

Entry Level 'Industry 4.0' for SME's

Digital SME manufacturing tools for
business, not just engineering

Industry 4.0 is a new set of tools

On-site servers → Cloud computing

Dedicated software licenses → Software as a Service

Industrial robots → Collaborative robots

Subtractive manufacturing → Additive manufacturing

Hardwired comms networks → Cellular, Wifi, LPWAN, satellite

On-board machine interfaces → Smart sensors (retrofittable)

The value is in how these tools are applied!

Small investments creating value

Example 1: Factory monitoring

Operational improvement by getting consistent information to the correct people at the right time

Factory monitoring retrofit – status quo

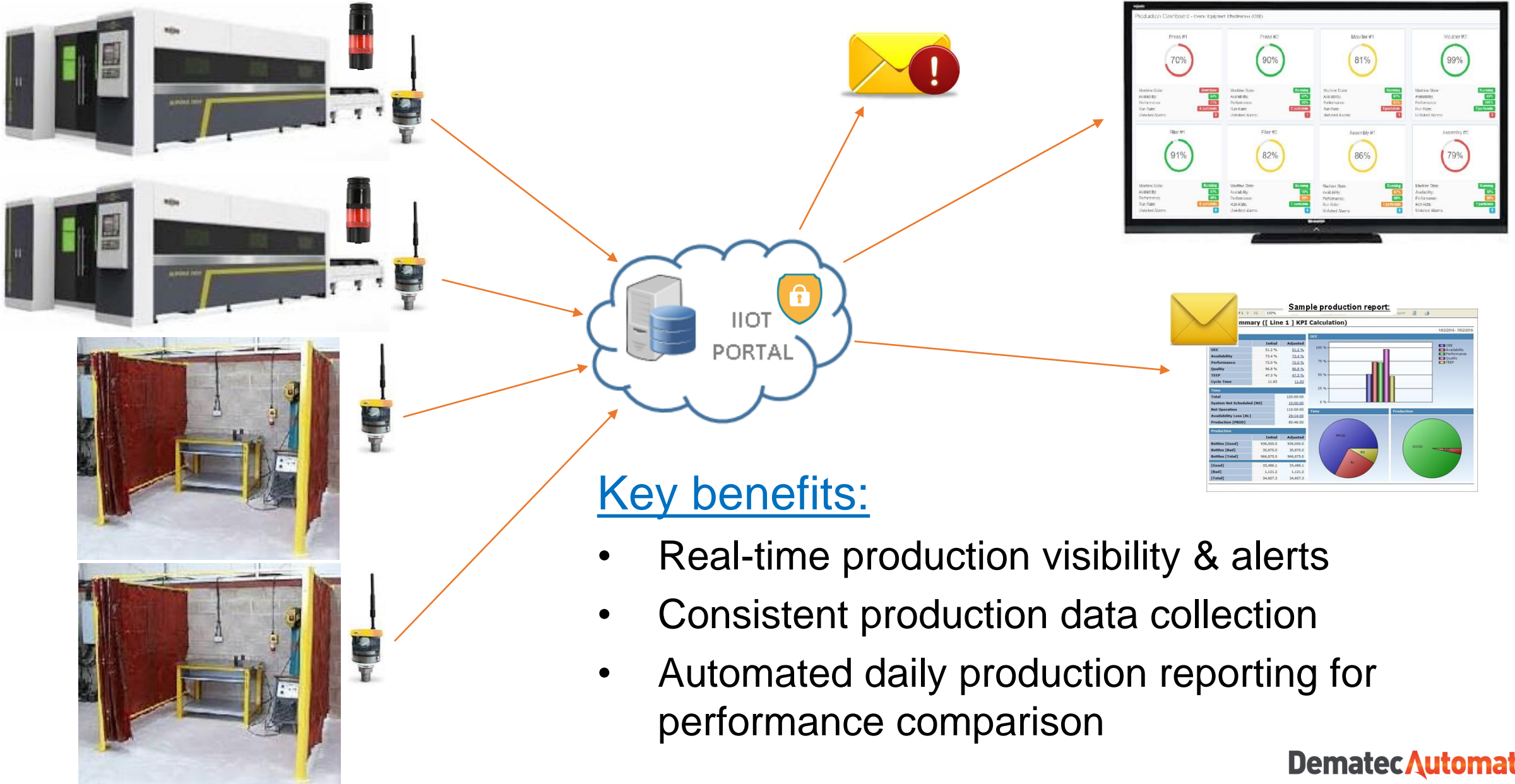


Key challenge - Maximise asset utility

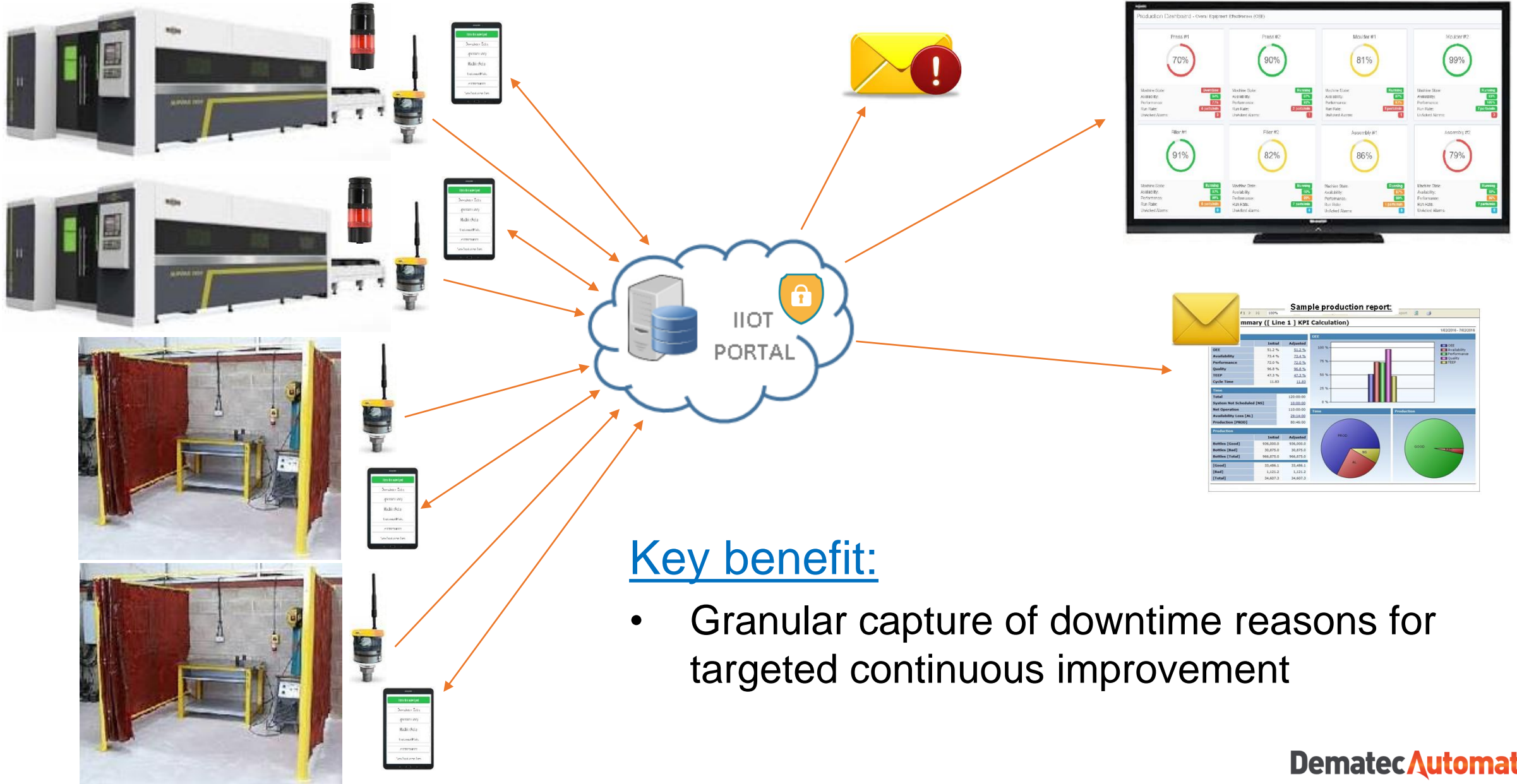
Barriers:

- Limited visibility of real-time production performance
- Inconsistent approach to production data collection
- Difficult to identify continuous improvement initiatives and track performance over time

