
Robotic process automation and the power of automation in the workplace

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Abstract Robotic process automation (RPA) is a powerful tool for performing manual, time-consuming, rules-based office activities more effectively by reducing cycle time and at lower costs than other automation solutions. RPA can have a major effect on a company's operations and strategic positioning and serves as a base for machine learning (ML), artificial intelligence (AI) and the creation of a more autonomous sector. This paper discusses how two of RPA's most significant advantages — ease of deployment and improved speed and agility — are often overlooked. The paper advises business leaders to concentrate on automating as much as possible, focusing on front-end processes, optimising efficiency and striving for auditability.

KEYWORDS: Robotic process automation (RPA), cycle time, operations, strategic positioning, machine learning (ML), artificial intelligence (AI), automating, front-end processes

INTRODUCTION

On a variety of fronts, robotic process automation (RPA) has a major effect on a company's operations and strategic positioning: economic benefit, workforce advantages, quality and control improvements and versatile execution. RPA is an alternative labour source, whereby digital employees can use the same user interfaces (UIs) that human employees use in order to do work. In fact, two of RPA's most significant advantages are often overlooked: its ease of deployment and the improved speed and agility it brings to the enterprise. Considering the disruption that RPA would eventually cause, business leaders should concentrate on a few main implementation principles: automate as much

as possible, focus on front-end processes, optimise efficiency and strive for 100 per cent auditability. RPA may assist businesses in preparing for the future. It serves as a base for machine learning (ML), artificial intelligence (AI) and the creation of a more autonomous sector.

Most executives have heard about this powerful tool for performing manual, time-consuming, rules-based office activities more effectively by reducing cycle time and at lower costs than other automation solutions, considering the lack of robots. It is estimated that 45 per cent of job operations can be automated, resulting in US\$2tr trillion savings in global workforce costs.¹

VALUE DRIVERS

Aside from cost and productivity gains, RPA's chief advantages are its ease of implementation and the speed and agility it offers to the company. Until now, the majority of cost-cutting and efficiency-improvement programmes have concentrated on centralising and standardising procedures. Forcing all or most aspects of an operation into a standardised business structure over time, on the other hand, restricts the organisation's ability to adapt rapidly to shifts and business opportunities.

For companies, the trade-off between expense, productivity and business resilience is a complicated one. During implementation, however, these strategies often face opposition and struggle to gain universal acceptance within an organisation. Although business process management (BPM) will boost process flow and minimise wait times and downtime between phases, actual process execution is still predominantly manual. When it comes to process restructuring, organisations often avoid the major improvements and costs that come with redesigning procedures and replacing outdated job practices.

RPA, on the contrary, helps various business divisions within an organisation to tailor technologies and quickly digitise operations, generating substantial and long-term benefit while decreasing overall risks. Managers can embrace routine procedures without conforming to uniform requirements for those processes by building and deploying intelligent operations at the business unit level, resulting in efficiencies and cost savings while ensuring consistency. Finance and accounting, human resources (HR) management and claims processing are all examples of these types of procedure, but they can also be used in other areas of the enterprise.

For example, as part of a finance and accounting process transformation, a high-growth technology corporation in California with US\$2bn in sales recently performed an RPA proof of concept (POC). To assess

RPA, the company proffered a range of front and back-office procedures of differing degrees of RPA sophistication. Reduced costs (10–15 per cent depending on the process), enhanced controls (100 per cent auditability), compressed processing time (saving 3,000 hours) and the ability to realign talent and concentrate on value-added tasks were among the POC findings. The corporation is aiming to extend the use of RPA through the entire enterprise as a result of these promising effects.

Consider the perspective of a top 5 US bank on a broader scale. For years, the company's executives had pursued outsourcing and offshoring as a way to cut costs, but they found they had exhausted those options. They wanted to look at RPA as a means to introduce the next step of business process enhancements. The bank commissioned a POC based on digitising its loan management functions. The findings were dramatic: a 60 per cent decline in operations and a 30 per cent reduction in headcount. As a result, the bank formulated a plan for deploying RPA across all loan management functions.

KEY BENEFITS OF RPA

The effect of RPA's capabilities on a company's activities and strategic positioning is important, as the following examples illustrate, and can be felt on a variety of fronts (see Figure 1).

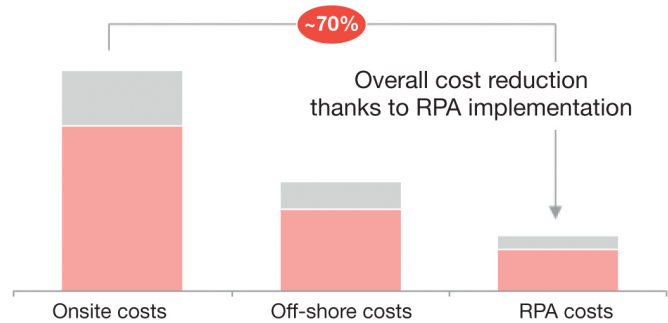
Economic value

This is because of two main factors. First, RPA-inspired process automation is customised to a particular business unit or feature, allowing for quicker and more accurate roll-out. Second, RPA does not necessitate complex system integrations or higher-level programming. It runs via a user interface which eliminates the costs and time involved with conventional process integration, such as IT capital, corporate specifications documentation and



Figure 1: Benefits and cost savings associated with RPA

- The cost savings from PA implementation significantly outweigh the cost savings from offshoring
- This is possible not only as a result of more effective processing, but also as a result of lower operating costs.



considerable production time. Reduced integration criteria and deployment times result in reduced costs and a quicker return on investment.

