ROBOTIC PROCESS AUTOMATION

NAVIGATING THE RPA IMPLEMENTATION FLIGHTPATH

INSIGHTS FROM THE MONOCLE RESEARCH TEAM

JANUARY 2020





A PRAGMATIC APPROACH TO ROBOTIC PROCESS AUTOMATION



At Monocle, we know that the theoretical concept of Robotic Process Automation (RPA) is not new to the large banks and insurance firms with which we consult. The vast majority of organisations have already embarked, in some form or another, on their own RPA journeys, utilising various software vendors and a variety of organisational implementation approaches. This often includes the evangelisation of RPA throughout the organisation via "Centres of Excellence".

What is evident, however, is that the success of these RPA projects has been wide ranging. For many organisations, the challenge lies not in making the initial decision of whether or not to buy RPA and allocate resources to it, but in the further **embedment** and **scalability** of RPA throughout the organisation in a meaningful and cost-effective manner.

The primary challenge that many organisations face is often in identifying the areas and tasks within the business where RPA can be implemented, applied and scaled to achieve the most value.

Indeed, when RPA is implemented in areas of the organisation that are not wholly suitable to this very specific type of automation, the organisation can end up spending an increasing amount of time and money on the maintenance and troubleshooting of their automated robotic processes, quickly negating any benefits of implementing RPA in the first place.

In this whitepaper, we will outline, through a **unique 5-Stage Implementation Plan**, how RPA can be scaled and embedded in the organisation to guarantee improved efficiency in process execution, alleviating skilled employees from performing mundane, time-consuming tasks and ensuring that your organisation's RPA project achieves the return on investment it deserves.



YOUR GUIDE TO NAVIGATING THE RPA FLIGHTPATH

THE BASICS OF RPA • The challenge of RPA implementation What is RPA? Benefits of RPA **RPA IN YOUR ORGANISATION** Extracting more value from RPA Three Levels of implementation **PLOTTING YOUR RPA FLIGHTPATH** Flightpath overview • Five-stage RPA implementation plan **RPA IN BANKING AND INSURANCE** Benefits of RPA in banking and insurance Use Case One: Reconciliation of letters of credit Use Case Two: Performance reporting and cost allocation **MONOCLE AND RPA** How we can help About Monocle



THE BASICS OF RPA



When applied successfully, RPA can substantially improve the efficiency, accuracy and cost-effectiveness of a range of routine processes, whilst redirecting human workers to higher-order tasks that add significantly more value to the business.

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Examples of tasks easily automated with RPA are:

- opening applications
- copying and pasting information
- sending standardised emails
 - A key element of RPA is that it has the ability to execute these tasks across platforms, applications and environments

The Challenge of RPA Implementation

There is a significant distortion between what Robotic Process Automation (RPA) can achieve **conceptually** and how it is being used **practically** by business.

This distortion arises because of common misunderstandings of what RPA is and how it can be leveraged to achieve the greatest value in business.

Often RPA software is purchased without a clear plan for implementation and the return on investment therefore becomes uncertain.

Therefore, by fully understanding its suitability and plotting a clear RPA implementation path, RPA can become a powerful business tool that will add significant value to the organisation.

What is RPA?

Robotic Process Automation (RPA) is specialised software that is designed to mimic a specific human action, facilitating the automation of highly structured and repetitive computer-based tasks that are not subject to unplanned disruption.

RPA should not be confused with Artificial Intelligence (AI), which involves the development of advanced algorithms that aim to mimic human cognition, with complex capacities such as the ability to learn and predict designated outcomes. RPA digital workers are not capable of making decisions or responding to changes but run much like a macro in Microsoft Excel. They cannot operate entirely independently and must therefore be managed by human business operations teams.

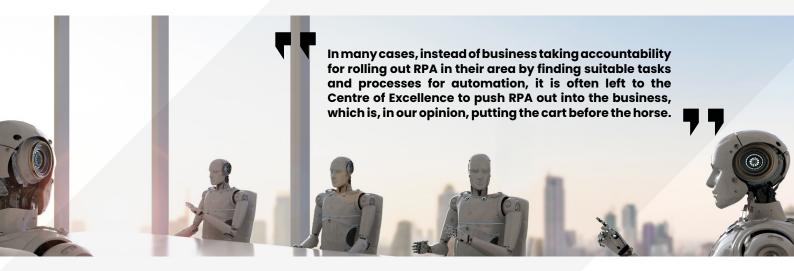
What are the benefits of RPA?

Rather than replacing human workers, RPA should be viewed as a tool that can alleviate the workload of human workers and enhance their performance by automating mundane tasks that are laborious and time-consuming to execute.

Overtime, RPA can be scaled to create an ecosystem of digital workers that function alongside their human counterparts, with the skills and benefits of each complementing the other.



RPA IN YOUR ORGANISATION



Extracting more value from RPA

Often, RPA software is purchased without a clear plan for further embedment and scalability throughout the organisation.

As a result, organisations often do not have a clear idea of where and how RPA will add value to their businesses.

This plan needs to consider:

- where RPA will be applied
- how it will be implemented
- and in what order it will be rolled out

In many cases, companies initially make the mistake of targeting complex tasks that are difficult to automate with RPA, instead of focusing first on the multitude of more simple activities that can quickly and easily be automated with RPA to deliver immediate value.

In isolation, the benefit of automating a simple task may seem negligible, but collectively these basic activities will add significant value to the organisation. Once RPA is successfully applied to these simpler processes, the organisation will also be well positioned to implement RPA in more complex processes.

Three levels of Implementation

RPA implementation can be performed at different levels of sophistication. Ideally, organisations should start with simple task automation across a multitude of areas, to embed the idea of RPA and to achieve a quick return on investment.

More complex task automation can then be performed, once a greater level of organisational maturity, with respect to RPA, is achieved.

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SIMPLE TASK APPLICATION

RPA software is programmed to automate a specific, standardised process, contained within an isolated system or environment.

COMPLEX TASK APPLICATION

A more complex RPA task would involve the extraction of data from multiple databases using multi-part queries, to synthesise the data for input into a larger process.

ENTERPRISE-WIDE APPLICATION

RPA that is scalable and reliable for use across the organisation and allows many digital workers to be linked to perform complex and often business critical tasks across different functional areas.



PLOTTING YOUR RPA IMPLEMENTATION FLIGHTPATH



Flightpath overview

Organisations must focus on creating value from the outset through RPA implementation and acquiring corporate goodwill from early in the process. This plays a crucial role in socialising the concept of RPA as a **positive change** that will enable – and not disable – human workers.

This will drive the progress of RPA implementation and ensure that RPA is embraced across the business.

To achieve a successful RPA implementation, it is also important to plot a path that extends beyond software implementation and includes a consideration of software maintenance and digital worker performance management and governance.

For this RPA implementation to flow into enhanced efficiency, we recommend a five-stage plan:

STAGE ONE Determine the organisation's current RPA maturity level Executive Overview to develop a high-level implementation plan. STAGE TWO Identify specific areas for RPA implementation in the short, Organisational Efficiency medium and long term. **Impact Assessment STAGE THREE** Identify specific processes and tasks that are highly Deep Process Analysis suited to an effective RPA implementation. **STAGE FOUR** Action the progressive implementation of RPA with the goal of enterprise-wide implementation. **Implementation STAGE FIVE** Establish a governance programme that will ensure the sustainability of RPA within the organisation. Governance Framework and Handover



STAGE ONE • Executive Overview

GOAL Determine at a high level how RPA can assist the organisation.

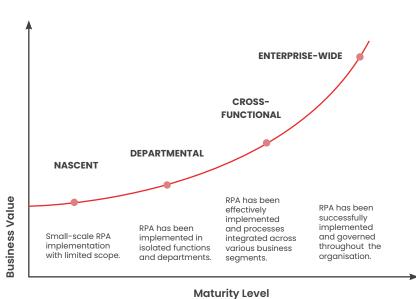
PROCESS | Investigate the organisation's maturity level to absorb RPA across different functional areas for specific macro and micro processes. This will involve meeting with various stakeholders of the business, including the IT department, business leaders, subject matter experts and specific sampled human employees to gather information.

There are four dimensions to the organisation's RPA maturity:

- **Infrastructural Maturity:** The maturity of an organisation's infrastructure with regard to architecture, governance and management.
- Process Maturity: The extent to which an organisation's processes are defined, measured, controlled managed, effective in achieving their aims.
- Structural Maturity: The extent to which the embedded reporting lines and ownership structure of the business are defined and stable.
- **Emotional Maturity:** The extent to which the human workforce would embrace the potential efficiency gain associated with RPA.



ORGANISATIONAL RPA MATURITY LEVEL GRAPH



to guide the implementation of RPA

over the short, medium and long term. This roadmap will determine the timeline for scaling RPA within the organisation, enabling it to ultimately achieve enterprise-wide RPA implementation.

By determining the organisation's RPA-readiness in respect of each of these dimensions, the business's overall maturity level can be determined. Ultimately, the goal is for the organisation to take the necessary steps to achieve a high level of

emotional, structural, infrastructural and process maturity, through widespread socialisation and education

on the benefits of RPA. This will enable

it to achieve enterprise-wide RPA

OUTCOME | A high-level roadmap

implementation.



STAGETWO • Organisational Efficiency Impact Assessment

GOAL Identify departments and divisions within the organisation with the most potential for a successful and impactful RPA implementation.

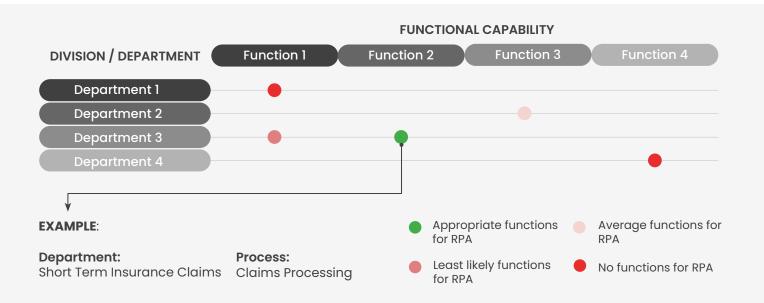
PROCESS | In discussion with executives, the Organisational Efficiency Assessment will analyse various functional and business areas within the organisation to identify where RPA would potentially yield high returns.

Whilst Stage Two engages the organisation at a macro level, to focus first on the business areas that are most suited for automation, Stage Three analyses at a micro level the most suited processes and tasks within the identified area.

To ascertain which segments within the business will benefit most greatly from an RPA implementation, the Impact Assessment, in conversation with relevant stakeholders and using deep industry knowledge, will assess and identify at a macro level:

- Functional areas within the organisation that contain a significant concentration of high volume, low cost per unit tasks and processes, often undertaken by rank-and-file employees, who spend an inordinate amount of time on these tasks on a regular basis.
- Functional areas in the organisation that require deep industry knowledge to identify, but are nonetheless suited to automation, particularly with regard to tasks that involve front-middle-back office administration processes, such as a trading-settlement-clearing process.

This exercise will critically prioritise the business areas assessed within the organisation, with consideration of where RPA will have the most immediate and impactful benefits on the efficiency of the range of processes that exist within that department or division.



OUTCOME | An analysis report that will prioritise functional and business areas within the organisation in terms of the greatest potential return on investment for future RPA implementation projects.



STAGE THREE • Deep Process Analysis

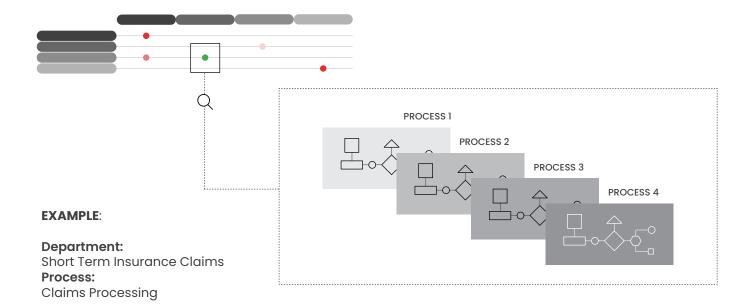
GOAL Identify the specific processes and tasks within the selected departments and divisions that are highly suited to an effective RPA implementation.

PROCESS | The Deep Process Analysis involves mapping and analysing, from end to end, specific processes within the identified business areas. These specific process are identified using a proprietary **RPA-Readiness Assessment** that will determine which tasks and processes are most ideally suited for robotic automation, according to a well-defined set of criteria.

The RPA-Readiness Assessment will, amongst other key criteria, evaluate:



- What is the extent of mundane, non-value adding and repetitive tasks in the process?
- What is the extent of the human intervention required when completing these tasks?
- How often are these repetitive tasks performed?
- How many man-hours are spent on these repetitive tasks?
- Will there be exceptions when processing these activities?
- Where does the information or data come from to support the process?
- Will external or third-party data access be required to complete the process?



- Highly repetitive task
- High human intervention, low human decisioning
- Tasks are performed once daily
- Six to eight hours per day
- Few exceptions in process
- Structured/Templated data sources only
- Third-party data access will be required

In addition, this step will enable the organisation to determine **how long RPA implementation will take** and the resources required to ensure success.

OUTCOME A process map outlining ideal opportunities for Level 1, 2 and 3 RPA implementation of processes and tasks within the selected business areas. This will include a clear indication of the advantages of implementing RPA at each of these levels, including the amount of time that will be alleviated for human workers and the process efficiencies than can be achieved.



