



LOWER COSTS, HIGHER PRODUCTIVITY

How PTC ThingWorx Digital Performance Management and Microsoft Azure help manufacturers drive digital transformation

Start here ►

TURN INSIGHTS INTO ACTION

Manufacturers are under intense pressure to meet production and cost targets. The key? Digital transformation. It starts with data insights. Companies are often data rich but insights poor. The right data in the right context can produce insights that can:

- Identify hidden process issues that result in lost production hours
- Help prioritize issues based on business impact
- Advocate solutions to identified issues

PTC helps industrial companies achieve the promise of digital transformation. In this e-book, we'll discuss some common issues facing manufacturers today—and how the right data can help overcome them.

OBSTACLES TO PRODUCTIVITY

Your workers are getting the job done but could be working more efficiently. Removing common obstacles can uplevel production fast.



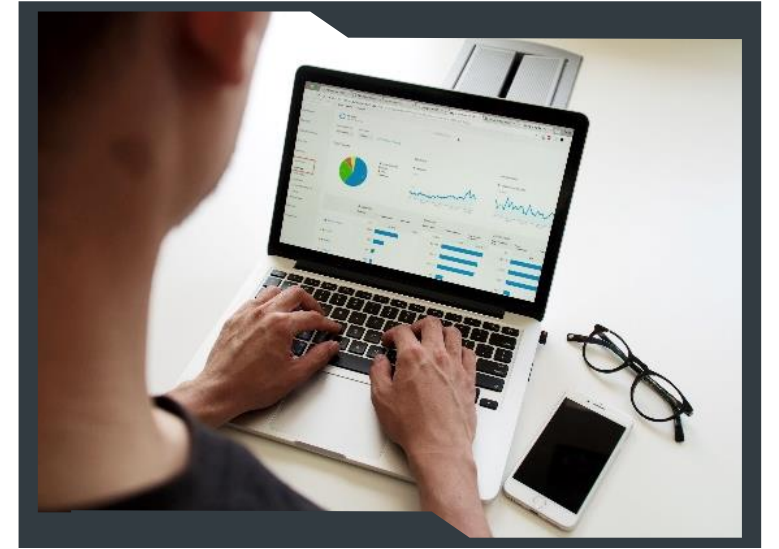
Teams spend more time collecting data than solving issues

We collect and store data in multiple systems (e.g., MES, ERP, QMS, etc.). Pulling data together by hand is difficult and time consuming.



In-house solutions are limiting technology innovation

Our network has a complicated architecture and includes some custom code. It's difficult to develop innovative Industrial IoT (IIoT) solutions with our current stack.



Pressure to increase production efficiency, which also can boost sustainability

We need to improve our manufacturing processes to increase production output and reduce costs. Increased efficiency has the potential to reduce our carbon footprint, too.



90%

of manufacturing leaders say digital transformation is a critical to success. Only 12% are recognizing digital transformation at scale.

Source: [Drive transformational outcomes and achieve impact at Scale](#), Forrester Consulting

UNLOCK INSIGHTS TO ACHIEVE GOALS

The world is changing around us.

Manufacturers need a technology partner that can help them survive—and thrive—in any situation, regardless of disruption. ThingWorx DPM and Azure remove the common obstacles preventing manufacturers from achieving their data insight goals.

With ThingWorx DPM and Azure, you can:

- **Improve efficiency and maximize revenues**
- **Reduce operating expenses**
- **Boost sustainability**

Plus, through our partnership with Microsoft, you can get the all the benefits of ThingWorx DPM and Azure in a single, powerful solution.

TAKE ACTION WITH THINGWORX DPM

Identify issues that are causing production losses and reduce OEE with pinpoint accuracy.

By gathering IoT data, regardless of where it lives, ThingWorx DPM provides focused, real-time, closed-loop problem-solving capabilities that enable manufacturing teams to boost plant throughput by 5-20 percent.

Manufacturers can use the solution to help detect bottlenecks, their root causes, and present priorities for addressing the operational and equipment challenges identified.

With the visibility and root-cause analysis provided, organizations can leverage an extensive set of [toolkits](#) offered by PTC and Microsoft to solve issues quickly and at scale.



BETTER TOGETHER: PTC AND MICROSOFT

ThingWorx DPM is a closed-loop, continuous improvement solution that provides the visibility you need to maximize your CI efforts. We use the objective measurement of lost production hours to identify the hidden issues hindering your production stream—and how to resolve them.

Our solution, built on the ThingWorx IIoT platform, is tightly integrated with Azure, providing additional security, flexibility, and scale for your data. Now, you can make better decisions and solve issues faster with ThingWorx DPM and Azure.

Reclaim lost production hours	Supercharge continuous improvement programs	Better together: PTC and Microsoft
<ul style="list-style-type: none">• Understand and reconcile all time loss issues, reducing downtime and improving productivity by 5-20 percent• Identify and prioritize target areas for improvement based on real-time data• Support revenue and sustainability goals with higher output, reduced waste, and operating costs	<ul style="list-style-type: none">• Streamline your data collection process, reducing time to insight• Support Overall Equipment Effectiveness (OEE) improvement efforts by detailing and recovering lost effective production time• Compare opportunities for improvement on a fixed, objective measurement of time lost	<ul style="list-style-type: none">• Speed time-to-value and achieve enterprise scale with ThingWorx DPM and Microsoft Azure IoT services• Optimize your TCO and support sustainability goals with out-of-the-box capabilities from ThingWorx DPM• Reduce security risks in manufacturing environments, at the edge, with native Azure security



CUSTOMER STORY

CELLFAB RECLAIMS LOST TIME, REDUCES OVERTIME

THE SITUATION

Plant management at Cellfab were tasked with boosting production to meet a recent spike in demand for electric vehicle batteries. In the past, the operations team had to rely on stale reports built from siloed and incomplete data sets.

THE SOLUTION

Cellfab deployed ThingWorx DPM to achieve a systematic, comprehensive, and always up-to-date view of equipment performance by leveraging real-time production data and a closed-loop approach to continuous improvement. The solution enabled the team to **focus**, **prioritize**, and **validate** their efforts.

THE RESULT

ThingWorx DPM allowed Cellfab to identify where in their production processes throughput wasn't keeping up with demand. They discovered unplanned downtime was a major driver of time loss and were able to track the root cause to a particular machine.

[Watch the case study video](#)

RECOVER LOST HOURS. INCREASE PRODUCTIVITY. PROMOTE INNOVATION.

Learn more about ThingWorx DPM on Azure:

www.ptc.com/dpm-drives-value

