

Optimizing Cloud Data for Accessibility, Cost Savings, and Efficient Manufacturing

August 2023

Sarah Gaffney Manager, Research Data & Operations



Operating costs for manufacturers have skyrocketed over the past few years due to the rising costs of raw materials, recession fears, and general economic fluctuations. Midmarket companies with plans for growth may feel more hesitant to expand operations and take on even more expenses, but with the right technology infrastructure, they can efficiently scale their business with confidence. Best-in-Class manufacturers leverage cost management capabilities, integration, and industry-specific features within cloud-based ERP systems to protect margins and make smart financial decisions.

## Integration & Scalability Are Top of Mind for Manufacturers

The manufacturing sector has nearly recovered from the economic detriment caused by the COVID-19 pandemic, but the lingering effects of being cost-conscious are still there. Especially with threats of a recession on the horizon, manufacturers need to be more prepared than ever to grow amidst uncertain economic conditions. Mid-market manufacturers with 500 to 5,000 employees may not be as strapped for cash or as worried about staying in business as smaller organizations, but it is critical for them to make smart investments that are going to move their business forward. They must find ways to cut costs while keeping plans for scaling their operations on track.

In Aberdeen's latest study with 360 manufacturing organizations, 48% of whom were in the mid-market (500-5,000 employees), manufacturing leaders provided their top concerns with digital transformation initiatives (Figure 1).

The Aberdeen maturity class framework is comprised of three groups of survey respondents. This data is used to determine overall company performance. Classified by their self-reported performance across several key metrics, each respondent falls into one of three categories:



Sometimes we refer to a fourth category, All Others, which is Industry Average and Laggard combined.



### Figure 1. Challenges with Digital Transformation



% of mid-market manufacturers experiencing each challenge





### Secure & Integrate Business Systems

As these companies plan for growth, they need a technology infrastructure that scales with them. Currently, integration of disparate systems is the number one source of friction between their existing infrastructure and modernization efforts, followed by competing priorities and security concerns. Investing in solutions that easily integrate with one another cuts down on time and money dedicated to implementation as well as time spent searching for information. Integrating systems into a single source of truth enables decision-makers with a trusted, 360-degree view of their business. This will help them choose between competing priorities and put their resources toward the areas that need them most. Adding new solutions into their tech stack may open the door for security risks, but cloud-based solutions with strong security measures can alleviate those concerns.

#### Prioritize Scalability & Adaptability

Scalability and adaptability for new business models is another top challenge, reinforcing the notion that mid-market manufacturers feel trapped by their existing technology. They need solutions that support agility, so they can focus less on internal roadblocks and more on providing seamless experiences for their customers as they develop new products and services. For example, consider an industrial manufacturer who plans on upgrading their customer self-service portal for maintenance requests from email-based processes to dedicated ticketing software. They need an infrastructure that allows them to easily integrate that new ticketing solution with their existing infrastructure, so they can then push those changes to customers without delays or malfunctions. Poor analytical capabilities and communication are also in the mix of challenges, further demonstrating the need for solutions to support decision-making and visibility for leaders across the organization. Cloud-based solutions may be the answer to many of these challenges.

# Cloud-Based Solutions Lay the Foundation for Cost Savings

Building a strong technological foundation can accelerate and streamline the adoption of different manufacturing systems. Cloud ERP solutions are the cornerstone of this base. Aberdeen surveyed 622 companies, 41% of whom were in the mid-market (500-5,000 employees), to investigate how these companies are running their Enterprise Resource Planning (ERP) activities and how the use of technology impacts their ability to maintain and even increase operating margins amidst today's ever-changing business environment. When asked about the factors driving investments in cloud-based ERP (see sidebar), respondents cited cost (31%), globalization (27%),

## Top Drivers to Implement ERP in the Cloud

- 1. IT costs, **31%**
- 2. Global workforce working in multiple time zones, **27%**
- 3. Collaboration needs for multiple locations, **23%**
- 4. Standardization into a single system for multiple entities,
  18%
- 5. Time to information, **16%**

% of mid-market manufacturers rating each reason as one of their top 2



collaboration (23%), standardization (18%), and efficiency (16%) as the top five.

The flexibility with Cloud offerings to only pay for the storage they need enables mid-market companies to grow without needing to invest in onpremises servers and data centers. Cloud offerings are also more accessible and make it easier for global teams to collaborate in real-time. When investing in more factories and workers around the world, mid-market manufacturers can stay connected through the Cloud. Standardization is also a big plus for Cloud ERP solutions. Bringing multiple entities together on a single platform improves data accuracy and reduces time spent reconciling information from different sources. This helps to improve time to information for decision making and problem solving. With cloud-based ERP at the heart of their tech stack, Best-in-Class mid-market manufacturers are better able to manage costs as they grow.

## The Best-in-Class Approach to Scaling Cost-Effectively

Aberdeen's Best-in-Class methodology (see definition on page 2) identifies the top 20% of companies based on their performance in specific KPIs and then utilizes those companies to determine what it takes to achieve such levels of success. For this analysis, Best-in-Class companies were defined based on on-time delivery, compliance, profitability, productivity, and cash-tocash cycle (see sidebar).

### Table 1. Metrics Used to Define Best-in-Class Companies

Business Metric	Best-in-Class	All Others
<b>Customer Service</b> (current % of complete and on-time delivery of products, projects, service, etc.)	97%	79%
<b>Compliance</b> (current % of projects that follow internal schedule compliance procedures)	96%	79%
Profitability (change over the past year)	+12.6%	+9.8%
Productivity (change over the past year)	+13.5%	+10.0%
<b>Cash-to-Cash Cycle</b> (current # of days from when you pay a supplier to the time you collect cash from a customer)	-3.2 days	+8.1 days

Average performance n=662, Source: Aberdeen, July 2023

Compared to All Others, the Best-in-Class get their products to market more quickly and compliantly, and they're seeing greater annual growth in both margins and efficiency. They are also collecting cash from customers an average of 3.2 days before they need to pay suppliers while All Others are in a deficit for an average of 8.1 days, indicating that these top performers have



more control over their cash flow to cut back or loosen restrictions on spending as needed.

