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Business Value White Paper
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The Business Value of SAP Cloud ERP for Supply Chain Management

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Business Value Highlights

Click each to jump to related content. Use "Return to Highlights" in the page header to get back here.

$367,900 average annual benefits per 100 employees

406% three-year return on investment

9-month payback on investment

79% increase in inventory automation

25% fewer orders not successfully fulfilled

34% higher productivity for supply chain teams

$539,900 higher revenue per year per 100 employees

4% lower overall energy costs

21% more efficient supply chain platform management

Executive Summary

As supply chain and enterprise solutions continue to migrate to the cloud, more creative offerings are appearing to deliver value to technology buyers. This white paper explores cloud subscription offerings as a service and the value provided through the lens of supply chain metrics, such as inventory optimization, to consider whether cloud solutions and subscription-based offerings can deliver value while simplifying implementations and integration work.

This IDC white paper examines the business value both enterprise-level and small and medium-sized business (SMB) organizations can achieve by using SAP Cloud ERP for supply chain operations. The study found that participants have achieved significant improvements in key supply chain-related outcomes, including better order fulfillment, inventory management, team productivity, and cost optimization. IDC's analysis shows that these improvements translate into an average annual value of $367,900 per 100 employees ($117.43 million per organization).

These gains stem from SAP Cloud ERP's ability to provide real-time visibility, integrated planning, and automation across global supply chains, driving the following benefits:

- **Improving order fulfillment and planning accuracy** through faster, more reliable delivery attributable to real-time visibility and integrated forecasting, which reduces the number of unfulfilled orders
- **Optimizing inventory, equipment, and transportation costs** by streamlining inventory turnover, reducing stockouts and excess inventory, and better understanding equipment and transportation use and requirements
- **Increasing productivity across supply chain teams** by expanding automation and centralizing data, which makes planning, warehousing, logistics, inventory, and pricing teams more proactive and effective
- **Achieving operational supply chain cost and sustainability efficiencies** through lower platform and infrastructure costs, reduced energy consumption, and robust margin control resulting from better pricing and forecasting

Situation Overview

IDC's supply chain survey data and client inquiries continue to confirm the steady migration from on-premises technologies to cloud-based architecture and services. The maturation of cloud-based offerings is beginning to yield creative ways of offering supply chain technology solutions.

IDC has explored supply chain as a service, as well as technology as a service, in past and recent research. This maturation in cloud offerings comes at a time when IDC's data reflects rising tensions between supply chain costs and the desire for resiliency. Seemingly, the dueling tensions of cost and resiliency have IT professionals looking to provide robust supply chain solutions at cost and scale.

Cloud subscriptions have emerged as a way to deliver value on supply chain metrics, which support either (or both) cost and resiliency. IDC has noted supply chain technology vendors offering cloud-based solutions, with reduced implementation and integration requirements, which still deliver on capabilities such as inventory optimization, streamlined workflows, minimized downtime, optimal purchase planning, order management, and a variety of other efficiency and resiliency metrics.

SAP Cloud ERP Supply Chain Capabilities

SAP is a leading provider of enterprise resource planning solutions, and its cloud-based ERP offerings represent a significant evolution in how organizations manage core business processes. These solutions are designed to simplify adoption and provide flexibility through modular packages tailored to specific business functions.

For supply chain management, SAP offers two packages. SCM Base delivers integrated capabilities across design, planning, manufacturing, logistics, and asset management while maintaining connectivity with finance and other operational areas. SCM Premium comprises all the functionality of SCM Base and adds advanced capabilities for environment management, product compliance, workplace safety, and footprint management.

Cloud ERP enables organizations to move beyond traditional, siloed systems by providing real-time visibility and harmonized data across the supply chain. SAP's approach

emphasizes ease of consumption through simplified licensing, integrated workflows, and embedded analytics. By leveraging automation and AI, these solutions help businesses respond more effectively to market volatility, regulatory changes, and customer expectations.

Overall, SAP's cloud ERP for supply chain management provides a foundation for continuous improvement and scalability. By connecting processes and both operational and sustainability data across the value chain, businesses can improve performance, mitigate risk, manage regulatory obligations, and position themselves for future growth.

The Business Value of SAP Cloud ERP for Supply Chain Management

Study Demographics

IDC interviewed organizations using SAP Cloud ERP to run their supply chain operations and related business activities. Interviews were in-depth in nature and designed to understand the quantitative and qualitative impact of using SAP Cloud ERP in key areas related to their supply chains.

