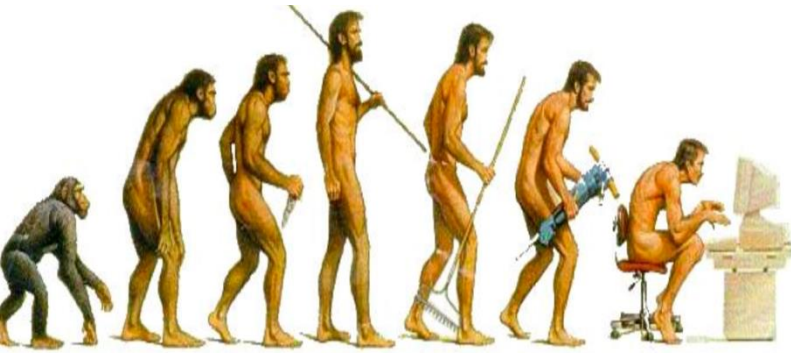




A “gig” Economy drives towards a Labour Market of individual Competencies?”

EIT Digital Academy



Learning as the soul of **mankind**:
Homo sapiens vs. Neanderthal



Learning as an **individual** value



Learning as a **market** – in money 3x as big as
the media market



History of Education and Innovation



Gutenberg



Briefmarke (1985) zum 150. Todestag

Humboldt



Digital

BC

Bologna

Royal Society

Ind & Sci Rev.

Now



Education

Research

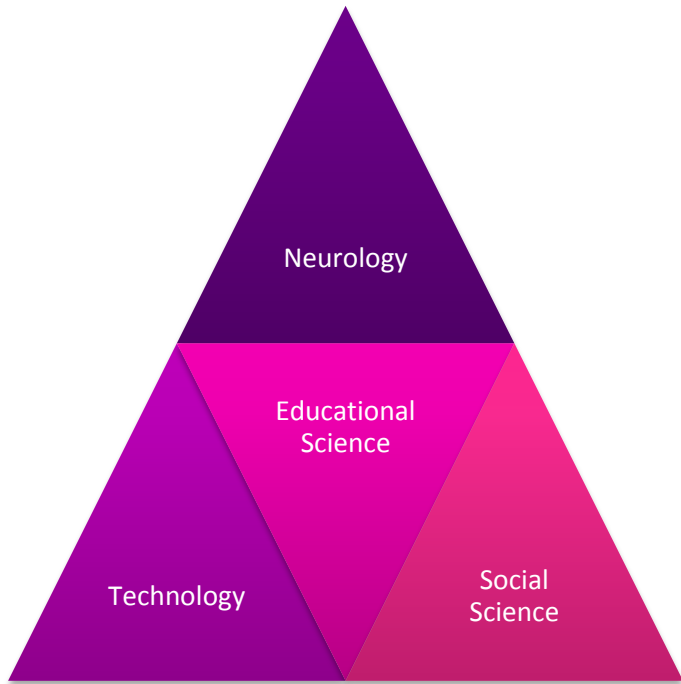
Digital
Online
Internet

Learning

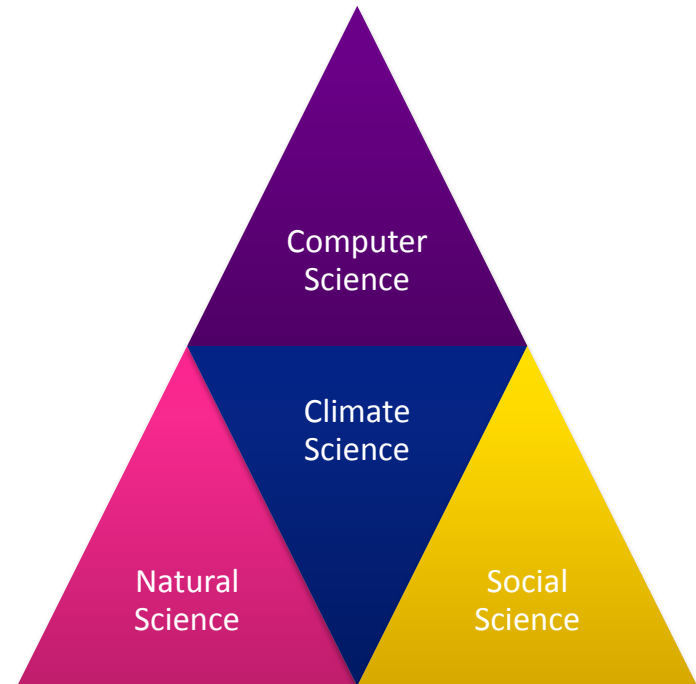
Learning Research

The Science on Learning

- Education – Neurology
- Education – Technology
- Education – Social Science



- Climate – Computer Science
- Climate – Natural Science
- Climate – Social Science



Times We live in

- Real GDP
- Actual GDP
- Note; “more with more” raises the GDP
- Technology most often aims at “more with less”
- **Innovation and Jobs**
- A factor of 1,5 to 2 is not OK and always debated
- Car Driving Analogy
- A factor 1 million is fully OK
- Cosmology- Star Patterns

What is a Digital Strategy?