STAGE FOUR • Implementation

GOAL | Enterprise-wide implementation of RPA achieved by embedding and scaling the automation process across business areas, as defined in Stage Three.

PROCESS | Progressive embedment and scaling of the RPA project from proof of concept to full-scale implementation across processes identified by RPA-Readiness Assessment and within the functions and departments of the organisation evaluated by the Organisational Efficiency Impact Assessment.

OUTCOME A fully functional and integrated digital workforce that includes the potential linking of RPA components across departments and divisions to create a holistic automation solution.



STAGE FIVE • Governance Framework and Handover

GOAL | Ensure the sustainability of the RPA programme as a Business-As-Usual competency.

PROCESS | Develop and implement an ongoing performance and governance programme that will identify and address any problem areas and ensure digital workers deliver the maximum possible value to the businesses over the long term.

The handover stage includes embedding performance and change processes to **actively manage the performance and efficiency of the robotic workforce**. This will ensure a sustained high level of productivity and return on investment on the RPA assets.

OUTCOME | A fully implemented RPA programme that is managed and maintained by the organisation and which delivers measurable value over the short, medium and long term.



RPA IN BANKING AND INSURANCE

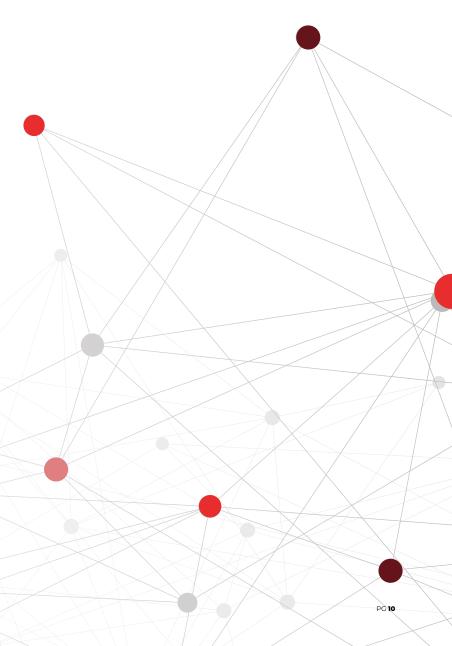
RPA has applications across many different industries, but is particularly useful in banking and insurance environments as:

- Banks and large insurers already have core IT infrastructure in place, so RPA can be implemented as a **low-cost layer** that sits on top of installed banking and insurance applications.
- RPA is **flexible and easily implementable** and can be installed and updated rapidly. This is important in the financial services environment where processes are subject to regular change.
- Minimal IT intervention is required as frontline employees can be trained to maintain and manage their own digital workers.
- Banks and insurers have a significant concentration of high volume processes.
- Banks and insurers are **rules driven organisations** with many repetitive processes at their core.

Introduction to Use Cases

In the next few pages we will demonstrate the practical use cases for a successful RPA implementation, with particular reference to implementation in the banking and insurance space.

Banks and insurance firms tend to be very large, "IT-heavy" organisations, often federal in structure, amalgamating many different business lines into a single corporation. Organisations in the financial sector are particularly well-suited to the prolific spread of RPA. This is because these institutions often have a large workforce of many thousands of computer-based employees, as opposed to the manufacturing sector, for example, where fewer employees are computer-based. RPA in the financial sector is especially useful for rank-and-file employees, who are often subject to many mundane, repetitive, non-value adding – yet necessary – tasks.







BACKGROUND

A large multinational South African bank with subsidiaries throughout Africa was required, on a daily basis, to reconcile the list of letters of credit generated by its Rest of Africa (ROA) system with the list generated by its South African system.

CHALLENGE

Every morning, an employee downloaded a list of letters of credit from the ROA system and a second list from the South African system, into Excel. Although the two lists of letters of credit should, in theory, match, there were often discrepancies. These discrepancies had to be manually identified, flagged and recorded in a list by the employee, for further investigation.

Often a discrepancy is the result of a timing mismatch or a currency fluctuation mismatch, or alternatively, simply a data capture error. However, if no explanation for a discrepancy could be identified, the employee has to email a list of these cases to the ROA entity for further investigation.

Each step of the reconciliation process had to be performed manually, making it very time-consuming.

RPA OPPORTUNITY

An RPA-based solution was implemented to automatically download the lists of credit from the ROA and South African systems. Once downloaded, the "bot" would change the formatting and load the data into an SQL table. In SQL, queries were triggered that automatically matched the data, based on a well-defined ruleset.

