VIEW POINT

IMPROVING BUSINESS WITH RPA AND API IN THE WORLD OF AUTOMATION

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Abstract

Automation is not just a buzz word anymore. It is looked at by many as a solution for most enterprise problems and a means to improve organizational efficiency. Bill Gates, famously said "The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that, automation applied to an inefficient operation will magnify the inefficiency". Using automation at the right time, place and in the right format is absolutely essential for success. In today's world of Technology and Digital transformation, the avenues for automation are vast and numerous. This creates complexity for all enterprises, in assessing the most relevant method of automation, the business scenarios and areas that need to be automated as well as how much time, effort and money to invest in these. Two such popular concepts in this context are RPA/ Robotic Process Automation and API based integrations.

Robotic Process Automation is a fast emerging go to solution for many aspects of automation in businesses. API integrations which have been the backbone of many technology solutions over the years, are constantly being re-defined, improved and therefore becoming versatile and beneficial. This whitepaper illustrates a point of view on how RPA and API have a very close relationship, can be used synonymously in certain business scenarios, and how they behave in the world of packaged solutions.

Most enterprises today, riding the wave of digital transformation, are gung-ho about automation, robotics, artificial intelligence and any tool that ensures accuracy, productivity and reduces manual overheads. Robots are great fun to watch at the movies, and for many years have been intriguing as a concept to many. Today however, robots are viewed by many as human replacements and the guys who are going to take our jobs away. While it is a separate discussion, on if they really are going to take jobs away, it is surely true that robots, robotics and its related automation is here to stay. Gartner's annual top 10 list of strategic predictions also talks about robotic automation having an expanding role in the years to come. It indicates that robots will facilitate 40% of all mobile transactions by 2020. It also suggests that by 2020, autonomous software agents outside of human control will participate in 5% of all economic transactions. Smart algorithms are already beginning to perform transactions without our help.

With enterprises focusing on providing the ultimate customer experience, the need to provide quick, accurate solutions, anytime, anywhere is key. With Robotic Process Automation, productivity of service providers can be improved with manual work being taken over by RPA. This also obviously provides the added advantage of handling larger volume of work by human agents, assisted by RPA to improve efficiency. So it is not really debatable (at least currently), that RPA has a host of advantages and surely has the potential to add value and enable better customer outcomes.

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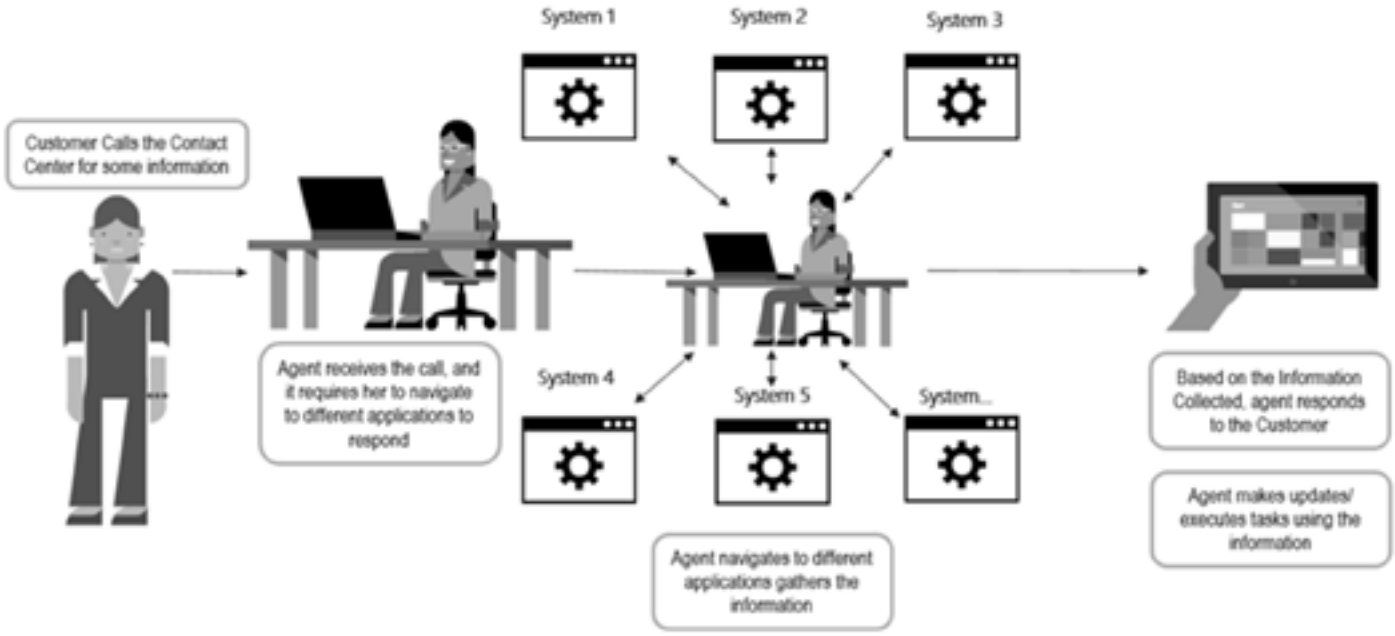
What about for connecting systems?

