

VOITH

Future(s) unfolding

Crafting the next chapter in papermaking with automation.

You will reach your production target

- Quality is slightly above specification
- Energy and emissions compliance are met
- Availability is in a range

Have a Good Day!

AUTONOMOUS
PAPER MILL

Up to 37.5 BEUR/year savings potential in paper production through digitalization

A study from McKinsey estimates
15% cost reduction and
5% OEE improvement

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45% ... Up from just **39%** 12 months earlier

of global CEOs believe their companies would no longer be viable in ten years' time if they continued their current path

So, the time to act is now – with a bold move towards **fundamental changes** in the paper industry's organizations, technology, and operating models.



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We spoke to more than 100 customers globally, and found that the majority faces three key challenges.



1

2

3

Talent

Collaboration

Technology

80% of know-how is covered by
20% of mill employees.

Expert dependencies

Too many complex tools lack
transparency and data integrity.

Long troubleshooting

Siloed work streams and tasks
cause heavy fragmentation.

Operational redundancies

We spoke to more than 100 customers globally, and found that they face numerous challenges ...

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#1 TALENT

- Ageing workforce
- Lack of adequate talent
- Need for attractive workplaces for next generation employees
- Change of needed skillsets
- Broken user experience



#2 TECHNOLOGY

- Complex technical systems
- Too many different tools
- Lack of transparency and data integrity
- Unexpected downtimes of paper machines
- High production and energy costs
- Low maintenance efficiency



#3 PROCESS

- Siloed applications and work streams
- Everything is fragmented, not seamless
- Complex processes
- No clear user guidance based on asset and process conditions
- Tool instead of outcome focus

... and one in particular

We need to prepare for the next generation

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Especially younger, tech-savvy generations expect more from the workplace, including better experiences!

GENERATION ALPHA*		
2.5 m born every week	2 billion reached by 2025	
80% have their own iPads and phones		global social tech-savvy
		90% will have a high school diploma
65% will work in jobs that do not exist today		COLLABORATION AUTONOMY PURPOSE

*Biggest generation yet

While productivity remains the main target, other external factors create new challenges.

Secondary goals as **workplace attractiveness** and **sustainability** became more important over the last years and are turning into **essential pillars** for the **Autonomous Paper Mill**.

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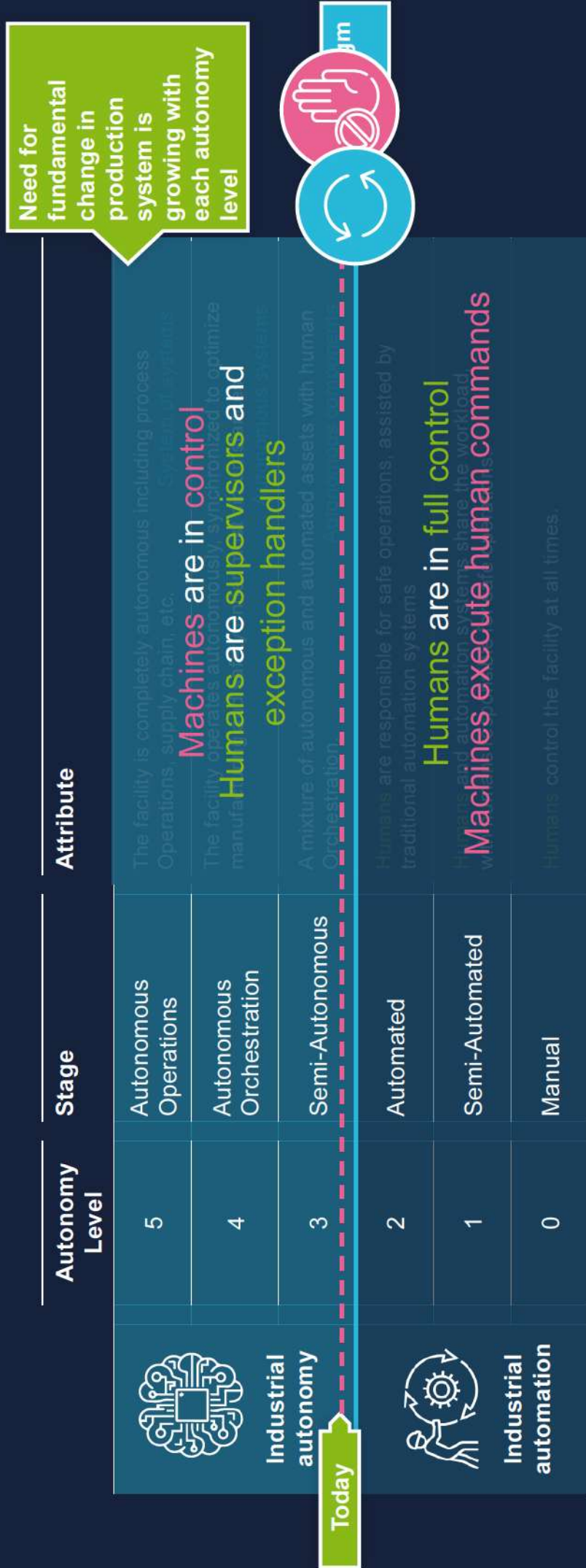


Voith's vision of the autonomous paper mill crafts a future where technology elevates the workforce, enables economic growth and protects the planet.

