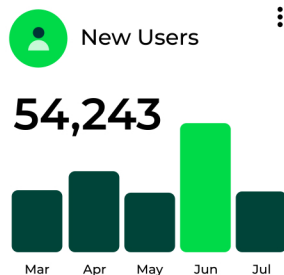


ERP AI Automation in the Age of Decision Intelligence

Accelerating insights and optimizing decision making across supply chain, sales, and finance

60%

Decrease in
report creation costs



- Infrastructure Manage...
- Compute Farm
- Data Lake
- Data Cache
- Notebook Configuration
- ML Ops
- Dataload Monitoring
- Data Loading Status
- Flow Run Status

Whitepaper



Rising Revenues: A Tale of Airwave 2, CBBC Warehousing

The 'Airwave 2 Monthly Rental Fee' has the highest total cost. The average leads in sales and ordered quantity, while 'Schock North America' tops in revenue trend compared to the previous year.

01/20/2025 11:36 pm
The product category with the highest total cost is 'Airwave 2 Monthly Rental Fee'.

01/20/2025 11:36 pm
The average SO cycle days for all customers is 1.0.

Revenue by Month

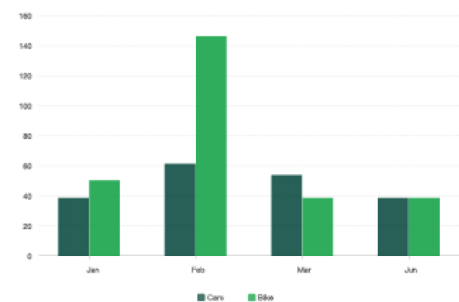




Table of Contents

1. Introduction	02
2. How ERP Systems Operate Today	02
3. Why ERP Alone Isn't Enough	02
4. The Role of AI in Modern ERP	03
5. How AI Can Automate ERP Workflows	04
6. ERP Then and Now: The AI Advantage	06
7. Bringing Intelligence to ERP: Real-World AI Use Cases	06
8. ConverSight's QuickStart AI Solutions	07
9. Benefits of Using QuickStart AI Solution	08
10. Conclusion	09

I. Introduction

ERP systems like NetSuite, Acumatica, Odoo, Dynamics, and Sage are essential to mid-market organizations, acting as the central hub for business operations. While they effectively manage transactions and workflows, many users struggle to derive timely, actionable insights from the data they contain. Reporting delays, fragmented dashboards, and heavy IT dependency often leave decision-makers without the clarity they need. This whitepaper explores the analytics limitations of ERP systems and introduces a better path forward: ready-to-go templates powered by AI, designed specifically to turn ERP data into immediate business value.

2. How ERP Systems Operate Today

Modern ERP platforms are designed to centralize and streamline key business functions across departments such as finance, sales, inventory, procurement, and human resources. They serve as the system of record for transactional data and ensure that daily operations run smoothly with well-defined workflows and compliance tracking.

However, these systems are primarily focused on process execution and data entry — not on making that data easily accessible for strategic analysis. Most ERP platforms are built with back-end data structures optimized for storage and control, not for real-time insight delivery.

- 🌱 **Process-First Design:** ERP systems are engineered to support operational tasks like order processing, invoicing, or inventory updates, but lack built-in tools for deep analysis or forecasting.
- 🌱 **Rigid Data Access:** Information is often stored across multiple tables and modules, requiring users to understand the database schema and write complex SQL queries or use rigid reporting templates.
- 🌱 **Limited Cross-Functional Visibility:** Because ERP modules are siloed, generating holistic views across finance, sales, and operations typically requires data extraction and consolidation in external tools.

3. Why ERP Alone Isn't Enough

ERP systems play a vital role in centralizing business operations, but users often face challenges when it comes to accessing insights, driving efficiency, and enabling agile decision-making. These struggles can limit the overall impact of ERP investments and create friction in day-to-day workflows. The following section outlines the key areas where ERP systems often fall short:

1. High Implementation Cost

One of the most common challenges of ERP, especially for finance and IT teams, is the high upfront investment. ERP implementation requires significant spending on software licenses, hardware (for on-premise solutions), infrastructure upgrades, and consulting services. Additionally, costs can escalate during implementation if unexpected requirements arise, such as complex integrations with existing systems.

