

# Team CashFlow





# Meet the Team

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# What is Elementum?

- Supply chain management startup
- 5 years old
- Headquarters located in Mountain View



# Background

- Elementum executives found an issue with the Purchase Order Pipeline
- What is the Purchase Order Pipeline?
  - Purchase orders, Sales orders, and Shipping invoices
  - Matched to one another to move forward in the pipeline



## The Problem

**Too much manual input  
in the matching process!**



# The Side Effects

- Delay
  - Up to 24 hour wait time between confirmation emails
- Human Error
  - Mismatch errors occur because of manual data input
- Lose Money
  - Where Elementum saw an opportunity



**Solution**

# **Automate the Matching Process!**

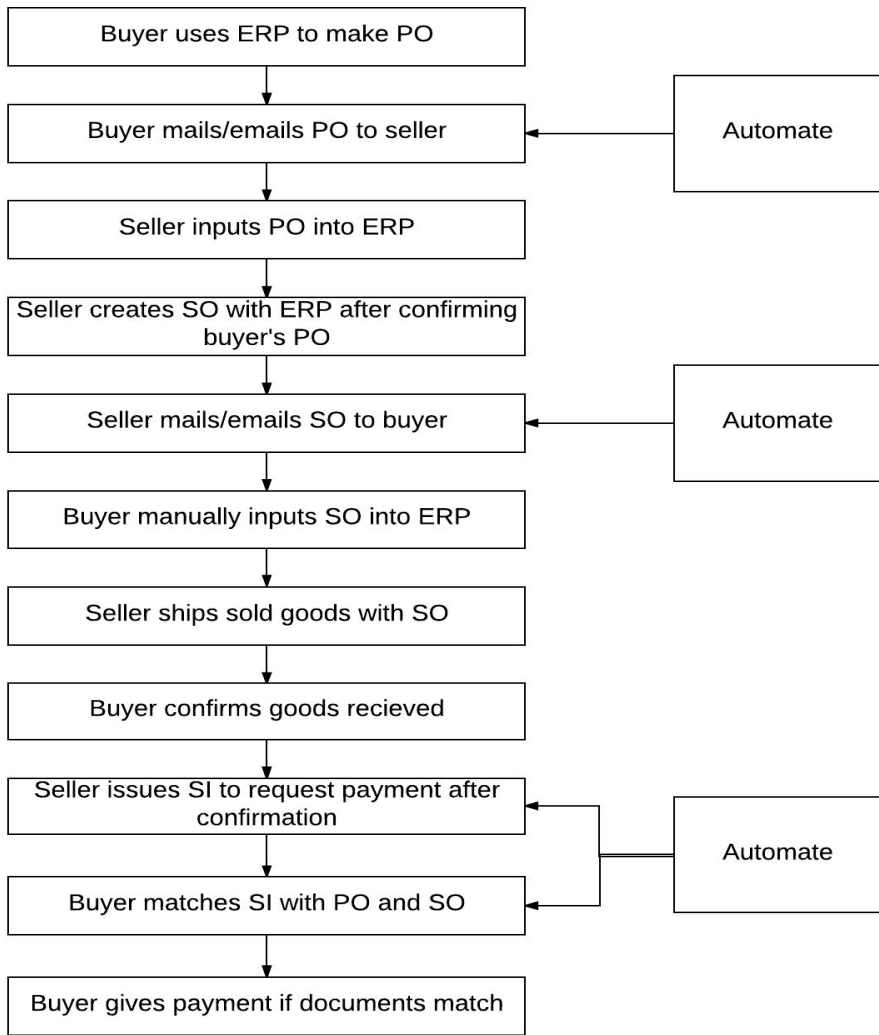
**IMPORTANT TERMS**

**Purchase Order (PO):**  
Describes the price, quality, and quantity of goods to be purchased.

