

Challenges and Benefits of Robotic Process Automation in the Banking Industry

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Abstract

A digital disruption is currently occurring in the banking and financial sector. The desire to reduce costs, increase scale, and provide quick service answers presents additional challenges for the sector. Nevertheless, banks are unable to innovate due to the dispersed processes and several antiquated IT systems that oversee these operations. In addition, banks must process a high volume of papers and personal data while adhering to regulatory regulations and maintaining data privacy.

Robotic process automation (RPA), i.e. Logic-driven robots that carry out pre-programmed rules on a modest quantity of both structured and unstructured data are referred to as "automation," in this context.

Since the concepts first emerged about ten years ago, they have developed swiftly. Insurance companies have been using RPA in financial services for a time now to handle claims. In order to cut costs, improve services, and even improve the effectiveness of complicated regulation implementations, capital market organisations are now resorting to automation. Financial organisations have the power to scale up their resources to a large population while lowering costs and improving service quality. All services will remain accessible and run continuously.

With the aid of a case study approach, this essay clarifies the fundamental idea, benefits, and difficulties of robotic process automation in banking.

Objectives:

1. To introduce the idea of robotic automation
2. To discuss the advantages of robotic automation with the banking sector.
3. To understand the difficulties while implementing robotic automation.

Introduction

Robotic Process Automation (RPA) is a technology that allows software robots to imitate human actions to automate tedious, repetitive, rules-based tasks. By leveraging RPA, businesses can automate processes and workflows to save time, money, and resources while improving accuracy and efficiency. The concept of software robots or artificial intelligence (AI) employees is the foundation of a new category of clerical process automation technology called robotic process automation.

An operation is automated using a traditional workflow, which is created by a software developer. The interface for the back-end system is made using internal application programming interfaces (APIs) or scripting languages created specifically for the interface. RPA systems, on the other hand, construct the action list by watching the user do the task in the program's graphical user interface (GUI), and then they automate the process by repeating those activities inside the GUI. As a result, products that would not otherwise have automation APIs are urged to adopt it.

Tools for RPA are comparable to those used for GUI testing. The interactions with the GUI are likewise automated by these technologies. This is accomplished by repeatedly having a user do a series of demonstration actions. RPA technologies distinguish themselves from comparable systems due to the features that make it possible to manage data in and between many applications. Consider getting an invoice by email, extracting the relevant information, and then entering that information into a bookkeeping system. The ability to manipulate data is not typically found in testing tools.

Conditions to determine whether a process is suitable for conversion to robotics:

1. The procedure must follow rules and not rely on human judgement.
2. A digital trigger should start the process, and digital data should be used to support it.
3. The process should work well and produce reliable data.
4. There should be more executions of the process.

Robotic process automation and Financial Industry:

Over the past 20 years, banks and other financial institutions have had to step up their support for technology.

1. The following requirements have been met through the development of powerful and practical tools for robotic process automation.
2. To maintain competition in a sector that is becoming more and more crowded, particularly with the growing use of digital banking
3. To figure out how to give their customers the finest user experience imaginable.

4. The need to balance maintaining the highest levels of security with maximising efficiency and limiting expenses has grown.

Like many other industries, the financial sector heavily relies on documents and the myriad legacy systems that have been put in place to handle them. Keeping extensive transaction records is a necessary part of the life cycle of a banking customer. From the first application for account establishment through the paperwork used for account administration. It involves loan papers, withdrawals, and deposits. By linking the various legacy systems that were being used, banking professionals struggled to manage and obtain the information necessary for them to carry out their tasks in the most effective way. Robotic process automation has reduced the difficulty facing banking professionals. Nevertheless, this issue persisted as a result of the banking sector's high rate of mergers and acquisitions. One of RPA's major benefits has been its capacity to connect to and integrate with these old systems. By doing this, data management can be improved without having to start from scratch. It was a ground-breaking move for the financial sector. In addition, a range of back office procedures that used to significantly slow down bank employees have been reduced using robotic process automation. The burdensome manual duties are transferred from people to machines. Banks drastically cut down on the necessity for human interaction. This strategy has had a direct impact on everything from performance and efficiency levels to personnel issues and prices.

