

# Economic update and industry outlook

*Integrating MES and ERP to solve top challenges in manufacturing*



# Agenda

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- 02 Economic update

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- 03 Era of permacrisis

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- 04 Industry trends

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- 05 Fuuz platform overview

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- 06 Questions and answers

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# With you today



Craig Scott  
CEO/ Founder (FUUZ)  
cscott@fuuz.com

## Summary of experience

Craig has nearly 2 decades in Manufacturing Operations Management, including Automotive, Aerospace/Defense and Consumer Goods operations. He has experience in all facets of manufacturing, including but not limited to engineering, quality, logistics, sales, project management and IT. In his current role as CEO of FUUZ, he leads the product development, sales and customer enablement of the industries only cloud native SaaS Manufacturing solution.

Prior to FUUZ, Craig spent much of his time owning and operating other ventures including an ERP Implementation and selection firm, focusing only on Manufacturing clients. During this time, he worked with over 450 individual clients globally including SMB and Enterprise. Before delving into the world of consulting, software and IT, he owned a Detroit based manufacturing company called Metalform Industries, which supplied Automotive, Aerospace and other industries with high precision tooling and prototype / low volume production.

## Education

- Bachelor of Science Manufacturing Eng, Central Michigan University
- Master of Science Manufacturing Eng, Central Michigan University

# With you today



Katie Landy  
*Consulting Principal*  
katie.landy@rsmus.com

## Summary of experience

Katie has over 16 years of experience providing risk consulting services to a variety of clients with a focus on the consumer products and industrials industries. She is one of the regional practice leaders focusing on serving and growing the firm's practice in this space. In addition to this role, Katie has extensive experience in areas of program and project management, enterprise risk management, operational and financial internal audit, internal controls, Sarbanes-Oxley readiness, and process improvement for both public and private organizations. Katie also serves as an Industrials Senior Analyst in RSM's Industry Eminence Program, which positions its analysts to understand, predict and communicate economic, business and technology trends shaping the industries and sectors RSM serves.

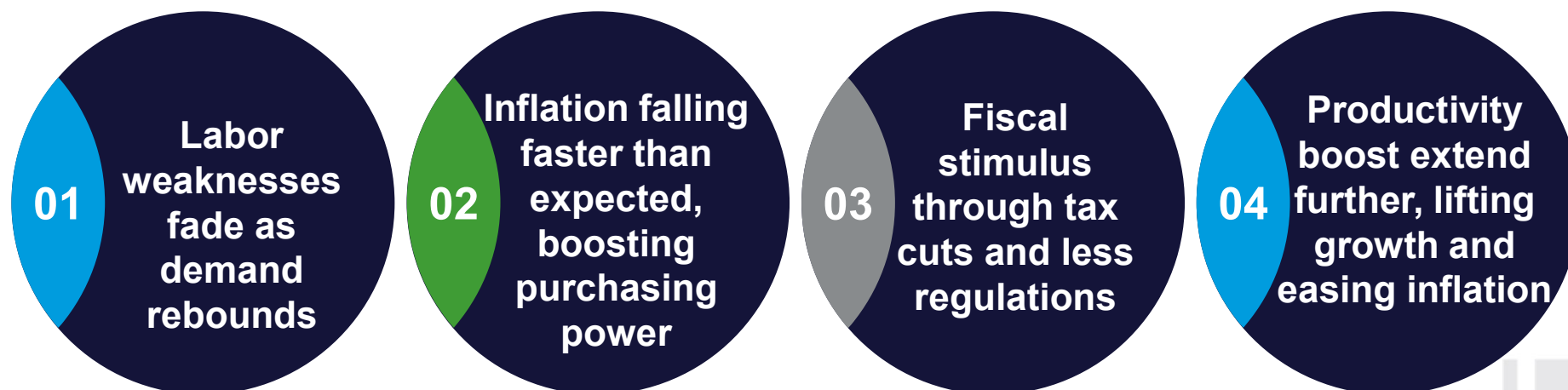
Prior to RSM, Katie served as the chief audit executive for a global manufacturing and distribution organization, where her areas of responsibilities included internal audit and enterprise risk management. Her industry and professional service roles have provided a broad range of experiences and ability to provide a unique perspective to her clients.

## Education

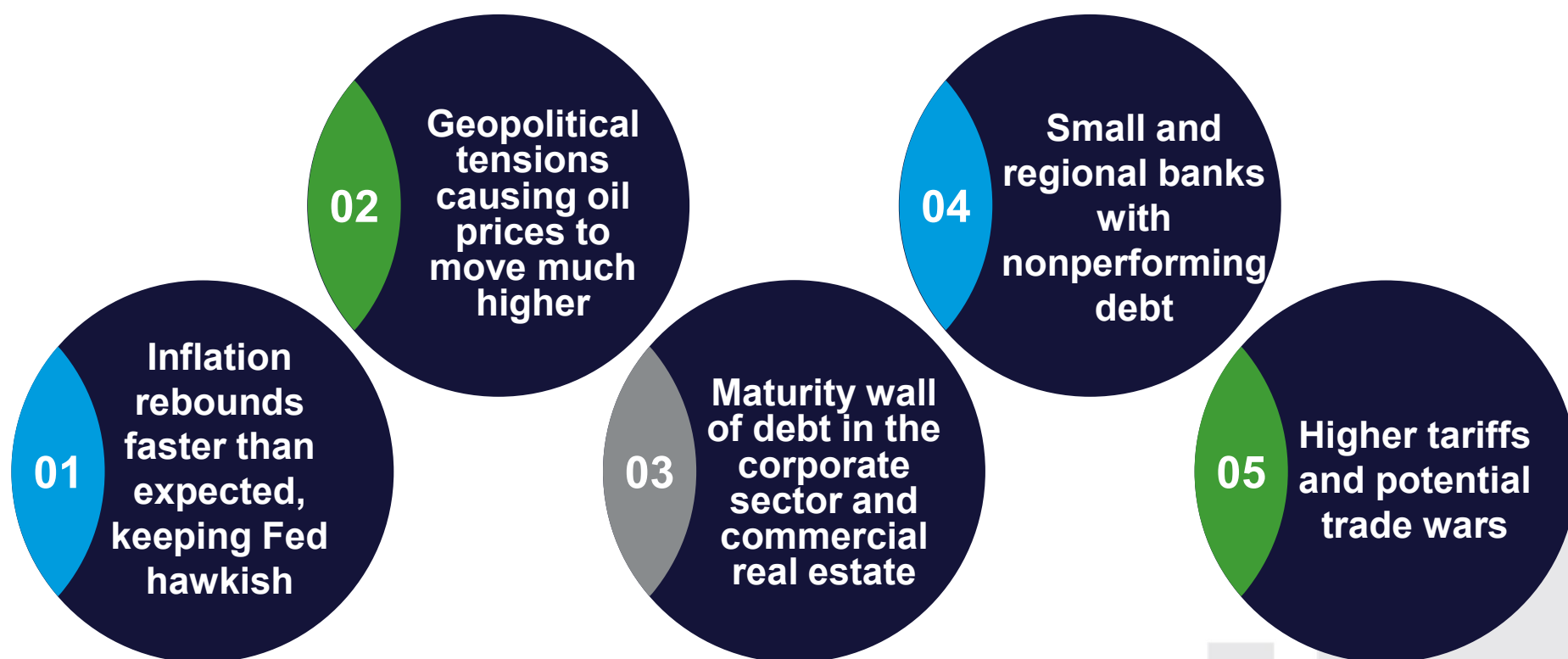
- Bachelor of Accounting and Information Systems, Virginia Polytechnic Institute and State University
- Master of Accounting and Information Systems, Virginia Polytechnic Institute and State University

