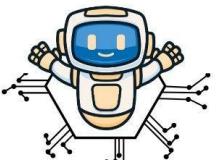


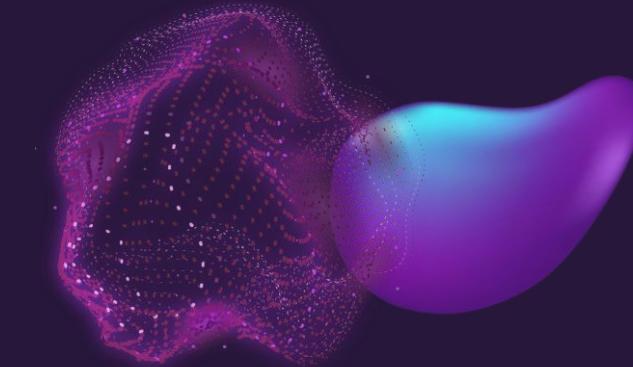


AI²

Artificially Intelligent Invoices



AI²



Team Copper
Fall 2025

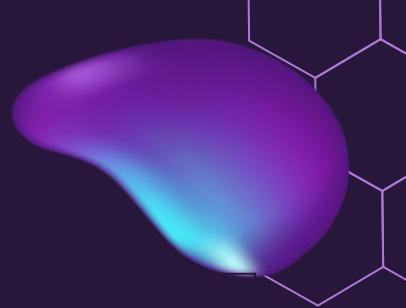


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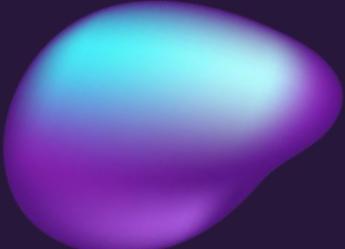
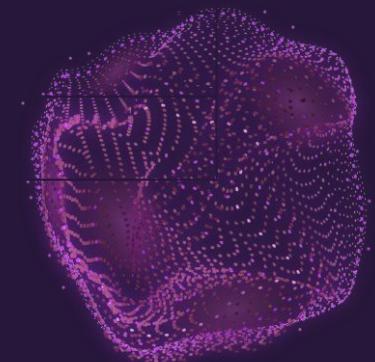


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Meet The Team



Dusan Djordjevic
Project Lead



Julian Diaz
Back-End Developer



Lynda Salinas Ascanova
Webmaster



Savannah Todd
Webmaster



Tommy Fuller
Full Stack Developer



Craig Grubb
Software Developer
and Database



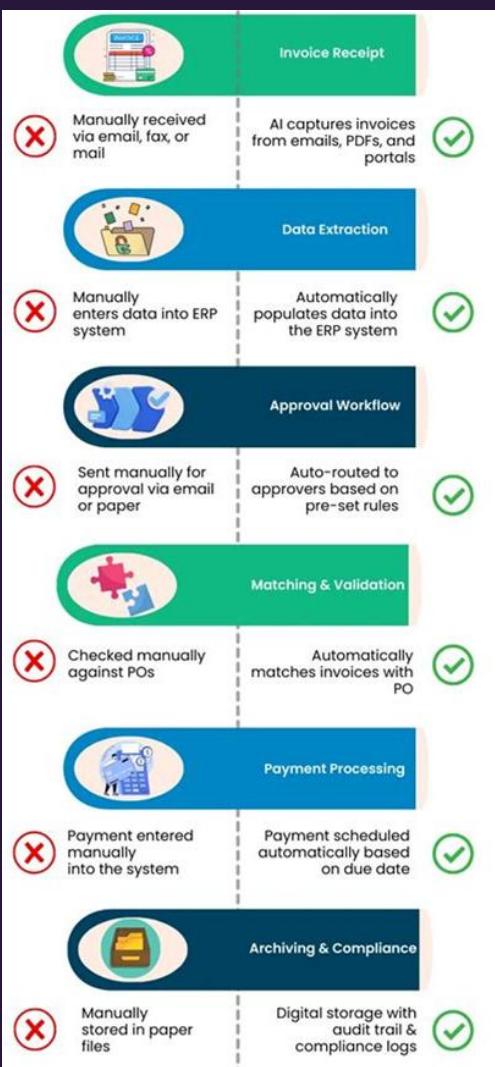
Michael Nimitz
Software Developer
and Database



Quin Elson
Front-End Developer

Background

- Manual invoice processing is still widespread across a variety of industries: Approximately 90% of companies rely on manual processing
- Cost per invoice: \$12-\$40 (manual) as opposed to \$3-\$6 (automated) [3]
- Turn around time: 10-15 days for manual processing vs. less than 5 days with an automated system
- Errors are made an estimated 1%-3% of the time when manual processing is used, which can strain business relationships
- Overall: Manual processing is expensive, slow, and prone to errors



