



# Webinar 1: Honest, Real-World RPA

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 09:30 AM PDT

[Aditya]:

Well, let's get started now. First of all, I would like to thank everyone for taking the time out from your busy schedule to be here. This is the first webinar in our series of webinars focussing on RPA. I would now like to introduce our host for the webinar Niladri Panigrahi. Niladri heads the RPA and Digital Transformation Group at V2Solutions. He is experienced in creating sustainable automation strategy for large scale enterprises. As a part of his role, Niladri provides automation consulting and execution with focussed outcomes for customers across the globe. His hands on approach for every technology that he has dealt with has helped him witness the evolution of automation over the last 15 years. Just a quick not before I hand over to Niladri. We shall have 5-7 minutes of Q&A session at the end of this presentation. So, feel free to type your questions using the Q&A section on your screen. We will try to respond to as many questions as possible; but if your question is not answered during this webinar, we will definitely do so over the email. Over to you Niladri.

[Niladri]:

Right! Thank you, Aditya!

So, I still see some people are joining. But in the interest of time, we will continue.

So, true to the topic, I would solely demonstrate true use cases on RPA that has gone into production without any bias for any platform. There would be no sales talk, however I would take a minute towards the end to touch upon our services.

So, before we jump to start, let's have a quick glimpse of the objective of this webinar as to why what and how?

So, why this webinar is unique as the title has already stated so that there are no hypes, no sales and no biases for any RPA platforms. And what you can expect today; you can expect the approximation of the efforts involved in RPA automation, common RPA myths, the key factors that delay overall RPA deployment and an insight through the RPA practitioner's view. And, how do we plan to accomplish it? So, it is going to happen through a detailed walkthrough of six live use-case, across various industries. With details of every effort and challenges involved.

All right, So I am sure, you all are aware of RPA as a technology. So thus, I won't be talking around introducing the technology. So, Let's start with our first use-case.

## [Use Case 1 :]

We call this use case "Data consolidation from Isolated Systems'. The format for the demonstration of these use cases will be the Problem Statement followed by the solutions and the behind-the-scene facts.

So, the problem statement. An organisation had 4 different isolated systems. These are IT systems. But a consolidated report was required with data points from each of these systems thereby engaging human resources to manually collate these data by interacting with each system manually. Then presenting the consolidated report for a meaningful insight. Now, remember the fact that these are 4 different isolated systems. They were not talking by themselves to each other. It used to take them around 3 hours to create a report of the similar kind. So, as a RPA solution, we deployed a bot. On the left hand side of this diagram, these are the 4 different systems that you have that was a backup system. Second one was a disk space management system. Third was an application monitoring and the fourth one was a ping monitor system. Right! So, the bot was engaged to extract

data from 4 of these systems. While the top 2 systems could give out the data over an email in a CSV and Excel format that the bot could listen to and extract the email content from them, for the rest 2 systems, the bot manually got into each of the systems by itself and extracted that data for the day. Once, all the 4 datapoints from these systems were brought in, there were nearly 20 to 30 business rules applied over those data to create and excel out and that report what was eventually sent out to the customer. Now, let's look into what exactly was the outcome of this. There was nearly 90% of the time saved and accuracy was nearly 100%. Now, coming to the behind-the-scenes which are the 5 buckets, what actually happened inside this. So, as you can see these 5 buckets over here, the **Requirement** bucket consists of all the time it took to bring all stakeholders involved in the process through a walkthrough call, then to study the existing process, document the "AS IS" of the process, doing feasibility of RPA, getting accesses of involved systems for the Developer and the Robot, and finally making infrastructure available. That too was part of the requirement bucket. It took nearly 6 days. And these are all true experience of ours. Maybe, there could have been more optimised output over a period of time, but these are the true cases. So, the development part is self-explanatory whereas the UATs where the business actually tests the robots. In case of development in this case it took us 8 days. Remember, it's not only the development. It's the development as well as the unit testing involved by the development team. Right! So, the development was for 8 days, the user acceptance testing was for around 4 days where all the business users who are looking into manually doing this thing are taking part to see the robots under different stress cycles how it performs. Now, the most interesting part over here is the 'BLOCKED' state. The "BLOCKED" state presents the number of days the work could not proceed since the development was started. This is a very important factor as it impacts the overall delivery timeline. In our experience, the BLOCKED state is primarily contributed by few of the following areas like :

