

COGNIVIX

AI FOR FACTORY AUTOMATION

FIELDVIEW

PITCHDECK



EXPERIENCE AND ENTHUSIASM

ABOUT US – FOUNDERS TEAM



CEO
Daniele Bernardini

Master in Physics from University of Florence & LMU Munich
Computer Vision and Machine Learning researcher
at Technical University of Munich (TUM)
15 years of experience in managing a software company



VP Sales
Francesco Scalise

Master in Electronic Engineering from University of Parma
20 years of experience in sales In the manufacturing market
15 years in management positions



COO
Giorgio Calapà

Master in Business and Administration from University of Bologna.
15 years experience as Business Analyst/Project Manager in
Operations and Technology for Tier 1 Investment Banks,
Investment Funds and Fintech companies



Scientific Advisor
Prof. Dr. Marco Caccamo

Alexander von Humboldt Professor at TUM
(Most prestigious German research award)
IEEE Fellow
Chair for Cyber-Physical Systems in Production Engineering



Industrial Advisor
Dr. Leonardo Tassini

PhD. in Physics from TUM
15 years experience in Research and Development
in Sensors and Optical Systems



TODAY'S RIGID AUTOMATION

PROBLEM AND HUGE OPPORTUNITY

FACT: Large part of global manufacturing is still not automated

WHY: automation makes sense only for large production volumes with minimal changes

High Mix

Automation 200B \$

Low Mix

High Volume

Low Volume

Manufacturing Untapped Market > 10T \$

Automation Today



Bespoke Machinery

High initial costs

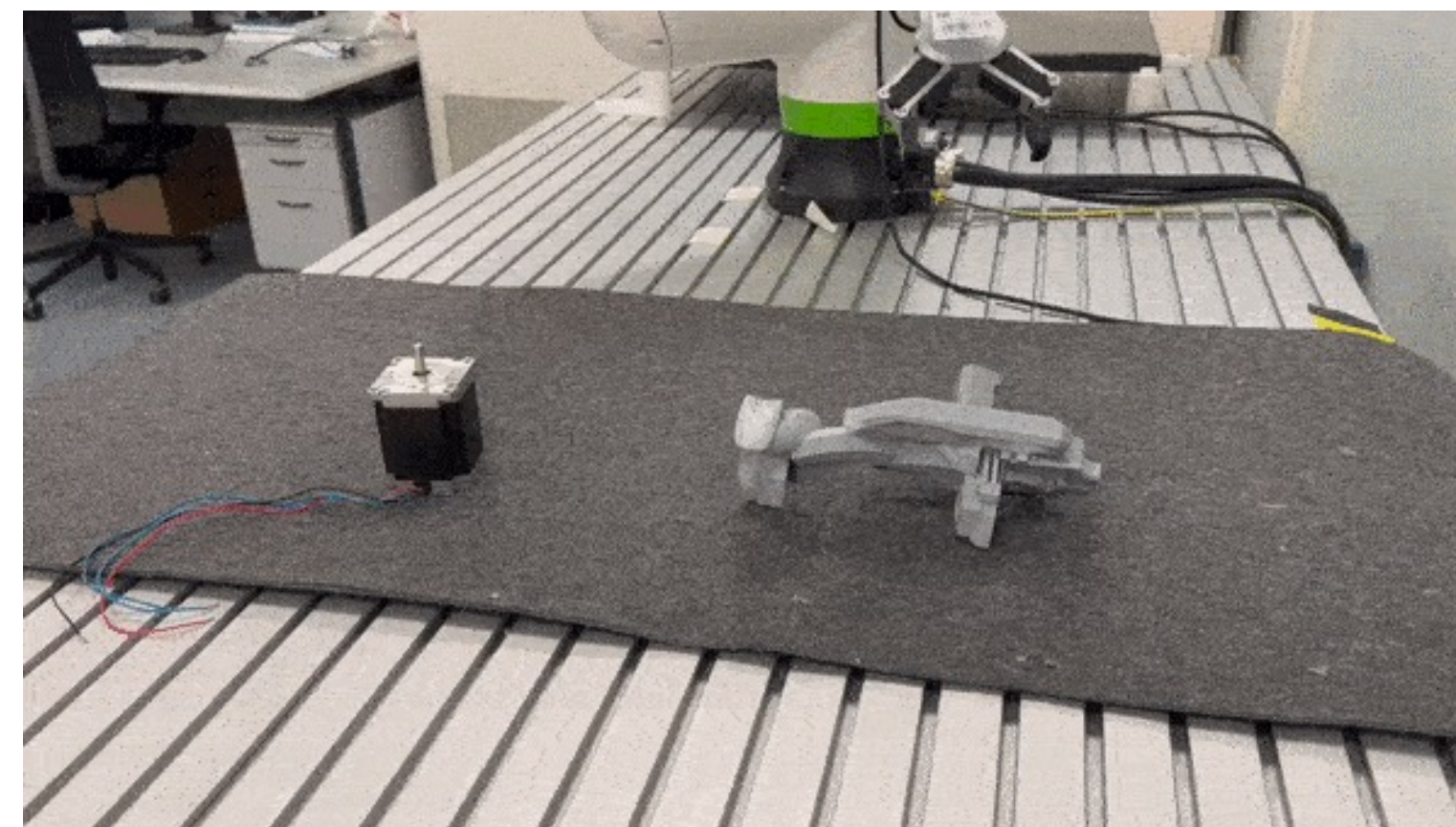
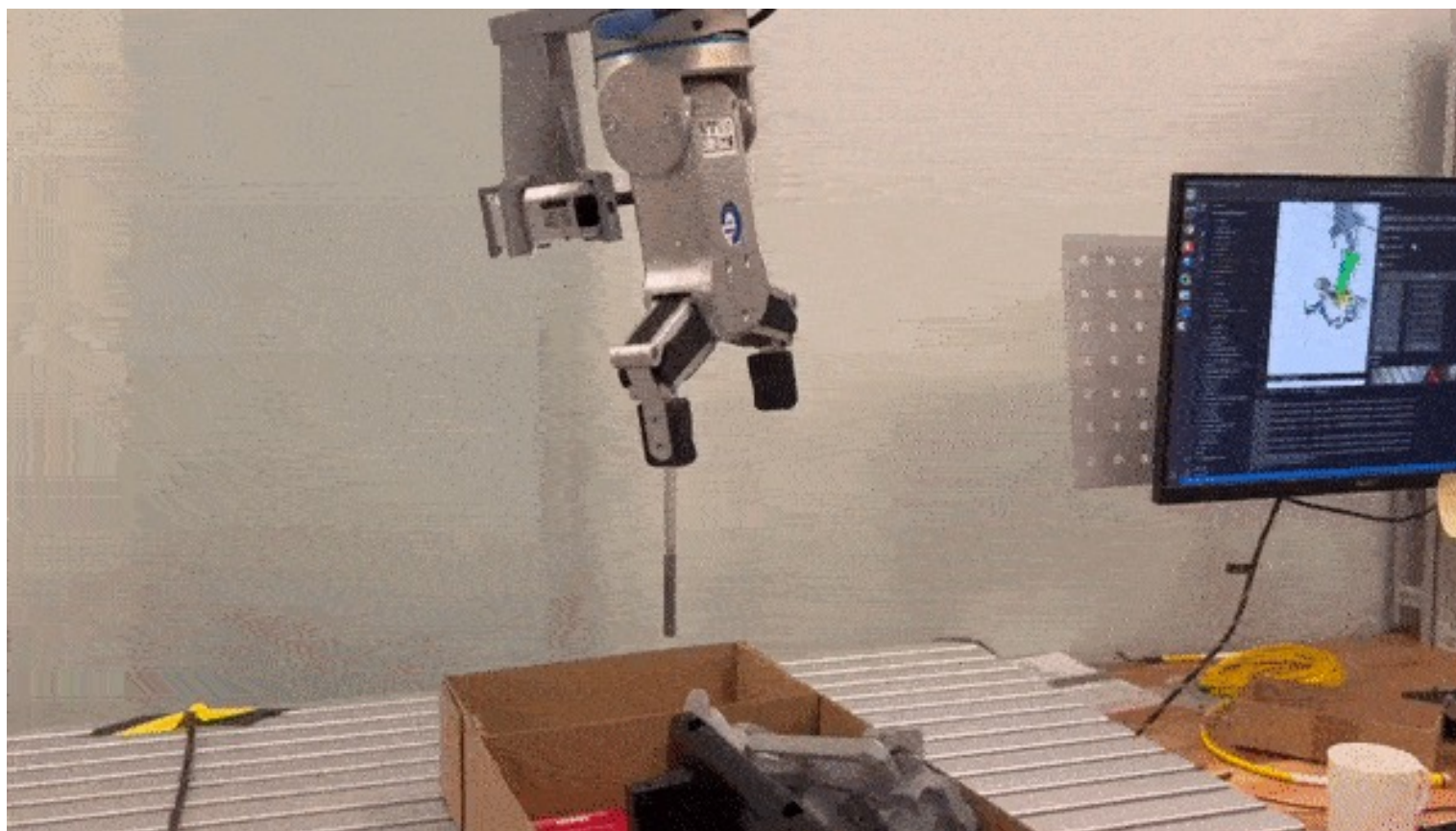
High costs for changes

