



# Five Must Haves for AI-powered Spend Auditing

A large, yellow circular graphic containing the number '5' in a bold, black, sans-serif font. The circle has a thin black outline and is set against a background of light gray diagonal stripes.

5



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## The state of spend auditing

In the last decade, modern finance teams have implemented spend automation. For your organization, this may have led to investments in enterprise resource planning, source-to-pay, expense management systems, and analytics or BI, as well as projects to consolidate supplier information and contracts, outsourcing or shared services consolidation, and efforts to understand and mitigate supplier risk. Today, you take a lean-forward approach toward using proven practices, best-in-class implementation frameworks, and process metrics to ensure continuous improvement. Indeed, you've made massive strides.

Despite these achievements toward modernization of your business spend process, you continue to face three challenges when it comes to your business spend: **spend leakage, non-compliance, and inefficient processes.**

### Spend leakage

Managing your organization's growing spend is not easy, especially if it's growing faster than your team can review and process payments.



In accounts payable, your team may have a buttoned-down process involving a three-way match to validate invoices against purchase orders and receipts, coupled with business user approvals, to ensure invoice accuracy prior to payment. Even with this approach, up to 30 percent of invoices fail the first match and you'll still have spend leakage from duplicate spend, manual errors, fraudulent invoices or suppliers, inflated or incorrect pricing, and missing discounts. There's also the potential for duplicate "crossover" spend with secondary invoice systems or T&E systems, where users are reimbursed for out-of-pocket, corporate card, and P-Card purchases.

On the expense side, you may have an automated process with built-in approval workflows, policy checks, and an in-house or outsourced audit team that reviews expense samples for erroneous or risky purchases. But how do you know they're finding the keying errors, duplicate receipts, mis-reported merchants, over-the-limit meals, and regulatory violations that show up in every company's expenses? Research varies, but sources agree that about 2-3 percent of all travel and entertainment expenses contain errors, waste, or fraud.

Despite their best efforts to maintain a tight spend management process, finance teams struggle to address spend leakage. They know that the controls and legwork required to verify payables or expenses against contracts, invoices, packing slips, and receipts, not to mention work deliverables, service levels, or hours worked (in the case of technical or professional services), are simply too much for any finance team to do at scale. So they make the hard tradeoff to review a small sample of their paid invoices and expenses, typically after payment, and do their best to claw back errors, waste, and fraud.

<sup>1</sup>Is Your AP Performance Top Tier?, Institute of Finance & Management, Fall 2017



### Non-compliance

Making sure your business spend complies with your corporate policies and regulations is no small feat.

Getting employees to comply with corporate expense policy is also an endless source of frustration for finance teams. Most people never even read the policy, much less follow it. That's why it's important to know when employees are making unauthorized purchases like cigarettes, spa services, or flight upgrades; frequenting unauthorized merchants like casinos or strip clubs; or consistently exceeding restaurant or hotel limits or per diems, as those expenses can signal bigger problems.

And what about regulatory compliance? In 2021, the US Department of Justice and the US Securities and Exchange Commission filed sanctions against companies totaling nearly \$360 million for violating the Foreign Corrupt Practices Act. If you're auditing only a fraction of your spend, how do you keep your company out of hot water and off of the front page of the newspaper? Beyond anti-bribery and corruption, organizations find spend violations in expenses and invoices in the areas of export controls; debarments; anti-money laundering; sanctions; and healthcare spend transparency.

### Inefficient processes

Review all spend or move quickly? This is one of the most difficult trade-offs finance leaders have to make. Where do you draw the line? If you're in a regulated or conservative organization, you don't have a choice, so you move slowly and deliberately, allocate the proper resources, create approval workflows, and implement standard operating procedures for consistency. The result is you're less agile, your process is costly, and you may not pay people and suppliers on time.

If you're in a less rigid industry, perhaps you can move faster, but the downside of moving quickly is that you miss finding risky transactions. While that may seem like the cost of doing business, some errors and policy violations can be detrimental to your business. Many organizations make the ugly tradeoff of conducting sample-based spend reviews by looking at only a fraction of their invoices, corporate card and P-Card purchases, and cash spend, usually post-payment, nearly always inconsistently, and always at significant cost.