Interviewed organizations represented a diverse set of industries, including aerospace, automotive manufacturing, biotechnology and life sciences, chemical manufacturing, ecommerce, energy, and general manufacturing, and multiple geographic locations (with headquarters in the United States, Germany, China, India, and the United Kingdom). While varied in size and including both enterprise and SMB organizations, study participants had an average employee base of 31,919 and annual revenue of $52.99 billion (medians of 6,750 employees and $3.65 billion in annual revenue, respectively). This diversity in the customer sample underscores SAP Cloud ERP's ability to support complex, global supply chains as well as smaller, more focused operations, reflecting diverse organizational needs for visibility, automation, and integrated planning from their supply chains **(Table 1, next page).**

Table 1

Demographics of Interviewed Organizations

Demographics	Average	Median
Number of employees	31,919	6,750
Number of IT staff	4,283	262
Number of business applications in the supply chain	74	40
Annual revenue	$52.99B	$3.65B
Countries	United States (3), Germany (2), China, India, United Kingdom	
Industries	Aerospace, Automotive Manufacturing, Biotechnology and Life Sciences, Chemical Manufacturing, eCommerce, Energy, Manufacturing (2)	

n = 8; Source: IDC Business Value In-Depth Interviews, November 2025

Choice and Use of SAP Cloud ERP for Supply Chain Operations

Interviewed organizations, both enterprise and SMBs, commonly reported choosing SAP Cloud ERP for their supply chain operations to modernize and consolidate fragmented systems, gain real-time visibility into inventory and financials, and improve planning accuracy across their networks.

Study participants cited key reasons for adopting SAP Cloud ERP:

- **Consolidation and visibility:** Replace fragmented systems and gain real-time insight into inventory and financials.
- **Automation and AI forecasting:** Improve planning accuracy and responsiveness to fluctuating demand.
- **Scalability and interoperability:** Support global operations and integrate with other SAP solutions.
- **Cost optimization:** Reduce total cost of ownership through cloud deployment and standardized best practices.

Interviewed SAP customers provided details about their choices:

High-quality management for a significant supply chain vendor environment (Enterprise):

"We chose SAP Cloud ERP because we have more than 50,000 vendors covering logistics and services, which creates challenges based on the scale of purchasing efforts … We wanted a management approach that could provide a clear picture of what has been purchased."

Need for consolidation and enhanced visibility (SMB):

"We wanted to consolidate our supply chain environment and get better visibility into both our SKUs and our financials."

Value of AI agent for operational matters (SMB):

"The AI agent is one of the most important supply chain features of SAP Cloud ERP, especially in relation to the purpose-built technology platforms we need … It calculates buffers for us in relation to our supply chain."

Cloud-based approach that is better for best practices and total costs (SMB):

"Using public cloud with SAP Cloud ERP enforces a much higher level of discipline in adhering to best practices. Those were essentially the two main reasons: First, to ensure we follow best practices, and second, from a pure TCO perspective, it offers better value for money."

Table 2 (next page) highlights the scale and complexity of the study participants' supply chain operations supported by SAP Cloud ERP. On average, organizations process 15.56 million customer orders annually (median: 139,750) across 56,569 products (median: 3,000). Their footprint includes 93 manufacturing facilities, 38 warehouses and distribution centers, and 246 store locations. This extensive use underscores SAP Cloud ERP's role in managing global operations, with an average of 73% of total revenue (median: 91%) linked to the platform. These figures reflect SAP Cloud ERP's importance in enabling visibility, automation, and integrated planning across distributed supply chains.

Table 2

SAP Cloud ERP Use by Interviewed Organizations

Use of SAP Cloud ERP	Average	Median
Number of customer orders per year	15.56M	139,750
Number of manufacturing facilities	93	6
Number of warehouses/distribution centers	38	15
Number of store locations	246	N/A
Number of products	56,569	3,000
Percent of organizational revenue	73%	91%
Number of employees whose work depends on SAP Cloud ERP	7,355	1,000

n = 8; Source: IDC Business Value In-Depth Interviews, November 2025

Business Value and Quantified Benefits of SAP Cloud ERP for Supply Chain Operations

Study participants reported substantial improvements in supply chain operations with SAP Cloud ERP, driven by real-time visibility, automation, and integrated planning. Common benefits include faster, more reliable order fulfillment, improved inventory accuracy and turnover, and streamlined workflows that reduce manual effort and errors. They also achieved cost efficiencies through better resource utilization and lower infrastructure and licensing costs. Collectively, these outcomes deliver measurable business value for both enterprise and SMB customers, including higher productivity across supply chain teams, improved ability to meet customer demand, and progress toward meeting sustainability goals.

Study participants spoke in detail about the most important ways they have benefited from the use of SAP Cloud ERP:

Inventory cost savings and improved business forecasting (SMB):
"SAP Cloud ERP has significantly reduced our inventory costs and stabilized fluctuating demand. We now maintain consistent volumes aligned with our clientele, which is a major help, and forecasting has greatly improved."

