Seven Digital Technology Questions Every Manufacturer Needs to Ask

KEY TAKEAWAYS

> Using technology is key to quickly identifying and accelerating sales opportunities.

> Technologies that improve design-for-manufacturability while reducing costs and lead times drive more growth.

> Operational efficiencies driven by digital technologies are essential to delivering on your promises and sustaining profitable growth.

THREE AREAS WHERE TECHNOLOGY ACCELERATES GROWTH

Use of the right digital technologies in three areas of the business helps ensure the best combination of insight and capability to gain competitive advantage and drive improvements of 5-15% in key operations performance metrics. This can make or break a manufacturer's ability to live up to leadership expectations and achieve their growth goals in today's complex operating environment.

Here are the three critical areas of focus that will be addressed in this article:

1. Sales and Marketing: Understand opportunities and expedite the sales process.

2. Engineering: Reduce lead time and enhance product value.

3. Operations: Deliver on promises at your lowest total cost.

May 15, 2021 Ken Koenemann

Digitally mature manufacturers have an edge when it comes to growth. Ask these seven questions to learn if you're leveraging the right technologies for identifying and capitalizing on your most profitable growth opportunities.

How Digitally Mature Are You?

Operating in a COVID-19 world amplifies all of the challenges you face when it comes to growing your business profitably. Mostly, this comes down to uncertainty.

- Where will demand go next?
- How will your customer base continue to change?
- What emerging needs should you be addressing through new offerings and new channels?

Getting the right answers to these questions can help you win. And, technology can give you an edge by showing you where your best growth opportunities exist and helping you produce and deliver against them profitably.

Specifically, companies that leverage the right digital technologies in three areas of the business—sales and marketing, engineering, and operations—have the best combination of insight and capability to ensure competitive advantage. The right technologies can help drive improvements of 5-15% in key performance metrics, a difference that can make or break your success in today's complex operating environment.

Ask these seven questions to learn how digitally savvy you are. And find out where you may need to up your technology game.

If you lag behind from a digital perspective, it could be costing your business in more ways than one. See how to use technology to accelerate and improve all your critical business functions.

SALES AND MARKETING

1. Do you leverage insights to spot your best opportunities?

With demand all over the place and customers bouncing between canceling orders then overcorrecting in the next breath, forecasting became pretty much a crapshoot in 2021. Those companies that got it right leaned into their technology like never before. They relied on their CRMs to help manage relationships and transactions. But they went further, integrating CRM data with analytics capabilities to tune into trending products and to look for the customers, segments, industries, and geographies representing the best opportunities for growth.

If you're already using your CRM and analytics in this way, you will have an edge as markets and demand continue to fluctuate. You can further sharpen that edge with IoT data. Connected products give you a wealth of information for better understanding product usage. This can translate into well-timed recommendations for parts replacement and/or follow-on services. It can even be used to innovate entirely new products.

> ### Digital Sales Data Drives Double-Digit Revenue Increases

A professional services customer of ours recently digitized the process of managing sales-related KPIs. By moving away from manual sell sheets to the real-time KPI dashboards in Dploy Solutions and by leveraging the powerful analytics capabilities within the platform, company leaders now know instantly when and where sales goals are being missed. They can more quickly evaluate trends and identify new opportunities to grow revenue. And they can act instantly to capitalize on these opportunities. Before the pandemic, the firm was seeing year-over-year double digital revenue increases. And during the pandemic, leaders kept a close eye on budget, expenses, client engagement, and customer service on a daily basis, keeping the business as responsive to changing circumstances and opportunities.

2. How quickly do you move from inquiry to quote to cash?

Of course, finding the opportunities is one thing. Going from lead, to sale, to cash is another. The better you are at streamlining and fast-tracking this cycle time, the more quickly you can build your topline. And the right configure, price, quote (CPQ) software can make all the difference.

> ### Digital Quoting and Workflow Management Capabilities Cut Lead Time by 40%

We worked with one heavy industrial engineered-to-order company where lead times were becoming a major obstacle with 75% of the time tied up in upfront processes including order acquisition, engineering, customer approval, and drafting/ modeling. Switching to a value stream structure aligned with customer sets and implementing new quoting capabilities and workflow management tools cut lead times by 40%, driving greater customer satisfaction in the process.

ENGINEERING

3. How connected are you?

Engineering technologies can reduce lead times and drive product value—both of which support more sales. IoT and IIoT data are critical inputs to your process, helping you design products that consumers want and that are cost-effective to produce—the very definition of a win. If you make connected products on a connected factory floor, you will have an edge when it comes to finding this sweet spot.

4. How quickly can you act on insights?

If you leverage a product lifecycle management (PLM) system with integrated drawing software and 3D modeling capabilities, you can quickly implement design improvements and validate their effectiveness. You can automatically generate bills of materials (BOMs), ensuring efficiency and reducing the potential for errors that can quickly turn a profitable project into a loss. Additive manufacturing—3D printing—is another way to turn ideas into prototypes fast while eliminating the costs involved in creating expensive aluminum molds.

5. Do you use technology to simplify and ensure accuracy?

Standardization of products and components reduces the potential for errors while driving efficiencies. For example, a configurator that automates and controls option selections can help reduce product variants. By maintaining design simplicity and avoiding costly mistakes, you can expedite production processes, slashing lead times and getting your products to market faster.

