



Rockwell Automation

UNLOCKING VALUE

Through Augmented Maintenance & Safety for Intelligent Motor Control Centers

AB WELL AUTOMATION

Authorised

Distributor





Motor Control Centers are critical to operations

Presenting Rockwell AMS, the augmented maintenance and safety solution to unlocking new MCC value.

This digital overlay experience brings data to life by transforming 2D into 3D. Rockwell AMS makes work accessible via mobile and cloud based tools, and moves worker experiences into AR, making them more interactive.



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Assessment Potential Realized Value



Potential Financial Improvement

With These Solutions

Real Time Product Monitoring

Augmented Remote Assistance

> Digital Frontline Functionality

Improving These Metrics

▲ 10% Service Response Time

7% Production Uptime

14% Mean Time to Repair

Achieving This Value



Reduction in Capital Equipment Sustainability \$4M

Downtime Avoidance & Rapid Return to Service \$5M

Optimize Labor Productivity

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Production Outages and Safety

An unplanned outage can cost major industries more than \$200k per minute, meaning saving even just 15 minutes in any given year is a win.

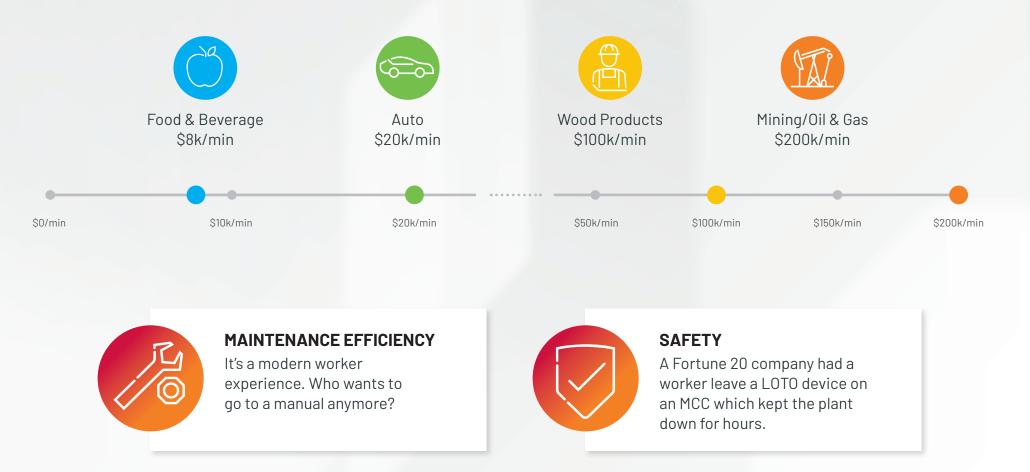
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The high cost of downtime

Production Outages



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5 **Rockwell**

AMS has the potential to unlock significant savings



- 40% Reduction in maintenance cost
- **80%** Reduction in unsafe behavior
- **35%** Time **savings** reaching root cause
- **30%** Reduction in training time
- 48% More efficient maintenance procedures
- 20% Reduction in safety incidents
- 90% Improvement in first-time right repair

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Augmented Maintenance & Safety

Digital augmentation of workers on the plant floor empowers people and leads to increased employee safety, productivity, and efficiency.

