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**The Digital Workforce is here**

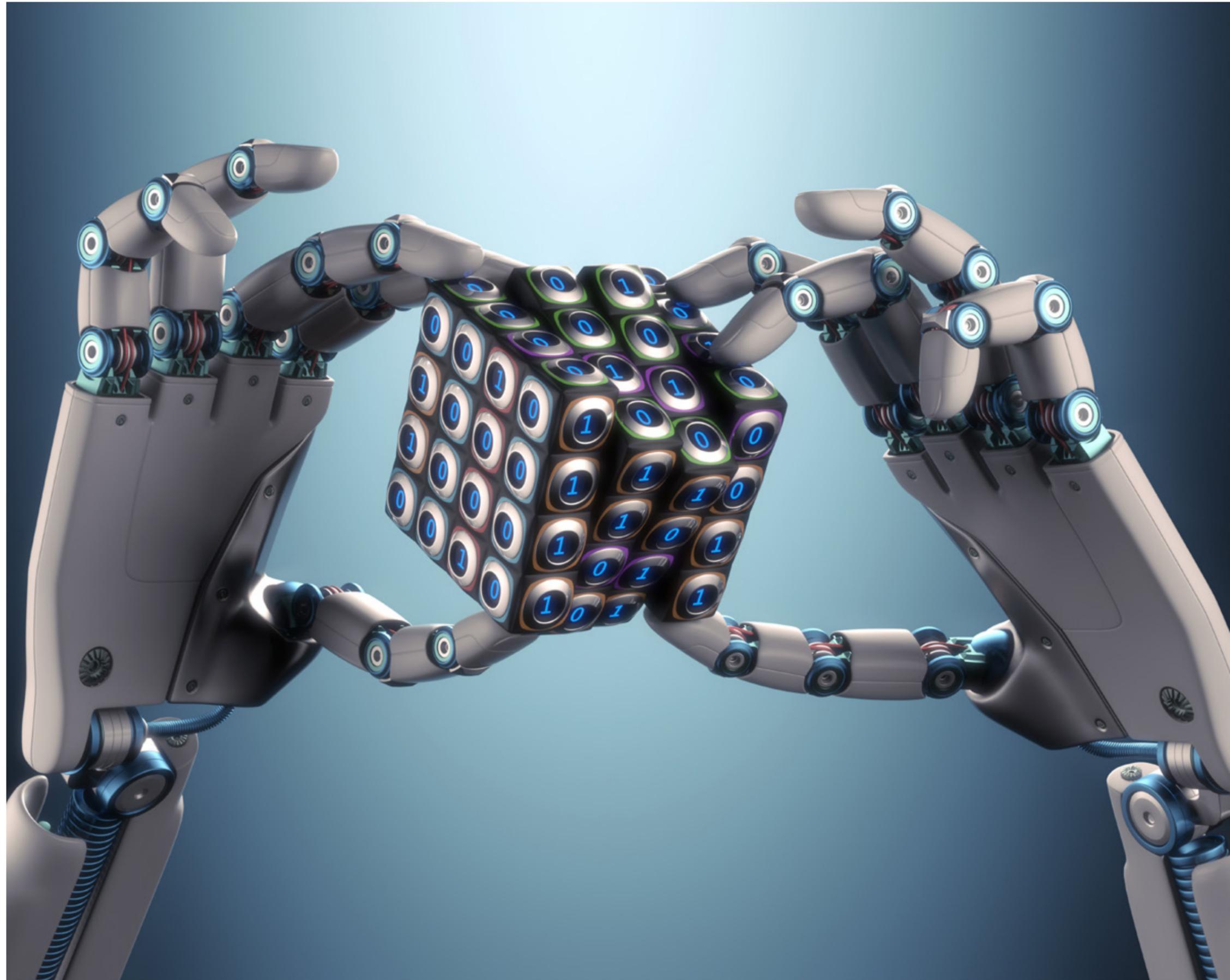
Understanding and Exploring Robotic  
Process Automation (RPA)

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# Robotics Process Automation

The world is changing faster than anyone could have envisioned at the beginning of the 21st century. With technology at the forefront of every disruption across industries today, every element of an organization's business model is being challenged. In this digital age of cognitive sciences, artificial intelligence, virtual reality, and robotics, organizations will need to balance multiple competing priorities to navigate through challenging times ahead and make optimal use of opportunities.