OPERATIONS

6. Are you digitally positioned to execute efficiently and at your lowest total cost?

Even if you know what consumers want and how to design those products for manufacturing, you can still fall down in the final mile if you don't have the operational capabilities to deliver on your promises. Keeping constant tabs on performance and production targets is essential, especially as you continue to manage through the lingering effects of COVID-19. Technologies that can help include:

- Capacity planning and finite scheduling tools to understand what is available to promise.

- Digital KPI management tools to keep everyone focused on hitting goals.

- Operations technology data, available through IIoT connectivity, to understand performance and uncover the root causes of production problems.

- Computerized Maintenance Management Systems (CMMS) to circumvent problems that could shut down equipment.

- Warehouse Management Systems (WMS) to keep products moving to customers' doorsteps.

- Advanced analytics to track, monitor, and improve total cost to serve.

- A comprehensive digital management system that aggregates data from your top floor to your shop floor to give your complete performance picture and help you proactively resolve operational issues.

> **Tracking KPIs Increases Operating Profit by 20%**

We helped a leading manufacturer of wind towers use the Dploy Solutions suite of manufacturing tools with a focus on KPI management to improve quality, increase on-time delivery capabilities, and expedite lead times. By automatically integrating data and providing the ability to easily track all operational metrics, the company was able to achieve its goals and ultimately improve operating profit by 20% in just three years.

> **Leveraging Data Intelligence Increases Throughput**

A U.S.-based building materials company turned to us after struggling with equipment that was constantly running outside of set parameters, resulting in ongoing maintenance costs. Implementing Dploy Solutions Factory Floor Connectivity as the IIoT platform enabled the company to stream data directly from the machines in real-time and to generate alerts the moment equipment processes slipped out of spec. Right away, the company was able to pinpoint the problem, analyze the root cause, and rapidly create countermeasures. These long-term improvements have helped control maintenance costs while increasing quality and throughput.
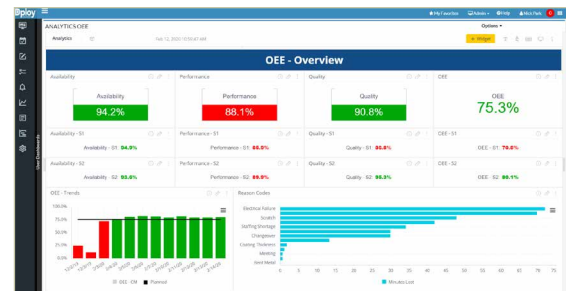
OEE analytics dashboard displaying real-time performance, availability and quality data from machines and reasons for missed targets.
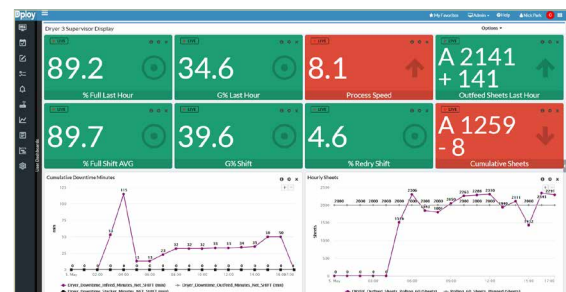
Supervisor dashboard displaying real-time equipment performance, downtime and throughput

7. Is automation in place or at least on the table?

Given that COVID-19 has compounded the tight labor market and amplified staffing challenges, automation is becoming more important, particularly to manufacturers that have meaningful equipment and facility capacity to spare, but not enough human capacity to get the job done. The good news is that even as the need is rising, technologies are becoming more accessible and more affordable.

At a minimum, you should at least be exploring your options and weighing the costs of automation. Look at implementable technologies that can dramatically reduce the need for people (think robots and co-bots). Focus on automating non-value-added activities first.

> **Strategic Automation Unlocks $1.6 Million in Savings**

We helped a potato processing plant capture $1.6 million in savings on its production and packing lines by introducing automation to eliminate monotonous material handling and packaging work that was continuously hard to staff. By prioritizing the right areas for automation, the company solved both production and human capital problems and put itself in a better position for growth.

Give yourself a technological advantage.

Uncertainty and a more accelerated pace of change has made profitable growth more difficult for all manufacturers to achieve. Your business needs every edge it can get. Upgrading your digital technologies may be one of the best ways you can stay on top of changes, pinpoint opportunities, and execute on them quickly in our current business environment.

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About TBM Consulting Group

TBM Consulting Group is a team of lean manufacturing operations and supply chain consultants, helping clients leverage operational excellence, enabling technologies, and lean process rigor to dramatically enhance operational speed. They are committed to building agile companies that can solve problems and respond to opportunities faster than their peers, paving the way for sustainable, profitable growth.

About Dploy Solutions

Dploy Solutions, a TBM Consulting Group company, is a suite of scalable cloud-based digital manufacturing software and IIoT platform solutions designed and priced for small to mid-sized manufacturers and distributors looking to grow their businesses. It brings data together from your top floor to your shop floor, including machine data, and it links your organization's strategic goals with your operational excellence activities and digital manufacturing technologies.

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