Veritaseum

FORENSIC ANALYSIS

Block (Square) Inc.

February 2022

Table of Contents

1. EXECUTIVE SUMMARY 4
   1.1. Company Overview 4
   1.2. Market Overview 5
   1.3. Financial Highlights 6
2. ABOUT BLOCK (SQUARE) 9
   2.1. Introduction 9
   2.2. Block (Square) Ecosystem – Products and Services 9
   2.3. Transaction Processing Overview 11
   2.4. Sales and Marketing 13
   2.5. Intellectual Property 13
   2.6. Square Business Model 13
3. GLOBAL MARKET OVERVIEW 16
   3.1. Global FinTech Market - Overview 16
   3.2. FinTech Market Segmentation 18
   3.3. Global FinTech Market Size 19
   3.4. Global FinTech Market Growth 20
   3.5. FinTech Market Key Players 21
   3.6. Other Players Include 21
4. US FINTECH MARKET 22
   4.1. Overview 22
   4.2. US FinTech Market Segmentation 24
   4.3. US FinTech Market sizing 25
   4.4. US FinTech Market Key Driver 27
      4.4.1. Increasing role of digital-age consumers 27
      4.4.2. Low-Interest Rates 28
      4.4.3. A rise in e-commerce sales 29
   4.5. FinTech Blockchain Market 29
   4.6. US Fintech Market Challenges 32
   4.7. Outlook 34

5. LITIGATION AND LAWSUITS 38
5.1. H&R filed a case against the company for changing its name to Block 38
5.2. Patent infringement lawsuit against Square, filed by AnywhereCommerce 38
5.3. Card reader patent lawsuit against Square 39
5.4. Jack Dorsey, Block (Square) CEO, filed a lawsuit against Craig Wright over the copyright ownership over the Bitcoin White Paper 41
Nulla Diligentia Malum– Said Differently – Zero Due Diligence Is A Bad Thing 42
6. FINANCIALS - HISTORICAL 46
6.1 Revenue and Cost Components of Operations 46
6.1.1 Revenue 46
6.1.2 Cost 46
6.2 Total Revenue 47
6.2.1 Segmental Revenues 48
6.3 Total Cost of revenue 48
6.4 Total Gross Profit 49
6.5 Operating Income 51
6.6 Net Income/ (Loss) 52
7. FINANCIALS – FORECASTED 53
7.1. Revenue Based Financials 53
7.2. Cost of Sales (COS) financials 56
7.3. Gross Profit & Gross Margins financials 58
7.4. Operating Expenses Financials 59
7.5. Operating Income/ (Loss) 62
7.6. Infringement Cost 62
7.7. Voluntary Patented IP Licensing vs Compensatory & Punitive Damages 63
7.8. Net Income / (Loss) 64
8. SCENARIOS – BEST, BASE, & WORST 65
9. COMPARATIVE VALUATION 66
Disclaimer 68

1. EXECUTIVE SUMMARY

1.1. Company Overview

Block, Inc. – formerly Square, Inc. (the "Company" or "Square") is a financial service and digital payments company. Square is a payments platform intended to focus on small and medium businesses that accept credit card payments and use tablet computers embedded with payment registers for a point-of-sale system.

Name	Block Inc. (Square Inc.)
Founder	Jack Dorsey & Jim McKelvey
Launch Date	February 14, 2009
Industry	Financial Services Mobile Payment Point of Sales
Headquarters	San Francisco, California, US
Revenue (2021)	USD17,661 million
Website	Squareup.com

Square offers seller hardware and software to merchants that assist them in running their businesses effortlessly. It *was* primarily a credit card processing company that provides various business solutions. In addition, the Company also provides a free software app as well as low-cost (sometimes free) hardware to turn mobile devices into capable point-of-sale (POS) system

Square products and services are organized into three categories, namely:

- Payment and POS services
- Financial services
- Marketing services

The Company provides Cash App, a mobile app that allows money transfers both among users and between users and businesses. The Cash App delivers access to the financial system, allowing customers to send, store, and spend money electronically. Businesses can use the Cash App to receive payments from their customers (Business Money).