- Delay in access to systems for Developers or Robots
- Unavailability of stakeholders to clarify processes midway
- Unavailability of enough Test Data to cover broad range of scenarios for Testing

Now, the last and interesting part over here is the communication thread. This is the count of clarifications and callouts posted to accomplish this automation between the members. This will vary from Org to Org based on the RPA process of maturity, but the important point here is "automation requires extensive communication between multiple stakeholders which includes also the business". You will also witness the fact that the communication thread in specific case has dramatically increased in proportion to the number of days in the "BLOCKED" state. That tells the story that throughout the lifecycle of this automation there were nothing, there were things that were discovered over a progressive manner.

All right, so that was the first use case. Let's jump into the 2<sup>nd</sup> one.

### [Use Case 2 :]

'Order Prioritization Report for Distribution Department'. This involved the distribution department for a large manufacturing was, the department was not getting the 'Pending Shipment Report'. It is a report that is created for all the shipment, which is pending, and report was not being generated on time which was resulting in delayed shipment of consignments and underutilised shipping capacity. The team responsible for creating this report was running short of time due to the complexity involved in the multiple sources of the data that was coming in. So, here can the RPA solution in the form of a robot again. So, what we did, we deployed a robot that would log into the SAP system. By the way every time you deploy a robot, the robot acts like a human. It has its own credentials like the human has his own username and password. So, they also have their own credentials attached and configured. So, the Robot would log into the SAP system, download the reports from multiple warehouses, right because the pending shipment report comes from different warehouses. It then

merges the reports to a single excel sheet and executes further business rules every time. So, this is the most biggest value add that every time robot does is that you define more and more business rules that a human would perform. It can do business rules over a large set of data. Finally, the robot filters the format and the data and sends the report in an email to the distribution department. So, it was nearly a 40 hours saved per month and the reports get sent well in time. So, it was executed on SAP version 6 with a module, SAP module MM. Time saved was 90% with 100% accuracy. Now, let's look into the background of it. The requirement time for this was nearly 2 days. 13 days was spent into the development, 9 days into UAT, 4 days into the blockage. Remember why this was a case where we got around one and half days into blockage detailing out the format of the shipment report. Because we found that some of the warehouses were sending out templates or formats which was not as per the standard format. So, that we revisited and that's why the block has around 35 communication threads were reported from this automation. Please make a note of this very particular thing that whenever we say there is a blockage, blockage doesn't mean that people were just sitting idle and then You see, blockage whenever there is a pipeline of automations happening, the developer jumps into the next available project for him to work on. So, most of the team is engaged always with 2 or 3 different process in a cyclic manner. So, it's not necessarily blockage means that no one is working at that point of time.

All right! Let move on to the 3<sup>rd</sup>. Whenever you have questions, please do type into the Q&A section. We will be reading through those questions for you those questions at the last or else we will respond back in a mail sent from our end.

#### **[Use Case 3 :]**

Automated timesheet entry into SAP HCM. The problem statement. The client was another manufacturing unit where the client was releasing payment to all its vendor based on the time entered to their SAP system. Right! It is typical timesheet systems. A team responsible for entering the data in SAP from excel files always face time crunch affecting the accuracy of the data and causing the compliance issues. Now, what was happening over here. There were so many different types of vendors and many of the vendors had adapted different types of timesheet. Now as pre-processed to this we standardised the format of the timesheet and then we brought in the deployment because It is always advisable that you should be deploying automation or your robots never on a broken process. Right! So, that's why little bit of straightening before the process we brought in the robots. So, a robot was deployed to read through emails from each of these vendors. On receiving emails with the timesheet with the actual tasks, robot logs into SAP and starts entering the data into the timesheet. There were chances that there will be errors that would be encountered because of the way the data has been put in into the excel or the SAP gives out an error. In that case the robot will capture a screen of what error output for which the process could not proceed further also. Eventually the data is entered into the SAP which resulted in nearly 45 hours a month of time-saving. It was eventually deployed to multiple geographic locations by the manufacturing unit. Right! So, it was an implementation on SAP 6.0 for HCM module, the T-Code CAT2. Nearly 90% time saved and 100% accuracy. Let's look into the background. So, the requirement took us nearly 4 days as I stated earlier with pre-standardisation of the timesheets over here. It took us nearly 6 days of development time, 3 days in UAT , 2 days of blockage and it is probably the lowest of the trade over here that there are a 15 communication that happened between the stakeholders who were a part of this operation. Now, that was the case number 3. Do you remember how we get this data. We track all our efforts from inception till execution of process automation through JIRA as our tracking system which is complemented through our RPA Devops which consist of multiple tools starting with the version management, continuous integration and deployment to various environments.

