

# **Knowledge based organization**

## *An identification model*

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# Motivation

- Definitions don't clarify the concept of knowledge based organization
- The complexity of economic environment and the need for continue innovation
- Providing a framework for identifying knowledge based organization

# Motivation – incomplete definitions

Organization type	Author	Elements
Knowledge based-organization	Liebowitz	Knowledge – important internally and externally
Knowledge creating company	Nonaka	Consistent knowledge creation and transfer in the entire organization and its embedding in new technology and products
Learning organization	Argyris and Schon Senge	Employees – learning agents Detecting and correcting errors Employees learn together Collective aspiration is free
Intelligent organization	Wiig	Employees – based on their skills, they are placed in the right situations having the freedom to innovate and improvise Employees have to act intelligently by using effective and active communication
Hypertext organization	Nonaka	The bureaucratic but flexible organizational structure with two real layers (business units and project teams) and one conceptual (knowledge layer)

# Motivation – economic applicability

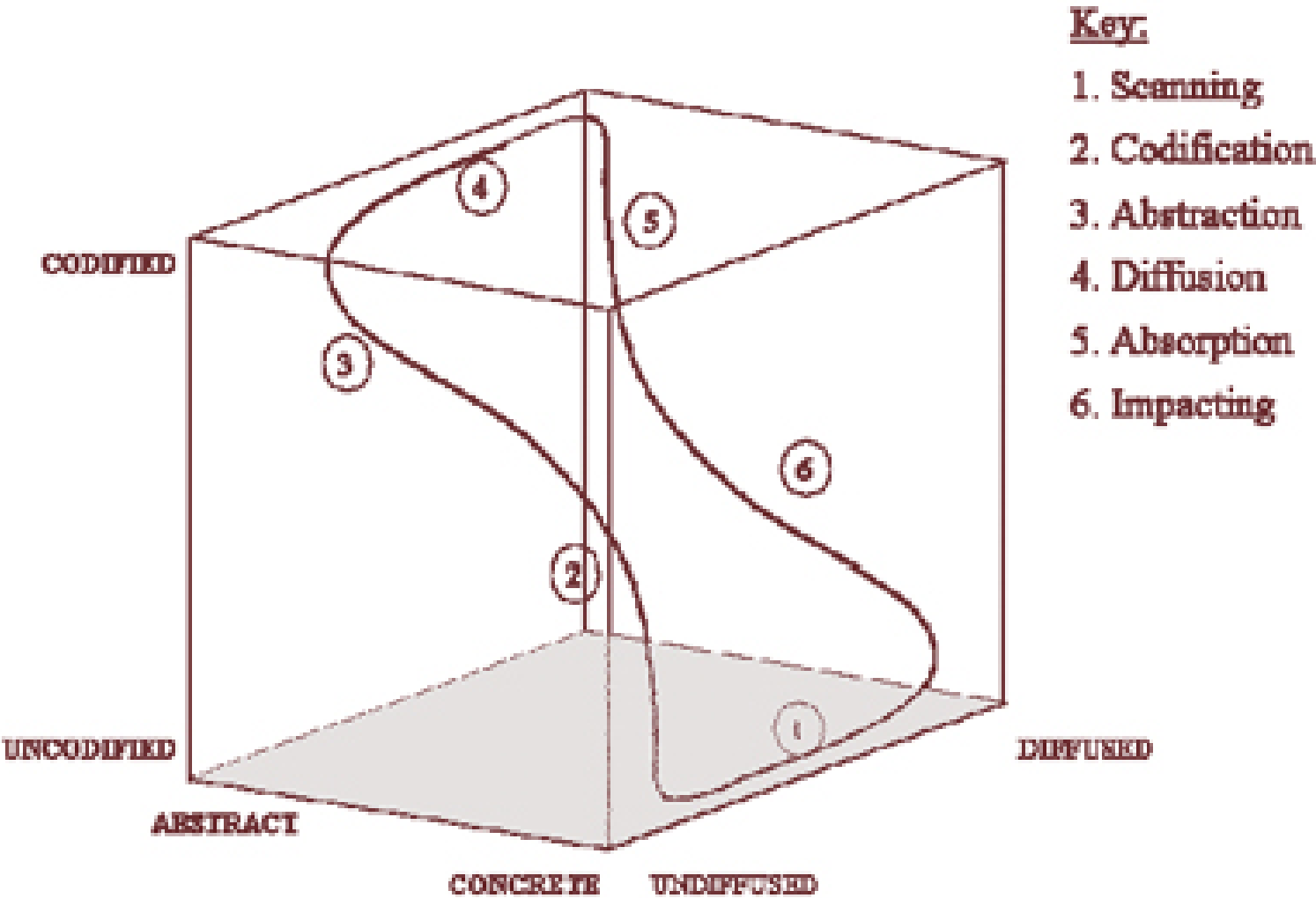


Fig. 1 I-Space Model

# Model - purpose

- Clarify the concept of knowledge based organization
- Identify the knowledge based organizations
- Highlight the critical points which needs solutions to optimize them