Background

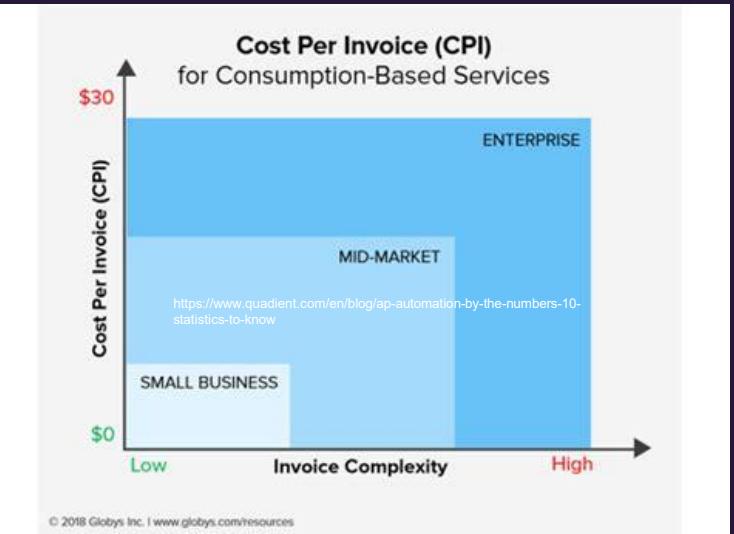
- ◆ 96% of employees report dissatisfaction with the AP tools that they have been provided with [4]. There is clearly a deficiency with the tools currently available.
- ◆ A Gartner study found that 59% of accountants make several financial errors monthly, and cited that many of these mistakes are caused by overextension at work [6].
- ◆ As part of the AP team, accountants and their coworkers would have their workload greatly reduced by automating invoice processing, with studies showing an 80% increase in productivity after adopting AP Automation [7].
- ◆ Automating invoice processing would not only let AP employees shift their focus back onto work utilizing their special skills, and reduce accounting errors, it would greatly boost employee morale as well.



[5]

Background ADS Case Example

- ◆ ADS processes 150,000 invoices annually from ~3,000 individual suppliers
- ◆ A small team of around 6 staff members handle invoices that are received in a variety of formats PDFs, spreadsheets, etc.
- ◆ Manual handling leads to
 - Delays and payment backlogs
 - Errors (duplicates, mismatches, etc.)
 - Staff overload due to (needless stress over inefficiency)
- ◆ Bottom Line: supplier frustration, compliance risks and potential penalties





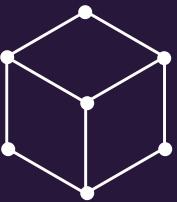
Problem Statement

- Accounts Payable (AP) manual processing is costly and inefficient. Between labor costs, printing and mailing expenses, and accounting for errors, each manually processed invoice can cost between \$12 and \$40, which adds up across thousands of invoices. A manually processed invoice takes an average of 14.6 days to process.
- Every year, ADS receives over 150,000 invoices from about 3,000 suppliers. These invoices arrive mostly by email and come in many different formats (PDFs, scans, spreadsheets, etc.). The AP team, only 6 people, must manually review each invoice and compare it to the company's Purchase Order. This magnifies the issues of AP manual processing, leading to a high workload, potential for errors, delays, and difficulty with taking in more work.



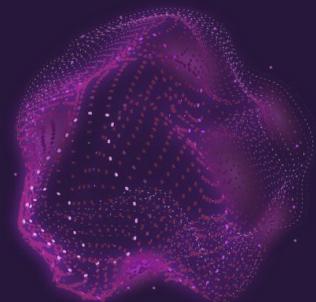
Who is Affected

- **Users**
 - ◆ ADS Accounts Payable team, AP manager, and Finance/Accounting leadership are all looking to automate simple, common invoices.
- **Customers**
 - ◆ ADS, the company itself would be willing to provide compensation for a satisfactory product.
- **Stakeholders**
 - ◆ Vendors connected with ADS, ADS Finance, and ADS executives would all experience shorter turnaround times and more effective use of labor with automation of common, simple invoices.

