Chapter 10
Hyperautomation in Financial Services:
Revolutionizing Banking and Investment Processes

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ABSTRACT

The financial services industry is on the verge of a revolutionary period, propelled by the emergence of hyperautomation. This study explores the significant influence of hyperautomation technologies, including artificial intelligence (AI), machine learning, robotic process automation (RPA), and other advanced digital tools, on banking and investment procedures. This analysis explores the ways in which these technologies are changing and improving business operations, enhancing consumer satisfaction, and modifying the competitive environment. The chapter begins by providing an overview of the present condition of financial services, emphasizing conventional approaches and the growing requirement for innovation in order to address changing market demands and rising client expectations. Subsequently, it offers a comprehensive examination of the integration of hyperautomation technologies into many facets of financial operations, encompassing algorithmic trading, personalized banking services, risk assessment, compliance monitoring, and customer service improvement.

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1. INTRODUCTION

The COVID-19 pandemic has significantly accelerated consumer payment pattern towards digital instruments that has been progressing slowly progressing for years (Akana, 2021).. In US, the cash in circulation reached a decade high due to a surge in demand for high valued notes for storage rather than payment purpose (BIS, 2021). Jamie Dimon, JPMorgan Chase chairman and CEO, in his annual letter to the shareholders mentioned that "Banks will face enroumos competitive threat from the Fintechs and Big techs" to stay relevant and profitable in future. Banks got to leverage emerging technologies and readjust their products and processes to stay in the business. Hyperautomation is critical for survival. The financial services sector is on the verge of a significant transformation, marked by the emergence of hyperautomation. The current technological revolution, which incorporates sophisticated technologies like artificial intelligence (AI), machine learning (ML), robotic process automation (RPA), Chatbots and cognitive automation, is not only changing the way banking and investment processes are carried out, but also transforming the customer experience in the financial sector.

Hyperautomation in financial services surpasses the conventional limits of automation. It integrates several technology applications to automate intricate business processes, including those that formerly relied on advanced human intervention and decision-making abilities. This integration enables an unparalleled level of efficiency, precision, and swiftness in financial transactions and processes. The banking industry, which has traditionally relied on manual procedures and outdated technologies, is currently undergoing a significant transformation through the use of hyperautomation. Banks are enhancing their services by revolutionizing processes such as loan origination, risk assessment, compliance checks, and customer support. This transformation enables them to provide more customized, secure, and streamlined services. Hyperautomation in investment management facilitates instantaneous market analysis, algorithmic trading, customized portfolio management, and anticipatory risk evaluation. This process expands accessibility to advanced investing tactics that were previously exclusive to privileged individuals.

Hyperautomation is an advanced approach that combines multiple technologies to automate, streamline, and optimize business processes. Here's a table describing key technologies needed for hyperautomation, along with their descriptions and applications: These technologies(Table 1) work in tandem to enable hyperautomation, allowing businesses to automate complex processes, gain deeper insights, and significantly enhance efficiency and accuracy across various domains.

Table 1. Techlogies needed for Hyperautomation (Source: Author)

Technology	Description	Applications
Robotic Process Automation (RPA)	Software robots that mimic human actions to complete repetitive tasks.	Automating routine tasks like data entry, processing transactions, and handling queries.
Artificial Intelligence (AI)	Intelligent systems capable of learning, reasoning, and making decisions.	Enhancing decision-making, predictive analytics, customer service through chatbots, and personalization.
Machine Learning (ML)	A subset of AI that allows systems to learn and improve from experience without being explicitly programmed.	Pattern recognition, forecasting, anomaly detection, and adaptive algorithms in various industries.
Process Mining	Technology that uses algorithms to analyze business processes based on event logs.	Identifying process inefficiencies, compliance issues, and optimization opportunities.

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