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REGION FOCUS: WORLDWIDE

Enhancing Your Business Value with Epicor for Manufacturing


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Table of Contents

CLICK BELOW TO NAVIGATE TO EACH SECTION IN THIS DOCUMENT.

Executive Summary

Customer and market expectations for more personalized products, deliveries, and services as well as unanticipated events and sudden demand shocks from global disruptions are causing manufacturers to rethink their approach to success. These factors are driving change and creating the need for a company to transform how its operations stay aligned with its markets. With disruption being a constant challenge facing the manufacturing industry, the ability to adapt and change has become even more important. This is resulting in factories being relied upon to handle more complex operations — serving a wider range of products, with faster throughput and smaller lots, all at minimized costs. Manufacturers need the proper digital foundation in place to succeed in this challenging environment.

IDC spoke with manufacturing companies using Epicor Kinetic solutions (Epicor for Manufacturing) to run their operations and businesses. These Epicor customers reported achieving strong value by enabling more efficient and reliable manufacturing operations and improving their business results.

Based on these interviews, IDC calculates that these Epicor customers will realize benefits worth an annual average of $2.90 million per organization ($866,800 per 100 users of Epicor for Manufacturing) by:

- **Increasing their manufacturing operations throughput,** which enables business growth and improved customer experiences
- **Ensuring operational quality and continuity,** thereby limiting the risk and disruption associated with errors, outages, and poor performance
- **Automating more of their inventory activities and equipment monitoring,** which helps optimize equipment use patterns and costs
- **Winning more business and improving margins,** leading to higher total and net revenue

Business Value Highlights

Click each highlight below to navigate to related content within this document.

373%
three-year ROI

9 months
to payback

14.2%
higher revenue

2.6
percentage-point increase in average gross margin

34%
higher order volume

39%
more orders delivered on time for 94% on-time delivery with Epicor

39%
fewer manufacturing errors

12%
higher equipment use rate

90%
higher inventory automation rate

Situation Overview

Manufacturers have encountered many challenges in their efforts to become more resilient. One of the most cited issues is outdated/legacy infrastructure. Most manufacturers tend to rely upon a mix of plants, assets, and technology systems that are decades old and limited in functionality. Manual or paper-based processes are frequently relied upon, and even if data is collected, it is often trapped in silos across manufacturing operations. This situation results in information that is difficult to access and analyze, hindering the ability to make the most effective decisions in the necessary time frame. The legacy nature of the industry led to additional challenges when it was faced with disruption in its operations and across supply chains; even if companies knew how they should react, many lacked the ability to adapt quickly enough. In response, the industry is now embracing a digital-first strategy to serve as the foundation for operational resiliency. System modernization brings a company's existing application portfolio to a point where those applications can maintain the pace of digital operations.

Epicor for Manufacturing

Epicor is a software company based in Austin, Texas, founded in 1972. Its Epicor Industry ERP Cloud is aimed at the manufacturing, automotive, distribution, retail, services, and building supply industries. Epicor provides manufacturers with a system to manage every part of their business. Epicor for Manufacturing functionality includes customer relationship management (CRM), enterprise content management, planning and scheduling, project management, human capital management (HCM), business intelligence (BI) and analytics, financial management, production management, quality management, service and asset management, supply chain management, risk management, configure/price/quote (CPQ), sales management, and ecommerce. Epicor for Manufacturing is purpose-built for manufacturers and is the same product deployed in the cloud or on premises.

The Business Value of Epicor for Manufacturing

Study Demographics

IDC conducted research that explored the value and benefits for manufacturing companies that use Epicor solutions. Interviewed managers all had experience with and knowledge about the impact of using Epicor on their manufacturing systems and processes as well as business operations and results. **Table 1** presents study demographics. The companies that IDC interviewed were small to midsize manufacturers, although they require a robust and flexible ERP platform for responding to specific business demands in their markets. Study participants had an average base of 339 employees and total average annual revenues of $57.25 million, with medians of 155 employees and $31.50 million annual revenue.

The interviewed manufacturers included the following subtypes:

- Contract manufacturing for custom manufacturing requirements
- Metal fabrication and machining
- Small parts and subassemblies
- Custom print projects

TABLE 1

Demographics of Interviewed Organizations

	Average	Median
Number of employees	339	155
Number of IT staff	6	2
Number of business applications	12	11
Revenue per year	$57.25M	$31.50M

n = 4, Source: IDC in-depth interviews, September 2022

Choice and Use of Epicor for Manufacturing

Interviewed manufacturing companies described both their use of and their reasons for choosing Epicor. They noted choosing Epicor for Manufacturing as part of efforts to refocus their businesses to better address supply chain challenges and ensure the sourcing of parts and materials, given volatile market conditions. In addition, they needed to optimize their visibility into activities and fluctuations in product demand taking place at the customer level.

Specifically, they cited challenges that included:

- Addressing requests to manufacture products locally
- Increasing the need for automation in response to supply chain complexities
- Changing customer expectations in terms of lead time and capacity

Study participants cited additional company-specific reasons for their selection of Epicor. These included the need to run their business in a more streamlined and unified manner by adopting a digital-first approach and enhancing the ability to flexibly adapt to changing customer and market demands. They also appreciated the flexible configuration options provided by Epicor and the fact that it easily integrated with their existing manufacturing floor workflows.

