



# **An IT leader's guide to modernizing the finance tech stack with AI**

Automate compliance, predict risks, and gain strategic advantage with intelligent finance operations

# It's time to modernize your finance tech stack

Today, financial organizations are facing pressure from all sides. Regulations are becoming more complex, and cyber threats are constantly evolving. There is a constant demand to move faster and more efficiently. But legacy finance systems, designed for a slower and more stable environment, are unable to keep up with today's technological pace. This leaves organizations vulnerable to compliance gaps, security risks, and operational inefficiencies that affect overall performance.

This guide is for CIOs and IT leaders looking to modernize finance technology stacks. By integrating AI into key finance workflows, organizations can effectively oversee compliance, gain real-time visibility, and detect fraud early on. This modernization shifts finance into a function that adds a strategic advantage across the business.

Organizations that delay the adoption of AI are putting themselves behind competitors who are already using AI. Delaying creates a performance gap that becomes expensive and difficult to close. On the other hand, organizations that move swiftly will witness significant improvements in compliance, security, and operational performance.

## A growing list of changing regulations

**SOC 2:** System and Organization Controls 2 (SOC2) certifies that systems are safe and secure when handling sensitive data.

**GDPR and CCPA:** General Data Protection Regulation (GDPR) and the California Consumer Privacy Act (CCPA) focus on data privacy and protection in financial transactions.

**PII:** AI systems have to detect and protect Personally Identifiable Information (PII) across finance workflows.

**PCI DSS:** The Payment Card Industry Data Security Standard (PCI DSS) enforces secure handling of payment information across systems.

**ISO 27001:** This global benchmark outlines best practices for managing information security.

**Industry-specific regulations:** These regulations add another layer of complexity from sector-specific requirements, such as healthcare, financial services, and government entity checks.



## Measuring success

Successful AI implementation requires clear metrics and ongoing measurement. Here are the top three areas of measurement that you should consider:

### Operational metrics

To understand the impact of AI in finance, it's important to measure how it improves key operations. Establish a baseline by tracking process efficiency, such as processing time, error rates, and the manual effort required for tasks like invoice approvals or expense audits. Then, look at changes over time. Look at cost reduction by measuring decreases in labor costs, time spent fixing errors, and the cost of meeting compliance requirements. Finally, monitor accuracy improvements in data entry, financial reporting, and decision-making areas where even small gains significantly affect outcomes.

### Risk and compliance metrics

The impact of AI on risk should begin with fraud detection, tracking the accuracy and timeliness of suspicious transactions. For compliance, monitor internal audits, regulatory exam outcomes, and compliance scores to assess how well the organization meets standards. Assess overall risk reduction by measuring decreases in operational disruptions, financial losses, and reputational damage. These metrics demonstrate whether AI is helping to build a safer, more resilient finance function.

### Strategic value metrics

To fully leverage the strategic value of AI in finance, it is important to assess how it enhances decision-making speed and quality. Quicker access to precise data helps teams make strategic decisions confidently. Evaluate stakeholder satisfaction by collecting feedback from internal teams, executives, and business partners regarding the usefulness and clarity of financial information. Determine whether the financial capabilities are advancing your market position. This requires faster reporting cycles and deeper insights that distinguish your organization from competitors.

AI turns finance functions into intelligent processors, enforcing policies, detecting fraud, and preventing errors before money goes out the door.

## Where legacy finance systems fall short

Traditional financial technology systems were designed for a different era, with simpler regulatory requirements, less sophisticated threats, and more tolerant stakeholders.

Here's where they break down:

### Manual audit processes.

Most systems rely on sample-based auditing that examines only a portion of transactions. This creates several challenges.

**Coverage gaps:** Most transactions are not reviewed, increasing the likelihood that fraud and errors will be missed

**Delayed detection:** Issues are discovered weeks or months after the damage has been done

**Intensive resource use:** Manual audits take time away from more valuable tasks

**Inconsistent controls:** Controls vary by reviewer, leading to mistakes and confusion

### Slow reporting cycles.

Legacy tools were made for batch processing and can't produce timely insights.

**Lagging indicators:** Human effort is required to extract, clean, and format data for reporting, leading to delays and potential errors

**Manual effort:** Teams dedicate time to compiling data rather than focusing on analysis and generating insights, which hinders the speed of approval review processes

**Bottlenecks:** Historical reporting is prioritized over predictive analytics that could influence future decisions

### Siloed data architecture.

Traditional finance systems operate in isolation, preventing comprehensive risk assessment.

**Fragmented visibility:** Financial data is scattered across ERP, AP, expense, and procurement systems, leading to unnoticed risks

**Limited correlation:** Difficulty in finding anomalies across systems

**Delayed insights:** Slow decision-making due to manual data pulling

**Compliance challenges:** Difficulty producing audit trails across systems

### Lack of real-time controls.

Traditional systems implement controls after transactions occur, which causes issues.

