

Automating Financial Processes within SAP ERP using Robotic Process Automation (RPA)

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Abstract

The following research paper has stated the automation of financial processes within SAP ERP with the utilisation of Robotic Process Automation (RPA). This has nurtured several benefits such as improving efficiency with accuracy and the swiftness of financial processes. This has served to be an essential aspect of digital transition for organisations. Furthermore, the research paper has catered to challenges in data integration, technical challenges, and lack of planning and management that have been mitigated by strategies like the development of RPA bots to emerge as beneficial for levelling financial processes.

Keywords: Robotic Process Automation (RPA), SAP ERP, Financial Process Automation, Data Integration, Change Management.

I. INTRODUCTION

This research paper will highlight the importance of automating financial processes within SAP ERP utilising Robotic Process Automation also abbreviated as (RPA). The role of RPA is considered to be vital as it helps to streamline the financial reporting processes. At the same time, the research paper will also shed light on automating data collection along with consolidation and analysis tasks. Moreover, the key benefits of RPA will be explained in a mediating sense with its integration into SAP ERP. Furthermore, the research paper will identify the challenges observed while implementing RPA and propose necessary solutions to overcome those challenges. Therefore, this will determine the overall reliability and validity of the research paper.



Figure 1: Depicting RPA

II. DESCRIBING THE OVERVIEW OF RPA

The following section defines Robotic Process Automation also known as "RPA". It is defined as a software technology which is considered to be easy to design along with deploying and managing software robots.

These robots are then used to emulate the chances of human actions which are then to get connected with humans and transfer them to digital systems¹. Additionally, it is evident that just like people, robots can also do things such as finishing the right keystrokes followed by navigating systems. The role of RPA is termed to be crucial as it helps to develop overall efficiency along with accuracy and compliance. As a result, this aids the financial teams to save both time and errors and thus focus on higher values.

III. EXPLAINING THE KEY BENEFITS OF RPA

This section describes the key benefits of RPA for the automation of financial processes. These benefits are described below.

Minimising Costs: It is found that RPA has the probability to minimise the operational costs thereby automating the financial processes.

Improving Compliance: RPA benefits the organisations to get strictly aligned and meet the compliance demands².

Developing Decision-Making: In terms of making curated decisions, the application of RPA is termed to be effective in nurturing strategic insights and thus cater for efficient decisions for financial companies.

Increasing Employee Satisfaction: It is obvious that RPA has the possibility to remove excess workloads from the employees' end. This can be advantageous to satisfy them and obtain overall productivity.

Upscaling Accuracy: RPA can be used to upscale accuracy. This is attained by simply removing the errors and developing the accuracy of data processing and reporting³.

Increasing Efficiency: RPA is used to elevate overall operational efficiency in a synchronised manner. This is achieved by the automation of repetitive tasks with minimising errors and freeing up time for more strategic work.

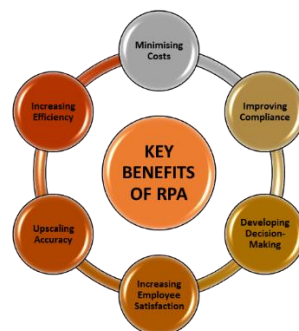


Figure 2: Discussing the Key Benefits of RPA

IV. APPLYING RPA IN SAP ERP

Robotic Process Automation fosters a stringent architecture for implementing it in SAP ERP. It allows organisations to automate the financial processes in a meticulous sense. RPA works in SAP ERP in various ways. The first way is by allowing RPA to record the process flow and then repetitively execute the same tasks. The second way is by simply automating the financial tasks such as sales with purchase and reporting⁴. This is attained by providing manual invoicing and payment processing workflows. As a result, this helps to mitigate the chances of mistakes and thus develop cash flow management. The third way by which RPA works in SAP ERP is by the automation of AR and PR processes. This contains payment

processing and reconciliation. Furthermore, the utilisation of RPA in SAP ERP is termed to be beneficial for vendor selection and procurement which seeks to transcend data validation and transfer entries into spreadsheets.

V. IDENTIFYING THE CHALLENGES OF IMPLEMENTATION OF RPA

This section highlights the challenges that are observed while implementing RPA. These challenges need to be identified at the initial stages and need to be minimised. These challenges are mentioned below.

Lack of Planning and Management: It has been observed that while implementing RPA challenges arise because of a lack of careful planning and management. This results in dissatisfaction with the employees' acceptance in a mediating manner⁵.

Technical Challenges: Another challenge observed while implementing RPA is technical challenges. It comes in the form of data and security breaches. This needs to be lowered by robust security measures.

Integration of Data: Integration of data is considered to be a significant challenge while implementing RPA. This is because it needs a seamless integration with the remaining systems and applications.

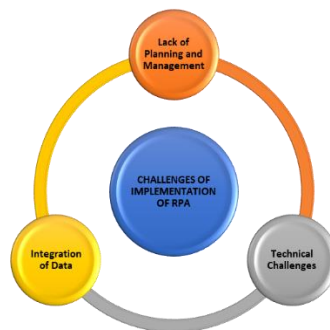


Figure 3: Challenges of Implementation of RPA

VI. ELUCIDATING STRATEGIES TO MITIGATE THE CHALLENGES FOR RPA IMPLEMENTATION

The following section elucidates with necessary strategies which are used in a productive form so as to mitigate the challenges observed for RPA implementation. The strategies are explained below.

Development of RPA Bots: The first strategy refers to the development of RPA bots that can be used for the automation of financial processes in business. It can also be used to facilitate optimum business operations.

Designing Automation Workflows: The next strategy is about designing range automation workflows. This is used systematically to extract the data and copy it between applications or workflows as needed⁶.

Enhancement of Automation Scope: This is proposed to be a beneficial strategy that is used to predict the automation processes and thus assess the feasibility of financial processes with the help of RPA.

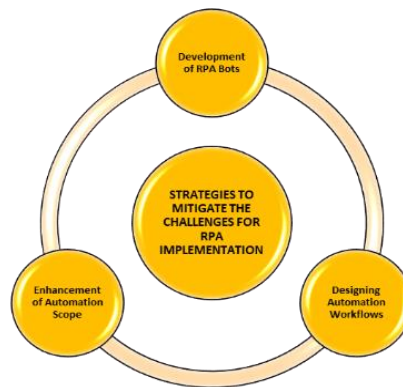


Figure 4: Strategies To Mitigate The Challenges For RPA Implementation

VII. CONCLUSION

The research paper has provided a detailed explanation of automating the financial processes in SAP ERP using Robotic Process Automation. The key benefits of RPA have made it clear that it can be used by organisations to achieve sustainable results by analysing its financial processes. It involves minimising costs, upscaling accuracy, increasing efficiency and employee satisfaction. At the same time, the integration of RPA in SAP ERP has been navigated with positive results. Furthermore, identifying the challenges like lack of planning and management, technical faults and integration of data can be mitigated through strategies. These include designing automation workflows, enhancement of automation scope and development of RPA boots which have proved to be effective to automate overall financial processes.

Abbreviations and Acronyms

- ERP- Enterprise Resource Planning
- RPA- Robotic Process Automation
- SAP- System Application and Products
- AR- Accounts Receivable
- PR- Purchase Requisition

Units

- Time is measured in seconds
- Data Size miscalculated in bytes

Equations

- Cost Savings (CS) = [Total Operational Cost Before RPA - Total Operational Cost After RPA]
- Accuracy Rate Improvement = [Errors Before RPA - Errors After RPA / Errors Before RPA] X 100

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