

## Data is the new gold



Industry 4.0, IoT is providing companies with more data than ever before. Making it difficult to interpret the information in a timely and intelligent manner so that you can make improved decisions on customer demand, delivery, performance and production costs.



## Data mine your digital IP

The first 60TB SSD can store **400m photos** or **12,000 movies**

UK supply chains currently have a **40% chance of failure** in supporting Industry 4.0. Worse still, there are no visible improvements coming down the line.<sup>1</sup>

Digital innovation will reinvent the sectors that account for almost two-thirds of world output, adding **\$14.2tn** to the global economy and **\$531bn** to the UK economy by 2030.<sup>2</sup>



Digital transformation produces the data and gives you the ability to interpret and react to the data quickly. Your customers won't wait! They expect quality goods to be made on demand, delivered within a timescale that suits them, at lower costs.

If you can't meet their needs, using modern technologies, your competitors will.

## How does the power of information transform your manufacturing business?

**8.4 billion** connected things in 2017  
**20.4 billion** IoT by 2020<sup>3</sup>

- Bottleneck identification
- Increase productivity
- Targeted cost reduction
- Make customers & staff happier and more loyal
- Increase operational efficiency
- Greater profitability



How do you get there? By harnessing the power of information

## Industry 4.0: Before & After Digital Transformation

### BEFORE

VS

### AFTER

- Inflexible production processes - customer places order and the batch is made with no ability to make amendments
- No customer insight. Manual aggregated customer and product sales and usage history. Applying simplistic algorithms
- Information stored in isolation, as a variety of different sources and systems - logbooks, performance sheets, scheduling tools - making it hard to manage
- Inefficient use of resources, resulting in additional and sometimes unforeseen costs
- Outdated or poorly-suited infrastructure hinders performance
- Customer downtime and outages caused by unplanned maintenance issues

- Highly efficient and fully flexible. Monitoring data in-line during production, identifying quality, quantity and cycle variances
- Added value - Enriched data adding content behind profiles using machine learning... understanding customer purchasing history, behaviour, preferences, demographic
- All information immediately accessible, in real-time, to make informed and up-to-the-minute business decisions
- Predictive analytics and insights can be used to optimise resources and reduce costs, based on real-time, working knowledge
- Automated processes, designed specifically for tasks and to free up human resource, saving money
- Predictive maintenance - using IoT and machine learning for scheduling and planning maintenance to minimise production downtime.

There will be 4 devices for every human on earth by 2020 (Business Insider)

## In the digital age, data is your most valuable commodity

Data gives you access to:

### YOUR OPERATIONS

- Employee productivity
- Machine availability
- Time management
- Production visibility
- Quality control
- Task completion
- Stock control
- Cost analysis
- Regulatory compliance
- Predictive maintenance
- Machine learning
- Internet of Things (IoT)



### YOUR CUSTOMERS

- Buying habits
- Enriched purchase history
- Reasons for ordering their chosen product
- When and where they need it
- Implications of missed deliveries/failed shipments
- Contract details and service level agreements (SLA's)

## Microsoft Dynamics 365 for manufacturing

Bring your data to life

Microsoft Dynamics 365 - Connecting stakeholders, employees and assets  
Open the door to a data-driven manufacturing business



## Microsoft Dynamics 365 in action

### Rolls-Royce®

### PRIMA

### KOHLER®

- Keeps 13,000 engines available and efficient, all over the world
- Processes rapidly increasing data volumes generated by aircraft and customers
- Engine sensors provide contextual information like air traffic control, route data, weather and fuel usage
- Comprehensive, accurate overview of aircraft engine health

- Enables better customer service through smooth operations
- Reduces manufacturing turnaround time by automating processes
- Integrated, collaborative internal processes - accessible anytime, anywhere
- Updates and improvements rolled out to all branch offices, in one hit

- Manages multiple office locations efficiently
- Implements changes and updates centrally
- Saves time and money on administrative procedures

#### Who is HSO?

HSO is a Microsoft Gold Partner with over 25 years of experience in implementing ERP solutions. We've been named a member of the Inner Circle for Microsoft Dynamics partners for eleven consecutive years.

#### About Microsoft Dynamics

Microsoft Dynamics 365 makes it easy to operate across multiple locations and countries by standardising processes, providing visibility across the organisation, and helping to simplify compliance.

HSO has the specialist expertise to deliver industry-focused Microsoft Dynamics 365 implementations for customers in retail, distribution, and manufacturing.

Learn more at [www.hso.com](http://www.hso.com)