The Connected Enterprise

EXECUTION MODEL

Assessment

Secure, Upgrade

Working Data Capital

Analytics

Collaboration

Rockwell Automation's Journey

ASSESSMENT
Increase VALUE and Reduce RISK

PROTECTION
against security breaches

VALIDATE
network performance and reliability

DATA MANAGEMENT
reconcile desperate data sources

FUTURE PROOF
for expanded use and technology
(CLOUD, MOBILITY, SECURITY)

14% MANUFACTURERS in the US have completely INTEGRATED plant floor information to the enterprise

» **12%** Have NO integration at all

Source: 2013 Industry Week Study

71% Perceive their control systems threat level as **moderate** to **severe**

» **24%** Have NEVER performed a vulnerability assessment

Source: Control Engineering 2014 Cyber Security report

SECURE & UPGRADE
THREATS will continue to EVOLVE
… is YOUR architecture READY?

SINGLE, UNIFIED
network technology for both OT and IT

PERFORMANCE INCREASE
by isolating untrusted legacy systems

REDUCE DOWNTIME
more smart devices & systems

AUTHENTICATE, AUTHORIZE, and ACCOUNT
for who has access, and to what

70%

Of companies **SUFFERED** a security breach in the last year

Yet **only 28%** ranked **SECURITY** as a top five strategic priority

Source: 2014 Ponemon Institute survey

13% **ORGANIZATIONS** that have implemented *"Smart Manufacturing"*

» **82%** experienced **improved EFFICIENCY** in their operations

» **49%** experienced **fewer DEFECTS** in their products

Source: 2013 American Society for Quality (ASQ) Survey

Secure Control & Information

platforms for providing secure real-time control and information

Scalable, Multidiscipline Control

Machine and Process Safety

Control & Automation Productivity (Design, Operate, Maintain)

Information Platform

INTEGRATED CONTROL AND INFORMATION

Industrial Automation Security

Protect Automation Investment
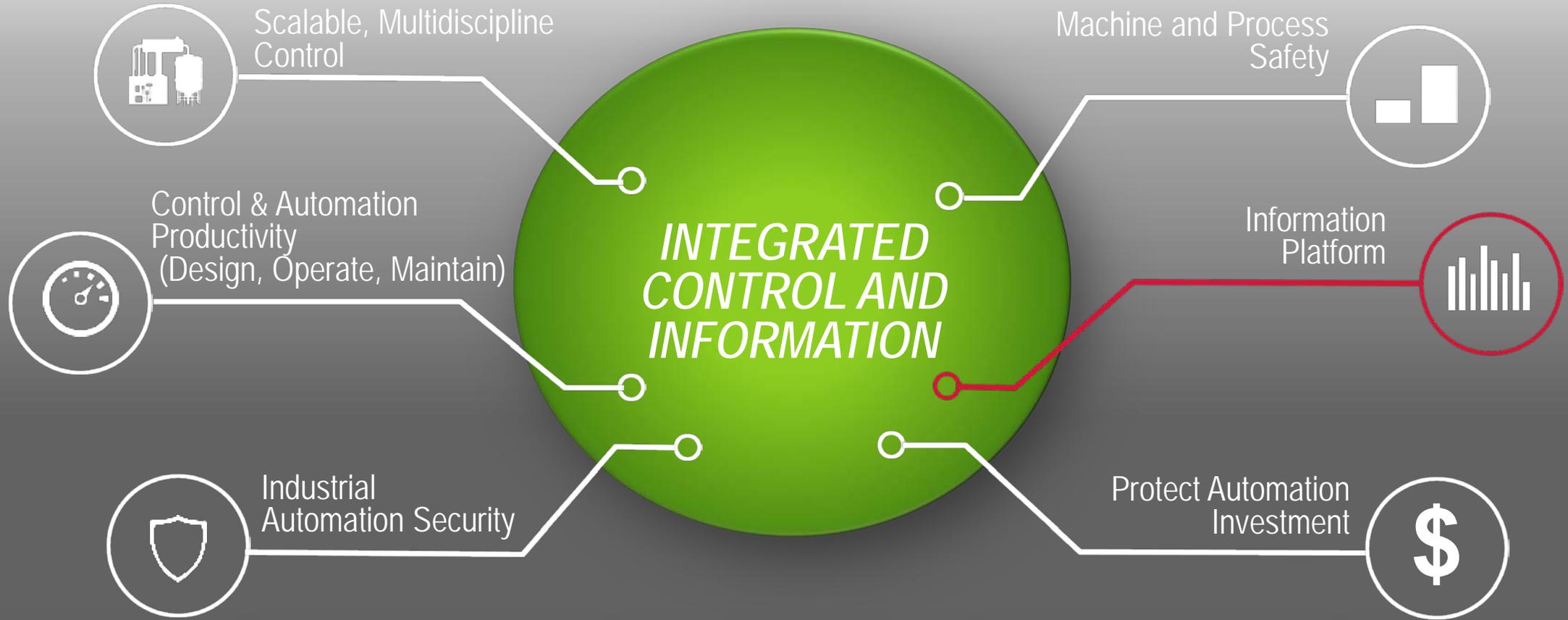
CONSULTING & IMPLEMENTATION SERVICES