**Only for high volumes
and stable production lines**

Loading

Assembling

Automation Tomorrow



Robotic Arms with AI Vision

Moderate initial costs

Maximum flexibility

BUT

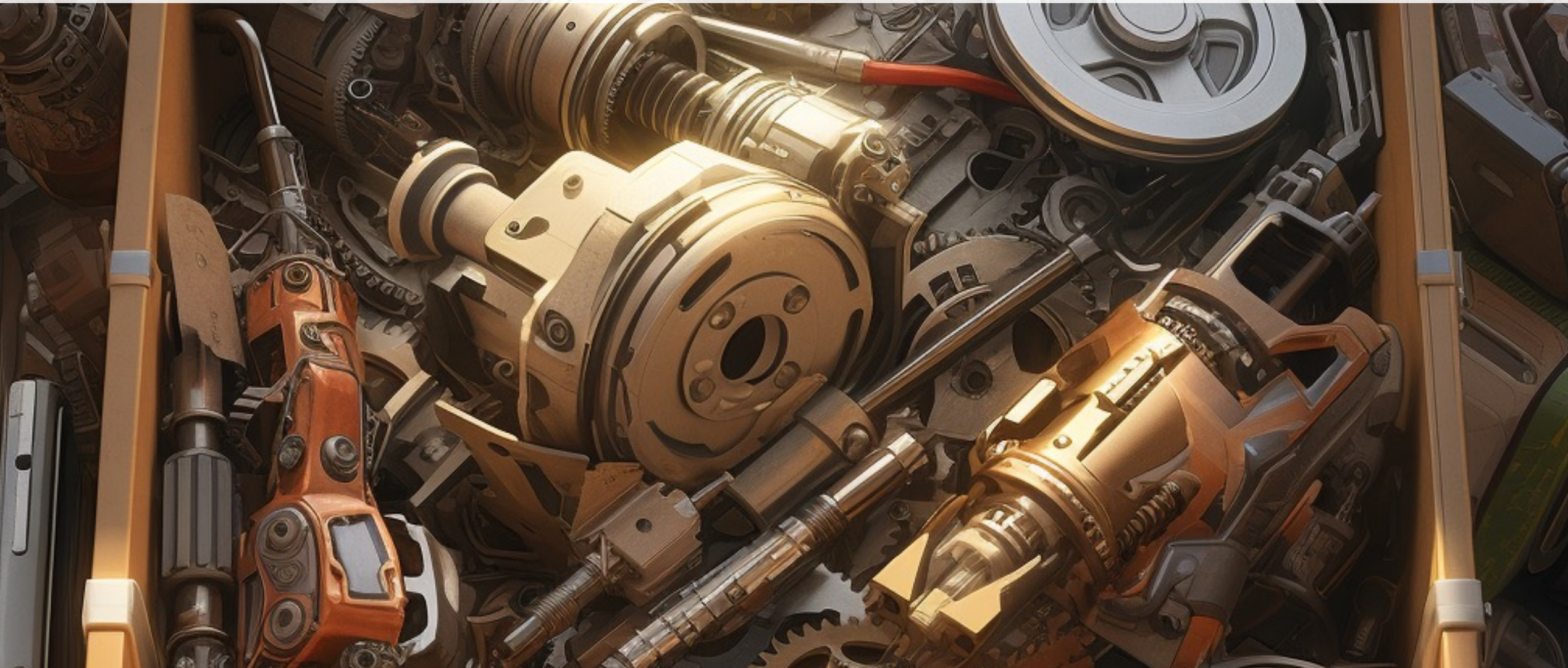
AI is still in research

Needs AI scientists on site



ADDRESSING KEY ROADBLOCKS IN AUTOMATION

Robustness in High Mix Production



Adapting to High Mix Environments

Consistent performance across varied lighting conditions
Efficient operation amidst dynamic backgrounds
Seamless integration with human operators

