RPA
Robotic Process Automation

A HITCHHIKER'S GUIDE

extra technology *just optimise*[IT]

Contents

1 Objectives

Robotic Process Automation (RPA) is a burgeoning market, but one with technologies that are still relatively unknown to many potential buyers in terms of solution features, deployment models, supporting frameworks, and commercial aspects. The technologies are also evolving, with an expanding feature set and increasing richness of functionality.

This white paper is intended to assist companies in taking the first critical step – from a desire to deploy RPA, to developing an RPA deployment strategy which embodies and builds upon strong best-practice foundations.

2 Situation analysis

Since 2008, the fall in interest rates and drop in inflation has forced most corporates to increase profitability through improvement in efficiencies. In order to remain competitive, companies must strive to remove redundancy and adopt a more agile approach towards operations.

A recent Bloomberg survey of the Standard and Poor 500 companies revealed that 65% of its constituents anticipated having to innovate radically in the next two years in order to retain their status.

A combination of technologies (AI, Automation and the Cloud) is seen as the key enabler to the required rapid and radical innovation – termed by some as the Fourth Industrial Revolution.

Successful companies don't just make their existing operations better, but re-invent their fundamental business model using these technologies. Digital Transformation is the term frequently adopted to describe this process.

An often-quoted example is Blockbuster vs. Netflix; both used to rent out pre-recorded media. Blockbuster's innovation was limited to better and more attractive outlets, while Netflix foresaw the Cloud-enabled media streaming boom and rode it to become a dominant player. In addition, Borders and Amazon both sold books. Borders created online bookstores and Amazon's vision was to leverage new technology to become the online provider of everything to everyone.

Thus companies who can increase efficiency will find it easier to survive when times are hard, and will flourish when the economy is on the upturn, and in a global economy it's no longer sufficient for a company to be first in their local market. Competition and advances in technology allow customers to engage with companies operating in any time zone.

If automation and cheap Cloud storage and processing are key innovation enablers, Robotic Process Automation (RPA) is the tip of the innovation spear; it is the single most significant technological development to impact process efficiency. It targets manual, repetitive and time-consuming processes depleting expensive skilled resources, and delivers time and cost savings, quality improvement and an increase in capacity.

Properly deployed, RPA has a positive impact across all sectors. The emerging partnership between RPA software bots and humans is already changing working lives for the better. Delegating repetitive tasks to bots frees people to think, create and innovate. Having a virtually error-free digital workforce allows companies much greater operational freedom, enabling new business models and routes to market.

just optimise[IT]

3 RPA: building the business case

Start with resource-intensive processes. Business process models have always been dependent on the technology that supports them and whilst many organisations have invested in best of breed systems, they share a common weakness: humans make mistakes. The weakest link in a system defines its risk factor, as long as processes are people-based we are unlikely to see accuracy levels reach 100%.

Due to the nature of repetitive unimaginative work, workforce morale typically declines, impacting productivity. In many situations because of a shortage in workforce, high skilled workers are utilised in low value tasks making little economic sense and driving down the levels of efficiency that corporates aspire to reach.

Hiring a new employee is an expensive process, especially when taking into account the cost of training, systems/equipment, office space, salary and benefits.

Employees have to commute and don't always start on time. They typically work for 7-8 hours each working day and are typically only productive for 75% of the time, while bots don't get tired, making RPA the ultimate shift worker.

The previous offshore model did not deliver improvements in efficiency, but rather simply cheaper inefficiencies. Given the upfront costs involved in replicating systems, policies and information, some organisations have not realised the gains promised by the offshore model.

"Organisations and CFOs focused exclusively on cost-cutting are really just planning on going out of business more slowly."

Mihir Shukla,
CEO and Founder
of Automation Anywhere

RPA is about so much more than just taking cost out of the business. Properly deployed it enables innovation, improves efficiency, compliance and effectiveness, and reduces error significantly.

4 Key deployment decisions

As with every leading edge technological product, RPA is evolving and many lessons have been learnt. Whilst industry has been implementing automated procedures since 1951 (with the introduction of the Lyons Electronic Office), it is only in the last 3 years that RPA has seen a noticeable impact. This means there is a limited supply of RPA Subject Matter Experts (SMEs) and as a result some implementations of RPA have been less successful than others.

Corporates looking to implement RPA are best advised to assess their organisational structure and skill base before deciding on their strategy and approach.

4.1 Centre of Excellence (CoE)

In addition to engaging 3rd party experts with the critical RPA deployment best practice expertise, most large organisations put in place a Centre of Excellence (CoE) team. The CoE, working with the 3rd party experts, advise, control and regulate the way in which the organisation adopts RPA. You'll find different opinions on the exact manner in which the CoE goes about carrying out its duties, but we at Extra Technology believe that an effective CoE should:

- Encourage and enable other teams without restricting or stifling their innovation
- Train others in a spirit of helpfulness and enthusiasm
- Deliver suitable training for senior and middle management to ensure that the automation program is properly supported and expectations are realistic
- Provide SMEs with training to ensure that the business can select suitable candidate processes for automation and actively develop bots
- Encourage innovation
- Be firm on security and appropriate roles and responsibilities
- Avoid over-regulation, but ensure that proper audits are in place for QA

In smaller organisations a CoE might not be practical, but it is still advised that small organisations adopt a well thought-out digital workforce policy and appoint a senior manager who can support the program, arrange training internally, select candidate processes for automation and manage a small team of bot developers.

Beware the cookie-cutter approach here, as with all aspects of RPA; one size does not fit all, and the wrong CoE can hinder or even stall your RPA deployment.

just optimise[IT]

4.2 A proven methodology that adapts itself to your unique needs

Most organisations have yet to deploy RPA solution and therefore do not have experience of industry best practices working in-house.

Like all powerful tools, RPA delivers the best results when used correctly. Thus organisations look for advice and guidance from experienced 3rd parties in order to avoid common implementation pitfalls.

In our experience, a successful RPA deployment begins with adopting these overarching guidelines:

- Implement coding standards and adopt best of breed practices

- Ensure that processes are well documented

- There are sufficient controls around change and release management

- Ensure that the Information Security policies and procedures are strong and sufficient care has been taken to protect the organisation from both internal and external influences

- Ensure that the RPA environment does not breach regulatory directives such as GDPR, KYC and other data security concerns

- Do not customise the RPA environment making future upgrades an unnecessary burden

- Use the tools for the purpose they were intended so that you can benefit from the subsequent upgrades

- Keep up to date with new releases – RPA is a fast evolving landscape and each release brings wide ranging improvements. This means the tasks you cannot do with today's release could be possible in future releases

- Know what is possible and only select processes that meet the criteria for RPA

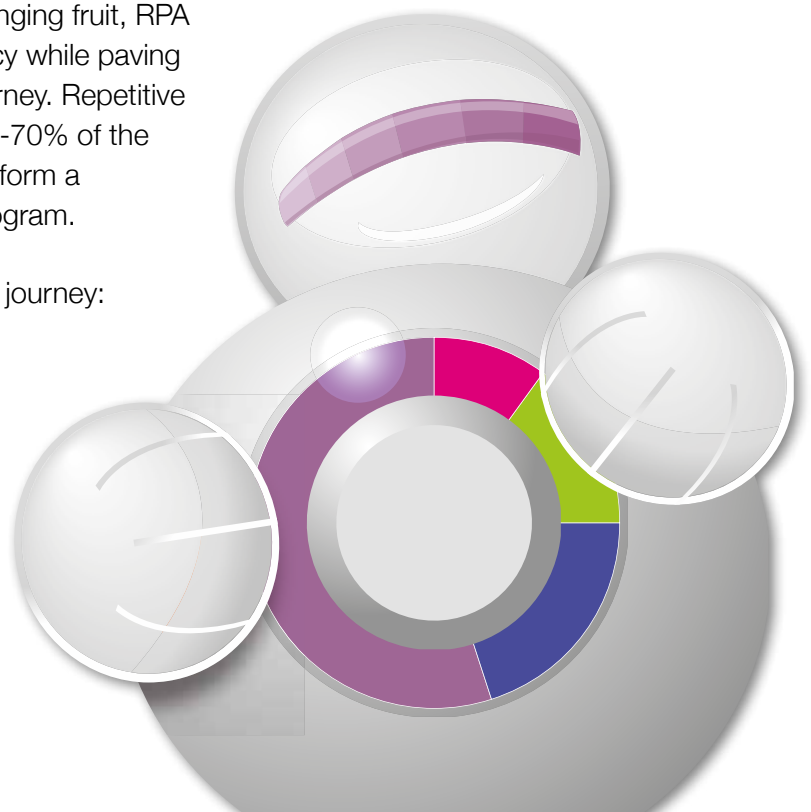- Introduce the workforce to the concept of "Co-Bots" – workers and robots working in tandem

4.3 Planning your automation journey

RPA is one of the foundation blocks in the automation journey of any organisation. Starting with the low hanging fruit, RPA delivers tangible improvements in efficiency while paving the way for the rest of the automation journey. Repetitive rules-based tasks typically account for 60-70% of the operational model of an organisation and form a perfect entry point for any Automation program.

This pie chart shows a typical automation journey:

Key:

- AI
- Chat Bots
- OCR/Cognitive Learning
- RPA

RPA is the entry point of every Automation program and its implementation and strategy are the foundations for a successful outcome.

Introduction of automation to an organisation can be a sensitive subject and one of the major challenges with process change is the management of how that change affects people. It is critical for any automation program to win the support of the employees of the company and those employees must feel that their working environment will improve as a result of automation and should be incentivised to make it succeed.