The lengthy amount of paperwork needed for financial transactions prolonged processing times. A process may frequently become stuck in infinite loops for days, weeks, or even longer while it waits for approval. However, since humans are engaged in every step, mistakes are unavoidable; some of them may harm the organization's reputation and finances. Automation of these back office processes can eliminate these lags and errors. Processes will operate more precisely, effectively, and productively.

Because of robotic process automation, bank employees are aware of where information is held. They have access to it with just a press of a button. Only the robot software operating in the background makes it feasible for all of these things. RPA can also improve transparency by accurately capturing, classifying, and archiving data for each and every transaction. This data can then be quickly and easily retrieved and reviewed as needed.

Robotic process automation is advantageous to the financial sector and compliant. In the insurance sector, banks and other financial institutions must always uphold a high standard of regulatory compliance. Employees must continuously check information to ensure that it complies with legal requirements and industry standards, as well as keep up with the rate of change, which can and frequently does. The management of all the documentation and the elimination of errors through robotic process automation greatly facilitate audits. This technology is also adaptable, making it ideal for a sector that experiences such rapid change.

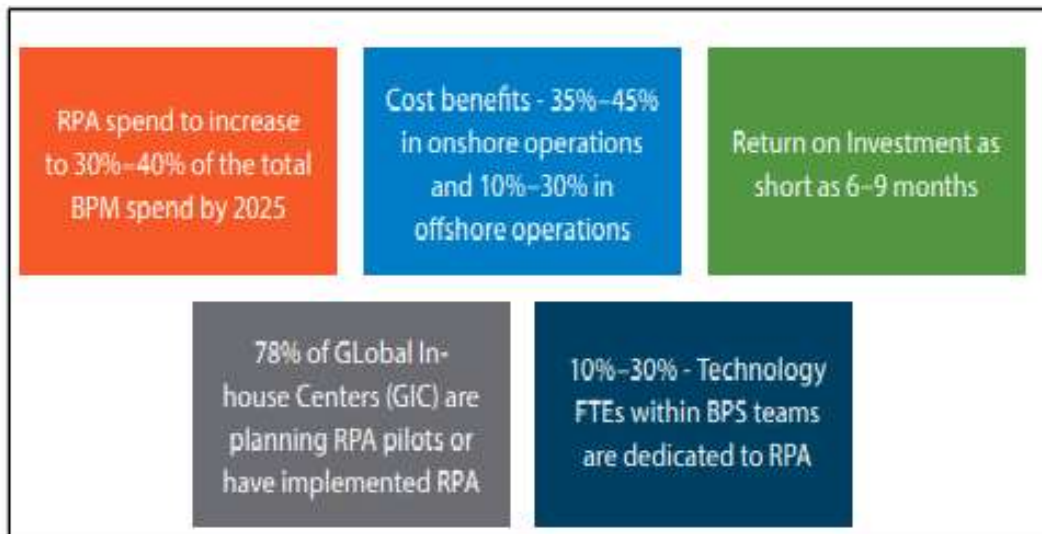
Benefits of Robotic process automation:

1. Increase efficiency: Robotic process automation helps to automate repeatable tasks, eliminating the need for human intervention. This reduces the time and resources required to complete a task, resulting in improved efficiency.
2. Reduce errors: Automating tasks reduces the chances of human error, which can lead to costly mistakes and delays.
3. Increase customer satisfaction: Automating tasks allows for faster and more accurate service, resulting in improved customer satisfaction.
4. Increase accuracy: Automating tasks eliminates the need for manual data entry, which can be susceptible to errors. Automated tasks allow for more accurate data processing and analysis.
5. Improve visibility: Robotic process automation provides visibility into processes and data, allowing businesses to effectively monitor their operations.
6. Reduce costs: Automating tasks eliminates the need to hire additional staff, resulting in reduced costs. Automating processes can also lead to decreased operational costs in the long run.

