Chapter 8
Integration of Robotic Process Automation With Blockchain Technology

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ABSTRACT

The impact of digital transformation is spreading across global marketplaces and sectors. Blockchain, robotic process automation (RPA), and artificial intelligence (AI) have a huge amount of potential to deal with every sector. Blockchain, RPA, and AI are seeing increasing adoption across multiple market segments. The integration of technologies offers the possibility to produce more intelligent, secure, efficient, and safe systems than those that already exist. Innovative technologies are improving responsiveness in terms of intellectual thinking and seeing within the limits of time act. This chapter gives a brief explanation of the integration of blockchain and RPA and how it is beneficial for digital finance and the business sector. Blockchain has the power to store massive data and it is interesting to see what are the methods and systems in which blockchain is used with artificial intelligence and robotic process automation. It can be said that shortly blockchain technology will be used in different domains of the technology sector with the help of AI and RPA.

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INTRODUCTION

The integration and deployment of platforms and tools such as blockchain and AI represent a fundamental shift in how accounting professionals engage with the larger corporate environment. While technology has been a component of the corporate environment since the invention of the computer, the practical deployment of these tools has mostly concentrated on automating and boosting the effectiveness of existing operations. Process upgrading, enhanced efficiency via technology augmentation of current techniques, and higher profitability are regarded as conventional business practices across industries. even when technology advances (Daniels, Sargolzaei, & Sargolzaei, 2018).

Accounting firms and specialists seem to be performing the metaphorical role of being increasingly integrated into how businesses function and are appraised by the market. The speed and process advantages associated with technology instruments may be observed across numerous industry lines and geographical locations. Market giants like as Google, Amazon, Tesla, and Netflix have used AI platforms and technologies to boost both user delight and operational productivity. Gathering information, efficiently using many information sources and being able to utilize this information to make better business decisions establish the framework for possibly achieving a persistent competitive advantage. In both the academic and practitioner literature, information has been highlighted as a viable source of competitive advantages in terms of profitability and operational performance. However, just employing info seems to be insufficient for efficiently completing and prospering in a growing global and digital business site.

Automation, as well as the increased production that frequently comes with enhanced efficiency and technology integration, may be seen as both a helpful and a bad development for the profession. When regarded adversely, the development in automation may and will most certainly result in job reductions, the distribution of some experts in the economy, and an attempt to reframe how accounting experts are taught in the coming years (Pareek, Tailor, & Khang, 2022).

Although blockchain and artificial intelligence, particularly the use of cryptocurrencies in the media environment, have gotten a great deal of attention and media coverage, this is just the most visible use of blockchain technology in the larger corporate landscape. At its foundation, blockchain is a decentralized ledger system that enables encrypted information to be sent to everyone on the network in near real-time. These opposing forces, encryption, and real-time information distribution reflect a fundamental change in how information is generated.