

# Knowledge Kickstarter– Some CommonRPA Questions

What to consider when deploying Enterprise RPA.



# Knowledge Kickstarter -Some Common RPA Questions

At Blue Prism, we have been working to deliver Robotic Process Automation solutions across the enterprise since 2001.

Our product has grown up in the context of large scale, demanding deployments where security, resilience and governance are equally, if not more important, than speed, automation and simplicity.

This data sheet outlines some common questions that are posed by customers who are beginning the RPA journey, and aims to help organizations to make sense of RPA technology and to quickly become knowledgeable enough in the sector to be able to choose the best approach.

# "Desktop Recorders make things easy...don't they?"



#### Blue Prism has never had a recorder in our software. And we have no plans to implement one.

It may seem odd that to start a discussion on our product by explaining why we don't have specific functionality but let us explain why we think this is so critical to enterprise RPA deployments.

A desktop recorder watches how you navigate the applications on your desktop and records the steps that you take - it's a useful shortcut to building a process quickly if that's what is required.

The downside is that by using a recorder, users are not designing their solution to be re-used and are making choices based on short term imperatives rather than long term objectives.

At Blue Prism, we strongly believe that for RPA to truly deliver value, longevity and resilience, automations should be carefully planned, modelled and designed in order to leverage principles such as re-use, componentization and economies of scale.

## Think about the long term...

Imagine how your environment will look in 6, 12 or 24 months' time.

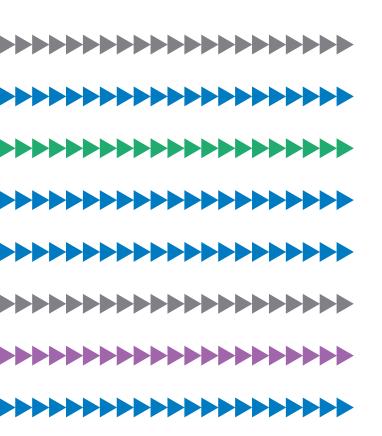
How many processes will you have captured?

How will you ensure that you maximise re-use across those processes for ease of maintenance?

How will you prevent having to record processes over and over again as systems and processes change?

How intelligent are the scripts that have been recorded in terms of rules and system responses?

How will the workload be shared, distributed and managed to achieve SLA targets and accommodate peaks and troughs in demand?



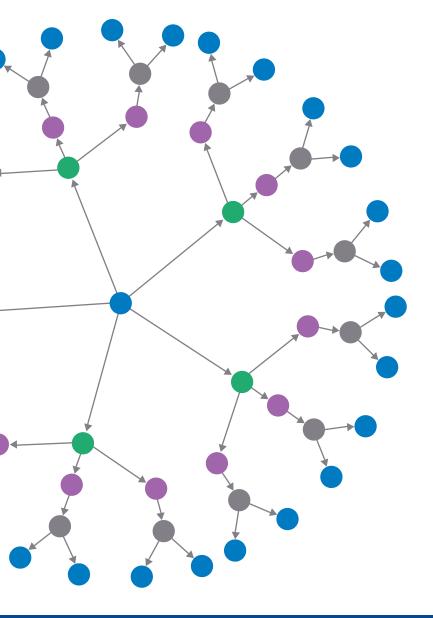
Recorded automations include pauses that comprise fixed numbers of seconds that break when your systems run slowly. The scripts will mix business logic and application logic together. Elements on the screens such as fields and buttons that are used in the automations will be duplicated over and over again, resulting in an inflexible block of automation that is very difficult to maintain and change.

This all means that whilst it may be quick to record a set of "point to point" single stream scripted automations to run on desktops of agents, it's almost impossible to take these unconnected scripts and deploy them in an enterprise context, where scale, availability, manageability and ease of change management are vital.

Fig 1. A series of unconnected scripts

# Blue Prism works differently.

By modelling the parts of the application that you are going to use first, then creating re-usable objects that interface with the system like a user, processes can be layered on top that chain together this library of objects with business rules to create flexible, maintainable processes.



