TREDENCE

Microsoft Solutions Partner
Data & AI
Azure

Smart Manufacturing

Enable smart manufacturing with our AI Driven Industry X.0 Solutions

#BeyondPossible

Microsoft

© COPYRIGHT 2022, TREDENCE. ALL RIGHTS RESERVED

Tredence at a Glance

2500+

Tredencians

Data Scientists & Analysts

Enabling

7

Industries

Retail, CPG, Manufacturing, TMT, Travel, HLS & BFSI

Powered by

100+

AI Accelerators

Across industries to power Last mile AI

4X Growth Since 2021

5X Valuation Since 2021

4X Growth in Employees

Leading to

94%

NPS

Across top engagements

and

50%

Faster TTI

Time to Insights through AI accelerators

Accelerating

50%

CAGR

Growth Since Inception

© COPYRIGHT 2023, TREDENCE. ALL RIGHTS RESERVED

AI Driven Predictive Maintenance

Optimize uptime & performance

Manufacturing teams spend 10-15% of their operations budget on maintenance activities, while still experiencing unexpected, unnecessary stoppages of critical primary & auxiliary equipment

Enhance asset lifespan, uptime & productivity with Tredence's Azure-based Predictive Maintenance Solutions

Our smart manufacturing solutions help companies drive operational efficiency & maximize value from key assets.

- Relevant for all rotating equipment, where vibration is a key leading indicator of potential issues
- Focuses on Risk Based Inspection, rather than Time Based, reducing unnecessary disruptions
- Continuous monitoring of Time to Failure & Remaining Useful
- Can be integrated with CMMS systems to enable smooth scheduling of maintenance activities

Reach out to us at alliances@tredence.com.

Tredence is a data and AI consulting firm that enables the last mile adoption of insights to drive value realization.

Enable smart manufacturing with our AI Driven Industry X.0 Solutions

AI Algorithms
Deep Learning algorithms, trained to detect & classify anomalies

Root Cause Analysis
RCA Engine to quickly pin-point the source of the problem

Data Wrangling
Scala/Sparkstructured streaming on Databricks for high-speed compute

IoT Edge Integration
Enable real-time monitoring & insights through streamlined implementation on the Edge

Ops for AI- IoT Edge
Automated pipeline & Governance frameworks for monitoring & troubleshooting

