

## **Fintech 2022 Trends: The era of F-CUBE “Fast and Furious Fintech”**

Mr. Vivek Dubey <sup>1</sup>, Mr. Rohit S. Walimbe <sup>2</sup>

<sup>1</sup> Senior Manager, Insight and Data Practice, Capgemini [arrayan.vivek@gmail.com](mailto:arrayan.vivek@gmail.com)

<sup>2</sup> Manager, Digital Engineering Excellence Practice, Capgemini [rohit\\_walimbe@outlook.com](mailto:rohit_walimbe@outlook.com)

**Abstract.** Due to the continued advancement in financial technologies, global businesses and startups have discovered new windows for potential economic gains. Potential investors are on the hunt for opportunities that would match the growth trend in fintech opportunities. Through a cross-sectional survey of different articles and other publications, the current study explores the various sectors in which fintech has discovered applicability. Even the emergency of personalities, most predominantly influencers, artists, content writers and unapologetic financial inclusion (low wage group, black, women, etc) has been traced to the 21<sup>st</sup>-century fintech breakthrough. An analysis of the pre-and post-pandemic fintech trends is also provided based on thorough qualitative research.

**Keywords:** Fintech, digital banking, payments, artificial intelligence, sustainability

### **Fintech trends post-pandemic**

#### 1.0. Introduction

Over the years, the financial services industry has experienced drastic changes solely influenced by technological advancements. Compared to the traditional financing system characterized mostly by offline banking, modern banking has been drastically changed by complex technologies comprised of AI (Artificial Intelligence), cloud services, virtual reality, climate sustainability, and augmented reality (1). These technologies have eased finance management through automation, multiple currency exchange, and globalization of financial institutions. The trend in technology and financial management has collectively been referred to as Fintech. Various companies, consumers, and business owners all over the world have utilized fintech to handle their day-to-day financial operations and processes through the utilization of computer-embedded software and complex algorithms (2). At the beginning of the 21<sup>st</sup> century, Fintech emerged into back-end systems of existing financial institutions and as technology advanced, fintech shifted to a customer-oriented system to include industries and sectors such as education, nonprofit and fundraising, investment management, retail shopping, development, and utilization of crypto-currencies, etc. In 2019, the global fintech market stood at \$5504 billion with an expected compound annual growth rate of 23.58% by 2025. In the preCovid-19 pandemic, fintech was experiencing a slow but rising financial trend. At the onset of the pandemic, fintech became an online alternative to the traditional financing system in the enforcement of covid-19 safety Sops, thus experiencing a tragic growth globally (3). This paper attempts to exhaust the various applications of fintech in today’s business world and the post-pandemic trend amidst the various challenges experienced during the pandemic.

## 2.0. Application of fintech in various industries and sectors

### 2.1. *Fintech for influencers, artists, and content creators*

#### 2.1.1. *Influencers*

An influencer is a person that can influence the decisions of those that follow them due to their audience relationship, and their knowledge or expertise in a particular field, financial technology in this case (4). According to IbrandStudio, fintech startups rose to 8,775 in the US, followed by 7,385 in Europe, the middle east, Africa, and to 4,765 in the Asian Pacific region. This global shift fostered the emergency of 15 well-known global influencers; Jim Marous, Theodora Lau, Steve McLaughlin, Spiros Margaris, Brett King, Matteo Carbone, Brandley Leimer, Efi Pylarinou, Alex Jimenez, Jean-Baptiste Lefevre, Robin Kiera, Damien Cabada, Alberto Garuccio, Duena Blomstrom, and Florian Semele (accessed from: [www.ibrandstudio.com](http://www.ibrandstudio.com)). Due to the overwhelming growth of financial technologies, the number of influencers has also increased in an attempt to aid customers to navigate the crowded landscape of information technology vendors by providing detailed analyses of the strengths, weaknesses, and opportunities in financial technologies.

#### 2.1.2. *Artists*

According to literature, the application of technology is termed Artech. Many artists have applied technology to broaden and increase artistic production. Various art institutions and galleries have adapted Artech to aid art professionals and dealers to communicate efficiently and at greater speeds with collectors around the world, plus broadening the creative scope of an artist (5). With the growing awareness and application of fintech, various artists across the world have adopted new and efficient methods of getting paid. Most renowned global artists have developed websites with automatic payment systems through PayPal, Payoneer, etc., once a sale is made. With this trend of financial management, Artech was estimated to contribute 4% of the US's \$800 billion year GDP in 2020 (6). This contribution was valued to be bigger than the economic output of Sweden or Switzerland.