So, now to break the monotony of these use-cases after 3 let's get to see a little refresher with a Myth buster what I call the Myth vs Fact. This is all about , the general thinking vs. reality of the RPA world . All right! And these are from our experience. In the interest of time, I won't read through many of those. Probably take few of those. So, the No1. Business user is the RPA developer, the

platform claims so “isn’t that true?”. So, this has been the most talked about topic with most of our clients who think that it is always the business users who can always jump into do the technology. But the true fact is that the RPA developer is anyone with the reasonable software development experience. Maybe a business user, but we have felt that if you have your RPA practise it should be initiated through a group of actual developers who might be the business users but they should have hands-on-experience who with scripting in the past. Or else the robots initially do work. But they are not optimised. Eventually they get into a much bigger problem. Right! Lets look into the 3<sup>rd</sup> point. Lets automate this. Its quick and easy. It’s a very popular saying. So in our experience not all processes qualify for RPA. The qualification rate is less than 30-40% in our experience. So that means if you identify within your organisation around 10 cases for RPA, if you do the feasibility really well, you will find, that probably 3 or 4 are the case that can be implemented as an RPA at that point in time. The rest can be. Probably you might have to do more straightening of the processes before you can bring in the robots. Second last. We are considering RPA for our invoice and document processing. Okay, that’s been a very very talked of debatable topic over here. So, I must state that RPA is a facility for document processing. So, most robots platforms make use of the third-party engines to do the document conversion. Robots by itself, they do not do the document conversion. For an example, there are many third party like ABBYY and there are many cloud-hosting offerings at this point who are doing the document conversions whereas the robots are actually engaged to take the operations forward. Right! So, the actual conversion of unstructured data into structured data is not truly part of the RPA as of today. Whereas I hear that many of the leading platform providers are coming up with their own engines which can do the document conversion at this point, but not at this point of time. Alright! Let’s move on to the next use case from a group of 6.

#### **Use Case 4:**

‘Movie Title Availability Check’. This was for a different industry all together and its for a digital media company which had to keep track of their movies availability for sale across various digital platforms. This was an exercise critical to clog any revenue loss due to this movie’s availability. Unavailability. However the process was manual and cumbersome with multiple platforms and formats, legal conditions to check for different countries and lastly keeping the track of every check with timestamp. So, this came as a RPA solution with the deployment of a robot. So, the robot was programmed to listen for mails for a specific inbox. An excel sheet containing the list of movie titles and the released year and the store name is sent to the robot. On receiving the email with the excel attached robots locks into individual digital stores and starts searching for the title. It matches the year if multiple results are found for the title like you know it tries to match up with the year if there are multiple results with the same movie name. If the exact title is found, it grabs the pricing from that page, takes a screenshot of the whole page and stores in in our cloud system. The finding is then updated in the excel sheet which is mailed back to the user of the process. Now, in between though it sounds easy, in between there were around 20-30 business rules applied on what to do what not to do. What actually it resulted in? It resulted in the time saved nearly 90%. Obviously, the accuracy was nearly 100%. And the digital sales platform that we are working on for the robots were for Amazon, Google, Microsoft and Others. Right! And let’s look into what was the behind-the-scenes situation. This being a robot as it was deployed for multiple platforms digital platforms so each platform had its own interface. So, the requirement time was higher over here just because the interface has to be studied before finding out how many clicks, how many types character typing was required where before the result was being displayed. So, 12 days went into the requirement. There were 15 days of development. Which was, this was actually developed for 5 to ..5 platforms. And there were 4 days in UAT testing. Please take a note that you know that there are multiple groups involved into this code in Unit UAT testing on this at the same time. So, that is the reason the UAT numbers were. Now, there were 45 communication thread over here. You can relate this to the requirement over here just because there was a requirement and their overlap of it from the business and varying from platform to platform. So, the number of communication threads has

increased. So, this is .. this is a direct linkage from the requirement to the communication thread number. Now, let's move on to the next slide. I believe, we are running right on time. On this.