Forecasts linked to sales, better meeting customer service-level agreements (Enterprise):
"With SAP Cloud ERP, we can execute a full customer order forecast to drive sales and revenue while tracking overall supply chain costs. We also ensure customers receive the right orders, in the right quantity, at the right time."

Significant decrease in customer order time (Enterprise):
"Previously, customers could wait for six months for their order, and now with SAP Cloud ERP, the average waiting time is three months. You can imagine the value of the 50% improvement."

Platform for giving operational data meaning (SMB):
"When you have standardized processes like product costing with SAP Cloud ERP, the data becomes comparable. It allows you to compare the cost of goods sold based on similar or identical calculations … When you ensure consistent calculations, the data has meaning. Otherwise, it doesn't."

Reduced vendor contract costs (Enterprise):
"SAP Cloud ERP has reduced our contract costs. It's not just the time savings because we have the data. We use that data to negotiate vendor contracts and save millions per year."

IDC's research shows that organizations using SAP Cloud ERP for supply chain operations achieve substantial financial and operational benefits, averaging $367,900 per 100 employees per year ($117.4 million per organization) **(Figure 1, next page).**

These benefits fall into four primary categories:

- **Day-to-day productivity gains:** Study participants gain efficiencies across their supply chain teams through deeper and improved automation and streamlined workflows. IDC puts the value of higher productivity for teams responsible for supply chain-related activities at an annual average of $145,300 per 100 employees ($46.37 million per organization).

- **Supply chain operational cost savings:** Study participants reduce inventory, equipment, and transportation costs by having greater transparency and data to better plan and use these resources. IDC estimates that interviewed organizations will save an average of $120,800 per 100 employees per year ($38.57 million per organization).
- **Business benefits:** Study participants achieve higher revenue by improving their order fulfillment, being faster to market, and better meeting their customers' needs. IDC calculates that study participants will realize net revenue gains worth an annual average of $64,300 per 100 employees ($20.51 million per organization).
- **Direct cost savings and efficiencies:** Study participants have lowered their platform and infrastructure costs, achieved sustainability gains that translate to lower energy costs, and simplified the management of their supply chain platforms. IDC puts the value of these cost and staff efficiencies at an annual average of $37,500 per 100 employees ($11.97 million per organization).

Figure 1

Average Annual Benefits per 100 Users

($ per 100 employees)

n = 8; Source: IDC Business Value In-Depth Interviews, November 2025

Supply Chain Operational Benefits

Interviewed organizations reported that SAP Cloud ERP has transformed their supply chain outcomes by enabling automation and improving delivery performance. Processes that were once manual, such as inventory checks, purchase order creation, and logistics coordination, are now largely automated, reducing errors and accelerating workflows. These gains stem from SAP Cloud ERP's integrated platform, which combines real-time visibility, AI-driven forecasting, and standardized workflows to streamline planning, procurement, and fulfillment.

Study participants cited improved delivery as a major benefit of the use of SAP Cloud ERP, reporting faster order fulfillment and greater accuracy in meeting service-level agreements. Advanced planning and analytics tools help maintain sufficient stock, optimize production schedules, and reduce delays from miscommunication or incorrect part calls. These outcomes reflect the platform's ability to integrate planning with execution, providing a single source of truth for proactive decisions and timely, reliable delivery.

Interviewed SAP customers provided details about the types of supply chain operational benefits achieved:

Better communication with trading partners (Enterprise):
"We used to struggle to communicate with and between our suppliers and sellers but can now address delivery time problems with SAP Cloud ERP and come up with measures to address them. We can sit down, flag our worst suppliers, talk to them, come up with plans, and monitor that plan using SAP Cloud ERP."

Reduction in business-impacting disruptions (Enterprise):
"With our previous supply chain solutions, we too often called parts twice or not often enough, disrupting our production for hours or even days."

Coordination on data across disparate operations (SMB):
"The dashboarding capabilities of SAP Cloud ERP are a major benefit. We're able to look at master data and visualize it and coordinate on it … Speaking the same language goes a long way in the company that's spread all over with multiple brands and locations."

