# Chapter 6
# A Study on the Use of Business Intelligence Tools for Strategic Financial Analysis

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## ABSTRACT

*The research work is focused on examining the role of business intelligence (BI) tools in strategic financial analysis. The effective utilization of data is essential in order to survive in today's competitive business environment. Traditionally, data analysis was performed manually by using a spreadsheet. However, due to big data proliferation at an unprecedented pace, it becomes difficult for the financial services industry to manage large datasets. Therefore, to address this issue, both academia and industry practitioners have come forward to meet the needs of a growing business with the help of BI tools. In this context, this chapter aims to assist the BI researchers and practitioners in the financial services industry to make fact-based decisions by using popular BI tools like Power BI, Tableau, and SAS analytics. Consequently, the chapter provides a detailed review of the applications of these BI tools in strategic financial analysis and to enhance overall corporate performance.*

## 1. INTRODUCTION

The rise of data generation and exponential growth of technology radically change the way industries and individual businesses work. By its very nature, the financial services industry is considered to be one of the most data-intensive industries, representing a unique opportunity to store, analyze and exploit data usefully. For

DOI: 10.4018/978-1-7998-7716-5.ch006

instance, vast quantities of customer data are being generated by the banks, such as point-of-sale transactions, customer profile data collected for know your customer (KYC), deposits, and withdrawals at automatic teller machines (ATMs), and online payments (Kautish, 2008). Still, they are not very good at using these rich data sets because of their silo and product-oriented nature. Data numbers have historically been crunched, and decisions have been taken based on inferences derived from measured trends and risks. However, hundreds of millions of financial transactions occur every day and the massive volumes of data present ever-new problems for the financial sector (Hasan et al., 2020). Therefore, companies require more efficient tools like business intelligence (BI) software (than conventional strategic management tools and ratio analysis) that can help shape the business strategy for tomorrow and facilitate real-time decision-making (IşıK et al., 2011). As computers have usurped the manual data analysis functionality, the need for more sophisticated data visualization and analytics capabilities has increased over time.

Financial services firms can now focus on emerging data-driven market opportunities by collecting and exploiting large volumes of data with business intelligence software. Business intelligence is characterized by Khan & Quadri (2014) as the process of taking large quantities of data, analyzing that data, and providing a high-level collection of reports that condense the nature of that information into the basis of business behavior, allowing management to make fundamental business decisions on a daily basis. Moreover, financial business intelligence is a term used to define strategies to collect, process, and analyze financial data from databases in real-time and make informed business decisions with the assistance of advanced business intelligence tools (Rasmussen et al., 2002). The use of BI in the financial services industry provides various benefits as listed below-

1. Forecasting potential future financial scenarios.
2. Shaping business strategy through reliable, factual insights rather than intuition.
3. Gaining in-depth knowledge of key trends and take steps to maximize organizational success.
4. Helping in reduction of costs, raise profitability and improves the value of the business.
5. Understanding customers' needs based on consumer profiles, purchasing history, expectations, and demographics.
6. Finding and targeting the most profitable clients.

This chapter is organized into various sections- section 2 discusses the importance of strategic financial analysis. Various issues related to conventional strategic management tools have been discussed in section 3. Section 4 discusses the role of BI in strategic financial decision-making. Section 5 provides a detailed review of BI