INFORMATION

Deepak Kumar
Based (mostly) on Luciano Floridi's
Information: A Very Short Introduction,
Oxford, 2010.

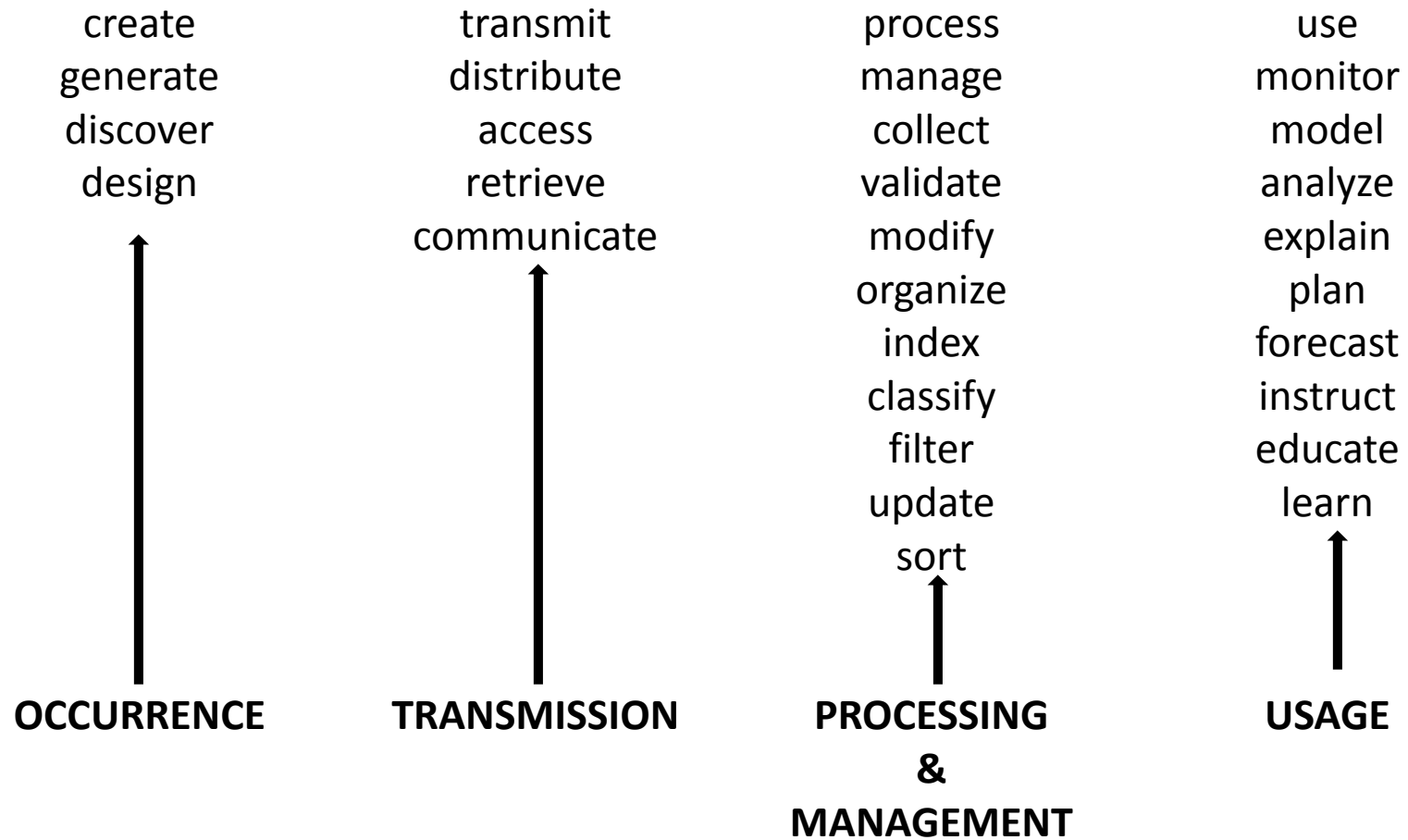# Information

create	transmit	process	use
generate	distribute	manage	monitor
discover	access	collect	model
design	retrieve	validate	analyze
	communicate	modify	explain
		organize	plan
		index	forecast
		classify	instruct
		filter	educate
		update	learn
		sort	

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OCCURRENCE   **TRANSMISSION**   **PROCESSING**   **USAGE**
&
MANAGEMENT