Study participants made these detailed comments:

Adapting to a specific business model:

"We're a contract manufacturer, so we need to treat products for each customer like a business, which is a challenge. … Looking through other solutions, we found that Epicor has all the functions that we need and it's better than the other possible solutions."

Providing the level of flexibility required by business:

"The biggest challenge we had when we chose Epicor for Manufacturing was that the flexibility of our system wasn't conducive in terms of the flexibility that we needed. … We run a mixed mode operations and Epicor offered additional flexibility that some of the other solutions we considered could not match."

Facilitating customization as needed:

"We chose Epicor for Manufacturing because it gave us the flexibility to customize it to match our more custom business."

Matching workflows with a strong out-of-the-box solution:

"We chose Epicor for Manufacturing a very long time ago, but the same reason applies today. It's a good solution for manufacturers. It's really matched our workflows quite nicely. We haven't had to do a lot of customizations or modifications. Epicor was good right out of the box."

Table 2 provides a snapshot of Epicor use at the time of the interviews. As the data shows, even though the interviewed companies are small to midsize manufacturers, they still face challenges in operating in complex markets, with business models that require them to work with thousands of suppliers to manufacture tens of thousands of unique products. On average, the interviewed manufacturing companies had 2,719 suppliers and 41,438 products, with employees that included an average of 219 manufacturing line team members and 11 supply chain team members.

TABLE 2

Epicor Use by Manufacturing Companies Interviewed

	Average	Median
Number of manufacturing locations	5	4
Number of warehouses	4	3
Number of suppliers	2,719	2,400
Number of products	41,438	7,875
Total number of users	335	149
Manufacturing line teams	219	120
Supply chain teams	11	4
Finance/accounts payable teams	8	5
Others	98	20

n = 4, Source: IDC in-depth interviews, September 2022

Business Value and Quantified Benefits of Epicor for Manufacturing

Interviewed manufacturing companies reported that Epicor solutions provide the automation, integration, and flexibility required to operate more efficiently and robustly. This allows them to streamline manufacturing floor operations and better respond to customer demand, which delivers benefits in higher net revenue, increased employee productivity levels, and lower operational costs.

Interviewed customers spoke about the most significant ways in which Epicor has allowed them to operate more effectively and efficiently:

Enables more freedom to efficiently handle custom orders to meet business requirements:
"The variety of how we can handle things with Epicor for Manufacturing is important — it provides flexibility in tying demand to an order. We can tie a purchase order straight to a job, to an order, or if we're purchasing from somewhere, and we have subcontracting options. … We have projects that are pretty unique, so the variety of ways we can handle that demand with flexibility is helpful."

Creates enhanced visibility and faster time to market:
"Epicor for Manufacturing gives us visibility into the status of all orders and jobs. We're also faster to market because we flow quickly through steps. … It also makes it easy to standardize our production information, so that way everything looks the same and our manufacturing teams know what to expect."

Ensures access to essential data and information as needed; improved understanding of product profitability:
"Epicor for Manufacturing allows us to customize to receive whatever information our manufacturing operations need … which is a tremendous benefit. … Also, it allows us to quickly see whether a manufacturing job made or lost money."

Creates better cross-business integration for more efficient operations:
"Epicor for Manufacturing allows us to integrate the different parts of the business — we don't have to retype information from sales to shipping to invoice, for example."

Based on these interviews with manufacturing companies that run their business operations on Epicor for Manufacturing, IDC calculates that they will realize benefits worth an annual average of $2.90 million per organization ($866,800 per 100 users of Epicor for Manufacturing). See **Table 8** in Appendix 2 for details.

Improved Manufacturing Floor Operations

Study participants rely on Epicor to ensure efficient, resilient, and effective manufacturing operations. They reported that they can only optimize business prospects when their manufacturing floor operations match business demand by delivering high-quality products in a timely way. Interviewed customers reported that Epicor provides a solid operational foundation that helps their manufacturing businesses run smoothly and take advantage of new market opportunities to expand. They spoke about the beneficial impacts of Epicor in terms of increasing manufacturing capacity, improving time to market, and establishing higher-performing and more robust manufacturing processes. Taken together, these factors led to improved overall operational positions and better business results.

Increasing Manufacturing Capacity

Study participants reported that Epicor has enabled them to increase manufacturing capacity through integration, improved use of data, and streamlined processes that help maximize volume.

A more orderly and rationalized approach along with more consistent floor operations enable interviewed manufacturing companies to increase their overall business capacity as indicated by these comments:

More orderly manufacturing process:

"With Epicor for Manufacturing, we have put in place steps to require that the first operation step be completed before anyone else starts the next operation, which has helped us keep our jobs and production floor clean and helped with inventory optimization."

