

NTEA Executive Leadership Summit

September 2026

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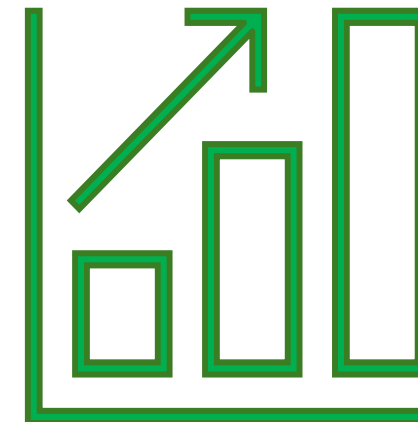


NTEA – Executive Leadership Summit:

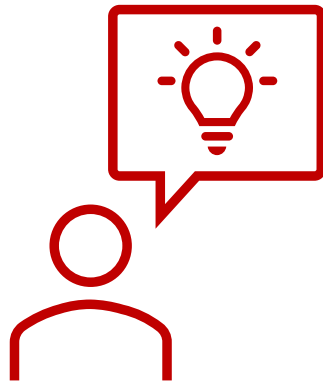
Creating a Scalable Automation Strategy for Manufacturing and Fabrication

Successful automation requires more than simply investing in robotics technology. This session will explore how manufacturers and fabricators can develop a long-term automation strategy that aligns with operational goals, workforce capabilities, and business growth objectives.