Automation presents one such opportunity. According to the World Economic Forum 5.1 MN jobs will be lost to automation by 2020 in 15 major countries, 2/3rds of which will be in the office and administrative sectors. Therefore for organisations, adoption of this wave of the digital workforce revolution is no longer a question of 'if' but 'when'.



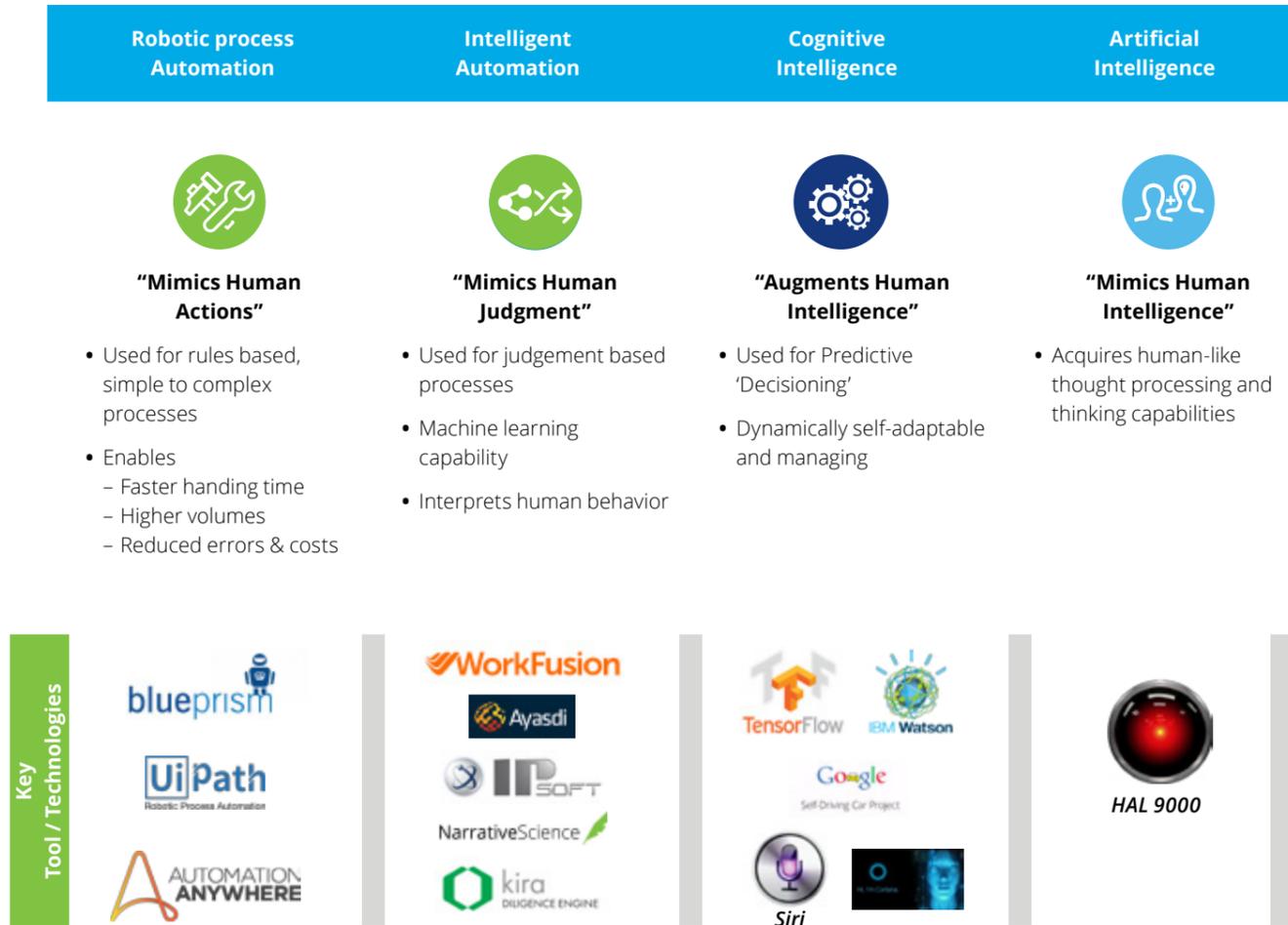
**Understanding the 'Automation Spectrum'**

