Perfect Your Unique Aerospace Manufacturing Processes to Drive Digital Transformation
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There’s a revolution going on that cannot be ignored. Progressive leaders in aerospace manufacturing corporations across the country are tired of wasting their time on reactive busywork. They want to move ahead to not only increase efficiency and productivity within their companies, but provide better value to customers.

But not every company is keeping up with the constant changes. As aerospace manufacturing companies work to digitally transform and move into the Fourth Industrial Revolution, they overcome challenges created by skill gaps and aging in the workforce, organizational silos, and inflexible tools.

These challenges can not only keep companies in a reactive stage where they are only responding to issues that pop up, but can lead to waste that causes increased costs, decreased efficiency, and a less than perfect customer experience.

**Enter low-code platforms.**

Low-code platforms, like Quickbase, can help aerospace manufacturing companies eliminate waste and increase efficiency to address many of these challenges while also giving them a competitive advantage. Such as:

- Augment existing legacy systems
- Improve visibility and transparency
- Increase speed to market
- Build custom solutions to fit the processes that make their businesses unique
- Gain real-time insights to solve problems immediately

But real transformation runs deeper than tools alone. In order to remain competitive, increase profits, and become a leader within the industry, transformation must be an executive priority that involves all people and processes. **The time is now.**
Consumers want more from companies: better products, faster results, and lower prices. To meet these consumer demands, provide additional value, and remain competitive, aerospace manufacturing companies that resisted change must digitally transform.

In today’s global workforce, aerospace manufacturing companies need to be more agile to adjust to constantly evolving trends. According to an EY report, digital transformation will require companies to go from “doing digital” to “being digital” where digital is deeply ingrained and part of the basic thought process.”

Modernizing Every Process: An Executive Priority

Operational Excellence  
Risk Mitigation & Compliance  
Accelerated Innovation
According to a recent report by The Economist Intelligence Unit that examined how manufacturers across the globe can navigate their way through a digital transformation, the Fourth Industrial Revolution will allow companies to “become more agile, more efficient and create more value for customers,” as well as allow companies to maintain a competitive advantage in today’s global workforce.

However, many companies still rely on legacy systems, emails, and time-consuming manual processes for their workflows that make their business unique.

This reliance leads to reduced visibility and transparency, organizational silos, increased costs, and inefficient processes.

But digital transformation is not just about the technology. Digital transformation is also about transforming the processes and people. While transformation may start at the bottom, without buy-in at the top where resources are provided, companies retain their status quo.

For many aerospace manufacturing companies, successfully navigating the path to digital transformation allows them to go from relying on maintenance of a legacy system, where they react to every issue that occurs, to becoming a leader within the industry.

A Deloitte study that examined digital leaders in manufacturing in the Fourth Industrial Revolution finds that although many companies have partially adopted automation technology, many manufacturing companies are falling behind in wider implementations that can be utilized across the organization.

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Low-Code Platforms and Aerospace Manufacturing

Digital factories will require a new way of working. To meet growing consumer demands, companies must confront numerous challenges to eliminate waste, increase efficiency, reduce costs, and remain competitive.

Companies are gravitating towards low-code software platforms like Quickbase to solve challenges like breaking down organizational silos and standardizing their digital infrastructure and to also gain a competitive advantage.

Low-code platforms, like Quickbase, also help manufacturing companies become more agile by letting users continuously perfect the processes that make their businesses unique, without any previous coding background, using their workflow to their competitive advantage. They also help reduce organizational silos by enhancing visibility and transparency and centralizing data that connects the right people with the right information at the right time.

U.S. manufacturing jobs down 31% since 1987\(^1\)

\(^1\) U.S. Bureau of Labor Statistics
Aerospace manufacturing companies and even specific roles within these companies all have clearly defined KPIs and goals that they monitor, whether it be parts per year, savings, energy costs, percent increase, percent decrease, and more. What is getting in the way is the inability to see all this data in one place, dig deep into that data and understand why they may not hit their goals as well as understanding hidden costs that may affect their bottom line.

Data visualization tools allow users to see trends but don’t allow access to the database to see where something went wrong. This can be challenging with tools or platforms that only present the numbers, but don’t allow the company the opportunity to dig deeper and track the root cause of the problems that contribute to hidden costs.

Many companies have reported previously using phone calls, email, Microsoft Access and spreadsheets to track machine breakdowns and parts replaced. These processes are largely inefficient because it is difficult to track the path of various parts or processes that may cost money down the line.

Companies have also been hindered by silos that prevent plants or departments from sharing information company-wide that could reduce future rework costs. It’s important to enable organizations to identify an issue, resolve it, and apply the results to other scenarios where the same problem occurs.
Quickbase features custom reports, roles, and dashboards that provide easy access to necessary data, the ability to automate tasks and send communications, and securely access the data you need any time, any place and on any device. Additionally, low-code software reduces the burden on IT, and allows those on the edges of the business to build capabilities and maintain their own custom solutions.