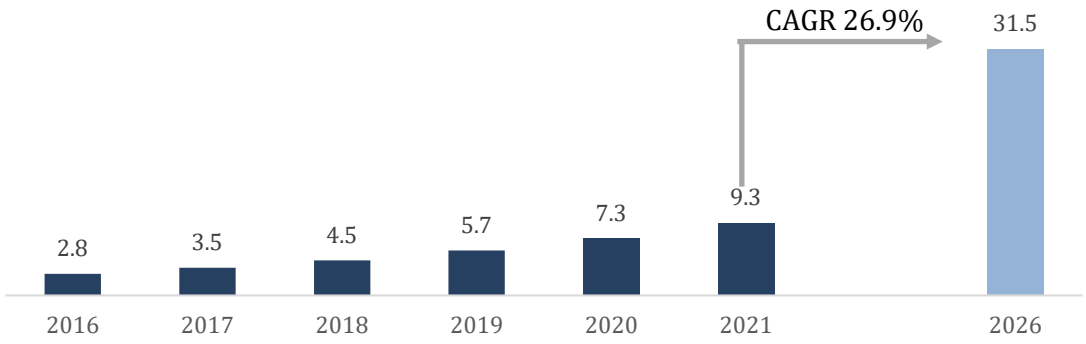
The company supports vendors of different sizes, from a single retailer to a farmers' market to local businesses. The geographical reach of these vendors spreads across the United States, Canada, Japan, Australia, and the United Kingdom.

1.2. Market Overview

The Global FinTech market witnessed positive automated and improved financial services developments with a striking growth rate (CAGR) of 27.5% during 2016-2020. The market is projected to reach US$31.5 trillion in 2026 with a CAGR of 26.9% during 2021-2026. The growth is attributable to the rise in digital payment popularity, augmented investments in technology-based solutions, supportive government regulations, and a surge in the adoption of IoT devices

FinTech enabled services primarily include fund transfers, lending services, online or mobile payments, personal finance, insurance and others such as equity and wealth management.

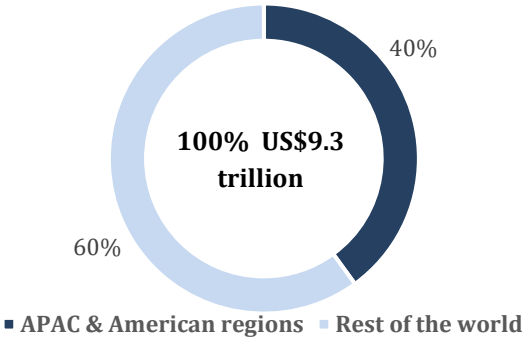
Figure 1: Global FinTech Market, 2016-2026 (in USD trillion)



Source: finance.yahoo, Feb 2022 & research and markets Oct 2021

In 2021, with more than 40%, APAC and American regions accounted for the lion's share of the global market size. The FinTech market of the US is growing at an impressive rate due to changing business models and the swelling emphasis on boosting customer interaction. Also, the increasing digitization of businesses and growing investment in FinTech companies offers lucrative growth opportunities to the market.

Figure 2: Global FinTech Market by Region, 2021



Source: Mordorintelligence 2021

As per the article published by BlueWeave Consulting, the FinTech market in the United

States is projected to expand at a CAGR of 10.1% during 2021-2027. Government regulations governing digital payment systems, banking, and credit are also expected to fuel the expansion of the FinTech industry in the United States over the forecast period.

As of Nov 2021, America registered 10,755 FinTech (financial technology) start-ups, making it the area with the most FinTech start-ups in the world. The EMEA region had 9,323 such start-ups, while the Asia Pacific region had 6,268.

The AI segment has emerged as a key element of the FinTech industry as it plays a critical role in collecting data, information analysis, and creating customer-centric products. As per Yahoo finance's report on global Ai in FinTech market published in Jan 2022, the global AI in FinTech market size is forecasted to reach US$46.9 billion in 2030 at a CAGR of 19.8% during 2020-2030.

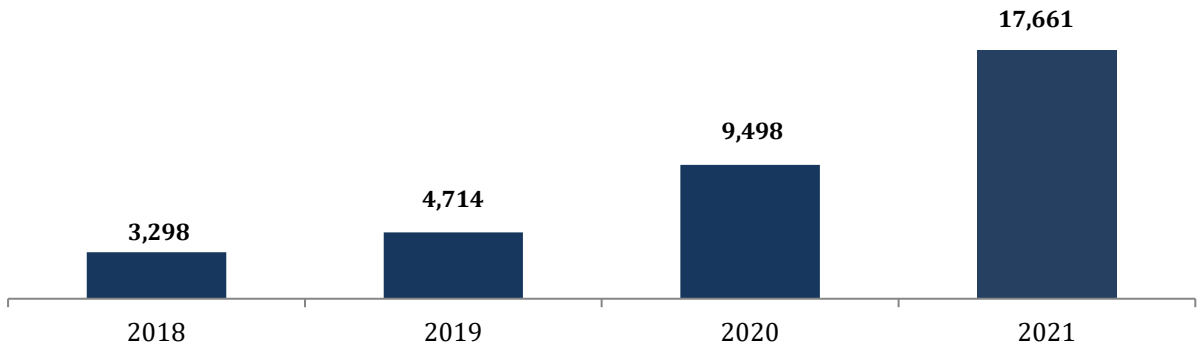
FinTech blockchain applications are becoming increasingly popular in the financial business. Payments, smart contracts, and compliance management/KYC applications assist banks, investment banks, and insurance businesses in improving efficiency and lowering infrastructure costs. Due to the rising relevance of FinTech blockchain applications, non-bank financial services such as asset management and wealth management are likely to dominate the market throughout the upcoming period. This is supposed to increase customer happiness, prevent fraudulent transactions, deliver speedier services, and lower the total cost of ownership.

1.3. Financial Highlights

Square's Seller ecosystem, which consists of over 30 separate software, hardware, and financial services solutions, is a unified commerce environment that helps sellers establish, operate, and grow their companies. These items are monetized by a mix of transaction, subscription, and service fees.

Square has generated total net revenue of US$17,661.2 million for the year ended December 31, 2021, or a 86.0% increase as compared to the previous year. The ***surge is mostly attributable to an increase in bitcoin revenues***. The total direct cost of revenue for the year ended December 31, 2021, stood at US$13,241 million, and for the 2020, it was US$6,764 million.

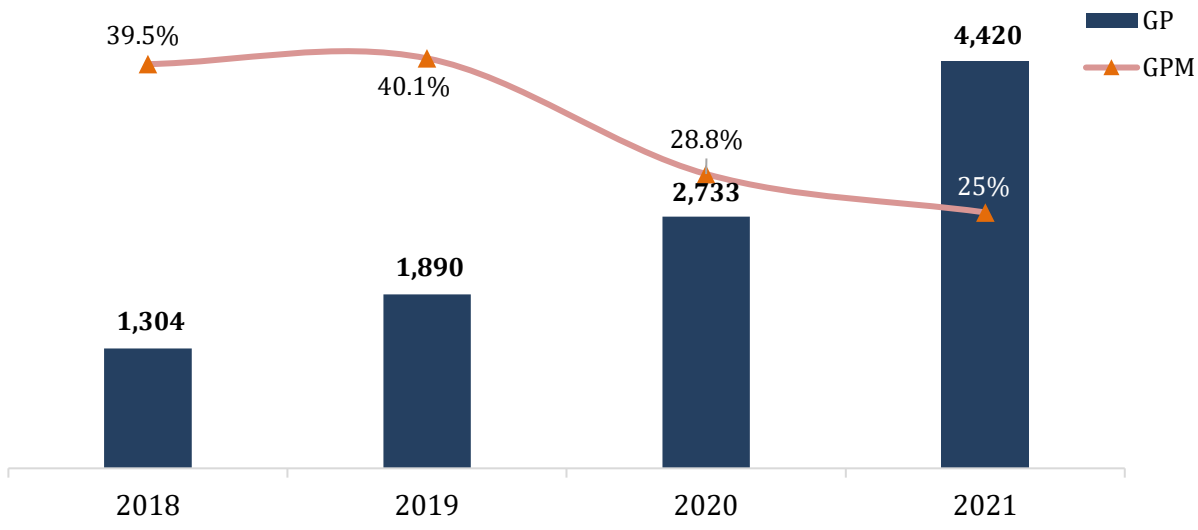
Figure 3: Historical Revenue Growth (US$ mn): 2018-2021



Source: Square's Annual reports

In 2019, 2020 and 2021, the Company's gross margins were 40.1%, 28.8% and 25.0%, respectively. Because of the rise in sales, the absolute amount of gross profit increased significantly from 2018 to 2021 but the margins have declined due to increased share of Bitcoin revenue which have had lower margins compared to revenues from other segments.