# Economic update

## Positive risks to the outlook



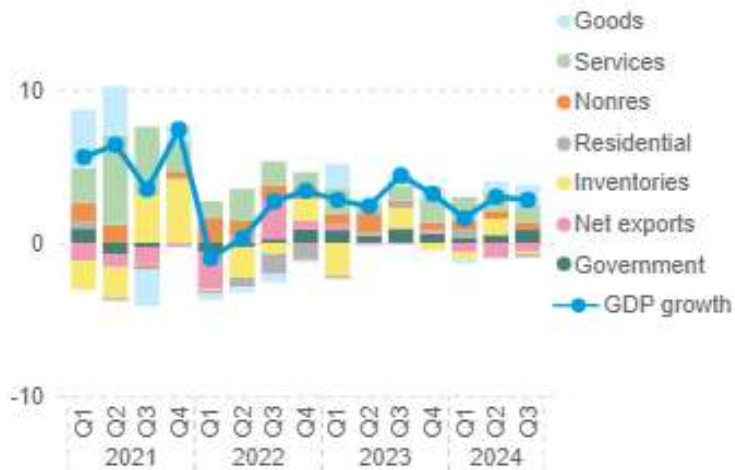
## Negative risks to the outlook



# Economic growth outlook

GDP Rebounds Strongly in Q3, Up 2.8% Overall

Real GDP growth, quarterly annualized



Source: BEA, RSM US

Real growth by key metrics

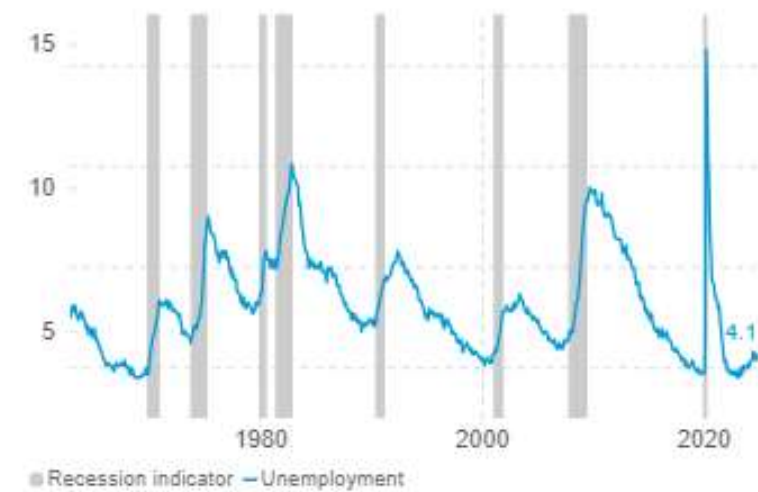




# Employment outlook

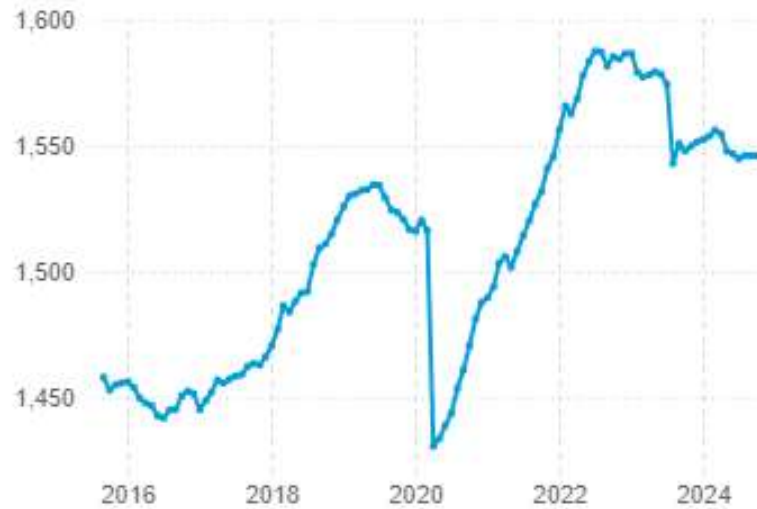
Unemployment rate at 4.1% up from recent low of 3.4%