Best-in-Class companies have capabilities in place that help them protect margins, such as the ability to track product costs, schedule management, and demand planning and forecasting (Figure 2).

## Figure 2. Best-in-Class Companies Protect Margins with Cost Management Capabilities



### % of mid-market companies with each capability currently implemented

Tracking product costs throughout the product lifecycle is important for manufacturers looking to increase their margins. They can identify what's driving cost increases and take action to utilize less expensive materials or processes. Scheduling the workforce based on production and service needs can be a huge money-saving tactic. Visibility into these needs and only scheduling workers when they will actively be working reduces employee downtime and increases productivity. When paired with demand planning and forecasting, workforce planning becomes even more effective, since decisions about scheduling will be based on what the market wants and how the company can best deliver against that.

Cloud-based solutions that enable collaboration between sales and product design can be a game changer for manufacturers. Especially for products with high levels of customization, there needs to be channels for sales reps to check specs with engineers prior to committing to a project. This reduces the resources required for problem-solving on complex projects and helps the company focus on developing products that are a better fit for their operations. Real-time collaboration can also help decrease sales cycle time and get products out the door faster. For example, if an automotive manufacturer has a field service customer that wants to customize the interior of their new fleet vehicles, automated alerts or messaging channels can notify engineers of the customer's needs and help get the customization request

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n=622, Source: Aberdeen, July 2023

Best-in-Class midmarket companies are

32%

more likely to schedule workforce based on production / service needs, demonstrating the value of sharing common data across organizational teams within manufacturing processes.



approved quickly. This avoids post-sale issues and engineers diverting attention from other projects to adhere to timelines promised to the customer. Running simulations prior to full-scale experiments is also impactful for greater productivity and cost savings. Simulations will reveal issues beforehand, avoiding resources required for problem solving after the fact.

The Best-in-Class have other manufacturing capabilities built into their technologies as well that enable them to reduce costs (Figure 3).

### Figure 3. Best-in-Class Leverage Manufacturing Operations Capabilities



### % of mid-market companies with each capability currently implemented

Full visibility into quality data helps ensure quality targets are met, which helps avoid the cost of non-quality later on from warranty redemptions and recalls. Industry-specific best practices allow manufacturers to take advantage of the latest innovations in their fields for intelligent process automation. As these mid-market organizations expand their operations, they can leverage these processes with confidence that they'll work for their business. Similar to collaboration between sales and product development coordinating manufacturing operations with product design reduces time and money spent problem solving for complex products. Manufacturing employees should be able to access comprehensive work instructions or communicate with designers during production to understand assembly, which improves product quality and productivity.

Integrating ERP with IoT expands visibility into manufacturing operations. Business leaders can track factory metrics and product performance in real time to make decisions about process optimization and improvements. This establishes a cycle of continuous improvement for manufacturers to make changes, measure the impact of those changes, and take next steps to further optimize their products and smart factories. Root cause analysis for repeated errors also contributes to continuous improvement because it helps manufacturers identify and eliminate the source of poor quality. n=622, Source: Aberdeen, July 2023



These manufacturing-specific capabilities help the Best-in-Class increase cost savings by helping businesses prioritize quality for future savings, continuously identify areas to cut costs, and give decision-makers the tools to scale operations without losing control of their spending. Best-in-Class mid-market companies achieve superior cost benefits compared to All Others (see sidebar). They experience 80% greater annual decrease in inventory obsolescence costs and 40% greater annual increase in equipment utilization. They are better able to manage their factories, optimize workforce planning, reduce the amount of wasted inventory to increase productivity and decrease downtime. They also experience 46% greater annual improvement in cash-to-cash cycle and 26% greater annual improvement in gross margin, demonstrating their ability to continue balancing cost and revenue goals as they grow.

### Summary & Key Takeaways

To scale in today's volatile business environment, mid-market manufacturers need solutions that will help them identify areas to reduce costs, prevent expensive miscommunications, and prioritize quality as they grow. Capabilities to protect margins like tracking product costs, conducting demand planning and forecasting, and setting up collaboration channels between sales and product development are critical for visibility into the impact business changes have on costs, and manufacturing-specific capabilities for greater innovation and visibility ensure these organizations are set up to grow cost effectively. For organizations that hesitate to open new factories or invest in new frontline workers because of cost implications, Aberdeen recommends following in the footsteps of the Best-in-Class to implement Cloud ERP solutions that support a smart manufacturing strategy with these capabilities.

## About Aberdeen Strategy & Research

Aberdeen Strategy & Research, a division of Spiceworks Ziff Davis, with over three decades of experience in independent, credible market research, helps **illuminate** market realities and inform business strategies. Our fact-based, unbiased, and outcome-centric research approach provides insights on technology, customer management, and business operations, to **inspire** critical thinking and **ignite** data-driven business actions.

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## Cost Benefits for the Best-in-Class

YoY decrease in inventory obsolescence costs:

- Best-in-Class: **12.4%**
- All Others: 6.9%

YoY improvement in cash-to-cash cycle:

- Best-in-Class: **12.4%**
- All Others: 8.5%

YoY increase in capital / equipment utilization:

- Best-in-Class: 12.0%
- All Others: 8.7%

YoY improvement in gross margin:

Best-in-Class: 11.3%
 All Others: 9.0%

Average % improvement over the past year

