



Invoice Processing Automation

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Abstract –

Receipt preparing is one of the key back-office activities that requests a great deal of manual exertion. With manual cycles set up, organizations sit around idly acquiring, allotting and affirming Receipts. (RPA) Robotic Process Automation is a more effective approach to Process invoicing. In this project we are going to Extract Invoice data and then filter them according to their due date and put those invoices into their respective excel sheets. Further the Excel sheet with expired Due Date will be sent to Respective Email Address. This Invoice processing Automation System is also trained to understand real world documents. It can also identify and extract a wide range of business values from your receipts and invoices, depending on the needs and requirements of your accounts payable and expense compliance processes. This Automation System will Process Invoices in Less time and with no Errors. This Automation Sem can Process More than 100's of Invoices Per day which is very hard to get processed manually. It will save Human Efforts, it will give the company a monetary gain with minimum errors.

I. INTRODUCTION

Robotic process automation (RPA) is basically a product fit for supplanting people to perform monotonous, rules-based errands and cycles. RPA's can handle tasks and even equipment's which have a defined pattern of working, Machinery's being used in Automobile Industries, Telecommunications, etc. are using RPA for Automated Processes. This not even decreases human effort but gives addition time advantage, into processes that can't be automated.

RPA is enabling organisations to create Automated Processes for Repetitive Tasks. Many Organisations fear that RPA might take place for Human Effort, but it adds to more human resource that it takes. RPA's are also inexpensive and easy to integrate. Traditionally, invoice processing was completely manual and paper-based, consuming a lot of time and effort and was very prone to mistakes. Since humans make error the time costing to fix it later would be enormous as 1 error in data Management can lead to a 100 of them. Which could create a blunder. Whereas, Integrating RPA in Invoice Processing would save tons of time and effort that could be invested into something more valuable than Manual Entries. This Paper will address the Advantages of RPA in Invoice Processing and how It can save time, avoid errors to provide crisp and hassle free information.

II. HISTORY OF INVOICE PROCESSING

A. Traditional Invoice Processing

There are many steps included in manual invoicing such as-

- Quality Assurance- invoices need to be verified usually to review that each invoice is complete and accurate. They check for inaccurate account number or missing Purchase Order Or any other errors.
- Getting Approvals- Further, Invoices will get approved by higher authorities before Payment. each step(the whole process) needs to be monitored so that delays are minimal.
- Accounting- Account Payable team need to record all the payments(expenses) in the general Ledger of the firm. then all invoices will file to transport to archives for storage. Stored invoices can be retrieved anytime when needed.
- Payment- after all the required approvals have been received, the payment is processed by the AP system.

B. Challenges in Traditional Invoice Processing

Invoice data Capturing, Matching, Approval lead to a number of issues when done so manually. For Instance manually entering data from an invoice to and AP system is a time-consuming process. These process being rather repetitive and also very vigorous, this automatically lead to mistakes in the data that is entered into the system. such mistakes further lead a company end up paying for the same services more than once or pay the incorrect amount. improper or poor transmission between suppliers and The purchasing company can create exceptions in the matching process. there may be lack of consistency or disputes may rise over prices on an invoice or for the amount received. All this eventually waste a company time. if there is a lack of consistency with supplier during the approval process, then supplier may assume that invoice has gone missing somewhere, decide to send it again and then the company which is purchasing have to pay off for both invoices for one time.

III. FUTURE OF INVOICE PROCESSING

A. Automating Invoice Processing

Automated Processing basically implies that all manual components of invoice, matching, and confirming are completely Automated, hassle and error free work processes. Everything can be defined by the user of the Automation its very versatile and robust. Since manual processing is such a tiring task it is necessary to shift to an Automated System. Essentially RPA will take over all the manual work once defined how and what to do. Automated systems can not only do a days task within seconds but also be very cost effective and efficient.

Human Resource can be used somewhere where it is more important. However, very few organizations are using Automated Processing.

7% of organizations surveyed are only already using an automated

invoice solution and even more than 35% have no plans to switch to Automation Processing.

According to the report 66% of finance teams are spending more than 5 days each month on invoice management.

B. What is RPA?

Robotic Process Automation is a technology to automate task through software or Hardware Systems that function across variety of applications, just as Human workers do. RPA is like a digital Assistant, doing mundane task. RPA is capable of doing highly repetitive, prone to human error, rule-based and time sensitive. RPA utilize the user interface to gather data and manipulate applications just humans do. They elucidate, trigger activities and communicate with other systems in order to perform on a vast variety of repetitive tasks. RPA Software robot never sleeps and makes zero mistakes.

Implementation of RPA is inexpensive and easy to Integrate with ERP systems.

- Recorder : Recorder is chief part at the development and implementation stage. All the movements (both keyboard and mouse) get recorded by recorder and automate on a continuous basis.
- Development Studio: Robot is design and develop in development studio. in this decision making logic are coded for robots here.
- Extension And Plugins : Addition of plugins such as E-mail, PDF, Word, Excel, Web Integration to enhance the running and working of bot.
- Bot Runner : This is the robot which automate Previously manual processes. Recorder and plugins make it run.
- Control Center : All the operation of robot is controlled by control center. Robot can be started, stopped, scheduled from here.

C. How RPA replaces Manual Invoice Processing

With an automation solution RPA replaced all the monotonous processes. Using UiPath to design and develop a robot we have lots of plugins to enhance working of the robot. We can create an automation that retrieves invoice data from a scanned or computerized invoice using Intelligent OCS and document Understanding Packages. The following steps are involved in developing such robot :

Step 1: Data Scraping to extract table data : Data scraping is also called as web scraping, and this is the process of extracting information from any website and then load it into a spreadsheet or file locally saved in your computer. so in this step first we will extract and specify all the details we need from our invoices.