Information Life Cycle

Create
Generate

Collect

Record
Store

Process

Distribute
Transmit

Consume
Use

Recycle
Erase
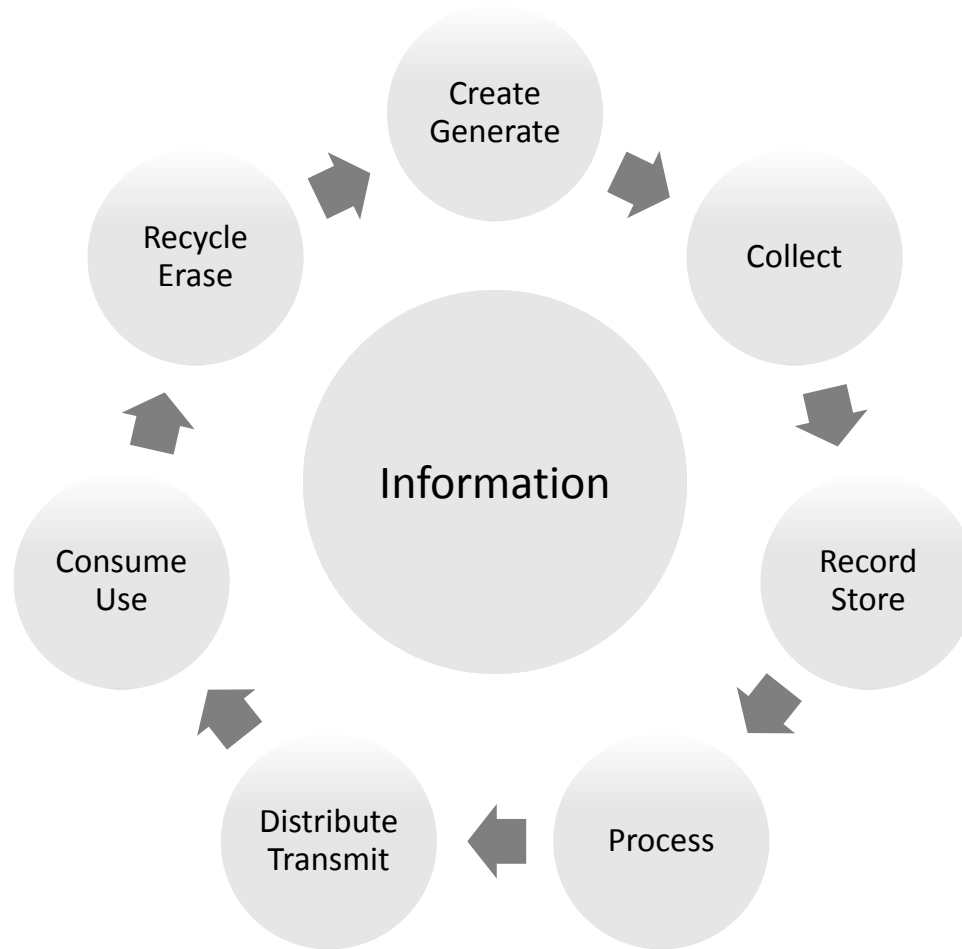
Information

The Information Societies

- **Intangible assets and services:** business, property, communications, finance, insurance, entertainment
- **Public Sectors:** education, public administration, health care
- At least 70% of GDP depends on intangible goods.
- **Requires data:** More than anyone has seen in entire history!

The Zettabyte Era: Data Deluge

- Humanity had accumulated an estimated ~12 exabytes of data prior to computers.

- In 2002 alone, print, film, magnetic, and optical storage media produced >5 exabytes of data (over 92% stored on magnetic disks).

- Between 2006-2010 the global quantity of digital data will have increased more than 6x from 161 exabytes to 988 exabytes [Exaflood].

- **Question: What is the planet's digital storage capacity?**

Information & Communications Technologies (ICTs)

- Lots of advantages: education (MOOCs anyone?), welfare, prosperity, economic, scientific advances, etc.

- Also: Significant risks, new dilemmas, profound questions, etc.

- What are the conceptual, cultural, and ethical roots of information societies?

Gear up!

- "It is high time we start digging deeper, top-down, in order to expand and reinforce our conceptual understanding of our information age, of its nature, of its less visible implications, and of its impact on human and environmental welfare, and thus give ourselves a chance to anticipate difficulties, identify opportunities, and resolve problems."
-: Floridi, p8.

The Fourth Revolution

- Copernicus, 16th century

- Darwin, 19th century

- Freud, 19-20th century

- Turing, 20th century

Luciano Floridi Video: The Fourth Technological Revolution, TEDxMaastricht, April 2011.

The Information Age

- Infosphere

- Inforgs

Siri

Use your voice to send messages, set reminders, search for information, and more.

Re-ontologizing our world?