# Model – criteria set

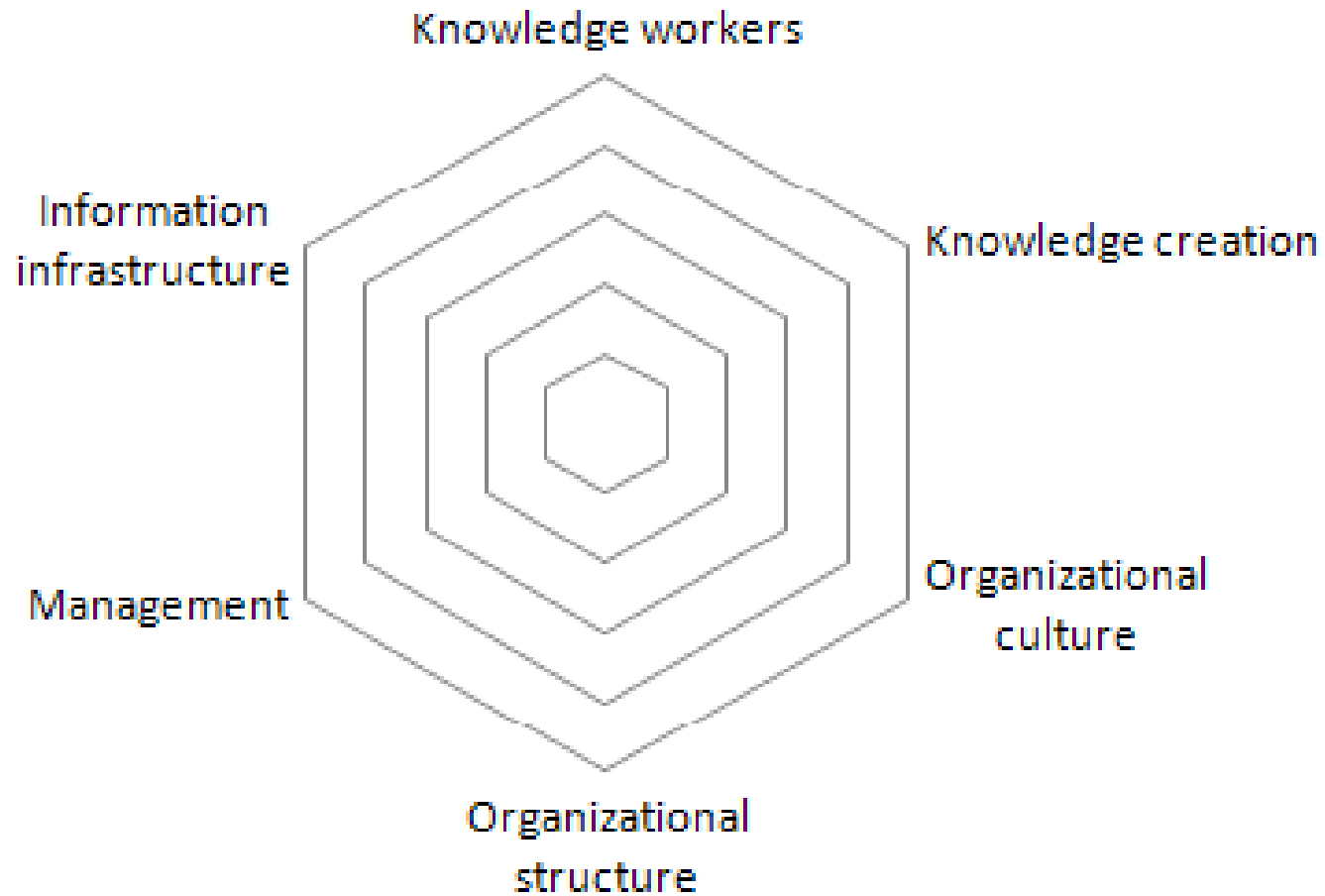


Fig. 2 Model's criteria set

# Component – Knowledge workers

Knowledge level	Knowledge worker's skills	Level of education
Basic	<ul style="list-style-type: none"> <li>-Read for understanding</li> <li>-Interpret visual information</li> <li>-Write comprehensibly and persuasively</li> </ul>	Secondary + Tertiary + Life Long Learning
Professional	<ul style="list-style-type: none"> <li>-Knowledge of the domain activity</li> <li>-Foreign languages</li> </ul>	Secondary + Tertiary + Life Long Learning
Technological	<ul style="list-style-type: none"> <li>-Use information technology in purposes such as:               <ul style="list-style-type: none"> <li>oEducation</li> <li>oProductivity</li> <li>oCollaboration</li> <li>oResearch</li> <li>oProblem-solving and decision-making</li> </ul> </li> </ul>	Secondary + Tertiary + Life Long Learning
Higher Order Thinking	<ul style="list-style-type: none"> <li>-Information literacy</li> <li>-Independent learning</li> <li>-Social responsibility</li> </ul>	Tertiary + Life Long Learning
Conceptual	<ul style="list-style-type: none"> <li>-Design</li> <li>-Flexibility</li> <li>-Empathy</li> <li>-Simultaneity</li> <li>-Meaning</li> <li>-Symphony</li> <li>-Learning</li> </ul>	Life Long Learning



# Component – Knowledge creation

Conversion	Methods
Socialization	<ul style="list-style-type: none"><li>•Apprenticeship</li><li>•Shared experiences</li><li>•On-the-job training</li><li>•Joint activities</li><li>•Physical proximity</li><li>•Walking in the company</li><li>•Informal meetings outside the workplace</li><li>•Wandering outside the company</li></ul>