2. Heavy IT Dependency for Reporting and Insights

Although ERP systems store vast amounts of business data, generating reports or extracting insights often requires technical skills or direct support from IT teams. For example, finance teams may need IT assistance to generate detailed financial reports or build custom dashboards. Similarly, supply chain managers or operations teams often rely on IT to access real-time inventory or procurement data. This dependency not only delays decision-making but also strains internal IT resources.

3. Limited Flexibility for Evolving Business Needs

Businesses rarely stay static. They expand into new markets, launch new product lines, or restructure operations. Unfortunately, many ERP systems are rigid and struggle to adapt to such changes. Configuring new workflows for an expanded warehouse, adding unique sales commission structures, or integrating with third-party e-commerce platforms can be complex, time-consuming, and costly. This lack of flexibility can force businesses to use workarounds that undermine ERP's effectiveness.

4. Manual Reporting Workarounds in Day-to-Day Operations

Despite the centralized data structure of ERP systems, employees in departments like sales, procurement, and finance often resort to exporting data into spreadsheets for ad-hoc analysis. For example, a sales manager may pull customer data from the ERP but manipulate it in Excel to track performance, while the procurement team may create separate reports to monitor supplier orders. These manual workarounds not only waste time but introduce errors and result in fragmented, inconsistent reporting.

5. Data Migration Challenges During Implementation

Transitioning from legacy systems to a new ERP platform is rarely seamless. Departments like finance, inventory, and HR rely on large, historical datasets that must be accurately migrated. However, inconsistent data formats, incomplete records and integration complexities often result in data errors or losses. This can disrupt operations and erode trust in the system during and after deployment, particularly for finance and compliance teams who rely on precise data for audits and reporting.

4. The Role of AI in Modern ERP

Artificial Intelligence (AI) refers to technologies that enable machines to mimic human intelligence — including learning from data, identifying patterns, making predictions, and recommending actions.

In ERP (Enterprise Resource Planning) systems, AI plays a crucial role in transforming raw transactional data into proactive business intelligence. While ERP platforms are traditionally designed to store, track, and manage operational processes, they are not inherently built for insight generation. This is where AI steps in — bridging the gap between data and decision-making.

Key Capabilities of AI in ERP Environments:

- 🌱 **Learning from Data:** AI systems can ingest historical and real-time ERP data to recognize patterns and trends.
- 🌱 **Automation of Repetitive Tasks:** AI reduces manual effort by automating reporting, forecasting, and alerts.
- 🌱 **Context-Aware Intelligence:** AI understands business context, enabling smarter recommendations aligned with operational goals.
- 🌱 **Human-Like Interaction:** AI can communicate in natural language, allowing users to ask questions and get answers without technical barriers.

5. How AI Can Automate ERP Workflows

Artificial Intelligence (AI) is reshaping how businesses interact with ERP systems by going beyond traditional reporting. It automates routine data processing, enhances decision-making with predictive capabilities, and delivers insights in real-time — all while reducing the dependency on technical teams.

Where ERP systems have traditionally stored and processed transactional data, AI brings the next level of automation, intelligence, and user accessibility. Here's how AI is transforming ERP environments:

1. Automated Data Interpretation

Manual analysis of ERP data can be time-consuming and error-prone. AI can instantly scan massive volumes of ERP data, interpret patterns, and highlight relevant insights without requiring technical queries or report building. By streamlining data comprehension, AI empowers users to understand their operational and financial health without waiting on reports.

- 🌱 Detects anomalies like sudden cost fluctuations or delayed vendor shipments
- 🌱 Identifies performance trends across departments or time periods
- 🌱 Flags data quality issues automatically, reducing manual cleanup

2. Predictive Insights

Instead of only reviewing historical performance, AI-powered models forecast what's likely to happen next enabling more proactive decision-making.

- 🌱 **Demand Forecasting:** Predict future product or part demand based on trends, seasonality, and order history
- 🌱 **Sales Forecasting:** Forecast revenue across products, regions, and sales reps to support pipeline planning

3. Smart Recommendations

AI doesn't just deliver insight, it also suggests next steps, helping users take action faster with less guesswork.

Examples include:

- 🌱 **Inventory:** Reorder recommendations based on usage rates, vendor lead times, and current stock levels
- 🌱 **Procurement:** Vendor prioritization based on reliability, delivery times, and past performance
- 🌱 **Finance:** Flagging high-risk customers or delayed invoices for early intervention

By integrating business logic into its models, AI supports smarter day-to-day decisions directly within ERP workflows.