**Sales Order (SO):**  
Confirms the PO details.

**Enterprise Resource Planner (ERP):**  
Creates SOs and POs based on a forecast

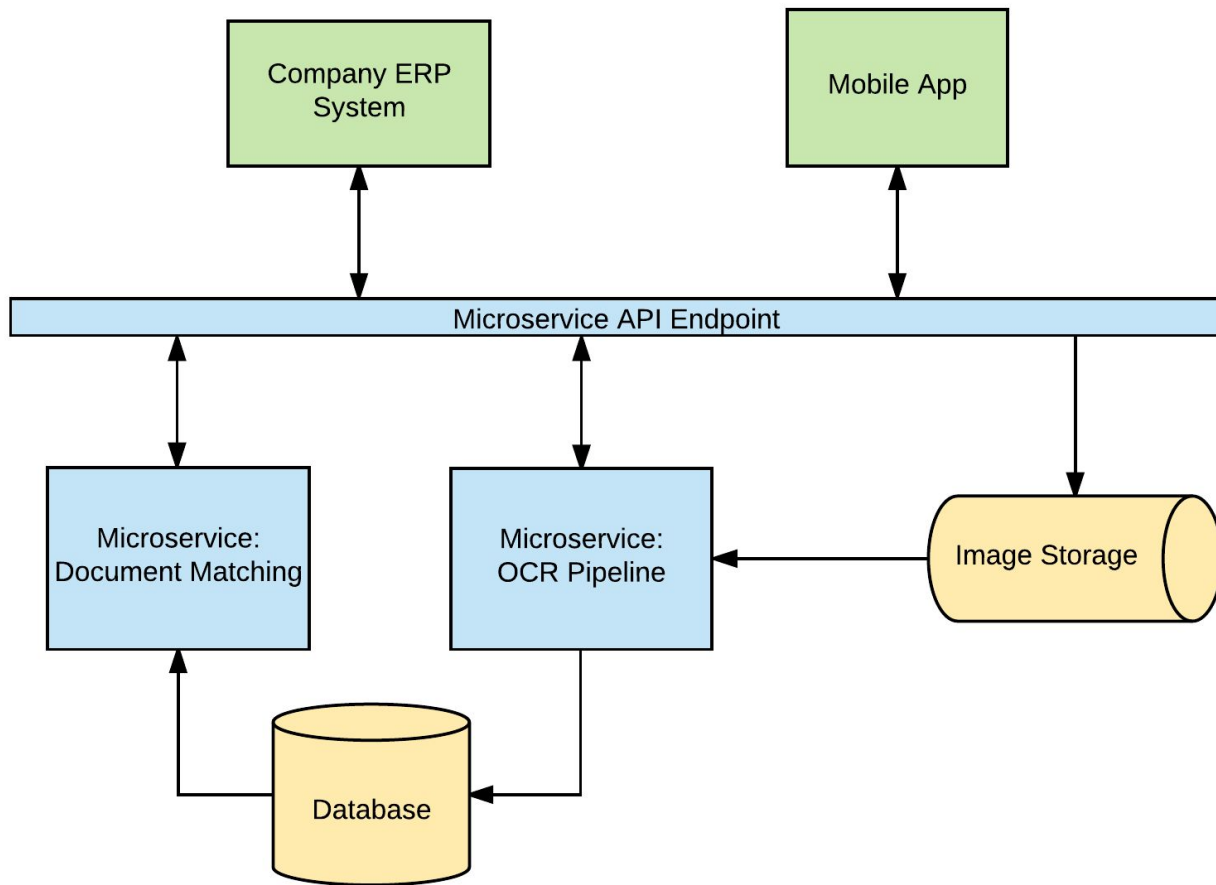
**Shipping Invoice (SI):**  
Describes price, quality, and quantity of goods in the shipment and may include PO and/or SO identifiers.







# Design





## Technologies

- JIRA, BitBucket, Slack
- Document Parsing and OCR
  - Tesseract (Tess4J)
- Cloud Tools - AWS S3, AWS RDS
- Mobile Development - React Native
- Backend - Java, Maven
- CI/CD - Docker, Jenkins



# Current Status

- Mobile app
  - Login, Home, Setting and Camera Screen
- Camera connected to AWS S3
  - Option to upload or discard image to S3
- OCR pipeline can take in files, then scan and parse
  - Feeds the parsed data to backend
- Database is deployed to keep track of images in S3 Bucket
  - Created data access objects

# Prototype Demo