Increased business capacity:

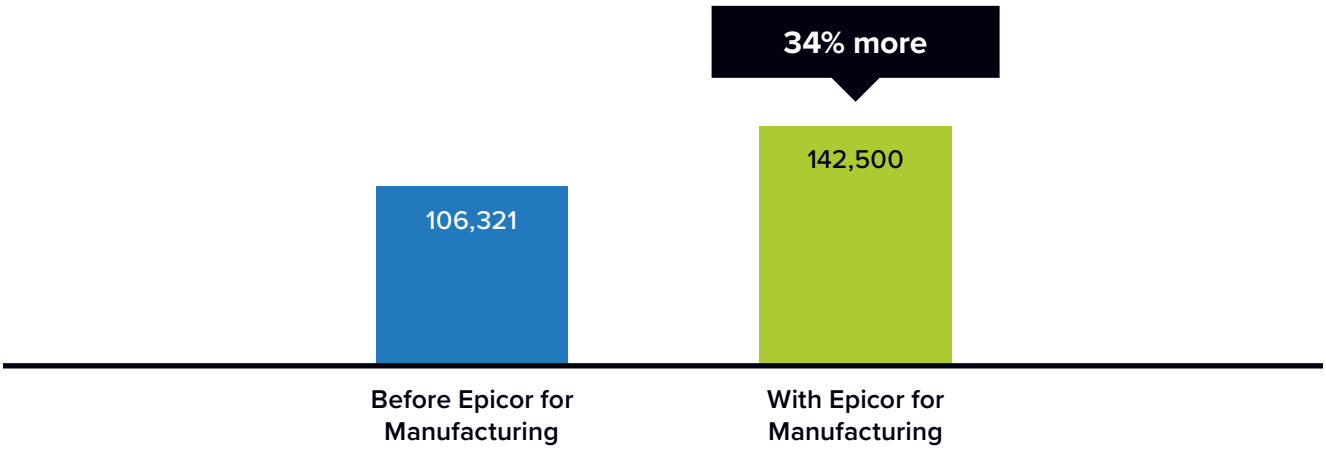
"We would be shipping fewer products without Epicor for Manufacturing. We ship probably 300,000 products every year and I'd say it would be half of that without Epicor. … Epicor helps minimize manufacturing errors and allows us to track them and run improvement projects based on the data."

Figure 1 shows the impact of Epicor use on manufacturing volume and capacity. IDC calculates that Epicor has enabled interviewed companies to increase their capacity significantly (34% on average), allowing them to better deliver their core products to existing customers as well as grow and expand their businesses.

FIGURE 1

Impact on Manufacturing Volume/Capacity

(Number of orders per year per organization)



n = 4, Source: IDC in-depth interviews, September 2022

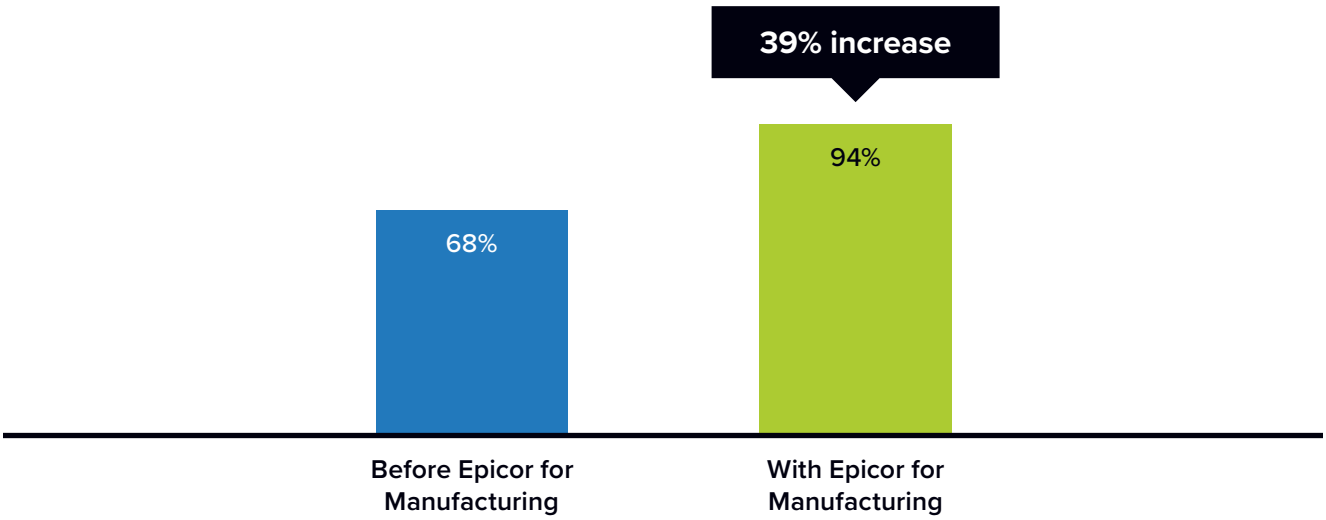
Faster Product Delivery and Customer Satisfaction

Manufacturers need predictability and timeliness in completing manufacturing jobs to meet customer expectations. For interviewed companies, improved process efficiencies and better visibility into those processes achieved through the use of Epicor have resulted in significant gains in delivery timeliness, ensuring better customer experiences and satisfaction. As one study participant noted: *"Epicor for Manufacturing gives us the ability to schedule and have our sequences broken down, so we know where jobs are at and where we are on our delivery times. … Epicor has helped with ensuring on-time deliveries by supporting our process flow."* As shown in **Figure 2**, Epicor has enabled interviewed companies to significantly improve their on-time delivery rate, allowing them to deliver in a timely fashion on 94% of orders, which is an increase of 39%. This improvement greatly increased customer satisfaction.

