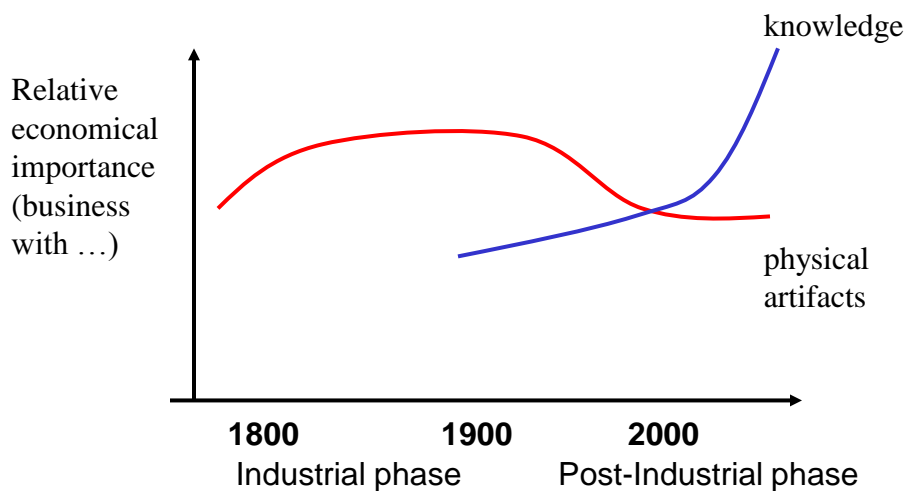


The new economy: e-commerce, intellectual property rights, trust and other dangerous things

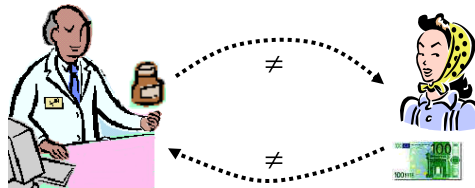
Prof. Dr. G.W.M. (Matthias) Rauterberg
Faculty Industrial Design
TU/e Technical University Eindhoven

From **old** to **new** economy

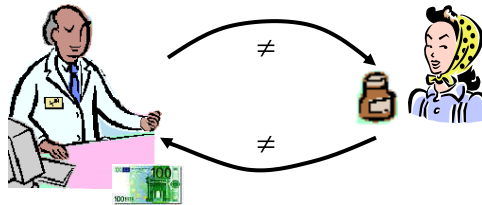


Business in the **old economy**...

Before a deal



After a deal



© TU/e M. Rauterberg

3

Definition of Data

1 : **factual information** (as measurements or statistics) used as a basis for reasoning, discussion, or calculation;

2 : information output by a sensing device or organ that includes both useful and irrelevant or redundant information and **must be processed to be meaningful**;

3 : information in numerical form that can be **digitally transmitted or processed**.

[source [Webster's Dictionary](#)]

© TU/e M. Rauterberg

4

Definition of Information

1 : the **communication** or **reception of knowledge** or intelligence;

2 a (1) : **knowledge** obtained from investigation, study, or instruction (2) : intelligence, news (3) : facts, data

b : the attribute inherent in and communicated by one of two or more alternative sequences or arrangements of something (...) that produce specific effects

c (1) : a signal or character (...) representing data (2) : something (...) which justifies change in a construct (...) that represents physical or mental experience or another construct

d : a quantitative measure of the **content of information**; *specifically* : a numerical quantity that measures the uncertainty in the outcome of an experiment to be performed;

3 : the **act of informing** against a person;

4 : a formal accusation of a crime made by a prosecuting officer as distinguished from an indictment presented by a grand jury.

[source [Webster's Dictionary](#)]

© TU/e M. Rauterberg

5

Definition of Knowledge

1 *obsolete* : cognizance;

2 a (1) : the fact or condition of **knowing something** with familiarity gained through experience or association (2) : acquaintance with or understanding of a science, art, or technique,

b (1) : the fact or condition of **being aware of something** (2) : the range of one's information or understanding (...),

c : the circumstance or condition of apprehending truth or fact through reasoning : cognition

d : the fact or condition of **having information** or of being learned (...);

3 *archaic* : sexual intercourse;

4 a : the **sum of what is known** : the body of truth, information, and principles acquired by mankind,