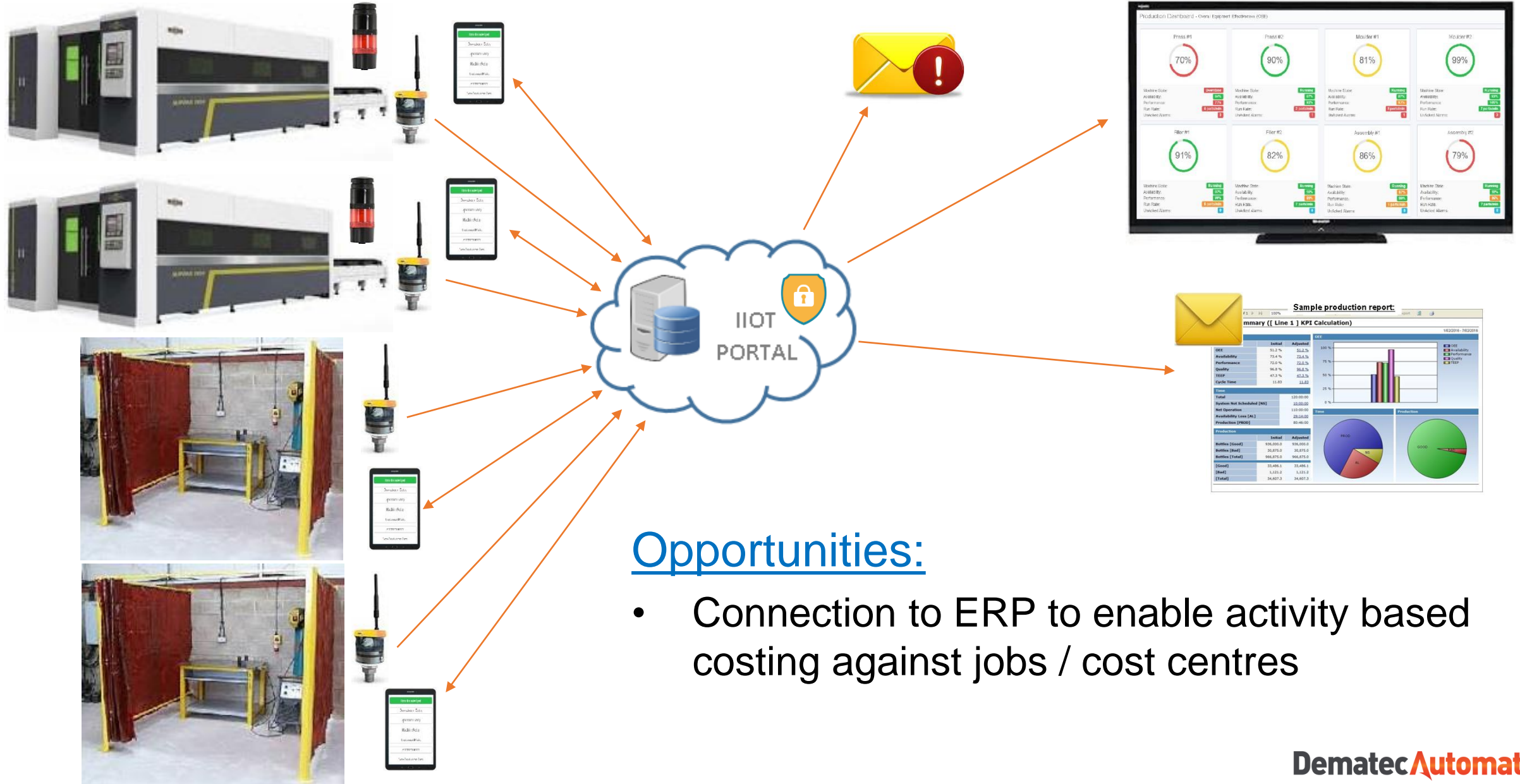
Factory monitoring retrofit – Stage 1



Factory monitoring retrofit – Stage 2



Factory monitoring retrofit – Future potential



Opportunities:

- Connection to ERP to enable activity based costing against jobs / cost centres

Small investments creating value

Example 2: OEM IOT implementation

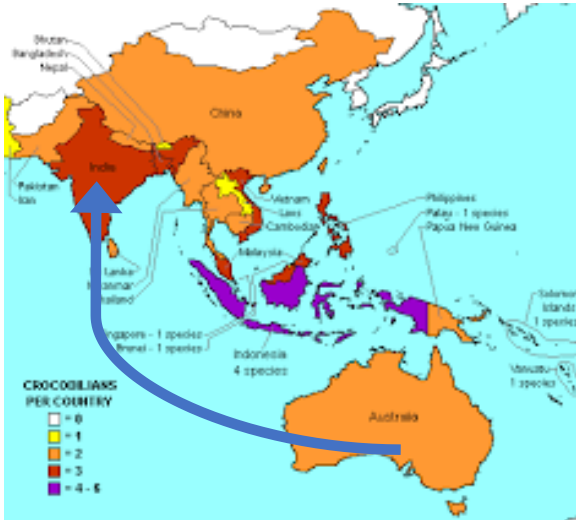
Using connectivity to get closer to customers