<sup>2</sup> Stanford Law School Foreign Corrupt Practices Act Clearinghouse (<http://fcpa.stanford.edu/>)



## Modern finance teams and their use of AI

What defines a modern finance team? From bankrolling blockbuster ideas to steering the company out of trouble, modern finance teams serve as the engine that powers organizations to greatness. They know they're on the hook to do right by shareholders, make smart resource decisions, and hold the rest of the organization accountable to its financial goals.

Beyond helping the organization invest in innovation projects to further its goals, modern finance teams carefully select, sequence, and execute transformation initiatives for the back office in order to save costs, streamline operations, and accommodate the changing needs of the business. Leaning forward into these projects and executing well enables finance leaders to lead by example and pave the way.

Modern finance teams have judiciously embraced new technologies. Artificial intelligence shows great promise for solving both repetitive tasks and highly complex problems. Given what's at stake for enterprises, and given finance departments' complex and highly-manual processes, enterprise finance is rich with opportunities for AI. Indeed, a variety of AI projects have flourished as a result, including robotic process automation for repetitive tasks and a handful of purpose-built AI solutions for collections, analytics, general ledger activities, and payables.

## Use cases for AI in spend auditing

One AI solution that enterprise finance teams are adopting is spend control and compliance through AI-powered spend auditing. Organizations are using AI to review both employee expenses and accounts payable as part of their existing workflows, prior to payment. In many instances, they're integrating AI directly into their spend automation systems and using it to automate the risk analysis of every spend transaction. This allows them to approve spend transactions automatically or provide finance decision-makers with the risk details necessary to make an accurate, consistent decision about whether to allow the payment to proceed or reject it.

Enterprises that use AI to audit spend typically do so to reduce spend, comply with policy, and streamline processes.

### Reduce spend

Enterprises that use AI to audit spend see dramatic savings from identifying and rejecting errors, waste, and fraud *prior to payment*. Because AI assesses risk in real time and can automatically approve low-risk spend, reviewers can focus their attention on all of the high-risk transactions that AI has flagged. Because AI not only highlights transactions' risk, but also provides underlying details and evidence, reviewers can make well-informed, consistent decisions about whether to pay invoices or reimburse employees.



#### Sample use cases:

- Find duplicate transactions in P-Cards, credit cards, expenses, and invoices
- Identify duplicate “crossover” spend between two or more systems, including AP and T&E
- Catch purchase amounts that do not match their associated receipts or invoices
- Uncover incorrect pricing on supplier invoices, even when invoices match POs
- Classify spend correctly across the organization to find savings opportunities
- Discover inflated prices and overcharges on invoices based on comparable online prices
- Detect employee overspending
- Flag fraudulent invoices or suppliers

#### Comply with policy

AI-based spend auditing helps organizations comply with both: company policies and regulations. AI models can serve as a proxy for company policies as well as perform fast lookups against online sources, suspicious merchant lists, MCC codes, and regulatory databases. This all happens in real time so reviewers can ensure compliance before they pay the invoice or reimburse employees.

#### Sample use cases:

- Flag invoices with suspicious charges or dual-use merchants, such as adult entertainment establishments posing as legitimate businesses
- Improve your days payable outstanding by ensuring compliance against corporate policies
- Be alerted to excessive meal charges based on average restaurant check sizes, using current social data for specific restaurants
- Identify non-compliant employee purchases or merchants like spa services and strip clubs
- Flag regulatory violations such as payments to foreign officials, politically-exposed persons, and healthcare professionals

#### Streamline processes

Unlike the prior two use case areas in which spend transactions themselves are risky, this use case area is about the spend review process. Whether in T&E or payables, reviewing business spend is onerous and rigid, with a built-in tradeoff between accurate validation and speed. Without AI, companies can either pay people and suppliers on time, or they can check spend transactions for errors, waste, fraud, and non-compliance, but they cannot do both at scale. With AI, however, they can have it both ways. They can automate the spend review process, remove extraneous steps, and ultimately increase system throughput, all while improving accuracy and consistency.