Unemployment rate



Source: BLS, RSM US

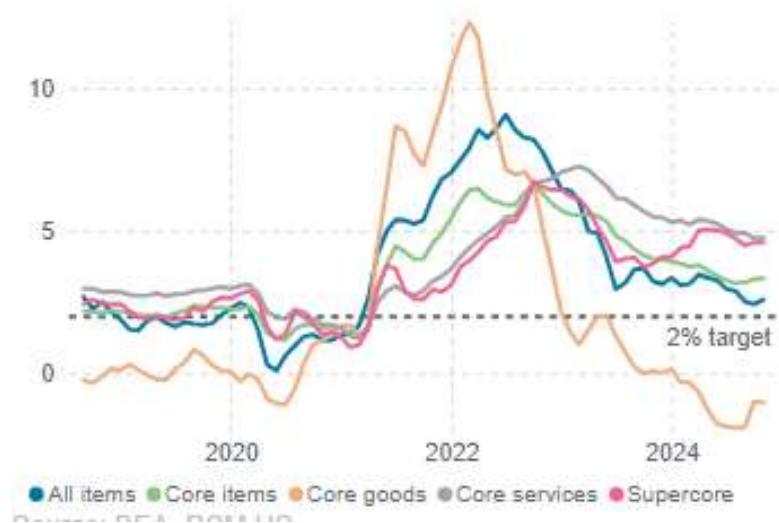
Employment-to-population ratio, age 25-54  
In percentage