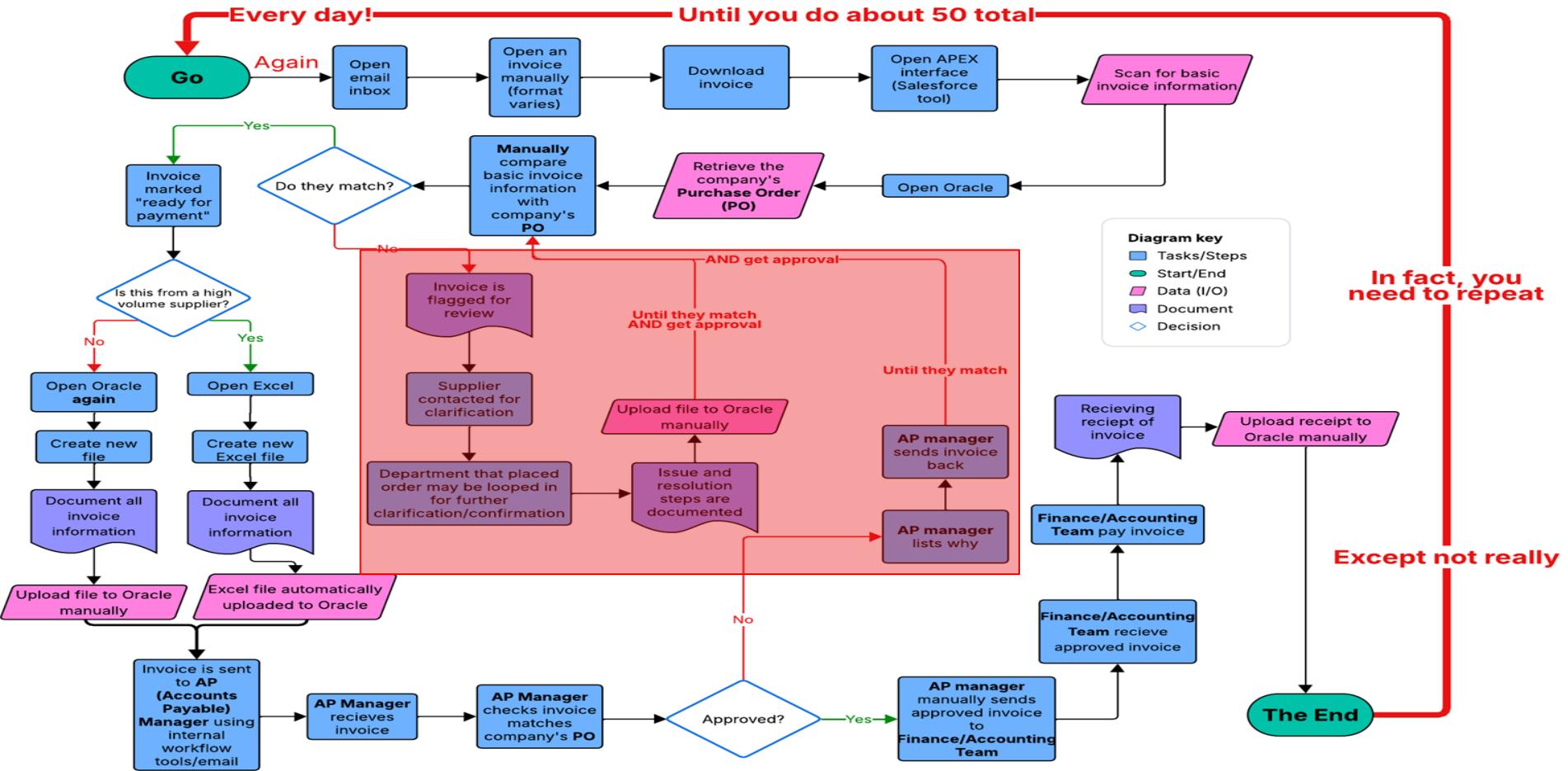


Problem Characteristics

- ◆ **Excessive Labor Hours:** Labor accounts for 62% of total AP processing costs, mostly consisting of repetitive checking rather than value-added work
- ◆ **High Error Potential:** 39% of invoices contain errors, and $\frac{1}{3}$ of businesses suffer from making duplicate payments
- ◆ **Delays:** Invoices take an average of 14.6 days to process, payments slowed down due to backlogs, leading to missed discounts and late fees
- ◆ **Scalability:** Already high pressure on the AP team makes it difficult for the company to take on additional clients, limiting financial growth

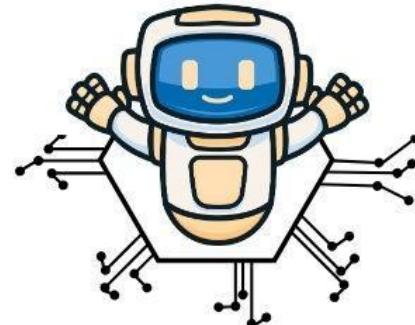


Current Process Flow



Our Solution: AI²

- ◆ AI² is a web-based platform that helps organizations manage high volumes of invoices with greater speed, accuracy, and transparency.
- ◆ Designed to integrate into existing financial workflows, it streamlines repetitive processing, prioritizes exceptions, and continuously adapts to diverse invoice formats across industries.
- ◆ By reducing manual workload while preserving oversight, AI² enables faster payments, fewer errors, and stronger financial compliance.



AI²

AI² and ADS

- ◆ For ADS specifically, AI² would relieve pressure on a small Accounts Payable team that currently faces over 600 invoices per day. The pressure will continue to grow as the company scales, leading to mistakes like mismatched data or “overreceipts”.
- ◆ By automating intake and matching, while routing edge cases for staff review, the system reduces backlogs and errors without removing human oversight.
- ◆ This allows ADS to accelerate payment cycles, strengthen supplier relationships, and improve overall financial health — outcomes that mirror the benefits other organizations can expect across the industry.