Workforce advantages

Companies will transition from a labour-centric to a technology-enabled operational model, allowing them to be less limited by labour prices, production and local labour laws. A digital workforce can work 24 hours a day, seven days a week with little or no supervision and can scale rapidly, agilely and resiliently in response to business expansion. Standard staff will concentrate on higher-value, more strategic assignments and other market planning practices in the meantime.

Quality and control improvements

RPA digitises costly and error-prone manual operations. Every step in the process, every operation conducted and every data source has a digital audit trail. Through deliberately designing the monitoring systems of an organisation, the company will integrate thresholds and instructions into

automated procedures, speed up testing and risk management. This reduces mistakes, improves consistency and compliance and will increase customer loyalty by decreased requests and grievances.

Flexible execution

Unlike conventional enterprise resource planning (ERP) programmes or process change initiatives, which are typically large-scale and assess progress over the years, RPA initiatives can be applied on a number of scales. Some small-scale installations can benefit within a few weeks, while the benefits of large-scale implementations can take between six and 12 months. In other words, businesses have the freedom to play with RPA or to completely devote themselves to the depth of change they wish to undertake.

DIGITAL WORKFORCE CAPABLE OF WORKING 24/7

Any business that wishes to adopt this transformative technology and the possibilities it promises must be prepared to meet the huge technical and cultural

obstacles that will emerge. Organisations will refocus, redeploy and/or reduce the workforce by automating procedures. Senior leaders may, however, need to allay concerns that employees might have regarding their potential positions by describing the change of emphasis to higher priority projects, including creativity, analytics and source data management.

Organisations would also need to identify and discuss control of RPA. Indeed, the position of the global process owner (GPO) is crucial. They are responsible for deciding how to make the operation effective and error-free. In most cases, company divisions should be responsible for the automation of activities for which they are responsible in order to give them agility. Nevertheless, business units should consult with the chief technology office (CTO) to understand the effect of this transition on the organisation's IT plan and roadmap, as well as the changing position of IT.

RPA implementation also ensures that more of the transactional activity of the business now outsourced to third parties can be returned or remain in-house, enabling businesses to retain ownership of their systems and controls. As a result, companies will need to reassess their vendor management organisation and outsourcing contracts to ensure that they are both important and beneficial.

Company groups that would not necessarily have operated together in the past now have the ability to share cross-functional procedures with one another with RPA. Ideally, this would

free up opportunities to reach cross-functional workflow efficiencies and lead to higher cost savings. In order to ensure the involvement of all business divisions, however, senior management would need to make it known that teamwork is a goal for the organisation.

IMPLEMENTING RPA

Implementation of RPA usually begins with a POC. End-to-end POC takes approximately one to two weeks to complete (see Figure 2).

Once that is complete, business leaders undertaking an RPA deployment should focus on a few key principles to maximise value from the initiative.

Automate as much as possible

Evaluate current processes with an end-to-end, cross-functional lens and maximise automation across processes.

Focus on front-end processes

Maximise the use of automation during initial steps of a process and work in coordination with other departments or functions, because upstream process improvements have a magnified impact on downstream steps.

Maximise productivity

Evaluate process dependencies between the traditional and digital workforce and

Phase	POC selection	Process re-engineering	Programming and testing
Activities	<ul style="list-style-type: none"> • Determine complexity • Confirm SME availability • Estimate value impact 		
Level of effort	1-2 days	2-5 days	5-7 days
Stakeholder involved	Business SME/ RPA centre of excellence (COE)	Business SME/ RPA COE	RPA COE

Figure 2: End-to-end POC

schedule RPA solutions intelligently to optimise uptime while not overwhelming production systems.

Aim for 100 per cent auditability

Consider applying automation to processes to create a complete digital trail and improve controls for tasks that are otherwise too labour-intensive to fully audit.

MOVING FORWARD WITH AI

While RPA technology has been around for a while now, it is still not fully adopted. Early implementation by leading organisations demonstrates that by redefining job processes and reassigning workers to higher-value tasks, minimising expenses and human error and

increasing enforcement and performance, RPA will carry companies to the next stage of productivity optimisation.

As businesses expand the size of automation within the organisation, they can constantly develop their automation algorithms and begin to see new RPA technologies for sustainable and long-term transformational improvement and competitive advantage. This is the next step towards intelligent computation, AI and a more decentralised business.

Reference

1. PWC, 'Robotic Process Automation (RPA): A primer for internal audit professionals', available at <https://www.pwc.com/us/en/services/consulting/risk-regulatory/library/robotic-process-automation-internal-audit.html> (accessed 16th June, 2021).