INTELLIGENT MOTOR CONTROL

INTEGRATED ARCHITECTURE

INFORMATION & VISUALIZATION SOFTWARE

MAINTENANCE & SUPPORT
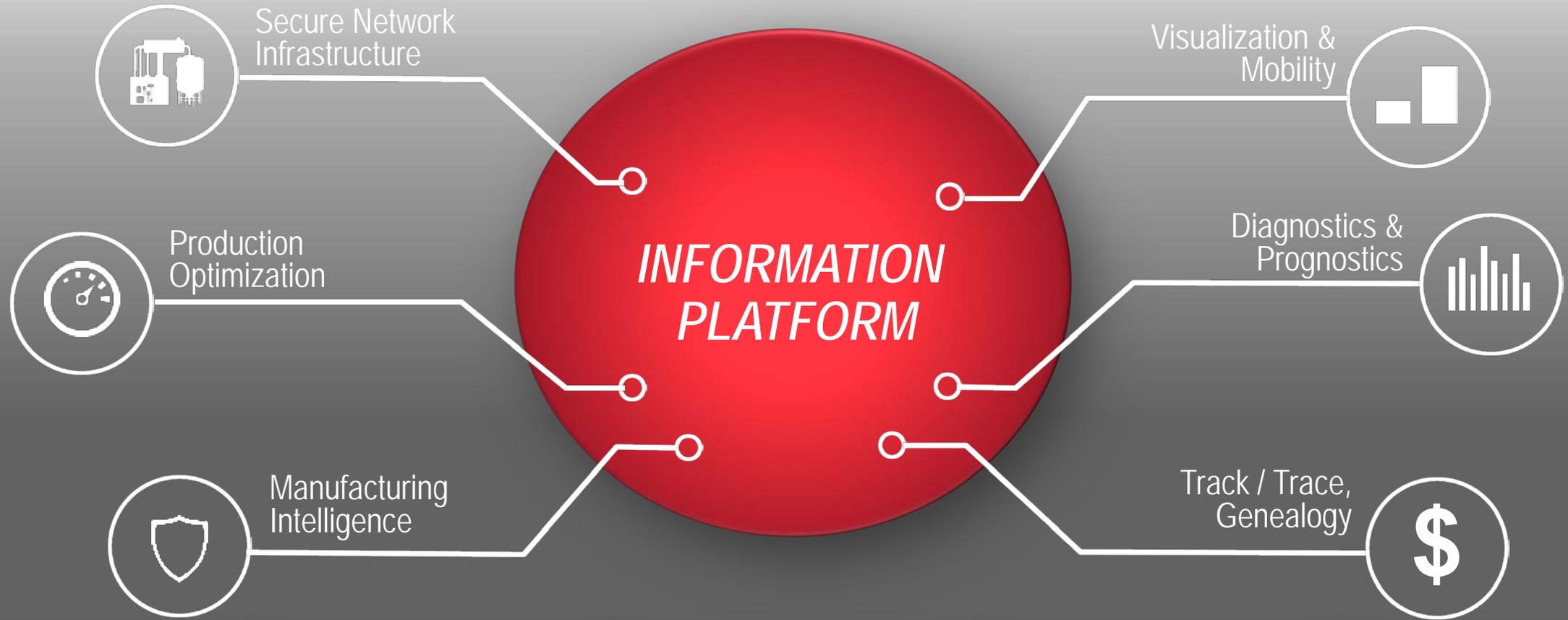
WORKING DATA CAPITAL
Transform DATA into INFORMATION

DELIVER
actionable information

SHARE
data securely across operations

OUT PERFORM
competitors

Information Management

24% Average annual **IMPROVEMENT** in **Total Cost per Unit** for Top performers **11%** better than average

Source: MESA Research

Data is there, are you using it to gain a **COMPETITIVE ADVANTAGE**?