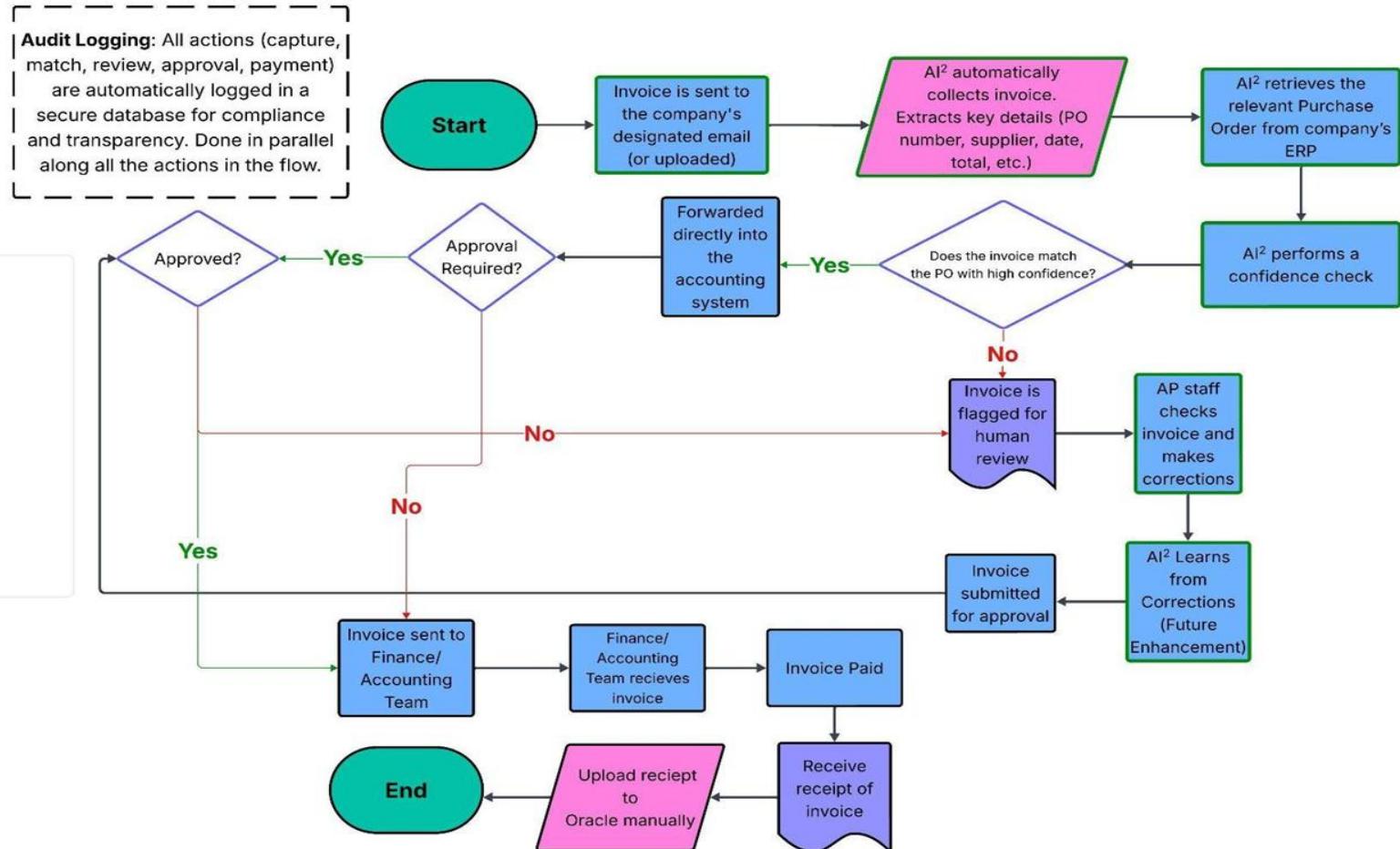


Solution Characteristics

- ◆ **Efficiency – Automated Invoice Capture and Organization**
 - All invoices are automatically captured from email and structured for review, reducing manual file handling.
- ◆ **Accuracy – Smart and Fast Matching**
 - AI² automatically compares invoices to purchasing orders, accelerating processing while minimizing errors and backlogs.
- ◆ **Adaptability – Learning from Corrections**
 - The system improves by learning from staff interventions, reducing redundant work and enabling staff to focus on complex cases.
- ◆ **Reliability – Confidence Scoring and Error Handling**
 - Matches are scored for certainty, with high-confidence items prepared for upload and low-confidence items flagged for review. This ensures fewer mismatches, duplicates, and overlooked errors.
- ◆ **Transparency – Auto Logging and Compliance**
 - Every invoice and action is tracked in the database, ensuring auditability, compliance, and organizational trust.



Solution Process Flow





What it Will Do

- ◆ **Email Intake and Storage:** Emails will be taken upon arrival and be sorted and prioritized.
- ◆ **Volume Handling:** AI² will considerably reduce the manual processing of individual invoices.
- ◆ **AI PO Matching:** Invoices will be matched to their corresponding purchase order.
- ◆ **AI Confidence Scoring:** Scoring system based on certainty of correct purchase order to invoice matches.
- ◆ **Error Matching:** PO matches with lower confidence scores will be prioritized for human intervention.
- ◆ **Continuous Learning from Human Interaction:** System updates matching based on staff corrections.



What it Will Do

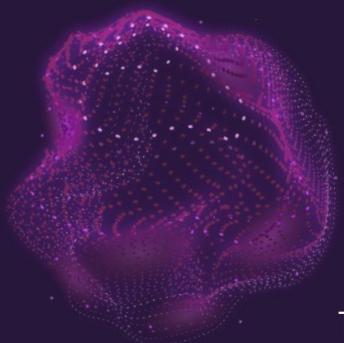
- ◆ **Audit Logging:** Invoices and system decisions are saved in a database for subsequent reviews.
- ◆ **Error Reduction:** Strain on the AP team will be reduced, leading to less mistakes.
- ◆ **Quick Implementation:** Easy for client to plug in and begin using.
- ◆ **Tailored for client:** Specially configured to meet the needs of client.
- ◆ **Long-tail vendor handling:** Streamlines monitoring of invoices from vendors supplying lower-frequency products.
- ◆ **Easily customizable:** Staff will be able to make tweaks to prioritize certain invoices.
- ◆ **Adaptable:** Customizations can be made at any time.
- ◆ **Timeliness:** Automation allows AP team to shift focus to other tasks.



What it Will Not Do



- ◆ AI² will not instill a prioritization system for emails that are not invoice-related. The system will be set up to make priority-related decisions based on the invoice confidence scores, which will not translate to other email content.
- ◆ AI² will not allocate the low confidence invoices to specific team members. It is outside of AI²'s purview to assign work to human workers.



Competition Matrix

	AI ²	Tipalti	SAP Concur	QuickBooks	Manual Processing
Volume handling	■	■	■	■	■
Error reduction	■	■	■	■	■
Less human interaction	■	■	■	■	■
Timeliness	■	■	■	■	■
AI PO matching	■	■	■	■	■
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Major Functional Components

User Interface

- User Interface
 - Website application and extension
- Pay Order Format Creator
 - Based on file format (PDF, scans, spreadsheets) create a system to autofill fields
- Invoice filter
 - Any documents that need to be reviewed/not automatically filling purchase order
- Data-Field suggestions
 - Based on pattern-recognition