**Leverage Cognivix founders
Machine Learning Research Results**

Simplified Setup & Adaptation



Easy Setup & Changes

Effortless setup of new production lines
Modify parts processing with simple configurations
No advanced ML expertise required

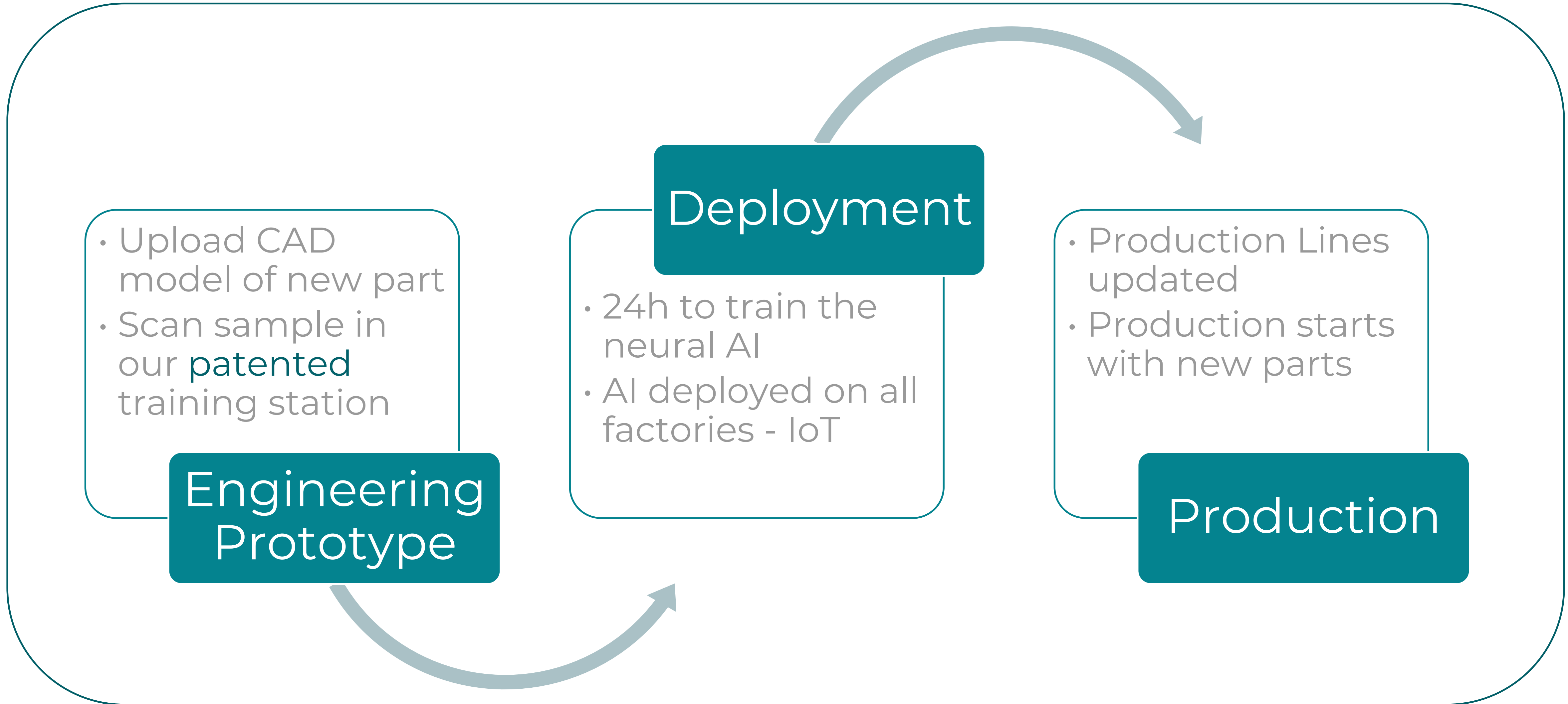
**Patented (pending)
Automated Data acquisition and training of AI**

