



**THE 2025
BAKING
FORUM**

Back in the mix for 2025



**Rockwell
Automation**

expanding **human possibility**[®]

Digitalisation Technology in the Bakery Industry

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PUBLIC



The pressures on the UK Baking Industry

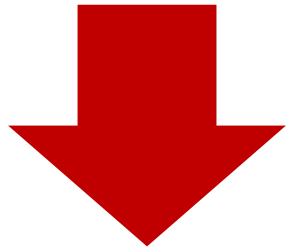
One of the most difficult FMCG sectors to be in!

- **Financial Pressure**
- **Labor legislation**
- **24-hour production**
- **Skills shortage**
- **New Product Innovation's**
- **Sustainability expectations**
- **Regulatory requirements**

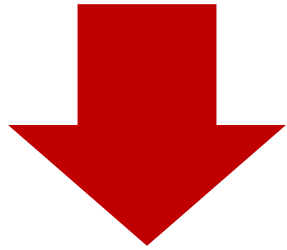
WHAT IS DIGITALISATION?

Decoding the 'Buzz words' and myths!

Digitalization



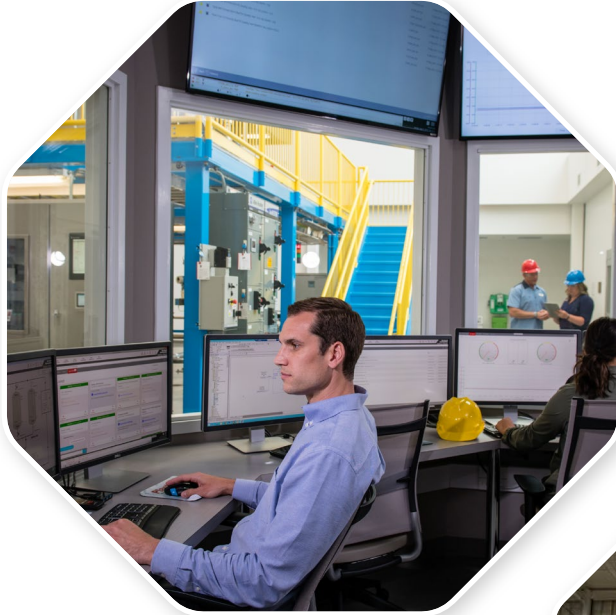
Artificial Intelligence (AI)