FIGURE 2

Impact on Manufacturing Order Timeliness

(Percentage of orders delivered on time)



n = 4, Source: IDC in-depth interviews, September 2022

Higher Manufacturing Quality

Interviewed companies also reported achieving higher levels of manufacturing quality and continuity with Epicor. They reported that Epicor has positively affected manufacturing quality by limiting the frequency of errors and allowing faster recovery through streamlined operations, access to operational data, and enhanced visibility, as these comments indicate:

Fewer errors:

"We've reduced the number of manufacturing errors with Epicor for Manufacturing. We used to have a daily check-in process with someone looking at our error logs and then escalating to handle them. Within six months of upgrading to the new Epicor version, we no longer have to go through that process."

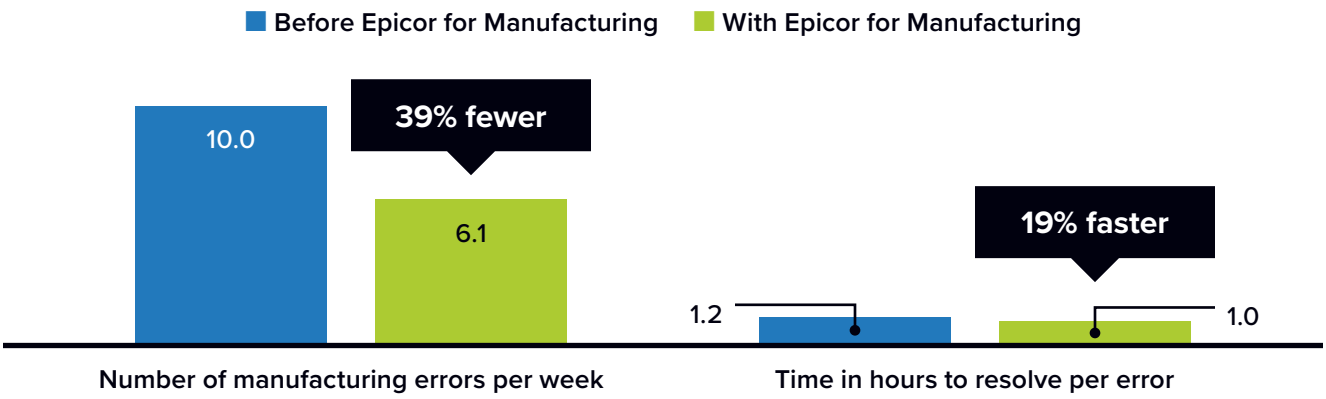
Standardization enables efficiencies and higher quality:

"Epicor for Manufacturing makes it easy to standardize our manufacturing job information, so that way everything looks the same and people in production know what to expect. … Our manufacturing is now better-quality because of having reliable information and the standardization."

IDC evaluated the impact of Epicor for Manufacturing on several metrics related to quality. As shown in **Figure 3**, improved visibility and more robust integration across manufacturing operations has limited the frequency and impact of errors significantly (39% fewer), thus limiting the number of errors that can negatively affect manufacturing quality and continuity. Further, when errors did occur, study participants resolved them 19% faster on average.

FIGURE 3

Impact on Manufacturing Quality



n = 4, Source: IDC in-depth interviews, September 2022

For an accessible version of the data in this figure, see Data for Figure 3 in Appendix 3.

IDC also analyzed the impact of Epicor on manufacturing continuity, a critical dependency for these companies. Put simply, when manufacturing floor operations experience disruptions or glitches, it diminishes overall productivity. With Epicor for Manufacturing, study participants face fewer outages and interruptions affecting the performance of manufacturing lines, which in turn reduces business risk and ensures more stable manufacturing operations.

Table 3 illustrates that study participants experience 63% fewer incidents that affect manufacturing availability and performance, and that when incidents do occur, they are resolved 17% faster. As a result, manufacturing line team members lose far less productive time — an average of 63% less — which translates to higher productivity for these teams worth an average of $150,700 per year per interviewed manufacturing company.

TABLE 3

Impact of Epicor on Manufacturing Continuity

Averages per Interviewed Organization	Before/Without Epicor for Manufacturing	With Epicor for Manufacturing	Gain with Epicor for Manufacturing	Percentage Gain with Epicor for Manufacturing
Number of outages/ interruptions per month	8.9	3.3	5.6	63%
Mean time to repair (MTTR), hours	2.1	1.8	0.3	17%
Productive time lost per year, full-time equivalents (FTEs)	3.4	1.3	2.2	63%
Hours of productive time lost per user	19.3	7.2	12.1	63%
Value of lost productive time per year	$241,100	$90,400	$150,700	63%