If a system changes, change the model. Once.

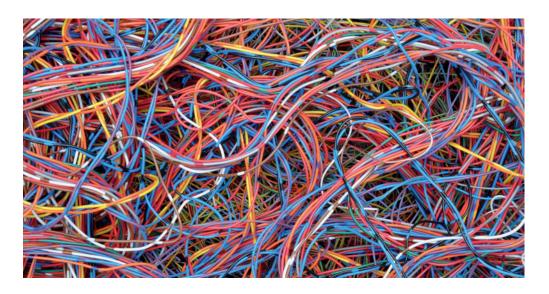
If an application interaction needs to change, update the object. Once

All of the processes that use this information inherit these changes, without re-recording or rebuilding them. And processes can be written more quickly as the building blocks that already exist can be re-used in different business scenarios.

With our approach, the Total Cost of Ownership actually reduces over time, rather than increasing.

Fig 2. Leveraging re-use

# "Scripts, code, objects – aren't they all the same thing?"



Up until 2 or 3 years ago, what many RPA vendors were actually providing were desktop scripting applications designed to automate short tasks on a user's desktop.

Because of this heritage, the architecture of these software products is not designed to scale across significant estates or to leverage centralization and design control – they are utility products.

One thing to look out for is how an RPA product captures and then replays the automation. Many of these software products produce "scripts" that are compiled into files that can be run on a desktop.

The disadvantage with this approach is that these scripts are slow, inefficient and difficult to maintain. They are also very linear in approach.

In competitive evaluations, we have seen complex scripts run 3-4 times slower on other technologies when compared to our object oriented approach due to this architecture.

Concepts like recursion (calling the same object from within itself), control logic (looping through objects and processes) and conditional processing (call process B based on the outcome of process A) are not possible and the linear approach reduces the flexibility afforded by the ultimate solution.

# "Aren't all robots the same when it comes to running them?"

Think about running the automations at scale as well as developing and maintaining them. Look at command and control very carefully when evaluating a technology.

If an application is designed to be deployed on an agent's desktop, but is actually being deployed as part of a wider RPA initiative, consider how the automations will be controlled and administered as the scale of the solution grows.

What happens when there is a system problem or the automation path doesn't match the data encountered in the application? Will the process stop? Who is required to restart it, and how will they do this? How will you ensure that the administrator can't see the customer data, or interfere with it fraudulently in the name of the robot?

Similarly, think about scale. If you had 1000 robots, how many administrators will you need to start the processes, log into the systems, keep them running? Blue Prism takes care of all of this with our secure enterprise infrastructure.

It may take a little longer to set up, but the result is a secure, reliable system that runs 24/7 and only requires one or two people to monitor (who don't have access to the systems, just the control room).

With a solution that has a desktop heritage, consider how many people will be needed to maintain and monitor it, and how you can ensure that your valuable customer information is safe and secure.



#### See the bigger picture – workflow.

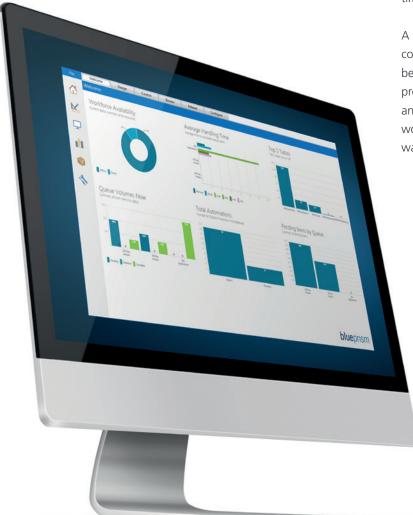
#### Workflow is very important when it comes to scaling your solution.

How will you deal with cases outside the scope of your automation? What about a 2-phase process, or retrying a case? If things go wrong, how will you know what was processed, what was left incomplete and what was unfinished?

Also, think about rolling back an automation, sharing a file across a team of robots and prioritising work with visibility and reporting on volumes, unit times and backlogs. Without centralised workflow, none of this is possible.