#### 2.1.3. *Content creators*

Content creation or marketing is one of the strongest and most renowned drivers of marketing as well as business results. According to BackBay's 2019 communication study, over 96% of content creators are employed by fintech institutions. Just as the saying by John Paul Aguiar "Nothing Big will happen in your life until you build off of many small things," many content writers have broken the silence into developing content that matches the growing trend of fintech as well as marketing fintech companies to customers who might be interested. The greatest content creators are influencers, and some influencers with big followings or those that have broken through are employing content creators to maintain their pages (7).

### 2.2. *Fintech for blacks, low wages people, students, and fintech for only females*

#### 2.2.1. *Fintech for blacks*

In the post by Chris Brummer, "Fintech race's problem," a professor of law in Georgetown (accessed from [www.forbes.com](http://www.forbes.com)), only 5.3% of tech professionals and less than 2% of tech executives were cited to be black. Again, with fintech accounting for 10-15% of tech employment worldwide, the professor argues that the number of full-time black employees, both professionals and executives is in the hundreds. With this post spreading on social media platforms, Jon Stein, a CEO and founder at fintech, spearheaded a money management fintech termed "Betterment" during the launch of Fintech Equality Coalition in mid-2020. He promised an increase in the number of black employees in their firms and a reduction in the percentage of white employees (previously 71% full-time employees and 80% in leadership). In the same year, fintech appointed Netta Jenkins, a black representative on the board, to act as an advisor on Black's issues. By the end of the Covid-19 pandemic, the number of black employees at fintech is expected to increase. We also expect adaptation of financial technology among African countries as many have transformed from analog into the digital world and as well due to the increasing number of startups within the region.

### *2.2.2. Fintech for low wages people*

As the Covid-19 has caused a wide gap between two financial groups of people, the rich and the poor, fintech has provided to be a potential for change. Approximately 40% of Americans with incomes below \$ 30,000 per year lack access to broadband services, and the only option available is internet access through smartphones. Americans that can't access online banking spend hours on ATM queues and sometimes pay feed to alternative service providers (8). Even access to pandemic relief programs for people of the financial system is complicated and hard. A solution to these difficulties modern financial institutions such as PayPal have partnered with government agencies to bring one-on-one financial coaching to change behaviors and elevate low- and moderate-income customers on the trek towards financial stability and adaption of high-tech and cost-effective financial systems. This model is aimed at extending access to financial services during this pandemic. It is expected that once people adapt and learn the beauty of fintech, the trend of adaptability is likely to increase beyond the pandemic thus bridging the financial gap between income statuses.

### *2.2.3. Fintech for students*

Fintech has expanded to students by providing fintech for school's programs and as well fintech for school's application. The programs aim at imparting knowledge and awareness regarding financial technologies among the youth (Prominently students). The program, through masterclasses and masterclass videos, also aims at producing talent since the innovation of financial services is a continuous trend (9). A program named Pintek which is a specialized education leader and influencer in Indonesia, provides small and medium private schools and low-income families financial assistance. Related programs exist globally and within a few years, fintech is expected to complete its mission among students.

### *2.2.4. Fintech for only females*

The world of startups, whether small, medium, or large scale, is still dominated by men. Women own approximately 7% of individual startup businesses in the global pool. In the study by Deloitte on achieving gender equity in the fintech community, three groups of stars, men-founded, women-founded, and startups involving both men and females, were studied for 10 years together with an analysis of the impacts of Covid-19 on fintech funding activities till mid-2020 (10). The study showed that the gender gap is more pronounced during pandemics and their economic aftermath. Women, due to difficulties faced in sourcing for funds, show resilience and capability in generating high returns on investment yet with no or little support. To increase women's resilience and self-support, fintech founder communities unleash new forms of support, products, and ideas. Even women's representation in fintech has been increased drastically. In the UK, the top five women-founded fintech firms include PensionBee, founded in 2014 by Romi Savova. Starling Bank was founded in 2014 with Anne Boden as founder and CEO, Borrowell, a Canadian-based fintech firm founded in 2014 by Eva Wong. Ellevest was founded in 2014 by Sallie Krawcheck, a wall street veteran, and lastly, Ovamba solutions were founded in 2013 by Viola Llewellyn (11). These firms are all aimed at improving women's resilience and benefit in financial technologies. In the post-pandemic time, the firms are expected to expand and multiple to uplift gender equity to at least 50%.

