Realizing Better Outcomes Through The Power Of AUTOMATION & MACHINE INTEGRATION On The Plant Floor

PAPER-LESS
MANUFACTURING EXCELLENCE THROUGH SOFTWARE

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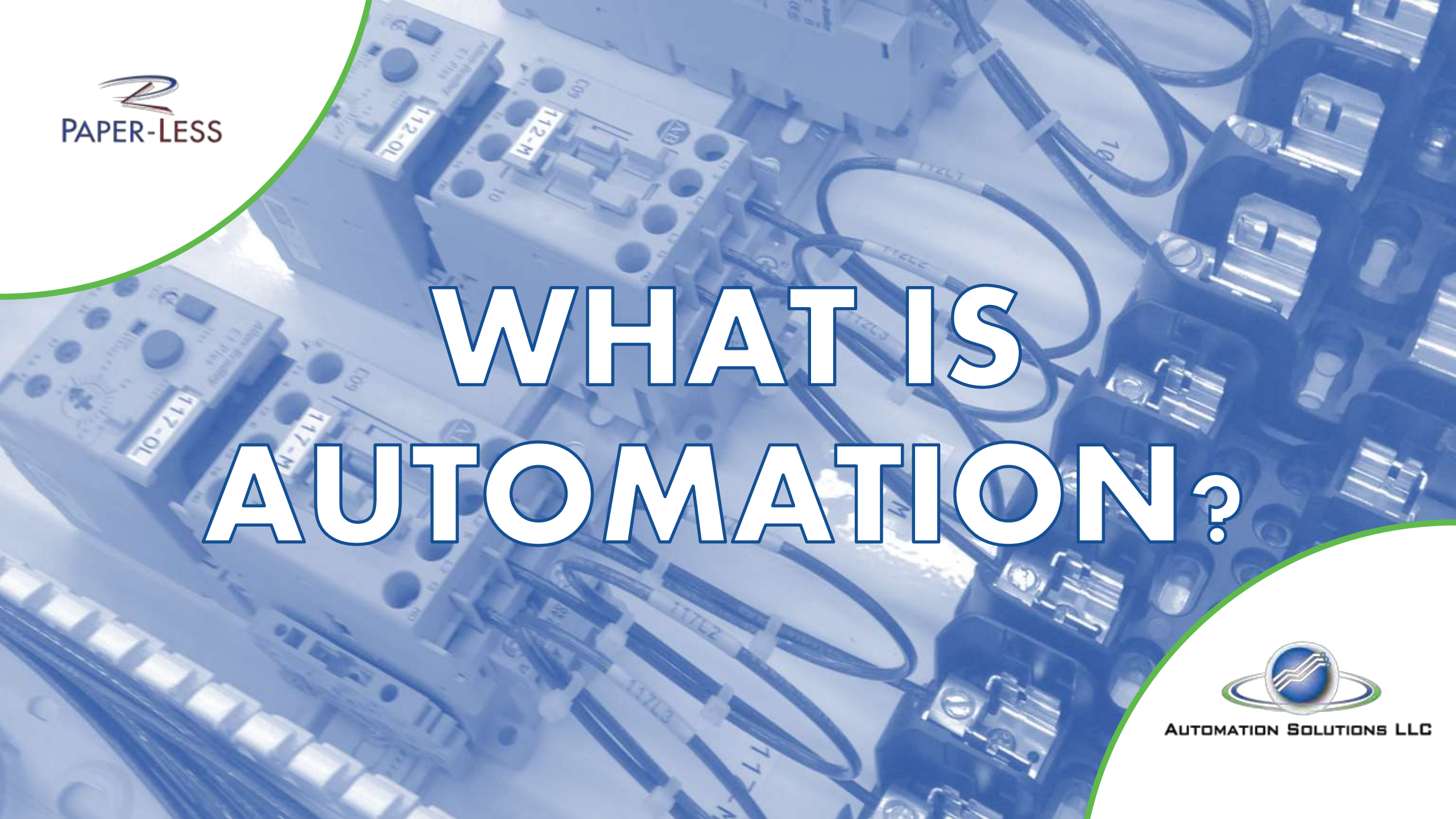
PAPER-LESS



WHAT IS AUTOMATION?

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Automate “Defined”

The technique of making an apparatus, a process, or a system operate by mechanical or electronic devices.

ôdəˌmāt

action

verb

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Seven Key Reasons For Automation

