Digital Maturity

What is and how to build it

Roberto Vardisio

Entropy
Knowledge Network
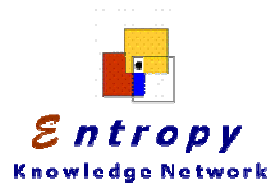
7 years of Technology Enhanced Learning

Multi players Environments

Augmented Reality

Serious Game

Robotics

Social Enterprise 2.0

Towards an idea of Digital Maturity

Maturity

Environment
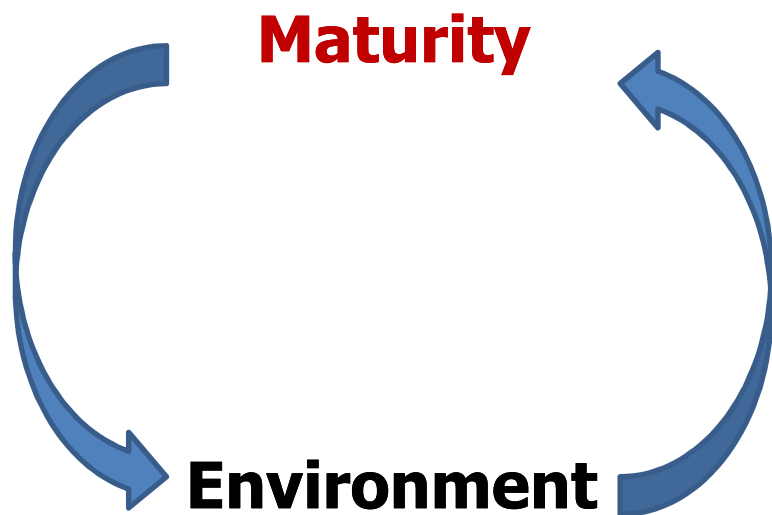
A *disruptive* change?

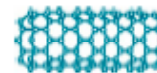|		
Mobile Internet	Increasingly inexpensive and capable mobile computing devices and Internet connectivity	
Automation of knowledge work	Intelligent software systems that can perform knowledge work tasks involving unstructured commands and subtle judgments	
The Internet of Things	Networks of low-cost sensors and actuators for data collection, monitoring, decision making, and process optimization	
Cloud technology	Use of computer hardware and software resources delivered over a network or the Internet, often as a service	
Advanced robotics	Increasingly capable robots with enhanced senses, dexterity, and intelligence used to automate tasks or augment humans	
Autonomous and near-autonomous vehicles	Vehicles that can navigate and operate with reduced or no human intervention	

Next-generation genomics	Fast, low-cost gene sequencing, advanced big data analytics, and synthetic biology ("writing" DNA)	
Energy storage	Devices or systems that store energy for later use, including batteries	
3D printing	Additive manufacturing techniques to create objects by printing layers of material based on digital models	
Advanced materials	Materials designed to have superior characteristics (e.g., strength, weight, conductivity) or functionality	
Advanced oil and gas exploration and recovery	Exploration and recovery techniques that make extraction of unconventional oil and gas economical	
Renewable energy	Generation of electricity from renewable sources with reduced harmful climate impact	

SOURCE: McKinsey

International Conference
The Future of Education

Real-virtual Fusion

Virtual

Real

Influence on training: *e-skills*

ICT pratictioner skills: specialist skills on the management of ICT systems

ICT user skills: required capacity for the use of ICT systems on a basic level

E-business skills: also known as e-ledership and affecting the ability to exploit digital technologies to improve the effectiveness and organizational efficiency