#### **Use Case 5 :**

'New Hire Onboarding'. So this is a HR specific use case where the problem statement was: the HR of a large organisation has to have to verify details of the new hires through mail exchange for over 300 new hires per week during the peak hiring season. It was cumbersome as the document varied with different person and positions. Also, each detail had to be entered into the HRMS systems. So, now let me explain more of the problem statement with this RPA solution diagram over here. So, these were actually documents being sent out to the new hires to fill out and send it back to the HR. So that their details are registered into the HRMS systems. Right! So, what we did was that we deployed the robot which was listening to a mail ID and this mail ID actually opened up with an actual excel sheet with it. That Excel sheet contained details of the new hire, their email IDs, their position and other things. Right! The robot could read through this excel sheet. And compose mail with the templates attaching the templates to it and send out to each of these hires. So, these new hires filled out these attachments, send it back to the robot email ID again. Robot could download each of the documents, validate whether they were right or wrong. If content were right, the data was being updated to the HRMS System and flagged off for human intervention or the HR could take it from there. If the document were found to be having certain issues, robot would resend mail back again saying that they were X,Y,Z fields that need to be filled again. Right! And the process cycle keep on keep going till the time the actual document with right data is received. This really helped us save tremendous time and the accuracy was nearly 80%. That 20% variation was because at times the format or content of the document changing leading to certain issues with the robot not being able to read the data points. Right! And let's look into the background of this. There was a 4 days of requirement with a 10 days of development time. 3 days went into the UAT. And, there was 3 days blockage and about 25 communication threads. Alright! Now, let's look into our last use case.

#### **Use Case 6 :**

Event-based updates from Salesforce. As the title states, so, this was all about taking updates from the Salesforce. So, a project win for an organization is typically marked as an "Opportunity Closure" within the "Salesforce CRM" that leads to a series of manual and time consuming updates to multiple systems within organization for the purpose of project creation, Contract archival, revenue projection updates and simple notification to key stake holders. At times, a broken flow leads to an isolated system going out of sync. Right!. So, there are multiple systems involved over here and Salesforce being the original source of the data. Whenever there is a closure that happens inside it, the data must be flowing into the other systems. So, this is where we implemented a robot. So, the robot was deployed to monitor salesforce dashboard for any opportunity closure. Right! So, the robot will constantly keep monitoring for opportunity closures. On the Salesforce interface, on detecting a closure, robot gets into the 'Details Page'. Robot has its own login ID to salesforce and gets into the 'Details' page and extracts the Opportunity Name, Date, the salesperson involved, the projected revenue etc. and downloads the files which are typically like 'Contract', 'Presentations' etc. Robot then logs into the SharePoint and PMS, that's a Project Management System to post each of this data separately for Project Creation and Uploading the file. The SharePoint portal then generates a unique URL for that visit. Right!. Typically, the SharePoint creates the unique URL for the Project. Robot then sends out the mail to key stakeholders with a SharePoint URL. So, the human intervention of getting into the system for creation of the project, contract archival and project other related updates was really taken care by the robot by simply exposing the SharePoint URL which has already created the project with all details from inside Salesforce. Now, that took us a requirement for around 5 days. That was around 10 days on development, 2 days into UAT, 6 days went into blockage. I will explain what exactly were the blocks over there. So, the blockage over there happened just because there were, the SharePoint interface had to be unified. In certain



cases, the SharePoint interface had different interfaces for project creation, whereas it had some different interfaces and for some other purposes. So, we unified the SharePoint interface, so that the robot makes it, it becomes easier for the robot to navigate through the pages and that led us to blockage that was only discovered in between the development. And one 33 communication thread that went into actually developing this workflow automation. All right!. So, now lets our ..one second. With the closure of this RPA use cases lets have a glimpse at our services that we have been looking at right now.