The spectrum of automation expands from simple rule-based automation to advanced cognitive and artificial intelligence automation. Hence, the task of exploring and understanding automation often appears more daunting than it is.

Let's take a step back and deconstruct this spectrum of automation in detail. The ability of the tool/solution to automate

depends on three factors: the type of input it can read; the amount data it can process; and the nature of output it can generate. Typically, as the variability of the input increases, the amount of data to be processed multiplies and the output moves from being deterministic to predictive, i.e., the solution moves from left to right on the automation spectrum. Robotics Process Automation (often referred to 'RPA') lies at one end of this spectrum.

**Fig 1: The Automation Spectrum**



Source: Deloitte Consulting

**What is 'RPA'?**

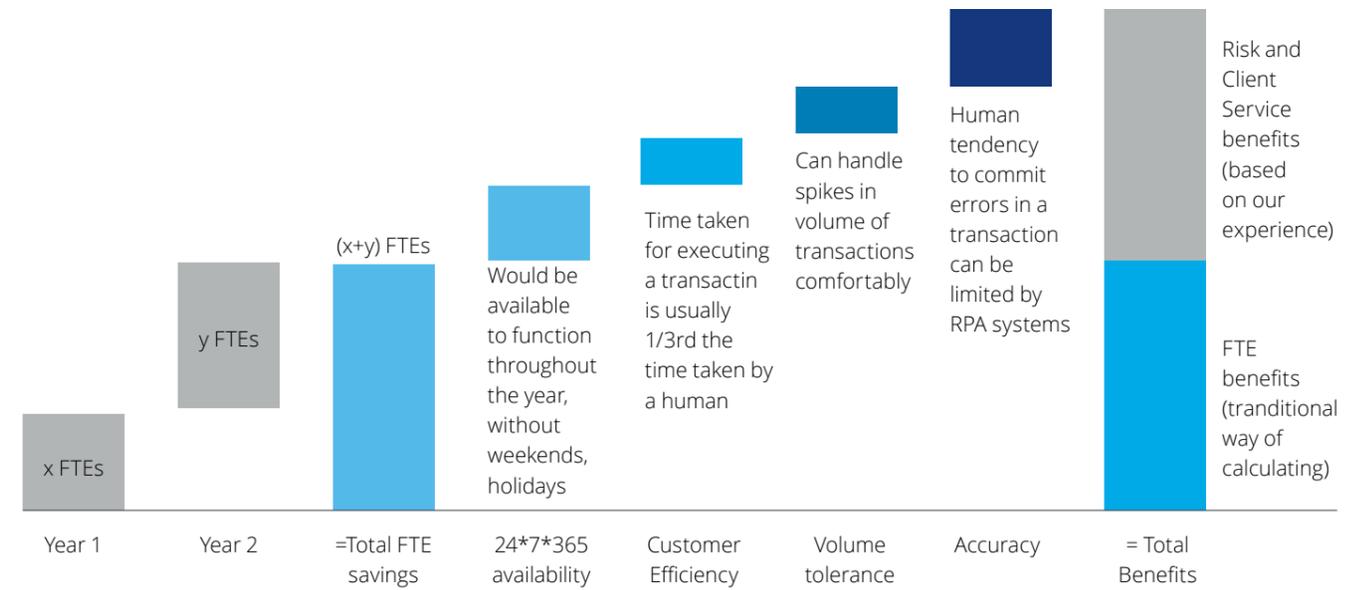
RPA is a technology that mimics the actions of a human performing simple rule-based processes. It interacts at the application/ interface layer of any application and performs the exact steps just like anyone working across multiple applications.