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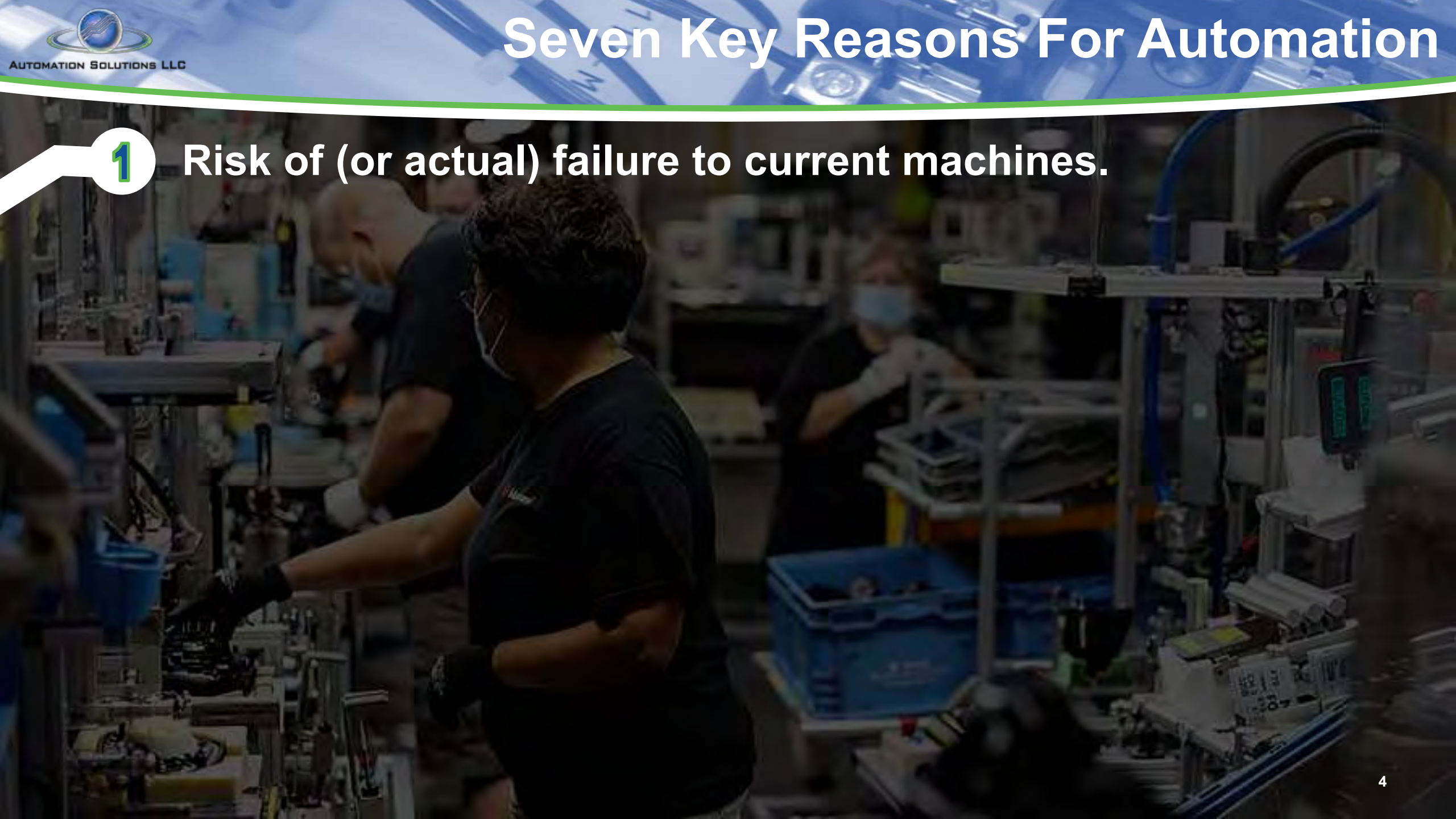
Seven Key Reasons For Automation



1 Risk of (or actual) failure to current machines.

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Seven Key Reasons For Automation

1. Risk of (or actual) failure to current machines.
2. Need to update inefficient equipment/components.

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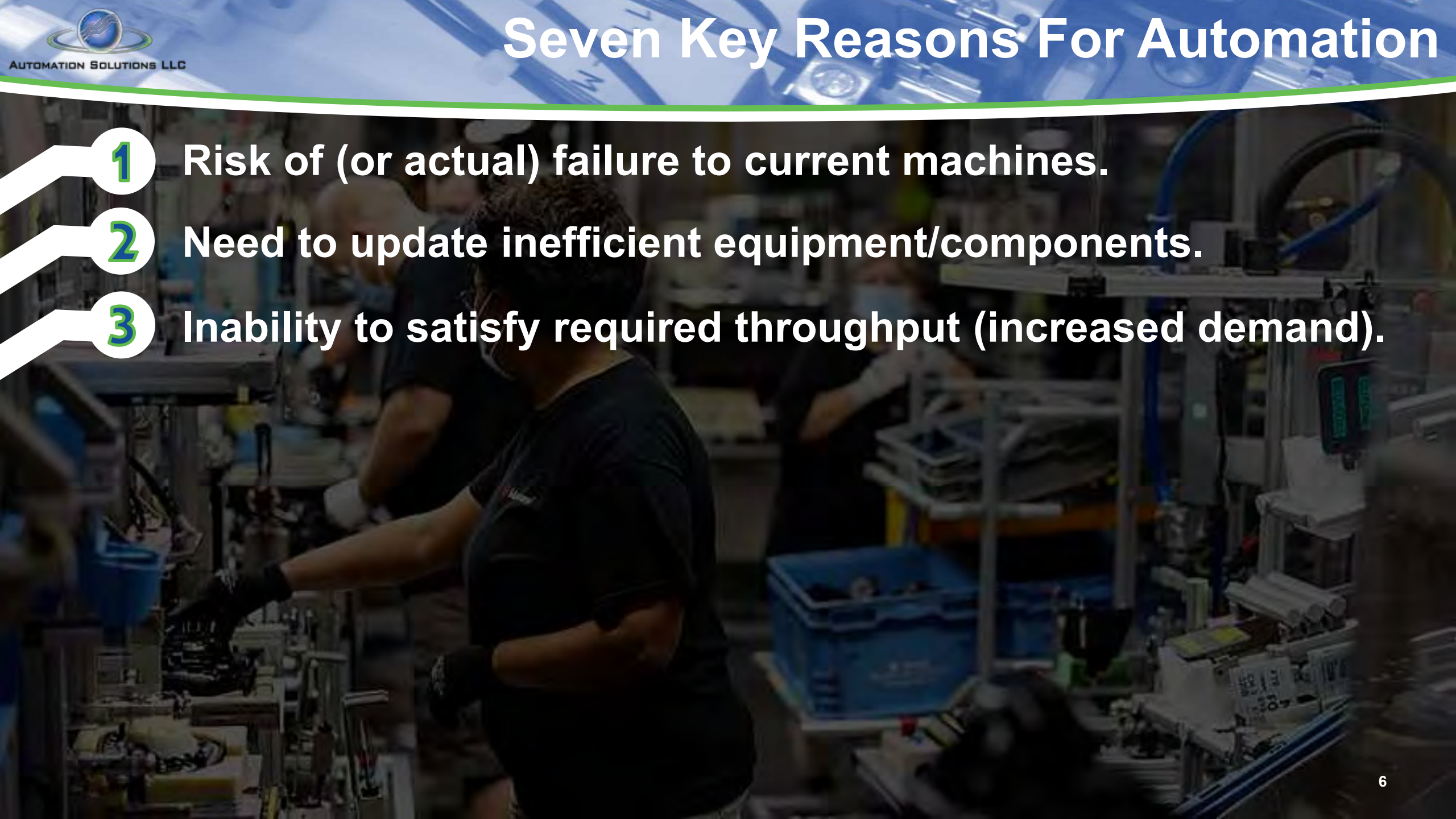