Long-term Automation Strategy



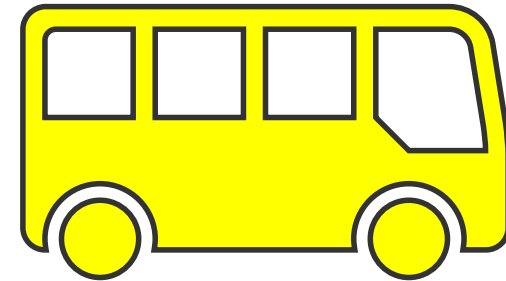
Workforce Capabilities - People



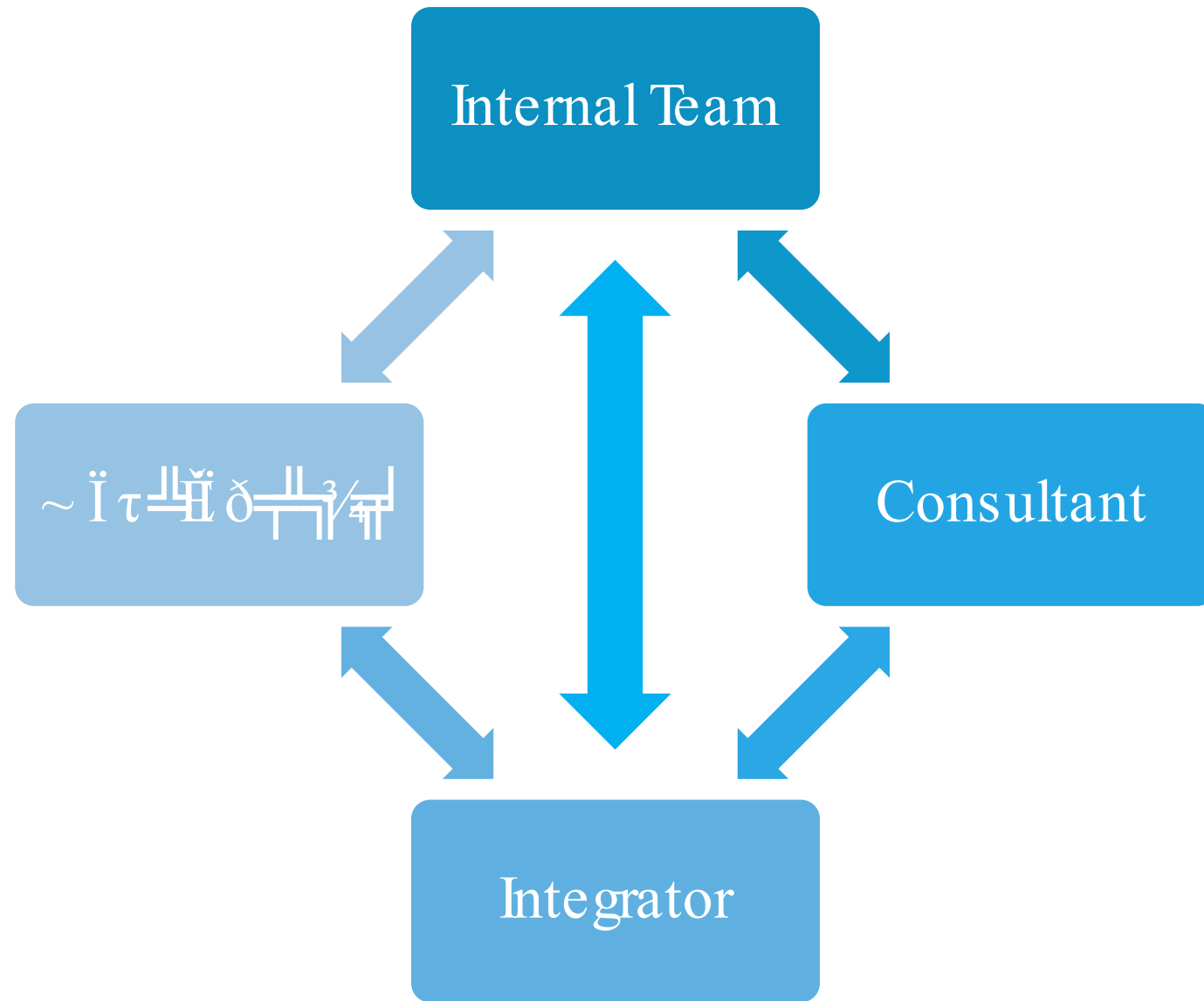
Knowledge and Skill



Energy



Seats and Driver



Evaluate automation opportunities and
identify where robotics can deliver the
greatest operational impact.

5 areas for potential automation

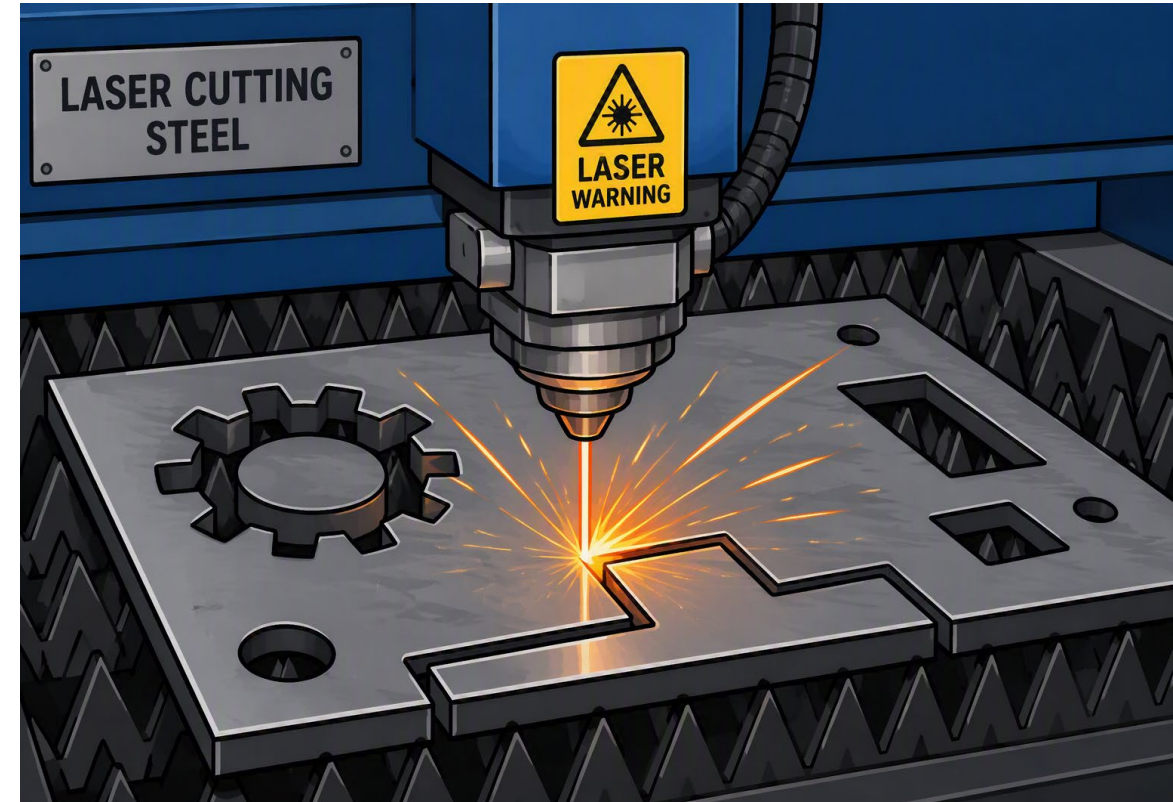
Preparation
Joining
Movement
Finishing / Paint
Assembly