### *2.3. Fintech in merchant onboarding domain*

Merchant onboarding is a system that enables system administrators to establish and maintain merchants through channel banking platforms, thus enabling users to initiate merchant payment via the channel banking facility. Under this system, a payment facilitator or an independent ISO establishes a connection between his system and a provided payment processor's native boarding system. Each processor establishes a provision for merchants to onboard manually via web-based boarding portals for ISOs to log into. Logging in can also be done automatically using an API integration embedded in programs such as IRIS CRM (12). Merchant onboarding is a special type of financial technology that is currently leading the payment industry's customer resource management platforms. With this system, businesses can run on the internet with customers having access to paying for goods or services online. An example of this is the alpha fintech that provides a global range of solution portfolios through continuous integration of various 3<sup>rd</sup> party provider plugins. It is a fintech business being operated by strong and well-reserved host websites.

#### *2.4. Fintech for Women Health Clinics and Benefits Platform*

The Digital Women Health Clinic area is the new thing that has attracted an immeasurable trust with the impressive consumer base. These platforms offer everything from fertility to family care. That means -

- A) support services ranging from preconception to post-pregnancy to family care
- B) supports pregnancy loss, high-risk care management, breech birth, and more

These platforms have extended plans to include -

- 1) therapists, and career mentors
- 2) egg donor experts
- 3) fertility knowledge educators
- 4) pediatricians, childcare, and more
- 5) Career coach - helping women to get back to work including career advise

Digital Women Health Clinic and Career Coach is the next big thing we will see in 2022

#### *2.5. Fintech in centralized payments e.g., PayPal*

Global financial giants such as PayPal were the first fintech empires to be established. Due to the increased demand for digital payment systems globally, information and computer technology specialists developed a series of complicated and encrypted codes that would enable online payments from one end to the other without altering financial regulations. Today, this advancement in technology facilitates global businesses through completing transactions between traders in different parts of the world. Under centralized payment systems, payments go through third-party bodies responsible for keeping the network secure and operational (13). For example, PayPal acts as a third party in completing a transaction between the sender and the receiver of a certain payment usually at a transaction fee. The greatest advantage of these fintech institutions is their capacity to keep transactions secure between end-to-end users. If proper identification or verification is not sought from the receiver's end, the payment might go to the wrong destination. PayPal and most other fintech central payment systems have a high-level verification process at the receiver's end to minimize cyber theft.

#### *2.6. Fintech in decentralized payments e.g., Blockchain and cryptocurrency platforms*

A decentralized payment system is one in which users, the customers, and the vendors involved exchange payments without going through a third party. Under these forms of fintech, transactions are completed via blockchains that offer a wide range of opportunities, including decentralization, security, and scalability (10). Before technology advanced, traditional blockchains involved financial transactions that were completed via cash payments. The beauty with decentralized fintech is that no verification is needed as both parties settle payments on agreements to sell, contract signing, etc. When bitcoin, a form of cryptocurrency, was introduced, the traditional cash system was eliminated, and transactions were processed and accessed publicly across all nodes on the network. Such forms of payment are cheaper, reliable, less prone to hackers, individual control of money, and more transparent (11). Even developing countries can access these forms of financial services, unlike centralized payments that have to go through third parties such as PayPal that is not supported everywhere.

#### *2.7. Fintech for kids and young millennials*

The two generations, alpha and millennials/Gen-Z, are the ones most comprised of kids and people referred to as young millennials. These generations collectively comprise people born between 1997 and 2024, characterized by recent advancements in financial technology. During their upbringing, large tech companies such as Google and Apple were already offering them high exposure to technology (9). The current generation utilizes fintech to pay for online products and services such as online gaming, entertainment, various online subscriptions, and to less extent, study courses. Their continued support offers a high opportunity for new fintech startups, and it is becoming hard for this generation to do without technology. Due to the high market potential in young millennials, fintech startups are designing programs that will encourage kids or their parents to make seasoned subscriptions to keep up with the academic education, financial education (how to manage money at young age?) and entertainment. For example, it is more often to subscribe to certain television channels such as educational channels, St. Kids, Nickelodeon, etc., via TV bouquet subscription.