Skills and working change

Lean management

Social enterprise

INNOVATION

Learning organization

Responsability

Creatibity

Flat organizazions

Spread Leadership
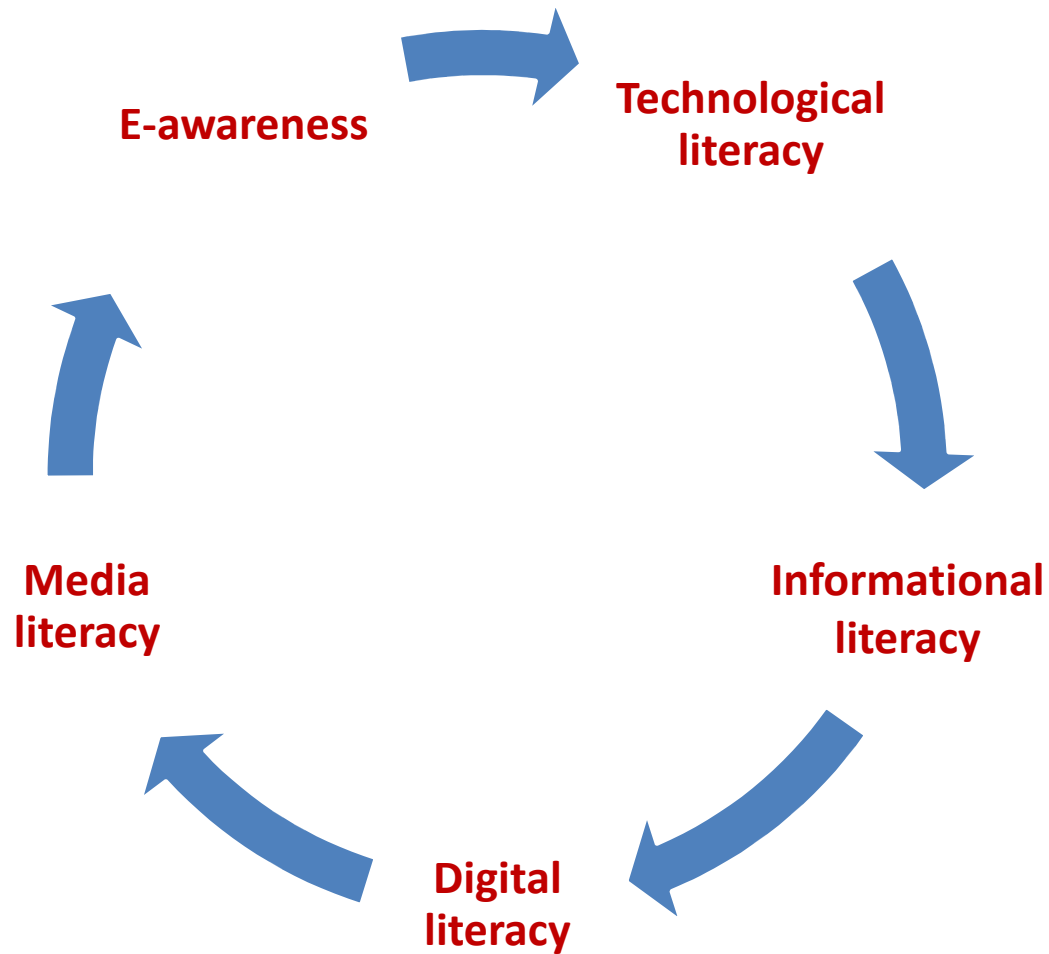
"Branson clears the working time: "The results count, not the time in the office", Source: *Repubblica.it*

Influence on Training: *e-competence processes*

E-awareness

Technological literacy

Informational literacy

Digital literacy

Media literacy

Digital Maturity

Technical

Managing the potential of the technologies in hardware and software level

Critical

Critical and conscious use of technology tools

Dialogic

Use technology to build new knowledge and change the reality: processes and environments

Dialogic Level: synthesis

Flexibility

Openess

Self-regulation

Dialogic Level

Digital Maturity

Dialogic Level: synthesis

Openess

Capacity to connect people, systems and processes beyond traditional categories and professional compartmental divisions.

Flexibility

Possibility of 'constructing technologies' i.e. adapting them, for instance, or personalising them or 'rearranging' them.