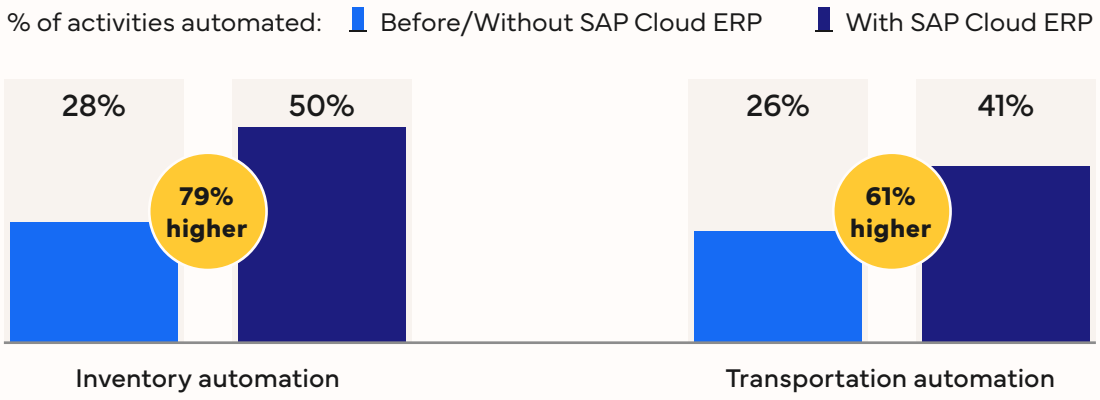
Single operational platform (SMB):
"With SAP Cloud ERP, we have one system for our whole business. We don't need to use special software for our finance operations — everything is connected because it's the one system."

Figure 2 (below) shows the significant extent to which study participants have driven automation across their supply chain activities with SAP Cloud ERP. They reported automating 79% more inventory-related activities and 61% more transportation-related activities, helping to make them more efficient and streamlined and less prone to error.

Figure 2

Impact on Automation

See the figure data in an accessible table format.

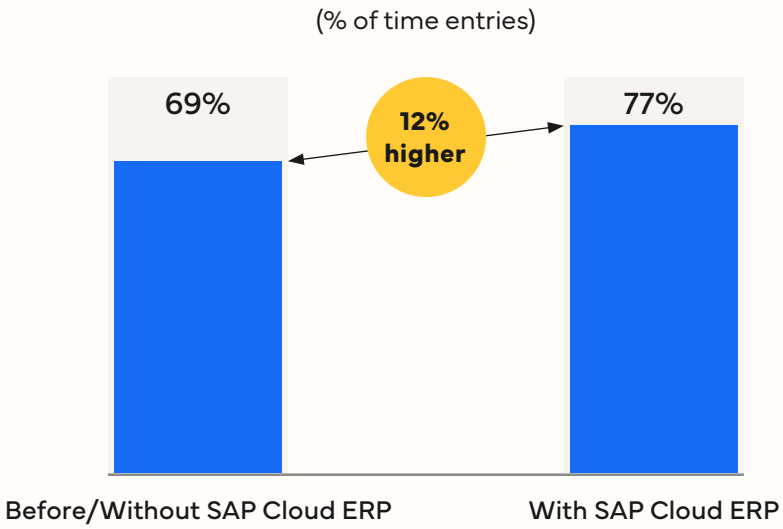


n = 8; Source: IDC Business Value In-Depth Interviews, November 2025

Study participants described reduced frequency of delivery delays and more reliable order delivery as key values of deeper automation and a more streamlined, connected supply chain. As illustrated in **Figure 3 (next page),** they have increased the share of on-time deliveries by an average of 12% while achieving other operational gains, such as 21% faster inventory turns and a 22% reduction in warehouse errors. Together, these improvements demonstrate the tangible impact of SAP Cloud ERP in driving better supply chain performance.

Figure 3

Impact on Order Fulfillment Timeliness



n = 8; Source: IDC Business Value In-Depth Interviews, November 2025

Supply Chain Team and Operational Benefits

Study participants reported substantial productivity gains across supply chain teams through the use of SAP Cloud ERP. Planning teams benefit from integrated dashboards and real-time analytics that eliminate manual data gathering and enable faster decisions. Inventory teams automate key processes, reducing manual stock counts and freeing staff for strategic tasks. Logistics and transportation teams leverage automation and scheduling tools to minimize routing errors and improve delivery coordination.

Pricing and financial teams also experience substantial productivity gains by using SAP Cloud ERP's centralized data and standardized processes. Instead of manually comparing spreadsheets or navigating multiple systems, they can access accurate, consolidated pricing information across products and regions, enabling quicker margin analysis and promotion planning. Across functions, the common thread is SAP Cloud ERP's ability to integrate data, automate repetitive tasks, and provide a single source of truth, which reduces rework and accelerates operational cycles. These capabilities translate into measurable time savings and cost efficiencies, allowing these teams to focus on higher-value activities.

Study participants provided specific examples of how SAP Cloud ERP has enabled these teams and operations:

Automated, efficient inventory management (SMB):

"SAP Cloud ERP helps our inventory management team because there are more capabilities that we didn't have before … We can use the system to do things that we previously performed manually."