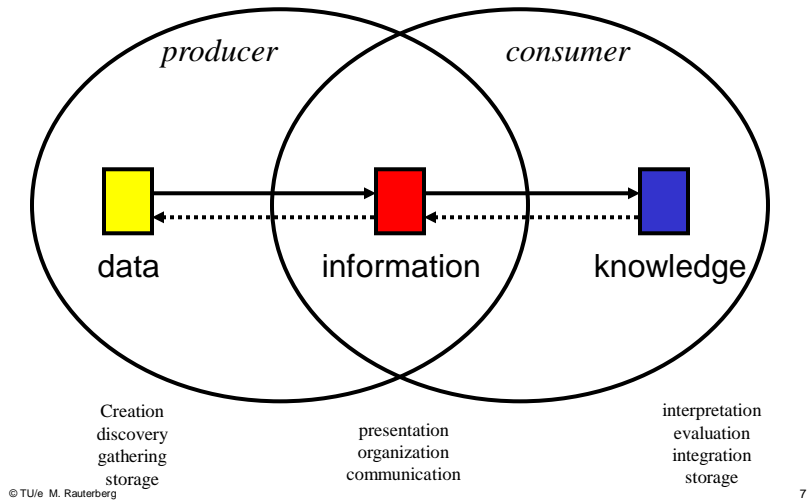
b *archaic* : a branch of learning.

[source [Webster's Dictionary](#)]

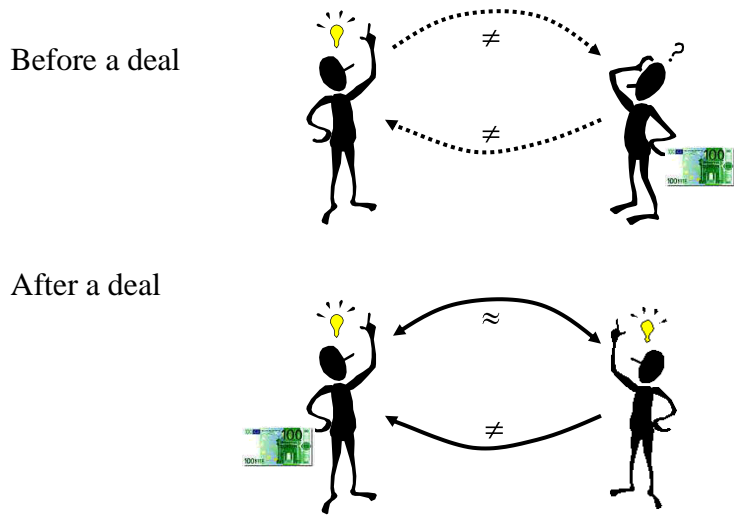
© TU/e M. Rauterberg

6

Data, Information and Knowledge



Business in the *new economy*...



How to make money, if...

	Old economy	New economy
Access to natural resources	limited	irrelevant
Access to knowledge	limited	“unlimited”

The new economy has to make business with *copying* knowledge!

© TU/e M. Rauterberg

9

Crucial success factors

- Trust:** Consumers' lack of trust can be explained by *concerns* in terms of:
- Security
 - Privacy
 - Difficulty of use
 - Lack of direct interaction (products/services & people)
 - Unfamiliarity of new business models
 - Legitimacy of businesses
 - Credibility of information and knowledge

[F. EGGER, 2001: Trust in e-commerce. PhD project at TU/e]

Knowledge transfer:

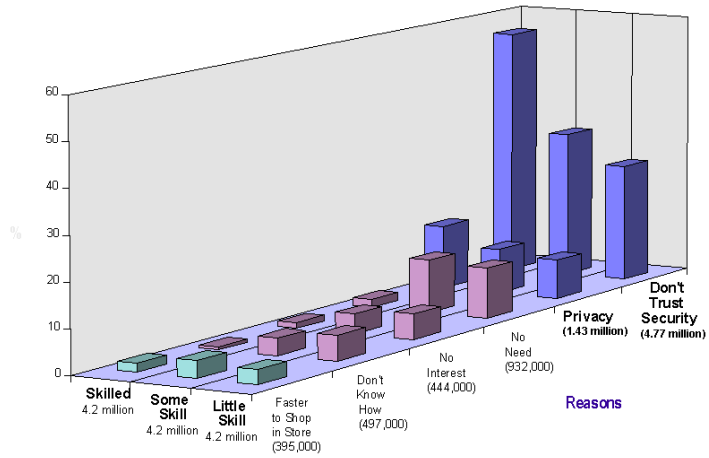
- 70% of knowledge specialists and other business leaders feel they are “reinventing the wheel daily at their jobs.”
- 90% of lessons being learned are not being shared with the organization.