4. Natural Language Querying

Traditional ERP systems often require knowledge of report builders or SQL to access data. AI-driven interfaces eliminate this barrier by allowing users to ask questions in plain English.

For Example:

- 🌱 "Which products are low on stock in the main warehouse?"
- 🌱 "What was our total revenue last quarter?"
- 🌱 "Show me the top 10 vendors by purchase amount."

The results are returned with rich visualizations and context-aware follow-ups, empowering business users to explore data without technical help.

5. Automated Alerts & Triggers

AI can continuously monitor ERP data in real time and trigger alerts when conditions are met. These smart notifications ensure that key changes don't go unnoticed.

- 🌱 **Finance:** Alert when working capital dips below threshold
- 🌱 **Sales:** Notify when a product line underperforms vs. forecast
- 🌱 **Supply Chain:** Warn if a vendor's delivery time exceeds SLA

This continuous intelligence layer allows businesses to respond faster, reduce operational surprises, and maintain tighter control over key KPIs.

6. ERP Then and Now: The AI Advantage

Aspects	Before AI in ERP	After AI in ERP
Decision Making	Reactive, based on historical data only	Proactive, with predictive recommendations
Forecasting	Limited or manual forecasting	AI-powered, automated demand and sales forecasts
Task Automation	Manual data entry and approval processes	Automated workflows and alerts
Anamoly Detection	Issues often discovered too late	AI flags anomalies and risks in real-time
User Adaption	Low, due to complex interfaces	High, thanks to intuitive AI-driven experience
Overall Efficiency	Time - c o n s u m i n g , error-prone processes	Faster, smarter, more accurate operations

7. Bringing Intelligence to ERP: Real-World AI Use Cases

1. Inventory Reordering Automation (Supply Chain)

One of the most impactful AI applications in ERP is automating inventory reordering. Traditionally, supply chain planners must monitor stock levels, track supplier lead times, and manually trigger purchase orders when inventory runs low. AI eliminates this manual effort by continuously analyzing real-time inventory data, historical consumption rates, and supplier performance. When stock for a specific item nears its reorder threshold, the AI engine automatically recommends or initiates a purchase order — optimizing for both quantity and supplier selection. This not only ensures inventory is replenished just in time but also reduces the chances of overstocking or stockouts, while improving procurement efficiency and customer service levels.

2. Sales Forecasting with External Signals

AI dramatically enhances forecasting capabilities by analyzing historical ERP data alongside external variables such as seasonal trends, economic indicators, weather data, and promotional campaigns. Unlike traditional static forecasting models that rely solely on past performance, AI models continuously learn from evolving data patterns. For sales teams, this means being able to anticipate demand more accurately and adapt quickly to market changes. AI-generated forecasts empower sales leaders to optimize production planning, allocate resources efficiently, and improve customer satisfaction by ensuring the right products are available at the right time — all while reducing excess inventory and lost sales opportunities.

3. Purchase Order Optimization (Procurement)

AI enhances procurement by identifying inefficiencies and opportunities in the purchase process. It examines historical purchase patterns, supplier performance data, material usage trends, and pricing history to suggest improvements. For example, AI can recommend consolidating multiple smaller orders into one bulk purchase to benefit from volume discounts, or it may highlight alternate vendors with better lead times or lower defect rates. These insights allow procurement teams to negotiate better contracts, reduce material costs, and improve supplier reliability. AI transforms procurement from a transactional function into a strategic lever for cost control and supplier collaboration.

4. Real-Time Alerts and Exceptions Monitoring

AI excels at scanning large volumes of ERP data to detect outliers and anomalies and doing so in real time. Whether it's a sudden drop in gross margin, an unusual delay in supplier delivery, or a spike in operational costs, AI can flag these events instantly and alert the relevant teams. These alerts can be based on predefined thresholds or learned behaviors from historical data. Instead of discovering problems after the fact, business users are empowered to take immediate action and avoid potential disruptions. This kind of real-time visibility transforms decision-making from reactive to proactive, allowing for quicker responses and stronger operational control.

8. ConverSight's QuickStart AI Solutions

ConverSight offers a powerful suite of QuickStart AI Solutions—a collection of ready-to-go templates and AI-powered dashboards purpose-built for ERP users across finance, sales, and supply chain domains. These solutions are specifically designed to overcome the common challenges of ERP analytics, such as slow deployment, IT dependency, and lack of cross-functional visibility.

