

FACULTY OF INFORMATICS  
MASARYK UNIVERSITY



# **Knowledge Management**

## **Department of Computer Systems and Communications**

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**The pillars of knowledge**

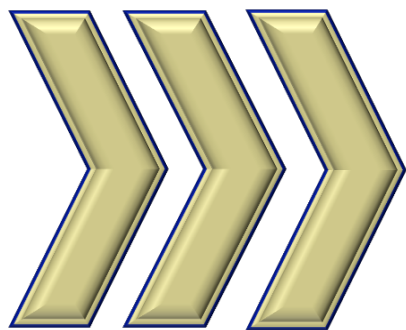
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## The basic assumption

*Why we are discovering the relevance of knowledge in economic field only today?*



The economy builds upon a *deterministic program* while the knowledge requires a *subjective approach*.

# Why the knowledge era has begun?

- ✓ End of Fordism Era
- ✓ Improving in knowledge accessibility
- ✓ Sharing of knowledge
- ✓ Possibility to approach the knowledge as a 'resource'



## The knowledge as mediator factor

The knowledge should be considered a *mediator factor* because it cannot be simple added to the the others productive factors.

The use of knowledge modify the others productive factors by *defining new pathways and approaches*.



## The knowledge as mediator factor

By using the knowledge *it is possible to radically change the other productive factors* through a process that define new resources and perspectives.



## The knowledge abnormalities

*The knowledge does not finish after the use.* In such a line, it is possible to outline two abnormalities:

- ✓ The knowledge production is a *irreversible process* that broke the link between past and future.
- ✓ The value of knowledge is *'potentially' endless* because the knowledge can be used for different times in different contexts in order to achieve different aims.

## The peculiarities of knowledge

The knowledge cannot be considered a resource because:

- ✓ *It is not poor*, because it can be used in different processes.
- ✓ *It is not divisible*, because its cost cannot be attribute to one single actor.
- ✓ *It is not excludable*, because it can be used by several actors at the same time.
- ✓ *It is not instrumental*, because the cognitive processes modify the aims and the identities of involved actors.

# The economy of science

## *Economy of Science*

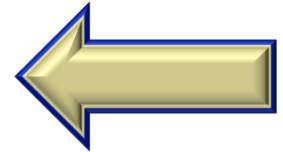
Basic Science

Applied Science



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*Aims of involved actors*





# The economy of information

## *The economy of information*

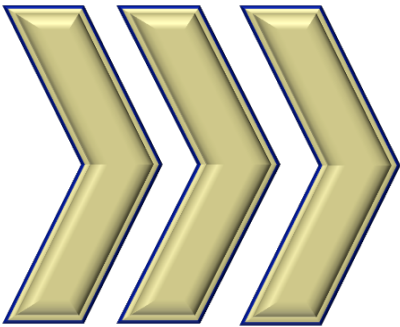
The information is everything that can be transferred without lose the rules need to understand it (Kogut e Zander, 1997: 30).

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## *Multiplication of information*

## The objective approach to information

- ✓ Theory of thermodynamic entropy
- ✓ Mathematical theory of information (Shannon e Weaver)



These theories identify the information as  
*an objective elements of a tangible  
environment.*



# The market dynamics

The *market dynamics* outline the prices for the balance by showing them to the public in order to support the discovering of new information.



# Knowledge vs. information

*Knowledge is different from information*

Allee (1997: 40)

Among data, information, and knowledge the differences refer to the semantic contents or, in other terms, to the *role of context* that is irrelevant in the data management and more relevant in the knowledge management (Gallouj, 2002: 257).



## The action plan for the knowledge management



By focusing the attention on the competences and on the capabilities it is possible to define an *action plan for the knowledge management*. More specifically, competences and capabilities show the actors' ability to perform a process with an high level of *confidence*" (Nelson, 1994).



**Questions ???**

