Original Article

Automation of Vendor Invoice Process with OpenText Vendor Invoice Management

Venkata Sathya Kumar Koppisetti

OpenText VIM Solution Architect. IBM, IL, USA.

Abstract - *Any Enterprise profit depends on optimizing the procurement and automating the labor-intensive manual tasks. Accounts Payable is one such department where timely action on the Vendor Invoices is needed. Otherwise, it will result in delayed payments, compliance issues and the risk of losing vendor trade relationships. In this article, I will cover the advantages of using OpenText VIM as an add-on to the SAP S/4 HANA system over other available OCR applications and how an Enterprise can benefit by leveraging this software application, considering the Image Quality of Vendor Invoices, Master data, Applicable Business Rules, Country Specific Localization and Strategies to apply for faster and timely processing of Invoices. This article will focus on the Successful Strategies to consider while implementing OCR solutions for Vendor Invoices. It will not see much effect on the Invoice automation process due to delays in the data extraction process, poor quality of images, the volume of invoices or incorrect master data.*

Keywords - *OpenText VIM, SAP S/4 HANA, Vendor invoice, Account payables, OCR, Compliance, FIORI.*

1. Introduction of OpenText VIM

OpenText is a Canadian Company founded in 1991 [1], offers Vendor Invoice Management (VIM) software application along with OpenText Archive Server and Intelligent Capture solutions. Any Enterprise can benefit if the procurement is optimized and automate the manual tasks. One such product is the OpenText VIM, which minimizes manual tasks and automates the Vendor Invoice process by extracting the metadata from the Vendor invoices (paper-based via Enterprise Scan or ingested via email channel in .pdf or .tiff format). The Accounts Payable team spends a lot of time manually entering Invoice data and then using a manual validation process on most occasions. OpenText VIM offers the digital solution in archiving Vendor Invoice in the Archive server and extraction of the metadata using Optical Character Recognition (OCR) technology; if validation is required, then such document will be presented to the validation client else, it will be submitted to VIM workplace in case of any exceptions to resolve else the accounting document will be generated in SAP S/4 HANA for the payment process. VIM also offers workflows in case of non-purchase order Invoices, which require approvals. VIM is an add-on product to SAP S/4 HANA and leverages the Master Data of SAP S/4 HANA. VIM is tightly integrated with SAP S/4 HANA and integrates with Ariba, Document Compliance and External Tax Engine.

2. Literature Review

Lack of visibility of Vendor Invoices and the present status of such Invoices will be at risk of attracting penalties for delayed payments or losing the trade relationship with the Vendor. Manual process takes away substantial efforts while processing the invoices, starting from the receipt and until posting for payments. There is a high probability that it will result in human errors and delays with manual tasks. With the advent of OpenText VIM, 90% of the Invoices are automated, and workflows are triggered to the respective Users to Approve or Resolve the Business Exceptions [2]. The volume of invoices and cost associated with processing a single invoice is way higher than implementing the automated process, which will help not only to act fast and detect any duplicate invoices or data errors. Automating Vendor Invoices in different layout formats and extracting unstructured data will result in vast process improvements [4]. As per the study [5] there are challenges in handling OCR from scanned documents is quite challenging due to several factors like poor invoice image quality (recommended 300 dots per inch) with valid data sets for matching and recognizing the Vendor and expensed Company Code along with the other key factors like Invoice reference number, Purchaser order number if applicable, tax data. Handwritten invoice images will slow down the process automation and have an impact on Machine Learning. It is highly recommended that during the Invoice automation process, having an agreement with the vendors will help reduce manual efforts and effective utilization of OCR technology.