**RPA is the natural evolution of labor arbitrage. It takes the Robot Out of the Human.**

It is cost-effective, scalable, and easy to implement. This is the biggest difference and advantage that RPA has over

traditional automation techniques that rely on back-end automation requiring massive IT transformation, huge investments, and complex decision-making/ approval cycles, given their susceptibility to security issues. The below figure highlights some of the benefits RPA has to offer; the tangible benefits in the form of a full-time employee (FTE) cost reduction and a host of other intangible benefits such as 24\*7 availability, accuracy, efficiency, etc., that improves the overall quality of the work delivered out of the organization.

**Fig 2: RPA Benefits**



Source: Deloitte Consulting

### Key Critical Decisions and Success Factors

As the world is moving toward a resource crunch, organizations need to find ways to be optimal yet effective. Simply put, RPA is one step closer to making an organization lean.

There are some critical decision points that an organization would face in its RPA journey, and these need careful evaluation with important stakeholders before implementing RPA.

These are as follows:

#### Strategy:

- Who will lead the RPA implementation within the organization—Business or IT?
- How do we retain 'tribal knowledge' from process experts on the floor?
- Should we go with a Single RPA Vendor or do we need to consider Multiple RPA Vendors?
- Often, many versions of the 'truth' of process execution exists. How do we capture all process unknowns, validate, and include it as a part of our automated process?

#### Implementation:

- Should we first "automate the process & then fix the process steps on a need basis" or should we "fix the process understand what can be automated and then go with automation"?
- Should we follow a "Top Down" or "Bottoms Up" implementation approach?
- How can we create 'Bot Login Ids' without affecting system security and privacy?
- While 'Testing' the bot, how much is enough?

#### Post Implementation:

- How do we handle frequent process and technology changes post RPA implementation?
- How do we manage employee communications on the operations floor?
- How do we effectively leverage 'freed up' FTE hours?

Having understood the challenges and decision points, leaders may have to think through during their RPA journey. We believe the following are some success parameters critical to maximize the benefits RPA has to offer. These success milestones are as follows:

- Select the right set of processes to begin the RPA journey; the process mix consists of some easy wins with some processes of medium and high complexity.
- Choose the right tool to help you achieve your short, medium, and long-term objectives; the right tool will enable a balance between automation with control and achieving the right balance between 'ease of use' and 'robust security'.
- Select a partner who will be able to seamlessly bring together end-to-end process and RPA skills, program and change management, and operational risk management capabilities to deliver the program with minimal risk.
- Design and implement the right 'pilot' upfront that showcased the tool's features, the breath of processes RPA could tackle, and control mechanism it can have in place.
- Choose the right implementation approach; a stepped phase-wise approach where benefits obtained in one phase can be used as an investment to kick-start the next phase.
- Adopt an effective governance structure and redesign roles to align with new process and team structures, reporting, etc.
- Design an effective change management strategy in place that identifies areas and people that could be impacted due to change. Effective communication and hand off between stakeholders to incorporate changes without affecting execution.
- Adhere to common standards to ensure controlled and consistent implementation of RPA within minimal disruption; leveraging right methods, tools and skillsets, adhering to IT data / security norms.