So while RPA is surely a game changer for automating rudimentary tasks done manually, or large volume of repetitive transactions that are done in tedious and laborious ways by human agents, using RPA as a tool to connect systems or to enable integration is a different ball game. While RPA and the concept of Virtual Workers/ Software robots, is well known, an important aspect to consider is a lot of the scenarios where RPA is used, would involve interacting with different applications and systems. When enterprises are faced with the need to enable integrations in their IT solutions, they would need to decide on how this would be executed. Knowing that integration is needed, is the solution to many problems in an enterprise set up, but the solution has to be executed well and properly to be truly useful.

Let us consider a conversant example in an enterprise scenario. We have all been acquainted with good customer service and bad customer service, and we have all had experiences with Customer Service/ Support Desks. Typically in a call center or support desk set up, agents interact with multiple systems or applications to give an accurate response to a customer. When a customer makes a call and is directed to the call center agent, he/ she would generally have to navigate multiple systems or tools and manage the customer conversation with utmost quality, simultaneously. It is also required that if the same customer has used a different channel to communicate with the enterprise previously, all that information should be up to date and available to the agent who is taking any required action. Having to switch back and forth between systems, screens and channels, is cumbersome, time consuming and could well impact the response and response time to the customer. No customer has the time or patience any more to repeat any information in these conversations and certainly not if they have called with a complaint and are already agitated.

Let's not forget the resultant activities of these customer conversations. Obviously the agents will have to update records in one or more systems based on the details of the call as well as take action or propose action in one or more systems. These multiple actions definitely impact the agent productivity.



RPA can be used here to automate many of the common tasks in a customer service or support desk, such as incident/ ticket management, FAQs, system administration tasks, updating records, consolidation of information so as to have a one stop shop for the agent to work with rather than multiple screens/ systems. Not only can it ensure tasks run faultlessly all the time with no dependency on night or day and address and resolve problems on its own, it is also key to realize that it can link disparate systems and applications into a single one. With RPA in this scenario, agents can be free from having to switch back and forth, perform multiple manual tasks and repetitive processes across systems and can focus instead on engaging customer experiences. Certainly with RPA automating these processes, faster turnaround for customer requests can be assured with better outcomes.

RPA can be very handy when we want to integrate multiple systems and third party applications with a focus to enable a seamless experience for the users and therefore heightened productivity. Especially in scenarios where the source code for the integrating applications is not available, RPA products can be very handy and the right choice to enable these integrations/ connecting of multiple systems for unified user experiences.

