



Success Stories of Edge Computing and AI in Industry

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Who we are



€ 700 million
in consolidated
turnover

4,000 people
in Italy and
abroad

3 major
production
centres

Present
across
5 continents
close at hand

7% of turnover
invested in R&D

INDUSTRIAL MACHINERY

Stand-alone machines, integrated systems and services specially developed to process a broad range of materials.



Woodworking
technologies



Technologies for processing
composite materials, aluminium,
plastic, glass, stone, metal

INDUSTRIAL COMPONENTS

Technological components for Group and third party machines and systems as well as for the mechanical industry.



Electro-spindles
and technological
components



Electrical panels



Metalworking
and mechanical
machining



Cast iron

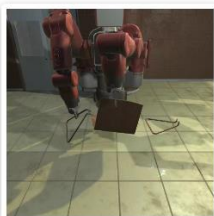
AI in Furniture Manufacturing: where do we stand?

Emergent Tech ▶ Artificial Intelligence

You wanted flying cars and colony worlds. Instead, IKEA furniture-building-ish AI robots



Sawyer



Baxter



Cursor

AI in Production engineering – fast and efficient engineering and commissioning

SIEMENS
Ingenuity for Life

Optimizing machines throughput

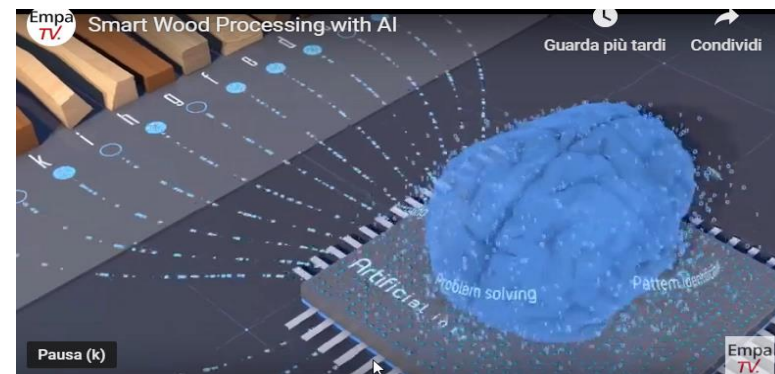
- ML for tool selection and changeover times
- Complex optimization methods to find exact (not approximate) optimal solutions
- Algorithm is implemented on edge device
- ▶ Productivity increase by up to 20%

Design and engineering → Automation and operation



With artificial intelligence to a better wood product

Wood technology



PRESS RELEASE

Athens, 3 September 2019

For immediate release

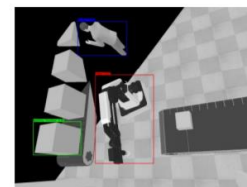


Fig 2. Convolution Neural Network identifies the key objects and labels them



Rossini's recent advances in the perception layer for collaborative robot control

What's in for SCM?

*From an industrial point of view, AI means **algorithm-based and data-driven computer systems** that enhance machines and people with digital capabilities such as **perception, reasoning, learning** and even **autonomous decision making**.*

T.Hahn, Siemens, 2019

What could be «enhanced»:

- Machines → productivity, adaptiveness, ownership cost
- People → production planning, maintenance, failure fixing

Barriers:

- Risk aversion in capital goods sector → Certifiability?
- Vicious circle: no data, no service...
- Customers' knowledge sharing
- Business model (not just value proposition, but distribution, relationship...)
- Lack of holistic approach («weak» correlations)
- Should we apply it ourselves first?