

Deloitte.

Analytics Answers

Time by Design
Deliver faster.
Improve profitability.

Manufacturing executives recognize the benefits that come from delivering their products more quickly—reduced operating costs, freed-up capital, increased revenues, and improved competitiveness. However, few manufacturers have the capabilities required to effectively manage their total end-to-end delivery time, which is often called “lead time” or “span time.” When it comes to highly engineered products, lead time is often an output of the production system, rather than a carefully designed input.

Several obstacles drive executives toward less effective productivity measures: complex data generated by thousands of unique parts and intricate supply chains, planning tools that don’t effectively measure performance variations, and cultural barriers that inadvertently encourage span-time expansion. Overcoming these obstacles has been a tremendous challenge for many manufacturers. Deloitte can help.



Get inside your data

At Deloitte, analytics isn’t just a good idea — it’s a call to action. That’s why we’ve launched the *Analytics Answers* series of solutions — practical, problem-specific tools that are ready to deploy today.

A million moving parts

Deloitte's Time by Design solution helps executives prioritize and target areas that hinder performance. We provide proprietary algorithms, analytics know-how, and the technology often needed to identify specific ways to improve performance across complex value chains. We also provide the predictive capability needed to answer tough questions. Which manufactured or procured parts increase the risk of production delays? How could unforeseen internal or external events affect delivery time? Which critical high-risk parts require strategic inventory? And more.

Our solution's complex statistical algorithms help uncover new insights into production improvements and can help you predict likely outcomes using your data. If your existing data is insufficient, the data quality is improved using tested statistical methods. These insights can help your managers identify specific areas or strings of events that slow the production process, allowing them to prioritize actions and gain substantial improvements.

Of course, advanced mathematics alone isn't enough. Deloitte's professionals bring a deep understanding of manufacturing processes and improvement opportunities. They also know how to leverage human capital, technology, and processes to help COOs, CFOs, and other leaders identify and execute improvements and increase profitability.

Bottom-line benefits

Deloitte's Time by Design solution is designed to help manufacturers reduce lead time and increase profitability. The technology behind the solution can be hosted on Deloitte systems as software as a service (SaaS) or installed on the organization's system. Manufacturers gain new capabilities that can help:

- Improve cash flow through lower raw and work-in-process inventory and shorter business cycles
- Reduce delivery times and increase confidence in on-time delivery
- Lower direct and indirect costs by reducing production time
- Win more bids with more competitive delivery times
- Increase revenue by meeting performance-based contract requirements
- Reduce risk by helping managers anticipate possible production problems before they occur

Time by Design in action

A leading aircraft manufacturer repeatedly missed delivery dates despite many performance improvement efforts, thus sacrificing on-time performance bonuses and eroding customer confidence. When growing inventories constrained the company's cash flow, leadership turned to Deloitte for a new approach. Using the Time by Design solution, Deloitte professionals helped the manufacturer unravel their supply chain mystery and identified the root causes that constrained performance. These insights were used to develop and implement an integrated program that reduced production lead time from more than 1,000 days to about 550 days. Inventory holding costs were reduced by 28 percent and on-time delivery increased by 45 percent. As a result, the organization increased profitability while improving overall competitiveness and customer satisfaction.

Learn more and get connected

-  Deloitte Analytics
-  @DeloitteBA
-  Deloitte Real Analytics
-  www.deloitte.com/us/analyticsanswers

Contact us

If you want to reduce production lead time while improving your organization's bottom line and competitiveness, we should talk. Please reach out to any of us to get the conversation started.

Steve Shepley

Principal
Deloitte Consulting LLP
sshepley@deloitte.com

Dan Haynes

Principal
Deloitte Consulting LLP
dhaynes@deloitte.com

About Deloitte

This publication contains general information only and is based on the experiences and research of Deloitte practitioners. Deloitte is not, by means of this publication, rendering business, financial, investment, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your business. Before making any decision or taking any action that may affect your business, you should consult a qualified professional advisor. Deloitte, its affiliates, and related entities shall not be responsible for any loss sustained by any person who relies on this publication.

As used in this document, "Deloitte" means Deloitte Consulting LLP, a subsidiary of Deloitte LLP. Please see www.deloitte.com/us/about for a detailed description of the legal structure of Deloitte LLP and its subsidiaries. Certain services may not be available to attest clients under the rules and regulations of public accounting.