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Seven Key Reasons For Automation

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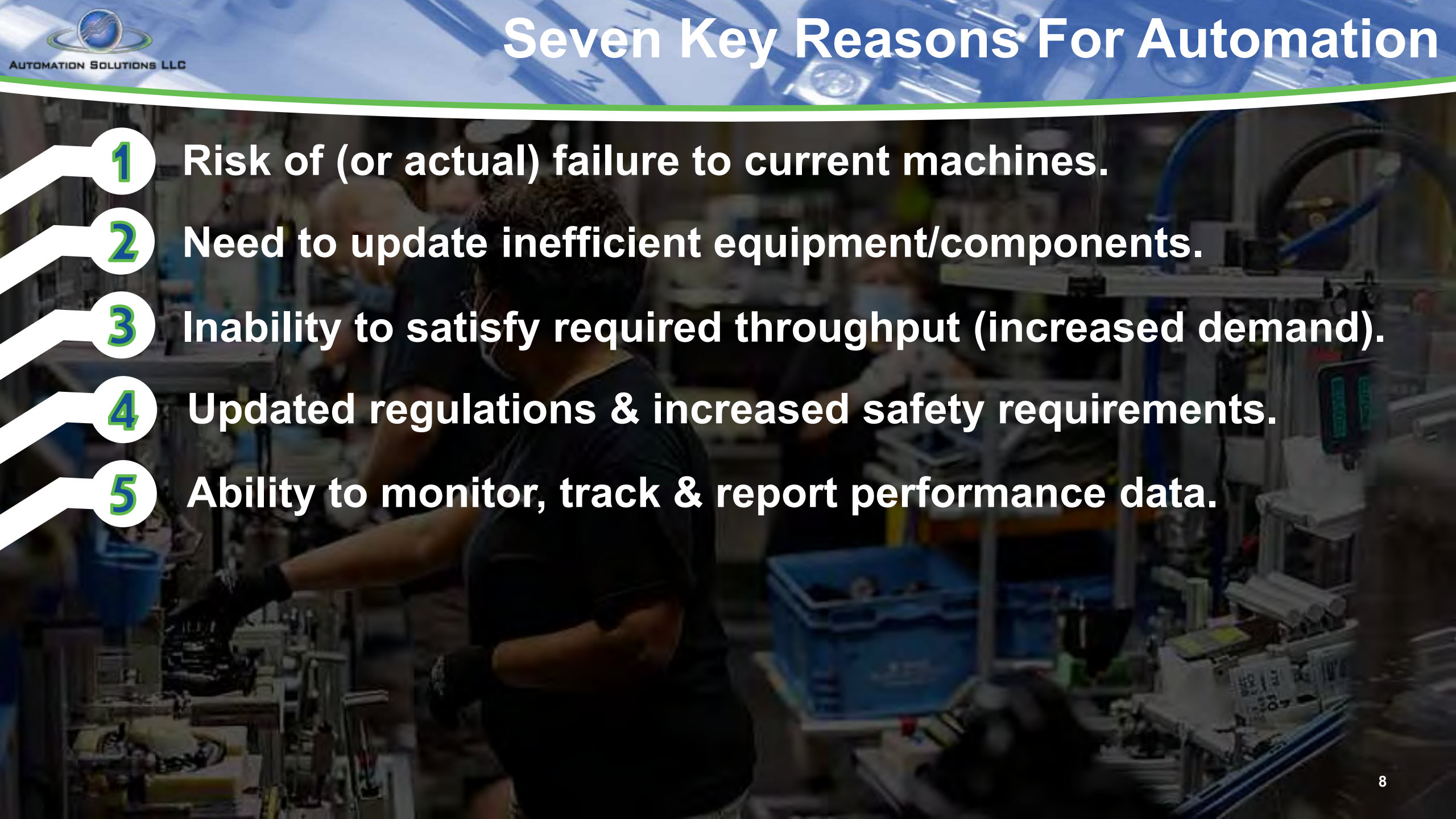

