EXECUTIVE BRIEF

6 key manufacturing pillars for end-to-end visibility

Industrial manufacturing

We've been hearing for some time that manufacturing's future will be smart, connected, and focused on results. But if you thought you still had plenty of time to prepare for this future, then you won't want to hear that this prognosticated future is already here. Current economic pressures, increasingly demanding customers, and a growing number of assertive competitors have helped speed up the timeline on manufacturing's evolution.

To stay relevant in this new normal, you need to recognize that your outdated and siloed operations and processes are in dire need of a digital transformation. Whether it's optimizing scheduling on the shop floor or enabling a more responsive supply chain, your operations and processes need to be data-driven, holistic, and flexible.

The six manufacturing pillars of a digital ecosystem

Most manufacturers recognize that a digital transition is required to remain competitive and drive growth and innovation. A recent survey by the **Manufacturing Leadership Council** indicates that 91% of manufacturers expect to increase their spending on digital tools. And in fact, 29% of manufacturers anticipate that their spending will "increase significantly" in building out a digital ecosystem in the next few years.

> ❝ **By 2026, 50% of large organizations will compete as collaborative digital ecosystems rather than discrete firms.**❞
>
> **Gartner®**

To get a better understanding of exactly what makes up a manufacturing digital ecosystem, we've grouped its key properties into the six pillars below. These pillars represent the core functionality of our digital solutions, which offer complete visibility and seamless access to critical data—providing a central view into related use cases, tools, KPIs, and workflows. Not all six pillars may be necessities for your organization now, but because your needs will likely change over time, the pillars are flexible and can branch out as needed or condense if no longer relevant.

Connecting processes for end-to-end visibility

Here are the most common pillars for manufacturers:

1. Customer experience

Offer personalized or highly configured products with speed and value. Deliver the rich, purchasing experience that customers expect, while integrating sales with operations and production for order accuracy and quality control.

2. Smart supply chain

Collaborate with partners and supplies across the supply chain for greater visibility. Implement corrective actions based on data-based decisions that deliver ideal final outcomes. Gain real-time views of the end-to-end supply chain and have the agility to quickly reroute shipments to maintain inventory levels.

3. Intelligent operations

Command operations, shop floor processes, and scheduling with total visibility. Analyze "what if" scenarios to plan the best use of resources, including labor. Bridge gaps between operations and the back office, creating a clear picture of costs and profitability.

4. Distribution

Ensure products reach customers when and where they need them. Confidently manage third-party logistics providers, after-market service contracts, warranties, and depot repair.

5. Environmental and social governance

Adopt carbon accounting techniques and achieve net-zero emission targets that meet customer expectations and increasingly stringent regulations. Extend the life of materials and assets, improve waste reduction efforts, and reduce energy usage by adopting a circular manufacturing sustainability model.

6. Connected workers

Improve visibility into labor and resources to help recruit, retain, and engage employees. Strategically put right-skilled workers in the right place and empower every employee to be as productive as possible.

Empowering modern manufacturing

A digital ecosystem is built on a foundation of relevant, accurate data that allows manufacturers to collect, store, aggregate, and analyze data to derive meaningful insights and apply those insights to applicable use cases. A digital ecosystem promotes innovation and has the flexibility to mature as needed to stay current as technologies continue to evolve. This agility even extends into how a digital ecosystem can be utilized, such as empowering workers with role-based forms, dashboards, and reporting capabilities. A digital ecosystem enables visibility across the enterprise that unites disparate parts of an organization and connects processes, people, and things. This level of connection and visibility is what our six pillars are built upon—and which can be found at the core of our digital solutions.

LEARN MORE ↗

Follow us: