

Chapter 9

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

Prabhat Kumar

Thrive Operations LLC, USA

Akash Garg

University at Buffalo, SUNY, USA

Raghvendra Singh

University at Buffalo, SUNY, USA

ABSTRACT

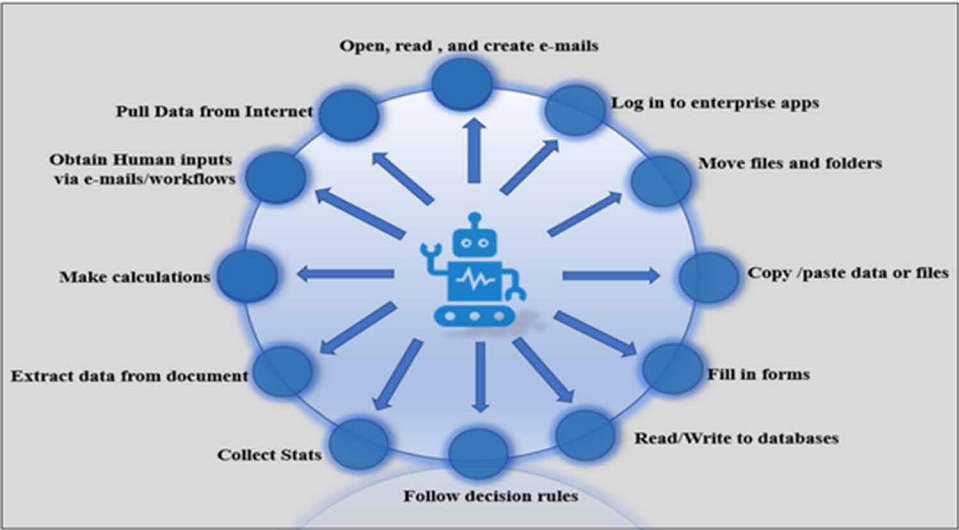
Robotic process automation (RPA) emerged nearly twenty years ago and has found widespread use across various sectors, including IT and banking industries for auditing purposes. The focus of this chapter is to emphasize that while RPA proves valuable in automating well-defined and repetitive tasks, its 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.

DOI: 10.4018/978-1-6684-8766-2.ch009

**UTILIZATION OF RPA IN CONTROL MONITORING AND
HYPER AUTOMATION IN AUDIT ECOSYSTEM**

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

44 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/utilization-of-rpa-in-control-monitoring-and-hyper-automation-in-audit-ecosystem/333184

Related Content

SOA Governance Considerations for Successful Project Management

Konstantinos Koumaditis and Marinos Themistocleous (2015). *Modern Techniques for Successful IT Project Management* (pp. 245-264).

www.irma-international.org/chapter/soa-governance-considerations-for-successful-project-management/123794

CIO Perspectives on Organizational Learning within the Context of IT Governance

Koen De Maere, Steven De Haes and Michael von Kutzschenbach (2017). *International Journal of IT/Business Alignment and Governance* (pp. 32-47).

www.irma-international.org/article/cio-perspectives-on-organizational-learning-within-the-context-of-it-governance/180693

How to Build Successful Cloud Computing Relationships

Klaus Egender, Georg Hodosi and Lazar Rusu (2018). *International Journal of IT/Business Alignment and Governance* (pp. 1-14).

www.irma-international.org/article/how-to-build-successful-cloud-computing-relationships/220437

Knowledge Management in Small and Medium Enterprises

Neeta Baporikar (2015). *Organizational Innovation and IT Governance in Emerging Economies* (pp. 1-20).

www.irma-international.org/chapter/knowledge-management-in-small-and-medium-enterprises/123644

How to Improve Board Accountability in ISO/IEC 38500 Based on IT Governance Implementations: Cascading and Rolling up IT BSCs

Carlos Juiz, Beatriz Gómez and Ricardo Colomo-Palacios (2019). *International Journal of IT/Business Alignment and Governance* (pp. 22-39).

www.irma-international.org/article/how-to-improve-board-accountability-in-isoiec-38500-based-on-it-governance-implementations/233154