Self-regulation

Derived from the second property. There are numerous examples of this capacity on an industrial scale: aeroplanes that diagnose their own systems and programme maintenance before landing, or wind turbines that communicate between one another to optimize energy production.
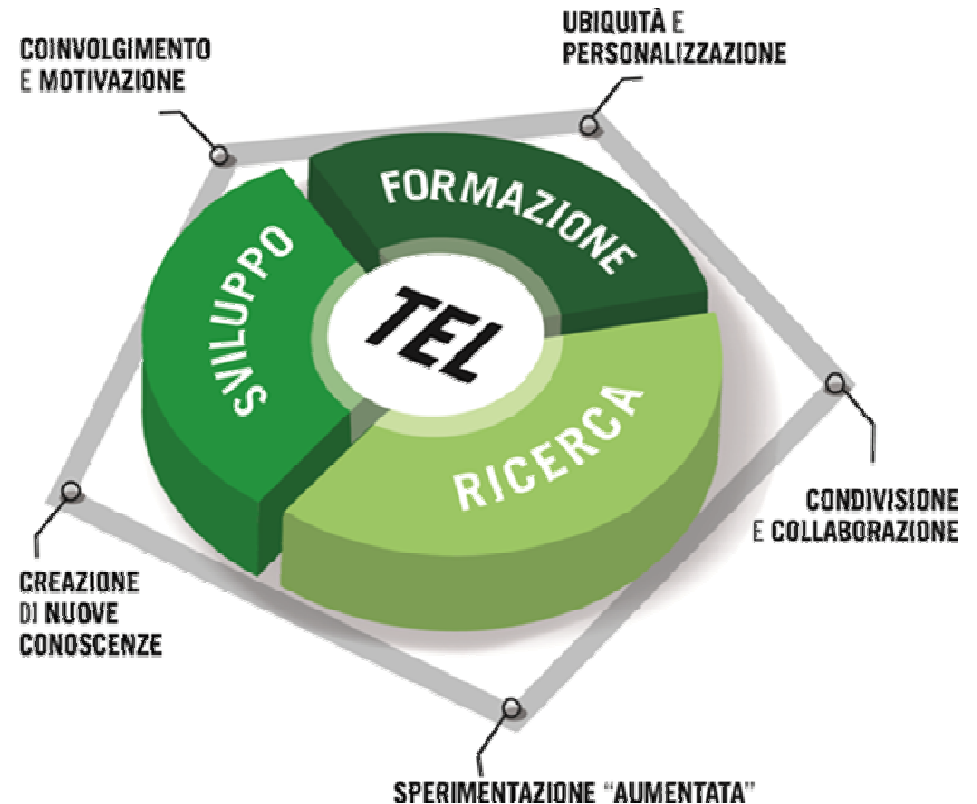
Technology Enhanced Learning

... A set of training methods, based on particular digital technologies, which emphasize the interactivity of the learning process active experimentation of knowledge and building common knowledge.
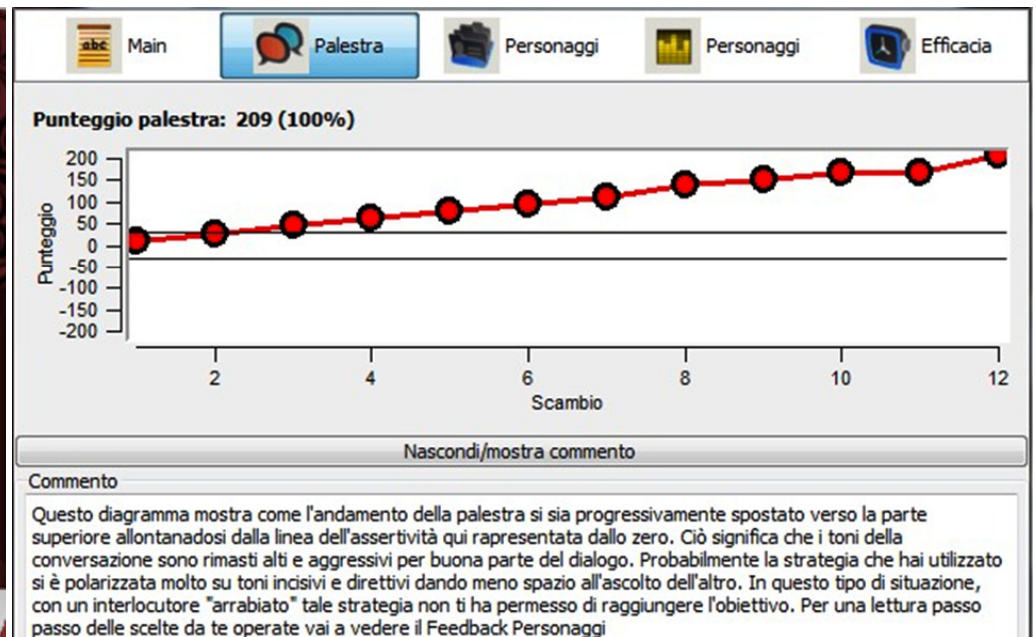
T.E.L. projects - AU.R.I.G.A.

"Serious Games designed and implemented in the group, inspired by the reality of business environment"

T.E.L. projects - AU.R.I.G.A.