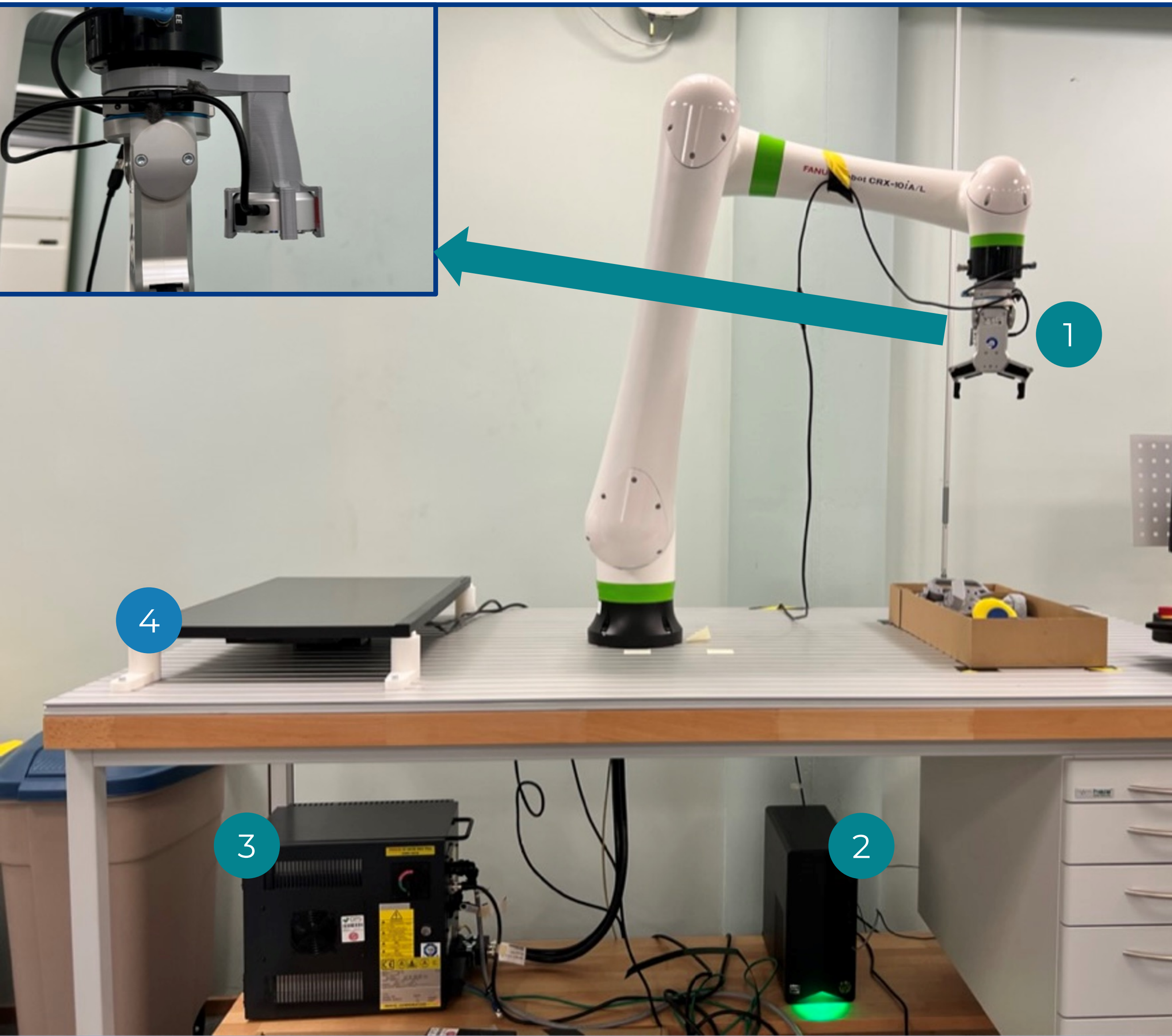
ROBUSTNESS IN HIGH-MIX PRODUCTION





SIMPLIFY SETUP AND ADAPTATION FROM DESIGN TO PRODUCTION IN 24H





4



Training Station Prototype to scan the sample before deployment (Patent in national phase)

1



Standard Camera + Depth

MOTION

VIDEO 3D

3



Standard Robot Controller

GRASPING POSE

2



Hardware: AI Controller 2000€
Software: Fieldview Client 2000€ / Year
1Controller / Robot