Externalization	<ul style="list-style-type: none"><li>•Use of metaphors and analogies</li><li>•Dialog</li><li>•Self-reflection</li></ul>
Combination	<ul style="list-style-type: none"><li>•Use different data sources</li><li>•Meetings and telephone conversations</li><li>•Presentations</li><li>•Using ICTs</li></ul>
Internalization	<ul style="list-style-type: none"><li>•Learning-by-doing</li><li>•Focused training with senior colleagues</li><li>•Simulation/experiments</li><li>•Self-reflection upon documents</li><li>•Reflection with others</li></ul>

# Component – organizational culture and structure

- Culture
  - sociability
  - solidarity
  - knowledge transfer
  - physical space
  - communication
  - flexible schedule
  - identity
- Structure
  - Use of teams
  - Flexibility
  - Creation
  - Variety
  - Physical space
  - Efficiency
- Management
  - autonomy
  - empowerment
  - evaluation
  - Incentives
  - accessibility to knowledge
  - communication
  - openness to new ideas

# Component – information infrastructure

Conversion	Technology
Socialization	Groupware, Expertise location, Knowledge Map Systems, Visualization tools, Instant Messaging, Email, Knowledge Portals
Externalization	Groupware, Newsgroups, Forums, Instant messaging, Email, Workflow systems, AI (Artificial Intelligence), Knowledge Portals
Combination	Search Engines, Workflow, Innovation Supporting Tools, Competitive Intelligent tools, BI (Business Intelligence), Document and content management systems, ERP Systems, Intranet, Voice / Speech Recognition, Search Engine, Taxonomy, Knowledge Portals
Internalization	eLearning, Computer Based Training, Innovative supporting tools

