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Robotic Process Automation: A New Era of Agent Engagement

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50 Years of Growth, Innovation and Leadership

ABSTRACT

Technologies such as robotic process automation (RPA) and back-office workforce optimization (BOWFO) have been slowly developing adjuncts to the front and back office for a number of years, but are fast ramping up the adoption curve. RPA is a particularly hot topic across all industry segments. When broadly applied, it consists of a digital workforce that can handle tedious, time-consuming, manual, rules-based, and repetitive tasks at scale. Across all industries, RPA workforces are improving organizational efficiency by offloading live resources, improving accuracy, maintaining compliance, and reducing costs.

RPA acts as hidden glue that ties together many business processes, including the contact center—the heart of where the customer experience resides. A RPA workforce can streamline workflow, fully automate routine processes and reduce errors in the back office, thereby reducing interactions with the contact center. It also can automate myriad processes within the contact center doing work triggered by agent actions or the reverse. When integrated with the agent desktop, RPA agents also can work alongside or provide guidance to agents.

INTRODUCTION

The contact center has gone through myriad shifts in focus over its tenure. In the early days of customer service, the call center—later contact center—was viewed as a cost center and not the customer engagement hub that it has developed into today. Early on, the key focal point was increasing operational efficiencies. Over the years contact center solution providers became quite adept at doing so through the development of advanced analytic applications that provide insights into agent performance and workforce management.

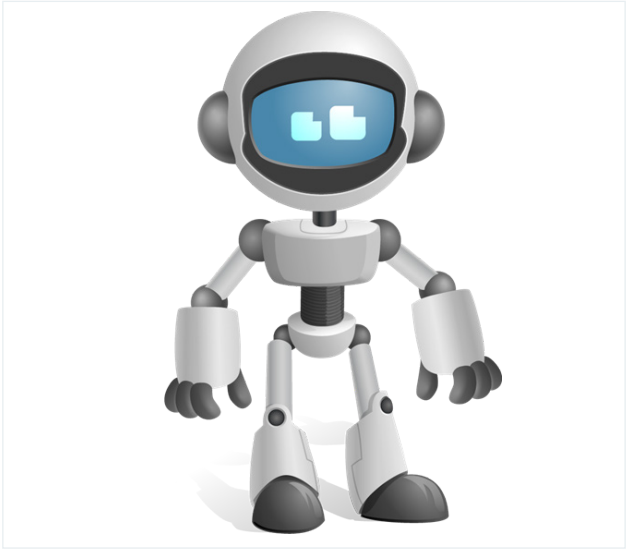
While great resources continued to pour into these areas, once the base of these tools was in place, the focus naturally shifted to developing tools that could analyze and improve upon customer engagement and the customer experience. The most recent shift is in combining the two. Why not go after improving overall operational efficiencies in the back office in order to lessen the impact in the front office?

An equally important focal point has been catering to a changing consumer and employee base that favors work-life balance and employee empowerment. Providing the tools that enable workers to have more satisfying jobs is now a business imperative; it is being achieved through enhanced workforce optimization applications and others.

However, on the periphery, but offering huge productivity gains across organizations, are solutions that involve the disciplines of the contact center that also can work with the contact center. Robotic process automation and back-office workforce optimization are two such applications that can have a substantial impact on the overall quality of customer service and employee satisfaction.

ROBOTIC PROCESS AUTOMATION

This paper shines a spotlight on one of the fastest growing of these solutions. Robotic process automation is the use of software that incorporates technologies such as artificial intelligence (AI) and machine learning (ML) to automate routine, high-volume tasks that are sensitive to human error. RPA software "robots" can mimic humans in the handling of countless types of processes, including inputting or manipulating data, triggering other processes, or communicating with other systems. The benefit and beauty of RPA is that these virtual agents can accomplish multiple tasks—tirelessly, quickly and accurately—freeing up their human counterparts for more complex, high-value, and sensitive tasks that require human attributes such as emotional intelligence, reasoning or judgment.



RPA is being deployed across many areas within business with varying levels of complexity. For instance, it can be of a generalized nature, propagating data into desktop applications or documents, or they can be highly customized applications geared to a specific vertical market or a specific business area, such as accounting or finance. RPA can be customized to a specific company, or be enterprise-grade software that is scalable and reusable. RPA also can incorporate the use of advanced AI and ML that allow the robots to learn and change as new data becomes available, improving their capabilities over time.