From: http://bigbangtheory.wikia.com/wiki/Siri

Re-ontologizing…

Materialist ⟶ Informational

9/4/2012   Mars Rover Curiosity. Photo Courtesy of NASA, www.nasa.gov (2012)
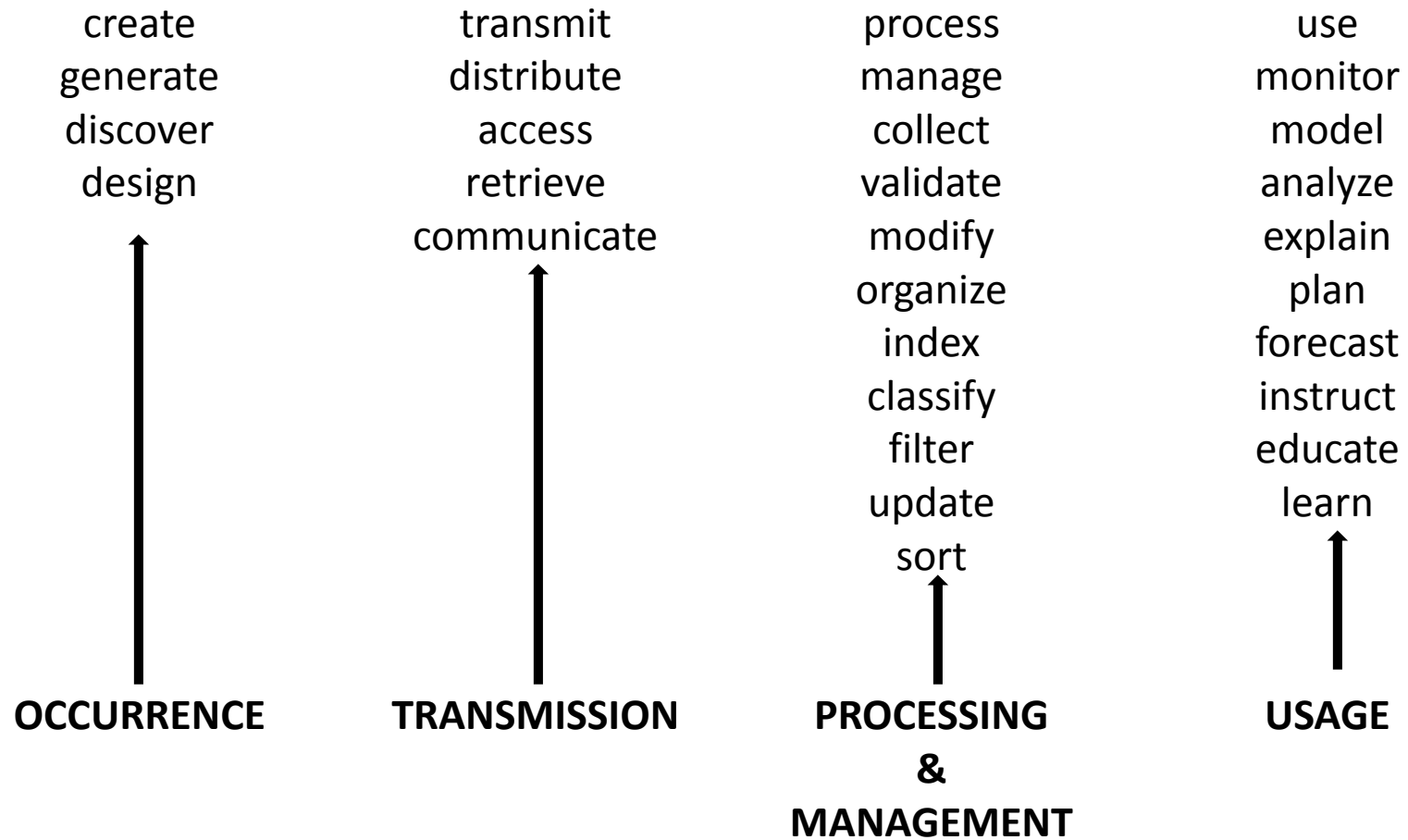
Creating ITentities with RFID tags.
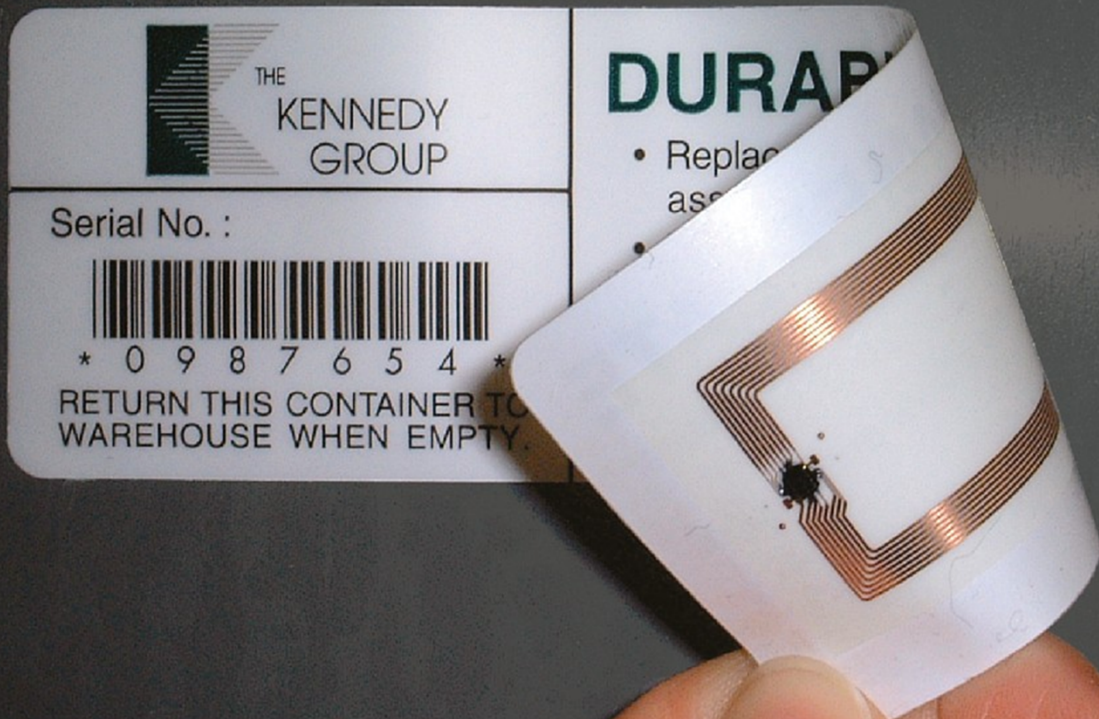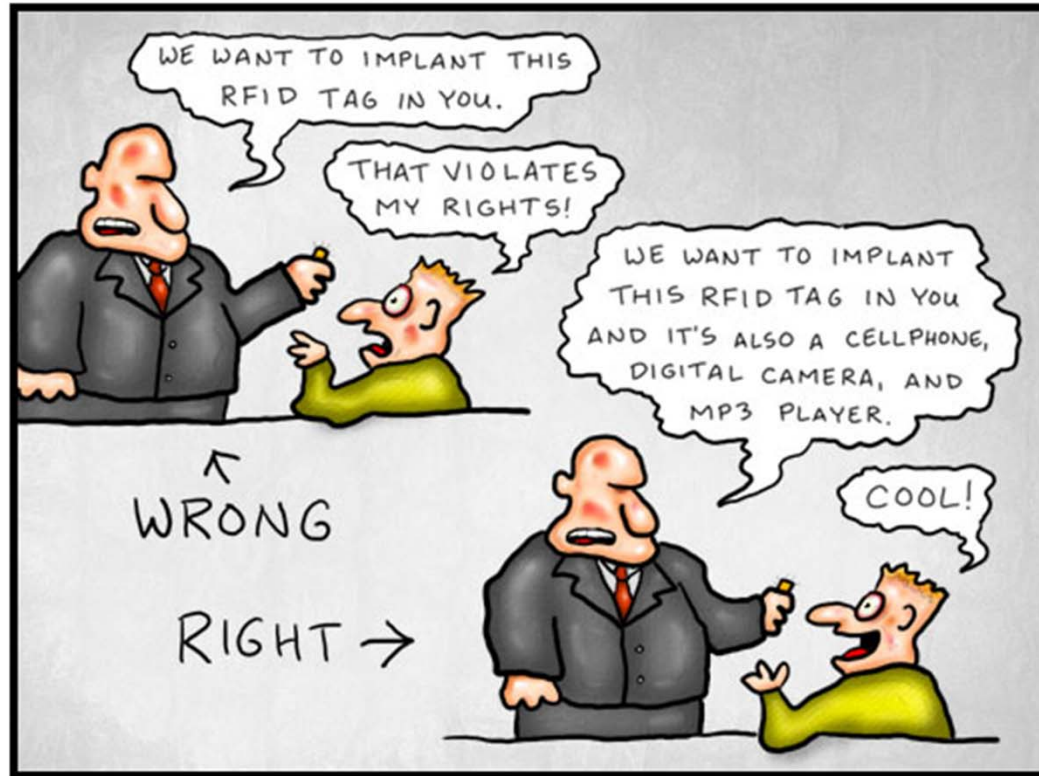
The (Information) Rich

The Digital Divide

The (Information) Poor

Information:
Foundations & Applications

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OCCURRENCE   **TRANSMISSION**   **PROCESSING &**   **USAGE**

MANAGEMENT

Next,

Defining Information