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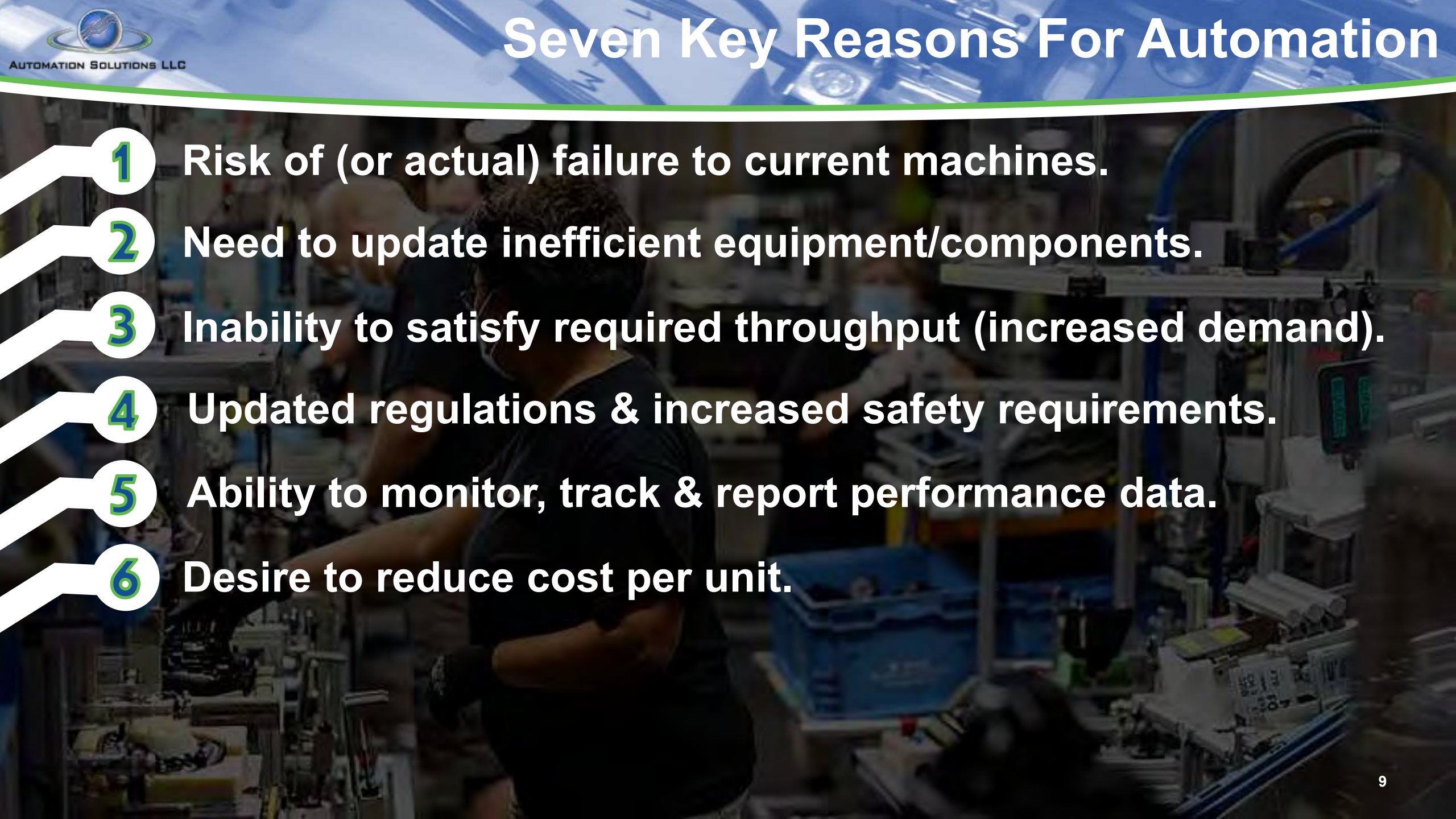

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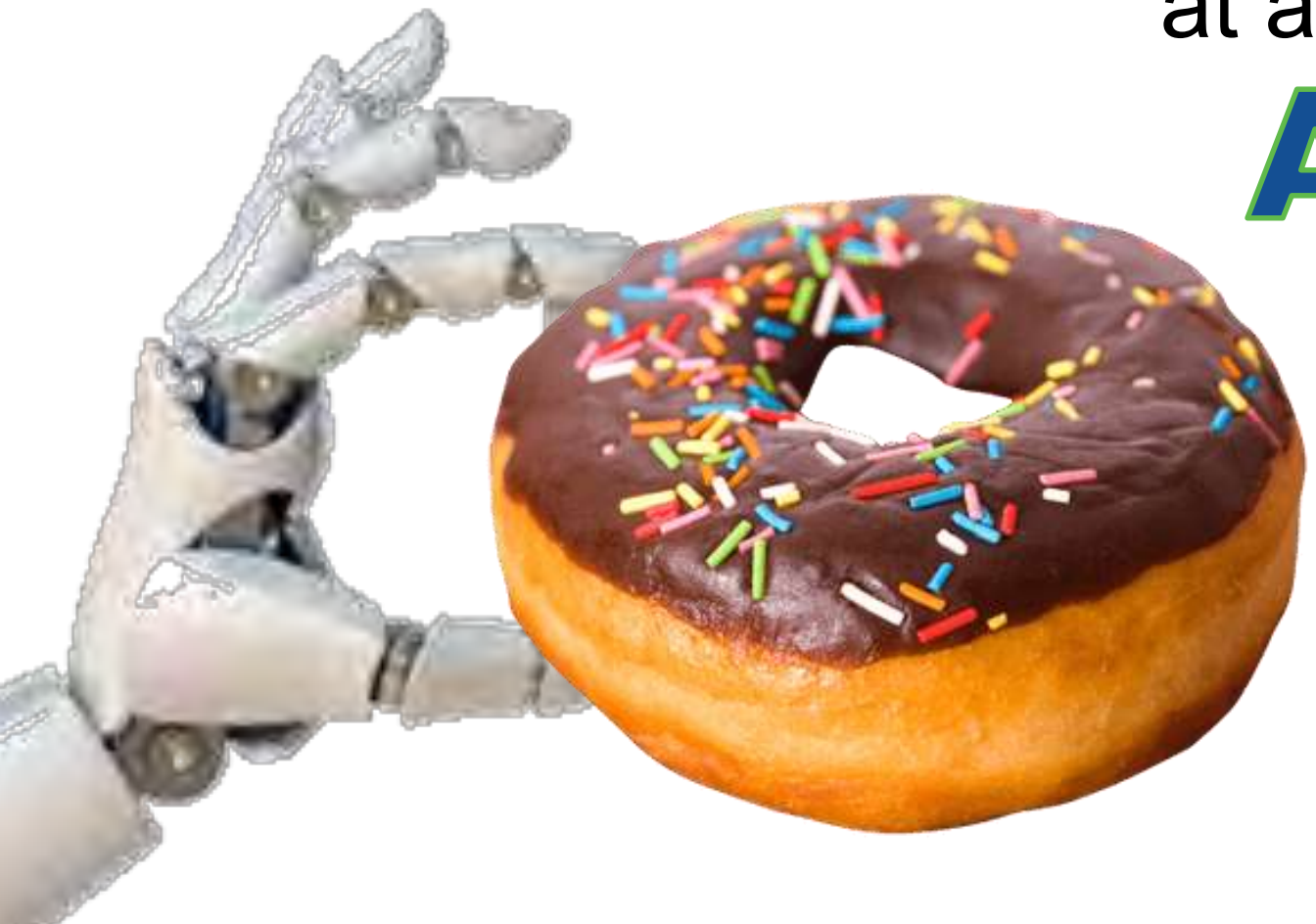
7. Workforce related –
   cost, physical limitations, availability, ability, repetitive nature.

