

Get ready for robots

Why planning makes the
difference between success
and disappointment

The EY logo consists of the letters 'EY' in a bold, white, sans-serif font. Above the 'Y' is a yellow chevron shape pointing to the right. The logo is positioned in the bottom right corner of the page, set against a background of a complex, golden-brown circuit board pattern on a dark background.

EY

Building a better
working world

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Delivering Robotic Process Automation

Software Robotics, or Robotic Process Automation (RPA) promises to transform the cost, efficiency and quality of executing many of the back office and customer-facing processes that businesses rely on people to perform.

That's the good news. But RPA is not without its challenges. We have delivered RPA projects across 20 countries and are often called upon to help companies when their first attempt failed. While RPA can transform the economics and service level of current manual operations, we have seen as many as 30 to 50% of initial RPA projects fail. This isn't a reflection of the technology; there are many successful deployments. But there are some common mistakes that will often prevent an organization from delivering on the promise of RPA.

As one of the largest RPA consultancies delivering programs globally to financial services organisations, EY is often called in to get RPA programs back on track. This is the first in a series of papers based on our practical experience and the lessons we have learned. In this paper, we examine the common issues that we see clients facing as they move forward with robotics projects. Subsequent papers will define robotics and explore its potential, how best to structure RPA programs and advanced robotics.



Given the promise of RPA, where do companies go wrong?

Any technology that can reduce the costs of existing manual operations by 25% to 40% or more without changing existing systems, yet improve service and generate return on investment (ROI) in less than a year, can truly be described as transformational and disruptive.

Getting RPA projects right is difficult. So what are the top 10 issues that companies always need to address to deliver on the promise of RPA?

At EY, we break these down into two components:

- ▶ The common issues across failed RPA projects
- ▶ The multiplier effect from multiple issues

Top 10 common issues in failed RPA projects

Business issues

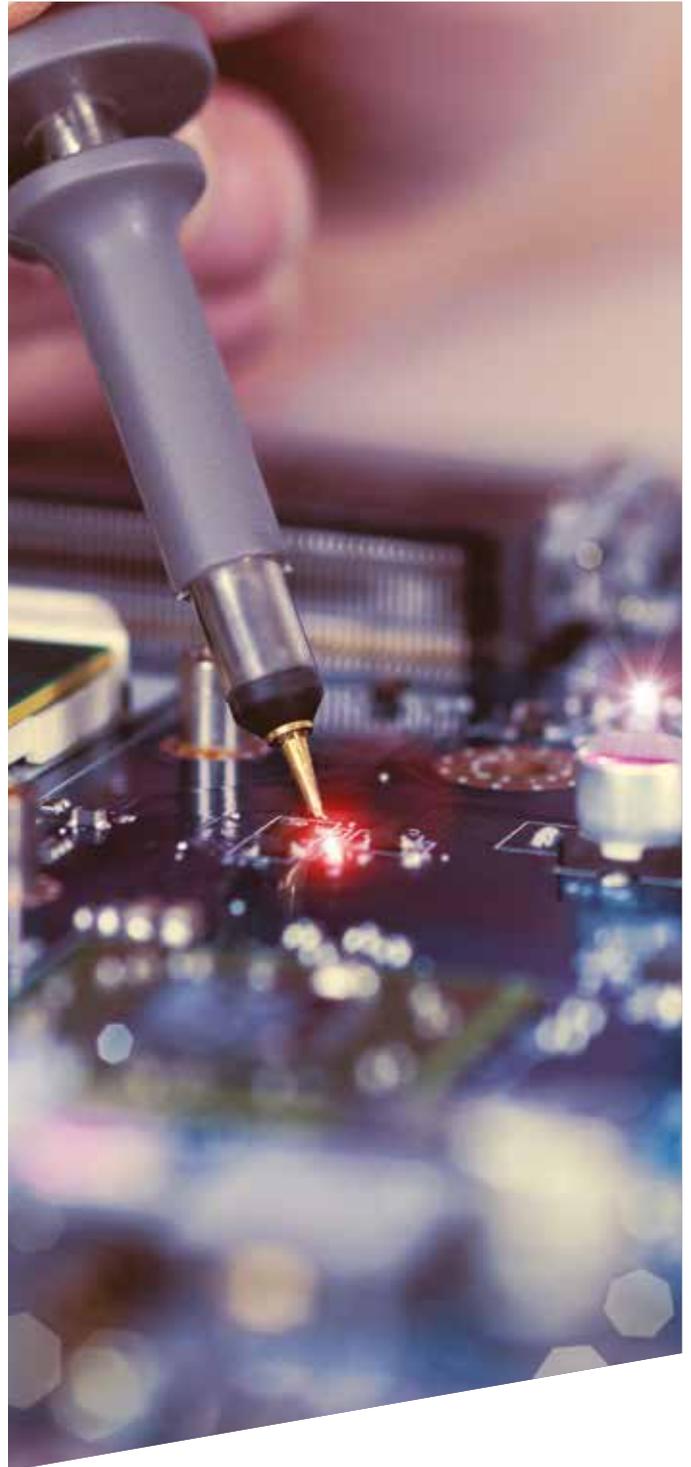
	1.	2.	3.
Issue	Not considering RPA as business led, as opposed to IT led.	Not having an RPA business case and postponing planning until after proof-of-concepts (POCs) or pilots.	Underestimating what happens after processes have been automated.
Description	A successful RPA is a business-led initiative or program with strong partnership from IT, Cyber, Security, Risk, HR and other enterprise functions.	A common route for most organizations is to perform an initial PoC or pilot to see that RPA delivers on its promise. But often this creates an embarrassing gap between a successful PoC and large-scale production automation, as RPA programs cannot answer simple questions from the Board about "where are we going to target RPA, how much will it cost and what is the return?"	There are a number of issues with just getting an RPA program mobilized, targeted and delivered at pace. But another common mistake is neglecting to consider how to get processes live and who runs the robot workforce - both issues that will delay "going-live" and timely delivery of benefits.
Mitigation	Often companies think about the initial automation project, but forget that ultimately RPA will deliver a virtual workforce that allows the business to task robots across the entire organization. IT would not be in charge of managing the current agent workforce, nor should it manage a virtual one. And, as back-office agents can be trained to teach robots, having a business-owned RPA center-of-excellence (CoE), liberates a constantly stretched IT department to focus on more valuable activity. So business-led CoEs allow the business to prioritize which processes to automate and what the virtual workforce does. However, IT still has a crucial role in delivering infrastructure and software support, but also jointly governing and managing change in automated processes.	There is significant body of evidence to show that RPA can deliver tangible business benefits across all types of companies, even those with the most archaic IT systems. We typically advise companies to carry out a rapid company-wide or unit-wide opportunity assessment alongside a PoC. Typically, PoCs can automate sophisticated processes in weeks, which is all it takes to perform a solid opportunity assessment and create a detailed business case. This means quick stakeholder sign-off, and enhances the momentum of the RPA program.	We believe a business-led RPA CoE is the best way to manage and enhance a virtual workforce - but it does not simply spring into existence. So the CoE processes need to be in place, IT governance agreed, and staff trained to operate robots and continue to enhance processes. While this seems daunting, a well-executed skills building program can see a fully self-sufficient CoE established within six to nine months - and is usually quicker and less restrictive than negotiating an outsourced CoE arrangement.