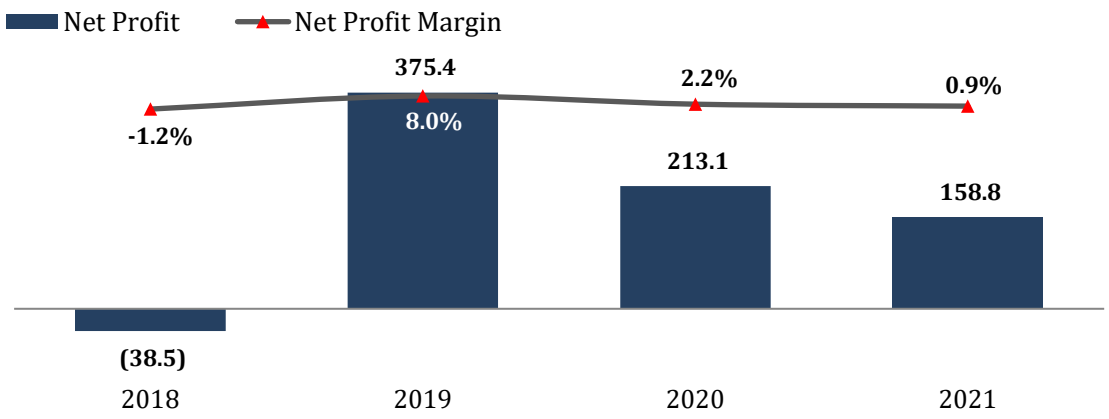
Figure 4: Gross Profit (US$ mn) and Gross Profit Margin (%): 2018-2021



Source: Square's Annual reports

Square generated a net income of US$158.8 million during the year ended December 31, 2021 and it was US$213.1 million in 2020. The decline in the net income was mainly due to increase in product development, sales & marketing and general & administrative expenses.

Figure 5: Net Profit and Net Profit Margin



The company profited from a rise in CashApp clients, PPP loans, and other services. Margins were lowered owing to a rise in bitcoin sales, which impacted gross margin. Other expenditures, such as sales and marketing, as well as product development costs, rose, negatively impacting net profit margins in 2021.

2. ABOUT BLOCK (SQUARE)

2.1. Introduction

Block, Inc. - formerly Square, Inc. (the "Company" or "Square") was launched in February 2009 as a merchant service and mobile payment platform to assist businesses (merchants) with accepting card payments, a vital competence that many businesses lacked previously. The company combines sophisticated software with low-cost hardware to enable shops to transform mobile and computer devices into powerful payment and point-of-sale solutions. The company relies on technology and design to create products and services that are integrated, quick, efficient, and dependable. These traits distinguish it from other businesses that need retailers to integrate many providers' computer hardware, software, and payment systems.

Currently, its Cash App allows users to swiftly and easily pay and receive money electronically to and from individuals and businesses. Customers can also utilize a visa debit card given by the corporation to access their funds. Square's Cash App now includes bitcoin buying and selling functionality.