And workflow doesn't just mean coding a schedule for a robot. It manages the state of the work items, tracks them, records any exceptions for later review and allows you to prioritise, retry, analyse and predict completion times across your automation estate.

A badly designed solution that doesn't consider these facets will impact your business benefit, lengthen your SLAs and may cause problems with your governance, compliance and information security teams. Often this won't become apparent until you are some way into the journey.



## "And what about your data?"

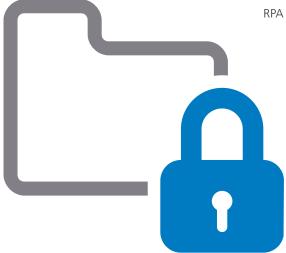
When you deploy your solution, your robots have access to data held within your information systems. They use this data to perform the automated process as a human would.

But a robot is a technology, not a person, and controls can and should be put in place to ensure that the data the robots are using stays secure.

This means protecting the RPA infrastructure from human intervention, locking down the robots so they cannot be accessed by developers, testers or administrators.

It also means ensuring that the data used by the robots is encrypted during transportation and whilst at rest, and having robust access management policies that log any changes and enforce role based permissions to demonstrate to auditors that best practise is being followed and no one individual has the autonomy to make a change without a secondary individual approving that change.

This also means that the system should be centrally controlled, not via individual scripts or executables, but by a centralised, server oriented architecture that uses a database to store all of the artifacts required by the RPA platform.



## "What's the difference between 'front office' and 'back office'?"



#### We see a lot of requests for process automations that originate with a front office requirement

Either the customer is on the phone and the agent would like to access more information quickly to help them with the conversation, or they want to do something in real time, like producing a quotation to give to the customer.

Desktop automation, mashups or reskinning applications for real-time, desktop processing is a very different approach to RPA and presents challenges and difficulties that can be hard to overcome.

Sometimes this is called "attended" automation, versus "unattended" automation. You can think of Blue Prism as a rapid response team of virtual workers in a separate back office. You delegate them work to do, they do it, and then report back.

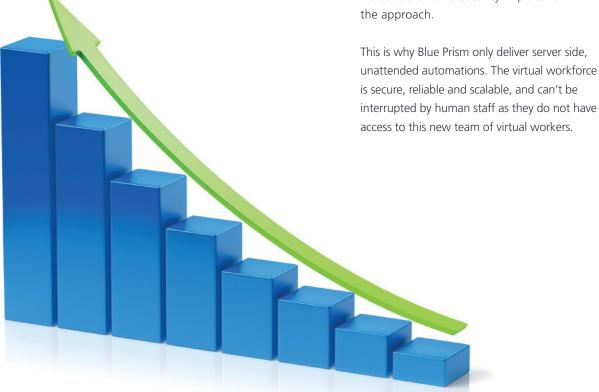
This approach means you can use techniques like workflow, prioritisation and scheduling to process large volumes of work securely, freeing up the desktop of your human agents, and allowing you to better meet SLAs and workload volumes and creating a whole "virtual backoffice" of staff to perform processes that were previously unachievable.

# "What's wrong with a 'front-office' approach?"

Deploying an automation on an agent's desktop, alongside their day to day activities, introduces complexities that are different to the controlled environment described above, that can mean longer development times and dissatisfaction with the resultant deliverable.

Some examples of the problems that can be encountered range from different desktop settings or user-customised applications the robots need to be trained to work with every combination of system appearance that the user might have – through to handling unsuccessful processes – if a process stops halfway through because the system or data didn't match the design, the user is left talking to the customer with no information and no feedback - this can impact the user's perception of the solution.

Furthermore, having an agent share a screen with a robot introduces a lack of control - the agent can interrupt the automation, close applications down, introduce unknown variables and even commit fraud in the name of the robot as there is no central audit trail, no control and no security in place for



# "So can my server side robots provide information to users in real time?"



One frequently explored scenario is that of a process being performed in real-time whilst a human agent in the front office waits for the response - again this can be challenging to resource.

