

An Introduction to Fintech APIs

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Abstract: Fintech APIs have revolutionized the financial industry by facilitating real-time data exchange and collaboration between applications. This article provides a technical overview of fintech APIs, their types, and their role in modern financial services. Fintech APIs serve various functions, including payment processing, banking data access, investment management, and identity and security features. These APIs offer numerous benefits such as faster time-to-market, improved customer experience, increased efficiency, and data-driven insights. Studies show that companies utilizing APIs experience reduced development time, increased developer productivity, and improved business revenue. Financial institutions partnering with fintech companies using APIs can achieve cost savings and revenue uplift. APIs contribute to enhanced customer satisfaction and loyalty by offering personalized experiences. The adoption of APIs, particularly in open banking, has resulted in improved financial decision-making, payment options, and borrowing opportunities for individuals. The global fintech technologies market is expected to witness remarkable growth, driven by the implementation of innovative advancements such as APIs, AI, blockchain, and data analytics. Cloud computing is gaining traction in the industry, with the worldwide public cloud services market projected to grow significantly. Despite initial concerns, more fintech companies are embracing cloud technology to reduce costs, enhance agility, and improve the customer experience. In conclusion, Fintech APIs are transforming the financial industry by enabling real-time connectivity, process optimization, and personalized services. Despite challenges, the benefits of fintech APIs are evident, and continued growth and innovation are anticipated in the future.

Fintech APIs, or application programming interfaces, have revolutionized the financial industry by enabling companies to easily connect and exchange data with third-party applications and services. This has opened up new opportunities for innovation, collaboration, and growth in the fintech space. In this article, we will provide a technical overview of fintech APIs and their role in modern financial services.

What are Fintech APIs?

In simple terms, an API is a software interface that enables two applications to communicate with each other. Fintech APIs are APIs specifically designed for the financial industry, allowing financial institutions, service providers, and startups to exchange data and services in real-time. Fintech APIs can be used to perform a wide range of functions, from retrieving financial data to making payments, and they can be accessed by developers and businesses through documentation and programming interfaces.

Types of Fintech APIs

There are many different types of fintech APIs, each with its own unique set of capabilities and use cases. Here are some of the most common types of fintech APIs:

Payment APIs: These APIs enable businesses to accept payments and manage transactions, including credit cards, e-wallets, and mobile payments.

Banking APIs: These APIs provide access to banking data, such as account balances and transaction histories, and can be used to initiate transfers and payments.

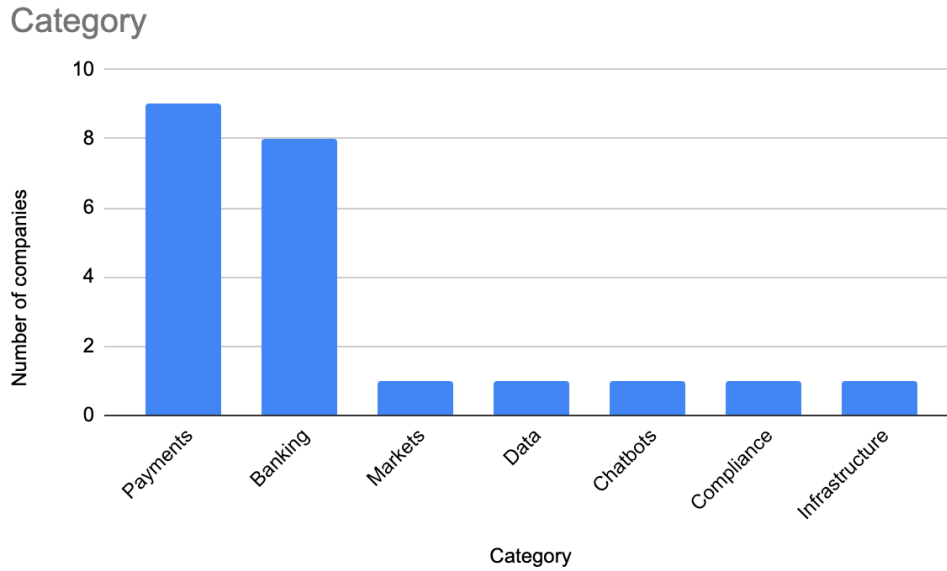
Investment APIs: These APIs allow businesses to access market data, investment insights, and trading capabilities, and can be used to manage investment portfolios and execute trades.