Business Impact

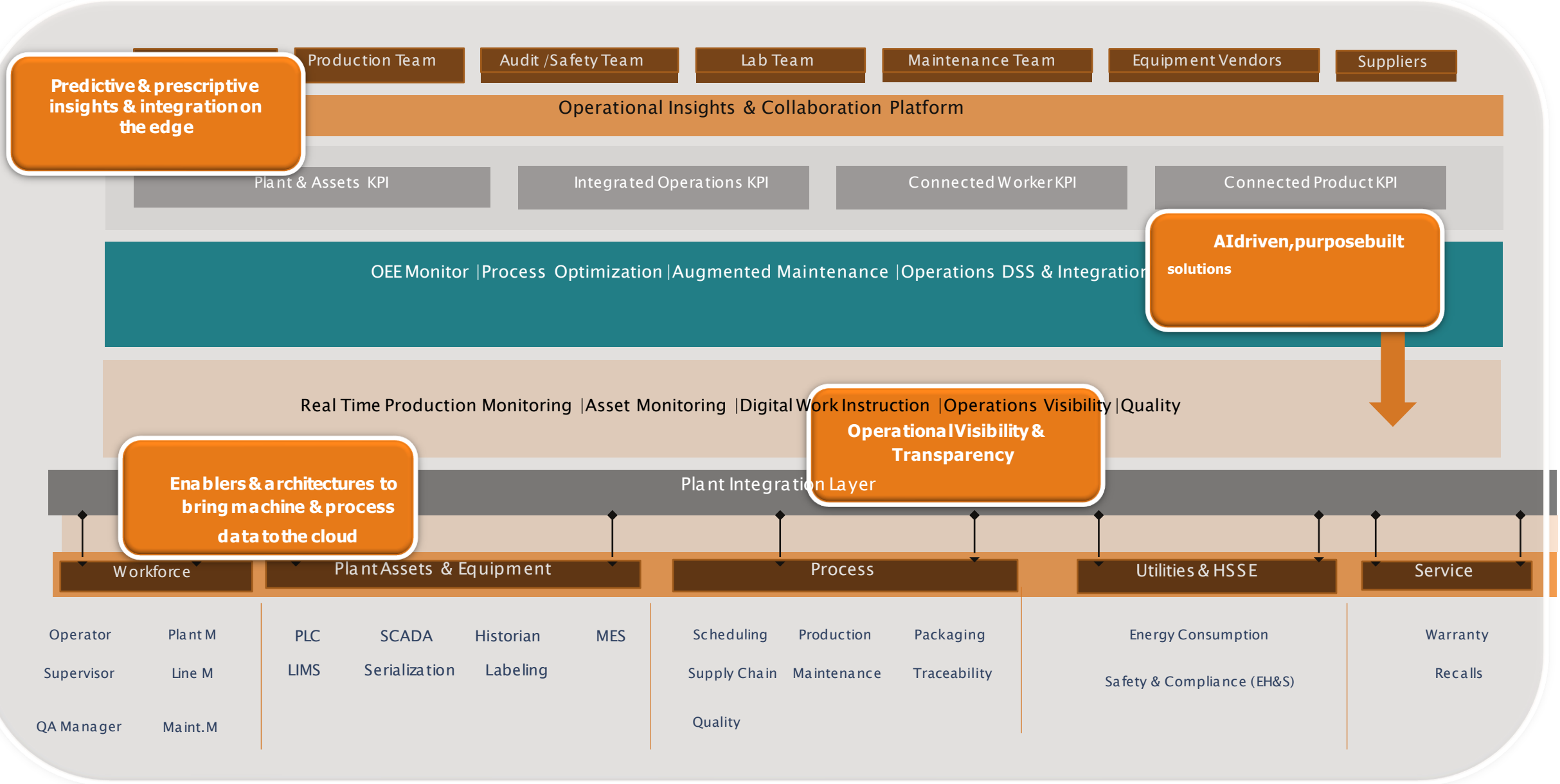
7-10% improvement in equipment uptime

15- 20% reduction in maintenance costs