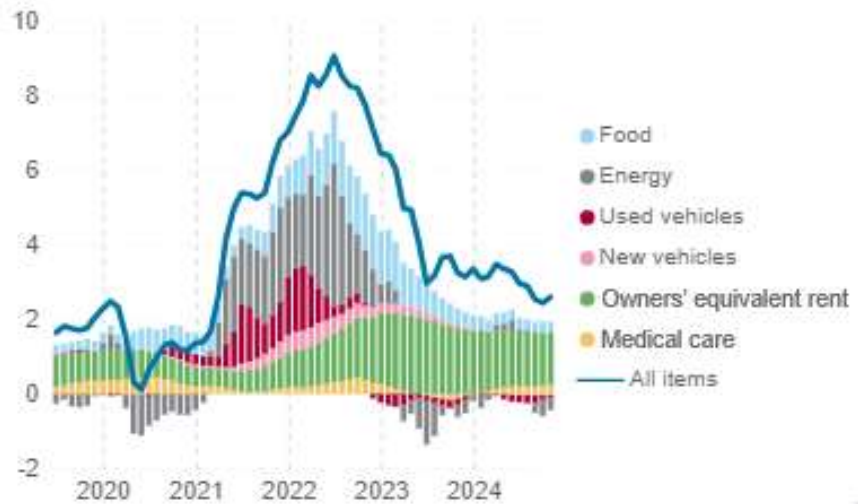
# Inflation outlook

CPI inflation cooled back to 2.6%

CPI inflation

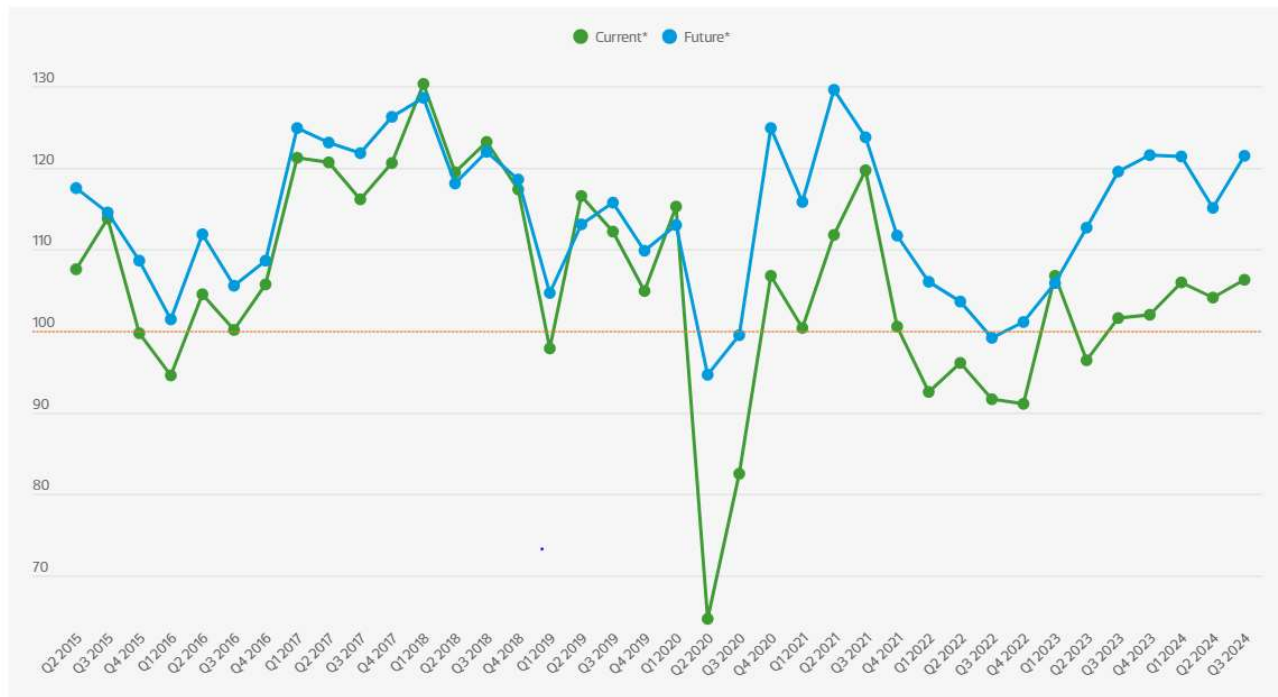


Component contribution



# Middle Market Business Index

## General economy performance



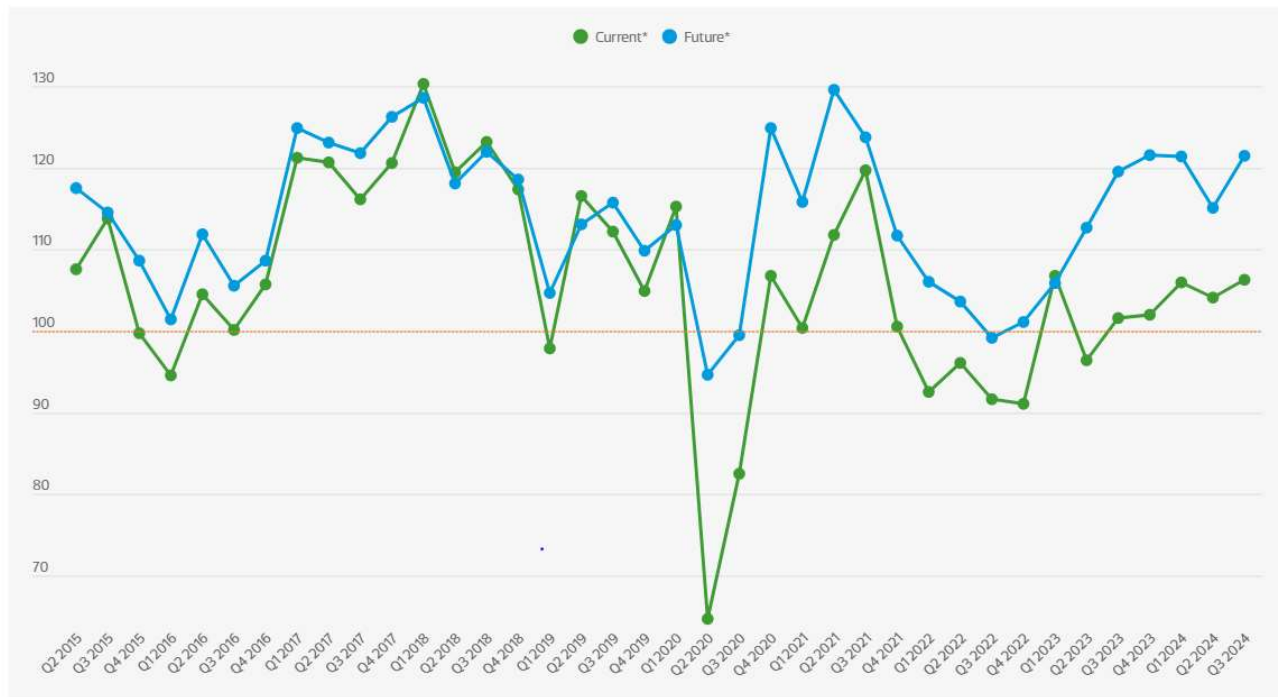
Source: RSM US LLP

First, thinking about the general economy this quarter versus last quarter, how would you describe the current general economy? Would you say the general economy has ...?  
 What are your expectations regarding the general economy over the next six months? Do you expect the general economy will ...?

\*Seasonally adjusted, diffusion index with neutral = 100

# Middle Market Business Index

Aggregate capital expenditures / investments performance



Source: RSM US LLP

First, thinking about the general economy this quarter versus last quarter, how would you describe the current general economy? Would you say the general economy has ...?  
 What are your expectations regarding the general economy over the next six months? Do you expect the general economy will ...?

\*Seasonally adjusted, diffusion index with neutral = 100

Era of permacrisis

# The Era of Permacrisis

## Since January 2020

- Worst global pandemic in 100 years
- Highest unemployment rate in 90 years
- Most significant war in Europe in 80 years
- Highest inflation in 40 years
- Most aggressive monetary policies in decades
- Failures in the banking industry
- Climate induced catastrophes
- Sharpening political divisions
- Outbreak of major hostilities in the Middle East
- Pending sense of helplessness

# The speed of risk

**Permacrisis is being driven by the speed of risk.**

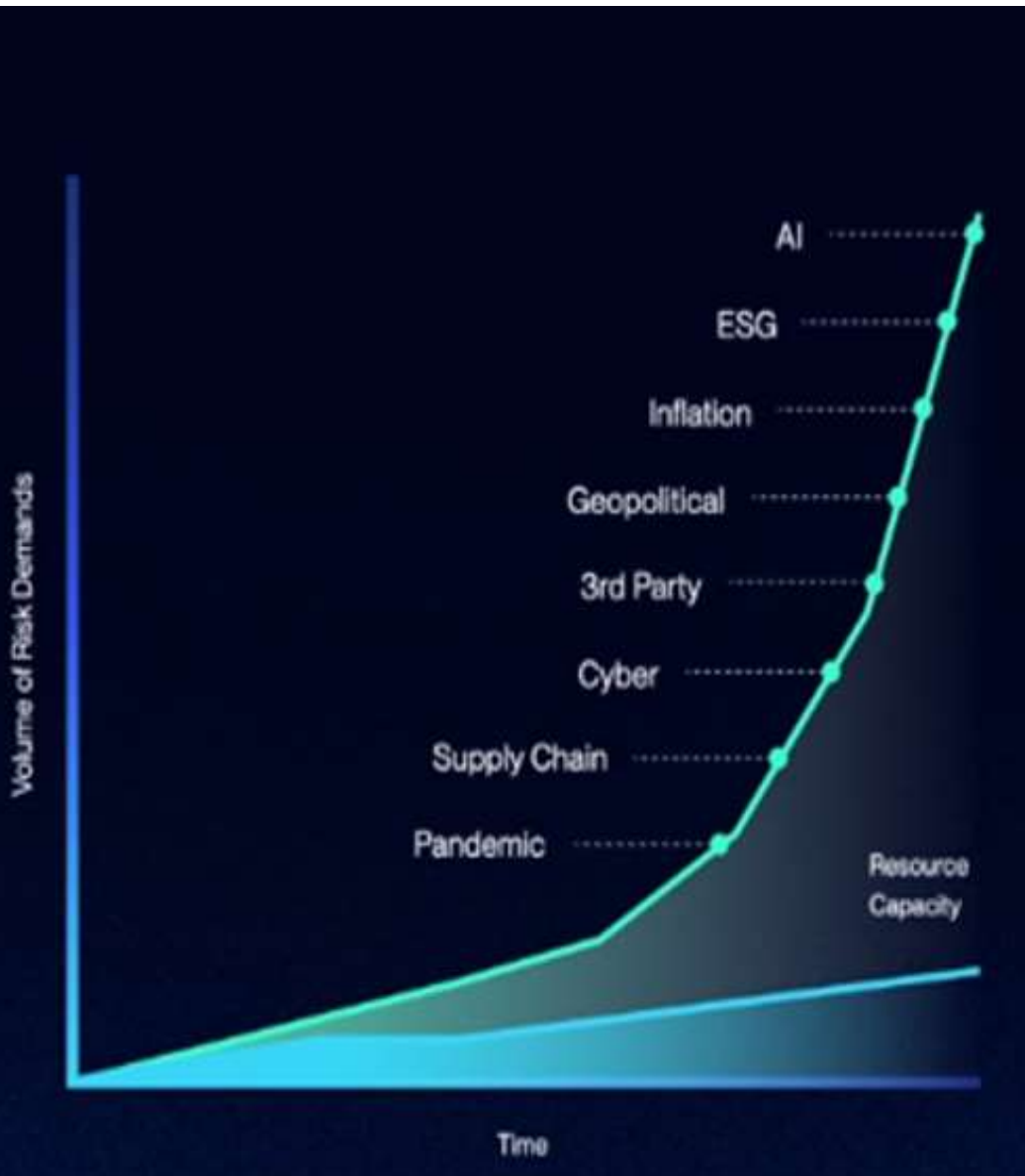
- Faster rate of change
- New and constantly evolving conditions
- More emerging risks
- Greater complexity
- Increased connectivity
- Greater uncertainty
- Greater need for assurance and insight