Smart Manufacturing / Industry 4.0



The Impact of Digitalization on Bakery Industry



Operational Efficiency

Sustainability

Product Development

Supply Chain Optimization



Customer Experience

Food Safety

Quality Control and Inspection

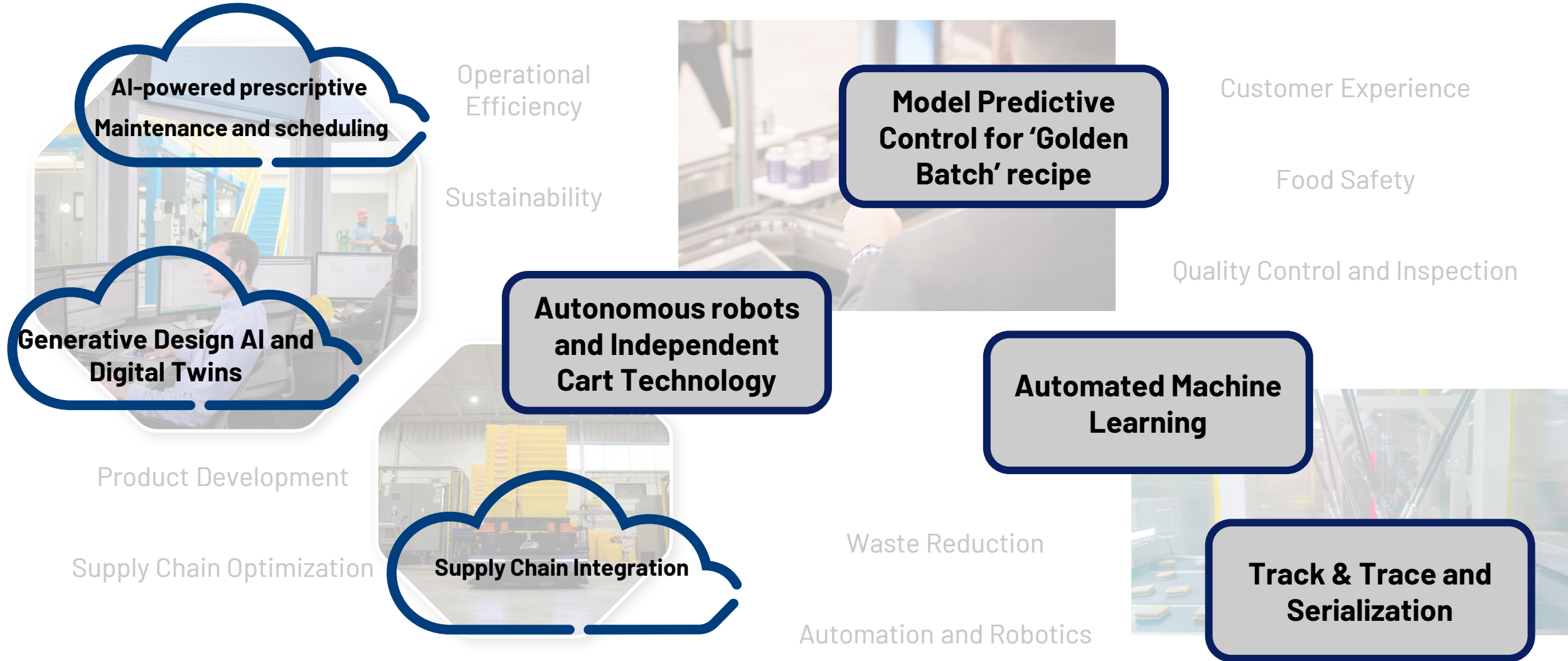


Waste Reduction

Automation and Robotics



The Impact of Digitalization on Bakery Industry





5 USE CASES FOR AI IN INDUSTRIAL BAKING

Optimizing Production

Using AI to forecast demand, optimizing production planning and inventory management using AI algorithms.

Quality

Replacing human inspectors with AI-powered computer vision for quality control and inspection, such as dough viscosity and moisture content.

OEE

Using machine learning algorithms to analyze machine performance and predict failures, reducing downtime and maintenance.

Sustainability

Smart measurement and control of energy and other precious resources. Measuring usage and seeing patterns emerging depending on external factors.

Employees

Capture valuable existing employee's knowledge and skills to help train the next generation of employees and provide valuable, repeatable insight and support.





CHALLENGE

Improve decision-making and quality for tortilla production:

- High Volume - Lines produce 7,000 packs of 12 Tortilla's and 1.8 Tons of Tortilla chips per hour.
- Leverage machine data to unlock enhance customer support
- Reduce failures and downtime
- Reduce maintenance/travel costs
- Reduce response times and mean time to restoration

Reduce response times and MTTR

SOLUTION

IoT platform and remote monitoring:

- KPI benchmarks and standards
- Real-time remote monitoring and dashboards
- Secure remote access
- Yield versus benchmark comparisons
- Remote support from the OEM reduces downtime and cost

Cross-plant KPI comparisons versus benchmarks

RESULTS ACHIEVED

Reduce response times

and Mean Time to Repair along with improved machine performance via OEM remote monitoring services/support

How do you 'Cross the Chasm'

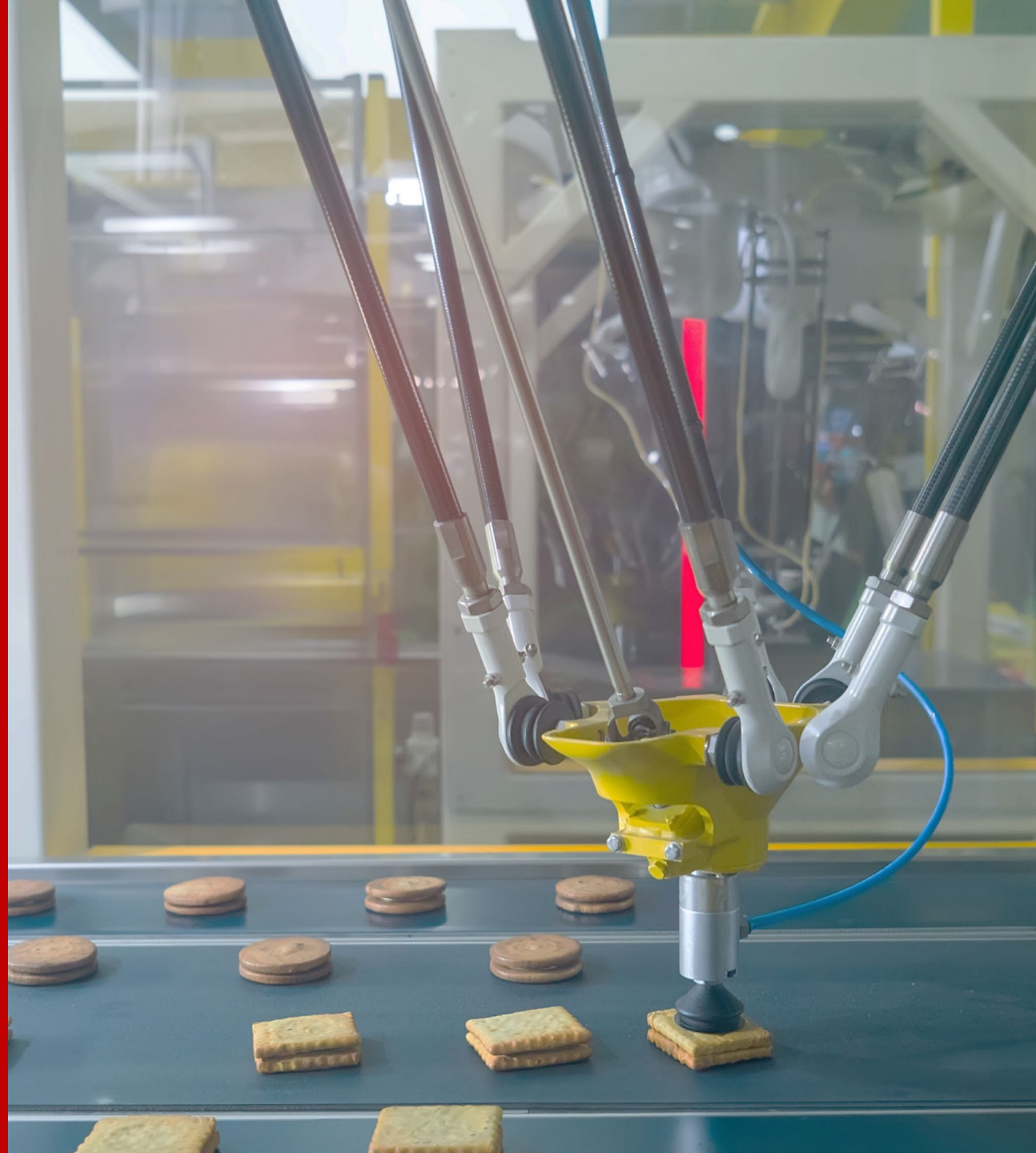
The art of the possible with what you have already