As aerospace manufacturing companies begin to empower employees on the floor and outside of IT to build their own solutions, they must confront unique security and governance challenges, like audits, regulations, and compliance in the global workforce.

Quickbase is one of the most trusted low-code platforms in the industry because it features comprehensive software security and powerful administrative controls that allow builders to quickly create custom applications that fit their unique processes while also satisfying corporate IT policies and regulations compliance.

Aerospace manufacturing companies that have worked with Quickbase have seen benefits like better identifying inefficiencies on the plant floor, identifying the root causes of those inefficiencies, implementing solutions and then sharing the results across the organization.

In doing so, team members are focused on strategic improvements rather than reacting to every issue or type of waste that pops up.

“Quickbase has given us the ability to disseminate information quickly and accurately to our entire team and improve our overall quality. We’ve actually grown our capacity and improved our on-time delivery, simultaneously. Quickbase has really made a significant impact on how we operate. And we are amazed with the outcome.”

- Michael Santiago, Sales and IT Executive, Danko Arlington
Case study

Danko Arlington is an aerospace and defense manufacturer that has been designing and building turnkey solutions for commercial and military applications since 1920. As a builder of parts for rockets, ships, satellites, and weapon systems, Danko operates in a field highly driven by compliance with quality assurance as a top priority. Amid contract delinquencies and insufficient tracking of production, Danko did away with the legacy ERP system they had been using since the 1980s and replaced it with Quickbase.

Since adopting Quickbase, Danko Arlington has launched real-time inspections and simultaneous documentation processes across their 85,000 sq. ft. facility. As a result, they have received the AS9100 Aerospace Certification, increased on-time deliveries, and decreased their order release time from 2-3 weeks to only 2-3 days.
Lean Process, Manufacturing, and How Low-Code Can Help

To stay competitive in a changing business environment, implementing lean manufacturing processes must become a strategic priority.

Platforms like Quickbase are used by aerospace manufacturers to achieve lean processes and eliminate waste while remaining in compliance with stringent regulations.

Automating key processes, centralizing data and aggregating insights via dashboards can help to reduce waste by saving time that would otherwise be spent transcribing information from paper, pencil, and spreadsheets. Simply put, a process that previously spanned 10 man-hours over three days might be reduced to two man-hours over a single afternoon.

Quickbase allows you to track the impact of lean initiatives through capabilities like defect tracking, inventory management, and people, skills, and training management. It also helps companies to continuously improve by identifying the root causes of waste and managing projects to implement the countermeasures.

Quickbase also allows you to continually perfect the processes that make your business unique. Building a continuous improvement culture in order to regularly examine processes and identify areas for betterment is a crucial ongoing process because organizations either improve continuously or become disorganized. Lean processes with a focus on continuous improvement also help to determine the root causes of inefficiencies.
Low-code platforms allow users closest to the work to quickly develop and update applications to solve problems tailored to their needs. The ability to innovate and produce applications quickly based on feedback can help reduce waste as soon as it is observed.

Utilizing low-code platforms like Quickbase can not only help aerospace manufacturing companies identify and eliminate waste within their organization, but also continuously improve upon those lean processes to ensure they are providing the most value to employees and customers.

Quickbase helps companies to continuously improve by identifying the root causes of waste and managing projects to implement the countermeasures.
Transformation is more than just techniques, tools, and platforms. It must be a strategic priority that starts at the top.

Those transformational companies that can fight off complacency know that the answer goes beyond technology. Great leadership is as important as having the right tools when approaching the continuous improvement of people, processes, products, and services.

Great people demand support to implement their ideas—this includes adopting tools and systems that enable a level of flexibility not afforded by legacy systems.

In a study assessing more than 2,000 C-suite executives across 19 countries for their annual Readiness Report, Deloitte found that many of these executives are shying away from bold technology investments needed to drive innovation. Instead, they are sticking with the status quo as it remains easier for companies to try to stay the same than to be proactive and innovative.

It’s not just about being ready to adopt new technologies that makes for a successful digital transformation, but also a deeper understanding of the business value that comes with new technology. A Deloitte study found that “front runners” in digital transformation “strongly believe in the business value of adopting new technology solutions for digital transformation and are ready to use the new technologies.”

Those companies that are not on board with new technologies will fall behind, while those that recognize the power of low-code platforms to not only improve upon their unique processes, but implement lean processes, will remain competitive, increase their profits, and stay agile in the changing world of manufacturing. Low-code platforms like Quickbase allow you to transform your operations into lean operations for a measurable competitive advantage.