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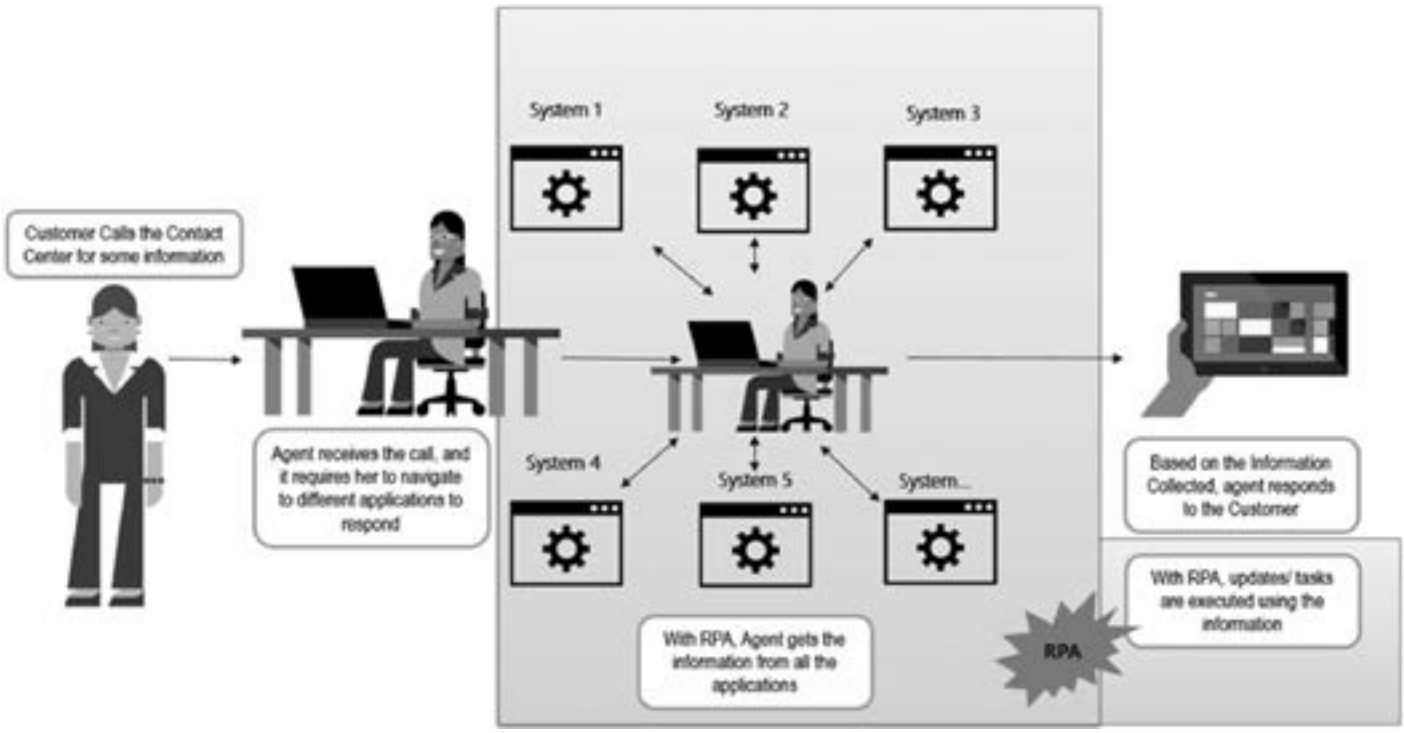
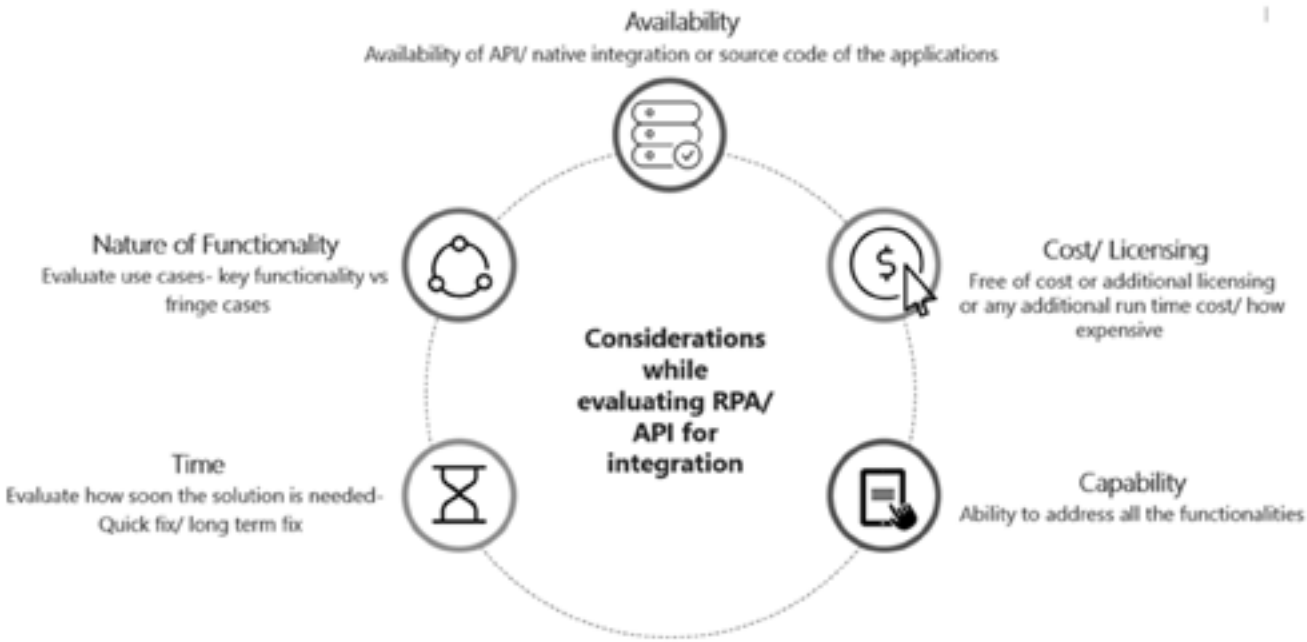