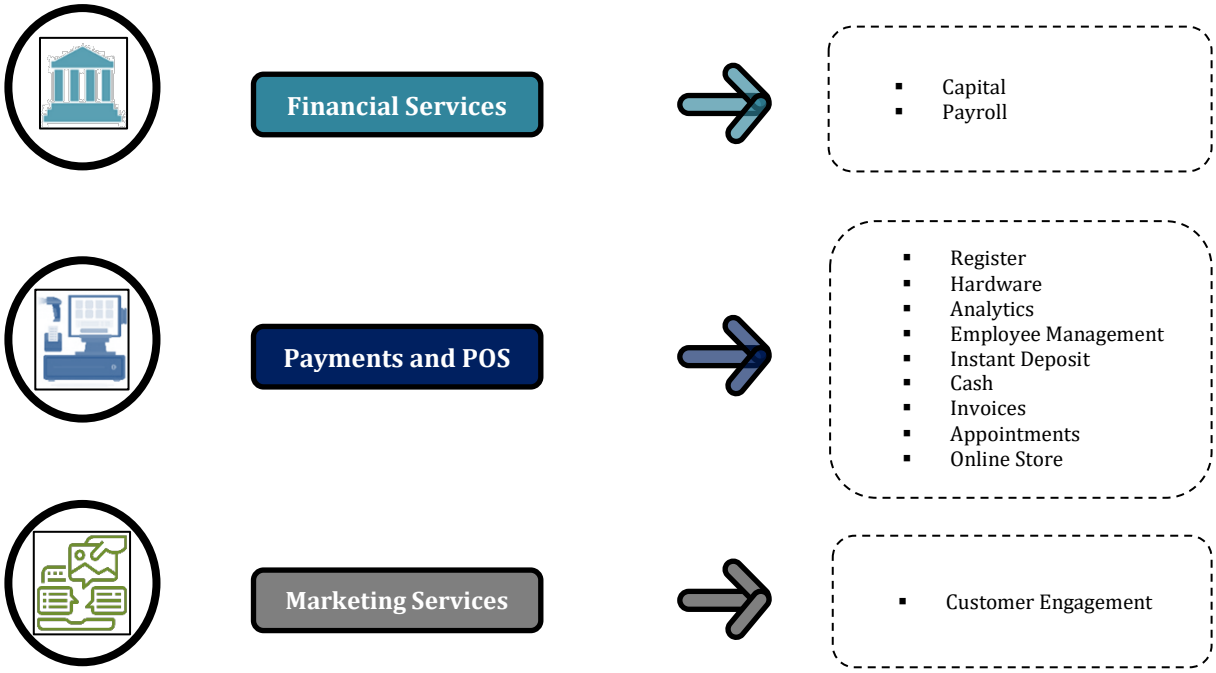
The trading ecosystem of the Company also provides strong marketing software and services that assist merchants in making informed business decisions through statistics and reporting. As a result, shops can manage orders, inventory, locations, staff, and payroll, engage customers, enhance sales, and get business finance via Square Capital. Businesses can use the Build with Square developer platform (Application Programming Interfaces or APIs) to customize their business solutions, including interaction with third-party applications while processing payments in Square and gaining all resources in its ecosystem.

Square has grown exponentially and includes millions of sellers from various industries, including retail, services, and food-related enterprises, as well as businesses of all sizes, from a single vendor at a farmers' market to multi-location businesses. These vendors hail from various countries, including the United States, Canada, Japan, Australia, and the United Kingdom.

2.2. Block (Square) Ecosystem – Products and Services

Square products and services are classified into three types:

- **Payment and POS services:** Software solutions to accept payments in-person or online and analyze business information.
- **Financial Services:** Financial Services assist sellers with funds to grow their businesses.
- **Marketing Services:** These assist retailers in reaching their consumers and boosting sales.



2.2.1. Payment and POS Services

Square is well known for its intuitive POS system. Paid POS accounts are also available for restaurants and retail companies that want more functionality/additional features. There are no monthly costs for credit card processing with Square, and the service can be terminated at any point in time. This is ideal for young enterprises and start-ups that aren't ready for a monthly subscription. Square uses a flat-rate pricing structure in which a specific percentage plus a few cents for every transaction is paid, regardless of the overall sale amount or credit card type used. The only difference in the processing charge is whether the transaction is online, in-person, or typed in. The lowest processing costs are charged for in-person transactions, while the largest fees are charged for keyed-in or manually input credit cards. Its charges are often equivalent to other well-known payment aggregators, such as PayPal and Stripe.

Square does not impose chargeback fees, which distinguishes it from the majority of the processors. It also provides several business tools – such as payroll software, business banking and loans, and website layouts – on a single platform, which may be beneficial for busy small business owners. In addition, Block's app store enables a plethora of connectors, including Intuit QuickBooks.

Some Square devices, such as the Square Register and Square Terminal, and its more expensive hardware alternatives and premium POS solutions for restaurants, include live phone support 24/7. Square also provides a wide range of additional business software, such as payroll processing, marketing, and loyalty programs. These services may be quite useful for small firms that want to handle numerous parts of their operations on a single platform, but bear in mind that these extra features usually come at an additional expense

2.2.2. Financial Services

Square financial services include Square Capital and Payroll services. Square capital's purpose is to offer business loan and deposit products, beginning with underwriting and originating business loans for lending products. Square Payroll is a comprehensive payroll system that assists small businesses in paying employees and managing payroll taxes. Businesses may use the online payroll solution to track workers' compensation and maintain payroll compliance at all times.

2.2.3. Marketing Services

Square Marketing promotes the business by connecting with customers via personalized email and social media campaigns. The Square Dashboard aids in the creation of personalized emails the deployment of automated campaigns and helps analyze how marketing efforts affect the organization's bottom line.

