Chapter 9 Utilization of RPA in Control Monitoring and Hyper Automation in Audit Ecosystem

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ABSTRACT

Robotic process automation (RPA) emerged nearly twenty years ago and has found widespread use across various sectors, including IT and banking industries for auditing purposes. The focus of this chapter is to emphasize that while RPA proves valuable in automating well-defined and repetitive tasks, its adoption in the field of auditing has been limited. In this chapter, the authors propose a solution that underscores the significant advantages of integrating RPA with a hyper-automation platform. This integration enables internal control monitoring, error correction, and the reporting of key performance indicators to evaluate the productivity of the automated processes. By leveraging the advanced capabilities of the hyper-automation platform, this research expands beyond mere RPA usage. Additionally, the authors address the necessity of a well-developed audit management practice within an organization as a prerequisite for implementing automation technology, as well as the role of Risk Management in facilitating the synergistic application of RPA.

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The term "audit" originates from the Latin word "Audere," which translates to "to hear." This terminology stems from its historical usage, where the accounts of an estate's management were read aloud in the presence of a neutral and unbiased third party, who would then form a judgment regarding their accuracy or validity (Micah & Ferry, 2008; Abomaye-Nimenibo et al., 2021).

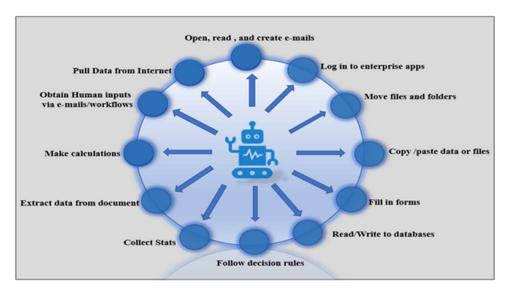


Figure 1. Round-the-clock traditional capabilities of RPA

Robotic Process Automation is helping businesses rapidly digitize certain aspects of their operations. RPA automates some human work by using software robots (also known as bots) that are computer-coded and based on rules. In past, RPA differed from artificial intelligence, such as cognitive computing or machine learning, in such areas it was unable to recognize patterns in data and form opinions. However, with the advent of emerging technological trends, intelligent platforms are now utilizing their functionalities in synergy, leveraging RPA, AI/ML, process-mining, predictive analytics, virtual agents, chat bots, and rule-based API workflows to name just a few features of hyper-automation platform. Since, traditional audit process and procedure were labor-intensive and time-consuming (Vasarhelyi, 2011) hence the idea of automating labor-intensive or time-consuming tasks has been advocated in earlier literature for decades (Vasarhelyi et al., 1991). RPA originated

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