RPA doesn't replace existing business process management (BPM) systems, case management systems or contact center/back-office applications. Rather, it augments and complements these solutions, without the requirement for complex application programming interfaces (API) or coding, allowing for quick deployment.

HOW DOES IT WORK?

So just how does this virtual workforce work?

A RPA application is set up to retrieve from or be given tasks from internal databases or third-party applications. For instance, within a human resources department, where multiple manual tasks have to be done to track new hires, annual review processes or other processes, tasks are put into a queue and a controller, or task conductor, so to speak, assigns the tasks to available RPA agents.

RPA agents are subject to the same monitoring, analytics and reporting scrutiny as their human counterparts in the front or back office. Application monitoring and analytics manages the activity of the RPA agents, providing alerts and historical and real-time reports so that supervisors have visibility and control over RPA agents. For instance, the application can provide reports on the number of completed tasks, failed attempts, average handle time and other metrics. Similarly, alerts might be sent for the same reasons as with live agents, for out-of-range average task handle time, number of active or non-active agents, or activities that are incomplete or have errors.

BENEFITS

RPA solutions boast a plethora of business benefits. Among the simplest are quick deployment and low reliance on IT. RPA applications are easier to deploy than many enterprise applications as they work with the presentation layer that a live agent or back-office worker would see rather than having to integrate with each application. They can:

- Utilize other applications without complex integration, allowing easy and affordable task management
- Cost effectively scale up or down without the business having to hire additional resources
- Reduce or eliminate repetitive, time-consuming tasks, including, but not limited to:
  - » basic form filling
  - » data entry
  - » rekeying data across multiple systems
  - » updating customer records
  - » validating account information
  - » navigating through multiple systems and databases to consolidate data and reports
  - » providing status to customers
  - » retrieving account records to answer billing questions

RPA'S ROLE IN CUSTOMER SERVICE

You want your agents focused solely on the customer. While activities such as checking order status or inputting new customer data into multiple databases is important, they are time-consuming tasks that take away from being actively engaged with a customer. In the worst cases, this work can leave the customer waiting online or on hold and frustrated, decreasing overall customer satisfaction. RPA agents work in the background, automating routine tasks that tend to bog down back-office workers and contact center agents; in particular, tasks that are repetitive or tedious, and error prone. For instance, in a typical work stream, customer data might be retrieved from multiple applications or databases, or be required to be input in several places. RPA agents can streamline this with great accuracy and speed.

Some solutions allow for the integration of RPA solutions with desktop applications. Here RPA can automate or assist with agent tasks, working in the background or alongside agents, providing guided assistance to agents as a pop-up desktop application. This sort of "attended" automation can assist with desktop activities, guide agents through complex processes, or even show them sales or compliance scripts, so they provide a more professional and coherent service.

RPA can significantly improve service-level agreements (SLAs) by removing processes that slow down time to serve and by more accurately predicting how long a task will take. Returning to our insurance example, if a RPA agent can automate large portions of the onboarding "paperwork" for a new client, customer satisfaction goes up, and the client is less likely to back out and go to a competitor in the honeymoon period of being a customer. Similarly, RPA allows a business to rapidly scale without adding resources or training, and without sacrificing quality and consistency. For instance, when the open enrollment window hits the insurance company, additional help is instantly available.

Employee satisfaction goes up as well as live agents are relieved of tiring, repetitive tasks. Additionally, RPA agents can be "turned up" to handle short peaks in demand, ensuring that live agents are less impacted by inconsistencies in contact volume.

RPA provides a quick and positive return on investment by offloading work, reducing errors, and providing assistance without added hiring and training costs.

HORIZONTAL APPLICATIONS

There are a number of key horizontal applications that benefit from RPA and can be applied across numerous vertical markets.

- **Back-office Automation** RPA robots can greatly enhance productivity by handling tedious and productivity-draining tasks such as opening trouble tickets, inputting data, or filing claims.
- **Compliance** RPA agents can maintain compliance with regulations such as PCI, HIPPA and SOX, as they are not subject to the costly mistakes that live agents sometimes make, breaching compliance regulations and exposing the business to lawsuits.
- **Fraud Detection** RPA can reduce social engineering, match against watch lists, detect potential fraud, notify customers of potential fraud attempt, and then take further action based on the customer response.
- **Personalization** When used alongside sales agents, RPA agents can provide real-time guidance and provide targeted, personalized information that will help live agents increase sales.
- **Security** RPA agents can be used to increase security, for example, by performing the multiple logins that are sometimes required for other personnel to access multiple systems or applications, as well as monitor for exception handling. In addition, because they are "virtual," RPA agents also can access data that is restricted to personnel, thus bypassing a security hurdle to complete a process.