In case of any invalid invoice, it can be returned to the Vendor to submit a valid invoice to pay. Based on trusted

relationships with Vendors, they can be categorized as a white list, which will process the invoices without validation, or certain Vendors will always be subjected to the Validation process. Storing Paper-based Invoices is required in certain Countries for Audit, and the OpenText Archive server is always a plug-and-play application that works well with the OpenText VIM. This will help to reduce the physical storage needs replaced with digital storage, and the time to retrieve the stored image is much faster than handling a physically stored image. Invoice images can be submitted via Email via Electronic Data exchange via Ariba Cloud Integration Gateway or Document Compliance. These can be connected to Government Portals for tax validations in certain countries like Brazil, Italy, China, India, etc. VIM System provides user-friendly FIORI apps to process or approve invoices.

3. Roles and Responsibilities

In VIM, Invoice processing is handled by different Users based on the defined roles and the exceptions to be resolved as configured in the system.

3.1. Validators

When Paper-based Invoices are received in the Vendor Invoice Management system or via Scanned image, such Invoices are subjected to the validation process. Initially, this process will be used for training the Invoice layout to capture details from the image using OCR technology. Invoice images should meet the criteria of 300 DPI (Dots per Inch); the OCR process will not be effective, which will impact the processing speed of data extraction.

3.2. Accounts Payable Indexer

Once the data is extracted and submitted from the Validation client to the VIM workplace, data can be indexed in the SAP screen and submit the invoice to post an accounting document or route the invoice for approvals.

3.3. Accounts Payable Processor

If any decisions are to be made for the Invoice data selection, the Invoice documents will be routed to the Account Payable Processor before submitting from VIM to create an accounting document or routing for approvals.

3.4. Approvers

Once the Invoice document is submitted by the AP Indexer or Processor, depending on the Invoice amount or the Expense type, the VIM system will route the Invoices for approval. The approver can either approve the Invoice or Reject the Invoice with the comments. Approvers are applicable to either non-purchase order-based invoices or 2-way matched purchase orders.

3.5. Goods Recipient

For the Purchase Order of 3-way match (Purchase Order Amount with the Goods Receipt and Invoice Receipt), if the invoice does not find any valid Goods Receipt during Invoice processing, then the VIM system will send the invoice to the Requisitioner on the Purchase Order to post a Goods Receipt.

3.6. Tax Expert

The VIM system can be configured to route the Invoice documents to the Tax Expert for tax-related decisions or errors.

3.7. Accounts Payable Administrator

For any workflow-related activities or the rejection or reprocessing of the invoices, VIM requires a designated Account Payable Administrator to handle this type of activity.

3.8. Non-Purchaser Order Coder

For the Non-Purchase Order invoice, a Coder is required to index the line items details of the General Ledger account, Net Amount, Quantity, and Cost Objects (Cost Center or Internal Order or Profit Center) for the respective invoice.

3.9. Requester

For the Non-Purchase Order Invoice Request, the person receiving goods or services from the Vendor acts as a first-level approver. Note that the Coder and Requester can be the same in some instances.

3.10. Strategies to Consider

- Clean Vendor Image with 300 dpi is a pre-requisite for effective Metadata extraction.
- Whitelist of Vendors based on high dollar value or high volume to bypass validation if the required fields have been extracted during the OCR process.
- Master Data should be clean and accurate.
- Consider No Purchase Order No Policy.
- Optimized Business Rules for VIM validation exceptions.
- Monitor VIM KPI reports and action on the Exceptions to resolve in a timely manner.

4. Results
4.1. Results of using OpenText VIM
4.1.1. Customer Story

"All in all, by digitizing a core part of our business with OpenText, we have vastly simplified processes to handle bigger volumes automatically. This has helped free up our valued resources to perform more meaningful, rewarding work with the goal of creating value for our owner-operators" [2].

4.1.2. Sharn Gamman

Commercial Operations Process and Training Manager, Foodstuffs North Island.

4.1.3. Customer Story

OpenText Vendor Invoice Management for SAP Solutions enables us to handle hundreds of thousands of inbound transactions, regardless of the channel chosen by our suppliers [3].