Each QuickStart AI Solution is pre-configured to integrate seamlessly with leading ERP systems like NetSuite, Acumatica, Odoo, Dynamics, and Sage, enabling rapid setup and immediate usability. With minimal configuration and no need for custom development, organizations can begin extracting valuable insights from their ERP data within days—not months.

Below are the key QuickStart AI Solution categories ConverSight offers:

Supply Chain Visibility: Gain a real-time, end-to-end view of your inventory across warehouses, fulfillment status, and inbound/outbound shipments. This template highlights supply chain risks such as excess stock, shipment delays, and low-turnover items, empowering operations teams to respond quickly and optimize efficiency. It brings clarity to supply flow bottlenecks, enhances demand-supply balance, and reduces manual tracking.

Supply Planner: Designed for procurement and inventory management teams, this solution uses AI to generate dynamic procurement recommendations based on inventory levels, reorder points, vendor lead times, and consumption trends. By automating purchasing decisions, it helps maintain optimal stock levels, minimize carrying costs, and improve supplier performance, all while reducing reliance on spreadsheets or reactive planning.

Demand Planner: Using historical ERP data, seasonality patterns, and external variables, the Demand Planner template forecasts future demand with high accuracy. This allows supply and sales teams to anticipate stock needs, align production schedules, and prevent overstocking or stockouts. The AI models adjust continuously as new data comes in, delivering updated forecasts that reflect real-time shifts in customer behavior or market trends.

Sales Analytics: QuickStart AI Sales dashboards provide real-time visibility into sales performance. Business users can easily identify top-performing regions, products, or reps, as well as spot underperforming areas that need attention. These insights support better territory management, forecasting, and go-to-market strategies.

Finance Analytics: Finance teams benefit from dashboards that deliver visibility into working capital, cash flow, profitability, accounts receivable/payable, and cost breakdowns. With QuickStart AI Solution templates, CFOs and finance managers can monitor performance metrics in real-time, detect financial risks early, and drive more informed budgeting, forecasting, and capital allocation decisions—all without waiting on manual reporting cycles.

9. Benefits of Using QuickStart AI Solution

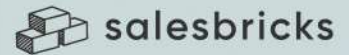
The benefits of using QuickStart AI Solution in comparison to traditional ERP reporting are outlined as follows:

- 🌱 **Faster Time to Insights:** QuickStart AI reduces the time required to access meaningful insights from months to just weeks or even days.
- 🌱 **Greater Business User Independence:** Business teams can access data and insights directly, reducing their reliance on IT and promoting self-service analytics.
- 🌱 **Improved Data Accuracy:** QuickStart AI ensures consistent, standardized dashboards and KPIs across departments, eliminating discrepancies.
- 🌱 **Faster, Proactive Decision-Making:** Real-time insights and AI-driven recommendations enable proactive, data-backed decisions instead of reactive guesswork.
- 🌱 **Lower Cost of Ownership:** The solution eliminates the need for costly, custom-built reporting environments, offering a pre-built, scalable, and maintainable analytics layer.

10. Conclusion

ERP systems are essential for managing complex business operations, streamlining processes, and enabling collaboration across departments. But traditional ERP alone is no longer enough in today's fast-paced, data-driven world. By integrating AI, businesses can unlock the full potential of their ERP, making systems more accessible, intelligent, and predictive. ConverSight's QuickStart AI provides a simple, scalable way to achieve this transformation—empowering business users to make faster, smarter decisions. Together, ERP and AI form a powerful combination that prepares organizations for growth, resilience, and long-term success.

Join our customers who have accelerated growth with ConverSight



About ConverSight

ConverSight is the category creator in Unified Decision Intelligence. Bringing together generative AI and advanced analytics without the traditional complexity of data science in one unified platform, so businesses can make better decisions. ConverSight's unified decision intelligence platform provides AI-powered instant custom reporting, demand forecasting, and inventory optimization using seamlessly integrated data from Acumatica and other business tools. ConverSight is an Acumatica partner, working closely with Acumatica Value Added Resellers (VARs), like at Net at Work, DSD, and Practical Software. ConverSight was named a Gartner Cool Vendor, Supply & Demand Chain Executive (SDCE) Top Software and Technology Solution 2024, and winner of the 2024 AI Breakthrough Award. Connect with ConverSight on LinkedIn, Instagram, Facebook, Youtube, tune in to the Data Insights Podcast, or visit www.conversight.ai to learn more.