- Data Architecture (logical model)
- Program Architecture (software)
- Hardware Architecture
- Network Architecture
- **Cyber Security Architecture**
- **Business Model Architecture**

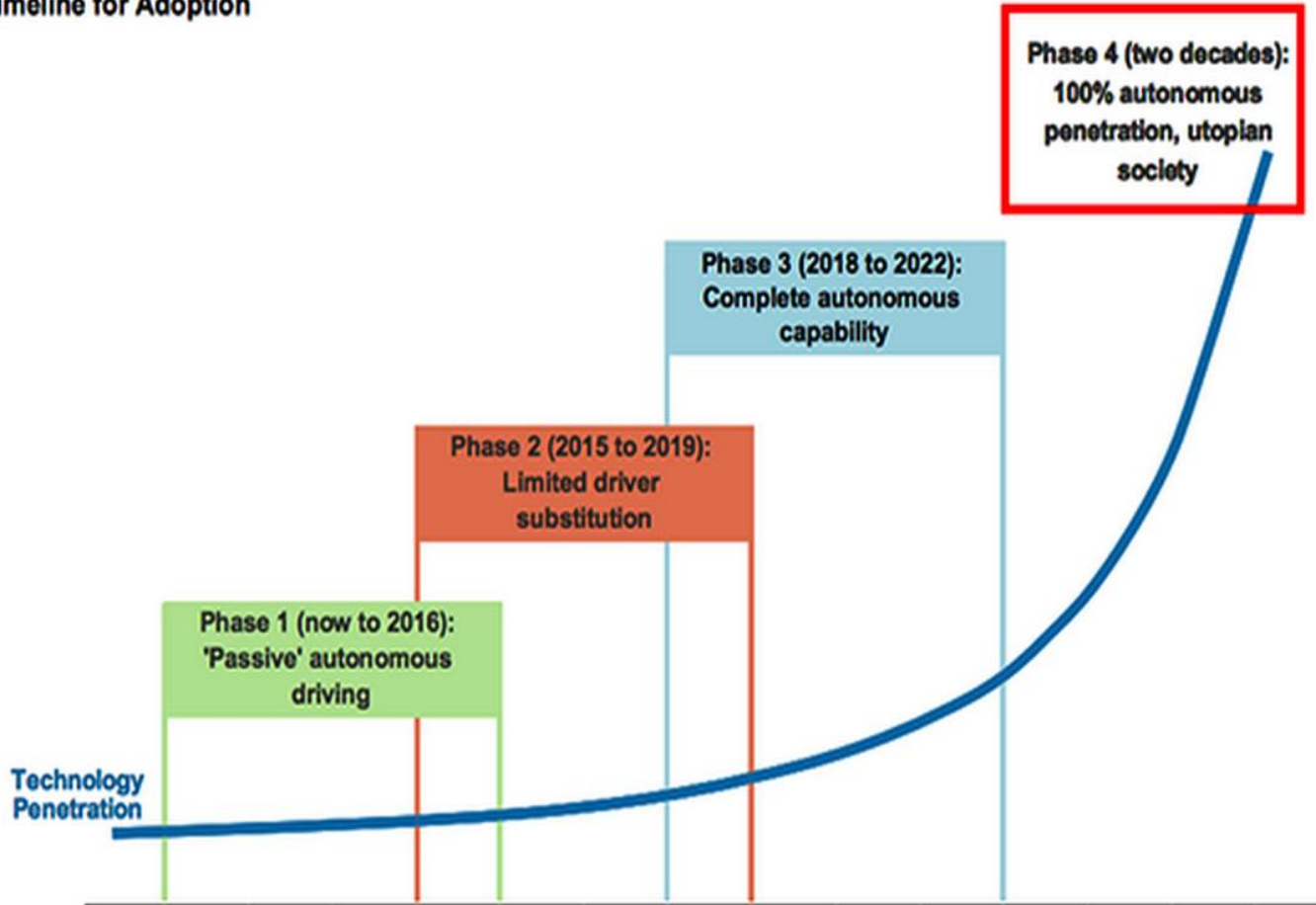
What is digital transformation?



