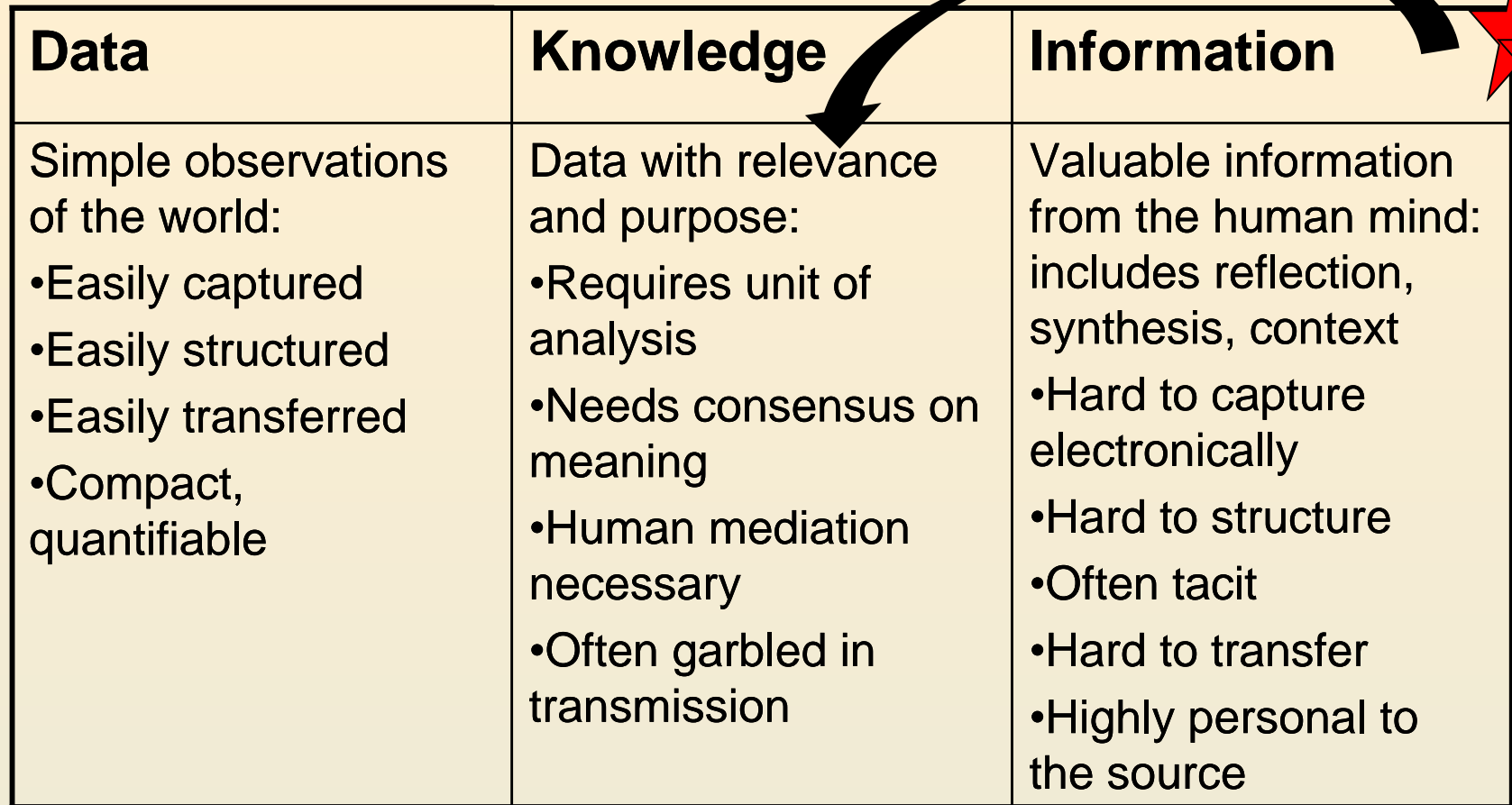


Managing Business Knowledge

**Managing and Using Information Systems: A
Strategic Approach**

by Keri Pearlson & Carol Saunders



Data	Knowledge	Information
Simple observations of the world: <ul style="list-style-type: none">•Easily captured•Easily structured•Easily transferred•Compact, quantifiable	Data with relevance and purpose: <ul style="list-style-type: none">•Requires unit of analysis•Needs consensus on meaning•Human mediation necessary•Often garbled in transmission	Valuable information from the human mind: includes reflection, synthesis, context <ul style="list-style-type: none">•Hard to capture electronically•Hard to structure•Often tacit•Hard to transfer•Highly personal to the source

More human contribution →

Greater value →

Figure 12.1 The relationships between data, information, and knowledge.