Start

Projcts Presentation
Group Creation

Training on tools
(PalMa - Moodle Portal)

Start of Activity

Online work

Check

Checking working
progress

Test and feedback

Feedback on
development

Online work

Switch

Presentation of SG

Award ceremony

End of the project

Project Portal 2.0

2 Months and half
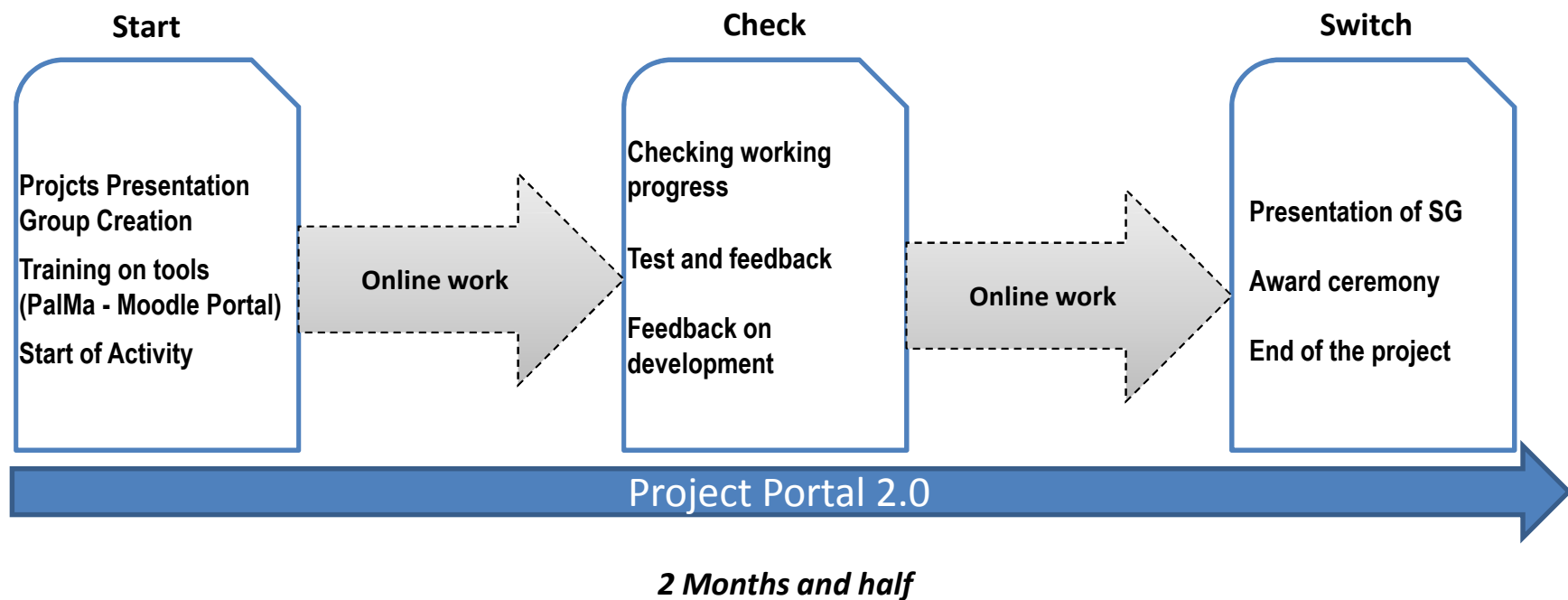
«A company oriented to the Social Business is an

organization in which the culture and systems

which encourage the network of people to create

business value»

IBM, 2013

T.E.L. project - Oktagona

"An intelligent library able to blend the virtual and digital library, to give advice for reading, tomorrow to read for us..."
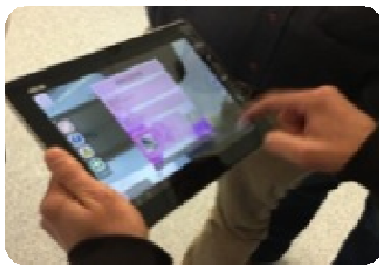