### Challenges with Adoption

As mentioned earlier RPA is currently in its early phase of adoption. While organizations are well aware of RPA, they are still trying to figure out the holy-grail of RPA implementation. There is a common theme around challenges that emerge with every conversation around RPA and we have highlighted them in this section:

- Change in Mind-Set: Historically speaking, whenever a break-through in technology is about to disrupt any industry (like the effect of introduction of ATM in the banking industry), sceptics have expressed concern about one thing consistently – job losses. But time and again, this has proved wrong. According to U.S. Census Bureau, on average since 1980, occupation with above-median computer use has grown substantially faster (0.9% per year, 1.61% from 1980 to 2013) than jobs below-median computer use (grown by 0.74% during the same period).

Improved technology reduces the cost of a product/service, lowers its cost and improves its quality, thereby attracting more customers to it. Technology quickens the time to market new innovative products/services, increasing the expectations from firms to deliver more. This increase in demand and expectations typically drives up employment. From an RPA standpoint, as centres look to automate mundane, repetitive tasks the quality of work delivered from their centre improves, cost goes down, and the centre's overall performance improves. Employees, who were performing tasks that are now being replaced by RPA, can either improve the work they were doing (for example: move up from just creating management reports that is now automated, to analysing them) or develop skills to take on new and innovative work. Therefore RPA will not replace existing jobs, but it sure will redefine them.

- ii. Limited know-how on RPA Business Case & Operating Model  
RPA is certainly not a new concept. It has been around for a while but it's still surprisingly misunderstood. Topics around RPA's business case, its potential benefits, most complex challenges, etc., are widely discussed but seldom have conclusive and definitive points of view. Leaders don't embrace RPA as quickly as required and there is some skepticism in the area. The biggest question they have while implementing RPA is "how do you build a business case?"

With all the buzz and awareness about RPA in the industry today, there are opinions surrounding its implications, both from proponents and critics. Hence, it has become vital to break through the hype to understand what RPA can do and what are its important limitations. Also it is important for organizations to begin their exploration soon, and evaluate automation solutions on the basis of the objective they are trying to fulfill.

Finally, as leaders look to strategize and implement RPA within their firms, they should be careful not to commit one common mistake - **'Leaders shouldn't fail to align their operating model with their new strategy'**. While large scale implementations of RPA are yet

to gain momentum, if initial signs are anything to go by, employees in organizations will soon be outnumbered by robots. In such a scenario, we believe the existing model would be strained, which is why some fundamentals must be redesigned.

#### Use Case

RPA Automation has proven to be industry-agnostic thus far. As long as there is manual repetitive work being done in an organization, there is potential for automation using RPA. Below are some actual implementation examples of how companies have used RPA:

- 01. **Global Investment Banks:** RPA has helped clients improve case handling productivity to address the existing case backlog and meet regulatory requirements.
- 02. **Insurance & Annuity Insurance Firms:** RPA has helped enhance customer experience by reducing inbound calls and "indexing" turnarounds with digital interactions.
- 03. **Financial Services:** Complex manual processes pose quality issue and RPA has helped reduce such errors and significantly improve quality.
- 04. **Leading Professional Services Firm:** Erratic and seasonal volume peaks for certain type of work (e.g., input compensation data for employees into Talent Management System) required hiring and training of temporary staff. Automating these

processes using RPA not only helped in efficiently and effectively handling these seasonal volume fluctuations at much reduced cost but also improved the transparency and overall quality of the process.

- 05. **Global Pharmaceuticals Company:** RPA implementation significantly improved operational efficiency and helped in overall reduction of operational costs.

#### Summary

RPA allows you to automate processes that were unthinkable using traditional automation. Due to its non-evasive nature and ease of implementation along with its benefits of improved processes and cost efficiencies, RPA is gaining prominence across different industries. Business leaders would need to break through the hype and dive in to understand RPA holistically.

Change is coming and it's going to become inevitable for organizations to adapt. A report by the Institute for Robotics Process Automation predicts that over 100 million existing FTEs could be replaced by automation software in the next decade.

We believe that the time is ripe for business leaders to join the RPA bandwagon and embrace this wave of the digital workforce revolution before it's too late.

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