Shifting paradigms

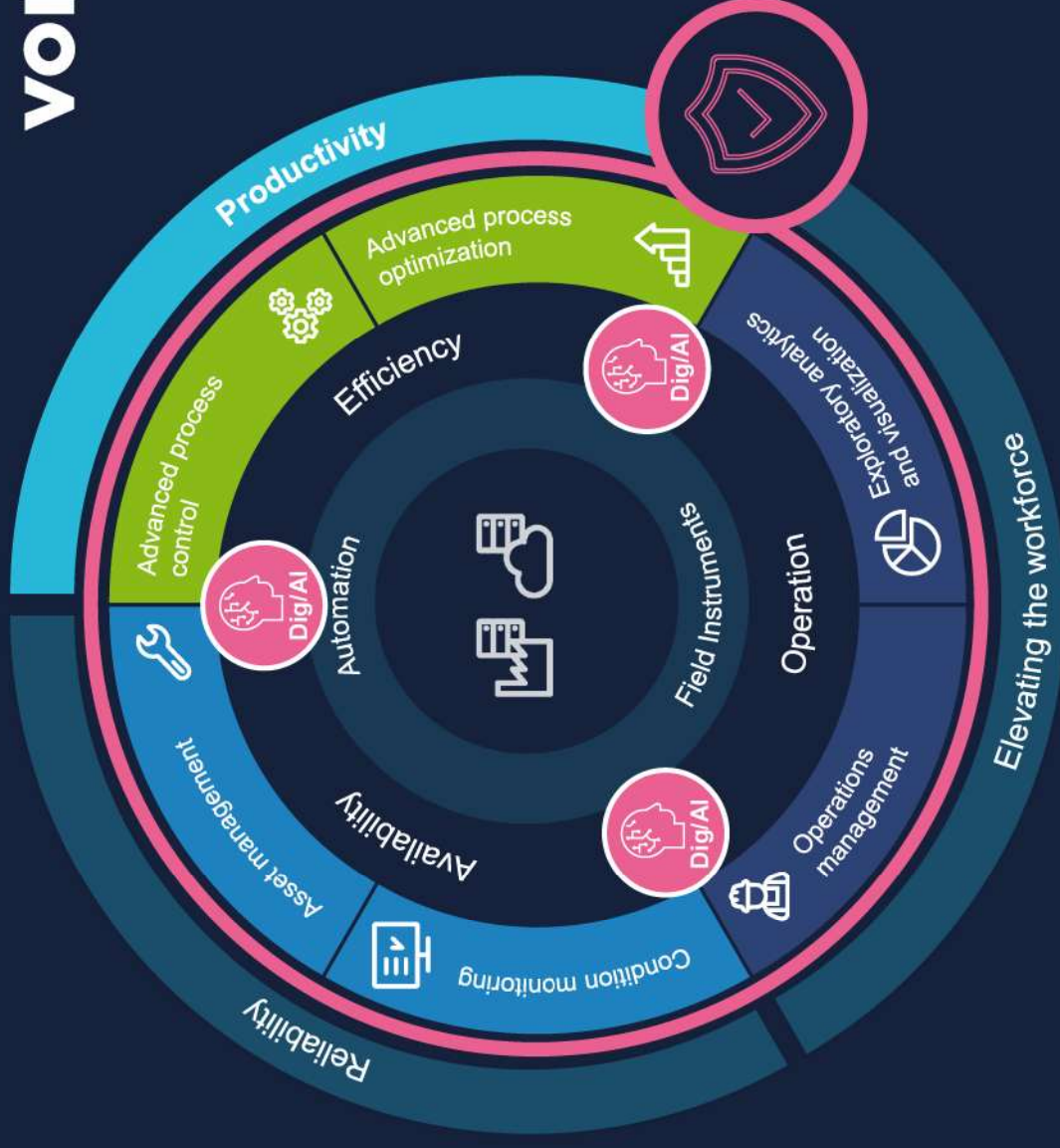
What does industrial autonomy mean?

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We at Voith are navigating this paradigm shift together with our customers

Our extensive domain knowledge, a complete automation and digital portfolio, strategic focus on autonomy as well as a decade of digital transformation experience put us in the position to support you on your journey, wherever it starts.