### *2.8. Fintech for ESG (Environmental, Green climate sustainability, and low carbon fintech)*

Environmental, social, and governance (ESG) refer to the approved standards by social investors to filter potential investments in sustainability initiatives. This criterion highlights the impacts of the company's activities on the environment, its degree of association with various stakeholders, and the society at large, including its governance and management practices. Fintech and ESG can be analyzed on four major pillars; fintech products and services that are oriented towards ESG include neo banking products and services, insurance, carbon offsetting products, and many others, inclusion initiatives that encompass all initiatives aimed at improving access to insurance, value exchange, and credit, technology platforms that facilitate data collection and its relay, measuring tools, and rating-engines, and lastly impact investing focusing on institutional investors aiming at ESG-oriented business portfolios (14). All recent fintech startups are trying to embrace the ESG aspect to produce what is currently referred to as green fintech. With this transformation, investors are slowly being pulled into embracing ESG-based opportunities in an attempt to comply with sustainability standards.

### *2.9. Fintech with voice biometrics (e.g., banking services with Alexa, Siri, and smart devices such as speaker, eyewear, and watches)*

Due to the increasing use of online payment systems, companies are getting more prone to cybersecurity crimes such as cyber theft, hacking, etc. Financial technology companies are working tirelessly to replace the traditional security systems such as passwords, patterns, etc. that are more prone to attacks with more advanced and complex biometric systems utilizing facial, voice, fingerprint, and retinal/iris pattern verification (15). The advancements are being made to provide convenient customer authentication flow, whether in retail banking, mobile banking, etc. With the adaptation of such technologies, e.g., banking with online services such as Alexa and Siri, it is becoming increasingly difficult to steal or cheat these systems since the details for authentication are based on individual user characteristics. Fintech uses biometric technology to not only authenticate users but also to initiate and complete payments and other financial transactions. Since biometrics link individual users to their financial identities, the use of traditional cash and credit cards is no longer feasible as payments can now be initiated using voice recognition, fingerprint scan, iris pattern scan, facial recognition, etc.

### *2.10. Fintech using low code or no code*

Low code or no code programs allow programmers or non-programmers to create application software via system configuration and graphical user interfaces instead of the traditional programming. In recent years, no-code or low-code platforms have seen tremendous growth and applicability. In 2017, the market of low-code and no-code platforms stood at \$ 3.8 billion, and Forrester predicted it to rise and reach \$ 22.2 billion in 2022. This advancement has provided great potential for fintech and payment landscapes. A bigger proportion of fintech startups in 2021 are utilizing low-code and no-code platforms to customize user-friendly and non-technical payment systems in the shortest time possible (16). This replacement of traditional coding comes with a series of advantages such as user-friendliness, little or no expertise needed, complete security, and all fields, whether technical or non-technical, are adopting the change. It is becoming easier day by day to develop new fintech solutions while incurring little or no expenses and limited complexity to completion.

### *2.11. Fintech for everyone (Embedded fintech)*

Embedded fintech or embedded finance is a system that allows an individual to make an online purchase without using bank details, and such a customer can easily acquire a loan on digital platforms (17). Through the use of the bank as a service model, financial services can be integrated via APIs (Application programming interface), and any type of customer, whether poor or rich, young or old, individual or a group, and online retailers can incorporate the banking software in their websites or mobile apps. This not only eliminates redirecting users to third-party websites but also offers a wide range of payment options such as paying by installments, use of credit cards, etc., and can also offer insurance (12). This fintech advancement offers a wide range of financial services to customers at the lowest costs possible compared to the previous period that was so complex, time-consuming, high initial

cash outlays, and requiring technological advancement. Everyone can startup a fintech outlet without any difficulty and the odds of success are so high.

### 3.0. Conclusion

In an attempt to match the growing demand for digital financial solutions, financial technologies have for a long time offered different opportunities to startups and well-established businesses to cross borders at a faster and more efficient rate. Financial technologies have enabled different sectors (Gaming, marketing, education, women health clinics, low earning groups, gender diversity and inclusion etc.) to develop and expand into the global arena. With continued advancement in technology, fintech is moving to an easier stance in which low or no coding facilitates interested parties to make quick startups. Considering sustainability and investment portfolios, green fintech is providing investors with eco-friendly investment opportunities with a guaranteed future. Even after the covid-19 pandemic, the growth trend is expected to continue rising to meet the forecasted value in dollars. Post pandemic (2022 onwards) we will witness the power of F-CUBE that is Fast and Furious Fintech in real sense.