#### Sample use cases:

- Reduce or eliminate reliance on managers for invoice and expense approval
- Reduce AP managers’ time spent validating and processing invoices by automating approvals for some or all transactions, such as all low-risk spend
- For high-risk transactions, ensure accurate, consistent, and unbiased reviews of spend by providing decision makers with AI-generated risk details and links to evidence
- Automatically classify spend correctly against company-specific and industry taxonomies to deliver accurate spend analytics and drive optimization plans
- Ensure correct header- and line-level spend categorization errors for accurate financial reporting and tax accruals

## Five must haves

Given the challenges and use cases above, there are five “must haves,” or functional requirements, for any solution to be effective. They include: 1. Audit 100 percent of spend prior to payment; 2. Understand documents; 3. Enrich with intelligence; 4. Assess and refine risk; and 5. Streamline processes.

### Spend classification

One critical piece of data in unstructured documents like invoices and receipts is spend category. Spend automation systems often serve as the point of capture for spend classification, but many rely on manual entry and capture only one category per transaction, even if there are multiple line items.

Procurement and finance experts recommend organizations adhere to a common spend taxonomy, but none will work if you classify incorrectly. Mistakes will flow through to your financial statements, taxes, financial analysis, and business planning.

Properly extracting and recording the spend category from every line item in every document in your system makes a huge difference in your compliance with accounting standards, determines how much you pay in taxes, and even affects the business decisions you make.

### 1. Audit 100 percent of spend prior to payment

To find all of the errors, waste, fraud, and non-compliance in your expenses and payables, you need a solution that enables you to review every spend transaction in a thorough and consistent manner before payment. This allows you to reject bad payments and deal with compliance issues up front versus claw backs and fallout after the fact.

### 2. Understand documents

There's so much useful information hidden in unstructured documents like images and PDFs, but physically opening and reading receipts and invoices to verify each transaction isn't scalable. An effective solution extracts and understands key data points such as dates, amounts, terms, and spend categories from unstructured documents, regardless of file type or document structure and irrespective of language and country. This lets you validate each transaction and ensure its accuracy for financial reporting, taxation, and business planning.

### 3. Enrich with intelligence

Critical information that can help you validate spend isn't just tucked away in unstructured documents, but is also spread out among your internal business systems and external online sources. An effective solution enriches your transaction data by validating it against intelligence from internal business systems and external sources that offer information about merchants, prices, environmental data, and regulations. This lets you assess risk in a more informed and confident manner than if you had only data from your spend system and documents.

### 4. Assess and refine risk

To determine which spend transactions are likely to be erroneous, wasteful, fraudulent, or non-compliant, you need a way to assess risk from all of the gleaned information from unstructured documents, business systems, and online sources. An effective solution uses a methodology to assess risk in a consistent manner and learn from new inputs and user feedback. This lets you rely on and even take automated action based on the system-determined risk, giving you confidence that, as new information becomes available, your solution will adjust to accommodate it.

