

AI Anomaly Detection

Catch errors before they become decisions

Anomaly Detection uses unsupervised machine learning to automatically identify unusual patterns in your business data, helping sales, purchasing, supply chain, and finance teams catch errors and exceptions before they drive costly decisions.

Vendor	Vendor Name	Subcontract Qty	Subcontract Total	Expected Value (Subcontract Total)	Anomaly Severity	Comment
AMERDOOR	American Door & Glass	2.00	104,983.75	84,028.50	Normal	
BCPHCO	BC Phillips Company	8.00	271,356.00	122,489.19	Normal	
BECKERROOF	Becker Roofing	2.00	60,623.00	94,061.76	Normal	
BOYMANBUR	Boyman Surveying	1.00	2,800.00	79,430.00	Normal	
BOYMANBUR	Boyman Surveying	8.00	3,200.00	81,520.25	Normal	
CBSTEWORK	CB Sitework, Inc.	16.00	63,200.00	82,774.40	Normal	
CBSTEWORK	CB Sitework, Inc.	3.00	170,000.00	433,518.66	Normal	
CLEANING	Cleaning Services Group	8.00	6,400.00	88,209.06	Normal	
CORNERCONC	Cornerstone Concrete	3.00	5,290,000.00	79,848.05	Significant	Material delivered early
DETAILCARP	Detail Carpentry	2.00	93,200.00	84,954.65	Normal	
DETAILCARP	Detail Carpentry	24.00	268,066.00	108,111.58	Normal	
EASTWESTLA	East West Landscaping	1.00	10,500.00	135,030.70	Normal	
ELITEDRYWA	Elite Drywall	2.00	1,590,500.00	156,351.27	Medium	

Anomaly results ranked by severity and confidence.

Protect your operations with smart error spotting

Acumatica AI Anomaly Detection applies unsupervised machine learning to your ERP data, helping sales, purchasing, supply chain, and finance teams catch data errors, process exceptions, and pricing irregularities early, before they disrupt operations or affect results.

Smarter than rule-based reporting. Instead of relying on preset thresholds or manual rules, it learns normal patterns by vendor, item, customer, or other segments, then flags values outside the baseline. Each group is evaluated independently, so teams get more relevant insights.

Clear, actionable priorities. Findings are classified as Normal, Medium, or Significant, helping teams focus on the exceptions that matter most. Leaders can manage by exception while the system monitors the details.

Built into daily workflows. Results appear in familiar dashboards, while business event alerts notify the right people when issues need attention. Detection runs automatically on your schedule, supporting faster response with less manual review.

Fast setup. Pre-built generic inquiry templates help teams get started quickly across sales margins, purchase order costs, AP document costs, production variance, labor variance, material variance, and employee efficiency.

Flexible access. Available with Select, Prime, and Enterprise licenses. Works with numeric data surfaced through the Acumatica generic inquiry framework, giving teams broad flexibility to monitor the metrics that matter. With MCP servers, those same inquiries can be made available, read-only, to AI tools such as Claude or ChatGPT, within each user's existing access rights.

Key business benefits

Catch data entry errors and pricing exceptions before they drive costly business decisions.

Prioritize investigation with severity rankings so your team focuses on critical anomalies first.

Eliminate manual monitoring of data points across vendors, items, and customers.

Stay informed automatically with scheduled detection and email alerts delivered to the right people.

Get started fast with pre-built inquiries covering the most common sales, purchasing, and production use cases.

Related resources

Prepare for AI-Driven Growth Solution Brief

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AI Readiness Checklist for SMBs

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Acumatica's AI-First Product Strategy

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“Acumatica really allows me to have a very high-level view, and it’s very intuitive if I want to try to dig into some of the granular details...Now I can monitor 95% of what I need to on a daily basis and not put any burden on anyone else.”

– Seth McArdle, President, Hedstrom Fitness

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Key features

How AI Anomaly Detection finds, ranks, and delivers the exceptions that need attention.

Unsupervised ML detection engine

Uses a cloud-based machine learning algorithm to identify outliers in numeric data without preset rules or thresholds. The system learns what “normal” looks like within each data group and flags deviations automatically.

Three-level severity classification

Classifies each result as Normal, Medium, or Significant based on how far the value deviates from the group's established baseline. This ranking directs your team to the highest-risk anomalies first, with Medium results reviewed as capacity allows.

Confidence level indicators

Each result includes a confidence rating that reflects how reliable the detection is based on data volume and grouping consistency. A Low confidence rating signals that the data distribution or grouping configuration may need review before acting on results.

Flexible grouping configuration

Segment detection using field combinations — vendor, item, customer, order type, and more — so each group is evaluated independently against its own baseline. Proper grouping significantly improves accuracy and reduces false positives.

Pre-built generic inquiry templates

Ships with ready-to-use templates for Sales Order Margin Analysis, Costs in Purchase Orders, Costs in AP Documents, Production Total Variance, Production Labor Variance, Production Material Variance, and Production Employee Efficiency, reducing setup time and delivering value out of the box.

Scheduled automated detection

Configure detection to run automatically on a daily, weekly, or monthly schedule using Acumatica's Automation Schedules. Set it once, and the system monitors continuously, with On-Demand mode available for initial configuration and ad hoc runs.

Reviewer workflow

Includes a built-in review interface where team members mark findings as reviewed and add comments, automatically removing them from active queues. This ensures no anomaly is reviewed twice and keeps the team focused on new findings.

Exception-based monitoring

Monitors operations continuously, identifies unusual patterns, and surfaces issues through dashboard widgets and push notifications. Leaders stay focused on running the business while the system alerts them when specific issues require their attention.

Dashboard and KPI widget integration

Surface anomaly counts as KPI widgets on any Acumatica dashboard, linked directly into filtered views of active findings. Role-appropriate widgets give managers at-a-glance visibility without requiring them to navigate directly to the inquiry.

Proactive business event alerts

Configure Business Events to trigger email notifications summarizing new anomalies as soon as they are detected. Alert emails include anomaly severity, reference number, vendor, status, actual value, and expected value, giving recipients full context before opening the application.

Faster results with GI optimization

Complex generic inquiries can store their results in the data warehouse and refresh on a schedule you control, so the dashboards and widgets built on them load in about a second instead of waiting on live queries.

ABOUT ACUMATICA

Acumatica Cloud ERP is a comprehensive business management solution that was born in the cloud and built for more connected, collaborative ways of working. Designed explicitly to enable small and mid-market companies to thrive in today's digital economy, Acumatica's flexible solution, customer-friendly business practices, and industry-specific functionality help growing businesses adapt to fast-moving markets and take control of their future.

For more information on Acumatica, visit www.acumatica.com or follow us on [LinkedIn](#).