

# Optimizing Automated Robotics Processes with AI for Smarter Services

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## Abstract

As AI continues to progress, one of the challenges we face is to involve robotics to be automated the tasks that are repetitive, dangerous, or vulnerable to human error. However, automation without intelligence creates a system that cannot respond to variables, new environments, or dynamic requirements. So AI provides a perfect platform to develop intelligent bots. By adding cognitive services to the bot, we can make our bot smart with capabilities like language understanding, image recognition, text recognition, translation, and more.

**Keywords:** Image recognition • AI • vulnerable

## Introduction

The idea is combining AI with robotics creates smarter autonomous systems. With machine learning, image recognition, cognitive services, and more robots can learn and respond to requirements, beyond simple commands. Intelligent robotics uses AI to increase collaboration between people and devices. So the great deal of our mission is to let AI enables the next generation of robots to adapt to dynamic situations and communicate naturally with people. Therefore, we have to keep on infusing advanced robotics with AI enables the next generation of robotics to be collaborative, assistive, and cognitive with societies and people [1].

## Description

The interest and use of RPA (robotic process automation) has rapidly increased to support repetitive, labor-intensive and transactional business processes. For many enterprises, RPA has emerged as a best-fit alternative to making huge IT investments in order to make business processes more efficient. An Everest study finds that the service delivery automation SDA software market size has been doubling in the last two years and is expected to be somewhere between USD 400 and USD 600 million. The study also reveals that several percent of shared services organizations are implementing or planning to deploy RPA [2]. Organizations are attracted to the potential of cognitive automation but recognize the need for expert guidance in developing an overall technical roadmap, implementing a robust governance model, selecting and integrating appropriate technologies, and achieving financial objectives. One

approach is to launch an enterprise-level automation competency chartered to design and champion a cognitive automation strategy and provide the necessary support to operationalize and execute this strategy. We have considerable experience in this arena and can add immediate value [3].

Intelligent automation using AI technologies replaces human involvement in work dispatching. They can monitor and survey system and business processes and initiate robotic work dispatching to perform actions based upon observations and conditional logic. A wealth of process diagnostical information is captured by RPA tools during the normal course of transactional execution. Information such as transaction volumes, transaction cycle time, exception or defect rates, and reasons for exceptions can all be extracted from the robotic tools and used to drive increased throughput and yields [4]. AI can be combined with RPA (robotic process automation) to enable new and compelling use cases and unlock new levels of value in two primary new ways:

- Extending RPA to areas that were previously unfit for automation.
- Increasing the yield of robotics within a currently enabled process.
- A full lifecycle of services, including designing an automation strategy and roadmap, setting up automation Centers of Excellence (CoEs), implementation, virtual workforce management, change management and governance.
- Proven governance and change control methodologies for a systematic approach to automation programs.

Traversing the IA journey at the back-office operations center has to be purposeful and needs to be driven by a shared vision with the

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parent, helping determine the speed and choices that the GBS will have to make along this journey. This requires being insync with the GBS's current position in the value chain and the target state it aspires to achieve. The centers will need to synchronize all that automation has to offer into a coherent value proposition, the same way an orchestra conductor harmonizes disparate instrumental sounds into a beautiful musical composition. The centers can simultaneously navigate up the value continuum as well as the automation maturity curve. With every automation technology experimentation, the journey along this path will open up new opportunities for scaling up the automation process, finally elevating and transforming the back-office support room to a new age digital business technology center.

People are the biggest support for ushering in change but maximum resistance, covert or explicit, also flows from them. We just need to appreciate this fact and work out a plan that create an environment of trust and to embrace change, the following point are useful. We always believed that we are a people company in the technology business. We acknowledge that our focus on automation will disrupt processes and people. So, while the strategy was pushed from the top, we knew the ideas had to come from the floor. We really engaged with the operations team and they were well aligned with what was coming, how they can participate and what to expect. This was a critical step to prepare people to embrace change while diminishing the fear factor.

It can be mapped out RPA projects that are ongoing and in the pipeline, and developed quarter-by-quarter visibility on the capacity that was being created so that this could be approved by the governing board. So far, we have been able to train 70+ people from the business on RPA. These people now have opportunities to move across the organization, to address the specific points of demand.

## Conclusion

We conducted a training program to help employees understand RPA and solicited ideas. The entire process was democratic, with people on the floor coming up with ideas for automation. Next, we started building an in-house talent pool and trained the subject-matter experts to undertake trainings in their respective process areas. We also defined a career path and created a differentiated pay structure to ensure we are able to retain people. All this helped break initial barriers and helped in a faster adoption of the RPA program.

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