Transforming Order Processing with Amorphic Intelligent Document Processing at AffinityX

Executive Summary

AffinityX, a leader in digital marketing and advertising services, partnered with Cloudwick to streamline its order processing using the Amorphic Intelligent Document Processing (IDP) solution. This transformation automates previously manual, labor-intensive tasks, increasing accuracy and efficiency and strengthening AffinityX's competitive positioning. Through this collaboration, AffinityX aims to set a new industry benchmark for operational excellence and customer service.

Business Context & Challenge

As a strategic BPO partner to the Koozie Group (KG), AffinityX manages the processing of critical purchase orders in PDF format from KG distributors. These orders drive KG's supply chain, making precision and speed in processing essential. Currently, a team based in India handles these processes manually with a need for order clarification multiple times, facing challenges like data accessibility and integration, prolonged turnaround times, susceptibility to human error, and limited scalability. With over 100,000 purchase orders across thousands of products, millions of product customizations and over 20,000 distributors being handled, these issues highlighted the need for a comprehensive automation solution.

Key Implementation Challenges and Mitigation Strategies

Implementing the solution required overcoming several complexities:

Transition to Full Automation
Shifting from a manual to an automated system required adapting existing processes, which involved multiple systems.

High Accuracy Standards
Maintaining human-level accuracy was essential to meeting SLA requirements, driving the adoption of NLP and AI for advanced processing

Handling Document Variability
With over 100 purchase order templates and complex structures in item tables, the system needed flexibility in data extraction. Strategies like iterative testing and real-time feedback loops helped address these challenges.

Cloudwick | Amorphic

Solutions

To address the challenges, AffinityX adopted Cloudwick's Amorphic IDP solution, powered by AWS, to automate data extraction, validation, and processing. The solution integrates advanced AI vision in the form of two multi-modal generative AI systems. Key elements of the solution include

Serverless Application on AWS

A scalable, serverless app enables efficient data management and OCR extraction, directly reducing reliance on manual processes.

Human-in-the-Loop (HITL) for Quality Control

HITL integration supports high accuracy standards, enabling AffinityX to meet SLA requirements consistently.

API Integration for Validation

By integrating downstream APIs, the IDP solution automates data validation, reducing errors and ensuring data accuracy.

Advanced AI for Enhanced OCR

Natural language processing enhances OCR accuracy, handling complex cases that require adaptability to diverse document layouts.

Real-Time Data Validation for Precision

Incorporates complex business rules and validation checks to cross-reference extracted data with AffinityX's database in real-time, preventing costly errors and ensuring high processing accuracy

Use of Vision LLM Models

LLMs allow for prompt-based extraction, eliminating the need for writing code. The system also receives AI feedback from the multiple LLMs and can seamlessly handle free flow tables.

Outcomes and Benefits

Since implementing Amorphic's IDP solution, AffinityX has achieved significant improvements in processing accuracy, speed, and resource allocation. Expected benefits include:

Reduction in Order-to-Delivery Time
AffinityX witnessed a significant decline in Average Handle Time from ~12 mins to <10 seconds and in order processing time from ~4 hours to <15 mins per order.

Increased Efficiency
Automating key-field extraction is projected to save the equivalent of 15 full-time employees (FTEs), allowing AffinityX to reallocate resources to customer-centric initiatives.

Transparency and Insights
A real-time dashboard provides insights into order processing, helping AffinityX continuously monitor and optimize performance.

Enhanced Accuracy and SLA Compliance
The IDP solution's high accuracy and reliable processing ensure consistent SLA adherence, resulting in faster, more dependable order handling.

AWS Services Used

The Amorphic solution is deeply integrated with the AWS ecosystem, leveraging over 60 native AWS services. Some of the key AWS services used include:
Amazon S3, AWS Glue, Amazon Athena, Amazon QuickSight and AWS Bedrock. In addition to these, the Amorphic platform utilizes a wide range of AWS services across categories like compute (Lambda, Step Functions), analytics (Redshift, Kinesis), security (IAM, KMS, CloudTrail), and monitoring (CloudWatch, X-Ray), ensuring a robust and enterprise-grade architecture.

About AffinityX

AffinityX is a global leader in digital marketing and advertising solutions, known for its focus on customer satisfaction and excellence in creative, digital, and print services.

About Cloudwick

Cloudwick's Amorphic Data Platform integrates over 65 AWS data and analytics services, enabling organizations to effectively manage and analyze data for improved decision-making and operational efficiency.

This successful collaboration between AffinityX and Cloudwick illustrates how AI-driven automation can elevate industry standards, paving the way for continued innovation and excellence in order processing.

Next Steps

Start small, achieve quick wins and build a scalable data foundation powered by AI and automation. Contact Cloudwick at **sales@cloudwick.com** for a demo.