T26 - Drive Operational Productivity with Integrated Services
Numbers to Consider

10
10 → 5
10X
$20B
5%
$30-50K
$250K+
3-4 Hrs.

Million unfilled manufacturing jobs
Only 5 people to replace every 10 that retire
More technical material to understand
Cost of unscheduled downtime
Output value lost to downtime
Average downtime Cost / hour
Average top downtime Cost / hour
Average downtime incident length
Numbers to Consider

<table>
<thead>
<tr>
<th>Uptime</th>
<th>Availability</th>
<th>Cost 1 @ 10K / Hr</th>
<th>Cost 2 @ 50K / Hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>99%</td>
<td>87.7 hours of unscheduled downtime per year</td>
<td>$874 K</td>
<td>$4.4M</td>
</tr>
<tr>
<td>99.95%</td>
<td>4.4 hours of unscheduled downtime per year</td>
<td>$44K</td>
<td>$220K</td>
</tr>
<tr>
<td>99.999%</td>
<td>.09 hours of unscheduled downtime per year</td>
<td>$900</td>
<td>$4.5K</td>
</tr>
</tbody>
</table>
Then – Break/Fix
20 years ago
Specialized Staff
20 years ago

Break/Fix

Specialized Staff

Generalists

RIF Retired

Staff

Tech

Complex

Impact on DT

Network / Security

Prod ↑ 40%

Now - Break/Fix

Islands of Automation
Today
Now - Break/Fix

Specialized Staff Generalists

Staff
Parts
Maint

Tech
Complex
Impact on DT
Network / Security
Prod ↑ 40%!

Now - Break/Fix

Islands of Automation

RIF Retired

$ $$

Impact on DT
Network / Security

$
Today
Now - Break/Fix

Specialized Staff
- Generalists

RIF Retired

Staff Parts Maint

Tech Complex Impact on DT
Network / Security
Prod \( \uparrow 40\% \)

Now - Break/Fix

Islands of Automation

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Prod.
Today
Now - Break/Fix

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Network / Security
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Specialized Staff Generalists
R I F Retired

$ $$$

Now - Break/Fix
Islands of Automation

Prod.

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Today

Now - Break/Fix

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Islands of Automation

R I F
Retired

Prod.

Now - Break/Fix

Islands of Automation

$
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Islands of Automation

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Now – Break/Fix

Specialized Staff Generalists

RIF Retired

Staff Parts Maint

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Today

Islands of Automation

Prod.

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Summary of Problems

- Uncertain network and connected devices
- Lack of skilled staff
- No time to perform maintenance tasks
- Lumpy costs / production
- Parts shortages
- KPIs constantly increasing
Common Problems

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TOP 10 COMMON PROBLEMS

1. Keeping up with the pace of software change
2. Aging workforce and no knowledge transfer
3. Lack of knowledgeable resources onsite
4. Poor understanding of how to wire and run products
5. Poor understanding of which products to use on new projects
6. Struggle to create a business case for migration
7. Lack of spares to support operations
8. Product isn’t working as it should
9. Aging infrastructure
10. Trying to prevent downtime
Network

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Bridging the Skills Gap

How to retain critical employee knowledge as workforce and technology landscapes undergo dramatic changes.

Uncertain network and connected devices
Lack of skilled staff
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Lumpy costs / production
Parts shortages
KPIs constantly increasing

Integrated Services
Base Level Of Support

What is TECHCONNECT™ Support?

Expert industrial automation support services for your critical, proactive and informational needs. Help protect your investment with the industry’s best.

- Faster downtime recovery
- Cost-effective off-shift support
- Lower maintenance costs
- Better visibility to asset obsolescence
Application Support

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24x7 access to experienced engineers who are trained on your system

![Graph showing Customer Hours Saved for Improved Human Performance, Improved OEE/Quality, and Reduced Downtime.]

- Improved Human Performance: 42.5
- Improved OEE/Quality: 24
- Reduced Downtime: 39

ROI CATEGORIES
Monitoring + Predictive Maintenance

- Uncertain network and connected devices
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Sensors On & Around Equipment

Running

Shorten or prevent cycle
Parts Management

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Reduce your MRO spend by as much as 25% while improving plant profitability and uptime.

- Easily Access Spare Parts
- Maintain Integrity of Critical Spares
- Optimize Storeroom Design/Processes
- Improve MRO Decision-Making
- Reduce MRO Costs

TRANSFORM INVENTORY MANAGEMENT INTO A LEAN, COST-SAVING MACHINE
Workforce – Supporting Our Veterans

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ManpowerGroup and Rockwell Automation: Skilling Up
Competency Building

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Bridging the Gap

The skills gap is reverberating around the world.

In the U.S., the average age of a highly skilled manufacturing worker is 56. In China, factories are struggling to fill positions, and the over-65 population is expected to reach 210 million by 2030. In the European Union, countries are seeking to prolong people’s working lives. And in Latin America, the birth rate is now nearly one-third of what it was 50 years ago.

Because of this, methods such as offshoring and workforce relocation are less effective.

78% of manufacturing leaders believe the talent gap will hurt their ability to adopt new technologies and increase productivity.

1 China’s Aging Population Threatens Its Manufacturing Might, CNBC, Oct. 24, 2012
Workforce Development and Skills Readiness

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Thank you!