## Growing exposure gap

- Fueled by the permacrisis
- Risks are emerging rapidly
- Resourcing not keeping pace
- Budget and operation implications

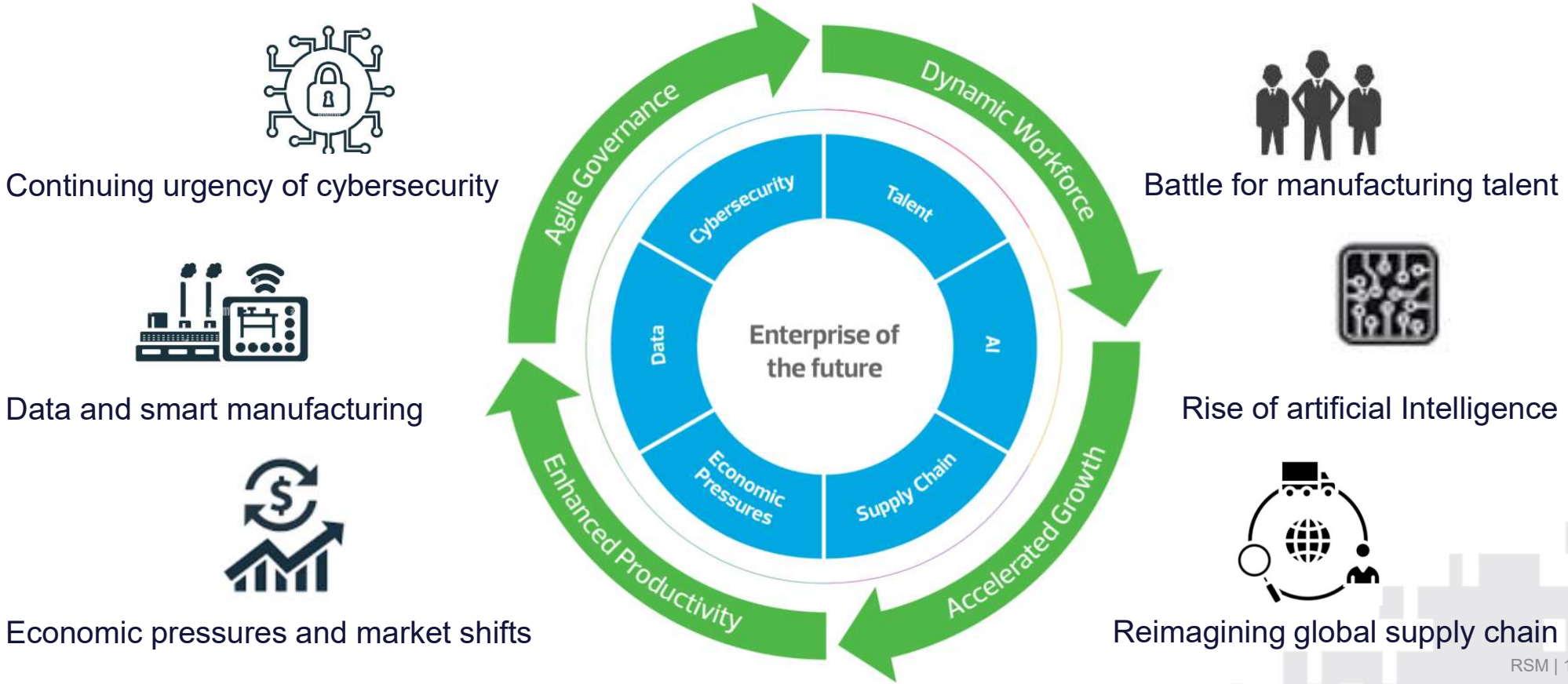
Source: AuditBoard Audit + Beyond Conference – Risk and Audit Transformation in the Era of Permaccrisis





# Industry trends

# 2024 Industrials mega trends



# FUUZ "The Manufacturing Platform"

How the FUUZ platform supports Digital Transformation



# Why FUUZ?

## Wonder why not just find an "all-in-one" solution?

Fuuz is a Platform that provides agnostic extensibility beyond what traditional all-in-one ERP's can provide.