Imagine a scenario where 1000 agents all need a real-time robot to assist them with some data collection or system based calculation. How many might need a robot simultaneously at peak times? 200? 300? In this scenario, you might need 300 robots sitting in the data centre waiting for a real-time request.

This has a number of drawbacks. First of all, it's a waste of resource – why have these machines sat waiting when they could be delivering value to your organisation.

Secondly, what if 301 agents all asked for the information at the same time? - you wouldn't want to force the agent who came in last to have to keep the customer talking whilst they waited for the robot to service their request again, perception is key and cultural adoption is critical to a project's success.

# "What's the solution for 'front office' processes then?"

A better approach is to look at the process through a different lens. Consider what needs to be done in real-time, and what can be gueued for the robotic workers to process as part of their daily workload.

Hand-offs through e-forms, existing systems and workflow can be a very effective way of splitting processing into online and offline segments to optimise both human and robotic workforces and get the best from both.



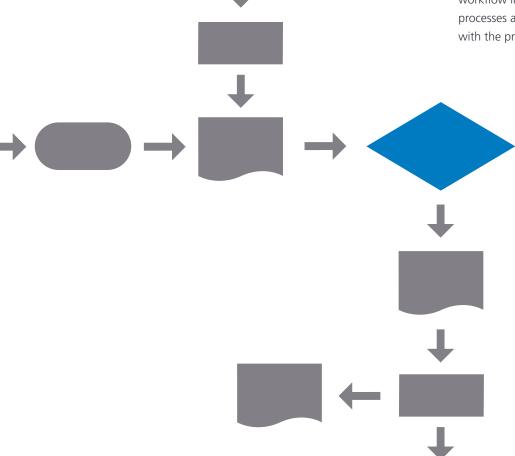
# "How can I automate a process that needs human intervention?"

That said, some processes do need a human decision or involvement along the way.

Examples might be an authorisation part way through the process, or it could be triggered by a customer conversation or some subjective reasoning by a human in the call centre.

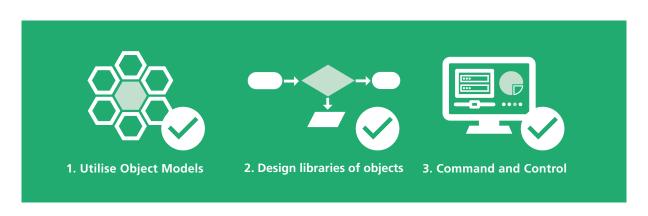
In these scenarios you can use standard workflow techniques to achieve this by way of a hand-off – work can be moved between the respective workforces just like you would with existing teams, either as a call wrap function, or as an authorisation step before pushing the work back to the robots to complete.

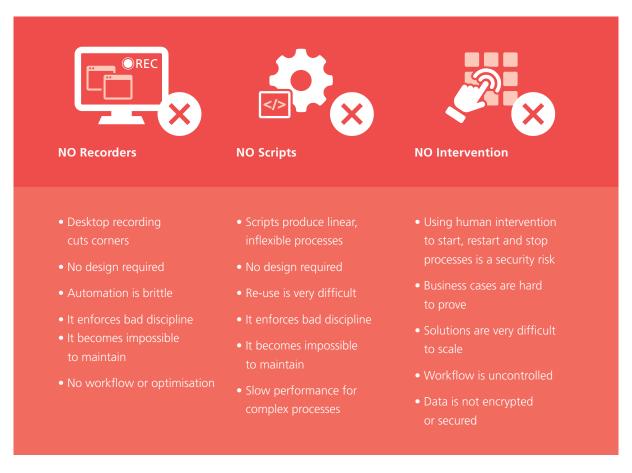
And because Blue Prism includes powerful workflow in our solution, you can resource processes appropriately for their SLA's and deal with the priority cases first.



#### "What does 'Enterprise RPA' mean?"

Blue Prism uses an enterprise-centric approach to RPA:





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