The other choice

While RPA has been explained in many ways, an interesting description for it is also "Intelligent Integration". Essentially RPA often enables integrations in scenarios where no other integration is possible. In scenarios, such as the one explained above, it is possible to integrate multiple applications, custom apps, packaged solutions etc. in a seamless manner, so long as the APIs for the applications are available. In the case where source code/ APIs are not available, the only way to achieve such a seamless integration is probably via RPA. RPA is simplistically understood as a virtual user that can interact with systems/ platforms regardless of the availability of APIs. However in the alternate scenario where source code/ APIs are in fact available, integration using APIs is certainly something to be considered.



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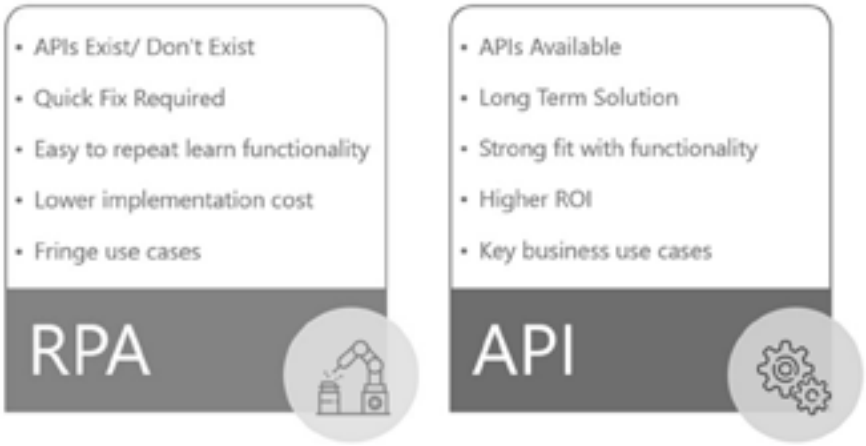
- The first and foremost consideration while making a choice between RPA and API for integration, is the basic availability. Availability of API/ native integration or source code of the application, is essential to facilitate integration