Self Driving Cars

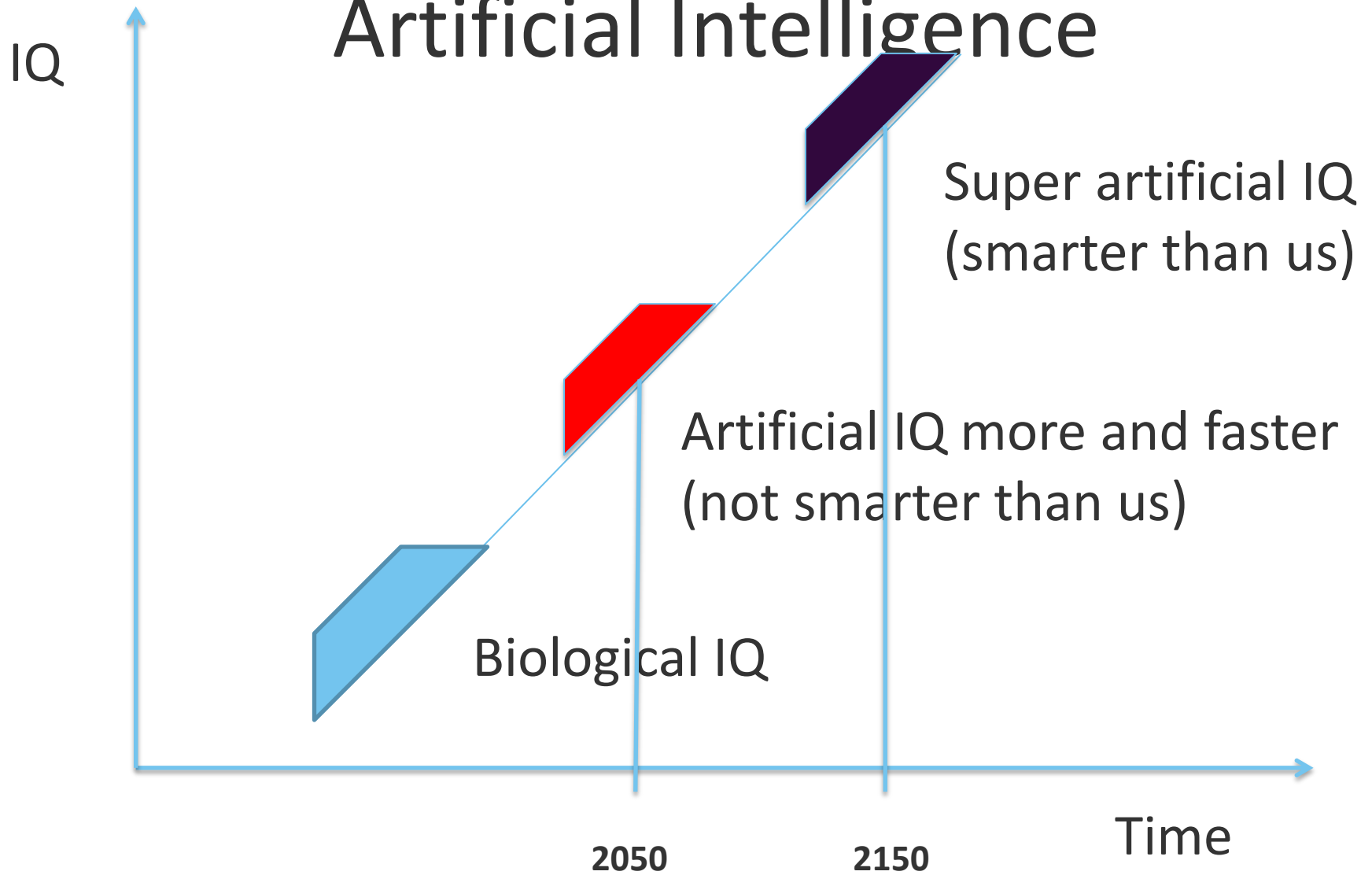
Exhibit 20

Timeline for Adoption



Sensors
Digitalisation
Wireless
Algorithms
Batteries

Biological, Artificial and Super Artificial Intelligence



Challenges or EIT KICs: Part of the Horizon2020 (≈5 %)



ERB Integration: Knowledge Triangle



A Cornerstone of the EIT strategy and operations:

- **Our ecosystem**
 - **ERB partners**
 - **The CLC (co-location) model**
- **Our integrated Innovation & Entrepreneurship pillar**
 - **Action-Line driven**
 - **Cross-pollination**
- **Our entrepreneurial Education Pillar**

