Rockwell Automation Overview

Rockwell Automation

expanding **human possibility**®

2024

PUBLIC

We are a global leader in industrial automation and digital transformation.

We connect the imaginations of people

with the potential of technology to expand

what is humanly possible, making the world

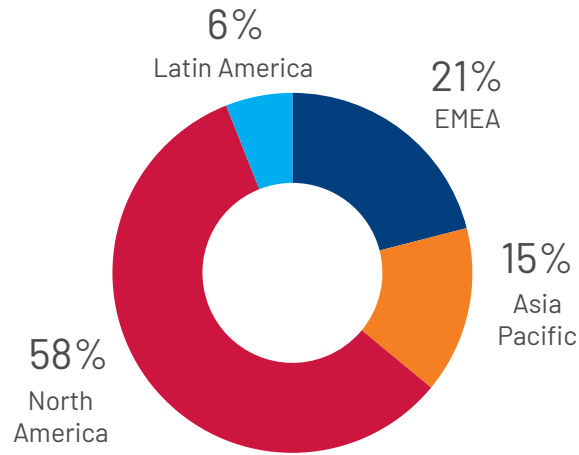more productive and more sustainable.

expanding **human possibility**®

Rockwell Automation

Rockwell Automation

expanding **human possibility**®

As the world's largest pure-play industrial automation and digital transformation company, **we are creating the future of industrial operations.**
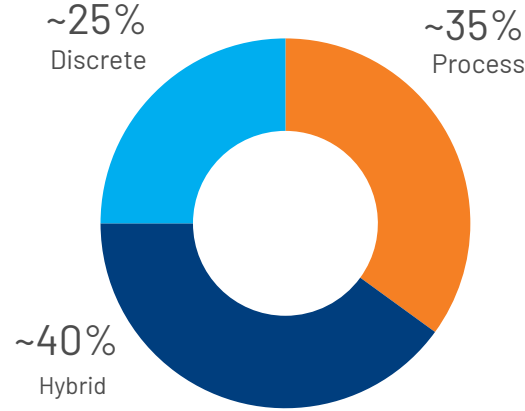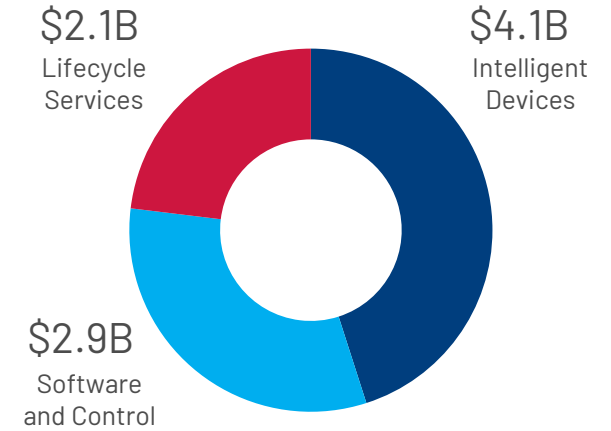
SERVING CUSTOMERS FOR 120 YEARS

AT A GLANCE

$9.1B 2023 sales

BY REGION

- 6% Latin America
- 21% EMEA
- 15% Asia Pacific
- 58% North America

BY INDUSTRY

- ~25% Discrete
- ~35% Process
- ~40% Hybrid

BY SEGMENT

- $2.1B Lifecycle Services
- $4.1B Intelligent Devices
- $2.9B Software and Control
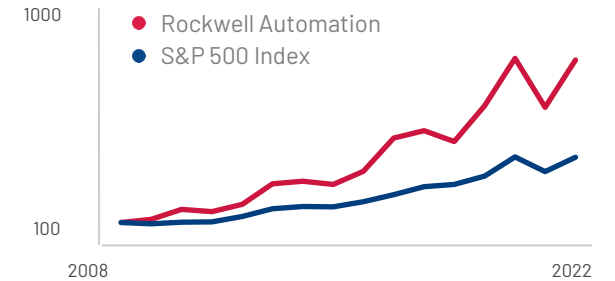
GLOBAL

100+ Number of countries

29k Employees: more than half outside the U.S.

2023 WORLD'S MOST ETHICAL COMPANIES® ETHISPHERE 15-TIME HONOREE — World's Most Ethical Companies

FAST COMPANY — The 50 best places to work for innovators

Total shareowner return

- Rockwell Automation
- S&P 500 Index

1000

100

2008   2022

enabling sustainability

Creating sustainable impact and change

"For more than 120 years, Rockwell has improved the efficiency of industrial processes. Today, we help customers to be more resilient, agile, and sustainable by delivering digital transformation and industrial automation solutions that simplify the complex challenges manufacturers face."