n = 4, Source: IDC in-depth interviews, September 2022

More Cost-Effective and Efficient Manufacturing Operations

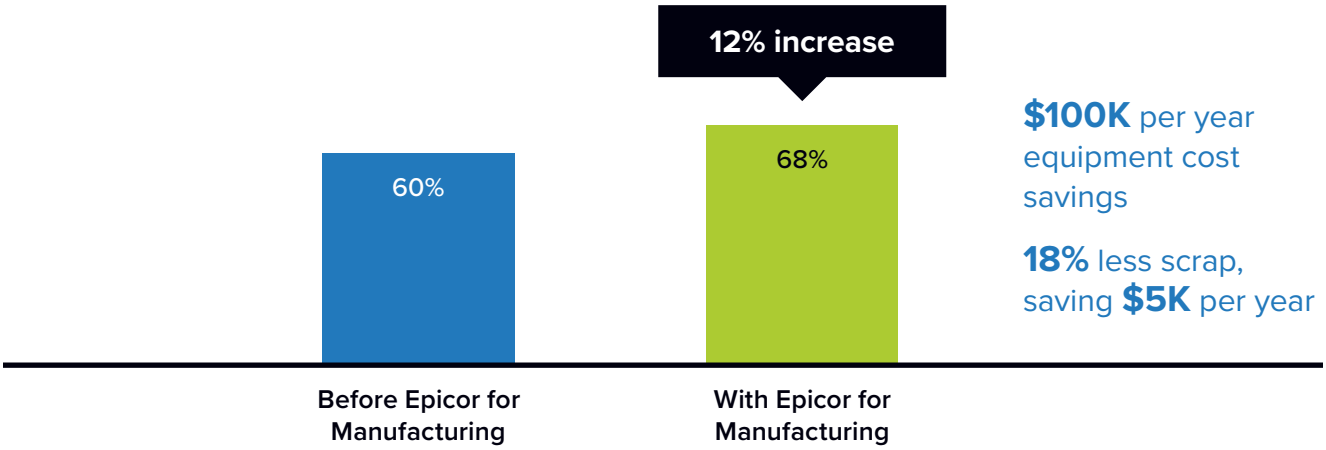
Interviewed companies also reported that enhanced access to data with Epicor for Manufacturing has allowed them to better schedule and use their equipment. This in turn promotes better use of available capacity and even helps optimize and manage equipment costs over time. Addressing this benefit, one study participant noted: *"With Epicor for Manufacturing, we're able to look at the times on our machines and how long an operation took, because it tracks all of that for us. We can determine how can we do a particular operation better and focus in more on others. We just had one instance where we made a change for an operation and saved 40%."*

Figure 4 shows how Epicor for Manufacturing has improved equipment use, with average use rate gains of 12% across interviewed manufacturing companies. This translates into a substantial equipment cost savings of over $100,000 annually, as study participants better maximize the value they derive from existing equipment. In addition, interviewed Epicor customers reported cutting their scrap materials use by 18% on average, generating an additional $5,000 of savings annually.

FIGURE 4

Impact on Manufacturing Equipment Use Rate

(Percentage use rate)



n = 4, Source: IDC in-depth interviews, September 2022

IDC's interviews with Epicor customers also demonstrated that manufacturing and supply chain operations core to these businesses have become more efficient. Interviewed manufacturers found that they can better schedule and leverage their staff resources as a result of improved access to data that enables more efficient use of team capacity and successful decision making. As a result, their manufacturing teams experience less friction, with streamlined and well-integrated floor operations, and work more productively.

One study participant commented on how understanding team capacity has enabled more efficient workflows: *"If we were doing what we're doing now without Epicor for Manufacturing, we would need another 100 people on our manufacturing team. … Epicor has helped us keep track of what capacity our manufacturing teams have available."*

Table 4 highlights the impact of the use of Epicor on manufacturing floor and supply chain teams. Interviewed Epicor customers noted an average 9% productivity gain for their manufacturing floor teams, which have an average size of almost 219 team members, resulting in an equivalent productivity gain per organization of 20.5 FTEs. Study participants also reported an average supply chain productivity gain of 26%, reflecting their enhanced ability to navigate current challenges related to supply chain activities.

TABLE 4

Impact of Epicor on Manufacturing Floor Team and Supply Chain Team Productivity

	Before/Without Epicor for Manufacturing	With Epicor for Manufacturing	Productivity Gain with Epicor	Percentage Productivity Gain
Productivity level of manufacturing floor teams, FTEs per organization	218.8	239.3	20.5	9%
Value of manufacturing team productivity per year per organization	$15.3M	$16.7M	$1.4M	9%
Productivity level of supply chain teams, FTEs per organization	11.3	14.2	3	26%
Value of supply chain team productivity per year per organization	$787,500	$991,400	$203,900	26%

n = 4, Source: IDC In-depth Interviews, September 2022

Inventory-Related Benefits

Study participants also found that Epicor for Manufacturing has helped them improve inventory accuracy, thereby helping avoid potential business losses. Automation and improved visibility into real-time status along with likely and expected inventory requirements have allowed interviewed companies to better manage inventories and adapt to changing business conditions.

Study participants appreciated that they could meet demand for customization from their customers and better control inventory costs, as these comments indicate:

Ability to understand job cost data and inventory generates efficiencies:

"With Epicor for Manufacturing, we've got a reliable way of looking at job cost data so we can monitor that on an ongoing basis and see if we want to make any changes to our inventory. … Because of this, we can address and scale our inventory. I'd say we're saving $40,000 per year in inventory costs, plus $2,000 per month."