Scansiona

Cerca

Nella tua Libreria

Info

Self-regulation - *A.N.GE.L.S.*

Work Safety

Augmented Reality

ANGELS

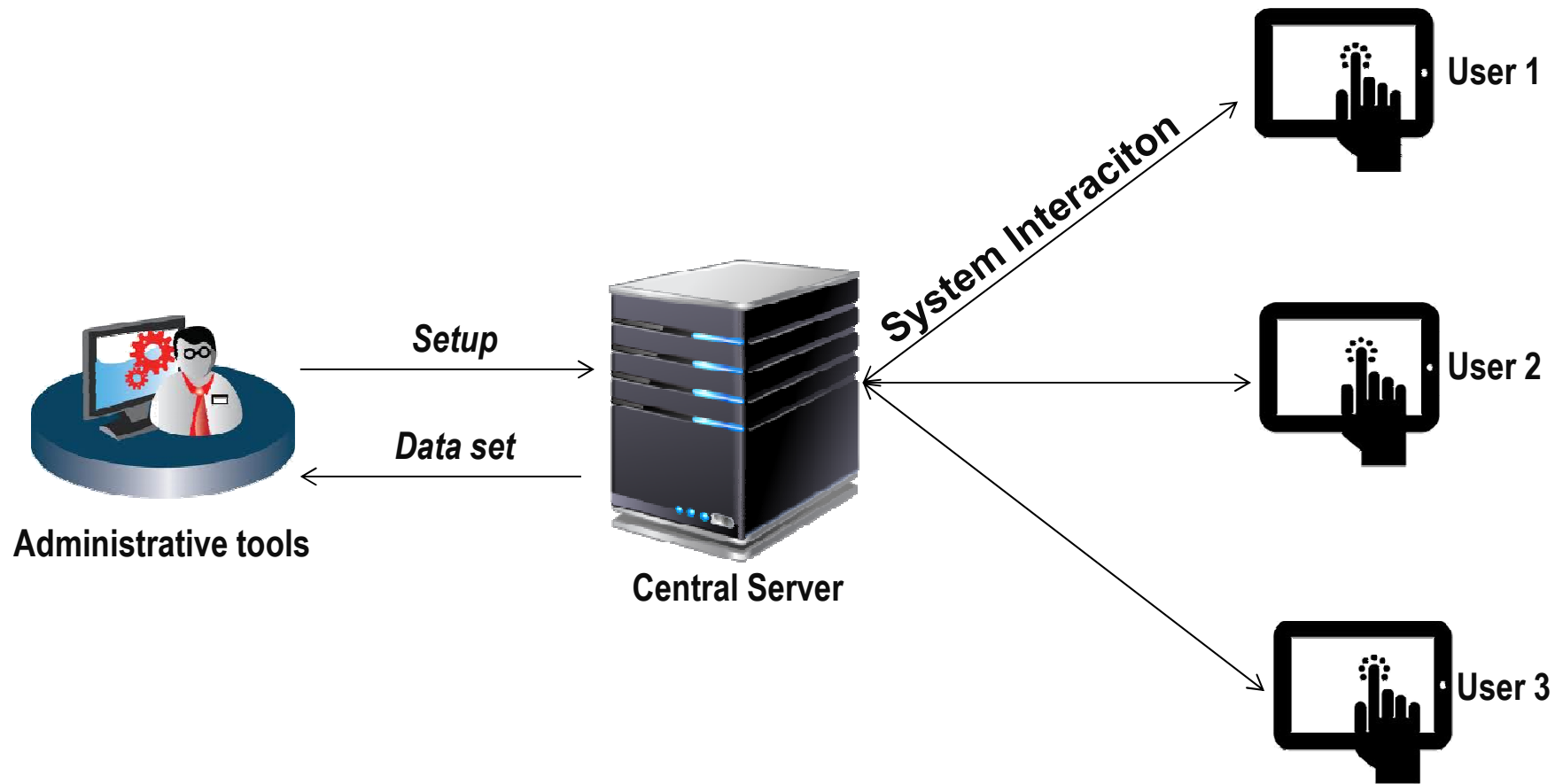"Augmented reality to see the invisible risk present in the workplace"

T.E.L. Projects: A.N.GE.L.S.