Knowledge

- Knowledge is a mix of contextual information, experiences, rules, and values.
- Richer, deeper, and more valuable.
- Consider knowing –
 - What? - based upon assembling information and eventually applying it.
 - How? – applying knowledge leads to learning how to do something.
 - Why? – casual knowledge of why something occurs.
 - (Figure 12.2 graphically illustrates these types of knowing).

Tacit vs. Explicit Knowledge

- **Tacit** knowledge is personal, context-specific and hard to formalize and communicate
 - A [knowledge] developed and internalized by the knower over a long period of time . . . incorporates so much accrued and embedded learning that its rules may be impossible to separate from how an individual acts. **‘knowing how’**
- **Explicit** knowledge can be easily collected, organized and transferred through digital means.
 - A theory of the world, conceived of as a set of all of the conceptual entities describing classes of objects, relationships, processes, and behavioral norms. Often referred to as **‘knowing that’**, or declarative knowledge.
- See Figure 12.3 for more examples.

Tacit Knowledge

- Knowing how to identify the key issues necessary to solve a problem
- Applying similar experiences from past situations
- Estimating work required based on intuition & experience
- Deciding on an appropriate course of action

Explicit Knowledge

- Procedures listed in a manual
- Books and articles
- News reports and financial statements
- Information left over from past projects

Figure 12.3 Examples of explicit and tacit knowledge



From Managing Knowledge to BI

- Managing knowledge is not a new concept, but one reinvigorated by IT.
- KM is still an emerging discipline
- **Business Intelligence (BI) term used to describe the set of technologies and processes used to describe business performance.**
 - **BI is a component of KM.**
- Business Analytics – use of quantitative and predictive models, and fact based mgmt to drive decisions.
- **An organization's only sustainable competitive advantage lies with how its employees apply knowledge to business problems**
- KM is not a magic bullet.

Why Manage Knowledge?



- Information and knowledge have become the fields in which businesses compete.
- Several important factors include:
 - Sharing Best Practice
 - Globalization
 - Rapid Change
 - Downsizing
 - Managing Information and Communication Overload
 - Knowledge Embedded (inclure) in Products
 - Sustainable Competitive Advantage
 - Figure 12.4 summarizes these trends.