Better understanding of inventory (Enterprise):

"Understanding inventory is a big benefit of SAP Cloud ERP. We hold billions of dollars in inventory, so having the right amount of inventory management is key."

Driver of more efficient assembly lines (SMB):

"Instead of people wondering about status and using barcodes and QR codes, SAP Cloud ERP has made these activities automatic … It's brought efficiencies up by 4% on our two assembly lines."

Foundation for improved pricing (Enterprise):

"With SAP Cloud ERP, we can look at our pricing and promotion strategy, understand our margins, and determine what kind of promotion we can run to drive revenue to the point where we're still in the black."

Pricing efficiencies (Enterprise):

"We used to have to navigate across different products when pricing products, and each time we tried to price something, it was difficult … Now, with SAP Cloud ERP, prices for parts are stored in the system across all products, which makes things much easier."

Table 3 (next page) shows the very significant impact across supply chain teams of using SAP Cloud ERP in terms of their capabilities and throughput. Study participants reported substantial productivity gains for hundreds or even thousands of employees working across their supply chains, with average productivity gains of 75% for pricing teams, 34% for core supply chain teams, and 25% for their warehousing and logistics teams, among others.

Table 3

Supply Chain Productivity Benefits

Productivity Levels per Organization	Before/ Without SAP Cloud ERP	With SAP Cloud ERP	Difference	Benefit
Core Supply Chain Teams				
Equivalent productivity, FTEs per organization	268	359	91	34%
Value of equivalent productivity per organization per year	$18.73M	$25.10M	$6.37M	34%
Warehousing and Logistics Teams				
Equivalent productivity, FTEs per organization	563	706	143	25%
Value of equivalent productivity per organization per year	$39.38M	$49.39M	$10.02M	25%
Inventory Management Teams				
Equivalent productivity, FTEs per organization	525	653	128	24%
Value of equivalent productivity per organization per year	$36.71M	$45.68M	$8.96M	24%
Transportation Teams				
Equivalent productivity, FTEs per organization	228	277	49	22%
Value of equivalent productivity per organization per year	$15.94M	$19.38M	$3.44M	22%
Pricing Teams				
Equivalent productivity, FTEs per organization	564	988	423	75%
Value of equivalent productivity per organization per year	$39.50M	$69.13M	$29.63M	75%

n = 8; Source: IDC Business Value In-Depth Interviews, November 2025

Business and Cost Benefits

Study participants consistently linked SAP Cloud ERP to improved business outcomes, notably revenue growth and operational cost savings. Higher revenue stems from improved order fulfillment and faster delivery cycles enabled by streamlined planning and execution. Integrated analytics and pricing tools support margin optimization and effective promotions, even during demand fluctuations. With centralized data, real-time visibility, and AI-driven forecasting, SAP Cloud ERP helps companies meet service-level agreements more reliably, driving customer satisfaction, repeat business, and long-term profitability.

Study participants cited operational cost savings as another major benefit of using SAP Cloud ERP, achieved through inventory optimization, reduced waste, and lower infrastructure expenses. They cited examples such as cutting inventory-related costs through faster turns and better stock accuracy, while predictive maintenance has extended equipment lifespans and minimized downtime. SAP Cloud ERP's standardized processes and automation of core workflows have enabled these savings, delivering financial efficiency and operational resilience.

Interviewed SAP customers provided examples of these business and operational benefits:

Better forecasts, leading to more accurate inventory and higher delivery rates (Enterprise):

"SAP Cloud ERP helps us plan inventory with the AI capabilities. We can run forecasts based on how the demand is going to look like and act accordingly … It helps us fulfill more orders. Currently, the number we can't fill is very low, around 0.5%. Before, it was about 5%."

More cost-effective operations (SMB):

"Facilities not using SAP Cloud ERP were over budget on capital expenditures and cost overages, but the facilities that utilized SAP stayed right at budget. The other facilities were 70% over budget, and 30% of that can be attributed to not having the transparency, visibility, functionality, automation, everything related to SAP Cloud ERP."