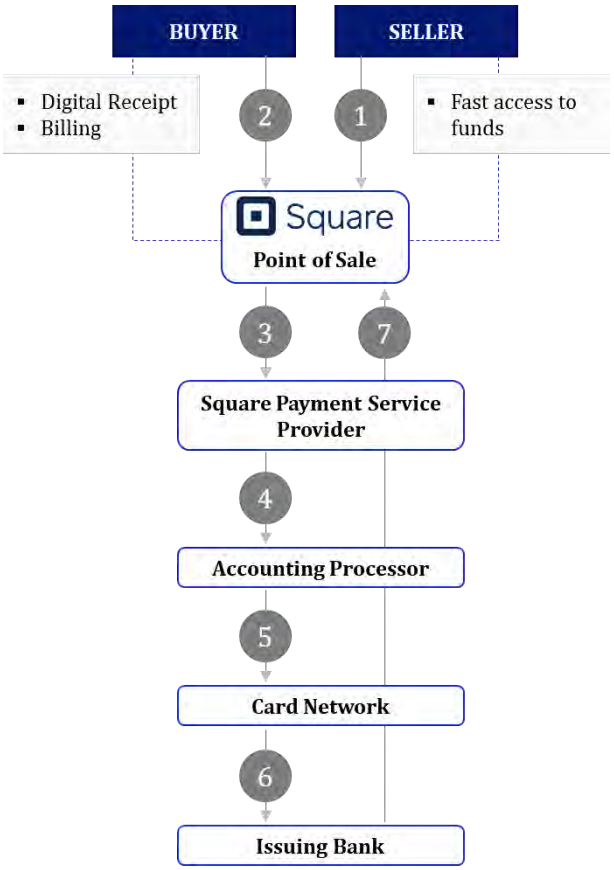
2.3. Transaction Processing Overview

Card processing requires close interaction between the number of industry partners providing the services and infrastructure required to perform those functions. These participants include payment service providers, recipients of processors, card networks, and issuing banks. In this case, Square acts as a payment service provider, which serves as the seller's contact point throughout the payment chain. The descriptions and diagram below (ref Figure 6) show this series of payments, the normal flow of square work, and the types of costs usually paid and incurred in each category.

1. When the customer is ready to buy, the seller enters the transaction into Square Point of Sale and displays the amount owed to the buyer.
2. In-person transactions are completed by the buyer swiping, dipping, or tapping their NFC-enabled payment card or mobile device on a Square Reader, Square Stand, or Square Register, which takes the buyer's account information. For card-not-present transactions, The seller can utilize the customer's card on file, or the buyer or seller

can enter the card information manually further into the Square Point of Sale app, Square Invoices, Square Virtual Terminal, or the seller's e-commerce portal.

Figure 6: Payment Service Provider (PSP)



Source: Square Inc, SEC Form 10, 2018

3. The Square Point of Sale transmits transaction data to Square, which serves as the PSP.
4. Through an internet connection, Square sends transaction information to the Acquiring Processor. Square pays the Acquiring Processor a tiny set charge for every transaction.
5. The Acquiring Processor sends the transaction to the relevant Card Network associated with the buyer's card, such as Visa, Mastercard, Discover, or American Express. Square pays the Card Network a number of fees, the most important of which are assessment expenses, typically less than 0.15 per cent of the transaction amount. The transaction is subsequently routed through the Card Network to the Issuing Bank, which either authorizes or refuses the transaction for the buyer's payment card. The transaction is subsequently routed through the Card Network to the Issuing Bank, which either authorizes or refuses the transaction for the buyer's payment card.
6. The Issuing Bank then initiates the distribution of money to the Acquiring Bank via the Card Network for the transaction amount. Square will ultimately pay the Issuing Bank an interchange charge as a proportion of the transaction amount plus a predetermined fee for each transaction that varies from 1.5% to 2.0% of the transaction value. However, depending on the buyer's card type, transaction type, and transaction amount, this proportion might vary dramatically.
7. The Issuing Bank sends the buyer a statement detailing their monthly charges at the end of each monthly billing cycle. The statement includes Square as the merchant of record on the billing statement (denoted as SQ).

2.4. Sales and Marketing

Square has a strong brand and continues to raise store awareness by enhancing services and supporting rapid adoption through product affiliation, direct marketing, public relations, and strategic partnerships.