Sl. No.	Opportunity for RPA	Related benefits				
		Enhanced accuracy and quality	Improved speed of operations	Increased staff productivity	Refined audit trail with accurate information	Increased time for strategic tasks
1	Validating existing customer information	✓	✓	✓	✓	✓
2	Documentation gathering	✓	✓	✓	✓	✓
3	Customer information gathering	NA	✓	✓	NA	✓
4	Compiling customer information	NA	✓	✓	NA	✓
5	Customer screening	✓	✓	✓	✓	✓
6	Customer servicing	✓	✓	✓	✓	✓
7	Regulatory monitoring and data collection	✓	✓	✓	NA	✓
8	Risk assessments	✓	✓	✓	✓	✓
9	Account closure processing	NA	✓	✓	✓	✓

Future of Robotic process automation:

Without the need of expensive or complicated software, robotic process automation (RPA) enables firms to automate boring and repetitive processes quickly and reliably. As more businesses see the promise of this technology, the adoption of RPA is anticipated to increase dramatically in the upcoming years. As the technology matures, it will become more sophisticated and integrated into everyday business processes. The future of RPA lies in its ability to automate more complex and higher-level tasks, such as those involving natural language processing and machine learning. As AI and ML become more widely used, RPA will become even more powerful and useful. Furthermore, with the increased adoption of cloud computing, RPA is expected to become more accessible and cost-effective. In the future, RPA will continue to improve and grow in its ability to automate more complex tasks, freeing up human labour and improving overall business efficiency.



Impact of Robotic process automation on Employment

Robotic process automation (RPA) is rapidly becoming a major part of many companies' operations, replacing humans in some roles. To understand its impact on the labour market, it is important to consider the types of roles that RPA can replace. Many of the roles replaced by RPA are manual and repetitive tasks, such as data entry and document processing. These roles often require little skill and can be quickly automated. This can create short-term job losses as companies replace human workers with robotic automation.

Nonetheless, RPA also has the potential to lead to the creation of new jobs. As companies become more efficient, they may be able to expand their operations, leading to new job opportunities. In addition, the use of RPA can create new types of roles, such as robotic process automation engineers, software developers, and operations analysts. Therefore, while there may be some short-term job losses due to RPA, there is also potential for job creation in the long run. Harvard Business Review reports that the majority of companies using RPA have assured their staff that automation won't lead to job losses. Instead, they gave the employees the assurance that they had been reassigned to more fascinating tasks.

Knowledge workers shouldn't feel threatened by automation, according to one academic research.

They accepted it, seeing the robots as allies. The same study showed that rather than lowering "headcount," technology was used in a way that increased productivity and output while using the same number of workers.

Yet, some analysts have evidence that the Business Process Outsourcing (BPO) sector is threatened by RPA. This concept is predicated on the notion that RPA will enable companies to "repatriate" tasks from remote places into nearby data centres. If true, the outcome would be a decrease in chances for low-skilled employees offshore and an increase in high-paying jobs for professional process designers in onshore sites (and within the linked IT hardware, data centre management, etc.).

Challenges to implement Robotic process automation:

1. Resistance from employees and on-boarding –

Every change that calls for the adoption of new technology can be uncomfortable for employees because it causes significant changes to their routine tasks. It is crucial that business owners and executive sponsors guarantee constant contact amongst staff members. Throughout the implementation phase, employees should be properly aware of their responsibilities. By using this tactic, new technology is effectively and critically adopted. Its acceptance will only be accelerated by instilling an innovative culture within the company.

2. Selecting the appropriate procedures

The automated capabilities of RPA are ideal for high-volume, repetitive, rule-based tasks that don't require human judgement. This can include operations like copy-and-paste work and data migration. RPA installation is particularly challenging for business processes that are non-standard and frequently involve human interaction. These more difficult duties involve interacting with clients and cultivating interpersonal bonds. To ensure that automation goes successfully, it is crucial for firms to identify which of their processes are appropriate for RPA.