Visibility and automation support inventory efficiencies and savings:

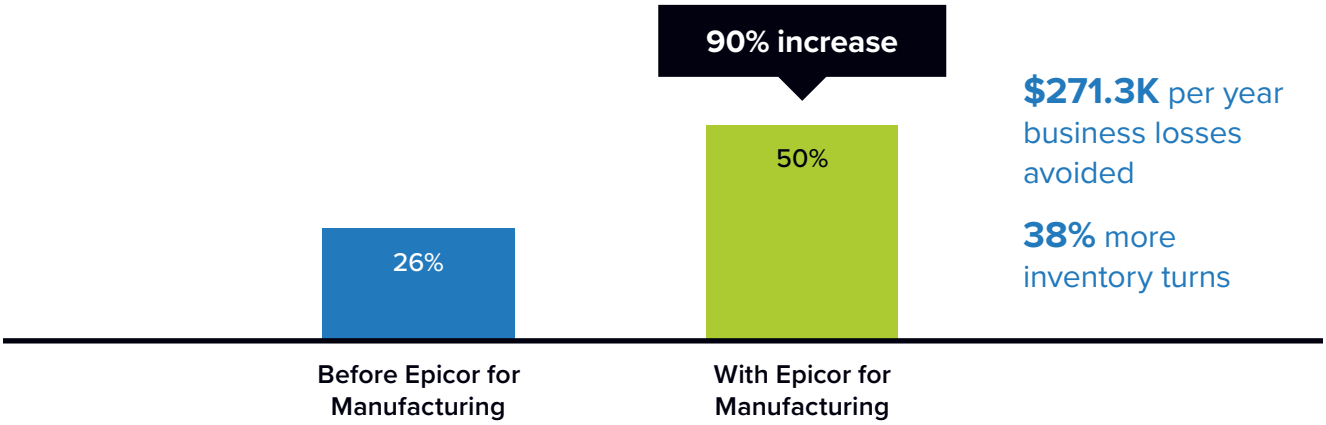
"Epicor for Manufacturing has impacted our inventory costs in that it provides more visibility. The savings are between $500,000 to $1 million per year, with 10–20% of that because we can turn products over faster. … Epicor automatically generates the PO, so around 20% of inventory activities are automated compared with very minimal — around 5% — automation previously."

Importantly, study participants reported driving automation much deeper into their inventory activities with Epicor for Manufacturing, with an average 90% increase in inventory automation. Increased automation not only limits the chances of manual errors affecting inventory activities but also helps study participants better match their inventories to actual manufacturing business requirements. By doing this, study participants maintain less excess inventory and incur lower business losses related to not having the correct inventory. On average, IDC calculates that interviewed Epicor customers complete an average of 38% more inventory turns annually and avoid lost business worth an average of $271,300 annually by having the right inventory to manufacture in ways responsive to actual customer demand (see **Figure 5**, next page).

FIGURE 5

Impact on Manufacturing Inventory Automation Rate

(Percentage automation rate)



n = 4, Source: IDC in-depth interviews, September 2022

Benefits for Finance Teams

Study participants reported that Epicor has positively affected how their finance and accounts payable teams work by improving access to the data and information they require, thus enabling them to work faster and at higher levels of quality and effectiveness. Epicor also helps these organizations ensure business continuity by optimizing results from these teams, better carry out business planning, and avoid regulatory and compliance penalties. Further, overall staff efficiency is improved with increased use of automation, avoiding any excessive staff time spent manually entering data.

IDC quantified these benefits as shown in **Table 5** (next page). Through use of Epicor, interviewed companies saw a 32% productivity boost for their finance and accounts payable teams, which equates to adding 2.4 FTEs per organization of productive time for these teams, an important gain for smaller manufacturing companies that rely on lean finance and accounts payable teams to run their businesses.

TABLE 5

Impact of Epicor on Finance and Accounts Payable Team Productivity

	Before/Without Epicor for Manufacturing	With Epicor for Manufacturing	Productivity Gain with Epicor	Percentage Productivity Gain
Productivity level of finance/accounts payable teams, measured in FTEs	7.5	9.9	2.4	32%
Total value of staff time per year per organization	$527,100	$695,100	$168,000	32%

n = 4, Source: IDC in-depth interviews, September 2022

Revenue Gains and Improved Margins

Epicor has enabled interviewed manufacturers to better serve their customers and operate more efficiently by streamlining business processes and providing better access and visibility to actionable data. As a result, study participants reported revenue gains along with improvements in both gross and net margins. They stressed the benefits of being able to customize their ERP use to match business requirements as well as the value created by Epicor's automation features and functionality.

Study participants also called out the ability to easily create queries into operational data to extract useful information:

Ability to customize is important for meeting business challenges:

"We face challenges like reduced lead times and capacity challenges. … Epicor for Business has helped us address these challenges by allowing us to customize fields and add what we wanted and manipulate it to do what we needed for our more custom portion of our business."

Automation across business activities:

"Before Epicor for Manufacturing, we used to print out every sheet of paper, and now we're completely automated with handheld machines throughout the receiving process. Also, because we're no longer printing everything, we're saving on paper, because we just scan purchase orders and send them to the vendor."

Improved ability to use operational data to drive business and optimize costs:

"With Epicor for Manufacturing, we can easily create queries into operational data to more easily extract more useful information. That's an improvement. … Because we provide

better data that would have been hard to get, the data leads to more sales and lower cost of operations."

IDC's analysis demonstrates the significant financial impact for study participants of using Epicor, in terms of both total and net revenue gains. As shown in **Table 6**, IDC calculates that interviewed manufacturing companies attribute an average of $7.14 million in higher revenue to their use of Epicor for Manufacturing. This equates to an average of 14.2% higher revenue and shows the sizable impact of Epicor on these organizations' ability to move to address business demand and ensure customer satisfaction through the creation and delivery of high-quality and relevant products and goods.