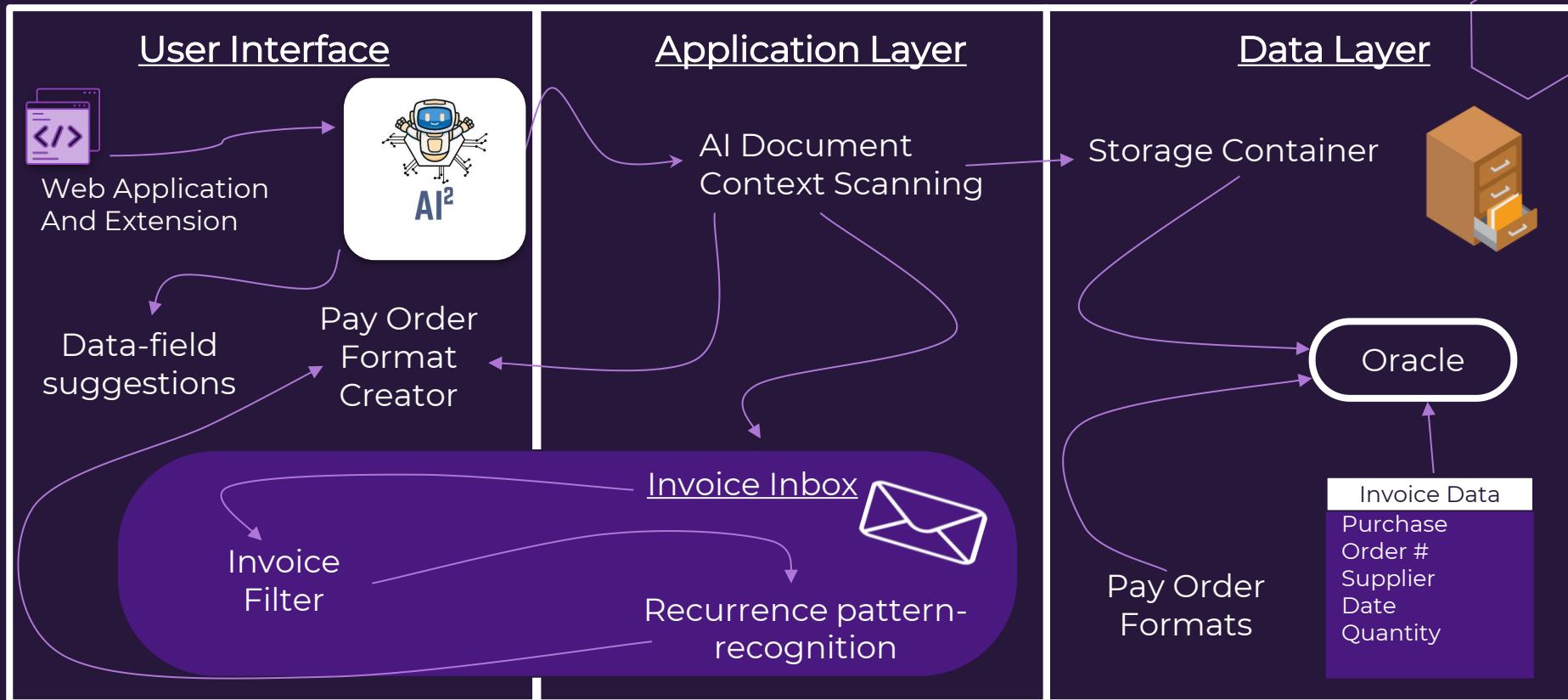
Application Layer

- Invoice Inbox
- AI Document Context Scanning
 - Autofill any missing data fields
 - Similar to ADS utilization of APEX (salesforce)
- Recurrence pattern-recognition
 - Invoices that occur from the same email get flagged to create a format

Data Layer

- Storage Container
 - Cloud storage (Oracle)
 - Invoice/document container
- Record of previously used invoice formats
 - And the ability to edit them

Major Functional Components Diagram





Development Tools

- ◆ Communication: Discord
- ◆ IDE: VSCode
- ◆ Version Control: Github
- ◆ Website: Github Pages
- ◆ Team Management: Clickup





User Risks

Risks

- ◆ **R1:** Unassigned Low Confidence Invoices

Mitigations

- M1:** Flagged invoices routed to manual review queue



User Risks

Risks

- ◆ **R1:** Unassigned Low Confidence Invoices
- ◆ **R2:** Workflow disruption during transition

Mitigations

- M1:** Flagged invoices routed to manual review queue
- M2:** System integrates with existing ADS tools



User Risks

Risks

- ◆ **R1:** Unassigned Low Confidence Invoices
- ◆ **R2:** Workflow disruption during transition
- ◆ **R3:** Delayed Human Review of Flagged Items

Mitigations

- M1:** Flagged invoices routed to manual review queue
- M2:** System integrates with existing ADS tools
- M3:** Surface flagged invoices via real-time user interface alerts



User Risks

Risks

- ◆ **R1:** Unassigned Low Confidence Invoices
- ◆ **R2:** Workflow disruption during transition
- ◆ **R3:** Delayed Human Review of Flagged Items
- ◆ **R4:** Overdependence on automation

Mitigations

- M1:** Flagged invoices routed to manual review queue
- M2:** System integrates with existing ADS tools
- M3:** Surface flagged invoices via real-time user interface alerts
- M4:** Confidence scoring will trigger human review automatically



User Risks

Risks

- ◆ **R1:** Unassigned Low Confidence Invoices
- ◆ **R2:** Workflow disruption during transition
- ◆ **R3:** Delayed Human Review of Flagged Items
- ◆ **R4:** Overdependence on automation
- ◆ **R5:** Resistance or Misuse of the System

Mitigations

- M1:** Flagged invoices routed to manual review queue
- M2:** System integrates with existing ADS tools
- M3:** Surface flagged invoices via real-time user interface alerts
- M4:** Confidence scoring will trigger human review automatically
- M5:** Offering transparent logs to build trust and accountability