4

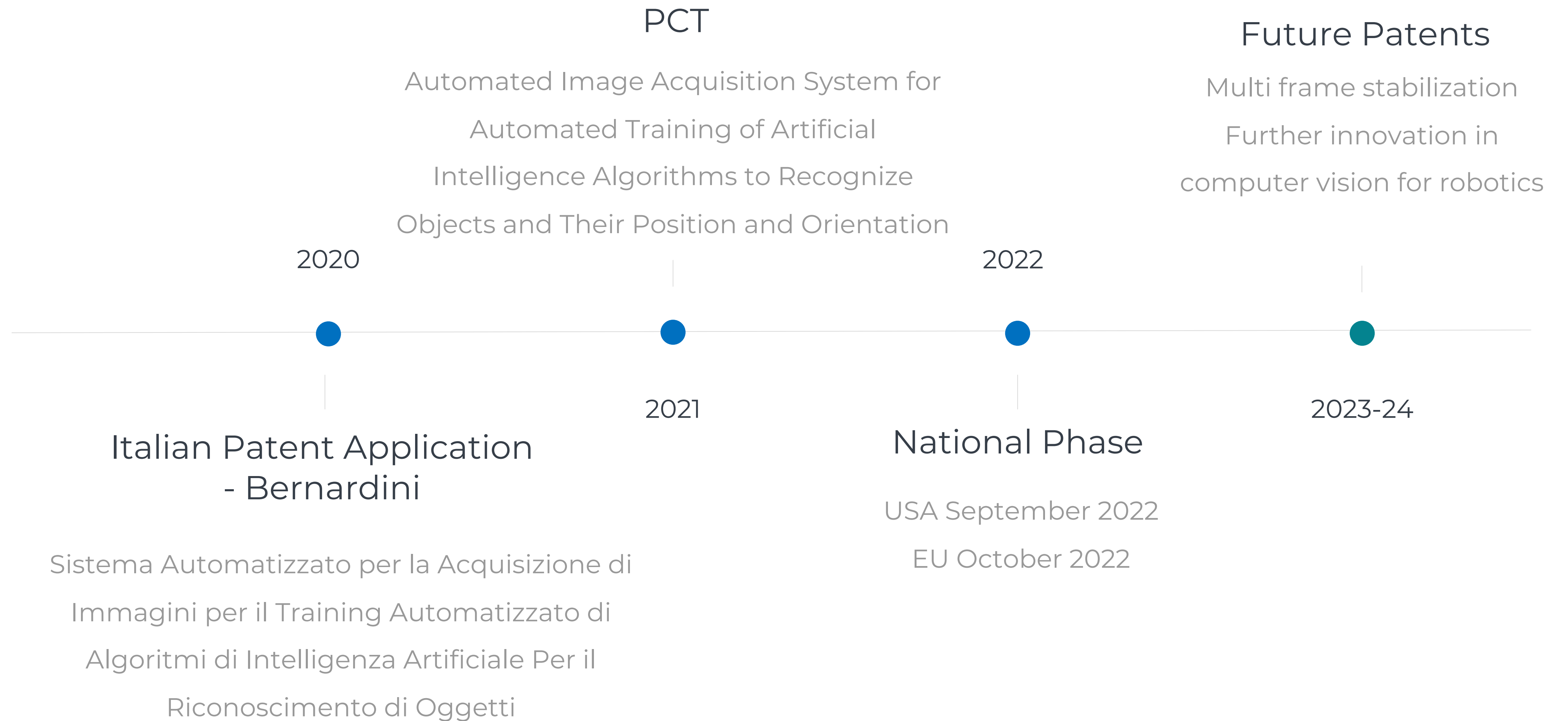
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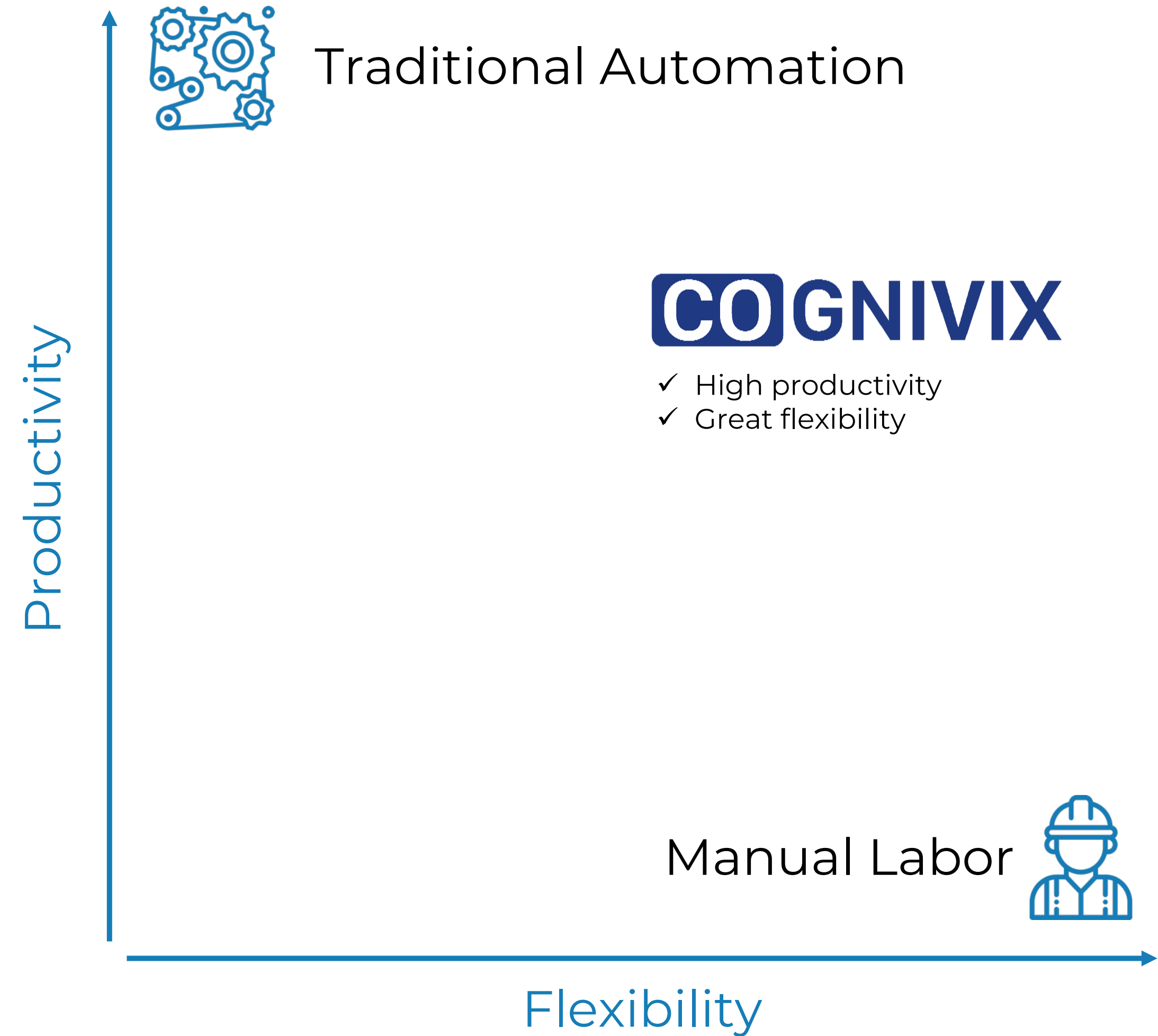
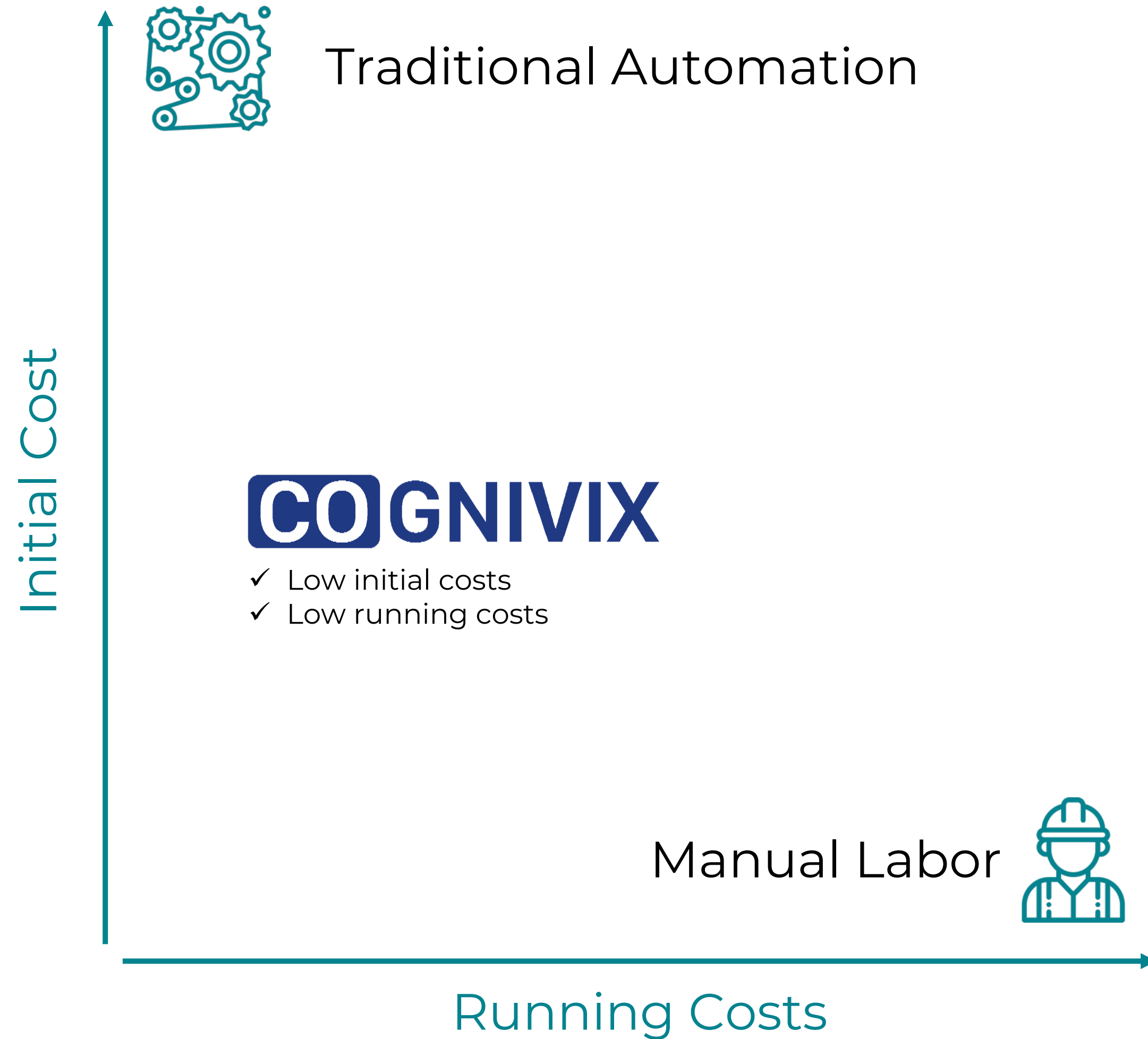
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COGNIVIX TIMELINE