- Assuming the applications that need to be integrated have these, another aspect that needs to be considered is if connecting to the APIs of the applications is free of cost or warrants additional licensing or any additional run time cost. RPA also certainly will have a cost/ license to it, so a comparison on this needs to be made such that the investment is justified
- Another aspect to be considered is also if the API based integration has the capability to achieve all the needed functionalities or it is simpler to use a RPA framework and enable repeat learning from agent actions.
- An important factor to consider is "Time". In some business scenarios, not all the applications to be connected might be up and running, and in some cases the need for an integrated seamless solution might be urgent. In such cases RPA can be as a quick fix to solving the integration problem between disparate applications, whereas API can be considered as the structured and long term solution for this problem.
- The nature of the functionality also contributes to the choice here. In business scenarios that are key to the functioning of processes APIs can be used as a permanent solution and for fringe cases RPA can be used



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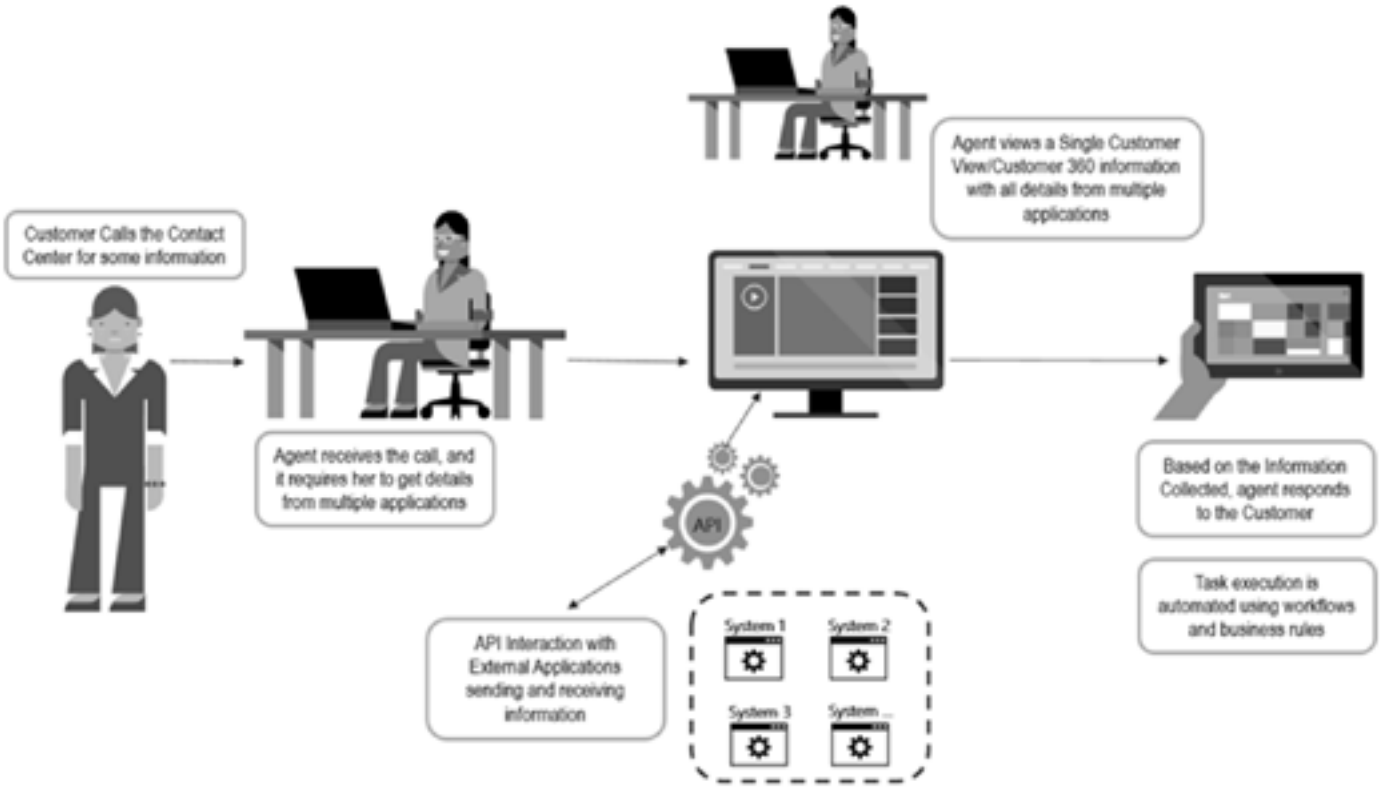
The packaged solution advantage