User Risks Matrix

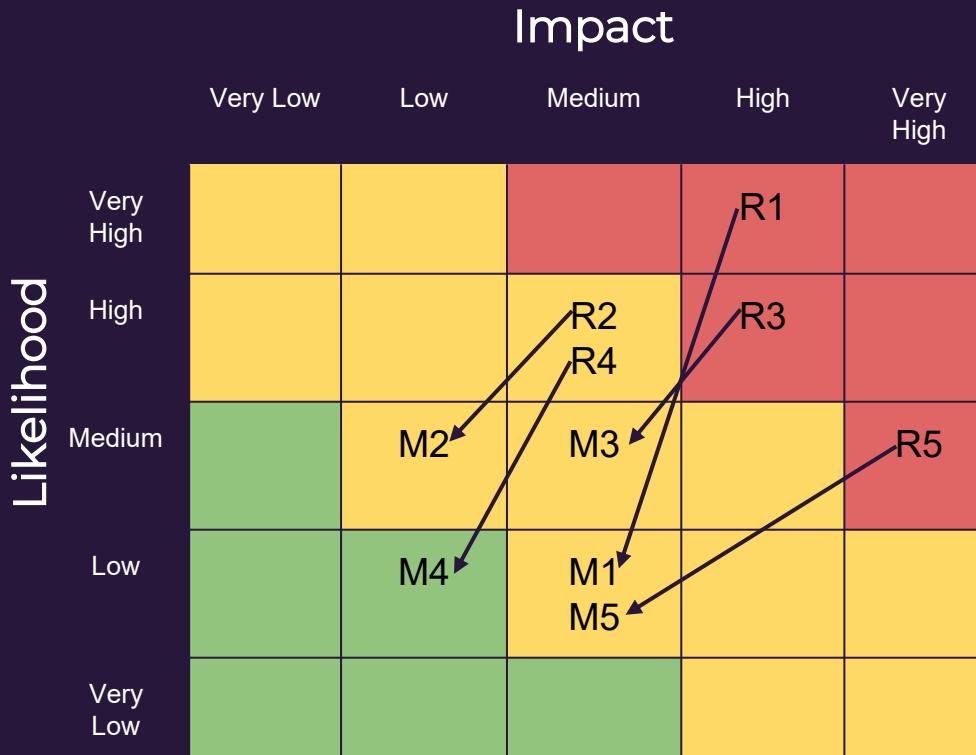


Legend

Low Risk

Medium Risk

High Risk





Customer Risks

Risks

- ◆ **R1:** Compromised financial accuracy from incorrect invoice matching

Mitigations

- ◆ **M1:** Confidence scoring will trigger human corrections before payment for improved accuracy



Customer Risks

Risks

- ◆ **R1:** Compromised financial accuracy from incorrect invoice matching
- ◆ **R2:** Delayed Return on Investment (ROI) due to transition disruptions

Mitigations

- M1:** Confidence scoring will trigger human corrections before payment for improved accuracy
- M2:** Integrate with existing ADS tools and workflows with minimal disruption to accelerate adoption and ROI realization



Customer Risks

Risks

- ◆ **R1:** Compromised financial accuracy from incorrect invoice matching
- ◆ **R2:** Delayed Return on Investment (ROI) due to transition disruptions
- ◆ **R3:** Strain on vendor relationships from missed or late payments

Mitigations

- M1:** Confidence scoring will trigger human corrections before payment for improved accuracy
- M2:** Integrate with existing ADS tools and workflows with minimal disruption to accelerate adoption and ROI realization
- M3:** Implement consistent, automated intake of invoices across formats to reduce risk of missed payments



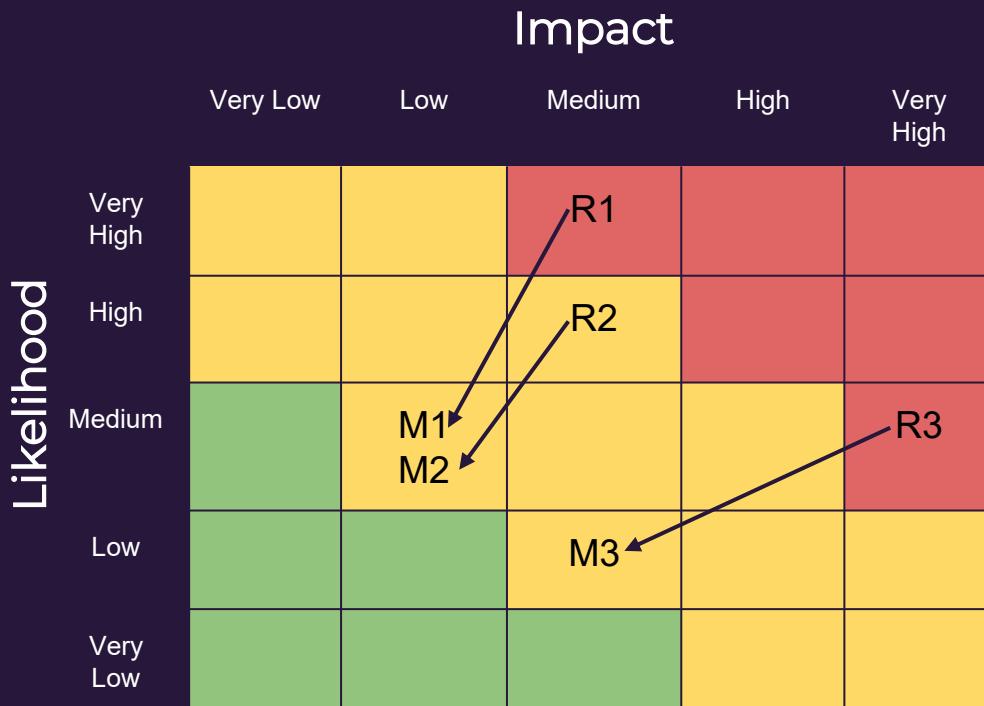
Customer Risks Matrix

Legend

Low Risk

Medium Risk

High Risk





Technical Risks

Risks

- ◆ **R1:** Optical character recognition (OCR) and parsing errors

Mitigations

- ◆ **M1:** Multi-engine OCR with validation rules



Technical Risks

Risks

- ◆ **R1:** Optical character recognition (OCR) and parsing errors
- ◆ **R2:** Low accuracy for edge cases