The ability to ensure sufficient stock to fulfill customer orders (SMB):

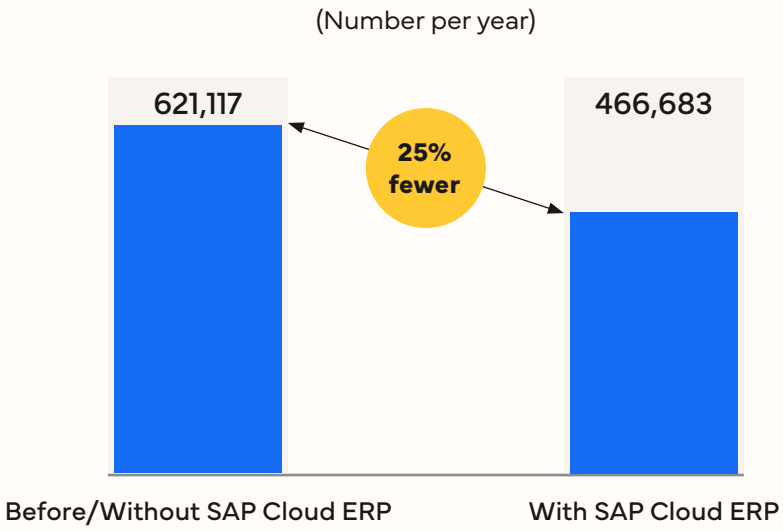
"We need to make sure that there are sufficient stocks and safety stocks in our manufacturing location so we don't have to suddenly stop making the products because we don't have the paper or frames, and SAP Cloud ERP helps us do this."

Source for important customer insights for demand planning (Enterprise):
"With SAP Cloud ERP, we build visibility into all our transactions and get more insights about our customers, their buying patterns, and other analytics, which we can use to plan for demand."

Interviewed organizations reported that they can better deliver to their customers' expectations with SAP Cloud ERP. As shown in **Figure 4 (below),** the impact of fulfilling more orders (154,434 more orders per year on average) translates directly into benefits such as capturing more revenue and increasing customer satisfaction, which translates into lower churn rates and more repeat customers.

Figure 4

Number of Orders Not Fulfilled



n = 8; Source: IDC Business Value In-Depth Interviews, November 2025

Table 4 (next page) shows the significant impact on revenue that study participants attributed to their use of SAP Cloud ERP. On average, they linked annual revenue gains of $539,900 per 100 employees ($172.32 million per organization) to the use of SAP Cloud ERP, underscoring the importance of more robust, streamlined supply chain operations on their business results.

Table 4

Revenue Impact

Impact	Per Organization	Per 100 Employees
Higher revenue per year	**$172.32M**	**$539,900**
Higher net revenue per year*	$25.85M	$81,000

Note: *15% margin assumption applied
n = 8; Source: IDC Business Value In-Depth Interviews, November 2025

In addition to revenue gains, **Table 5 (below)** demonstrates the considerable operational cost savings that study participants have achieved through the use of SAP Cloud ERP. By making more informed decisions based on robust operational data, they have optimized costs related to their inventories ($100,900 in savings per 100 employees per year), equipment ($42,600 in savings per 100 employees per year), and transportation ($8,800 in savings per 100 employees per year). Together, these cost savings total a significant $152,300 per 100 employees per year ($48.60 million per organization).

Table 5

Operational Cost Savings Impact

Impact	Per Organization	Per 100 Employees
Inventory cost savings	$32.22M	$100,900
Equipment cost savings	$13.58M	$42,600
Transportation cost savings	$2.80M	$8,800
Total operational cost savings	$48.60M	$152,300

n = 8; Source: IDC Business Value In-Depth Interviews, November 2025

Sustainability Benefits

Study participants have leveraged SAP Cloud ERP to advance operational and sustainability goals. By improving visibility across energy use, materials, inventory, and asset performance, organizations are able to reduce waste, optimize resource consumption, and lower operational emissions as part of day-to-day business execution.

Integrated operational and sustainability data enables organizations to better track carbon emissions across their value chain and assess supplier sustainability performance. Predictive maintenance extends equipment life cycles, while inventory optimization minimizes overstock and scrap, lowering environmental impact and costs. Adopting a cloud-based approach also helps reduce energy consumption and IT-related costs, while automated workflows decrease the time and effort required for sustainability data collection and reporting, creating a data-driven foundation for long-term sustainability goals such as net carbon zero.

From a cost perspective, participants reported an average 4% reduction in energy spending, saving over $700,000 annually per organization.

Interviewed SAP customers provided specific examples of how they have achieved better outcomes related to running sustainable operations with SAP Cloud ERP:

Energy use optimization and cost savings (SMB):
"We save on electrical consumption, more than $1 million per year because SAP Cloud ERP helps us track and optimize energy use across our supply chain operations."

The data needed for eventual net carbon zero (Enterprise):
"SAP Cloud ERP is helping us break down the value chain, or the supply chain, of the parts we source, so we can better understand our carbon contribution. The benefit is that we now have the data, unlike before, when we didn't."

Minimized operational waste (Enterprise):
"SAP Cloud ERP helps us address waste such as aged inventory, scrap, and similar issues at both the plant and central levels. Eliminating that waste delivers significant operational benefits."