Keywords in the World of Golfing



Processes

Swing
Putt
Chip
View
Drop

RESULTS

Par
Score
Birdie
Eagle
Bogey

Technologies

Iron
Driver
Wedge
Rules
Course

People

Competitors
Teams
Caddy
Referee

Keywords in the digital World



Processes

Agile
Scrum
Design thinking
Integration
Accelerator

Technologies

Platform
Network
Pervasive
Interface

People

Collaboration
Teamwork
Empowerment
Multidisciplinary

Keywords in the learning World



Processes

Teaching
Learning by doing
Skills Training
MOOC
Blended
Quality
Integration

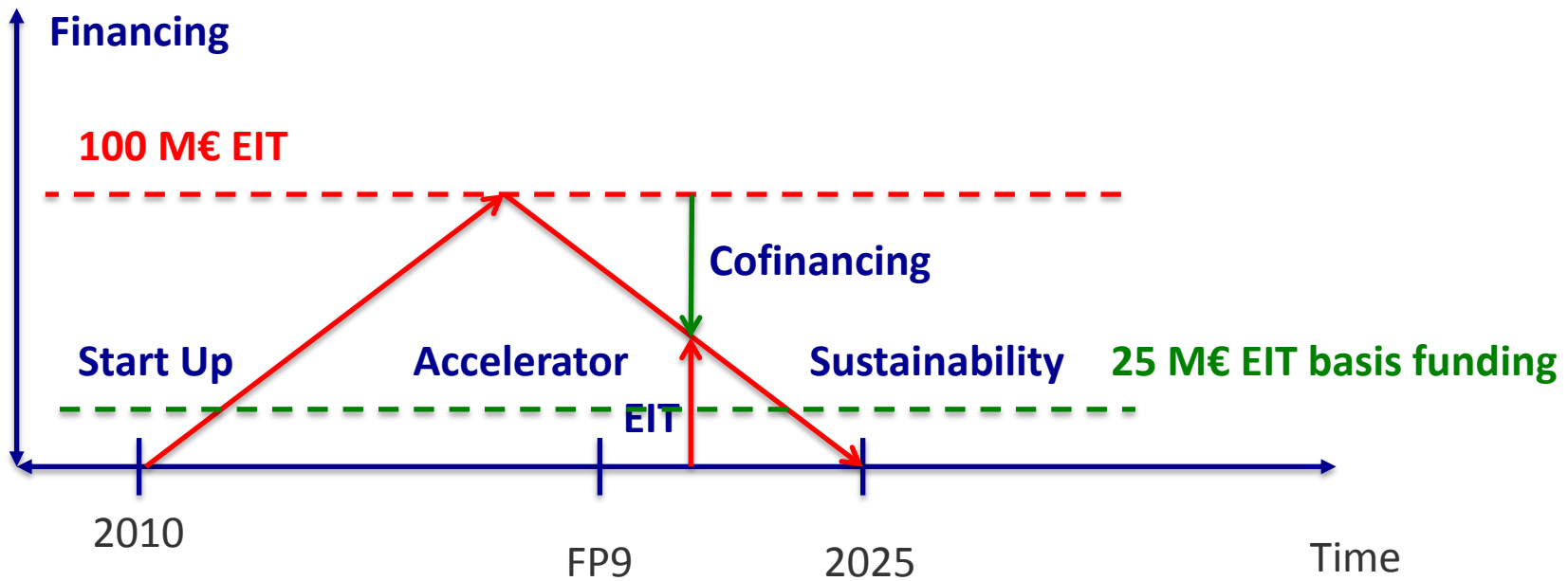
Technologies

Classroom
Books
Blended
MOOCs
Laboratory
Integration

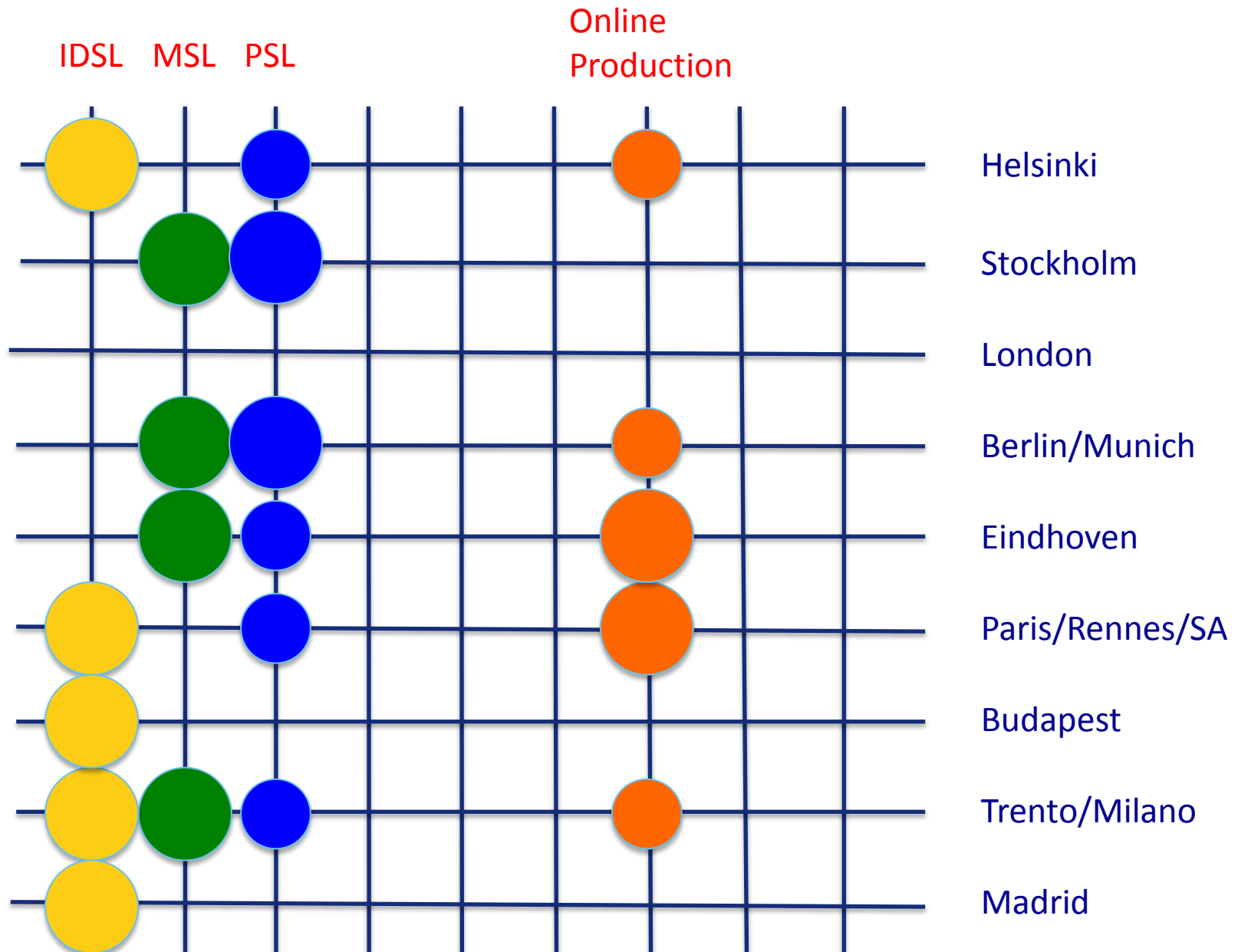
People

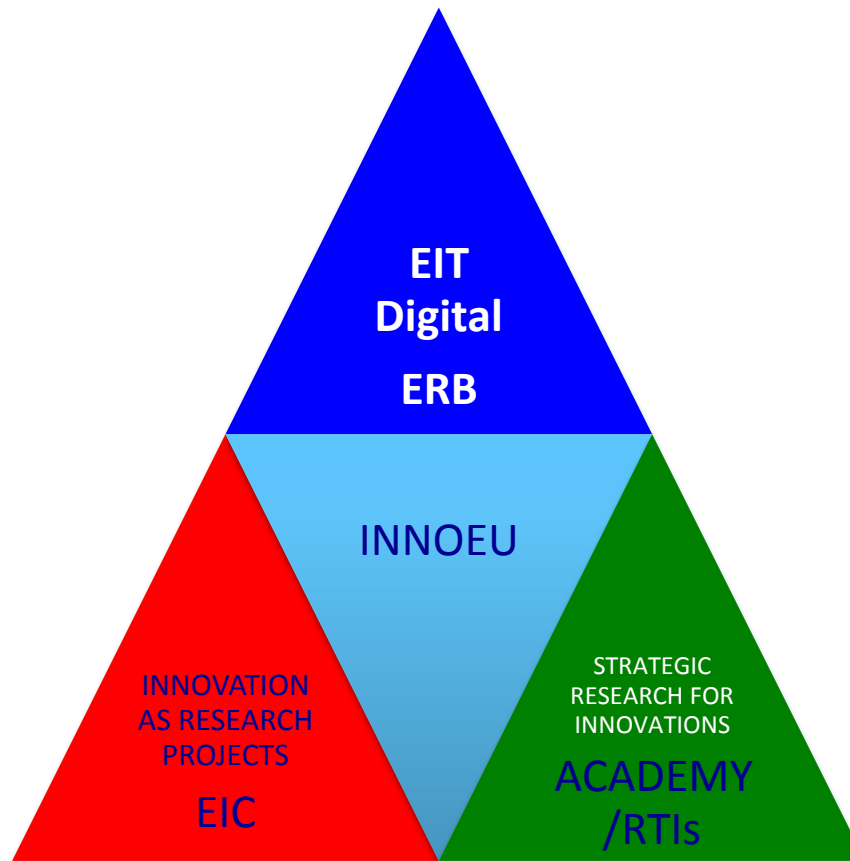
Exchange
Teamwork
Mentors
Multidisciplinary
Faculty