4.

Treating Robotics as a series of automations vs. an end to end change program.

Unless a structured reorganization and full-time-equivalent (FTE) -release happens as part of an RPA project, agents quickly “drift off” to perform other work. Typically this involves focusing on providing a better service, or working on more interesting tasks instead of the manual work the RPA is now doing. While understandable, it means that the benefits are not fully realized and subsequent phases are not approved.

While providing better service is laudable, ultimately an RPA program must deliver its planned benefits in order to continue to rollout. Focusing on measuring and realizing benefits is therefore key. By performing an opportunity assessment, we usually recommend a portfolio of savings, service improvement and transformation processes - each of which needs to be measured and benefits delivered so ongoing investment continues.



Project challenges

	5.	6.	7.
Issue	Targeting RPA at the wrong processes.	Applying traditional delivery methodologies	Automating too much of a process or not optimizing for RPA.
Description	Targeting RPA at a highly complex process is a common mistake. This results in significant automation costs, when that effort could have been better spent automating multiple other processes. Often these are tackled only because they are very painful for agents, but may not offer huge savings.	Quite often companies try to apply an over-engineered software delivery method to RPA, with no-value documentation and gates, leading to extended delivery times - often months where weeks should be the norm.	Often we see that companies try to totally eliminate human input in a process, which ends up in a significant automation effort, additional cost and little additional benefit. But we equally often see no effort to change existing processes to allow RPA to work across as much of a process as possible, and hence reduced savings.
Mitigation	<p>Perform a proper opportunity assessment to find the optimum portfolio of processes. Low or medium complexity processes or sub-processes are the best initial target for RPA, with a minimum of 0.5 FTE savings, but preferably more. Ultimately, we are looking for the processes with the best return, and simplest delivery.</p> <p>Companies should only tackle complex or critical processes once they are RPA-mature, and then look to automate the highest value or easiest parts first and increase the percentage of automation over time.</p>	<p>While IT governance is essential, most software delivery methods are over-engineered for RPA - especially as RPA rarely changes existing systems, and processes are documented in the tool. Companies should look to challenge and simplify existing methods and use an agile delivery approach to deliver at pace. In fact, a few leading RPA CoEs, with the right methods, have delivered new processes into production every two to four weeks.</p>	<p>The best way to view RPA initially is as the ultimate "helper," carrying out the basic work in a process and enabling humans to do more. Automating 70% of a process that is the lowest-value, and leaving the high-value 30% to humans is a good initial target. It's always possible to back and optimize the process later. And while fully "learning" every process may take too long, look to see if simple changes mean that a robot can do more of a process.</p>

8.