TABLE 6

Business Enablement: Higher Revenue

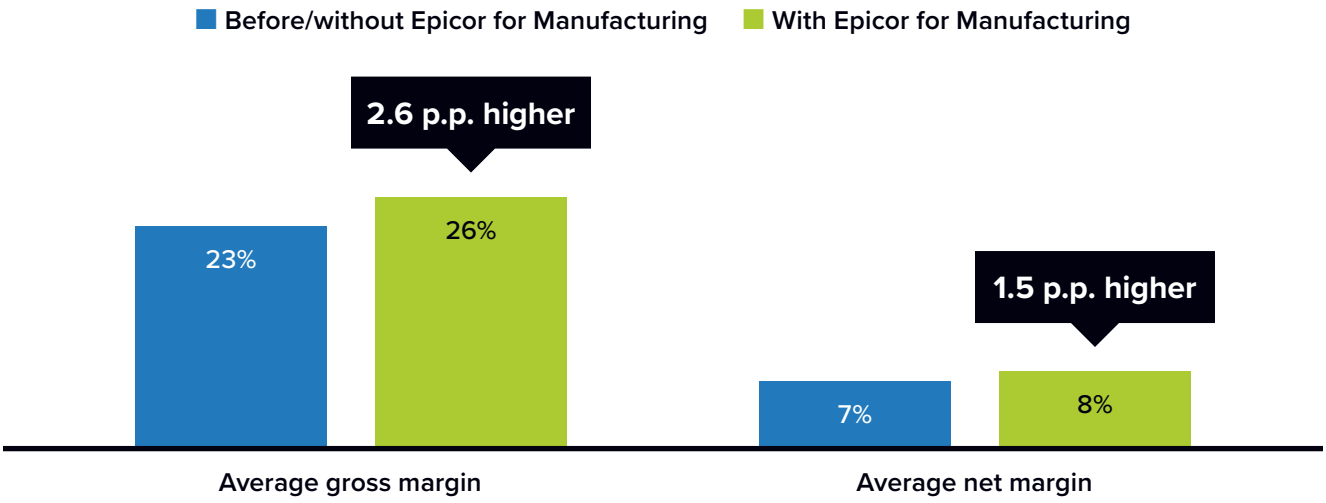
	Per Organization	Per 100 users
Higher revenue per year	$7.14M	$2.10M
Higher revenue per year, percentage	14.2%	14.2%
Higher net revenue per year	$1.30M	$383,700

n = 4, Source: IDC in-depth interviews, September 2022

In addition to higher overall revenue, study participants reported that Epicor has enabled them to maintain and improve their margins through both business gains as well as operational efficiencies and cost savings. As a result, they attributed higher gross and net margins to their use of Epicor for Manufacturing, with higher average gross margins of 2.6 percentage points and higher net margins of 1.5 percentage points. As shown in **Table 6**, their ability to win more business while improving their margins contributes to annual net revenue gains that IDC calculates as worth an average of $1.30 million per interviewed organization per year.

FIGURE 6

Impact on Margins



n = 4, Source: IDC in-depth interviews, September 2022

For an accessible version of the data in this figure, see Data for Figure 6 in Appendix 3.

ROI Summary

Table 7 (next page) presents IDC's return on investment analysis for study participants' use of Epicor for Manufacturing. IDC projects that interviewed manufacturing companies will achieve three-year discounted benefits worth an average of $6.77 million per organization ($2.02 million per 100 users) through better manufacturing operations, improved customer satisfaction, inventory cost savings, and impacts on business results. These benefits compare with total three-year discounted costs of $1.43 million per organization ($0.43 million per 100 users). These levels of benefits and investment costs are projected to result in an average three-year ROI of 373% with a break-even point occurring in nine months.

TABLE 7

Three-Year ROI Analysis

	Per Organization	Per 100 Users
Benefit (discounted)	$6.77M	$2.02M
Investment (discounted)	$1.43M	$0.43M
Net present value (NPV)	$5.34M	$1.59M
ROI (NPV/investment)	373%	373%
Payback	9 months	9 months
Discount factor	12%	12%

n = 4, Source: IDC in-depth interviews, September 2022

Challenges/Opportunities

As industry complexity continues to increase, manufacturers will be under tremendous pressure to become more streamlined, innovative, and market-driven. As with any digital transformation project that can start at a company, being caught in "pilot purgatory" is always a challenge to consider. Epicor will need to help its customers manage this complexity while delivering value and support to numerous functional groups/stakeholders across the manufacturing value chain (engineering, supply chain, production, sales, customer service, etc.). Epicor must continue to articulate the benefits and ease of migration from its on-premises systems. An inability to do so can cause delays or stop decisions to move to the cloud for manufacturers.

Conclusion

Manufacturers today face near constant disruption and changing market conditions, putting a premium on their ability to adopt and change to meet customer needs and demand. Becoming more flexible means taking on more complex operations and jobs and meeting customer demand for wider product selection, increased customization, and faster delivery. Achieving these objectives without incurring higher operational costs often requires establishing a digital foundation upon which these manufacturers operate their businesses.