We at Extra Technology recognize that RPA cannot be delivered in a cookie cutter approach, because one size simply does not fit all. We provide our customers with meaningful advice tailored for their specific requirements and enable our customers to be able to make informed decisions with respect to automation and process re-engineering. For some people RPA is not a change program, since neither the business procedures nor systems used by the business are changed, and thus there is no lengthy redesign of systems and procedures and no security, regulatory or compliance hurdles to overcome. Comparing a typical RPA project with a typical change project:

Change project		RPA project	
1	Change request/SOW	1	Define existing tasks and process
2	Define KPI	2	Use RPA to replicate the process
3	Review/approve change request	3	Run tests in UAT
4	Produce Impact Assessment Report	4	Run tests in pre-production
5	Define new Target Operating Model (TOM)	5	Go live
6	Sign off CR		
7	Analyse requirements		
8	Design new process/system(s)		
9	Develop new systems		
10	Run tests (Unit, System, UAT)		
11	Implement systems in production		
12	Run pre go-live tests in production		
13	Go live		

For others RPA is a strategic program intended to bring change, usually in harmony with Lean process re-engineering. What is the the best way implement RPA? It depends - Extra Technology evaluates each customer's unique situation and provides meaningful advice, enabling them to make informed decisions with respect to automation and process engineering.

Proven technology
RPA is not a complex development tool, the complexity lies in the business procedures and understanding the limitations of current technologies. This means organisations will rely less on IT developers and more on business process specialists and project timelines should be shorter than traditional IT build projects.

Compliments existing systems
RPA solutions do not replace the existing systems, but rather simply complement them by ensuring that data flows from one source/interface to another accurately, reliably and efficiently. Given the appropriate access levels, a robot can access information from multiple disparate sources such as ERP, legal, HR, Finance, customer service and sales as well as external systems, and automate an entire process that may currently be split across multiple disciplines and departments.

Flexible technology
When selecting an RPA solution, organisations should ensure that the platform they select can be adapted to a variety of business needs and be scalable to cope with the size of the enterprise.

5   Introducing Extra Technology:

In most organisations, the need for 3rd party assistance with RPA deployment varies across time, moving from initial high-dependence to eventual virtual self-sufficiency. As detailed above, strategic initial decisions can radically affect the eventual speed and effectiveness of RPA deployment.

Since 2007 **Extra Technology** has been a leader in the provision of specialist intelligent automation solutions. We are an Automation Anywhere Sales, Services and Education Partner. Our RPA team are Automation Anywhere accredited Subject Matter Experts (SMEs). You could say automation is in our DNA.

We combine deep product knowledge with wide industry experience. Our team have wide experience gained not only from many years of automation solution delivery but also from managing live corporate automation environments.

This has allowed us to develop a methodology which embraces the complete RPA life-cycle,

The right initial approach is key

covering not only planning, design and implementation, but also review and ongoing support. Because of our experience and background our customers know they can trust our work and advice implicitly and have peace of mind as we help them steer the choppy waters of automation.

We believe that our role is to guide you through the key processes in the design and execution of your RPA strategy, taking our experience of best of breed as outlined above, and adapting it to your unique situation and requirements. Across time, the goal is customer virtual self-sufficiency, with your business people driving continued RPA deployment guided by their technology counterparts.

We are frequently invited by larger organisations to optimize their RPA deployments (usually managed by large integrators with a cookie-cutter, standard template approach). Based on our experience, we have found that by treating each customer as a new and different environment we can deliver a more rapid and effective RPA deployment.

*just optimise*IT

6 About the authors

Mark Mannion

Mark Mannion is Extra Technology's CEO and a recognised expert in the field of Intelligent Automation, including Robotic Process Automation, Workload Automation and Advanced Analytics. Mark advocates a pragmatic approach to Automation, encouraging a policy of using 'the best tool for the job'.

Prior to co-founding Extra Technology, Mark worked in Senior Automation roles, architecting and delivering robust, scalable solutions for many of the world's biggest banks and working with leading Automation vendors. He developed his first automated solution in 1992 and has continued to deliver robust, scalable and sophisticated Automation ever since.

Mark is a regular guest speaker and panellist at Automation seminars, conferences and user group events most recently the Workload Automation Summit, CA World, Innovation Europe and ISoP Intelligent Automation in Pharmacovigilance.

Faz Moshfeghi

Faz Moshfeghi is an Intelligent Automation Solution Architect with Extra Technology. He has 25+ years of industry experience, specialising in IT Automation, System Integration and Business Transformation including Robotic Process Automation, Workload Automation, Process Automation, FpML messaging, and Straight Through Processing. Faz is a senior member of Extra Technology's RPA team and designed and developed Automation Anywhere Automation utilities for specific tasks in the Pharma sector. He has also taken a lead in a large-scale Automation project for a leading bank, and ran a critical Automation product replacement project for a leading Telecoms provider.

Faz has a proven history of providing BPM governance, designing best practices, project management practices, process analysis & selection, robotic process development and process delivery.

" Overall, the inexorable shift
from simple digitization (the
Third Industrial Revolution) to
innovation based on combinations
of technologies (the Fourth
Industrial Revolution) is forcing
companies to re-examine the way
they do business.

The bottom line... understand their
changing environment, challenge
the assumptions of their
operating teams, and relentlessly
and continuously innovate."

**Klaus Schwab,
Founder and Executive Chair,
World Economic Forum**

*just optimise*IT

Contact us...