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Achieve your potential

Reduce Production Costs

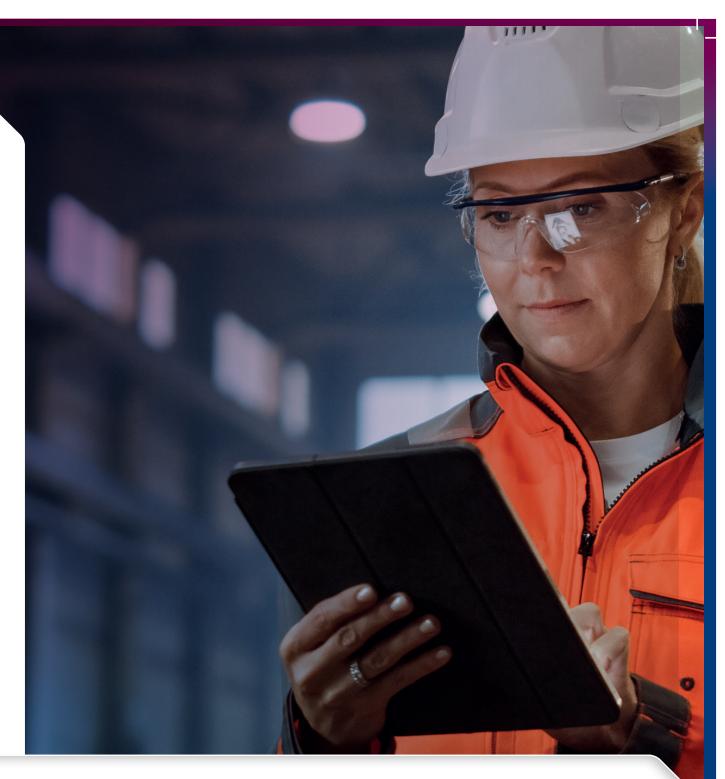
• Improve asset utilization

Maximize Workforce Productivity

- Increased employee safety, productivity, and efficiency
- Accelerated employee ramp time

Improve Safety & Compliance

 Reduce incidents and fines with improved safety protocols that empower confidence in your workforce.



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Reduce production costs with improved asset utilization



Take immediate action based on status of MCC



Expedite maintenance with easy instructions



Ensure safe maintenance procedures

FACILITATE FASTER TROUBLESHOOTING AND REPAIR



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Production Outages and Safety PG4

Augmented **Maintenance & Safety** PG7

Maximize Workforce Productivity PG 11

Improve Safety PG 14

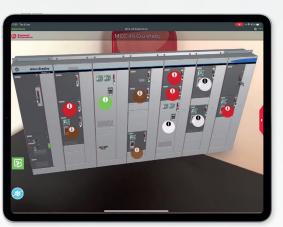
and Compliance



Real time Status, identify failure & get all MCC information

- Augmented reality representation by simply scanning a QR code.
- Full visibility of real time status and key performance indicators (KPIs).
- Access KPI's from MCC's even in restricted areas.
- Dynamic gauges that blink if they require attention, with an easy to distinguish color-coded system.
- Download manuals.
- No limits on the complexity of your MCC's

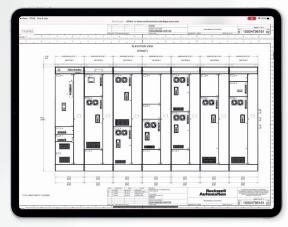




AR representation



Current, Voltage, Power and Freq.



Downloaded manual

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Maximize Workforce Productivity

Traditional methods of empowerment like paper documentation, training classes, over-the-shoulder mentoring, and face-to-face troubleshooting are no longer viable.

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AR brings **digital technology** to the front line

Companies can no longer rely on the memory and skill retention of their operators and technicians to handle the increasing necessity to quickly adapt to complexity and variation of products and production lines.

Fortunately, AR fundamentally changes the way we can communicate information and knowledge. AR delivers new capabilities to improve productivity, agility and safety.

It allows us to present 3D digital models, visually augment work instructions, and expose relevant insights, such as from sensors or other digital sources. With AR, this content can be presented directly in the frontline workers field of view, relative to important context they see in the physical world where they're working. Use augmented maintenance procedures to give your workforce confidence.

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The right information improves productivity, agility and stability

AMS changes everything – it improves productivity, increases quality and ensures safety & compliance. And most importantly, all of that unlocks value for you and your team.



Increased safety Easy knowledge capture Easy remote collaboration Clear, accurate work instructions Faster documentation of SOPs Highly effective training methods

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Improve Safety and Compliance

Arc Flash incidences are unpredictable. While there are methods in place to prevent them from occurring, companies need to be prepared for the 'what if' scenario.

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Make unseen danger visible, warn users of the danger zone

AMS CAN IMPROVE SAFETY AND COMPLIANCE BY SHOWING ARC FLASH BOUNDRIES.

TYPICAL SAFETY MEASURES

Solution: Safety zones are painted on the floor

Result:

Standard painted distance barriers are often ignored

AMS SAFETY MEASURES

Solution:

Because Arc Flash is dynamic, the distance needs to vary

Result:

A barrier that dynamically adjusts according to the conditions



THE VIRTUAL SAFETY BARRIER CAN HELP PREVENT THE RISK OF BEING EXPOSED TO THE ARCH FLASH BLAST ZONE, POTENTIALLY SAVING LIVES

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A value-driven implementation approach



Discover

• Discover use cases

• Quantify business value



Design

Prototype

Build

Test



Deliver

- · Identify immediate hurdles
- Prioritize investments

RESULTS ACHEIVED

DIGITAI

Security

Defin

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AB MARKET ELEKTRİK OTOMASYON SANAYİ VE DIŞ TİCARET ANONİM ŞİRKETİ

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