

AI² - Faster Payment Processes Using AI!

CS 410 Lab 1 Introduction

AI² – Artificially Intelligent Invoices

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1 Introduction

In the era of automation, approximately 60% of companies still rely on Accounts Payable (AP) manual processing for handling invoices [1]. Manual processing carries a variety of disadvantages that make the task expensive, slow, and prone to costly errors. These issues can have a negative effect on a company as a whole, its individual workers, and the vendors that a company conducts business with.

The excessive labor hours and costs, combined with the printing and mailing expenses, each manually processed invoice can cost between \$12 and \$40. When automated, those same invoices can be processed at a cost between \$3 and \$6, which adds up quickly for a company processing tens of thousands of purchases per year [2]. Manual labor hours account for 62% of total AP processing costs, most of which go into checking simple, repetitive invoices that have potential for automation [4].

Manual processing is inefficient, with an invoice taking 10 to 15 days to process, while an automated system can process the same invoice in under 5 days [4]. Potential for human error can cause processing to take even longer. Even if no errors occur, this workload stifles the company's potential as a whole. The AP team being pushed to their limit by the current workload makes it difficult or unfeasible for the company to take on new clients, limiting the company's potential for growth.

Manual processing comes with high error potential. The AP team must match invoices to purchase orders, and only 5% of those matches are correct on the first attempt. 39% of invoices contain errors, and a third of companies make duplicate payments due to such errors [4]. 59% of accountants make several financial errors monthly, many of whom cite overexertion at work and insufficient processing tools available [3]. These many errors can lead to further delays, strained relationships with vendors, and financial loss for the company.

Solving these issues would benefit AP team members by lightening their workload, allowing them to do more meaningful work instead of repetitive checking, and improving employee morale. The company as a whole would benefit from more efficient financial processes and greater potential for growth. Vendors would benefit from having their payments processed quickly and efficiently.

AI² is a web-based platform that seeks to alleviate these problems by managing high volumes of invoices quickly and accurately. It is designed to streamline repetitive invoice processing and allow AP team members to instead focus on high-risk invoices that demand greater scrutiny. It automates invoice intake and matching, while routing edge cases for staff review, reducing backlogs without removing human oversight. This allows the company to accelerate payment cycles, strengthen supplier relationships, and improve overall financial health.

References

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- 4 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/>