Identity and Security APIs: These APIs provide authentication and security features to protect sensitive financial data and transactions, including biometric authentication, two-factor authentication, and fraud detection.

There are also other types of APIs, such as Markets APIs, Data APIs, Chatbots APIs, Compliance APIs, Infrastructure APIs.

Please find below simple diagram built based on data from “Best FinTech APIs – The Ultimate List” from April 2023 article from codeandpepper.com [1]:

Graph 1 - The Ultimate List of Best FinTech APIs



Benefits of Fintech APIs

Fintech APIs offer a number of benefits to financial institutions, service providers, and startups. Here are some of the key benefits of fintech APIs:

Faster time-to-market: Fintech APIs enable companies to build and launch new products and services more quickly and easily, reducing time-to-market and improving competitiveness.

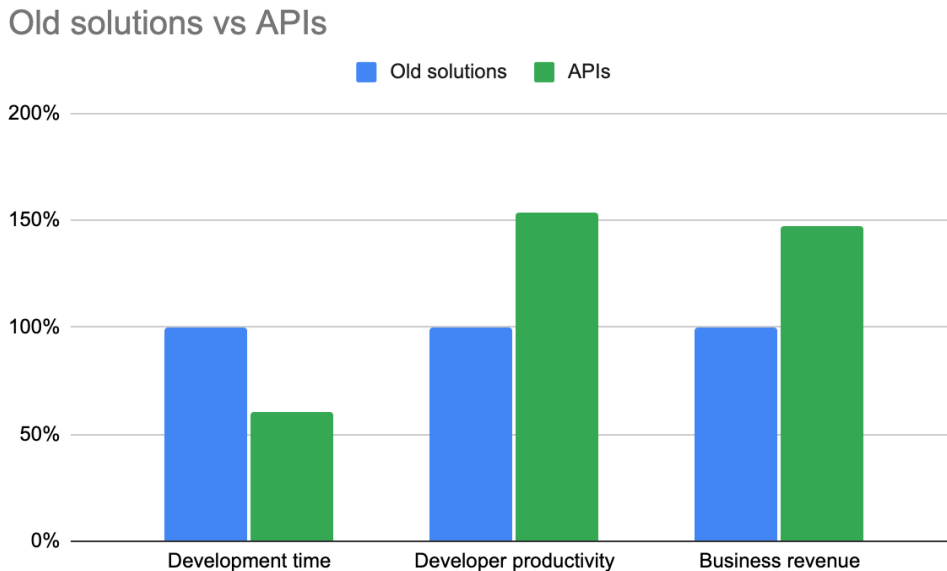
Improved customer experience: Fintech APIs enable businesses to deliver a more personalized and seamless customer experience, by integrating financial services with third-party apps and services.

Increased efficiency: Fintech APIs streamline processes and automate tasks, reducing operational costs and increasing efficiency.

Data-driven insights: Fintech APIs provide access to valuable financial data and insights, enabling businesses to make data-driven decisions and improve their offerings.

According to a survey by MuleSoft [2], companies that use APIs report an average decrease of 40% in development time, a 54% increase in developer productivity, and a 47% increase in business revenue.