Real Life Application

Here's a **SIMPLIFIED** look at automation's **APPLICATION** to business.



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Time To Make The Donuts

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A More Efficient Approach

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WHAT DO WE DO FOR OUR CUSTOMERS?

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OUR ACTIONS

- Upgrading antiquated or unsupportable control systems.
- Providing faster processes, machine data acquisition & storage.
- Creating innovative PLC & computer-based solutions.
- Building systems capable of being monitored remotely.

OUR ACTIONS

DELIVER

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Customer Benefit

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DELIVER

- Performance
- Reliability
- Efficiencies

Sample Industries Ripe For Automation

Brewing/Distilling

Packaging

Paper & Pulp

Engine Manufacturing

Batch Mixing

Food/Consumables

Heat Treating

Utilities

The Application Of Automation

MODERN DISCRETE MANUFACTURING METHODS

require a high degree of control and oversight throughout the process of creating a distinct unit

The Application Of Automation

Our solutions help guarantee better outcomes by combining

PROCESS CONTROL

+

DATA ACQUISITION

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What Do These Things Have In Common?

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Unique Products Made From Recipes

Single Lines Producing Multiple Products

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Single Lines Producing Multiple Products

CEMENT

- Various Mixes
- Different Products
- Multiple Ratios

CREATING A DISTINCT UNIT

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Single Lines Producing Multiple Products

ADHESIVE

- Unique Products
- Various Recipes
- Alternate Packs

CREATING A DISTINCT UNIT

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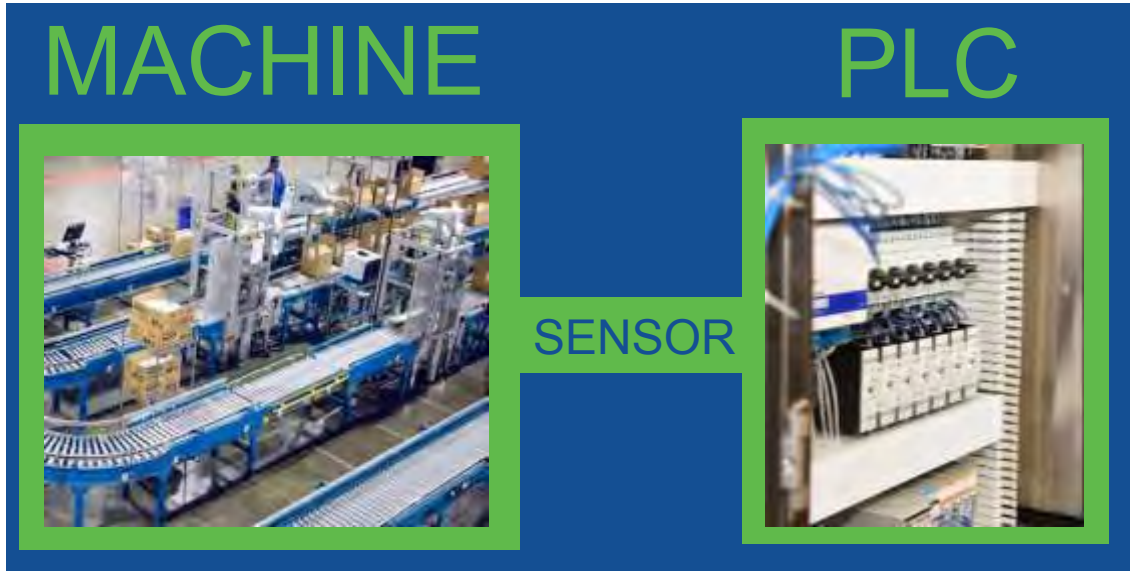
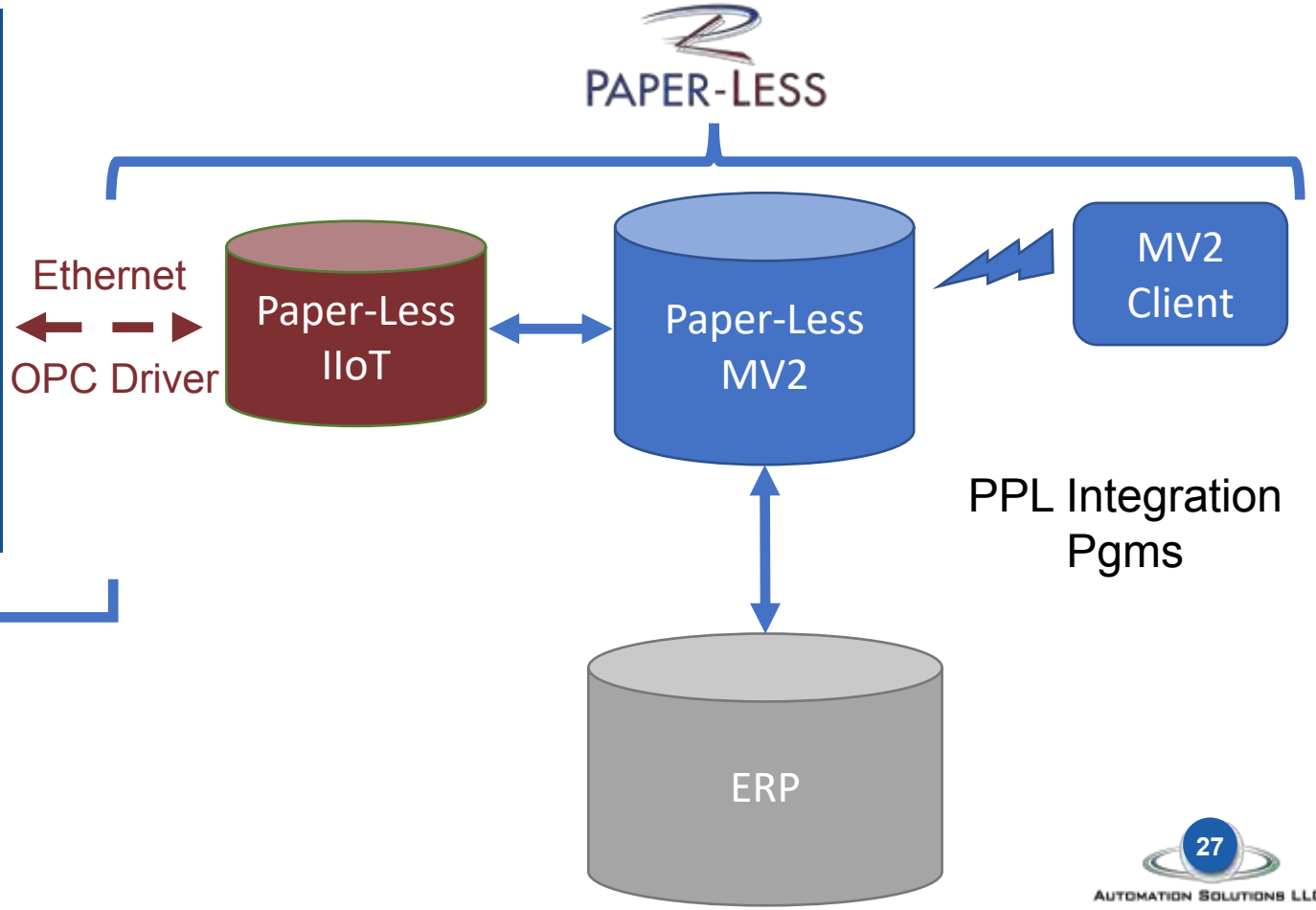
Machines Don't Discriminate