INTELLECTUAL PROPERTY STRATEGY





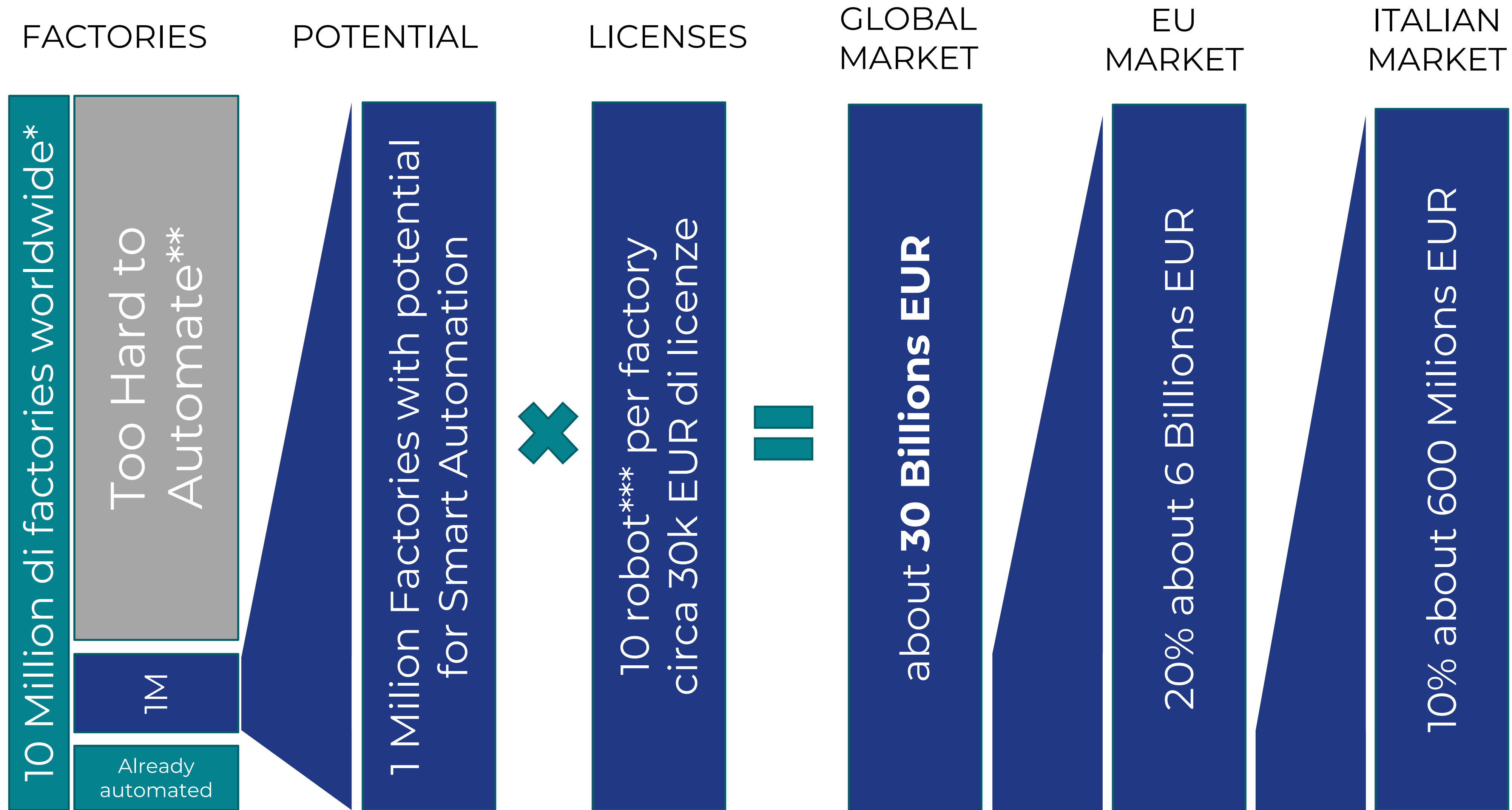


BUSINESS MODEL

ORDER EXAMPLE

A typical small customer
with 2 robots

	Count	Fixed Costs	Yearly Licenses
Hardware Costs	2	4,000€	0 €
Fieldview Client	2	0€	4,000€
Fieldview Server	1	0€	10,000€
Total		4,000 k€	14,000€