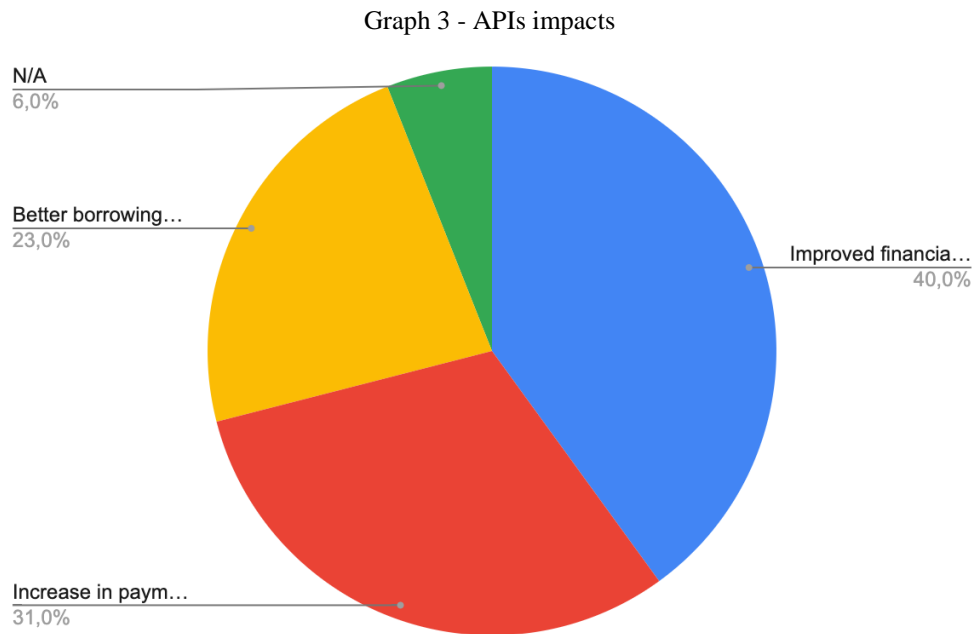
Graph 2 - APIs vs other solutions comparison



A study by Deloitte found that financial institutions that partner with fintech companies using APIs can achieve cost savings of up to 50% and revenue uplift of up to 20% [3].

The use of APIs can also lead to increased customer satisfaction and loyalty. A report by Accenture found that 89% of consumers are more likely to stay with a financial institution that offers personalized experiences.

Based on the Open Banking Impact Report from June 2022 APIs have provided considerable benefits to its users [4]. A significant percentage of individuals, 40%, have reported improved financial decision-making as a result of open banking, with 31% indicating an increase in payment options and 23% reporting better borrowing opportunities:

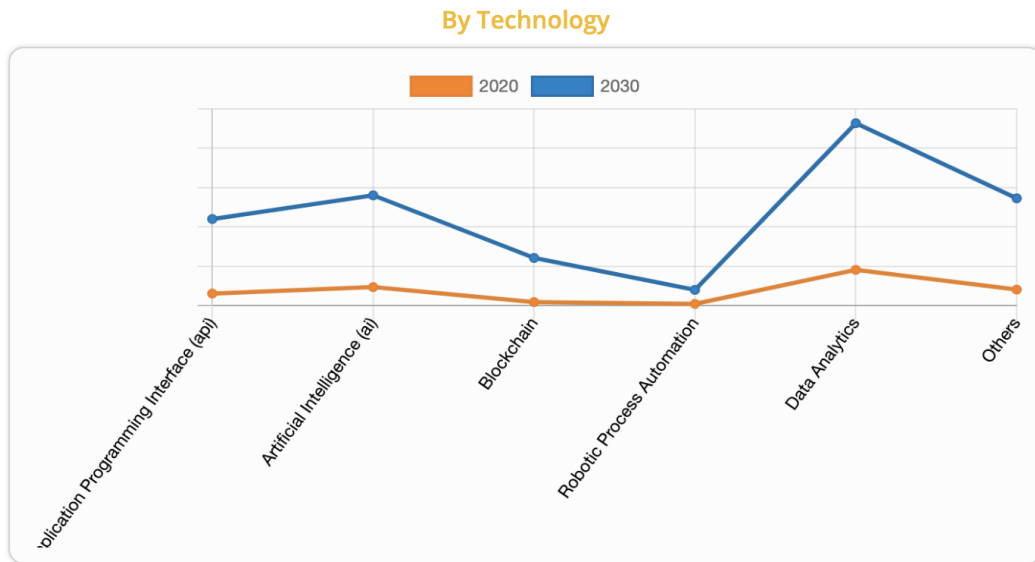


FinTech technologies market

Based on a report on the global FinTech technologies market from allied market research in 2020, the global financial technology (Fintech) market was valued at \$110.57 billion, and it is expected to experience a remarkable growth rate of 20.3% between 2021 and 2030, reaching a projected value of \$698.48 billion [5]. Fintech is the implementation of innovative technological advancements in financial products and services with the goal of improving and automating their delivery and use. This technology aims to compete with traditional financial methods by utilizing tools such as API, AI, blockchain, and data analytics.

The most interesting diagram shows a growing trend by technology, where APIs are playing a key role, especially if combined with Artificial Intelligence (AI) and Data Analytics.

Graph 4 - APIs trends by technology



The trend of migrating environments from on-premises to cloud has been steadily increasing over the past few years. Cloud computing offers many benefits over traditional on-premises infrastructure, including scalability, agility, cost savings, and improved security.

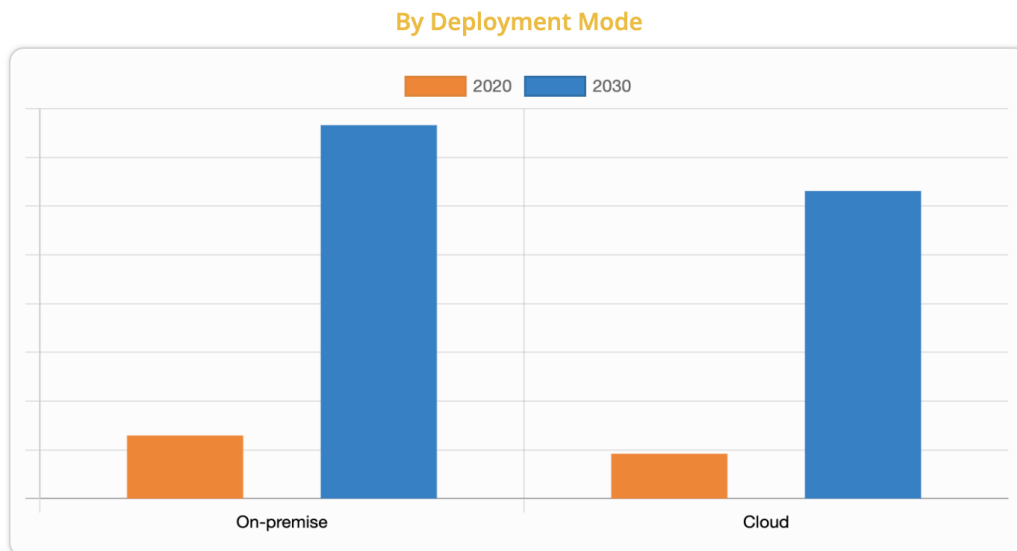
According to a report by Gartner, the worldwide public cloud services market is projected to grow 23.1% in 2021, totaling \$332.3 billion, up from \$270 billion in 2020. This growth is driven by an increased demand for cloud-based services, including infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS).

In the fintech industry specifically, cloud adoption has been slower due to concerns around security and regulatory compliance. However, as cloud providers have improved their security offerings and become more compliant with regulations such as PCI-DSS, HIPAA, and SOC 2, more fintech companies are beginning to adopt cloud technology.

A report by Accenture found that 73% of financial services firms plan to increase their cloud usage in the next three years, with 37% expecting to move the majority of their applications to the cloud. This trend is driven by a desire to reduce costs, increase agility, and improve the customer experience.

However based on Allied Market Research, the On-premise trend still will be growing with a similar speed as a cloud:

Graph 5 - APIs deployment mode trend



Conclusion

Fintech APIs are transforming the financial industry, enabling businesses to connect and exchange data in real-time, streamline processes, and deliver more personalized services to customers. While there are challenges to consider, the benefits of fintech APIs are clear, and we can expect to see continued growth and innovation in this space in the coming years.

References:

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