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Competitiveness, Talent, Growth and Innovation

Reach all by new ways of working with MillOne

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Your benefits by using MillOne

Free up working hours

Empower workforce

Reduce onboarding time

Increase operator efficiency



High performance OPEX





MillOne

AUTONOMOUS
PAPER MILL

Where are we?



At the Maschine

In the control room

Starting with the operator Because we want to shift the focus ...

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... from process monitoring and
manipulation ...

... to data driven business decisions.



Calculate your own **KPI** and set a **trigger** to get informed

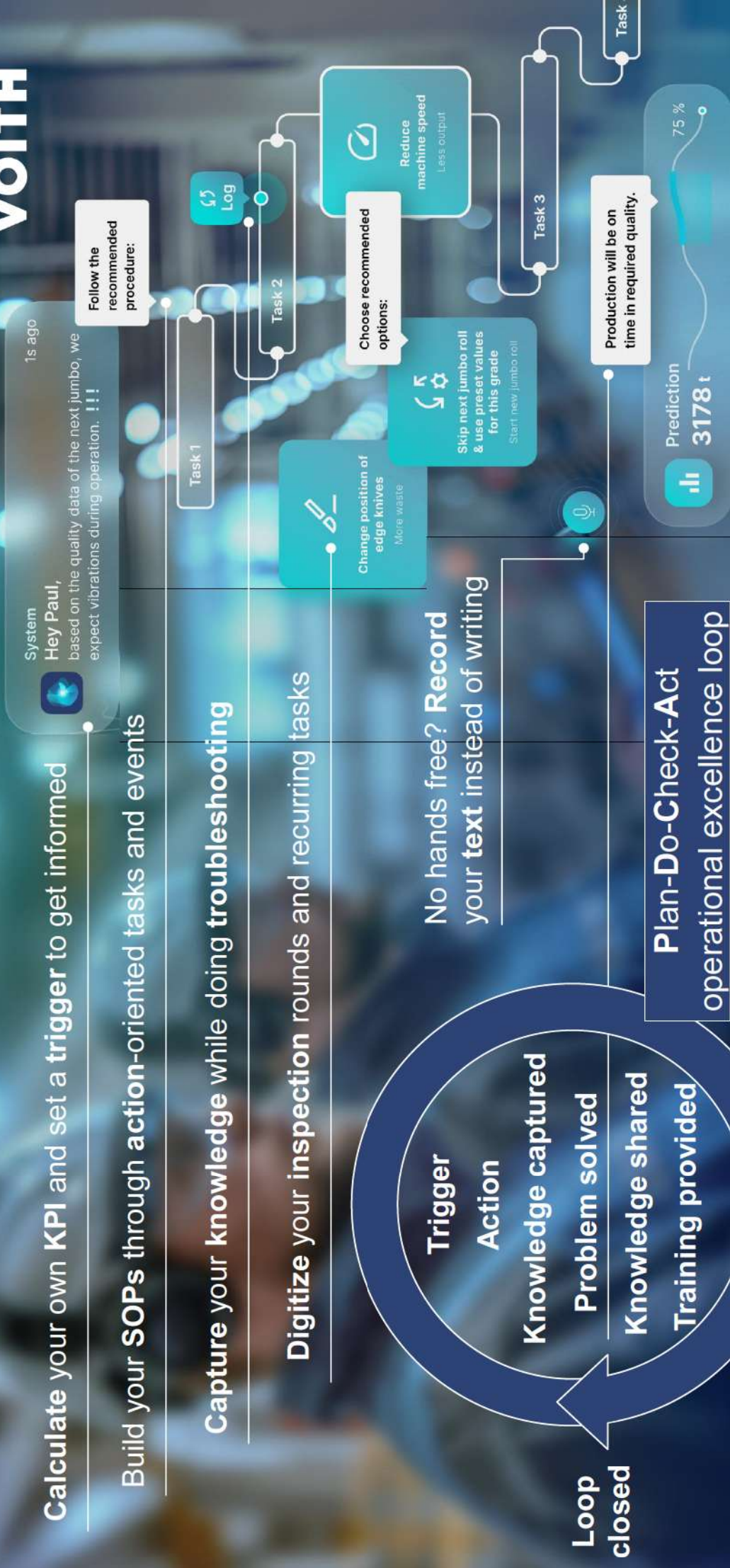
Build your **SOPs** through **action-oriented tasks** and events

Capture your **knowledge** while doing **troubleshooting**

Digitize your **inspection** rounds and recurring tasks

No hands free? **Record**
your **text** instead of writing

Plan-Do-Check-Act
operational excellence loop



Systems, AI & Controls integrated in MillOne

None of your current systems will be replaced

VOITH



1

Efficiency and transparency increase
by easy data access and data integrity

Looking forward to exploring the future of papermaking with you!

AUTONOMOUS PAPER MILL

VOITH

Autonomous Mill



More Information

MillOne



Book a Demo!