There are numerous areas within customer contact ripe for automation. RPA agents can do mundane tasks that live agents normally do, like record retrieval and updates, such as address change; creating shipping information; or tasks such as checking order status. RPA agents can interact with customers as well (in non-real-time scenarios), like sending emails and SMS messages or opening trouble tickets.

WHERE TO DEPLOY RPA

RPA creates great business efficiencies, but the work is going to need a human eye. At some point, a customer service interaction might need a human touch. AI is getting better and better all the time. Intelligent self-service solutions, driven by deep learning and machine learning, continuously learn and get better. The combination of the two packs a powerful punch.

In the case of RPA, the core capabilities drive the ability to automate, maintain accuracy, and streamline workflow, with the results of decreased costs and enhanced revenue. But it doesn't happen without the solution being flexible in how it is used, and without an understanding of where in the process a human might need to intervene.

Here is where best practices in the division of live-versus-virtual work are imperative. With agents, human intuition and understanding are real time, with live supervision if needed. With RPA, the virtual agents are working unattended in the background. And while they get better over time and learn, that process can also produce errors as with live workers and might need assistance as well. Just like the human workforce needs supervising, so does the robotic workforce. In the case of a system failure, for instance, a robot may be inactive for a long time. By monitoring the bots, supervisors can be alerted when metrics such as long inactivity occur, and they can intervene and solve the issue in a timely manner.

Strong RPA solutions can provide attended and unattended work. For example, business rules might dictate the need for a pop up on a live agent screen to check the work of a particular part of a RPA process. This might be a simple yes-no pop up after an agent checks to ensure that the entry is accurate or complete.

RPA solutions also should be flexible. The goal of RPA is to offload tedious, repetitive and error-prone tasks to a software agent. While some of those tasks are just scheduled as part of normal workflow, the most benefits are to be gained by allowing a live agent to also trigger a task for a bot, and vice versa, depending upon work/process conditions. The most flexible allow for either the RPA agent or live agent to initiate an action to be completed by the other half. As an example of the human-bot collaboration, some processes require work with scanned documents. Advanced automation solutions use an optical character recognition (OCR) engine to read unstructured data out of scanned documents and use that data in the digital process. However, there may be cases where the bot doesn't recognize the characters due to low quality of print or handwriting. In that case it would send a pop-up message to the live agent, asking them to manually input the unclear data. In addition, in keeping with the movement of employing intuitive, easy-to-use interfaces, a live agent should be able to trigger a RPA workflow by desktop input or voice.

Similarly, a RPA agent can only do one thing at a time, but can handle an infinite number of tasks, prioritized according to business needs. For instance, used in a security setting, auto logins to several accounts might always be done first and in a certain order, but other tasks can be scheduled or pulled from a queue either by priority, first in first out (FIFO), or according to some other business rule. And when one task or set of tasks is complete, the next available robot starts the next set.

THE FINAL WORD

A wealth of benefits is available through the use of attended and unattended RPA agents in the back office and the contact center. As such, RPA can provide some quick "wins" in investment. The wins double when RPA is deployed for both attended and unattended work. Blending both enables you to have more control and visibility over the entire customer service process, whether it starts in the contact center with a live agent doing something on the desktop that triggers a workflow or starts with the RPA agent.

Integrating RPA with additional analytics assets can drive further efficiencies, as well as insights. For instance, utilizing desktop analytics can help a business identify further areas for process automation. Using speech analytics can allow a business to set rules that can trigger a process, such as the handling of possible fraud attempts.

Finally, be strategic, not tactical. RPA can create marvelous benefits, as outlined above. However, taking a one-off approach to process management is a limited point of view. Without an overarching plan for enterprise-wide process automation, you risk cascading process inefficiencies.

NEXT STEPS

- **Schedule a meeting with our global team** to experience our thought leadership and to integrate your ideas, opportunities and challenges into the discussion.
- Interested in learning more about the topics covered in this white paper? Call us at 877.GoFrost and reference the paper you're interested in. We'll have an analyst get in touch with you.
- Visit our **Transformational Health** web page.
- Attend one of our **Growth Innovation & Leadership (GIL)** events to unearth hidden growth opportunities.

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