics (job aides)
- Specially designed videotaped programs

## One-to-Many, Media-based, Personal

- Audio or Video training and education lectures
- Televised educational courses
- Correspondence Courses
- Educational courses over computer service networks
- Bulletin boards on network

## Active, Computer-Based Work Aids

- Computer applications performing "No Brainers"
- Case based reasoning systems (CBR)
- Complex reasoning systems (KBS)
- Neural nets
- Virtual reality systems

## Training and Education Program

- Paper-based training manuals
- Conventional training programs
- Multimedia Computer-Based Training
- Interactive Multimedia Computer-Based Training with Feedback

## Management, Infrastructure, Cultural, and Other Embedded Changes

- Policy changes
- Incentives changes
- Organization changes
- Work practice changes
- Systems and procedures changes
- Product and service changes

# ***In Summary***

- *KM is something we have all done, if informally.*
  - *We keep knowledge in our brains, in our culture, in our processes, and we write it down.*
  - *Sharing is hard to do, not always rewarded, and sometimes scary... But we have all benefited from others sharing their knowledge with us.*
  - *It begins with trust and requires risk.*
- *KM begins with how people use information rather than IT*
- *KM is 10% technology + 80% culture + 10% the magic that happens when people get together.*