How Do We Talk To Machines?

Our innovative solutions provide transparent access to PLC data - modernizing your existing machines & allowing the transfer of data.





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Benefits Of Accessing This Data

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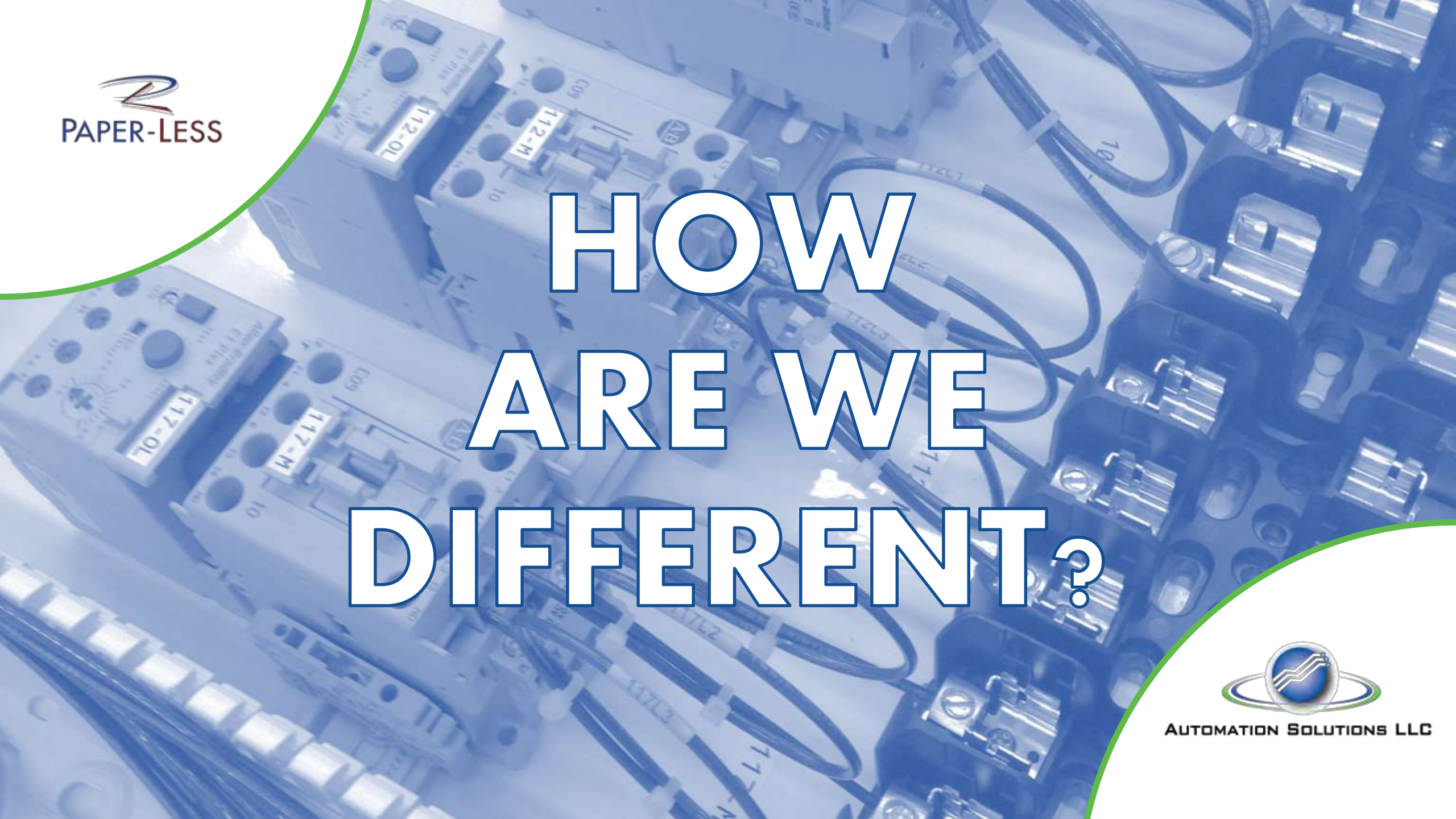
6. Monitor inventory levels; notify purchasing to place orders.
7. Identify bottlenecks in your manufacturing process - downtime, inefficiencies, improper ingredient/part usage, etc.