Preparation:

How do you handle raw material?

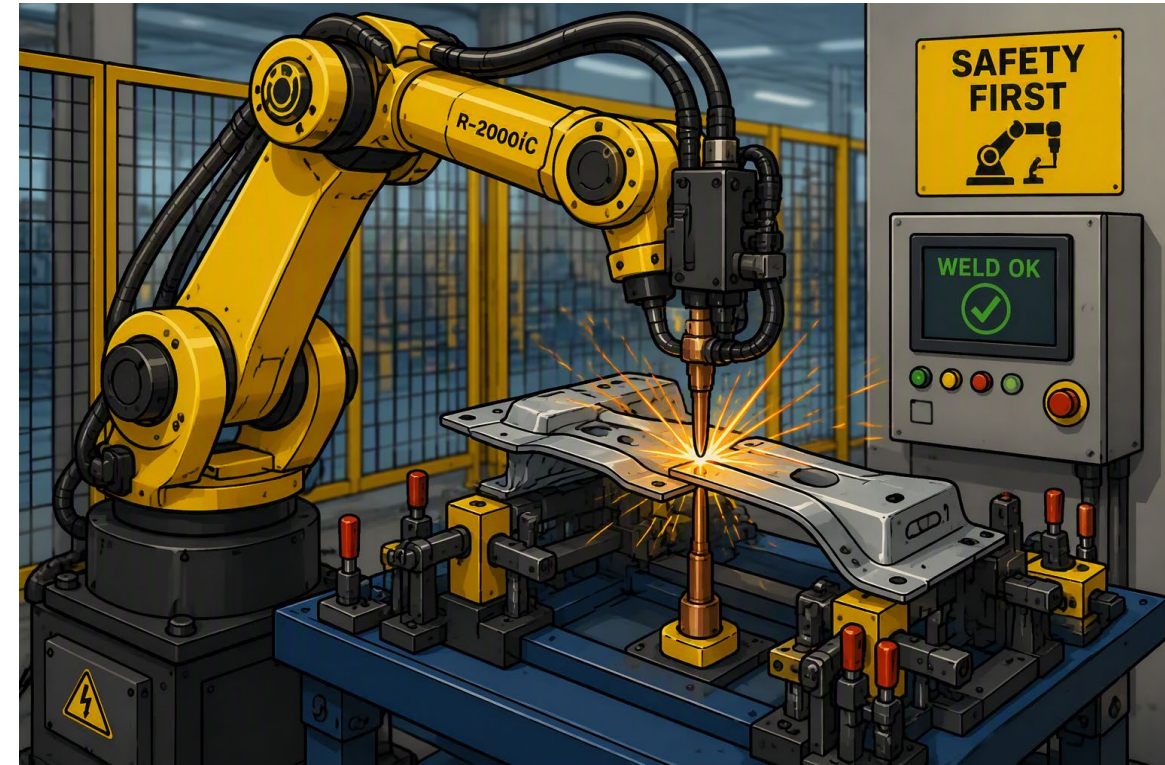
Tolerances? Commonize?

Can changes be made to allow for automation?



Joining:

What type of welding in your plant?
Can you change process to increase productivity?
Will Robotics improve throughput?



Movement:

How do you move material / parts?

