

AIMS

To investigate the impact of digital innovation on Italian industry, the willingness of companies to accept this paradigm and their readiness for change. Focused on the Factory of the Future framework.

WHO

A group of leading companies in their respective sectors.

BEHIND

To cross-link different dimensions: the economics of innovation, local development, educational policies, the labour market.

To watch two worlds: the large companies leading their production segments and the small businesses in the sub-contracting chain.

Promoting cooperative inter-play to overcome communication difficulties, unsynchronised information and material-cultural barriers that limit full deployment.

## > A new paradigm for workers?

*Industry 4.0 in Italy. The needs of companies and skills training in the digital industry*



- The key factors of innovation.
- The pervasiveness of innovations.
- The necessary skills.

AUTHORS

Worker's digital agency  
*Bruno Latour*

Worker's digital habitus  
*Pierre Bourdieu*



**Trial**  
**Openness**  
**Release**  
**Always-on**  
**Naturalness**

**Digital media**

Integrated shop-floor simulation  
*CAD and virtual reality,*  
*for design and learning*

**Mobile media**

*Tablets used by workers*  
*on the production line*

**Always-on connection**

(all connected, always connected)

## > From Ict to digital media

*From "service" technologies to inter-mediation  
between people, spaces and machines.*

## > In Alstom / Savigliano

*From a big handcrafting industry to a large digital factory.*

### **Integration of manufacturing engineering in the design phase**

Growth of the engineering department

### **Management of the complexity: from the practice to the simulation**

### **Worker's roles and industrial relations:**

- *Special Processes School*
- *Team-based work, workers = mentors*
- *Fixed-term employment contracts- flexible work conditions*

- **Workplace | Innovative social organisation**

(not only innovative production system)

*Worker* > from reactive position to proactive position

- **What we loose, what we gain**

*Craftsman-worker* > tacit knowledge acquired over time through experience

*Media-augmented worker* > tacit knowledge acquired through the use of media in everyday life

- **Media | Universal language for diversity**

(visual and “natural”)



*Future worker's skills will be more and more linked to computer literacy: we need “computerized” workers ... Here we have people from all over the world, there is a mixture of people and cultures that requires teaching and acting more visually.*

(Excerpt from an interview in Alston Savigliano, 2015)

TORINO nordovest

 **t.mazali@torinonordovest.it**

*Founded by*



*Thanks to Alstom Ferroviaria spa (Savigliano Site)  
for allowing the presentation of the case study.*