



Streamlining Order Management with AI: From Manual PO Chaos to an Intelligent, Automated Workflow



Client Overview

The client is the largest privately held sustainable packaging company in the United States, managing a high-volume order operation that services a broad and diverse customer base. With approximately 150 Customer Success Representatives (CSRs) handling purchase order ingestion daily, the organization's manual processes were creating significant operational drag and the scale of the problem was only growing.

To modernize their purchase order ingestion workflow, the client partnered with Cyann and Microsoft to design and deploy an AI-powered solution capable of handling the complexity, inconsistency, and volume of their order data at enterprise scale.

The Challenge

The client's CSR team was spending the majority of their working day on a single, repetitive task: manually extracting purchase order details from unstructured files arriving in dozens of different formats. There was no automation, no standardization, and no safety net, which meant errors were inevitable and productivity was severely constrained.

Key challenges included:

- **Overwhelming Manual Burden:** Approximately 150 CSRs spent around 70% of their working day manually extracting PO data from unstructured files across inconsistent formats, leaving little capacity for higher-value customer work.
- **No Standardization:** There was no consistent template, schema, or automation in place to handle the diversity of incoming PO formats from different customers.
- **High Error Rate:** Manual data entry introduced downstream errors at a rate of approximately 10%, creating rework, delays, and customer experience issues.
- **ERP Friction:** Order creation within Infor Distribution A+, operating on AS/400, was entirely dependent on the accuracy of what CSRs manually entered, amplifying the cost of every mistake.
- **Scale Without Structure:** With 100+ distinct PO formats arriving from a wide customer base, any solution needed to be adaptive and learnable rather than purely rules-based.

The Breaking Point: When 70% of a 150-person team's day is consumed by a single manual process with a 10% error rate, the problem has moved beyond inefficiency and become a structural constraint on the business. Scaling the team was not the answer. Eliminating the manual step was.



Cyann's Approach

Cyann architected and deployed a fully integrated, end-to-end AI solution on Microsoft Azure, automating PO extraction, validation, and ERP order creation while keeping CSRs in control through a conversational review interface.

Solution Overview

- **End-to-End AI Automation:** Deployed a complete AI-powered solution on Microsoft Azure to automate the full

PO ingestion lifecycle, from extraction through to order creation in Infor Distribution A+.

- **Intelligent Document Processing:** Leveraged Azure Form Recognizer to extract structured PO data from unstructured files across 100+ customer-specific formats.
- **Conversational Confirmation Interface:** Built a Power Apps-based interface enabling CSRs to review, verify, and confirm AI-extracted data through a conversational workflow, preserving human oversight without manual re-entry.
- **Workflow Orchestration:** Used Azure Logic Apps and Power Automate to orchestrate end-to-end process flows from ingestion through ERP submission.
- **Adaptive Learning:** Trained the solution using Azure Semantic Kernel and Azure OpenAI to interpret and generalize across 100+ PO formats, continuously improving accuracy as new formats are encountered.
- **M365 Co-Pilot Integration:** Embedded M365 Co-Pilot to further enhance CSR productivity within familiar tooling.

What Cyann Built

Intelligent PO Extraction	Conversational CSR Workflow	ERP-Integrated Order Creation
Azure Form Recognizer trained on 100+ PO formats to accurately extract structured data from unstructured inputs.	Power Apps interface enabling CSRs to review and confirm AI output conversationally, with no manual re-entry required.	Automated order creation directly within Infor Distribution A+, operating on AS/400, removing human bottlenecks from the final step.

Tech Stack

Microsoft Azure • M365 Co-Pilot • Azure Form Recognizer • Azure Logic Apps / Power Automate • Azure Semantic Kernel • Azure OpenAI • Power Apps



Engineering Insights

- **Conversational UI Is the Right Abstraction for CSR Workflows:** Rather than removing CSRs from the process entirely, Cyann kept them in the loop through a conversational confirmation interface. This reduced resistance to adoption, maintained human judgment for edge cases, and dramatically reduced the cognitive load compared to full manual entry.
- **Format Diversity Requires Semantic Understanding, Not Just Rules:** With 100+ distinct PO formats in scope, a rules-based extraction engine would have required constant maintenance. Training Azure Form Recognizer and Semantic Kernel to generalize across formats rather than hardcoding each one was the architectural decision that made the solution scalable.
- **AS/400 Integration Is Solvable:** Legacy ERP systems like Infor Distribution A+ on AS/400 are often treated as integration dead ends. Azure Logic Apps provided the orchestration layer needed to bridge modern AI outputs to legacy ERP inputs without requiring a platform migration.



Results

The deployment transformed the client's order management operation across every measurable dimension:

- **85% Reduction in Manual Entry Time:** CSRs reclaimed the majority of their working day previously lost to manual PO extraction, unlocking capacity for higher-value customer engagement.
- **Error Rate Dropped from 10% to Under 1%:** Automated extraction and validation virtually eliminated the downstream errors caused by manual data entry.
- **100+ PO Formats Handled Automatically:** The solution was trained to accurately interpret the full range of customer-specific formats with no manual configuration required per customer.
- **Greater CSR Productivity:** With repetitive extraction removed, CSRs can focus on exception handling, customer relationships, and complex queries.
- **Streamlined ERP Access:** Order data flows directly into Infor Distribution A+ on AS/400, faster, cleaner, and without human bottlenecks in the critical path.



Conclusion

Manual purchase order processing at scale is not just an operational inefficiency. It is a ceiling on what a customer service team can achieve. By deploying an intelligent, Azure-native AI solution that automates extraction, validates data, and creates orders directly in the client's ERP, Cyann removed that ceiling entirely. The result is a system that learns, adapts, and gets smarter with every new PO format, giving CSRs back their time and giving the business a foundation for order management that scales without headcount.

About Cyann

Cyann partners with organizations to design and deliver practical AI and data platforms that prioritize transparency, governance, and measurable outcomes. Our approach ensures that intelligence scales responsibly and delivers real business value.

Learn more at cyann.ai.