Mitigations

- ◆ **M1:** Multi-engine OCR with validation rules
- ◆ **M2:** Confidence ratings to include human reviews



Technical Risks

Risks

- ◆ **R1:** Optical character recognition (OCR) and parsing errors
- ◆ **R2:** Low accuracy for edge cases
- ◆ **R3:** Integration failures

Mitigations

- M1:** Multi-engine OCR with validation rules
- M2:** Confidence ratings to include human reviews
- M3:** Robust APIs that include sandbox testing



Technical Risks

Risks

- ◆ **R1:** Optical character recognition (OCR) and parsing errors
- ◆ **R2:** Low accuracy for edge cases
- ◆ **R3:** Integration failures
- ◆ **R4:** Scalability

Mitigations

- M1:** Multi-engine OCR with validation rules
- M2:** Confidence ratings to include human reviews
- M3:** Robust APIs that include sandbox testing
- M4:** Microservice architecture



Technical Risks

Risks	Mitigations
◆ R1: Optical character recognition (OCR) and parsing errors	M1: Multi-engine OCR with validation rules
◆ R2: Low accuracy for edge cases	M2: Confidence ratings to include human reviews
◆ R3: Integration failures	M3: Robust APIs that include sandbox testing
◆ R4: Scalability	M4: Microservice architecture
◆ R5: Model drift	M5: Continuous retraining and KPI monitoring



Technical Risks

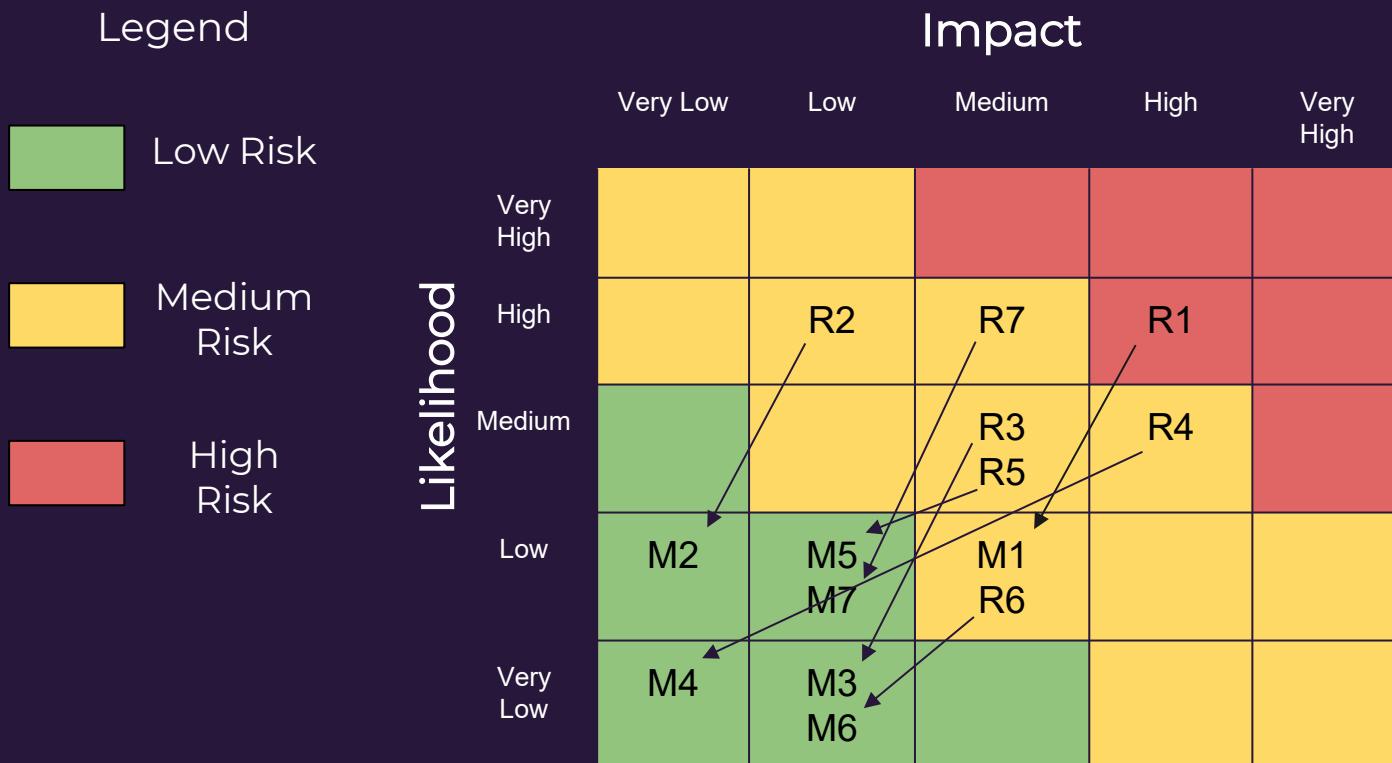
Risks	Mitigations
◆ R1: Optical character recognition (OCR) and parsing errors	M1: Multi-engine OCR with validation rules
◆ R2: Low accuracy for edge cases	M2: Confidence ratings to include human reviews
◆ R3: Integration failures	M3: Robust APIs that include sandbox testing
◆ R4: Scalability	M4: Microservice architecture
◆ R5: Model drift	M5: Continuous retraining and KPI monitoring
◆ R6: AI black box	M6: Include confidence scores and extracted source fields in logging



Technical Risks

Risks	Mitigations
◆ R1: Optical character recognition (OCR) and parsing errors	M1: Multi-engine OCR with validation rules
◆ R2: Low accuracy for edge cases	M2: Confidence ratings to include human reviews
◆ R3: Integration failures	M3: Robust APIs that include sandbox testing
◆ R4: Scalability	M4: Microservice architecture
◆ R5: Model drift	M5: Continuous retraining and KPI monitoring
◆ R6: AI black box	M6: Include confidence scores and extracted source fields in logging
◆ R7: Excessive manual corrections	M7: Progressive machine learning