[L. MILLER, 2000: International publish report on knowledge management research-
Strategies for the Knowledge Economy: From Rhetoric to Reality. Internal Auditor, October 2000 vol. 57 no. 5, p. 13] 10

Skill Interacts with the Reasons Consumers Do Not Buy On the Web

Base: 12.6 million Nonbuyers *Not At All Likely to Buy in the Future*
Who Gave Reason(s) for Nonbuying
(31% of all Nonbuyers)

N.B. Nonbuyers are 90% of all Web Users



Analyses based on data from the 1997 CommerceNet/Nielsen Internet Demographic Survey

© TU/e M. Rauterberg

11

Limiting factors

Trust

- perceived trustworthiness \neq objective trustworthiness
- individuals differ as to their *general propensity* to trust

Attention

- human attention span is NOT unlimited
- 'new economy' leads to 'attention economy'

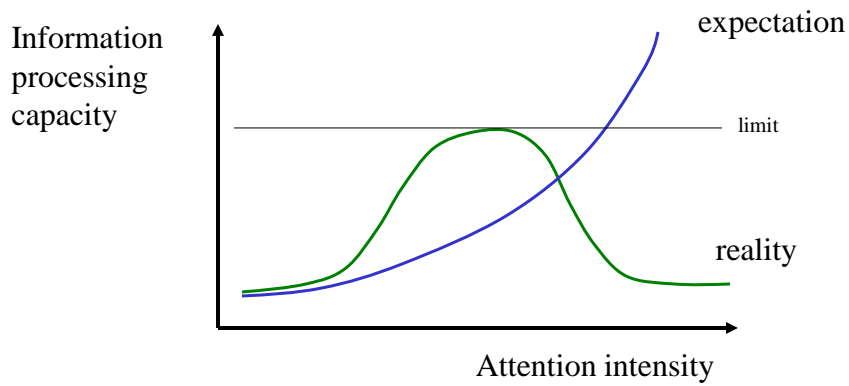
Intellectual property rights

- guarantee of the distinction between *original* and *copy*
- automated copy-right checker
- punishability (can and will lead to mistrust!)

© TU/e M. Rauterberg

12

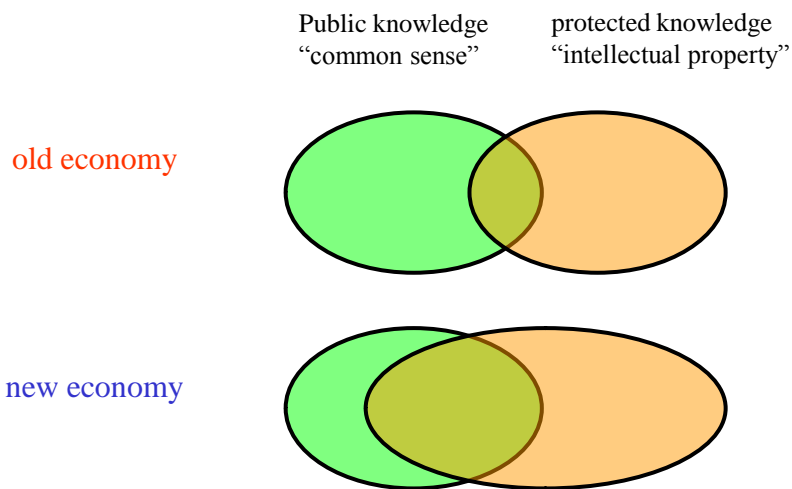
Information and Attention



© TU/e M. Rauterberg

13

Public versus protected Knowledge



© TU/e M. Rauterberg

14

Possible solutions...

Old economy

- ownership rights
- product charge
- natural decay
- limited edition
- etc.

New economy

- intellectual property rights
- consumption charge
- time bounded
(e.g. stock market)
- expertise bounded
(e.g. consultant)
- process bounded
(e.g. service)
- context bounded
(e.g. counter intelligence)
- access bounded
(e.g. information broker)
- etc.

© TU/e M. Rauterberg

15

Summary

- selling knowledge means making ‘copies’
[successful knowledge transfer leaves the source untouched]
- the new economy will be an attention economy
[production is unlimited, consumption is limited]
- free communication is essential for trust
- trust is essential for selling knowledge

Do you trust me?

© TU/e M. Rauterberg

16