2- 4 % reduction in production costs

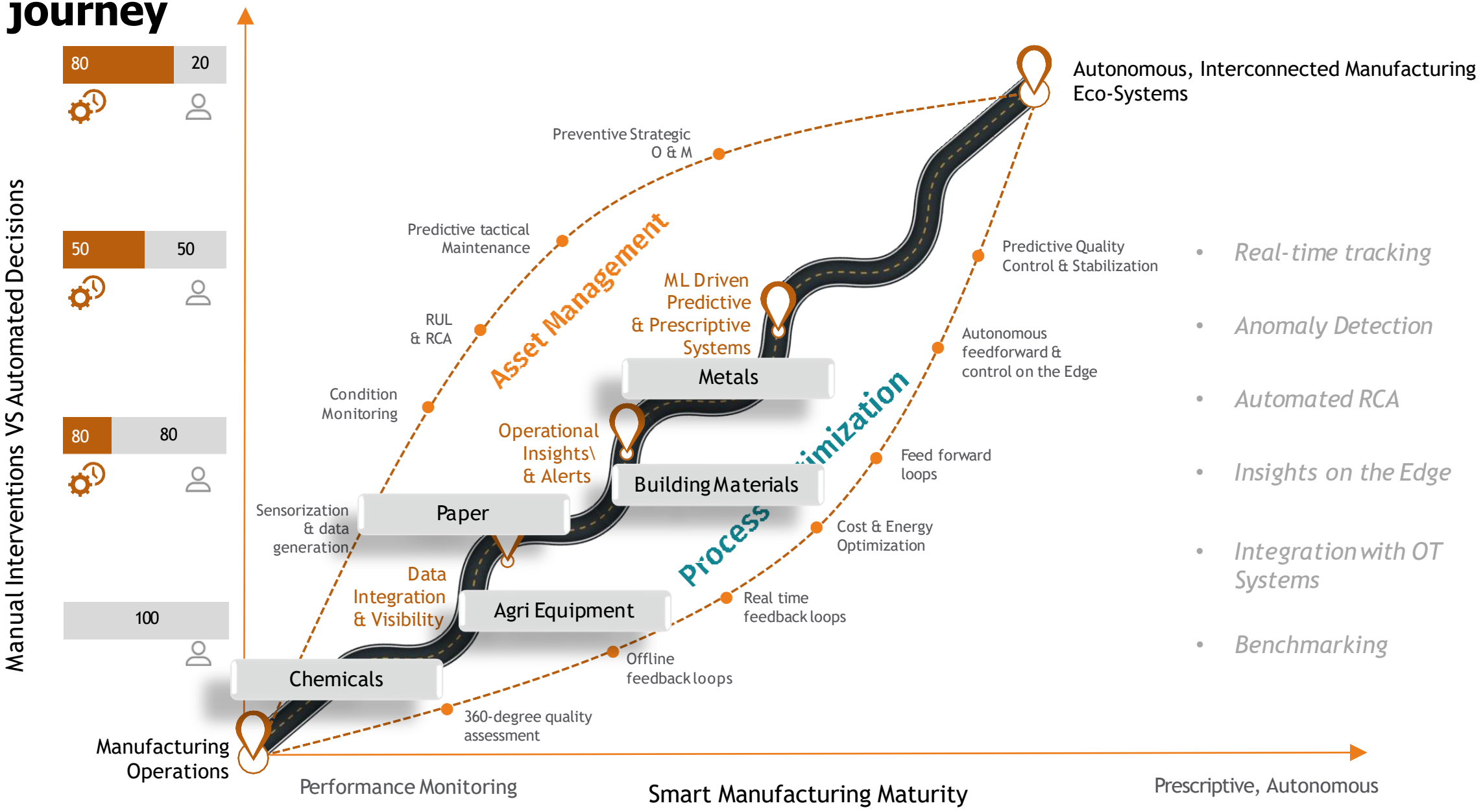
© COPYRIGHT 2023, TREDENCE. ALL RIGHTS RESERVED