- Avec en plus la rareté de la m-o
- Lien IA pour définir les algorithmes

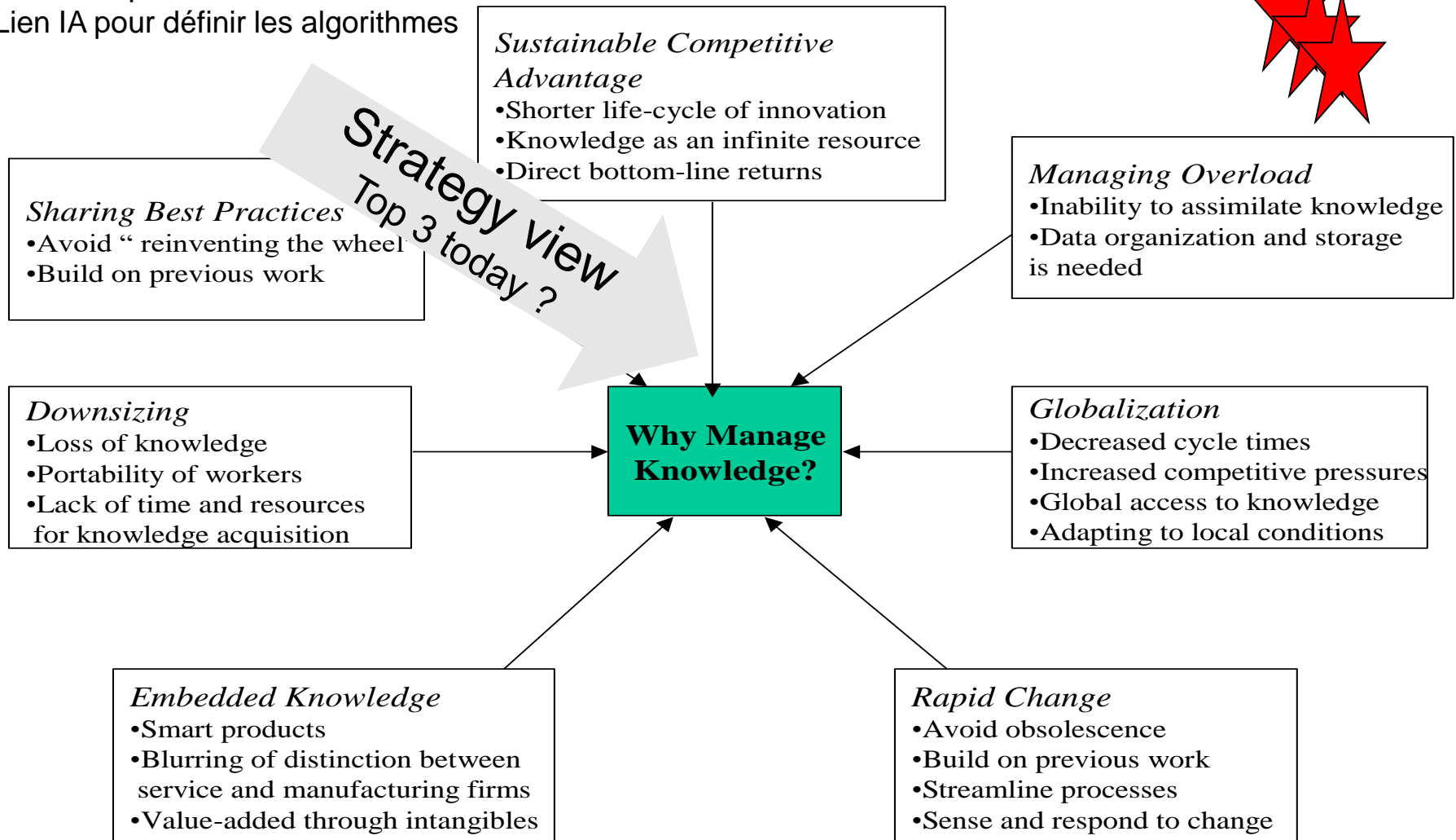
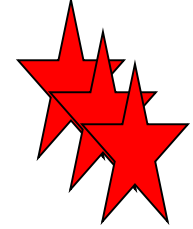


Figure 12.4 Reasons for Managing Knowledge. ©IBM Global Services

Sharing Best Practices

- Sharing best practices means leveraging the knowledge gained by a subset of the organization.
- Increasingly important in organizations who depend on applying their expertise such as accounting, consulting and training firms.
- KM systems capture best practices to disseminate their experience within the firm.
- Problems often arise from employees who may be reluctant to share their knowledge (managers must encourage and reward open sharing).

Globalization

- Historically three factors, ***land***, ***labor*** and ***capital*** were the key to economic success
- ***Knowledge*** has become a fourth factor.
- Knowledge-based businesses can grow without traditional land, labor, and capital requirements.
- Key competitive factor will be how well an organization acquires and applies knowledge.

Other factors

- **Rapid change:** firms must be nimble (agile) and adaptive to compete
- **Downsizing:** sometimes the wrong people get fired when creating a leaner organization
- **Managing Info and Comm Overload:** data must be categorized in some manner if it is to be useful rather than overwhelming
- **Knowledge Embedded (intégré) in Products:** the intangibles that add the most value to goods and services are becoming increasingly knowledge-based
- **Sustainable Competitive Advantage:** KM is the way to do this. Shorter innovation life cycles keep companies ahead of the competition.

Summary



- KM is related to information systems in three ways: IT makes up its infrastructure, KM makes up the data infrastructure for many IS and apps, and KM is often referred to as an app of IS.
- Data, information, and knowledge should not be seen as interchangeable.
- The 2 kinds of knowledge are tacit and explicit.
- Manage knowledge carefully, there are many valid and of course legal reasons.
- KM projects can be measured using project-based measures.