PAPER-LESS

HOW ARE WE DIFFERENT?



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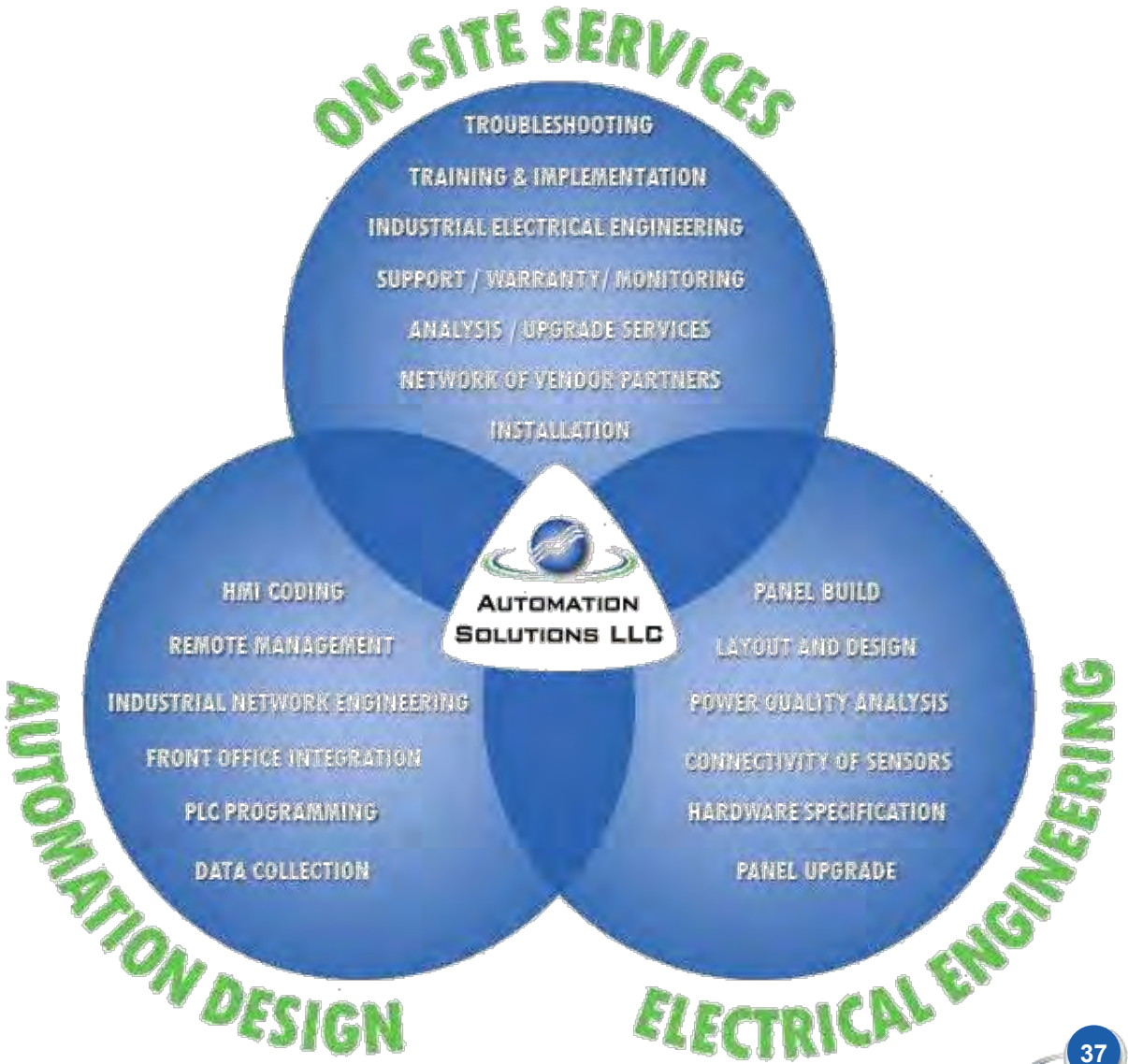
What Is Automation Solutions LLC?

We are a **BOUTIQUE**
"one stop shop"
systems integrator
offering
in-house engineering,
panel-building &
installation services.



Our Process

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PRE-SALES ENGINEERING

- Understanding unique business challenges
- Aligning budgets to ROI goals
- Proposing optimized "path to success"

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- Providing custom functional specification
- Mapping the "path to success" across four key stage gates

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ENGINEERING

- uL508 Control Panel designed
- Writing custom software (PLC/other)
- Design & code of HMI

4

FABRICATION

- Build of control panel
- Development of required machinery

5

ON-SITE INSTALLATION

- Control panel and wiring installed at customer's location

6

COMMISSIONING

- Dispatching and startup of HMI and PLC software

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7 ONGOING SUPPORT

- Warranting hardware
- Preventative maintenance/Spare part sourcing
- Proactive breakdown avoidance

Our Values

CURIOUSITY

Constantly pursuing innovative solutions

SAFEGUARDING

Uncompromised consideration for human well-being

BETTERMENT

Achieving higher “quality of life” by optimizing processes

PARTNERSHIP

A desire to achieve common goals

Our Partners

We provide unbiased use of parts and suppliers best aligning to each custom solution.

ABB

Allen-Bradley by Rockwell Automation

BECKHOFF

C-more

Cutler-Hammer

Danfoss

EATON

GE

HOFFMAN

Maple Systems

PANDUIT

Rockwell Automation

Schneider Electric

SIEMENS

WAGO

YASKAWA

Our Customers

Bradley
eden PET PRODUCTS
ER WAGNER
GE POWER
Glue Dots ADHESIVES
GNC Great Northern
HEARTLAND ADHESIVES, INC.
HUDAPACK metal treating, inc.
INTERNATIONAL PAPER
JEL CONCRETE PLANTS
Johnsonville
Keiding INC.
Kroger
LAKESIDE FOODS
LIPHATECH
Madison Metropolitan Sewerage District
MED-TEK, INC
MIDWEST CUSTOM BOTTLING
MRPC
OCTOPI BREWING
Peter Albrecht Company
The Prestwick Group, Inc.
PRO ENGINEERING / MANUFACTURING INC.
SAHALE ALE WORKS
Schreiber
SIGMA-ALDRICH
SILGAN CONTAINERS CORPORATION
Tyson
WAGNER
Western States envelopes • labels • packaging

Customer Testimonial

"The custom services and solutions provided by Automation Solutions LLC & Paper-Less has been game changing. Having transparency to what's happening on the factory floor has increased our efficiency, while decreasing both our costs and production times."