Forgetting about IT infrastructure.

Most RPA tools work best on a virtualized desktop environment, with appropriate scaling and a business continuity setup. It can be so quick to deliver RPA processes (typically weeks not months) that IT has not had the time to create a production infrastructure and, hence, get on the critical path to delivering benefit.

Companies can learn from EY or RPA vendors about exactly what IT infrastructure will be required. This means knowing your company's lead times and ensuring an appropriate "tactical / physical PC-based infrastructure" plan is in place, if a production environment is not feasible quickly. Similarly IT security engagement must start early so as to not impact go-live.

9.

Assuming RPA is all that's needed to achieve a great ROI.

While current RPA tools can automate large parts of a process, they often cannot do it all - frequently because the process starts with a call or on paper, or requires a number of customer interactions. Hence companies often end up automating many sub-processes, but miss the opportunities to augment RPA with digital or OCR and automate the whole process.

The cost arbitrage of RPA is significant - in European countries, a robot can be 10% to 20% of the cost of an agent. But more often than not, a robot only works on sub-processes and hence leaves a lot of the process that a robot cannot handle, and therefore limits savings achievable. But, for example, if we extend RPA into digital self-service we see that benefits can be up to two to three times that of RPA alone. EY has invested heavily in getting digital to work well with robotics through special "robot-aware" digital tools, and the result is delivering nearly 100% straight-through processing, and significant ROI.

10.

Assuming skills needed to create a PoC are good enough for production automations.

One of the common traps of RPA is that with just a day or two of training, most business users can automate simple processes. But the skills needed to create scalable, resilient RPA processes are significantly greater. So often PoCs have lengthy testing and re-work cycles to go live, if not totally re-creating.

Companies should work on the basis of needing at least two weeks of classroom training, then two-to three months of hands-on project delivery with supervision and coaching, before an analyst can deliver production-quality automations well. It's essential not to be economical on teams' training or skills transfer and support.

The multiplier effect

More than one of the issues outlined above is often present or linked, creating a significant multiplier effect. As our “top 10 issues” list shows, it takes sufficient forethought or outside help to mitigate these issues.

Unfortunately, if more than one of these issues occurs - which is common - there’s a significant multiplier effect that can lead to loss of belief in RPA or cause the project to stop.

Let’s look at an example, where three of the simpler issues are encountered in a RPA program.

In the scenario below we are looking to deliver a simple data cleanse PoC, and then quickly take this into production to deliver tactical benefits:

	1.	2.	3.	
Issue	Using the wrong delivery methodology.	Assuming skills needed to create a PoC are good enough for production automations.	Automating too much of a process or not optimizing for RPA.	Total
Typical time to deliver if issue avoided	With skilled resources and an agile, RPA-centric method employed, simple sub-processes are typically automated and ready to go live in two to four weeks.	Knowing a PoC is due to go live means the right design and development rigor is used and unit tested. Hence the delivery part of a PoC may go from one to two weeks to two to three weeks to confirm it's fully scalable, resilient and audited.	Assuming the focus is on the optimum 70% of a process, it should be possible to automate in two to four weeks.	2-4 weeks
Typical time to deliver if issue impacts	If a software delivery method is used, then excess documentation and governance gateways can quickly mean a process can take six to eight weeks to be ready to go live.	If a PoC is delivered by poorly skilled staff, then teaching a robot a process could miss important issues on scaling, error handling, concurrency or scheduling. Hence, there can then be numerous cycles of testing and re-work before it is fit to go live - adding two to three weeks.	Continuing to automate the remaining 30% often involves convoluted exception handling or multiple diversions from the “happy-path”, so can double the time to deliver - adding two to four weeks.	10-15 weeks



One further thought

What should have taken two to four weeks to deliver under a high quality approach can rapidly increase in duration - and hence increase cost - four-or five-fold.

Often these simple errors and delays give senior stakeholders a reason to withdraw support from the project. It's therefore important to recognize and mitigate these (and other) common issues in order to facilitate the success of the organization's RPA program.

In order to best gain buy-in to RPA by senior stakeholders, we recommend that an RPA portfolio balances cost reduction with other value drivers such as service improvement, transformative services, improved regulatory response and growth.

While delivering cost-savings is great, "headline-grabbing" service improvements or showing entirely new and innovative digital services or products makes the senior stakeholders even more interested in making RPA happen.

We hope this paper has helped you with the main areas to consider when you are starting a project. Our next few papers will focus on how to organize and restructure for success.

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EYG no. 03746-164GbI

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