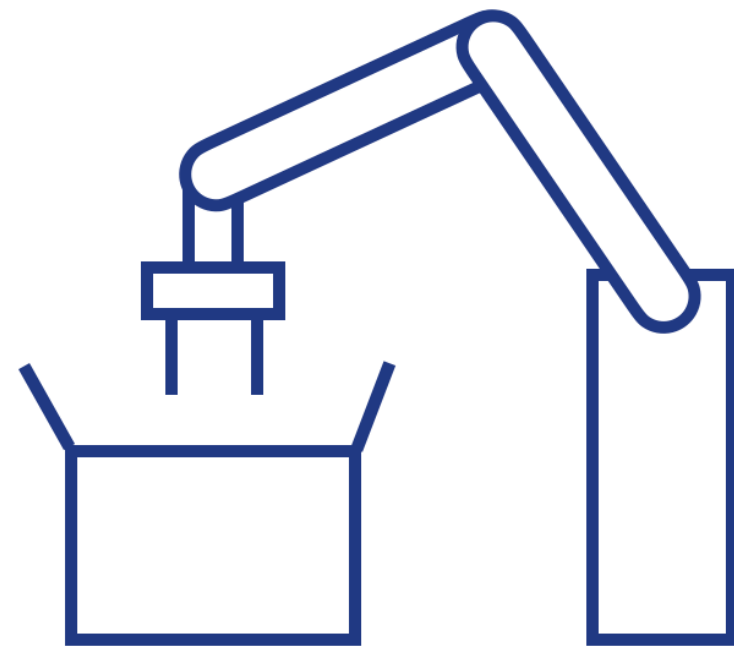


* <https://www.scmo.net/faq/2019/8/9/how-many-factories-is-there-in-the-world>

** We assume that 10% of the factories have some process that can be automated using our technology

*** We further assume that each such factory will utilize on average 10 robots

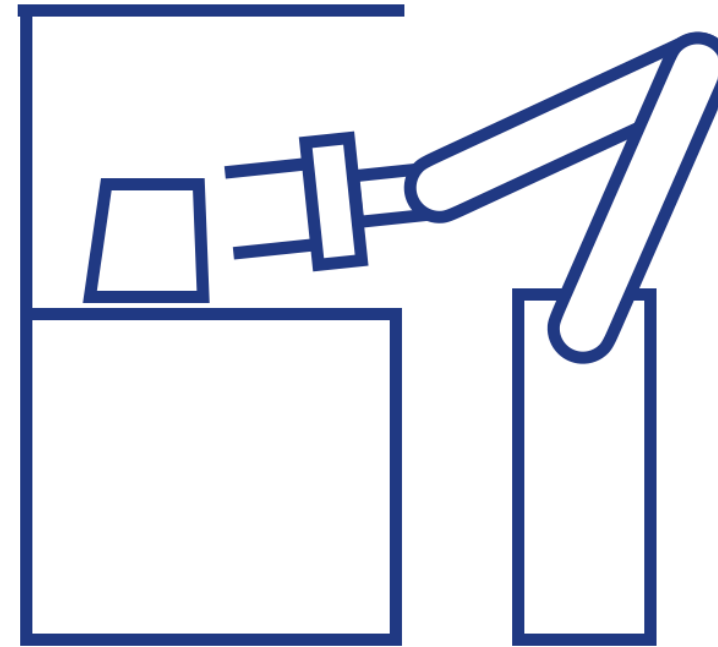
Bin Picking



Single-camera operation: The camera mounted on the robot can manage multiple bins, eliminating the need for multiple cameras.

Direct picking: Fieldview can pick directly from the delivery box, removing the need for additional cells.

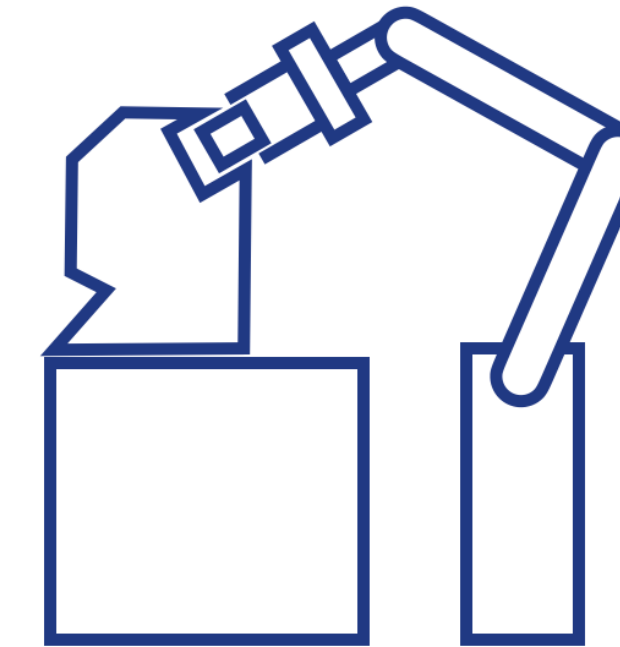
Machine Tending



Multi-tasking: One robot can tend to multiple CNC machines as the vision system moves with the robot.

Flexibility: When combined with bin picking, it offers maximum flexibility in operations.

Assembly



Design adaptability: Changes in parts design can be accommodated without altering the assembly routine.

Human collaboration: The adaptive AI allows for seamless collaboration with human workers.