3. Having reasonable expectations

When implementing new technologies like RPA, one of the biggest hurdles is setting up realistic outcomes. RPA has some restrictions, so businesses shouldn't think of it as a quick remedy for all their operational problems and inefficient processes. Technology-related decisions must be made individually and according to each company's needs. Different businesses will experience RPA's functionality, deployment process, and operational outcomes differently.

4. Lack of Business Case:

The biggest challenge of implementing robotic process automation is that it can be difficult to make a compelling business case for it. Companies may be hesitant to use RPA due to the upfront costs and the uncertainty of the long-term return on investment.

5. Change Management:

It is important to manage the change that comes with implementing robotic process automation. This means that the organization must be prepared to embrace the change and put in place the necessary processes and procedures to ensure that everyone is on board with the new system.

6. Process Complexity:

Robotic process automation requires that the process being automated be well-defined and documented. This can be challenging if the process is complex or if there are multiple stakeholders involved.

7. Security Concerns:

Security is always a concern when implementing any new system, and RPA is no exception. Companies must ensure that all systems are secure and that any data being processed is handled securely.

8. Sustainability:

It is important to ensure that the RPA system is sustainable in the long-term. This means making sure that it is regularly maintained, upgraded, and monitored to ensure that it is running optimally.

Conclusion

In conclusion, there is an increasing pressure on today's financial companies to operate as efficiently as possible while providing great customer service at the lowest feasible cost. Financial institutions are able to accomplish these objectives and maintain their competitiveness in a somewhat chaotic, constantly changing market thanks to robotic process automation.

References:

1. "10 ways Robotic Process Automation can improve the Loan Origination Process." Nelito, 2019, <https://www.nelito.com/blog/10-ways-Robotic-Process-Automation-can-improve-the-Loan-Origination-Process.html>.

2. Aithal, P. S. (2016). A Comparison of Ideal Banking Model with Mobile Banking System. International Journal of Current Research and Modern Education (IJCRME),
3. Allen, S. "7 Uses for Robotic Process Automation in the Lending Industry." Docuphase, <http://blog.docuphase.com/uses-for-robotic-process-automation-in-the-lending-industry> "Business Process Automation in Banking & Finance." Accelirate, <https://www.accelirate.com/industries/business-process-automation-in-banking-finance/>
4. Cutura, S. "The Benefits of Robotics in Financial Services." Convedo, 2019, <https://info.convedo.com/the-benefits-of-robotics-in-financial-services>
5. Huang, F. "Applying Robotic Process Automation (RPA) in Auditing: A Framework." International Journal of Accounting Information Systems, vol. 35, 2019.
6. Neetika. "Future of Robotic Process Automation in the Banking Sector." Convedo, 2019, <https://info.convedo.com/future-of-robotic-process-automation-in-the-banking-sector>
7. North, R. "Business Automation Process in Banking and Finance Industry." Enterprise Edges, <https://www.enterpriseedges.com/business-process-automation-banking-finance-industry>.
8. North, R. "Significance of Robotic Process Automation (RPA) in the Banking Industry." Enterprise Edges, <https://www.enterpriseedges.com/future-robotic-process-automation-banking-industry>.
9. https://marutitech.com/rpa-in-banking-and-finance/#RPA_in_Banking
10. <https://docs.automationanywhere.com/>
11. <https://www.productiveedge.com/banking-robotic-process-automation-intelligent-automation/>
12. <https://www.comtecinfo.com/rpa/use-cases-of-rpa-in-banking-industry/>
13. <https://docs.uipath.com/>
14. <https://docs.microsoft.com/en-us/power-automate/>
15. <https://www.claysys.com/rpa-in-the-insurance-industry/>
16. <https://irpaai.com/what-is-robotic-process-automation/>