Our sustainability priorities

ENVIRONMENT
We are committed to environmental stewardship within our own operations and across our entire value chain.

- **Customer Sustainability**
- **Energy & Emissions Management**
- **Responsible Supply Chain**

SOCIAL
Our people set us apart. By coming together to create a culture that values fairness and equity, where all people are enabled and inspired to do their best work, we are expanding human possibility.

- **Talent & Culture**
- **Diversity, Equity & Inclusion**
- **Workforce of Tomorrow**
- **Occupational Health & Safety**

GOVERNANCE
Our commitment to integrity defines who we are and how we act. We do what we say we will, always honestly and ethically, no exceptions.

- **Ethics & Compliance**
- **Cybersecurity**
- **Product Quality & Safety**
- **Enterprise Risk Management**
- **Corporate Governance**

Discrete
automation

The assembly of engineered components into countable units such as automobiles and electronics.

Hybrid
automation

Where process and discrete exist in the same production environment to manufacture items like consumer packaged goods and pharmaceuticals.

Process
automation

The control and monitoring of continuous and batch processes such as oil refining, water/wastewater treatment and chemical production.

PartnerNetwork™

Global reach with local solutions

TECHNOLOGY PARTNERS   **DIGITAL PARTNERS**   **STRATEGIC ALLIANCES**   **DISTRIBUTORS**   **SYSTEM INTEGRATORS**   **OEM PARTNERS**

Rockwell Automation

Rockwell Automation enabled results

Increase Revenue
Up to **10%**

Decrease Operating Costs
Up to **12%**

Drive operational improvement
Up to **50%**

Chemical industry challenges

Market variability and pressure	Productivity and fixed-asset utilization	Process safety and cybersecurity	Environmental, Social, and Governance (ESG)	Workforce effectiveness
Before the pandemic, Nearly **50% of the top 100 chemical companies** made changes to their product portfolio (McKinsey)	**From 2011 to 2020** the quantities of production-related waste managed by the chemical manufacturing sector **increased by 79% (EPA)**	A recent U.K. government study estimated that **cyberattacks cost** the chemicals industry in general **£1.3 B (US $1.5 B) a year**	Including fuel and feedstock use, the chemical industries account for about **30% of the total energy consumed in the manufacturing sector** (EIA)	Experienced staff creates almost **50% of industry personnel**, and most are **retiring in the next 3...5 years** (Deloitte)

OUTCOMES

Accelerate growth through digital transformation	Production optimization	Safe and secure operations	Sustainable operations	Workforce enablement

Rockwell Automation

Recognizing the challenges across the company

Executive Team

"Is the company aligned to support ESG initiatives?"
"Are measures in place to drive shareholder value?
"Can we meet our growth strategy through organic efforts?"

Plant Management/Operations

"Do I have real-time insights of production KPI's?"
"How can I increase capacity / yield in support on order demand?"
" Are we aligned with EHS in meeting safety targets?"

Sales

"Will the site deliver on my customers order?"
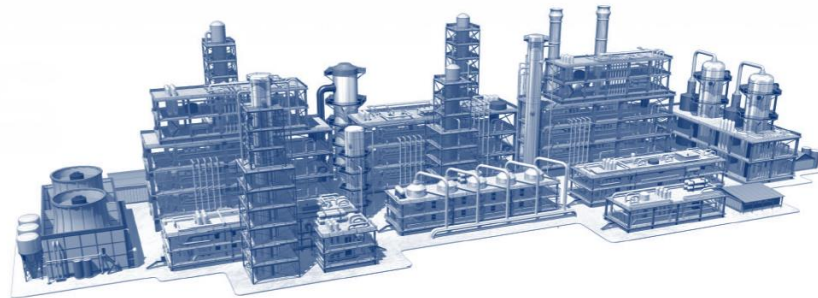*"Does our plant have enough capacity to meet demand?"*
"Do we have insights to support product quality concerns from my customers?"

Maintenance

"Do we have the environment to onboard new resources?
"Do we have the budget to support our obsolete assets?"