COGNIVIX TIMELINE

MARKET ACCESS

Licensing

Leverage partners networks and Integrators to transition from project to product sales

Scale Up

Consolidate partnerships with integrators

2024



Pilots

First pilot planned dec 2023
2 more pilots in pipeline
Aim to finish 5 pilots by end 2024

2025



International Expansion

Establish USA and Japan subsidiaries
Round A

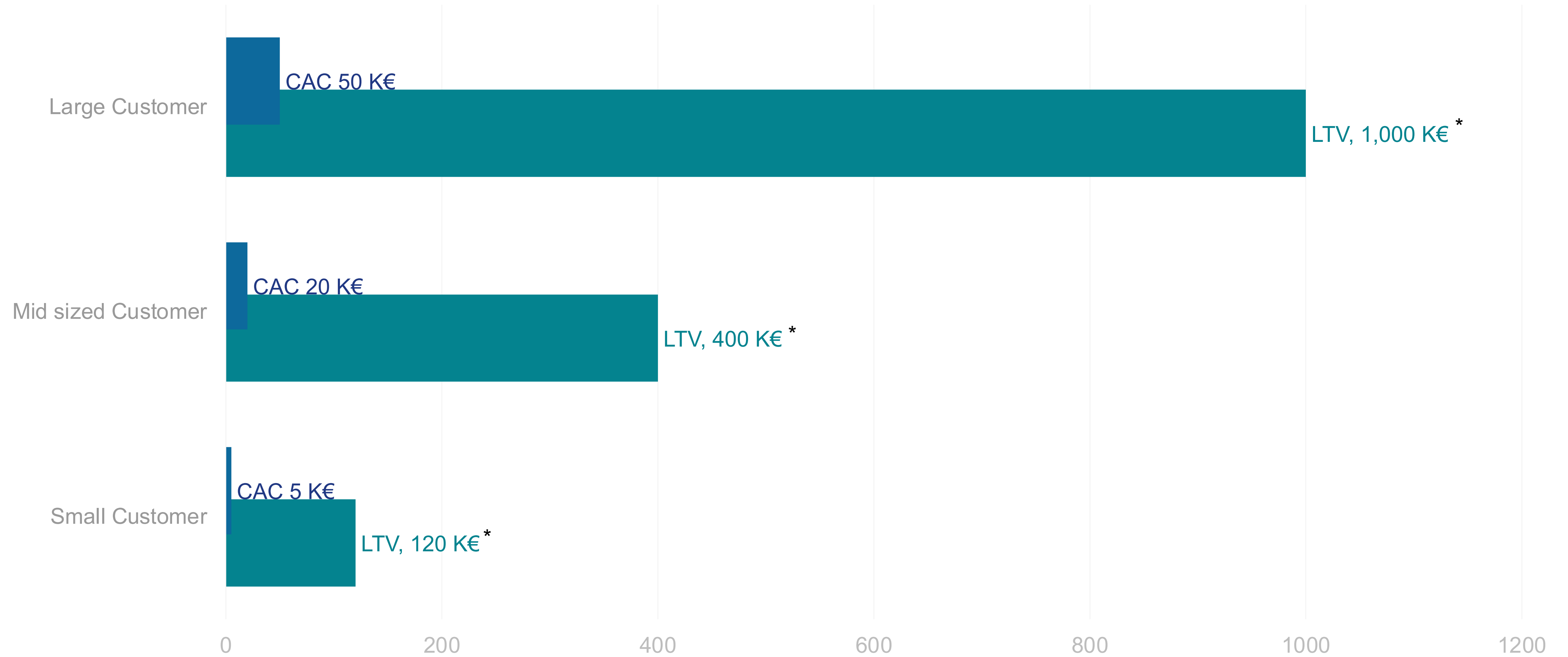
2025



2026



CAC LTV in K€ By Segment



* assuming 10 year of operations for a production line and:

- 1 plant, 1 robot for a small customer
- 2 plants, 5 robots per plant for a medium customer
- 5 plants, 5 robots per plant for a large customer



FIELDVIEW TIMELINE

HOW WE GOT HERE

Idea & PoC

Idea born from collaboration with FANUC - First PoC
Successful Robot Grasping

2019-20

2021

Research Prototype

Completed first working prototype in collaboration with TUM – 90% accuracy

2022

2023

Pilots & PMF

Speed, robustness, prototype production lines

2023-24

10 years of research in AI

Cognivix s.r.l. incorporated

Highly experienced team from research, industry and finance

Raised 950k€

Smart & Start Italia
Equity Seed Round

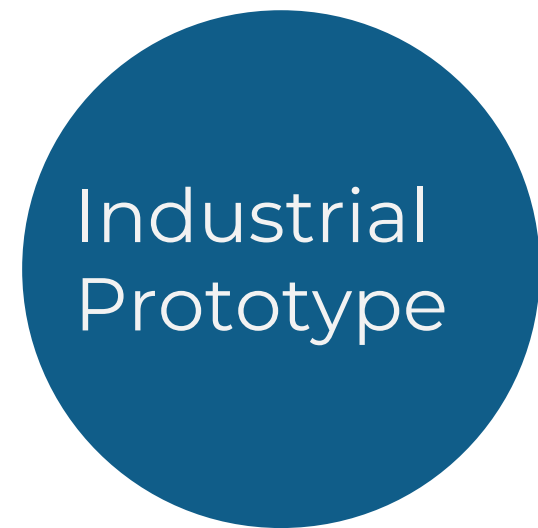


SEED ROUND

SEED ROUND 1.2M

LEAD INVESTOR: MAGIC SPECTRUM

2023



Industrial
Prototype

950k € Pre-Seed

Magic Spectrum is an accelerator and investment fund of Digital Magics, Cassa Depositi e Prestiti and Compagnia di San Paolo

2023



- Product Development
- Business Development

600k € Seed

Dec 2023:
300k € Magic Spectrum
300k € Other Investors

2024



600k € Seed Follow on

After Milestone:
300k € Magic Spectrum
300k € Other Investors

2025



Move from project driven business to license driven revenue

Hand over installation and operations to integrators

Ready to scale up internationally



Recognized by StartUs Insights as one of the
10 Top Manufacturing Startups to Watch in 2023
<https://www.startus-insights.com/innovators-guide/manufacturing-startups/>

Recognized by Web Summit as one of the
200 Most Exciting Early Stage Startups 2022 & 2023

For two consecutive years Cognivix was invited to
The Gathering, a close door event taking place before Web Summit

Cognivix aims to harness the power of AI through groundbreaking hardware/software innovation to the factory floor.

Contact us at daniele.bernardini@cognivix.com