

Hitachi Construction Machinery America automates non-PO invoices using Microsoft Power Platform's AI builder and Power Automate

Doing more with less is the new norm this digital age. With Microsoft's low-code no-code platform aka Power Platform, companies can easily automate tedious manual processes.

One example is processing vendor invoices wherein accounts payable (AP) clerks need to spend a lot of time to go through the printed or digital copies of the invoices, translate them into the system nomenclature, manually enter the data in the system, and then finally get them approved before posting.

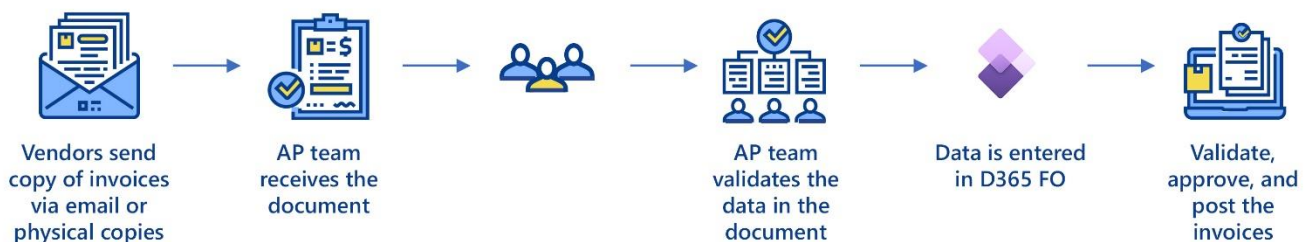
With Microsoft Power Platform's AI Builder optical character recognition (OCR) capabilities for form processing and Power Automate (formerly know as Microsoft Flow), the entire process of getting the invoice data in Microsoft Dynamics 365 Finance and Operations has been fully automated and made significantly easier.

The vendors send their digital invoices (pdf, word, jpeg, etc. format) in the AP mailbox. A trigger is made to the Power Automate pipeline which pulls the invoice copy, sends to the pre-configured AI Builder model, extracts the data, validates it, and finally send the data as JSON to Dynamics 365 Finance and Operations using the FinOps connectors. Finally, the invoices are created and then all that needs to be done is post them.

As a result, Hitachi Construction Machinery America have successfully automated ~65% of their invoices with 99.9% accuracy.

Automating the lengthy data entry process to only posting the validated invoices

Previously, the accounts payable team in Hitachi Construction Machinery America had to spend a lot of man hours on data entry during their month end just to record invoices in the system. Part of the tedious process includes validating and cross referencing every invoice with their digital or printed copy, getting it approved, and posting it. If manual errors occur, the AP team had to go back through the invoices and raise credit notes. Reworks and manual errors are more prominent, considering the AP team must enter more than 500 invoices per month.



The journey

Hitachi Construction Machinery came up with the use case that fully automates vendor invoice processing, specifically their freight invoices, from multiple sources. Starting from streamlining the invoice sending method, getting the data from the invoice inserted into D365 FO, having the invoice copy as attachment, to finally getting it posted.

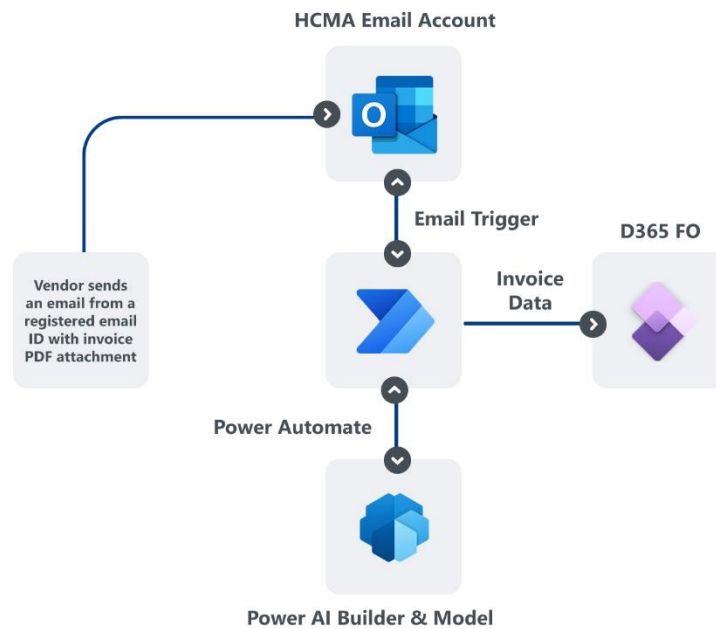
As a solution, Microsoft Power Platform's form processing combined with Power Automate was proposed. After multiple POC's done on the invoice format and the sources, the fully automated solutions were built. With easy-to-understand processes written in Power Automate, citizen developers in Hitachi Construction Machinery America were able to understand the process easily.

The Solution

Once implemented the invoice sending method was streamlined. The vendors were informed to send the invoices as email attachments to the AP email inbox.

A trigger in Power Automate was set for the mailbox to read only the invoices sent as attachment by selected vendors for whom the AI Model form processing were configured. The pipeline extracts the attachment and sends to the AI Model. The AI Model then reads the content of the attachment and extracts the configured data points. These data points are then converted in JSON and sent to D365 FO through the enterprise connector of FinOps in Power Automate. If any errors occur while sending the data, it is moved to an error log with the invoice copy as attachment. From there the AP team can check the error and then reprocess the invoice with just a click of a button.

Once the invoice journals are created, the AP approver can quickly check on the totals and have the AP clerk post the invoices.



65%

invoices automated



Significantly improved
multi-step
cumbersome process
to only two steps



99.9%

accuracy



Simplified month
end process