Where the all-in-one's fall down :

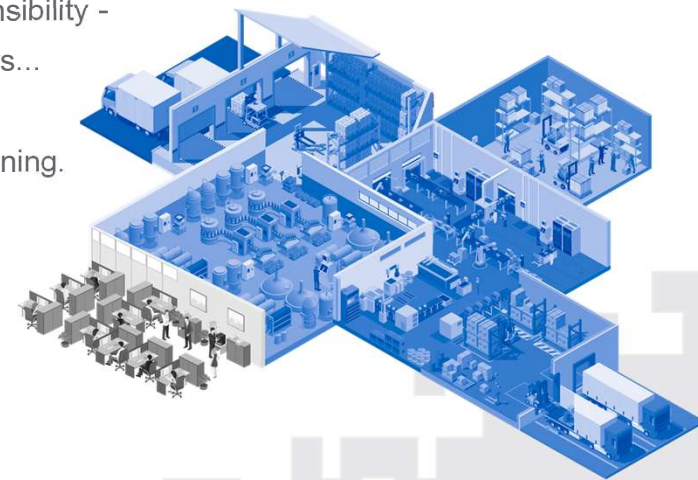
*Inability to continue driving value to the operation after the initial deployment.*

Fuuz is the only cloud-native, full SaaS provider that provides end to end flexibility and extensibility - Quickly and easily, build your own line of business apps – or get one from any of our partners...

Fuuz handles the operations side of the business, while your ERP handles the Finance/Planning.

Our platform is 100% Agnostic, any ERP, any Equipment, Any Data Source...

No "Vendor Lock"...



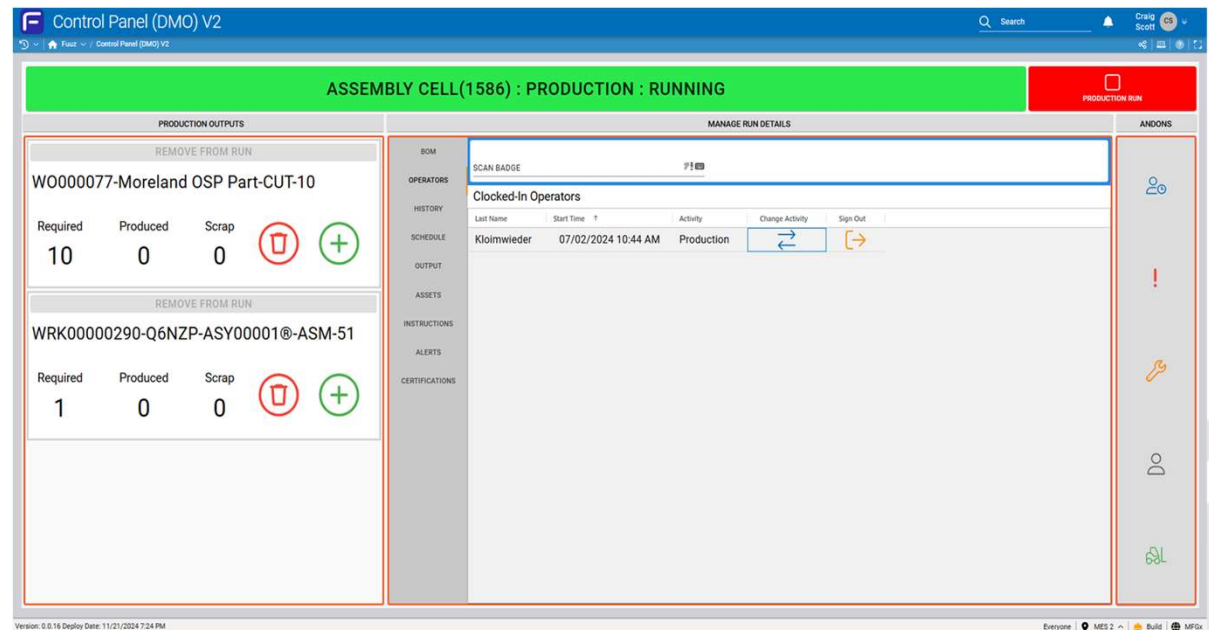
# Why MES?

## MES is not simply monitoring your equipment

Machine Monitoring accounts for about 10% of what a true MES can do

Measuring, monitoring and collecting data is a critical part of MES – but often SMB's underestimate the full scope of MES.

- Labor Tracking
- Workcenter Efficiency
- Run Analytics
- Production / Scrap
- Batch, Discrete, Continuous
- Asset Tracking / Validation
- Training / Certifications
- Schedule Attainment



The screenshot displays the 'Control Panel (DMO) V2' interface for 'ASSEMBLY CELL(1586) : PRODUCTION : RUNNING'. The interface is divided into several sections:

- PRODUCTION OUTPUTS:** Contains two rows of data for different parts. Each row has columns for 'Required', 'Produced', and 'Scrap', along with 'REMOVE FROM RUN' buttons (trash and plus icons).
 

Part Number	Required	Produced	Scrap
W0000077-Moreland OSP Part-CUT-10	10	0	0
WRK00000290-Q6NZN-ASY00001@-ASM-51	1	0	0
- MANAGE RUN DETAILS:** Includes a 'SCAN BADGE' field, 'Clocked-In Operators' list, and a table for operator activity.
 