This IDC study assesses the impact for manufacturers of running their business operations on Epicor solutions. Interviewed manufacturers attributed gaining the automation, integration, and flexibility they require to operate efficiently, flexibly, and robustly to respond to business demand. They linked these gains to operational efficiencies such as streamlined manufacturing floor operations and lower operational costs, as well as improved business results such as higher revenue and improved margins. Taken together, these benefits have allowed interviewed manufacturers to capture significant value through their use of Epicor for Manufacturing, with IDC calculating that they will realize an average three-year ROI of 373% and break even on their Epicor investment in an average of nine months.

Appendix 1: Methodology

IDC's standard Business Value/ROI methodology was utilized for this project. This methodology is based on gathering data from manufacturing companies currently using Epicor's ERP solution for manufacturing companies (Epicor for Manufacturing) as the foundation for the model.

Based on interviews with organizations using Epicor for Manufacturing, IDC performed a three-step process to calculate the ROI and payback period:

1. **Gathered quantitative benefit information during the interviews using a before-and-after assessment of the impact of using Epicor for Manufacturing.** In this study, the benefits included staff time efficiencies and productivity gains, operational cost reductions, reduced risk, and higher revenue.
2. **Created a complete investment (three-year total cost analysis) profile based on the interviews.** Investments go beyond the initial and annual costs of using Epicor for Manufacturing and can include additional costs related to migrations, planning, consulting, and staff or user training.
3. **Calculated the ROI and payback period. IDC conducted a depreciated cash flow analysis of the benefits and investments for the organizations' use of Epicor for Manufacturing over a three-year period.** ROI is the ratio of the net present value (NPV) and the discounted investment. The payback period is the point at which cumulative benefits equal the initial investment.

IDC bases the payback period and ROI calculations on a number of assumptions, which are summarized as follows:

- Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and manager productivity savings. For purposes of this analysis, based on the geographic locations of the interviewed organizations, IDC has used assumptions of an average fully loaded salary of $100,000 per year for IT staff members and an average fully loaded salary of $70,000 per year for non-IT staff members. IDC assumes that employees work 1,880 hours per year (47 weeks x 40 hours).
- The net present value of the three-year savings is calculated by subtracting the amount that would have been realized by investing the original sum in an instrument yielding a 12% return to allow for the missed opportunity cost. This accounts for both the assumed cost of money and the assumed rate of return.
- Because IT solutions require a deployment period, the full benefits of the solution are not available during deployment. To capture this reality, IDC prorates the benefits on a monthly basis and then subtracts the deployment time from the first-year savings.

Appendix 2: Business Value Calculations

Table 8 provides greater detail on IDC's methodology for arriving at the business value calculations presented throughout this White Paper.

TABLE 8

Average Annual Benefits

Category of Value	Average Quantitative Benefit	Calculated Average Annual Value*
Manufacturing team productivity gains	9% higher productivity, 20.5 FTE gain, $70K annual salary	$1.15M
Unplanned downtime/ interruptions, productivity gains	63% less productive time lost, saving 2.2 FTEs productive time per year, $70K annual salary	$120,300
Equipment use and scrap cost savings	$100K per year in equipment use savings, $5K per year in scrap savings	$83,900
Supply chain team productivity gains	26% higher productivity, 2.9 FTE gain, $70K annual salary	$162,800
Inventory-related business losses avoided	$271,300 business losses avoided per year	$216,700
Finance team productivity gains	32% higher productivity, 2.4 FTE gain, $70K annual salary	$134,200
Net revenue gains	$7.14M per year in higher total revenue, net margins as reported applied	$1.04M
Total annual benefits	**$2.90M per organization per year**	

n = 4, Source: IDC in-depth interviews, September 2022

*Includes 7.3 months' deployment time in Year 1

Note: All numbers in this document may not be exact due to rounding.

Appendix 3: Supplemental Data

The tables in this appendix provide an accessible version of the data for the complex figures included in this White Paper. By clicking "Return to original figure" below each table, you can quickly get back to the corresponding data figure.

DATA FROM FIGURE 3

Impact on Manufacturing Quality

	Number of manufacturing errors per week	Time in hours to resolve per error
Before Epicor for Manufacturing	10.0	1.2
With Epicor for Manufacturing	6.1	1.0

n = 4, Source: IDC in-depth interviews, September 2022

Return to Figure 3

DATA FROM FIGURE 6

Impact on Margins

	Average gross margin	Average net margin
Before/without Epicor for Manufacturing	23%	7%
With Epicor for Manufacturing	26%	8%

n = 4, Source: IDC in-depth interviews, September 2022

Return to Figure 6

About the IDC Analysts

Reid Paquin
Research Director, IDC

Reid Paquin is research director for IDC Manufacturing Insights, responsible for the IT Priorities & Strategies (ITP&S) practice. Reid's core research coverage includes IT investments made across the manufacturing industry and manufacturers' progress with digital transformation. Based on his background covering the manufacturing space, Reid's research also includes an emphasis on the technology enablers that help manufacturing executives make better-informed operational decisions.

More about Reid Paquin

Matthew Marden
Research Vice President, Business Value Strategy Practice, IDC

Matthew is responsible for carrying out custom business value research engagements and consulting projects for clients in a number of technology areas with a focus on determining the return on investment (ROI) of their use of enterprise technologies. Matthew's research often analyzes how organizations are leveraging investment in digital technology solutions and initiatives to create value through efficiencies and business enablement.

More about Matthew Marden

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