User 1

System Interaciton

User 2

User 3

Setup

Data set

Administrative tools

Central Server

Dialogic Level: synthesis
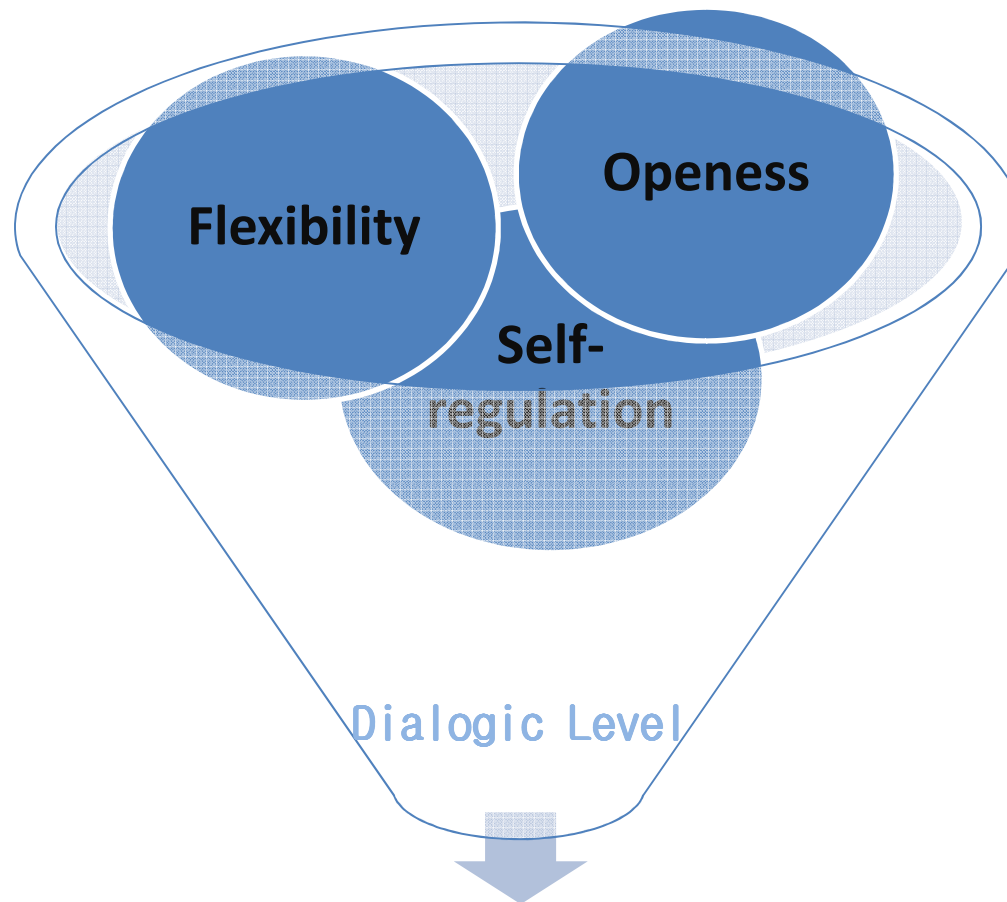
Conclusions

Between creativity and technology there is now a clear circular relationship.

Creativity produces new systems and technology solutions ...

... Technology moves forward as far as possible, feeding creativity and increasing the degrees of freedom.
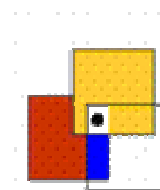

Penguin Science Fiction 2'6

The Evolution Man

Roy Lewis
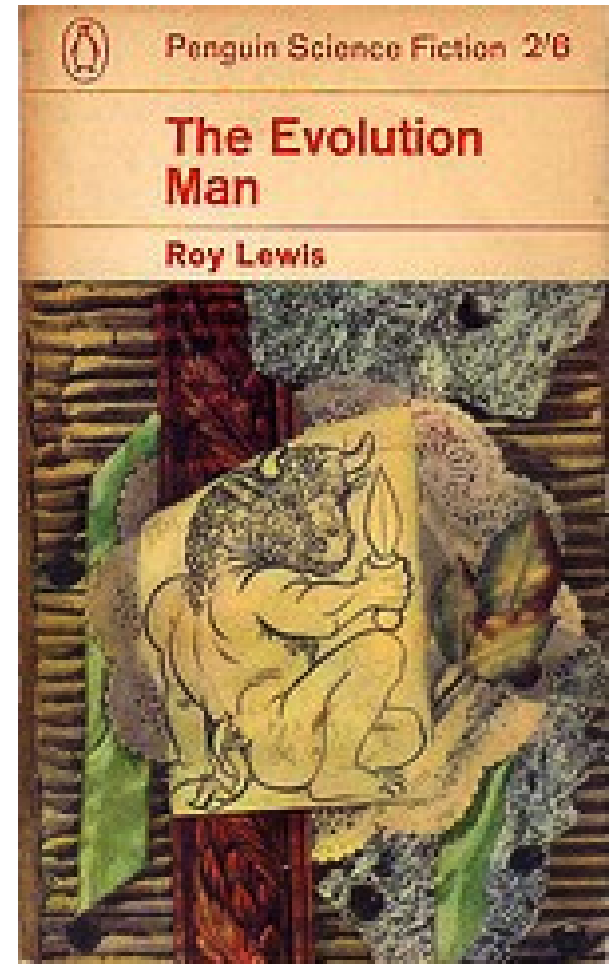
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