Technical Risks Matrix





Security Risks

Risks

- ◆ **R1:** Data confidentiality

Mitigations

- ◆ **M1:** End-to-end encryption, multi-factor authentication, and clear role-based security groups



Security Risks

Risks

- ◆ **R1:** Data confidentiality
- ◆ **R2:** Data residency

Mitigations

- M1:** End-to-end encryption, multi-factor authentication, and clear role-based security groups
- M2:** Provide region-specific data hosting



Security Risks

Risks

- ◆ **R1:** Data confidentiality
- ◆ **R2:** Data residency
- ◆ **R3:** Supply chain attacks

Mitigations

- M1:** End-to-end encryption, multi-factor authentication, and clear role-based security groups
- M2:** Provide region-specific data hosting
- M3:** Malware scanning on all libraries



Security Risks

Risks

- ◆ **R1:** Data confidentiality
- ◆ **R2:** Data residency
- ◆ **R3:** Supply chain attacks
- ◆ **R4:** Model poisoning

Mitigations

- M1:** End-to-end encryption, multi-factor authentication, and clear role-based security groups
- M2:** Provide region-specific data hosting
- M3:** Malware scanning on all libraries
- M4:** Separate production data from training data, applying data validation before retraining



Security Risks Matrix

Legend

- Low Risk
- Medium Risk
- High Risk

Impact

Very Low Low Medium High Very High

		Impact				
		Very Low	Low	Medium	High	Very High
Likelihood	Very High					R1
	High					
	Medium				R3 R4	
	Low	M1	M2		R2	
	Very Low	M3 M4				



Legal Risks

Risks

- ◆ **R1:** Machine-generated incorrect results leading to financial loss

Mitigations

M1: Keep human-in-the-loop for low-confidence cases, maintain full audit trails, define liability boundaries in contracts, consider professional liability insurance



Legal Risks

Risks

- ◆ **R1:** Machine-generated incorrect results leading to financial loss
- ◆ **R2:** Clients' financial data may become vulnerable

Mitigations

- M1:** Keep human-in-the-loop for low-confidence cases, maintain full audit trails, define liability boundaries in contracts, consider professional liability insurance
- M2:** Encrypt all data at rest and in transit, enforce role-based access



Legal Risks

Risks

- ◆ **R1:** Machine-generated incorrect results leading to financial loss
- ◆ **R2:** Clients' financial data may become vulnerable
- ◆ **R3:** Noncompliance with financial record-keeping laws can result in fines or failed audits

Mitigations

- M1:** Keep human-in-the-loop for low-confidence cases, maintain full audit trails, define liability boundaries in contracts, consider professional liability insurance
- M2:** Encrypt all data at rest and in transit, enforce role-based access
- M3:** Implement automated record retention, ensure immutable audit logs, conduct regular compliance checks



Legal Risks Matrix

Legend

- Low Risk
- Medium Risk
- High Risk

Impact





Conclusion - Squaring up AI²

- ◆ **The Problem**
 - Manual invoice processing costs organizations time, money, and accuracy
- ◆ **Our Solution**
 - AI² automatically compares invoices to purchasing orders, accelerating processing while minimizing errors and backlogs.
- ◆ **The Difference**
 - Reduce processing costs by up to 80%
 - Easily scale AP operations
 - Free AP teams to focus on strategic, value-added work



Glossary

- ◆ **Invoice:** a list of goods sent or services provided, with a statement of the sum due for these; a bill.
- ◆ **Purchase Order (PO):** the order list ADS sends to suppliers

References

1. ADS Pitch Document Sample
2. Tamaro, R. (2025, March 4). *The Hidden Costs of Manual Accounts Payable and How Automation Solves Them - CASO Document Management*. CASO Document Management. <https://caso.com/2025/03/the-hidden-costs-of-manual-accounts-payable-and-how-automation-solves-them/>
3. *AI Invoice Processing Benchmarks 2025 - Accuracy, Speed, And Cost Comparison*. (2025, September 9). Parseur. Retrieved September 27, 2025 from [https://parseur.com/blog/ai-invoice-processing-benchmarks#:~:text=Speed%20\(according%20to%20SuperAGI\),automation%20drives%20significant%20productivity%20gains](https://parseur.com/blog/ai-invoice-processing-benchmarks#:~:text=Speed%20(according%20to%20SuperAGI),automation%20drives%20significant%20productivity%20gains)
4. Jex, S. (2024, September 24). *Accounts Payable Automation by the Numbers: 10 Statistics to Know*. Quadient. <https://www.quadient.com/en/blog/ap-automation-by-the-numbers-10-statistics-to-know>
5. *Avalanche of E-mail Coming Out of the Computer, Overwhelming the Person*. (n.d.) 123RF. Retrieved September 29, 2025, from https://www.123rf.com/photo_176621030_avalanche-of-e-mail-coming-out-of-the-computer-overwhelming-a-person-eps-8-vector-illustration.html
6. *Gartner Survey Shows That a Third of Accountants Make Several Financial Errors Per Week Due to Capacity Constraints*. (2024, February 21). Gartner. <https://www.gartner.com/en/newsroom/press-releases/2024-02-21-gartner-survey-shows-that-a-third-of-accountants-make-several-error-per-weeo-due-to-capacity-constraints>
7. *Accounts Payable Automation Trends: Key Insights and Latest Statistics*. (n.d.) Kefron. Retrieved October 6, 2025, from <https://kefron.com/2025/02/accounts-payable-automation-trends-key-insights-and-latest-statistics/?switch=us>