Our Competency highlights.

We are into the SAP and web domain of expertise in RPA. Implementing partners for the leading RPA platforms with a large pool of certified RPA developers. We have made so far 170+ robotic workflows in productions that has resulted in 20,000+ manhours saving and we have had nearly 120,000 successful transactions so far.

Quick look at our services. 3 on the broader perspective. Consulting, Development and Support. Our consulting services in RPA is all about making the key decisions your PoCs, the CoE setup and process setup whereas the development is all about the development where we look into the development of workflows, coding standards, checklists and ticketing systems. Monthly business review meetings and the support part is all about bots where we look into bots for their deployment, monitoring and the analysis. With this, we come to the last part of the webinar. And over to Aditya.

[Aditya]

Thank you very much Niladri. So, with this we come to the last part of this webinar that is the Q&A session. So, I will just go through the questions that we have received over the webinar and we will start taking them one by one. All right!. So, let us start with the first question. This comes for Ricardo. So, Niladri the question here that Ricardo is asking is how is the overall process of document conversion is managed in RPA.

[Niladri]

All right!. Thanks, Ricardo, for that question. I will, as I stated that it's a little debatable, but I would make an attempt. Firstly, RPA is not a tool for document conversion. The core engine for document conversion such as invoices are handled through third party services like ABBYY or any custom built tools. Right!. Most of this RPA platforms. The robot interact with these tools to retrieve the data to take the operations forward whereas the tools actually do the job of data conversion of unstructured to structured data. There are broadly 2 groups of document conversion tools in the market as of today viz. template and non-template-based tools. You know, while the template-based tools are great where you have fixed format documents, for an example in case all your invoices have a very similar structure, then that's the case of a template-based conversion. Whereas the non-template based tools can be good for a variety of invoices irrespective of the position of the data elements. So, it's a big topic for discussion. But both these type of tools have had limited success and have their own set of limitations. The careful assessment for your document conversion need is very important before you can decide on the type of tools to work alongside your robots. Right! I hope that answers your question.

[Aditya]

All right! Thank you Niladri! So, moving on to the next question. We have this question from Anita where she has noticed that development time for some of the processes is relatively high. Any comments on that Niladri.

[Niladri]

Ok Anita. Well, that's a nice observation. Let me tell you development time does not involve the configuration of the process. But a large part of it goes into the unit testing of the process as well. Right! At times the unit testing time is more just because there is a lot of combination of the data that needs to be tested through with the robots. One needs to test multiple scenarios and even the same scenario multiple times to see if any unwarranted screens, messages or pop-ups are appearing on the screen which the robot needs to tackle. Right! And since the processes that are automated are long-running processes, developers end up spending good amount of time in testing. So, its not only development. Its development plus unit testing. Right! So, that's why you might be seeing things high. But if you were to divide it only specific to the development, only to the core of the development, then it is going to be much much lesser.

[Aditya]

Thanks, Niladri for that! The next question I am seeing is from Mitch. He is asking what happens if the website or the application that we have automated changes. Will it not cause the robot to fail? Niladri.

[Niladri]

That's right! One of the things to check while in requirement phase is to get a buy-in of the owners of different applications involved in the automation. Right! They are the ones who know if the applications are going to be upgraded or revamped will scrap for one in a very short while. So, Process Automation for such cases should be put on hold in order to avoid robot's failure. But, to answer your question specifically, the robot will fail if any of the underlying applications involved in the automation changes. Robot will have to be reconfigured not to handle such changes. All right! So, I believe in the interest of time, we will be responding back to further questions over email.

[Aditya]

Right! So, thank you Niladri for answering all those questions. Everyone, I have just triggered a poll and you should see it on your screen right now. Your feedback will help us improve the overall experience of our upcoming webinars as well. So, please provide your inputs on the webinar. We will really appreciate that. And, once again, a big thank you to all of you for joining in and we look forward to seeing you soon at the next webinar on our other exciting topics. Till then goodbye and have a great day ahead!

[Niladri]

Once again thank you everyone and have a great day! Have a great night! Bye bye.