Chapter 8
Fin-Cology or Tech-Nance?
Emergence of FinTech

Swarnasree Vutharkar
Woxsen University, India

Rajesh Kumar K. V.
https://orcid.org/0000-0002-7989-1824
Woxsen University, India

ABSTRACT

The words "financial" and "technology" are combined to form the phrase "fintech." Despite being a wide expression with numerous interpretations, it typically refers to the growth of a sector when new technology use-cases are developed and put into place to expedite more traditional-looking financial activities. When it first arose in the 21st century, the term "fintech" was used to describe the technology employed in the back-end systems of reputable financial organisations. Since then, nevertheless, there has been a shift toward more client-centered services, and thus, a more client-centric definition. Currently, the term "fintech" is used to describe a wide range of professions and businesses, including investment management, retail banking, education, and non-profit fundraising, to name a few. In this chapter you will be reading the relation between python and finance; SQL and finance; Tableau and finance; Power Bi and finance; and Block Chain and finance.

INTRODUCTION

In this chapter we will be learning about the emergence of Fintech in this world. Is technology used in finance industry? Does finance and technology go hand in

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hand? What changes technology had bought into finance industry? Has technology changed finance or finance changed technology?

Did you ever get such doubts? Let's find the solution for all your finance and technology related questions in this chapter.

Any innovation that includes financial transactions, whether for personal or professional usage, falls under the umbrella of financial technology. Since the invention of the credit card in the 1950s and the ATM in the 1960s, fintech has been upending our world.

In reality, financial technology is all around us. Many of us utilise fintech instead of cash while making purchases. It is widely used to conduct different financial transactions in methods that are much more practical than in the past.

Our society will continue to change as a result of fintech. So, let's get acquainted with this category of financially disruptive developments (An et al., 2021; Hilpisch, 2014, 2018; Lin, 2016; Raef Lawson et al., 2018; Reddy et al., 2019; Shahrokhi, 2008; Zetzsche et al., 2020).

PYTHON AND FINANCE

Python is one of the best general-purpose, high-level programming languages available today. With its straightforward grammar and close resemblance to the English language as a whole, this language aims to be user-friendly for beginners.

In addition, when it comes to employing Python for finance, its general application is a blend of English and mathematics. Thus, Python's syntax is not all that far from the standard format for expressing mathematical and financial methods.

The three primary components of financial analytics—data collection, sophisticated mathematical calculations, and result visualization—can be made simpler with Python. Finding the ideal module for your data analysis is simple thanks to the large number of Python packages available.

The most popular computer language for undertaking quantitative and qualitative analysis in finance is Python. This language is used for construct payments and internet banking systems, analyse the status of stock market, lower financial risks, calculate the rate of return on stocks, and much more.

Regular data analysts find it expensive, time-consuming, and difficult to grasp and base statistical computations on massive amounts of data. Analysts can streamline these processes and create illuminating visualisations of the outcomes by utilising Python. Financial and data analytics is the idea of gathering, processing, and analysing data using technology, programmes with complex algorithms, and mathematical calculations. The obtained data can be used to make judgments, forecast future trends,