

Unleashing Productivity: How AI and Digital Technology Is Transforming Manufacturing

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Todays Presenters



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Manufacturing Challenges



Managing Operating Costs



Increasing Productivity



Generating Scalable Growth





87%

Of manufacturing business leaders expect AI to improve their productivity in the next 2-3 years.



Principally through the reduction of product manufacturing cycles / service delivery times

https://www.forbes.com - Productivity Potential-at the ground level March $31^{\rm st}\,2024$





Productivity Opportunities

Downtime

Reducing scheduled and unscheduled downtime.

Quality

Reducing scrap and causes of non-conformance.

Output

Increasing productivity rates and improving flow.





Productivity Optimization

Lean / Six Sigma Di

Digital Solutions

Work for the customer



Design with the user

Identify and focus on problem



Be data driven

Remove variation & bottlenecks



Understand existing ecosystem

Communicate clearly



Be collaborative

Be flexible and responsive

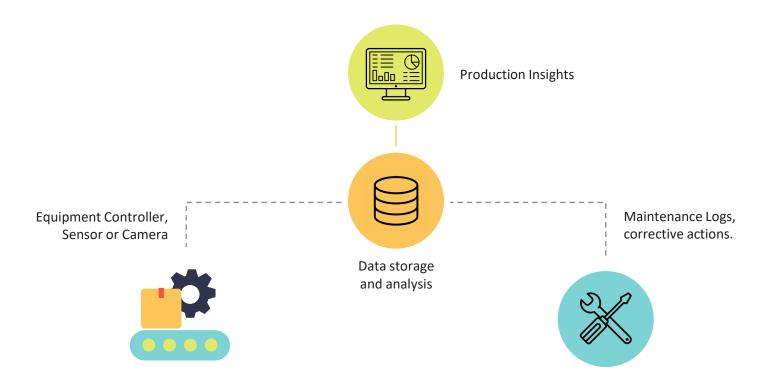


Design for scale & sustainability





Productivity Optimization







Rapid Productivity Improvement – Contract Manufacturing

Business Challenge

- High precision, high mix precision machine shop
- Struggled with output even with significant capital investment / expansion
- High backlog highly regarded supplier but frustrating customers with delivery timeframes

The Solution

- Cross-functional team to discuss root cause / issues
- Identified data / metrics to monitor root cause issues
- If there wasn't a tangible action to take on the data – it wasn't measured
- Daily huddle 15 minutes followed by action





Rapid Productivity Improvement – Contract Manufacturing



30%

Improvement in productivity in first 90 days

20%

Further improvement in productivity by end of year

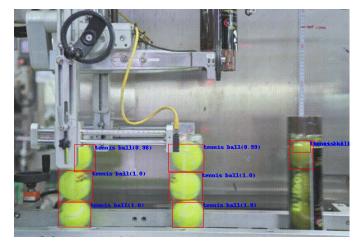
\$2M

Increase in net profit





Production Automation – Vision AI



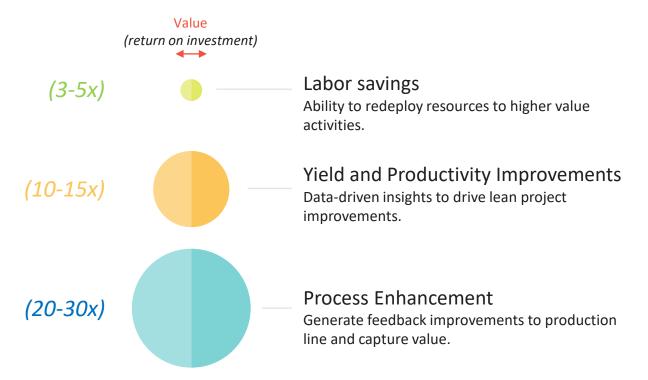
CLA Digital generated Vision Al inspection model

Vision AI can augment or replace existing manual visual inspection processes.





Vision AI – Value Summary







Digital Readiness Assessment

A collaborative roadmap development process focusing on key business challenges.

- 1 Discovery and evaluation
- 2 Current state mapping
- 3 Use case and feasibility study
- 4 Future state mapping
- 5 Roadmap and value definition









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