Smart Manufacturing: Our Solutions Landscape



© COPYRIGHT 2023, TREDENCE. ALL RIGHTS RESERVED

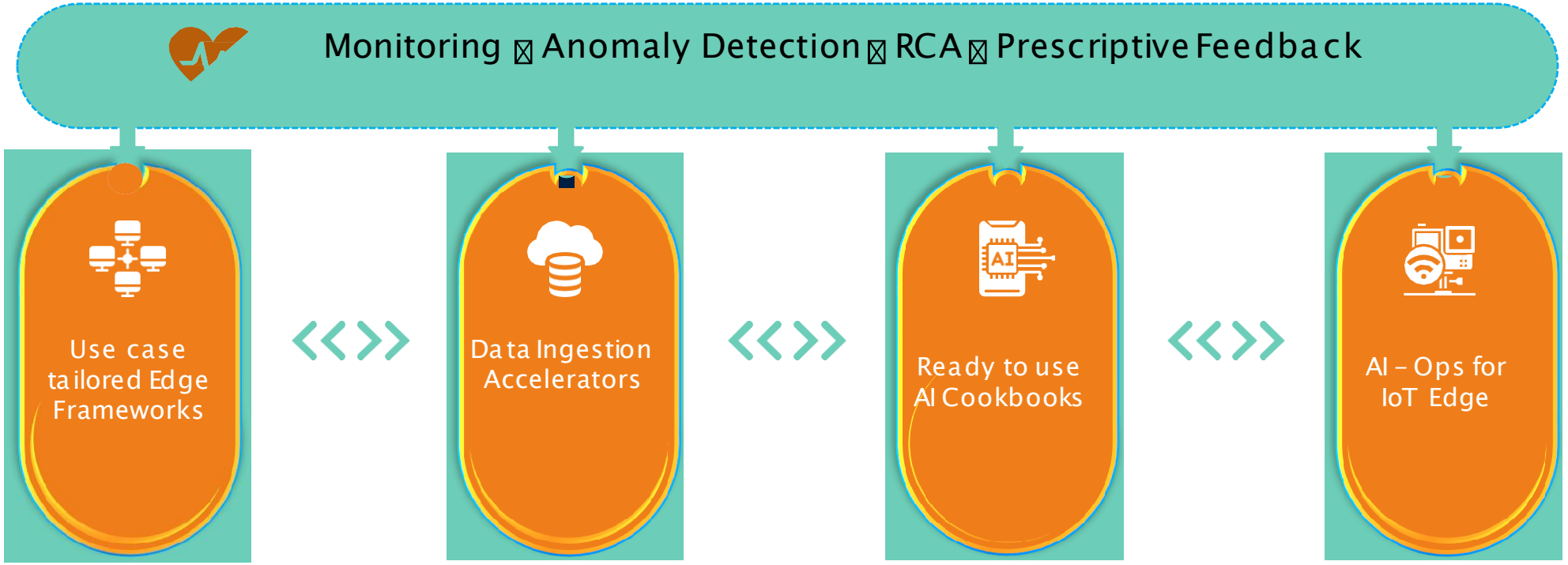
Smart Manufacturing – We work with customers at different stages of the journey



- *Real-time tracking*
- *Anomaly Detection*
- *Automated RCA*
- *Insights on the Edge*
- *Integration with OT Systems*
- *Benchmarking*

© COPYRIGHT 2023, TREDENCE. ALL RIGHTS RESERVED

Tredence's ready to use building blocks in AI, data engineering & Edge thru the Industrial AI platform, help run experiments, scale & realize value faster



Microsoft Azure IoT Platform

Industrial AI Solution Accelerator Platform

Supply Chain & Manufacturing SMEs

IIoT Solution Architects

Ecosystem partners

© COPYRIGHT 2023, TREDENCE. ALL RIGHTS RESERVED

Select Case Studies

Client	Category	Overview	Impact
1 **Global Chemical Manufacturer** Annual Revenue: ~$20B	**Inventory& Transportation Optimization**	**AI-IoT Driven smart transportation** & inventory management solution	**Transportation costs reduced by 5%,** while avoiding hazardous inspections by field teams **Predictive Replenishment**
2 **Global Paper Products Manufacturer** Annual Revenue: ~$20B	**Quality Assurance Improvement**	**Computer Vision based Defect Detection** before the finished product enters the packaging line	**Improved defect detection rate by 34%,** reducing returns & customer complaints **Computer Vision**
3 **US Metals Major** Annual Revenue: ~$9B	**Process Efficiency Improvement**	Prescriptive machine parameter recommendations that help run equipment in optimal conditions	**Productivity improvements by 4%,** while **reducing scrap & quality rejects by 24%** **Process Optimization**
4 **Leading Building Materials Manufacturer** Annual Revenue: ~$30B	**Quality Optimization**	**Predictive Quality Control** – Feedback & **by** feedforward loops that help fine tune process parameters in near real time..	**Production costs reduced 2% ang GHG emissions brought down by 15%** **Quality Control & Sustainability**

© COPYRIGHT 2023, TREDENCE. ALL RIGHTS RESERVED

#beyondpossible