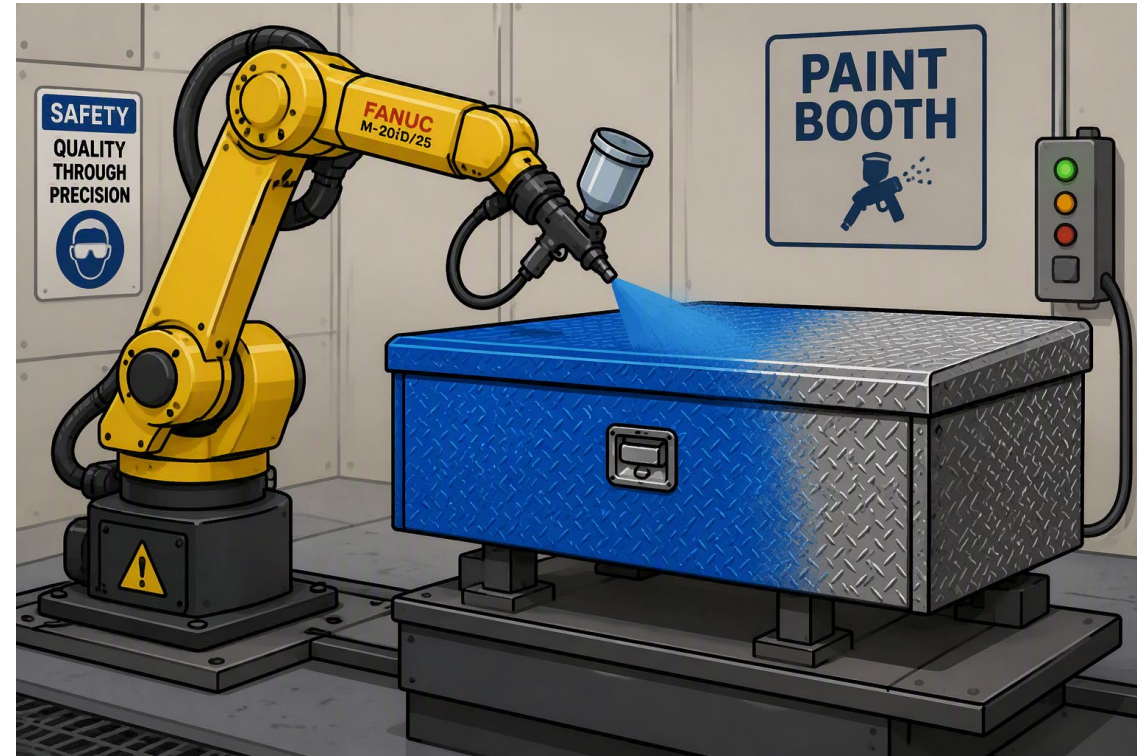
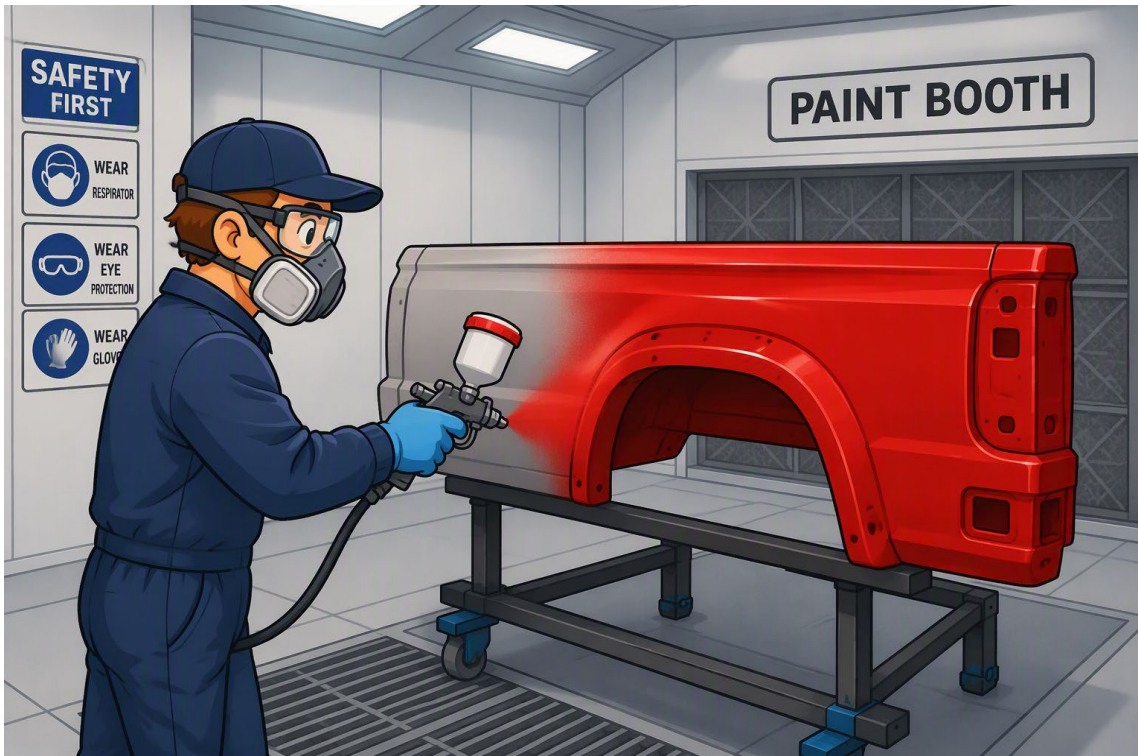
Can you change process to increase productivity?