Plantwide Visibility

Relevant Information are configured to your needs

**DATA** Management   **OPERATIONS** Management

ASSET Management   **VISUALIZATION** Management

Executive Dashboards Accessible Anywhere

Check Performance as if you Were There
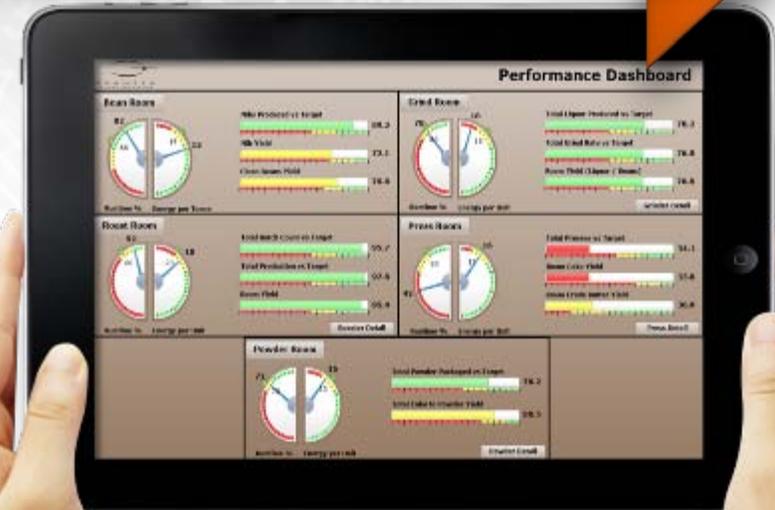
ANALYTICS
Transforming INFORMATION into KNOWLEDGE

UNDERSTAND
process performance in real time

RESPOND
quickly to changes in the process

INCREASE
uptime and reduce waste

80% OEE — *Top performers* achieved **10%** higher overall equipment efficiency

14% Increase in annual Financial Improvements **(5X BETTER than average)**

Source: MESA Research

60% Lack the necessary **equipment connectivity** to capture the data

30% Have **NO** integration at all

Source: 2013 Industry Week Study

Contextualized Information

Right Information – Right Time – Right Person

FactoryTalk® VantagePoint

Empowering PEOPLE to make SMARTER, more INFORMED decisions

ENTERPRISE

EXECUTIVE

SITE

PRODUCTION MANAGEMENT

EQUIPMENT/LINE

OPERATOR

Notifications and Reporting

FactoryTalk® VantagePoint

Anywhere, Anytime

Enable mobile collaboration - Know WHEN and WHAT needs attention

Summary Reports for Real-time Process Intelligence

Compare Performance Across Plants

Downtime Reports and Notifications
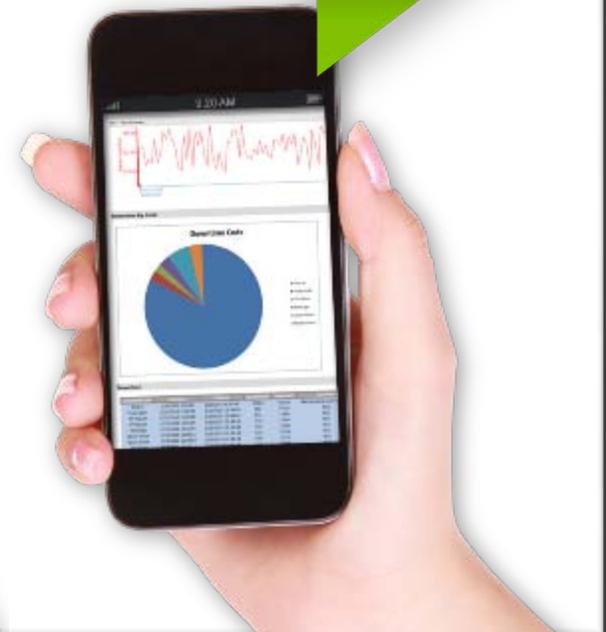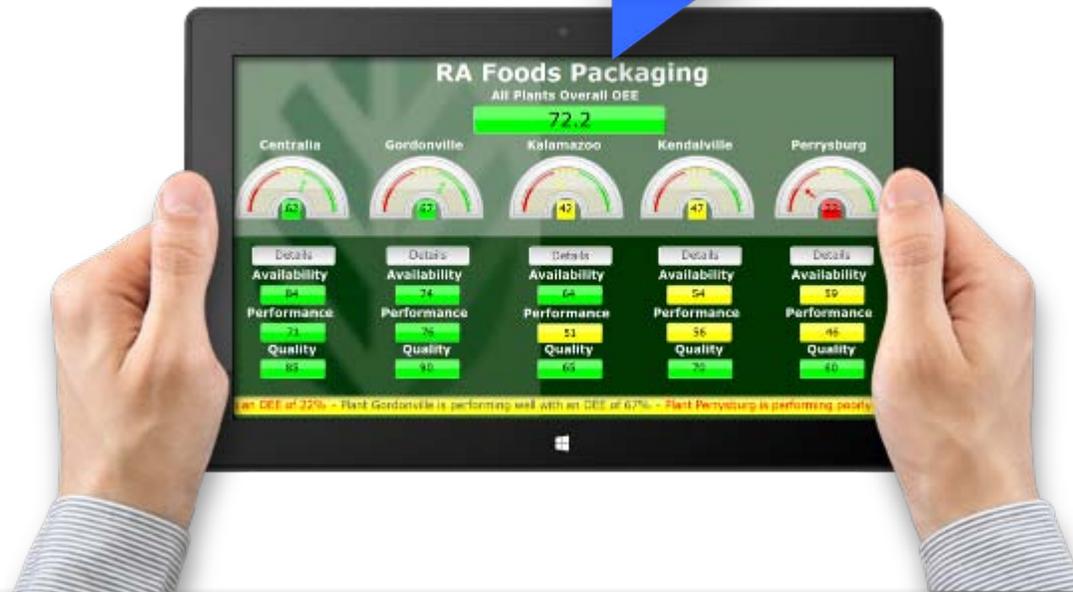
COLLABORATION
Transforming KNOWLEDGE into POWER