### References

- [1] Gill SS, Tuli S, Xu M, Singh I, Singh VK, Lindsay D. Transformative Effects of IoT, Blockchain and Artificial Intelligence on Cloud Computing : Evolution, Vision, Trends and Open Challenges Transformative Effects of IoT, Blockchain and Artificial Intelligence on Cloud Computing : Evolution, Vision, Tr. *Internet of Things*. 2019;(December):1–31.
- [2] Paul LR. A Systematic Analysis on FinTech and its Applications. *Conf Pap*. 2021;(July):1–7.
- [3] Tut D. FinTech and the Covid-19 Pandemic : Evidence from Electronic Payment Systems. *SSRN Electron J*. 2021;(January 2020):1–42.
- [4] Safitri Y, Luthfia A, Ramadanty S. Social Media Influencer Credibility and Social Influence on Intention to Use Fintech in Indonesia SOCIAL MEDIA INFLUENCER CREDIBILITY AND SOCIAL INFLUENCE ON INTENTION TO USE FINTECH IN INDONESIA. *SSRN Electron J*. 2021;(January):263–70.
- [5] Dinis B, Alexandre IM. ARTECH 2012, 6th International Conference on Digital Arts. *Conf Pap*. 2017;(January):365–8.
- [6] González-Zamar M-D, Abad-Segura E, Rosa AL de la, López-Meneses E. Digital Education and Artistic-Visual Learning in Flexible University Environments: Research Analysis Mariana-Daniela. *Educ Sci*. 2020;1–20.
- [7] Forrest P. Content Marketing Today. *Soc Media Mark*. 2019;(April):407–15.
- [8] Billore S, Billore G. Consumption switch at haste : insights from Indian low-income customers for adopting Fintech services due to the pandemic Consumption switch at haste : insights from Indian low-income customers for adopting Fintech services due to the pandemic. *Int Mark J*. 2020;8(2):197–218.
- [9] Abu-Daqar MAM, Arqawi S, Abu-Karsh S. Fintech perception )” Fintech in the eyes of Millennials and Generation Z ( the financial behavior and Fintech perception ). *Banks Bank Syst*. 2020;15(3):20–8.
- [10] Leong K, Sung A. FinTech ( Financial Technology ): What is It and How to Use Technologies to Create Business Value in Fintech Way ? *Int J Innov Manag Technol*. 2018;9(2):74–8.
- [11] Robin T, Shahryar S, Anthony L, Alejandro-Moreno P, Claire-Ingram B. The rise and development of FinTech: Accounts of disruption from Sweden and beyond. 2018. 1–468 p.
- [12] Mohammed B. API " Application Programming Interface " Banking : A Promising Future For Financial Institutions ( International Experience ) API " APPLICATION PROGRAMMING INTERFACE " BANKING : A PROMISING FUTURE FOR FINANCIAL INSTITUTIONS ( INTERNATIONAL EXPERIENCE ) 1. *Rev DES Sci Commer*. 2020;2(4):31–43.
- [13] Bechara M, Bossu W, Liu Y, Rossi A. The Impact of Fintech on Central Bank Governance: Key Legal Issues. *Int Monet Fund*. 2021;1–23.
- [14] Vergara CC, Agudo LF. Fintech and Sustainability: Do They Affect Each Other? *Sustainability*. 2021;13(7012):1–19.
- [15] 15. Dubey V. Fintech -Digital way of ID Verification and Biometric Verification in 2020

- Fintech - Digital way of ID Verification and Biometric Verification in 2020. *Int J Innov Appl Stud.* 2020;27(4):896–901.
- [16] Smith G, Papadopoulos M, Sanz J, Grech M, Norris H. Unleashing innovation using low code / no code – The age of the citizen developer. 2020;60–75.
- [17] Barefoot JA. Digital Technology Risks for Finance: Dangers Embedded in Fintech and Regtech M-RCBG Associate Working Paper Series. Fifth a Ser six Pap Regul Innov. 2020;(151):1–26.