

Enabling Digital Transformation in Manufacturing

IT'S TIME TO MOVE QUALITY TO THE CLOUD



2 Ways to Move Quality to the Cloud



Our award-winning Enact Quality Intelligence platform provides a modern, intuitive, integrated solution that speeds real-time quality data collection, reporting, and analysis.



ProFicient on Demand offers a flexible, scalable way to centralize your SPC software—minimizing total cost of ownership while supporting operational agility and scalability.

Quality transformation has become a key objective for manufacturers.

2020 was a trying year, to say the least. But the future holds promise for manufacturing as data becomes widely accepted as the most critical aspect of the journey to a hoped-for "new normal."

The key is not just data—but how data is utilized to ensure that manufacturers remain as agile, efficient, and cost effective as possible. This is what it means to talk about digital transformation in manufacturing.

It's essential for manufacturers to deploy systems that enable greater operational efficiency. A great first step is moving quality management to the cloud.

76% of manufacturing executives intend to increase their investments in digital initiatives—and implement more Industry 4.0 technologies.

*Deloitte. 2021 Manufacturing Industry Outlook

Moving Toward Digital Transformation

By the end of 2019, many manufacturers faced challenges that made *manufacturing optimization* a major focus heading into 2020, including:

- > Changing consumer trends that drove demand for products made better, faster, and cheaper
- > Consumer sensitivity to ethical business practices, including waste reduction, environmental impact, ethical manufacturing, re-use, recycling, and upcycling
- > Increased competition sparked by social media, online marketplaces, and review and rating sites creating a fickle, highly mobile consumer
- > Advances in global logistics that broke down geo-competitive boundaries and helped make global markets for manufactured goods frictionless—and more intensely competitive
- > Significant increases in demand volatility that drove uncertainty across markets
- > Worker shortages that limited production capacity and organizational agility

To overcome these challenges, manufacturers started prioritizing the technology and infrastructure needed to maximize agility, performance, productivity, and efficiency. Digital transformation has been proven—across industries—to be an effective tool in mitigating the myriad risks of increasingly fluid, competitive, volatile markets.

Widely known as "Industry 4.0" or "smart manufacturing," digital transformation in manufacturing has typically taken the form of long-term initiatives requiring many years to come to fruition.

But the pace of that transformation accelerated during 2020.

A YEAR OF CRISIS

As the COVID-19 pandemic progressed, it exposed weak points in outdated systems and manual processes that significantly limited manufacturers' ability to respond.

Those that had taken a gradual approach to digital transformation struggled to cope with numerous immediate challenges:

- > The almost instantaneous shift to online interactions and commerce
- > Disruption and delay-across the supply chain
- > Dramatically increased demand for some goods—and shocking reductions in demand for others
- Remote and distanced work—in an industry not accustomed to either limited contact on the plant floor or providing connectivity for remote workers

Since the crisis began, manufacturers have continued to fight fires—on multiple fronts—to protect their businesses, strengthen supply chains, and support consumers.

Bring on the Cloud

Over the last few years, cloud computing has slowly been gathering momentum in the manufacturing sector, especially for the collection of plant-floor data. Lingering concerns over cloud data sovereignty, privacy, and security are often misplaced given the robust nature and sophistication of today's cloud-based solutions.

Access to data, intelligence, and analytics was a major challenge for manufacturers in 2020—and many organizations saw their adaptation impeded by the fact that the data required to quickly make critical decisions was hard to access: data was usually isolated on the plant floor in a binder, on an HMI/SCADA interface, or on a legacy system not easily accessible away from the plant floor.

Remote access to production and quality data has become a critical requirement.

When it comes to manufacturing, the phrase "remote working" does not always mean working offsite. Remote working might mean working from the back office, or in another building on a sprawling campus. It could also describe plant-floor changes designed to protect workers' health and wellbeing—such as limiting surface contact by multiple plant-floor workers or reducing the number of employees using a workstation or machine interface.

Secure, cloud-based solutions solve many problems and support manufacturing employees—wherever they work.

- > When data is accessible via the cloud, users can work from any location—on any device with a web browser
- > Cloud solutions can be adopted rapidly, scaled as needed, and operated remotely
- Subscription-style, cloud software pricing easily scales as adoption increases (or decreases) to support your business needs

These proven benefits far outweigh the perceived negatives of cloud solutions. As manufacturers continue to pivot away from an "I would consider the cloud" mindset toward a "cloud-first" strategy, this movement will gain significant momentum.



Our main challenge was responding to issues quickly. Entering paper-based data into Excel—and then having an employee review the data was inefficient. We finally said enough is enough—we've got to streamline this. We've got to have real-time data, and we've got to know what's going on. InfinityQS has been a lifesaver for us.

Deirdre Sanford, Assistant Quality Assurance Manager | Mid South Baking

MOVING FORWARD WITH TACTICAL DIGITAL TRANSFORMATION

The most important challenge for manufacturers going forward is to re-engineer systems, architectures, and operating models to ensure that they are better prepared to respond to future risks.

We are seeing the pace of digital transformation projects dramatically increase. Many commentators have posited that 5-10 years' worth of digital transformation progress (measured on 2019 scales) will be achieved in the next 12-18 months (measured on 2020 scales).

Enterprise-wide, strategic goals for digital transformation will become a tactical priority throughout 2021—as manufacturers attempt to solve specific challenges, and tackle areas of weakness, on a case-by-case basis.

I can pull up our color performance—across all lines—into one report, and then compare them against each other. I can see where they stack up against a customer's specifications, which plants need improvement to meet those specs, and which plants we can ship from immediately. That's a huge plus.

Brad Bell, Director of Quality & Continuous Improvement | Strategic Materials



THE YEAR OF SUSTAINABLE RESILIENCE

Ultimately, embracing the value of real-time data—and the opportunities and benefits of the cloud—delivers rapid and ongoing advantages for manufacturers.

Migrating to the cloud enables manufacturers to truly transform from the "rapid response" and "firefighting" modes of 2020 to sustainable resilience in 2021–and beyond.

The manufacturing industry has responded with amazing adaptability to the challenges of the COVID-19 pandemic. From front-line operators through senior executives, and all those allied to the manufacturing sector in the products and services they provide—this is a proud and resilient community.

Quality transformation is a high priority for manufacturers in today's competitive market.

Enact allows for statistical process control (SPC) quality intelligence in the cloud, enabling a complete quality transformation for manufacturers. **77**

Frost & Sullivan, 2021 Product Leadership Award

Start your transformation at the heart of your business—with your quality data.

Contact us today to learn more about InfinityQS Enact and ProFicient on Demand.

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