- How to apply without rip and replace
- Start small, prove value and grow
- Scalable solutions.

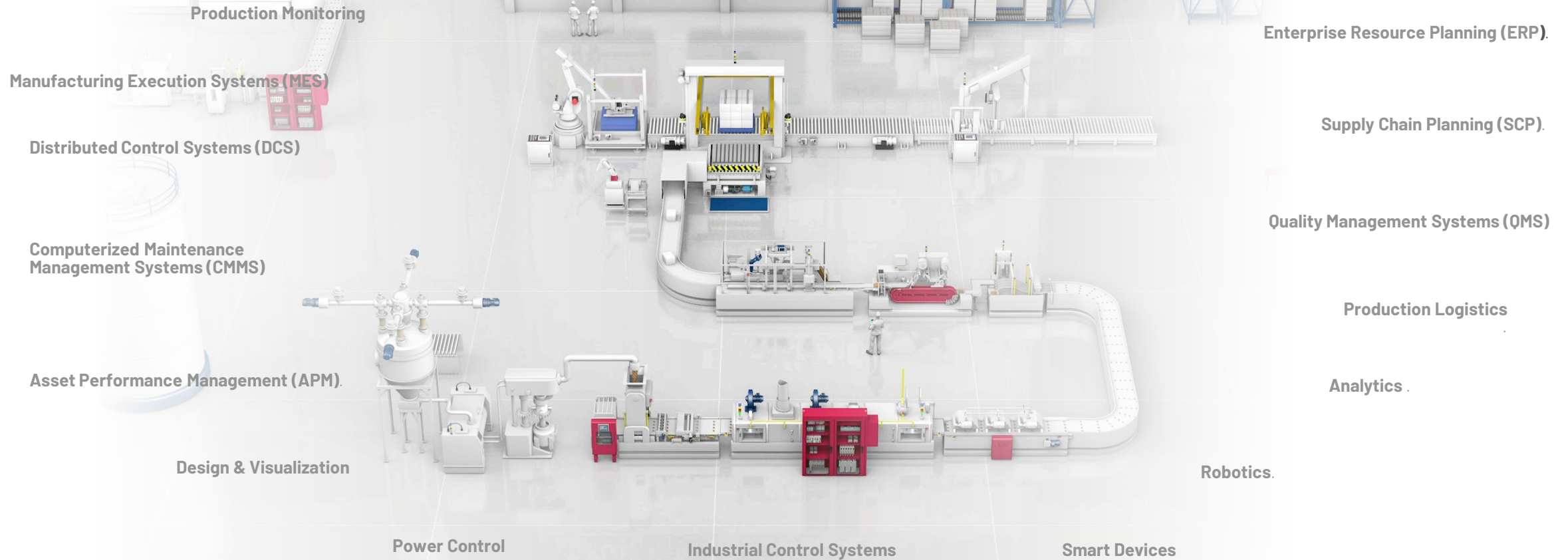


“ Automation is a powerful tool, but it's only the beginning. The future belongs to autonomous systems that can learn, adapt, and make decisions on their own.”

Satya Nadella
CEO OF MICROSOFT



What is the future of **autonomous production**?



Thank You



**Rockwell
Automation**