Dan Priebe;

Director Of Manufacturing Operations

Western States
envelopes • labels • packaging

Customer's Machine Integration Example

Western States
envelopes • labels • packaging

- Input/Output
- Good Pieces
- Scrap Pieces
- Run Rate

Dashboard

Customer's Dashboards

55" Display Monitor

- Real Time Status of W.I.P
- 7 Workcenters
- Machine Down Indicators
- Metrics and Goals Tracked

Executive KPIs

- Portal KPI App
- Search & Sort
- 5 KPI's
- Charts

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WHAT IMPACT CAN YOUR BUSINESS EXPECT?

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Remember Our Three Examples…

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Business Impact

- Increased Brewery's output by +40%.
- Eliminated batch & recipe variance.
- Reduced training costs for complex processes.
- Decreased the number of skilled laborers required.
- Ability to monitor & execute both on-site and remote.
- Installed lock-down PLC logic security.

Business Impact

- Higher degree of safety measures.
- Allows for even distribution of manual labor (social distancing).
- Improved quality; reduced product variability.
- Custom solution less expensive than “off the shelf” products.
- Less waste and decreased cost of goods.
- On and Off-Site monitoring.

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Business Impact

- Doubled production output.
- Reduction in the cost of manual labor.
- Less variability in product consistency.
- Process can run remote; uses less people in confined spaces.
- Cohesive integration of existing and new hardware.
- State of the art facility is future-proof.

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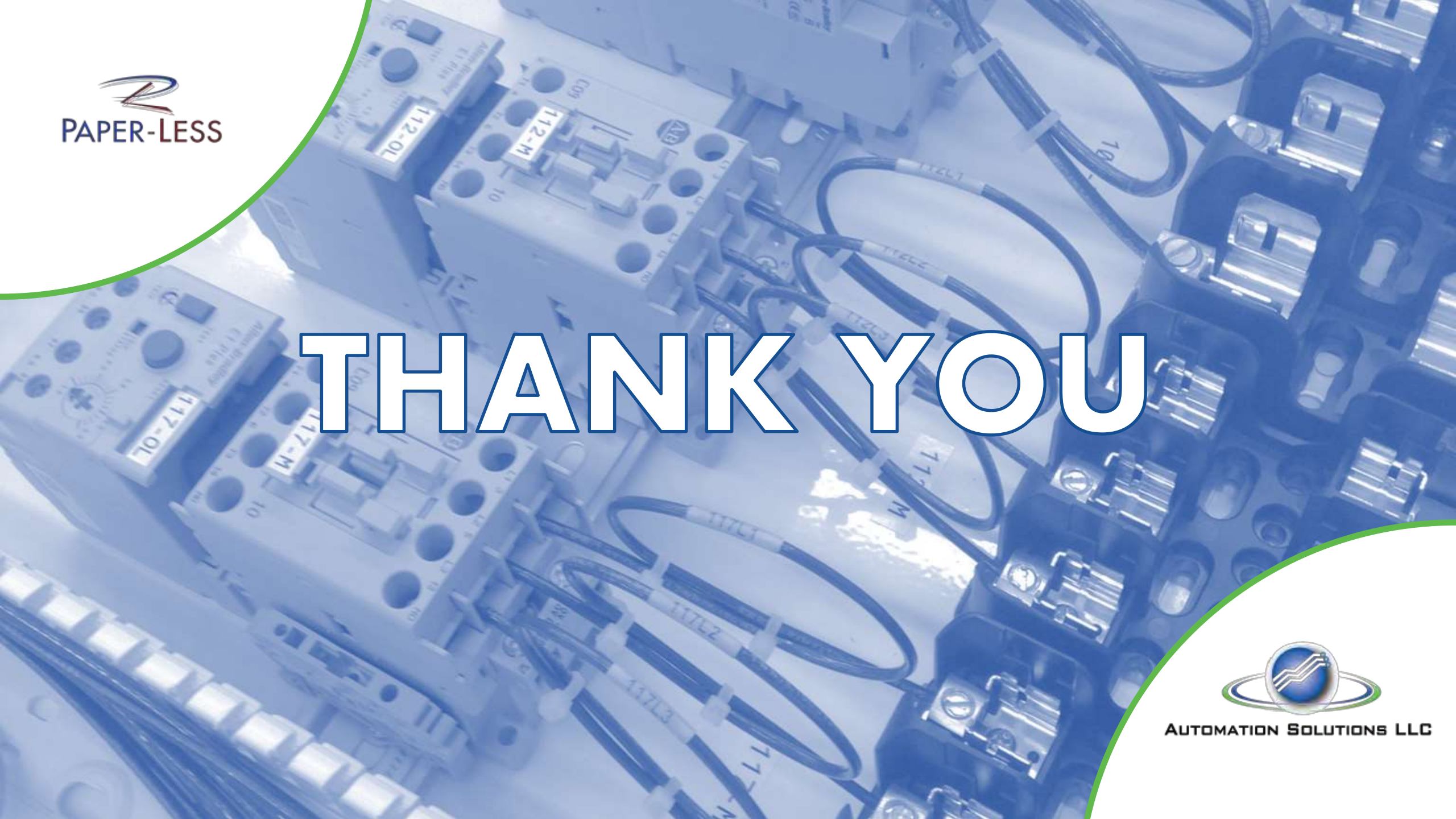

THANK YOU

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