Engineering
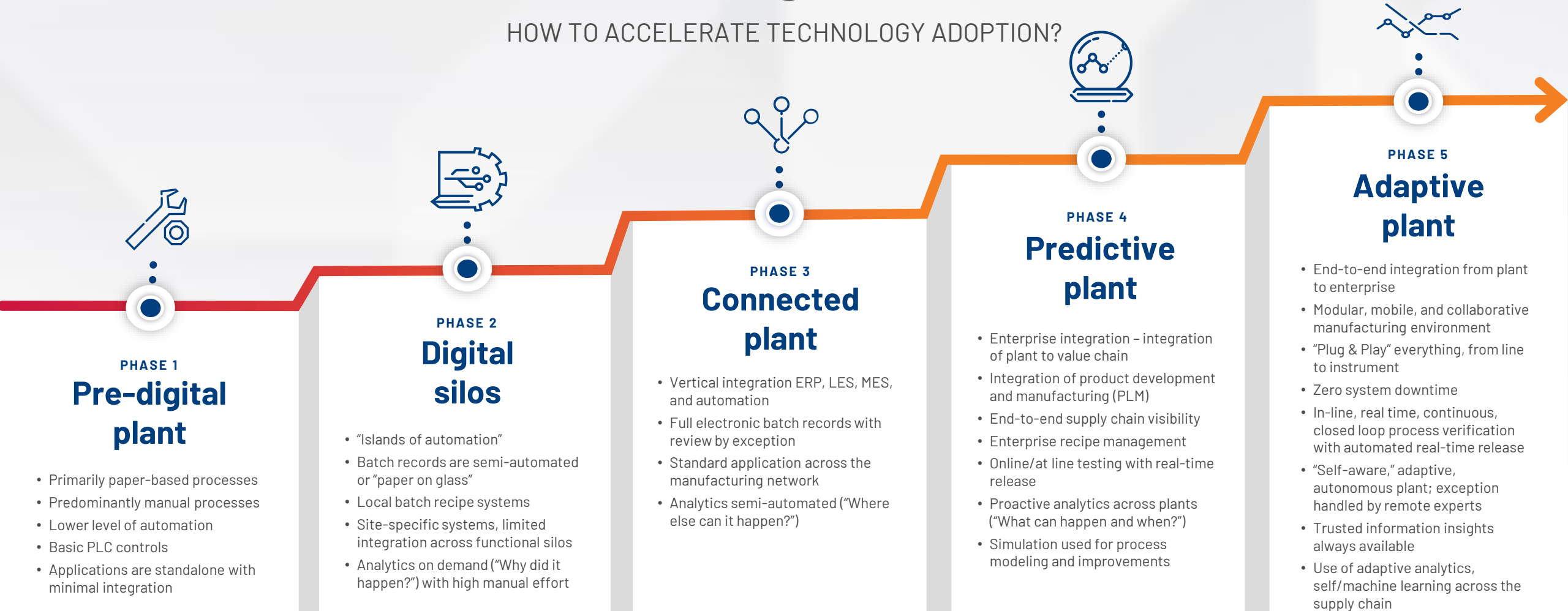

"Do we have the 5-yr automation plan in place to support site?"
"How do we support standardization across the company?"

Consulting services

HOW TO ACCELERATE TECHNOLOGY ADOPTION?

PHASE 1
Pre-digital plant

- Primarily paper-based processes
- Predominantly manual processes
- Lower level of automation
- Basic PLC controls
- Applications are standalone with minimal integration

PHASE 2
Digital silos

- "Islands of automation"
- Batch records are semi-automated or "paper on glass"
- Local batch recipe systems
- Site-specific systems, limited integration across functional silos
- Analytics on demand ("Why did it happen?") with high manual effort

PHASE 3
Connected plant

- Vertical integration ERP, LES, MES, and automation
- Full electronic batch records with review by exception
- Standard application across the manufacturing network
- Analytics semi-automated ("Where else can it happen?")

PHASE 4
Predictive plant

- Enterprise integration – integration of plant to value chain
- Integration of product development and manufacturing (PLM)
- End-to-end supply chain visibility
- Enterprise recipe management
- Online/at line testing with real-time release
- Proactive analytics across plants ("What can happen and when?")
- Simulation used for process modeling and improvements

PHASE 5
Adaptive plant

- End-to-end integration from plant to enterprise
- Modular, mobile, and collaborative manufacturing environment
- "Plug & Play" everything, from line to instrument
- Zero system downtime
- In-line, real time, continuous, closed loop process verification with automated real-time release
- "Self-aware," adaptive, autonomous plant; exception handled by remote experts
- Trusted information insights always available
- Use of adaptive analytics, self/machine learning across the supply chain

Rockwell Automation

Cybersecurity Services

ASSESSMENTS, TURNKEY IMPLEMENTATIONS, MANAGED SERVICES AND INCIDENT RESPONSE

NIST Framework – The Cyberattack Continuum (Identify and Protect, Detect, Respond, Recover)

BEFORE ← ─ ─ ─ ─ ─ DURING ─ ─ ─ ─ ─ → AFTER

Identify and protect

Asset inventory services
Patch management
Vulnerability and risk assessments
ICS security zone and countermeasure deployment

Detect

Real-time threat detection services
Remote monitoring and administration services
Incident handling and response
Incident response and disaster recovery