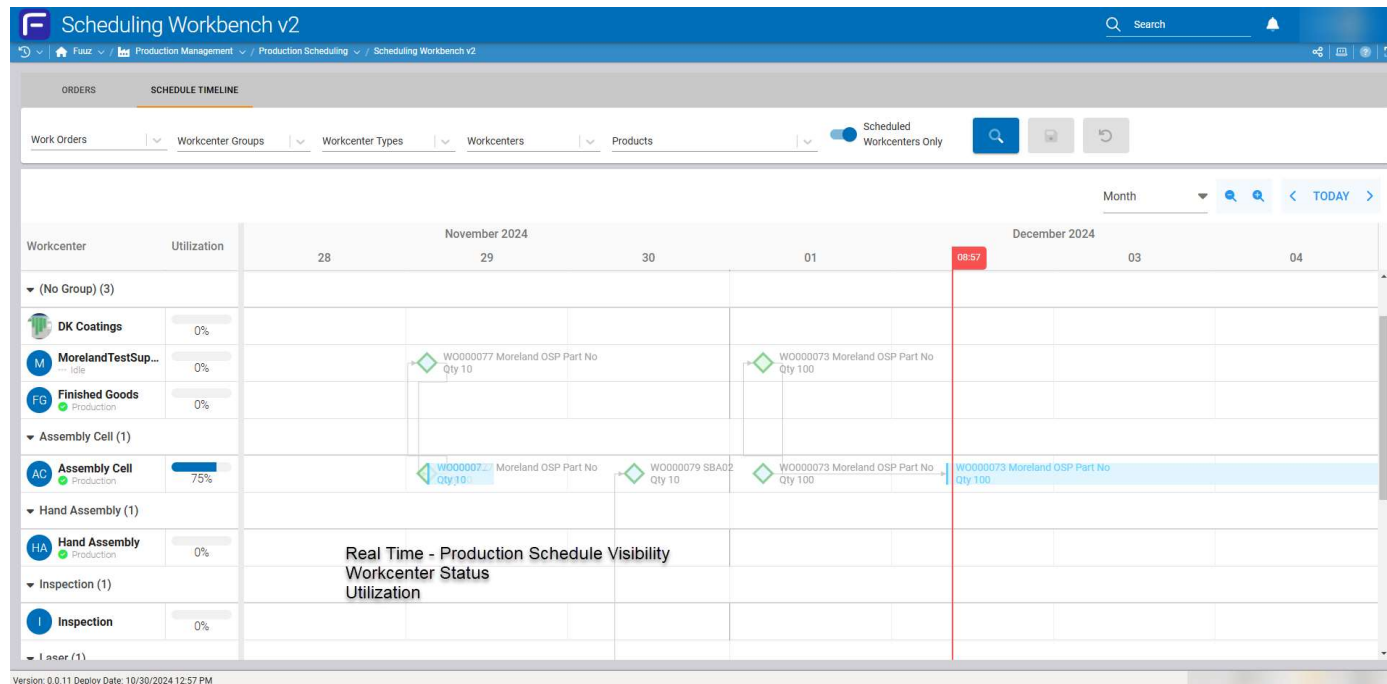
Last Name	Start Time	Activity	Change Activity	Sign Out
Kloimwieder	07/02/2024 10:44 AM	Production	[Change]	[Sign Out]
- ANDONS:** A vertical sidebar on the right with icons for user management, alerts, and other functions.

At the bottom, the interface shows 'Version: 0.0.16 Deploy Date: 11/21/2024 7:24 PM' and user information 'Everyone | MES 2 | Build | MFGx'.

# Real Time Visibility

Real time systems drive real time actions and accountability

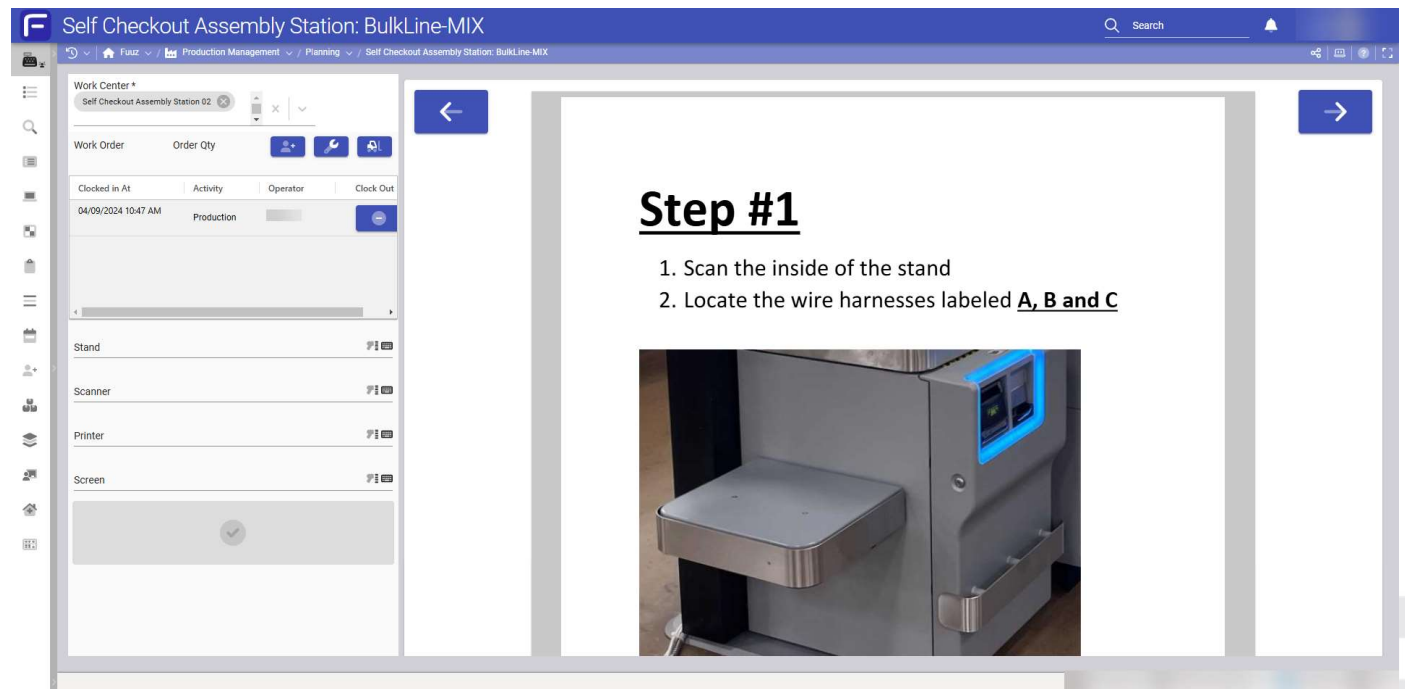
In an environment that Manufacturers struggle to attract and retain workers, enhance skills, drive efficiency through knowledge – Fuuz is that real time toolset that not only collects data – but presents to the end users in easily consumable ways.