# Romanian case study



Fig. 3 Romania's Map

# Analysis's results - knowledge workers

Knowledge level	All – Production	All
Basic	3,97	5
Professional	4,07	5
Technological	2,87	0,8
Higher Order Thinking	4,55	0,5
Conceptual	4,34	0,5
	3,3	1,96

# Analysis's results - knowledge creation

Conversion	All – Production	All
Socialization	3,9	3,81
Externalization	3,9	3,02
Combination	4,07	3,03
Internalization	3,8	2,8
	3,92	3,16

# Analysis's results – Organizational culture

Elements	All – Production	All
sociability	4,03	3
solidarity	4,3	4
knowledge transfer	3,9	3
physical space	3,05	2
communication	3,57	3
flexible schedule	1,5	2
identity	2,22	4
	3,22	3

# Analysis's results – Organizational structure

Elements	All – Production	All
Use of teams	4,06	4
Flexibility	2,75	2
Creation	3,84	3
Variety	4,09	3
Physical space	2	2
Efficiency	3,94	3
	3,45	2,83



# Analysis's results - Management

Elements	All – Production	All
autonomy	1,39	4
empowerment	4,33	4
evaluation	4	3
incentives	3,84	3
accessibility to knowledge	4	4
communication	3,91	4
openness to new ideas	4,33	4
	3,69	3,71

# Analysis's results – Information infrastructure

Elements	All – Production	All
Socialization	1,23	3
Externalization	1,75	3
Combination	1,75	3
Internalization	0	1
	1,18	2,5

# Analysis's results

## All-production



## All

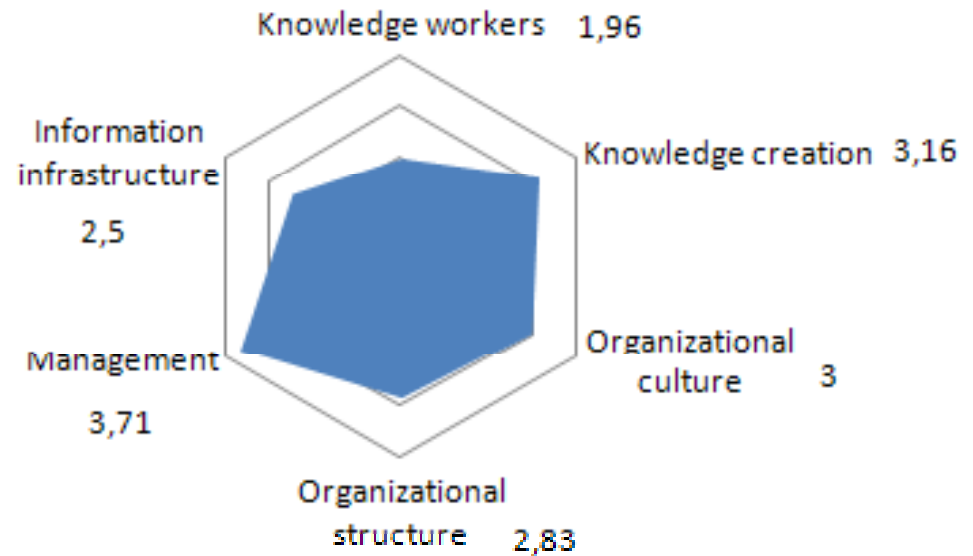


Fig.4. Analysis's results

# Conclusions

- Applicable through methods:
  - Surveys
  - Interviews and Direct Observation
- Qualitatively evaluation
- Supports the organizational evaluation in addition with the methods for measuring intellectual capital
- Supports the strategy development for specific organizational domains
- Ensures comparisons between organizations (benchmarking studies)
- Suffers reinterpretation for ensuring comparison of organizations from different domains
- Difficult to apply , it needs mainly direct observation and interviews

**Thank you very much for your attention.**

**Comments welcome !**