IMPROVE
inventory by managing your supply chain

CONTROL BUDGET by knowing the cost of goods produced - material, labor and energy

REMOTE ACCESS to PEOPLE, ASSETS and DATA securely, anytime, and anywhere

Anticipate activities throughout the **ENTERPRISE** and through the **SUPPLY & DEMAND** chain

LOWER
Customer Rejects & Returns

INCREASE
Supplier Incoming Quality

KNOWLEDGE & EXPERIENCE will shrink significantly over the next **5** years

Leverage centrally located **DOMAIN EXPERTS** across operations, sharing *best practices* and *enlisting the knowledge* base of an entire supply chain

Transforming Information into Operational Benefits

FactoryTalk® ProductionCentre

Production Management

Performance Management

Quality Management

ERP Integration Gateway

MES INDUSTRY SUITES

CPGSuite™
Rockwell Software

PharmaSuite™
Rockwell Software

AutoSuite™
Rockwell Software

HUNDREDS OF PLANTS with **THOUSANDS** OF USERS

THE CONNECTED ENTERPRISE

THE ROCKWELL AUTOMATION JOURNEY

Rockwell Automation

The Connected Enterprise
Implementation & Transformation

Rockwell Automation

387,000
STOCK KEEPING UNITS
(SKUS)

20 PLANTS

200 PARTS AVG ORDER

20 YEARS AVG PRODUCT LIFE

PRODUCT TYPES
- *Stock + Configure to Order*
- *Engineered to Order*

ISSUES DISCOVERED

| Custom applications | Numerous functional experts | Independent ERP systems | Model replication cost prohibitive | Autonomous P&L centers | No single system to run plants |

Common Technology Footprint

Supports Both
ETO and STD
Products

The Connected Enterprise
Implementation at Rockwell Automation

ENTERPRISE

ERP   FINANCIALS   HR   LOGISTICS   QUALITY   WAREHOUSE

IT

MANUFACTURING OPERATIONS MANAGEMENT

Scalable computing	Rockwell Automation Cloud platform
Mobility	**FactoryTalk** VantagePoint
Secure Network Infrastructure	Common Industrial Protocol (CIP)
Multi-disciplined Control & Information	Manufacturing execution mgmt.: **FactoryTalk** ProductionCentre Multidiscipline control & information: **Logix**
Smart Assets	Data collection

OT

PLANT FLOOR

INDUSTRIAL "THINGS"   MATERIAL & TRANSPORT   MACHINES & TESTERS   CONTROLLERS & SCANNERS   PRINTERS & LABEL SERVICES   SHOP FLOOR PERSONNEL

The Connected Enterprise
Rockwell Automation Transformation

LOWER COST PLANT BEHAVIOR	FASTER TIME TO MARKET SUPPLY CHAIN / LEAD TIMES	ENTERPRISE RISK CUSTOMER SERVICE
Inventory 120 days to 82 days	**Delivery** Mid-80s to 96%	**Time to Want** 82% to 98%
CapEx 30% per year in capital avoidance	**Lead Times** Reduced 50%	**Quality** 50% reduction in PPM

Productivity ► *4% to 5% per year*