**Post-transaction detection:** Errors and fraud are caught late, making prevention impossible and correction more difficult

**Exception handling delays:** Analyzing exceptions manually can cause significant delays

**Manual intervention:** Manual intervention doesn't scale effectively as transaction volumes increase

**Limited fraud detection:** Traditional, rule-based systems only identify known fraud patterns and are unable to adapt to new or emerging ones

# The AI advantage in finance

Artificial intelligence addresses the limitations of legacy systems by providing capabilities that were previously impractical.

## Real-time, full-spectrum analysis

AI systems can analyze 100% of transactions in real time, identifying patterns and anomalies that might otherwise be overlooked. They provide comprehensive transaction coverage by evaluating each item against multiple criteria simultaneously. These systems use AI models to detect anomalies and recognize patterns across extensive datasets. They also continuously learn from new data and feedback, improving their accuracy with time. This allows finance teams a precise view of risk and performance, expanding and deepening oversight.

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## Predictive capabilities

AI surfaces emerging threats before they escalate, enabling proactive action. It can flag suspicious transactions before they are processed and approved, reducing the chance of fraud. By spotting trends that signal cash flow issues or compliance risks in real time, AI allows teams to act quickly and avoid violations. AI can monitor supplier behavior and risk indicators as they appear, as well, to help prevent supply chain disturbances before they start.

## Automated decision-making

AI enables automated decision-making, which reduces manual work and improves accuracy across finance workflows. It can automatically route transactions to the appropriate approvers based on factors like risk, amount, and company policy. And also handles routine tasks like generating audit trails and documentation, saving time while ensuring records are complete. By enforcing policies automatically, AI ensures consistent compliance across all transactions and frees teams to focus on strategic analysis.

**“ With AppZen’s AI, we can see and focus on the most frequent, high-risk reasons and drive behavioral or policy changes. We have insight into risky expense types and can better understand the scope, size, and type of risk.”**

Dominika Murzynowska  
Global Indirect Purchasing Manager, Electrolux

## Risk management and governance

Implementing AI in finance requires robust governance frameworks to manage associated risks. Below are three key aspects you need to consider for any new finance system in place for a successful transition to AI automation.

### Data governance

Data governance is essential for finance AI systems to be effective. This includes maintaining high data quality by ensuring the accuracy, completeness, and timeliness of your AI system's information. It requires comprehensive data privacy and security measures to protect sensitive financial information. And end-to-end audit trails must also be in place to track where data comes from, how it's processed, and how it's used, supporting transparency and compliance.

### AI model governance

AI models must be trustworthy and reliable. This means establishing clear and relevant algorithms, regularly checking for bias, and addressing patterns that may result in inconsistent outcomes. Ongoing performance monitoring is important to keep models accurate, effective, and adaptable to current conditions.

### Compliance and risk management

AI in finance requires a strong emphasis on compliance and risk management. All AI implementations must follow regulations and industry standards to prevent legal and operational issues. Before deployment, each system should undergo a comprehensive risk assessment for operational, financial, and reputation impacts. Clear escalation protocols for handling system failures or security incidents are crucial for resolving problems efficiently.

Unlike legacy systems, AI operates continuously and proactively, immediately flagging issues as they appear, not weeks later.



## Modern finance starts with bold leadership

The modernization of finance systems with AI is no longer an option. Organizations that wait for this transformation face risks from regulatory compliance failures, fraud schemes, and competitive disadvantages from slower, less accurate financial processes.

Companies that integrate AI with their finance systems will have a strategic advantage over those who don't. These companies will benefit from automated compliance monitoring, predictive fraud detection, real-time financial insights, and more efficient operations that free finance teams to focus on more valuable tasks.

The next steps are to evaluate current systems, scale successful implementations, and regularly evolve capabilities to stay ahead of changing requirements and emerging threats. The organizations dedicated to this transformation will develop efficient and competitive finance operations.

For CIOs, this is a chance to lead a transformation into a strategic driver of value. AppZen supports this shift by enabling finance teams to automate intelligently, detect risk early, and gain insight faster.

Integrating AI into finance workflows allows CIOs to create an independent solution that executes tasks accurately and learns from data, improving over time.

**“Our company is very, very reliant on government compliance, and it was very important for us to have a system of checks and balances that would allow us to find these things.”**

Caitlin Leatherman  
Accounts Payable Supervisor





AppZen is the leader in autonomous spend and compliance management, revolutionizing enterprise finance operations with its proprietary AI platform. Built specifically for finance, AppZen's solutions accurately automate expense audits, card audits, and invoice processing. They integrate seamlessly into your existing processes and learn from your workflows to drive operational efficiencies, improve compliance, and help your business grow. Empower your AP, T&E, and Card teams to transform your business with AI. Learn why the world's largest companies trust AppZen's AI platform to automate their finance operations. Visit [www.appzen.com](https://www.appzen.com) today.