Financing EIT Digital



EIT Digital Academy Map





PROBLEM:

- EUROPEAN - FIGHT BETWEEN DIFFERENT EU DGs
- EUROPEAN - FIGHT BETWEEN DIFFERENT ACTORS AS UNIVERSITIES, RESEARCH INSTITUTES AND EIT KICS
- A NEED FOR A COMMON STRATEGY NOT FOR LAMY TYPE REPORTS

A World in Need of Collaboration/Integration: We work with University and Industrial Partners



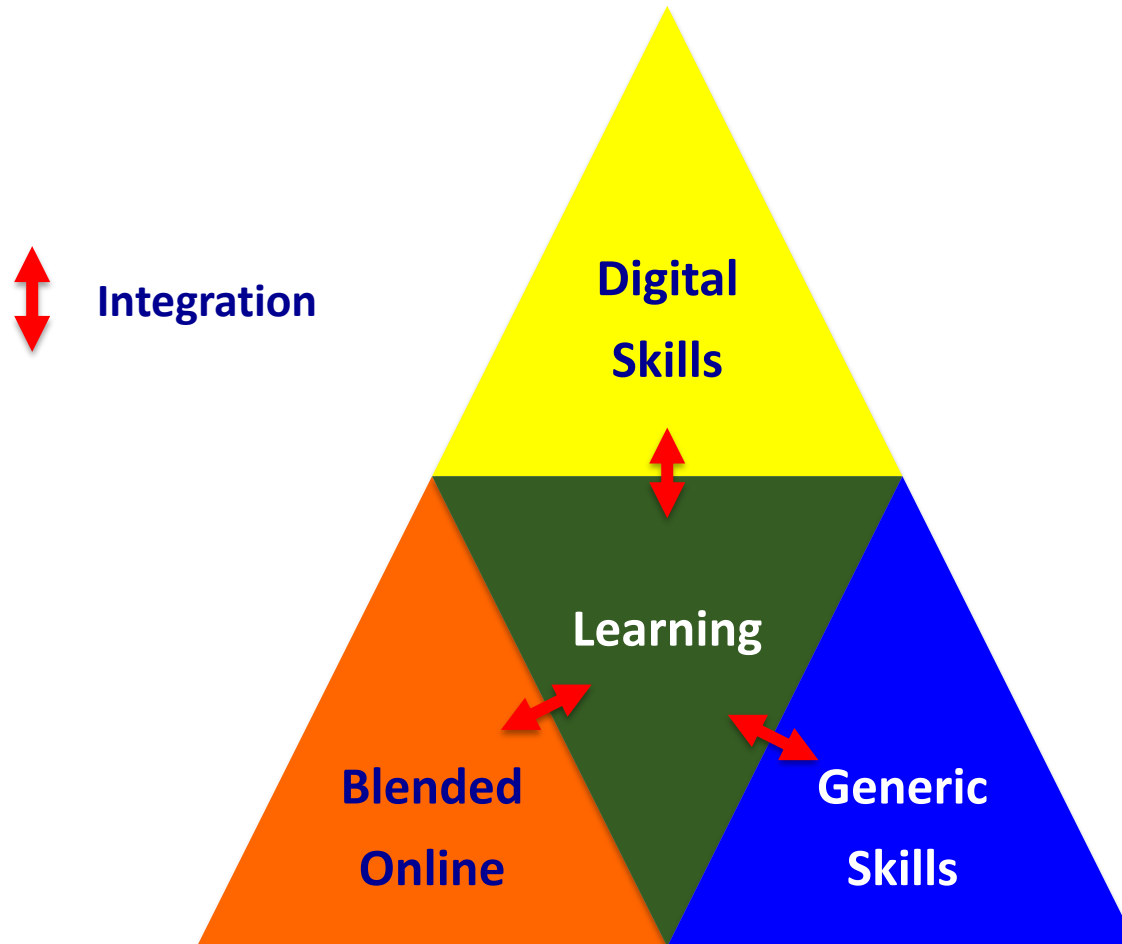
The easiest way to collaborate...