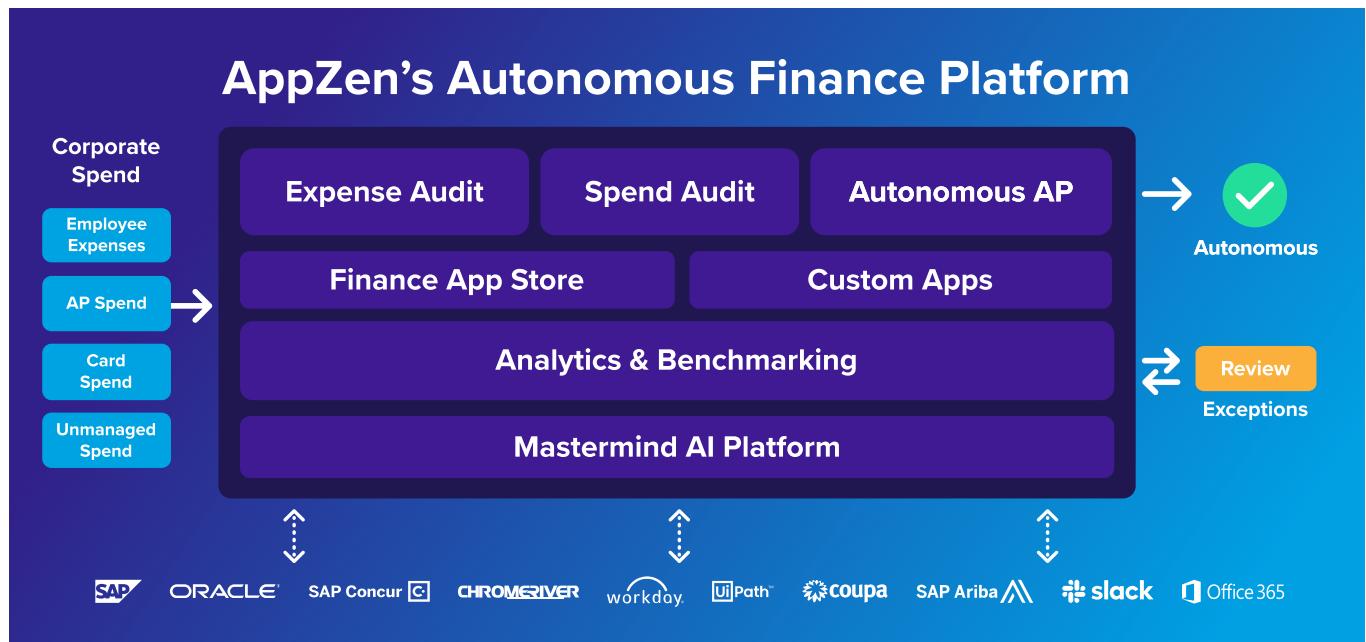
### 5. Streamline processes

Once you have a reliable way of calculating the risk of each spend transaction and can provide details and evidence for that risk, you can comfortably take automated action, remove extraneous steps in your process, and enable professionals to make accurate, consistent decisions. An effective solution fits into your existing workflows, but allows you to automate approvals, skip steps, and correct errors. This lets you pay people and suppliers on time while also finding the errors, waste, fraud, and non-compliance in your spend.



## The AppZen Platform

AppZen is the AI platform for modern finance teams. Our AI-powered platform integrates with AP and expense system workflows, reviews 100 percent of spend in real time and prior to payment, and flags errors, waste, fraud, and non-compliance for review.



### How our platform works

Most enterprises must make the tradeoff between finding spend leakage and non-compliance and having an efficient process. They usually try to balance the former two with the latter by manually auditing a sample of their expenses and payables, almost always after payment. This means they have to chase down overpayments and often don't find important indicators of fraud, non-compliance, and regulatory violations before it's too late. The few that do review all spend prior to payment do so at significant cost and usually struggle to pay people and suppliers on time.

By contrast, contrast, AppZen addresses all three challenges at once. It integrates into the workflow of all major spend automation systems and uses AI to audit all expenses and invoices in real time.

In addition to ingesting transaction data from your spend automation systems, our platform extracts and understands information like dates, prices, discounts, payment terms, names of individuals and organizations, supplier addresses, and line-level spend categories from unstructured documents such as receipts and invoices. Beyond understanding this information, our purpose-built AI engine builds context and relationships between pieces of information so the system can be more effective over time, performing functions like identifying important missing terms, understanding key differences between dates in POs, ascertaining the conditions for offered discounts, and flagging mis-entered spend categories.



## Enrich your data with finance AI

Evolved from the traditional three-way match in the AP process, AppZen's finance AI is a key ingredient in the AppZen platform and is a powerful way to enrich data. It references an unlimited number of data points from documents, business systems, and online sources and can consist of structured or unstructured data matches, inclusion in a list or database, or a relationship identified through machine learning.

By enriching spend transactions with these data inputs, our platform can help you validate spend with a far greater degree of accuracy than ever before. This means your team can root out fraudulent suppliers, duplicate and wasteful spend, regulatory violations, and excessive employee expenses more easily, as well as get a leg up on complex spend like contractor invoices and construction projects.

Beyond understanding information related to transactions, our platform enriches those transactions with intelligence from both internal business systems like physical access, enterprise resource planning, customer relationship management, functional applications, sensors, and corporate lists, as well as external sources like regulatory databases, pricing and e-commerce sites, merchant reputation sites like Yelp and Dianping, weather, maps, GPS, and financial market sources, crowd-sourced information sites, and corporate websites.

Our platform assesses risk based on the inputs above, and then refines that risk based on additional data and user feedback. From there, it uses the AI-calculated risk score to approve low-risk transactions automatically while flagging high-risk ones for manual review. Because we provide not just a risk score, but also details and evidence, your decision makers will have what they need to make careful, consistent, accurate decisions over time.