Step 2 : Add Columns to the data table to store invoice data: In this step we will build data table and add column which is same in the excel sheet.

Step 3 : Extract Data from Invoices : Extract data from invoices using Intelligent OCR and Document Understanding packages, based on the condition if the condition "Due Date has passed or is today's date" is True.

Step 4 : Write to CSV file : Now we will write Data extracted from invoices into a Specified CSV file.

IV. IMPACT OF USING RPA

According to a new study conducted by UiPath around 5 % of RPA spend is increase in around 66% companies over the next 12 months. There is a incredible impact of RPA on the world of work.

A. RPA impact on a company Expenditure

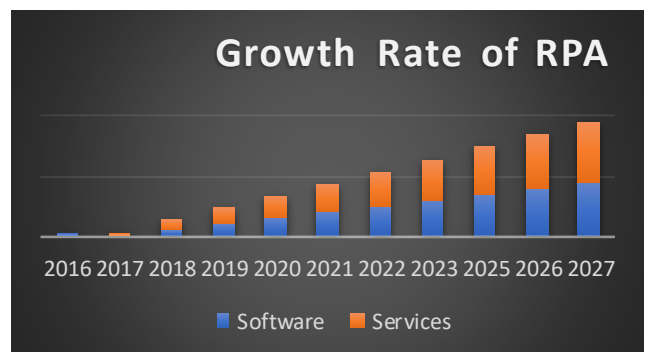
Basically, RPA Depend on the automation of business which impact the efficiency of your work and streamlines your processes without losing accuracy or quality.

For example when your team work on a project and during research they find good and accurate data what they need to take a forward step to a project it efficiency naturally goes up. A Recent Forrester study predicted that within the RPA technology market More than 40% of enterprises will create state of the art digital workers by combining AI (Artificial Intelligence) with Robotic Process Automation.

Robotic process automation (RPA) is transforming the way of organizations to function, streamlining once manual processes and reducing the burden on human employees. RPA helps in Increasing productivity by investing a scalable, digital workforce. The growth of RPA software increased rapidly across industries and Applied from healthcare to financial services and insurance to human resources and call center automation.

Benefits of RPA in company Expenditure :

- Cost Effective
- Accuracy and Quality
- Consistency
- Improved Analytics
- Increased Employee Productivity
- Increased Customer Satisfaction
- Faster than humans do repetitive tasks
- Reconciliation from multiple system



RPA Growth Rate of Company Expenditure in 2020 to 2027(USD Billion)

B. RPA Impact on Efficiency/Workforce of Company

Basically, Efficiency of Company depend on automation or RPA. It operates 24/7: With RPA, the workday doesn't end at quitting time.

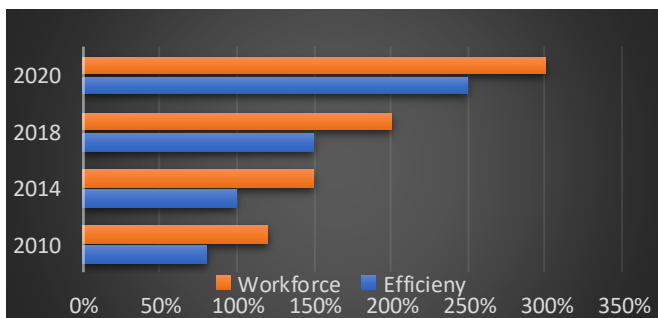
It takes less time to do things which leads to increased efficiency and eventually improve company's bottom line.

At a macroeconomic level, based on scenario modelling, we estimate automation could raise productivity growth on a global basis by as much as 0.8 to 1.4 percent annually.

- RPA can never replace humans.
- RPA will enable humans to work on more sophisticated Skills.
- RPA will lead to upskilling.
- RPA to transform how organizations engage with employees and generates lead.
- Humans and machines will work in tandem.
- RPA the 'Macro's on steroids.

RPA increases efficiency of organization more than 300%.

It is disruptive approach by companies to enabling business to improve operational efficiency.



Efficiency & Workforce Growth 2010-20

V. BENEFITS OF USING RPA IN INVOICE PROCESSING

A. High Accuracy and Increased Productivity

RPA provide precise results, with correctness in monotonous tasks like copy pasting data, transferring files and folders, etc. Using RPA increase company's overall Productivity by enabling human workers redeployed to higher value business functions.

B. Cost Saving

RPA helps in saving cost ranging from 20% to 60 % of FTE costs. UiPath implemented RPA solution for a large Japanese organization which reduce their annual hours across 200 Operations by 650,000 just in a few months after implementing the system in 2017.

1.1 million hours of work are automated in the company which reduced their cost by ¥10 billion.

C. Compliance and Audit Trails

RPA programmed to meet all specified standards because each step is take up in a specific process.

D. Reliability & Improved Customer Experience

RPA provide services available 365 days a year without taking any break, sick leave or leave for other reasons.

RPA can deliver enhanced customer service, by reducing error in manual invoice processing and time for rechecking the invoices.

CONCLUSION

Automated invoice processing system will use of all these elements in one form or another. The faster an organization adapts to this automated system, the easier it will be to focus on company growth.

Companies will be finding ways to tackle large financial processes with least human interference that would cut cost and be more efficient to one. A business that uses Manual Invoice Processing, will keep facing errors defined and that might lead to loss of business.

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