Respond and recover

Backup and recovery solutions

Rockwell Automation

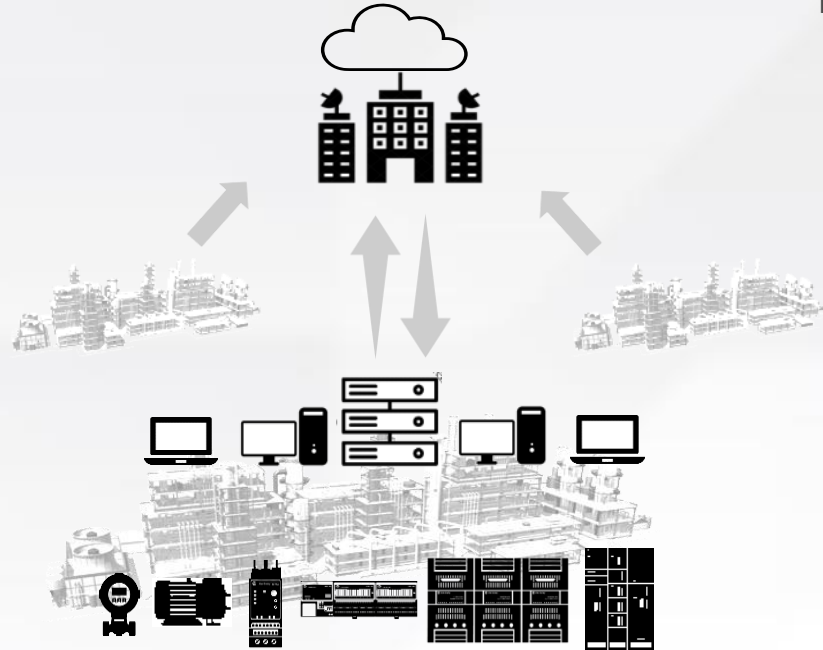# Migration services

OT Infrastructure
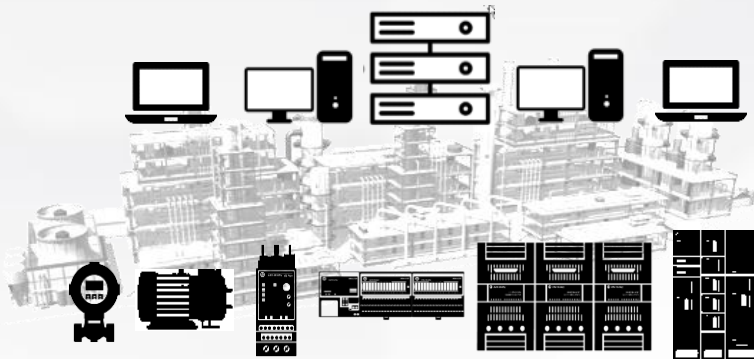
DCS MODERNIZATION

- Necessary infrastructure for digitalization
- Cybersecure, scalable architecture for future requirements
- Improved EH&S performance, fixed-asset utilization, product quality and reduced operating cost
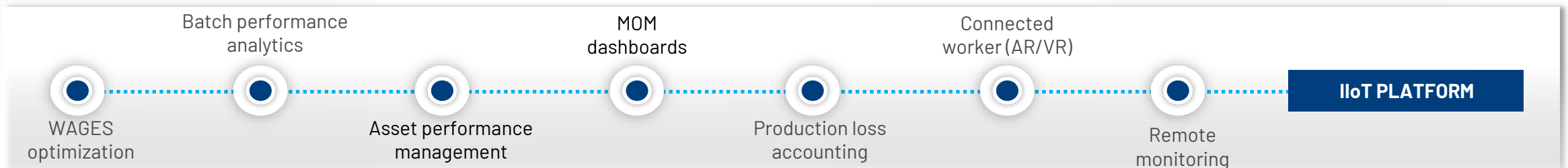
Rockwell Automation

Migration services

IT Infrastructure

ENTERPRISE ANALYTICS (IIoT)

- Insights into enterprise-wide performance
- Maximized fixed-asset utilization and operator effectiveness
- Scalable across the enterprise
- Quick time to value

Batch performance analytics

MOM dashboards

Connected worker (AR/VR)

WAGES optimization

Asset performance management

Production loss accounting

Remote monitoring

IIoT PLATFORM

Rockwell Automation

Key Takeaways

- *Rockwell Automation delivers solutions to solves the challenges facing our industry!*

    - Improve Time to market
    - Increase Production
    - Reduce operating costs
    - Improve Environmental performance and safety
    - Protect from cyberattacks

- **Let Rockwell assist you in developing a plan!**

- **Come visit us in Booth 404!**

Rob Swim
Chemical Industry Manager, NA
rdswim@rockwellautomation.com
216-346-0169

Ramon Farach
Chemical Industry Solution Consultant
ramon.farach@rockwellautomation.com
615-509-8724

Rockwell Automation