Can automated carts improve production?



Finishing:

Are you manually grinding, polishing, painting?
Will automating portions of the process reduce
a bottleneck?

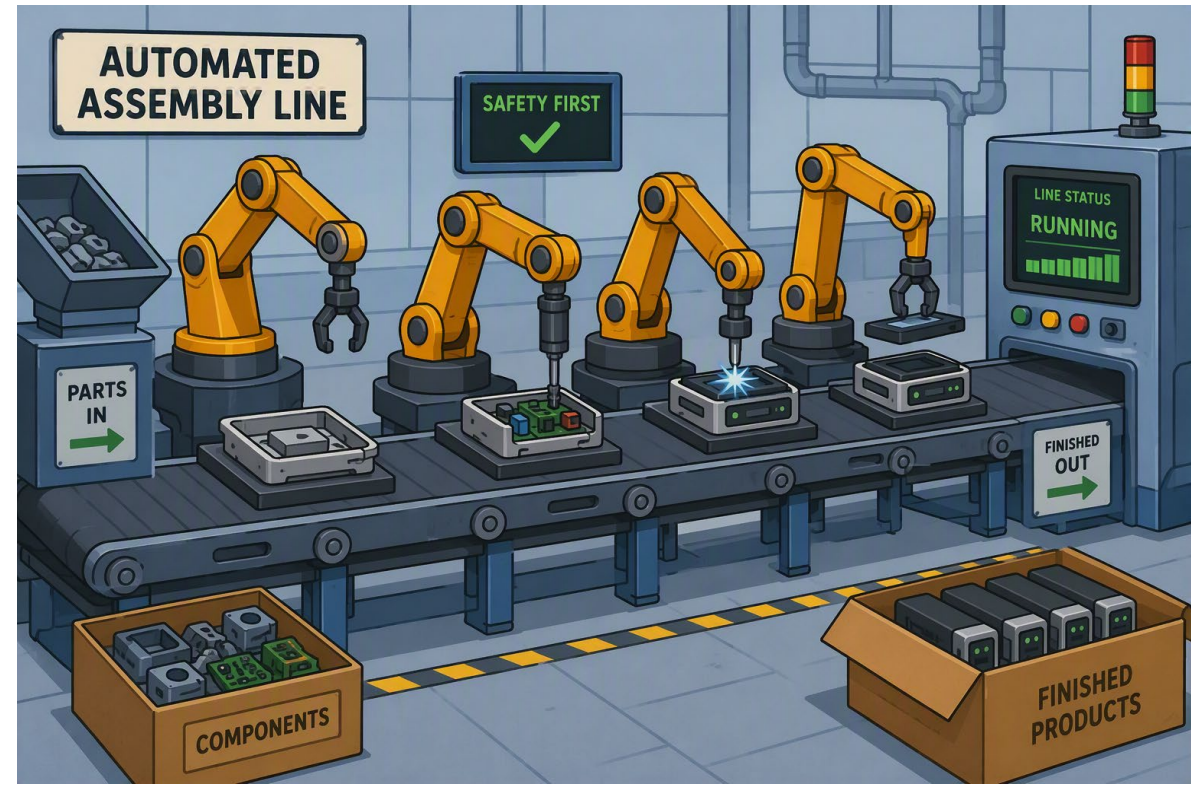


Assembly:

How do you assemble parts?

Can you change process to increase productivity?

Can you re-design? Commonize?



Examine strategic approaches to implementation, scalability, and optimization

Preparation

Laser Processing Plate / Tube Processing



Collaborative Robots

Easy to deploy
Cost effective
High Mix
Low Volume
Fast Learning



Standard Work Cells



Higher Volume
Integrated Automation
More skill

Movement



Positioning Equipment
AGV's / AMR's

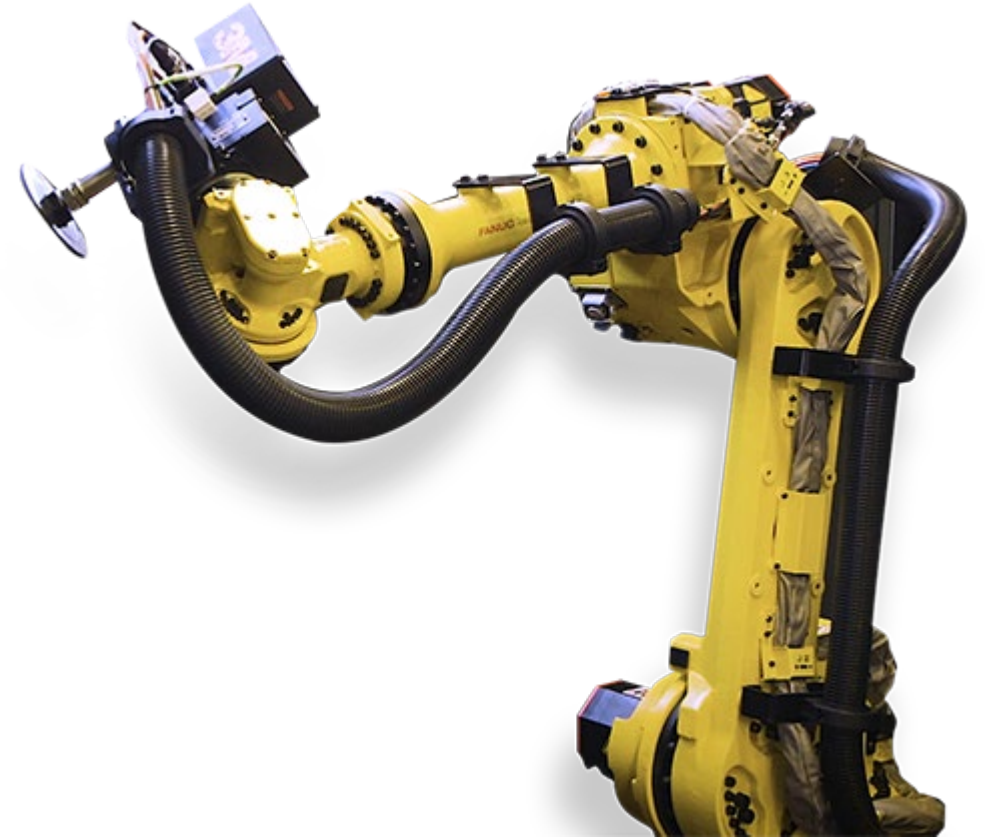
Assembly

Line Builds
Sophisticated
Expert
\$\$\$\$



Finishing

Paint Systems



Grind / Polish Systems

Aligning technology investments with process improvement, organizational readiness, and long-term operational success

Process Improvement

Are parts ready for automation?

Organizational Readiness

People
Facilities

Longterm Success

Crawl Before You Walk
Walk Before You Run