Integrated platform for driving sustainability (SMB):
"SAP Cloud ERP helps because we use another SAP application to calculate our carbon footprint, which is part of sustainable carbon footprint management. It pulls raw data, such as the bill of materials, into the sustainability system to calculate the footprint and generate sustainability reports."

Supply Chain Cost and Management Efficiencies

Study participants reported that SAP Cloud ERP has significantly improved supply chain management efficiency by consolidating processes and providing real-time visibility across planning, procurement, and execution. Automated workflows have replaced manual tasks, while dashboards and integrated analytics allow teams to coordinate on master data and monitor supply chain health, enabling faster, more informed decisions. These capabilities have helped interviewed organizations avoid costly disruptions, maintain safety stock, and streamline collaboration with suppliers and logistics partners, creating a single operational platform that has simplified complex global operations.

Interviewed organizations have also achieved substantial cost savings by retiring legacy systems and moving to SAP Cloud ERP's cloud-based architecture. They noted that on-premises environments were expensive to maintain and often required additional hardware and IT resources, while SAP Cloud ERP has reduced infrastructure costs and licensing fees. Beyond hardware and software savings, the platform's standardized processes and automation reduce the need for manual oversight and minimize operational inefficiencies, delivering direct financial benefits and long-term scalability.

As **Table 6 (below)** shows, study participants have benefited from 21% average efficiencies with SAP Cloud ERP in managing their supply chain platforms, freeing up staff to innovate and extend their supply chain capabilities. Further, they have achieved substantial cost savings from moving to a consolidated, cloud-based supply chain platform with SAP Cloud ERP, saving an average of $4.25 million per organization in infrastructure costs per year and $7.46 million per organization in supply chain-related licensing costs.

Table 6

Supply Chain Management Efficiencies

Efficiencies	Before/ Without SAP Cloud ERP	With SAP Cloud ERP	Difference	Benefit
Equivalent FTEs required per organization	119	94	25	21%
Value of equivalent staff time per organization per year	$11.89M	$9.36M	$2.53M	21%

n = 8; Source: IDC Business Value In-Depth Interviews, November 2025

ROI Summary

Table 7 (below) presents IDC's analysis of the financial benefits and costs for study participants of using SAP Cloud ERP for their supply chain activities. On average, IDC calculates that interviewed organizations will realize average discounted three-year benefits worth $857,200 per 100 employees ($273.59 million per organization) in higher productivity, revenue gains, staff efficiencies, and cost savings. These benefits compare with the average three-year discounted investment costs of $169,500 million per 100 employees ($54.10 million per organization), which results in an average three-year ROI of 406%, with investment breakeven occurring an average of nine months from the beginning of deployment.

Table 7

ROI Analysis

3-Year ROI Analysis	Per Organization	Per 100 Employees
Discounted benefits	$273.59M	$857,200
Discounted investment costs	$54.10M	$169,500
Net present value	$219.50M	$687,700
Return on investment	**406%**	**406%**
Payback	**9 months**	**9 months**
Discount factor	12%	12%

n = 8; Source: IDC Business Value In-Depth Interviews, November 2025

Challenges/Opportunities

Though supply chain improvement value came through clearly in IDC's exploration of SAP cloud ERP for supply chain management, IDC also cautions potential buyers to assess several considerations.

First, buyers should determine whether their enterprise is ready to leverage integrated solutions. Enterprises stuck in silo and legacy-based processes may not realize the full benefits of a cloud solution. Streamlining old processes and/or siloed models will still yield suboptimal results.

Second, it's important to assess not just what is in the offering but also what is out of it. Potential buyers should assess the depth of scenario modeling, decision intelligence tools, and analytics desired and explore whether these cloud solutions meet that need for their organization.

Finally, buyers should consider that IDC interviewed clients who migrated to SAP cloud solutions for their own business reasons. Some may have had outdated tools and saw significant gains as a result. Others perhaps led with IT infrastructure considerations, such as ease of implementation. Potential buyers should analyze their goals and whether the "from-to" in their situation calls for a similar solution or something different.

Conclusion

Organizations face persistent challenges in managing complex, global supply chains, including fragmented systems, limited visibility, and rising cost pressures and regulatory obligations. These issues often result in inefficiencies such as inaccurate forecasts, inventory imbalances, slower fulfillment cycles, and increased operational and compliance risk.

To address these challenges, SAP offers its Cloud ERP for Supply Chain Management, built on SAP S/4HANA Cloud. These supply chain management and sustainability capabilities provide real-time visibility, integrated planning, and automation across core supply chain processes, enabling businesses to consolidate operations, improve agility, and support resiliency and long-term sustainable growth.