# Connected Worker

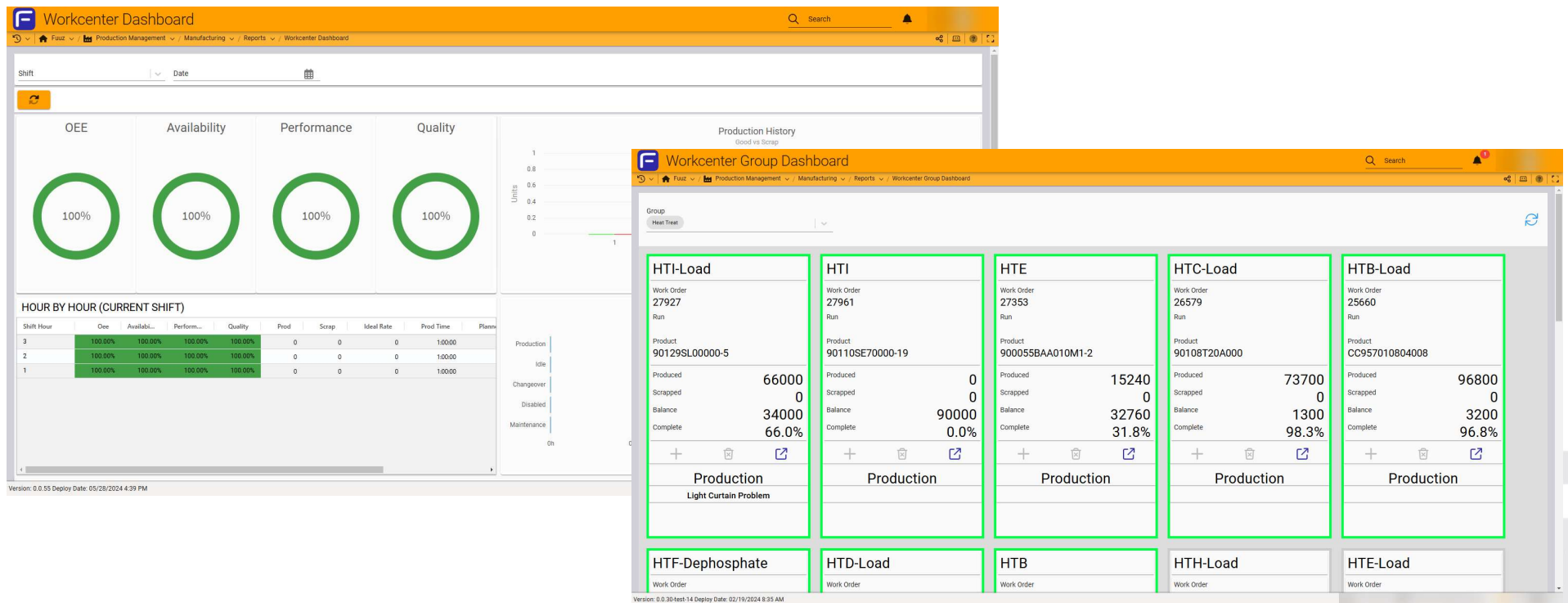
Connecting your workers with real time data and instructions

- Real Time ECR Updates
- Reduce/Eliminate Training
- Not Paper on Glass
- Process Control



# What the "Buzz" : Industry 4, 5, 6...

In a world filled with too many Buzz words, Fuuz offers the most comprehensive solution



**Workcenter Dashboard**

OEE: 100% | Availability: 100% | Performance: 100% | Quality: 100%

**Hour by Hour (Current Shift)**

Shift Hour	Oee	Availabil...	Perform...	Quality	Prod	Scrap	Ideal Rate	Prod Time	Plann
3	100.00%	100.00%	100.00%	100.00%	0	0	0	10000	
2	100.00%	100.00%	100.00%	100.00%	0	0	0	10000	
1	100.00%	100.00%	100.00%	100.00%	0	0	0	10000	

**Workcenter Group Dashboard**

HTI-Load	HTI	HTE	HTC-Load	HTB-Load
Work Order: 27927 Run Product: 90129SL00000-5 Produced: 66000 Scrapped: 0 Balance: 34000 Complete: 66.0%	Work Order: 27961 Run Product: 90110SE70000-19 Produced: 0 Scrapped: 0 Balance: 90000 Complete: 0.0%	Work Order: 27353 Run Product: 900055BAA010M1-2 Produced: 15240 Scrapped: 0 Balance: 32760 Complete: 31.8%	Work Order: 26579 Run Product: 90108T20A000 Produced: 73700 Scrapped: 0 Balance: 1300 Complete: 98.3%	Work Order: 25660 Run Product: CC957010804008 Produced: 96800 Scrapped: 0 Balance: 3200 Complete: 96.8%



# How Does MES Increase Your Value?

MES savings will pay for your ERP system and more!

## Fuuz MES Advantages – One Platform, One Product!

Reduce Costs  
Increase Profit, Visibility and Data Integrity

5% Improvement in OEE can increase Enterprise value 10%  
Effective MES deployment can justify MES + ERP!

Operator Control Panels  
Minimize Downtime,  
Increase accuracy, Track  
Labor and nearly  
eliminate training

- **45%** Reduction in Downtime
- **41%** Reduction in Direct Labor Costs
- **40%** Reduction in Cost of Quality
- **23%** Reduction in Defects, Scrap
- **22%** Increase in Volume/Throughput
- **75%** Increase in Analytics Availability

Increase employee  
engagement with next-level  
GUIs and Touch interface  
Reduce administrative costs  
by eliminating manual  
tracking

# Questions and answers





## THE POWER OF BEING UNDERSTOOD ASSURANCE | TAX | CONSULTING

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