Exported water disinfection unit – status quo

Key challenge – Ensure good client outcomes

Barriers:

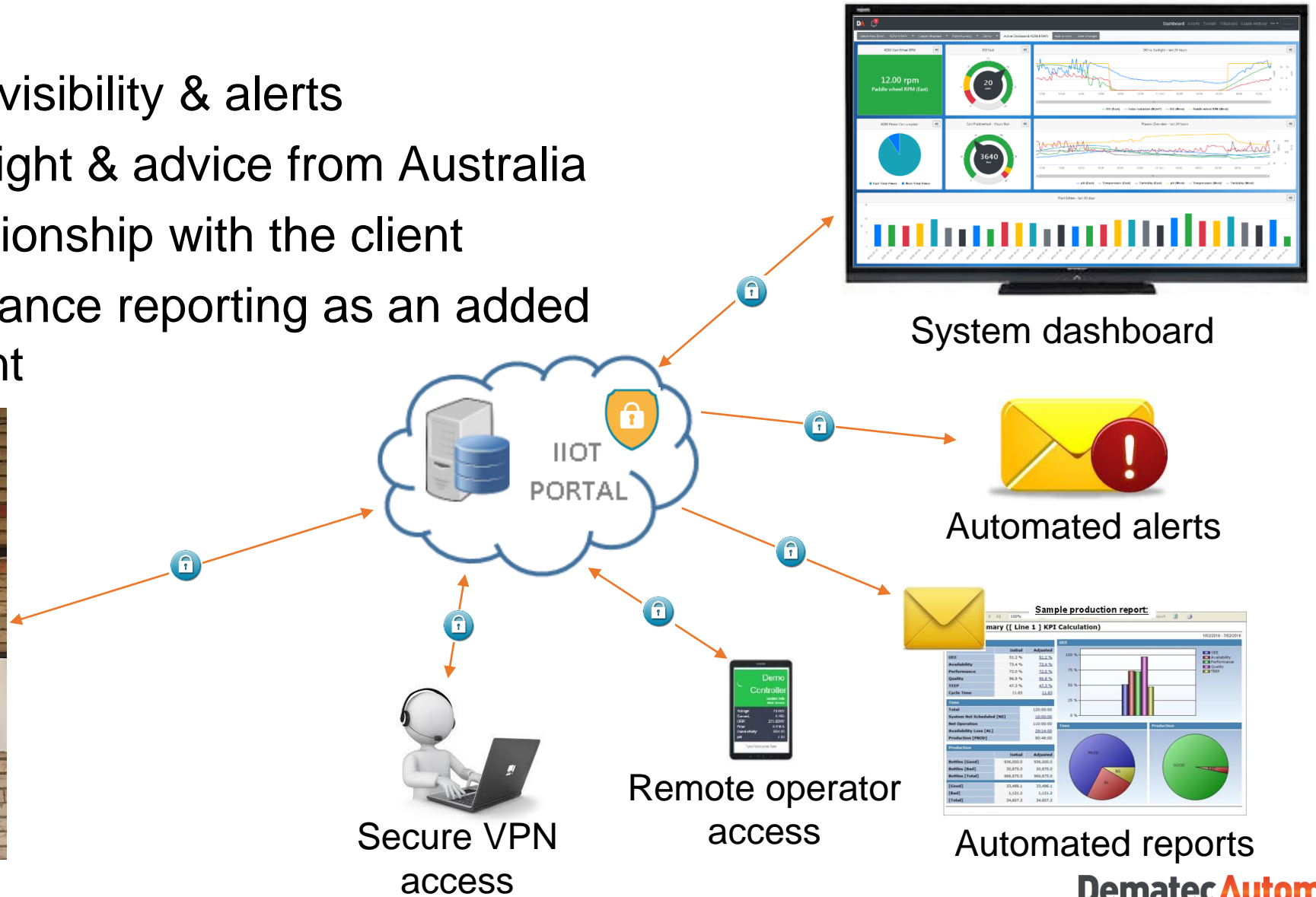
- No visibility of system performance
- Limited local technical capability for operation or maintenance
- Communication and logistical issues in providing support from Australia
- Transactional relationship with client



Exported water disinfection unit – IOT connected

Key benefits:

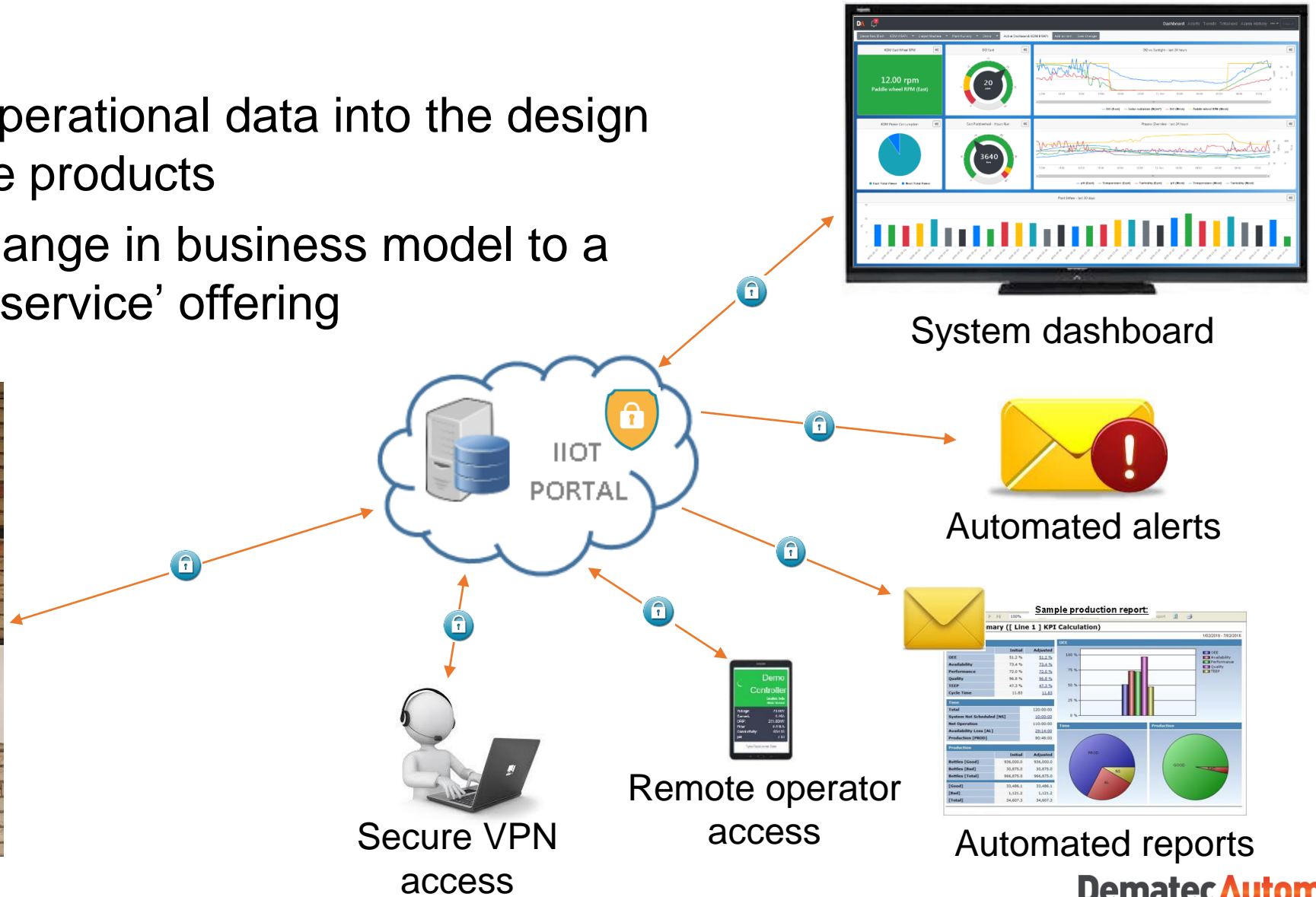
- Real-time system visibility & alerts
- Provision of oversight & advice from Australia
- Collaborative relationship with the client
- Automated compliance reporting as an added service to the client



Exported water disinfection unit – IOT connected

Opportunities:

- Bring historical operational data into the design process for future products
- Potential for a change in business model to a 'throughput as a service' offering



Three takeaways on entry level Industry 4.0

1. Technology is a tool – the value is in the application (and the information)
2. Actionable insights produce a quick ROI
3. Small scale iterative implementation is a low risk approach to get started

One additional takeaway on Industry 4.0

Industry 4.0 technology can be used to augment traditional control infrastructure
– large or small scale

Thankyou

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