IDC's research shows that organizations using SAP Cloud ERP realize substantial business value across organizational types, including enterprises and SMBs. Benefits include improved order fulfillment, higher productivity across supply chain teams, and cost savings through inventory optimization and streamlined workflows. On average, organizations achieve $367,900 in annual benefits per 100 employees, supported by operational efficiencies and revenue gains. These outcomes deliver a strong financial return, with an average three-year ROI of 406% and a payback period of just nine months.

Appendix A: Methodology

IDC utilized its standard Business Value/ROI methodology for this project. This methodology is based on gathering data from organizations currently using SAP Cloud ERP to operate their supply chain operations.

Based on interviews with organizations using SAP Cloud ERP, 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 SAP Cloud ERP for supply chain operations.** In this study, the benefits included cost savings, staff efficiencies, user productivity gains, and higher net 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 SAP Cloud ERP for supply chain operations 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 SAP Cloud ERP over a three-year period. ROI is the ratio of the net present value 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 the purposes of this analysis, IDC used its standard 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.

All dollar figures in this white paper are in $ USD.

Appendix B: Special Calculations

Quantified Benefits of SAP Cloud ERP for Supply Chain Operations

Table 8 (below) provides greater detail about the quantified benefits for study participants of using SAP Cloud ERP for their supply chain operations, with IDC calculating that study participants will realize benefits worth an annual average of $367,900 per 100 employees ($117.42M per organization).

Table 8

Annual Quantified Financial Benefits

Category of Value	Average Quantitative Benefit	Calculated Average Annual Value Per Organization	Calculated Average Annual Value Per 100 Employees
Annual SCM solution cost savings	$7.46M lower platform costs per year, $4.25M per year infrastructure cost savings	$9.29M	$29,100
Annual energy cost savings	4% total cost savings worth $842,900 per year	$668,900	$2,100
Supply chain management efficiencies	21% more efficient, worth 25 FTEs, salary $100,000	$2.01M	$6,300
Supply chain team productivity gains	34% higher productivity worth 91 FTEs, salary $70,000	$5.06M	$15,800
Warehouse and logistics productivity gains	25% higher productivity worth 143 FTEs, salary $70,000	$7.95M	$24,900
Inventory management productivity gains	24% higher productivity worth 128 FTEs, salary $70,000	$7.11M	$22,300
Transportation team productivity gains	22% higher productivity worth 49 FTEs, salary $70,000	$2.73M	$8,600

Table 8 continued next page

Table 8 continued from previous page

Category of Value	Average Quantitative Benefit	Calculated Average Annual Value Per Organization	Calculated Average Annual Value Per 100 Employees
Pricing team productivity gains	75% higher productivity worth 423 FTEs, salary $70,000	$23.5M	$73,700
Inventory cost savings	$32.22M per year in savings	$25.57M	$80,100
Equipment cost savings	$13.58M per year in savings	$10.78M	$33,800
Transportation cost savings	$2.80M per year in savings	$2.22M	$7,000
Higher net revenue*	$172.32M higher revenue per year	$20.51M	$64,300
Total average annual benefits	**$117.42M per organization per year/$367,900 per 100 employees**		

* 15% margin assumption applied for net revenue

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

n = 8; Source: IDC Business Value In-Depth Interviews, November 2025 (includes 7.4 months deployment time in year 1)

Appendix C: Accessible Data Tables

This appendix provides an accessible version of the data for any complex figures in this document. Click "Return to figure" to get back to the original figure.

Figure 2

Impact on Automation

Activities Automated	Inventory Automation	Transportation Automation
Before/Without SAP Cloud ERP	28%	26%
With SAP Cloud ERP	50%	41%
Difference	**79% higher**	**61% higher**

n = 8; Source: IDC Business Value In-Depth Interviews, November 2025

Return to figure

About the IDC Analysts

Eric Thompson

Research Director, Global Supply Chain Planning, IDC

As a Research Director, Eric Thompson is a member of the IDC Worldwide Supply Chain Strategies program and is responsible for providing research, analysis, and guidance on key business and IT issues pertaining to manufacturing, retail, and healthcare supply chains. He currently leads the Worldwide Supply Chain Strategies: Planning and Multi-Enterprise Networks practice, providing fact-based research, analysis, and insight on best practices and the use of information technology to assist clients in improving their capabilities in these critical supply chain areas. This practice specializes in advising clients on supply chain demand planning, supply planning, sales and operations planning, and multi-enterprise supply chain networks.

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Matthew Marden is responsible for carrying out custom business value research engagements and consulting projects for clients in several technology areas, focusing on determining the return on investment of their use of enterprise technologies. Marden'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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