This AI-powered process lets you to audit 100 percent of spend prior to payment, allowing your organization to reduce spend, comply with policy, and streamline processes.

### What sets our AI apart

The AppZen Platform combines three critical capabilities: **computer vision, content and context understanding, and deep learning**. Our computer vision extracts text and images from unstructured documents associated with spend transactions such as receipts and invoices. **Content and context understanding** combines this extracted information with intelligence gleaned from business systems and external sources and develops a rich, contextual understanding of each transaction in our purpose-built data model that has been optimized for the finance domain. Finally, our platform's **deep learning** continually refines its understanding based on billions of spend transactions consisting of trillions of data points, coupled with user feedback from auditors and reviewers interacting with the platform.



## How to measure ROI in AI-powered spend auditing

You can measure the benefits of AI-powered spend auditing across three primary value pillars: 1. Reduce spend; 2. Comply with policy; and 3. Streamline processes.

### Measure spend reduction

Rejecting errors, waste, and fraud in your expenses and payables carries a hard-dollar return. Most enterprises see a 10x return on investment on this conservative measure alone.

SPEND REDUCTION = SUM OF REJECTED ERRORS, WASTE, AND FRAUD

*Even if you don't reject transactions outright, simply using information from AI-based auditing to alert employees to their behavior or call suppliers' attention to inflated pricing or errors often leads to more careful spending over time.*

### Measure policy compliance

Compliance is a broad category, including corporate policy and regulations. Ensuring compliance with corporate policy usually carries hard-dollar savings that are part of the



“reduce spend” pillar. When it comes to regulatory compliance, you get soft-dollar value from avoiding penalties and reputation loss.

$$\text{COMPLY WITH POLICY} = \frac{\text{PROBABILITY OF NON-COMPLIANCE MULTIPLIED}}{\text{BY PENALTIES AND REPUTATION LOSS}}$$

*While not all compliance benefits are ROI-worthy, consider measuring volume and value of non-compliance so you can advise your organization and suppliers as well as understand the effectiveness of your AI-powered spend auditing program over time.*

#### **Measure streamlining processes**

Automatically approving low-risk spend lets you increase your audit coverage from a fraction to 100 percent of expenses and invoices. Moreover, skipping extraneous steps like manager approvals saves time. The soft-dollar value of each of these is the associated manual cost of AI automatically-approved spend and the associated cost of manager time savings.

$$\text{COST OF EQUIVALENT HUMAN AUDITOR HOURS FOR STREAMLINE PROCESSES} = \frac{\text{AUTO-APPROVED SPEND PLUS COST OF MANAGER TIME SAVINGS}}$$

*Enterprises get value in numerous other ways from streamlining processes with AI. These include reimbursing employees quickly and paying suppliers on time, correcting errors from manual data entry, and making auditors’ decision making more accurate and consistent by providing risk details and evidence.*

## **Summary**

Modern finance teams are adopting AI to automate processes and enable complex decision making across a broad swath of their operations. AI-powered spend auditing is especially promising because expenses and payables are rife with spend leakage, non-compliance, and inefficiencies. If you intend to address these challenges by implementing AI-powered spend auditing in your organization, you should evaluate potential solutions with these five requirements in mind:

1. Audit 100 percent of spend prior to payment
2. Understand documents
3. Enrich with intelligence
4. Assess and refine risk
5. Streamline processes

With its distinctive capabilities in the areas of computer vision, content and context understanding, and deep learning, the AppZen Platform uniquely addresses these *must have* solution requirements.



## About AppZen

AppZen is the leader in Finance AI software, empowering autonomous finance operations for modern finance teams. Our patented artificial intelligence software accurately and efficiently processes information from thousands of data sources so that organizations can better understand internal spend and make smarter business decisions. It seamlessly integrates with existing expense and accounts payable workflows to read, understand, and make real-time decisions based on your unique spend policies, leading to faster processing times and fewer instances of fraud or duplicate spend. Global enterprises, including one-third of the Fortune 500, use AppZen's Expense Audit and Autonomous AP products to replace manual finance processes and accelerate the speed and agility of their businesses. To learn more, visit us at [www.appzen.com](http://www.appzen.com).

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