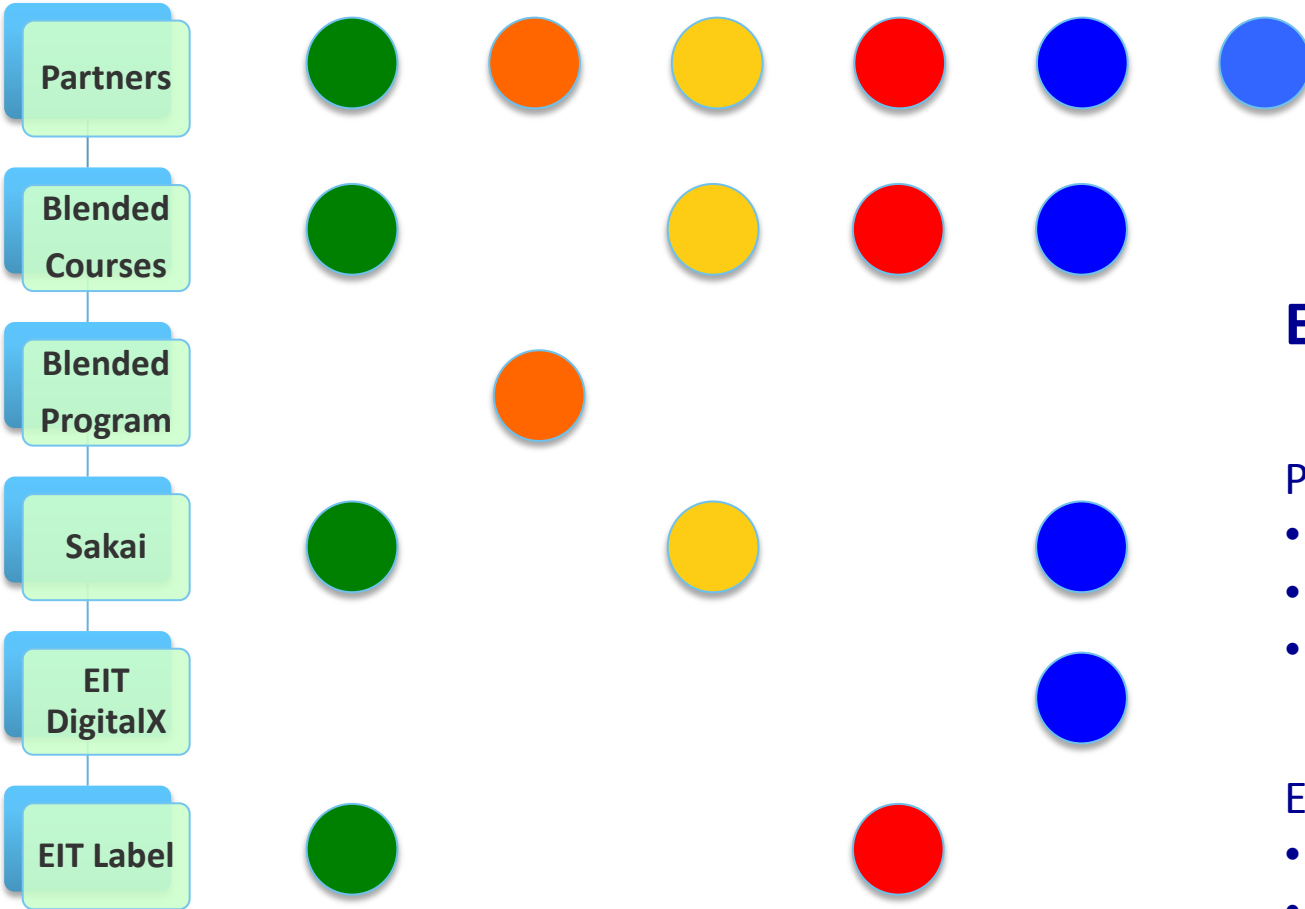
...is to do things on your own

The only way to collaborate...

...is to **NOT** do things on your own

Education Triangle: How to create Competence from Knowledge and Skills





EIT Digital Academy

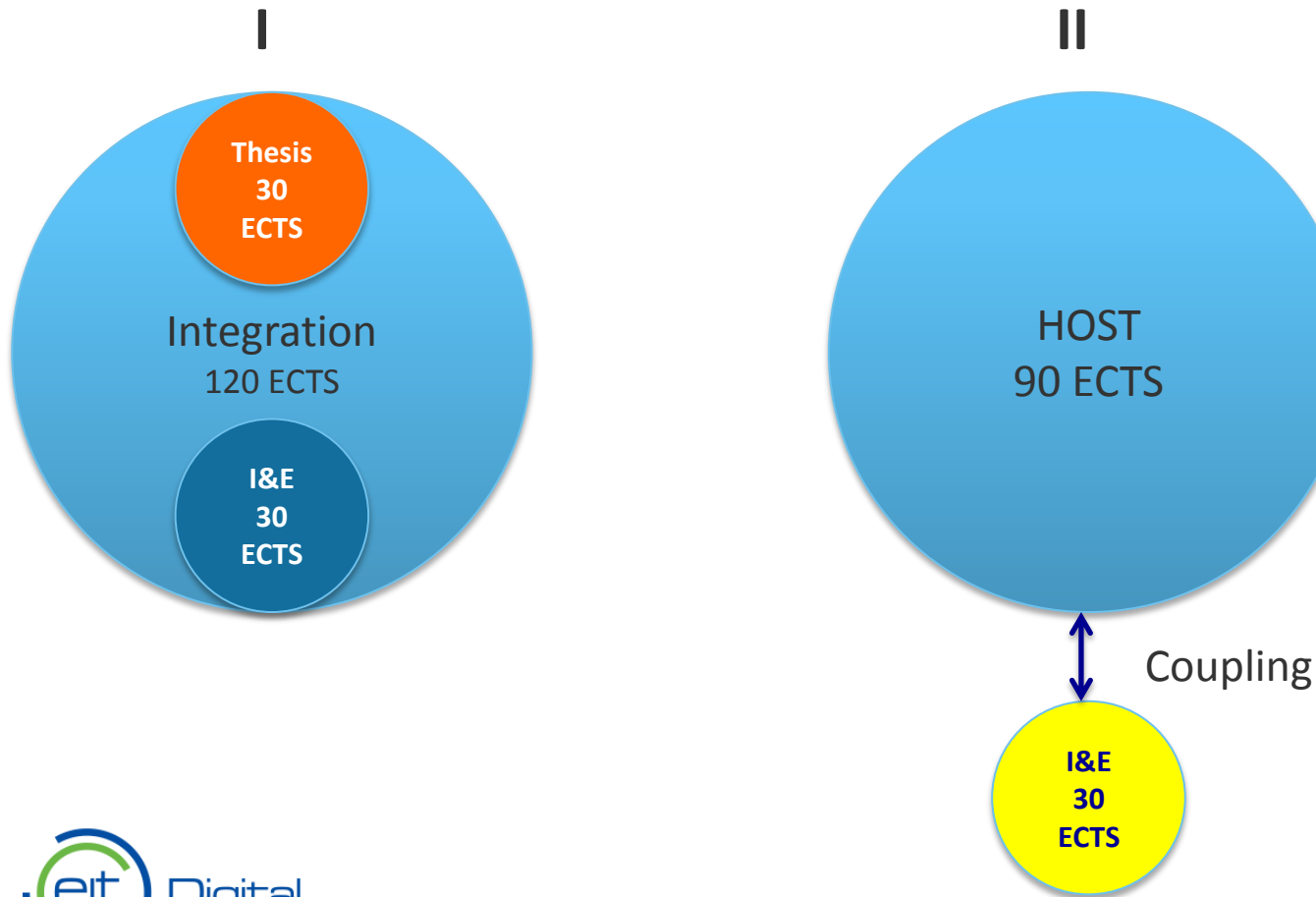
Partners are:

- Universities
- Research Institutes
- Companies

EIT Digital Online:

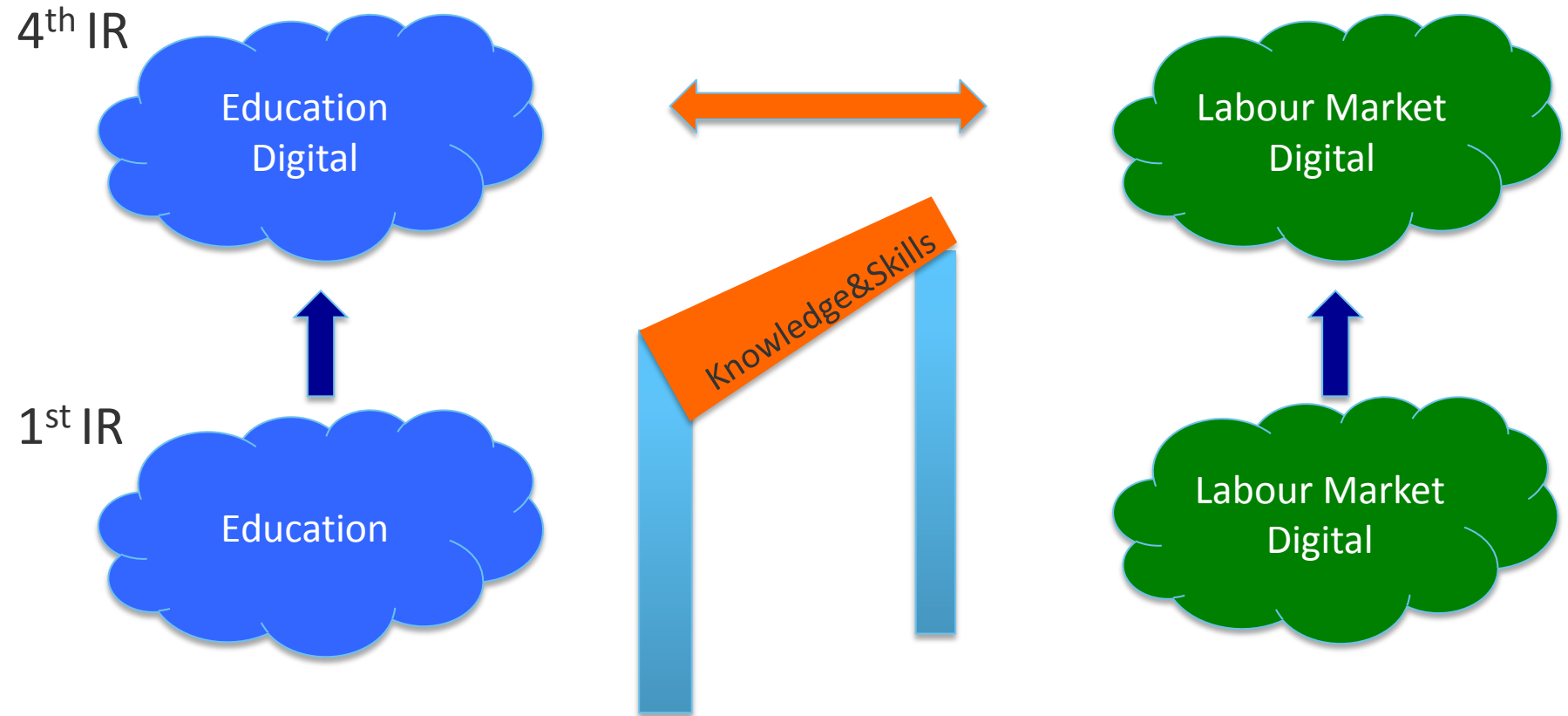
- Content Provider
- Learning Design
- Media Design
- Learning Analytics

ERB (KTI) Integration: EIT Labelling of Master Programmes (Doctoral is analogue)



Industrial Revolutions (IR) demand on new Knowledge and Skills

From Professional Roles to Individual Competencies?
New Human Capital Paradigm?

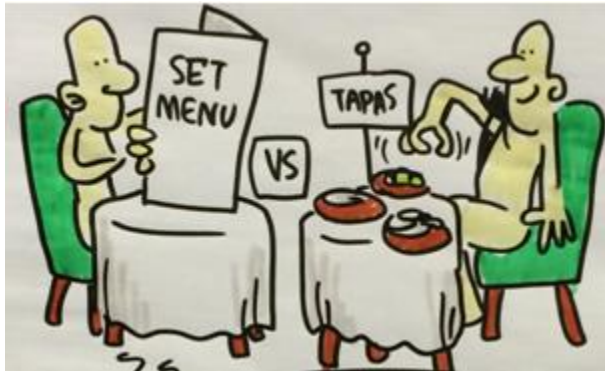


1st IR needed K7 + vocational training

4th IR needs K12 + higher education + digital competencies

The dynamic Evolution of industrial Human Capital towards a blended Model

Fast and focused learning (“tapas”) enhance the learners competencies and thus attractiveness. Driven by the gig economy.