4.1.4. Marcus Johannes
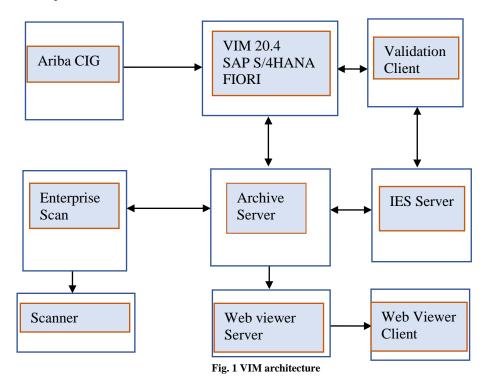
Process Manager Accounts Payable, Innogy SE.

4.1.5. Customer Story

Instead of having employees type information such as product quantities and dispatch dates into SAP, OpenText Vendor Invoice. Management for SAP Solutions uses optical character recognition to capture the information automatically.

4.1.6. Andrea Ferrino

Head of Applications, Distrelec Group NL.

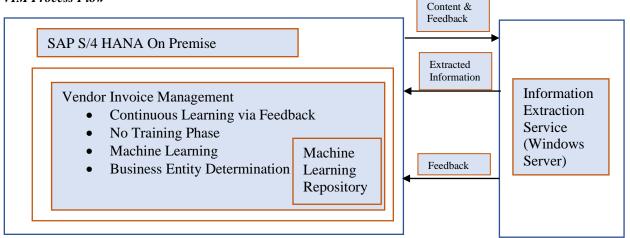## 4.2. VIM Architecture of the Invoice Process

Fig. 1 VIM architecture

4.3. VIM Process Flow

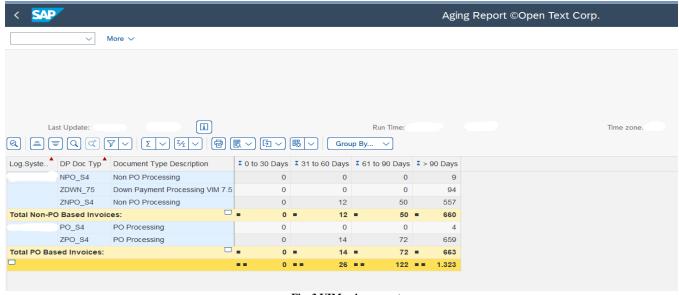**Fig. 2 VIM machine learning**

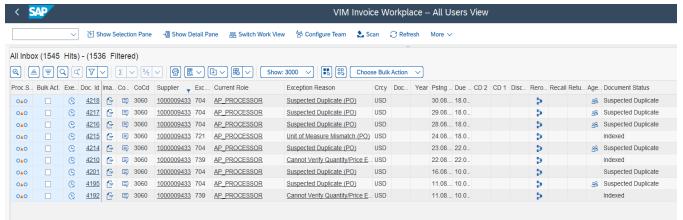**Fig. 3 VIM aging report**
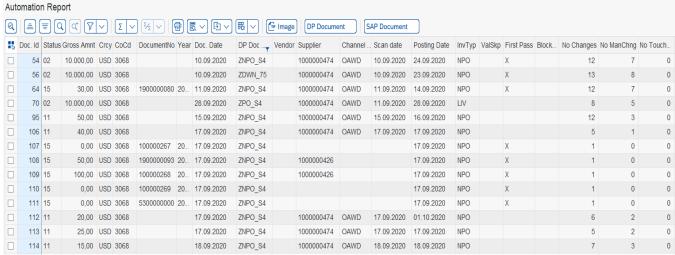

Fig. 4 VIM workplace

Fig. 5 VIM automation report

5. Conclusion

Leveraging Technological advancements should weigh with the Return-on-Investment vs the Volume of Invoices that an Enterprise needs to process. Digital Transformation always expands with more features like AI and Machine Learning along with Generative AI embedded soon, making the software application more user-friendly and rapid speed of processing. Technology should be implemented depending on the organisation's goals to align with current market trends.

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