Mismatches would automatically be identified using known criteria built into the SQL code, such as timing and currency fluctuation mismatches. The remaining exceptions were then outputted by SQL and the "bot" pasted them into an email, to be sent to the African entity for further investigation. RPA was thus able to eliminate the need for the employee to spend hours performing this mundane reconciliation task on a daily basis. The RPA solution was also scheduled to run in the early hours of the morning, identifying mismatches in the data and notifying the relevant party for further investigation before the start of the workday.

RPA not only made the reconciliation process more efficient, but it also enabled the employee to pursue more value-adding work. In addition, it expediated the reconciliation process for the South African entity, allowing the ROA entity more time to complete its own reconciliation.





BACKGROUND

When undertaking performance reporting, certain banks use very detailed, proactive and granular methodologies to assess and actively manage their activities. This process is often broken down per business segment, per division, per branch, per employee and per client, for example. Each of these entities is assigned an income statement, including their revenue and costs, to determine a P&L statement over a certain period, as a standardised measure of their performance.

The calculation of this income statement for each entity – down to the level of an individual employee, client or branch – involves complex equations that include:

- Net Interest Income (NII)
- Non-Interest Revenue (NIR)
- Provisions and/or Economic Loss (EL)
- Capital Charges
- Operating Costs (OC), which in the case of the performance reporting of an individual divisional manager, for example, would entail a cost allocation methodology such as Activity-Based Costing (ABC).

CHALLENGE

The specific challenge in performance reporting of this nature lies in the scale, frequency and accuracy of managing the inputs to the process. It requires the collection of data from many points across the organisation – across many systems and applications – and inputting it in the right place and in the right manner for the data to be consumed correctly by the receiving system.

Cost allocation in performance reporting is complex, yet critical, in determining a specific entity's costs, and subsequent profitability. However, the sourcing and preparation of data from a variety of divisions and many diverse stakeholders can be unnecessarily laborious and time consuming.



RPA OPPORTUNITY

Because of the disparate data landscape that currently exists, the inputs needed for this type of performance reporting are decentralised and often unstructured – feeding in from many different systems and business areas. This makes the task of gathering cost data from across the organisation difficult, involving numerous repetitive, manual and time-consuming procedures. The highly repetitive and predictable nature of this exercise, however, which requires very little human decisioning, makes this process a particularly suitable candidate for RPA implementation.

When implemented successfully, with the correct rules and specifications in place, the collection, processing and input of the multitude of data points into the relevant systems will be automated in a manner that significantly improves the efficiency and accuracy of the entire performance measurement process, saving time and money without having to entirely overhaul existing systems.



AFTERWORD: THOUGHTS ON MENIAL TASKS

Often, a significant obstacle in implementing RPA is gaining acceptance of the technology amongst human workers and encouraging its adoption at various levels of the organisation.

The implementation of a robust HR programme alongside the RPA technical implementation plan is therefore crucial for ensuring success.

In this respect, the words of Viktor Frankl – an Austrian psychiatrist and Holocaust survivor – are particularly pertinent.

In his seminal work *The Doctor and the Soul* (1946), Frankl writes:



When we present man as an automaton of reflexes, as a mind-machine, as a bundle of instincts, as a pawn of drives and reactions, as a mere product of instinct, heredity and environment, we feed the nihilism to which modern man is, in any case, prone.

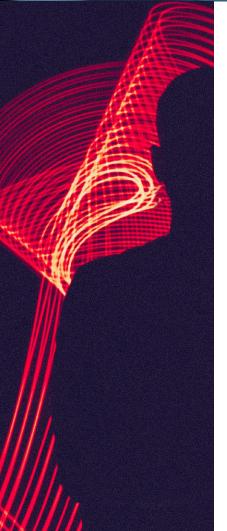


The key to achieving freedom from this nihilistic state, Frankl says, is to find meaning in everything we do – and this is where tools such as RPA play a crucial role.

When people are released from performing mundane, meaningless and robotic activities, they may focus their attention instead on those tasks that require unique human skills and capabilities.

And often, it is through these tasks that they will attain a sense of accomplishment and meaning.





ABOUT MONOCLE

Established in 2001, Monocle is a resultsfocused consulting firm that specialises in banking and insurance.

Our experienced consultants translate business and regulatory requirements into tangible, data-driven results to bridge the gap between business stakeholders and IT. We believe in operating with integrity and transparency and work closely with our clients to determine and build a unique and pragmatic solution that will solve their challenges. We also understand that institutional and subject matter expertise is critical to the success of any consulting engagement and we therefore ensure that all our projects are overseen by senior consultants with years of experience in the industry. Over the last two decades, we have gained extensive institutional knowledge into all areas of financial services and have consulted in multiple regions including Africa, the UK, Scandinavia and Asia-Pacific.

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