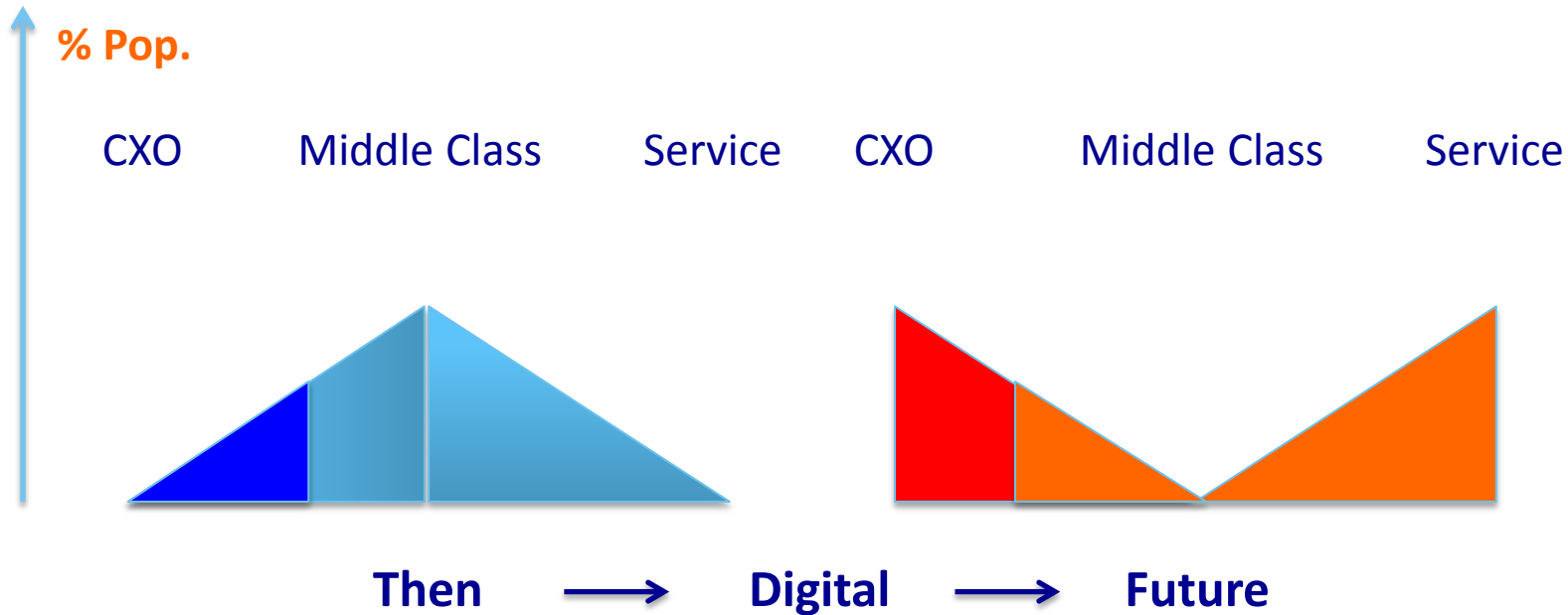


Education today rests on the idea that labour markets build on professional roles and education should match these roles.

Engineer - EIT Digital Engineer (T shape (I&E)) – Career - lifelong Learning

**In a “gig” economy, there are no professional roles? Just Competencies!
Agile yes! New Paradigm?**

Innovation and Jobs?



Master School

- Data Science/AI (DS)
- Embedded Systems/IoT (ES)
- CyberSecurity (S&P)
- Human Computer Interaction and Design (HCID)
- Software and Service Architecture (SDE)
- Digital Media Technology (DMT)
- Internet Technology and Architecture (ITA)
- Cloud Computing and Services (CCS)

- Digital transformer
- Digital transformer
- Enabler
- Digital Transformer Enabler
- Enabler
- Digital Transformer Enabler
- Enabler
- Enabler

NYDC²⁰₁₇ *The New American Dream*



Now everything is coming apart at the seams again. We are building machines that can do the job of human brains, not only the hands. Jobs are disappearing, workers who used to get a monthly pay check are living from one day to the next, “uberized” into commodity. There is a lot of uncertainty. “Trump democrats” are democrats in the rust belt that voted for Trump because he promised them jobs.

Innovation & education integration

Centered around Innovation Action Lines



Post Masters work at CLCs
in Action Line activities



The Accelerator scaleups
are embedded in Action
Lines

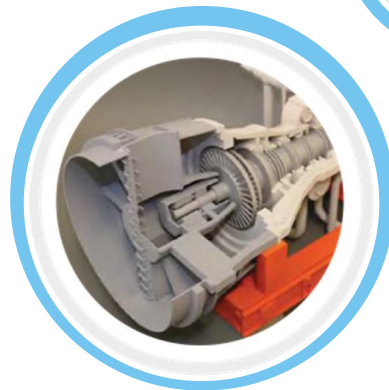


The industrial Doctoral
School program is aligned
with Action Lines with PhD
students working at CLCs

Summer Schools work on
Action Line business cases



Professional School is
based on Action Line
experiences



Master students
internships are almost to
100% in Action Line
activities



Master School Graduates or T shaped Engineers



AL Integrated

Doctoral School Graduates or T shaped Researchers



AL Integrated