In the example scenario considered, another solution to be considered for Support desks and improved Customer Service is the use of a CRM. Most CRM packages, or at least the good ones, come with multiple features and flexible frameworks for automation and integration.

Let us consider a packaged solution such as Microsoft Dynamics 365 (CRM). Adding this to the mix of the business scenario considered, largely enhances the capability of the solution that an enterprise can gain. A holistic 360 degree view of a Customer can be easily designed and enabled within Dynamics 365 to consolidate all the necessary information that an agent would need for servicing a customer. In this case, given that the platform for Dynamics 365 is robust for integration enablement, most automation can be done using platforms like xRM and C# coding making use of the WebAPI. So here a unified, single customer view can be developed and can also be connected to other applications to consolidate information from these applications and display them within the CRM. This integration can easily be enabled as bi-directional as well, to exchange needed information between the CRM and other applications, thus simplifying the overall process. A package like Dynamics 365 also is largely benefitted by APIs, especially for scenarios like Customer 360 views in larger enterprises, where the integrations are with large number of systems of varying complexity.

In addition to automating the integration with native APIs, Dynamics 365 also has the added benefit of enabling workflows, business rules, task automation etc., with out of the box functionality of the product. These features essentially take the automation to the next level and help to achieve multiple aspects with the package itself. In such a scenario with APIs and Dynamics 365, there is no real need for RPA, unless the enterprise is very short on time or is looking for a short term or interim solution with RPA.



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Conclusion

RPA and API integration can be positioned as solution options for the same business problems. Various influencer parameters can be considered to evaluate the right choice between these two, depending mainly on the time and cost considerations of an enterprise. Choosing a solution that works well for business and IT is essential especially in scenarios of automation for integration.

Simple RPA might be the right solution for some business problems, while some business scenarios might demand API-based integration. Yet, it is important in business scenarios, to take sort of a middle ground of analysis and consider both RPA and API integration and arrive at the option that makes all operations better - to improve the productivity of agents/ employees, to make customer experiences better, and to stay ahead of competition. When it comes to selecting the right solution for integration automation, there is no one right answer on which way to go, but the choice has to be made based on which solution best fits the problem at hand.

Suffice to say, while riding the tidal wave of automation, enterprises should understand there is more than one way to achieve a solution, and ultimately it's not just about automation, but about the right automation!

About the Author

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Rithika Messiahdas is a Lead Consultant with Infosys. She has over 10 years of experience in the Microsoft Dynamics space and works on CRM implementations, pre-sales as well as vertical solutions and new initiatives development. Her areas of interest span across thought leadership and building of new solutions enabling modernization to the existing CRM ecosystem as well as Next Generation technology areas across AI, Automation, Analytics and related enrichments in the CRM space.

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