Direct, internet and physical marketing have also become efficient ways to acquire new customers. Search engine optimization and marketing, internet advertising, direct email campaigns, direct television advertising, mobile advertising, interest rates, and merchant referral programs are examples. To improve awareness and usage of products and services, the Company employs a range of communication channels, including in-app notifications and messages, dashboard alerts, Square communities, etc.

2.5. Intellectual Property

The Company strives to safeguard its intellectual property rights using a mix of organizational, state, and common law in the United States and elsewhere and contractual means. It is customary to enter into confidentiality and non-disclosure agreements with its employees and contractors and confidentiality and non-disclosure agreements with third parties to limit access to, disclosure of, and use of confidential information and proprietary information technology. In addition to these contractual safeguards, the Company employs a combination of trademarks, trademarks, copyrights, registered domain names, trade secrets, and patents to protect its products and other intellectual property.

Square has created a patent system and strategy for finding, implementing, and patenting novel parts of its goods, services, and technology. The Company expects to apply for new patents as it continues to innovate via its R&D initiatives and will pursue additional patent protection to the degree that it deems lucrative and cost-effective.

The Company works to have its trademarks, logos, service marks, trademarks, and domain names registered in the United States and worldwide. Square is the registered owner of a number of domain names in the United States. And, on a global scale, merging the words "Square" for distinctions.

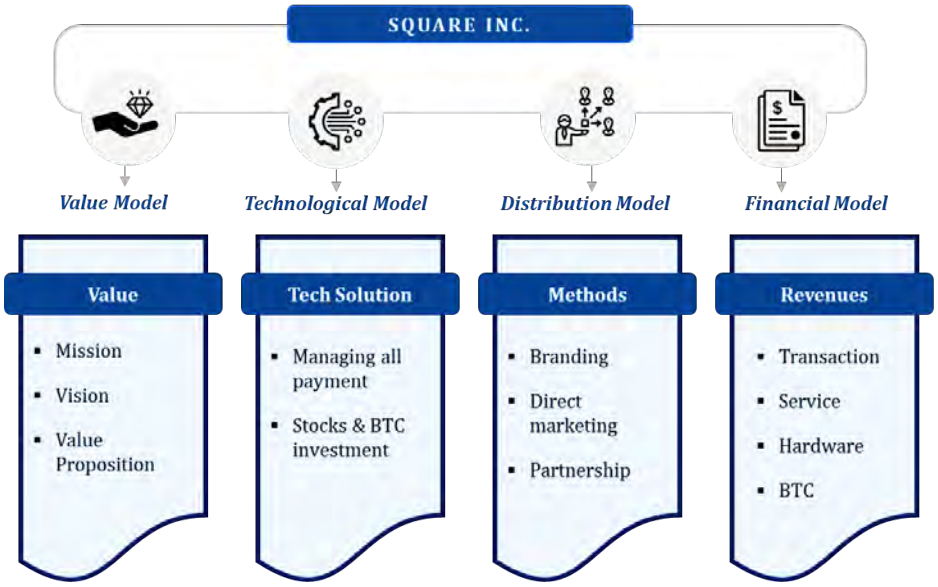
Over time, the Company also imports certain licensed intellectual property from third-party companies, including under certain open source licenses. Even if such third-party technology was not made available to them on reasonable commercial terms, the Company believes that other technologies will be available as required in all cases.

2.6. Square Business Model

Square is a merchant service provider that offers sellers hardware and software to help them run their companies. The Company's CashApp allows for money transfers and stock, ETF, and Bitcoin investments. Transactions through the Company's payment products and subscription services are primary revenue drivers, but it makes money through its Cash App as well.

Square, Inc. ("SQ"), as a payment processing firm that provides business solutions, offers a free software app and low-cost (sometimes free) hardware to transform mobile devices into sophisticated point-of-sale (POS) systems. This enables sellers or merchants to take card payments using a mobile device from anywhere and at any time. Square also allows retailers to take EMV (Europay, Mastercard, and Visa) chip cards, as well as the most up-to-date contactless payment methods based on near-field communications (NFC) technology (such as Apple Pay). Square allows retailers to get started in minutes and without a credit check. Square charges the same fee for accepting Visa, MasterCard, Discover, and American Express credit cards.

Square is a company that focuses on payment processing. Square directly links with suppliers and arranges payment transactions on their behalf with payment card networks and banks. Vendors are not subjected to complex processes, procedures, and regulations of the payment sector. Square is the seller's authorized merchant, thus is exposed to chargebacks and reimbursements.



Square Business Model in a Nutshell

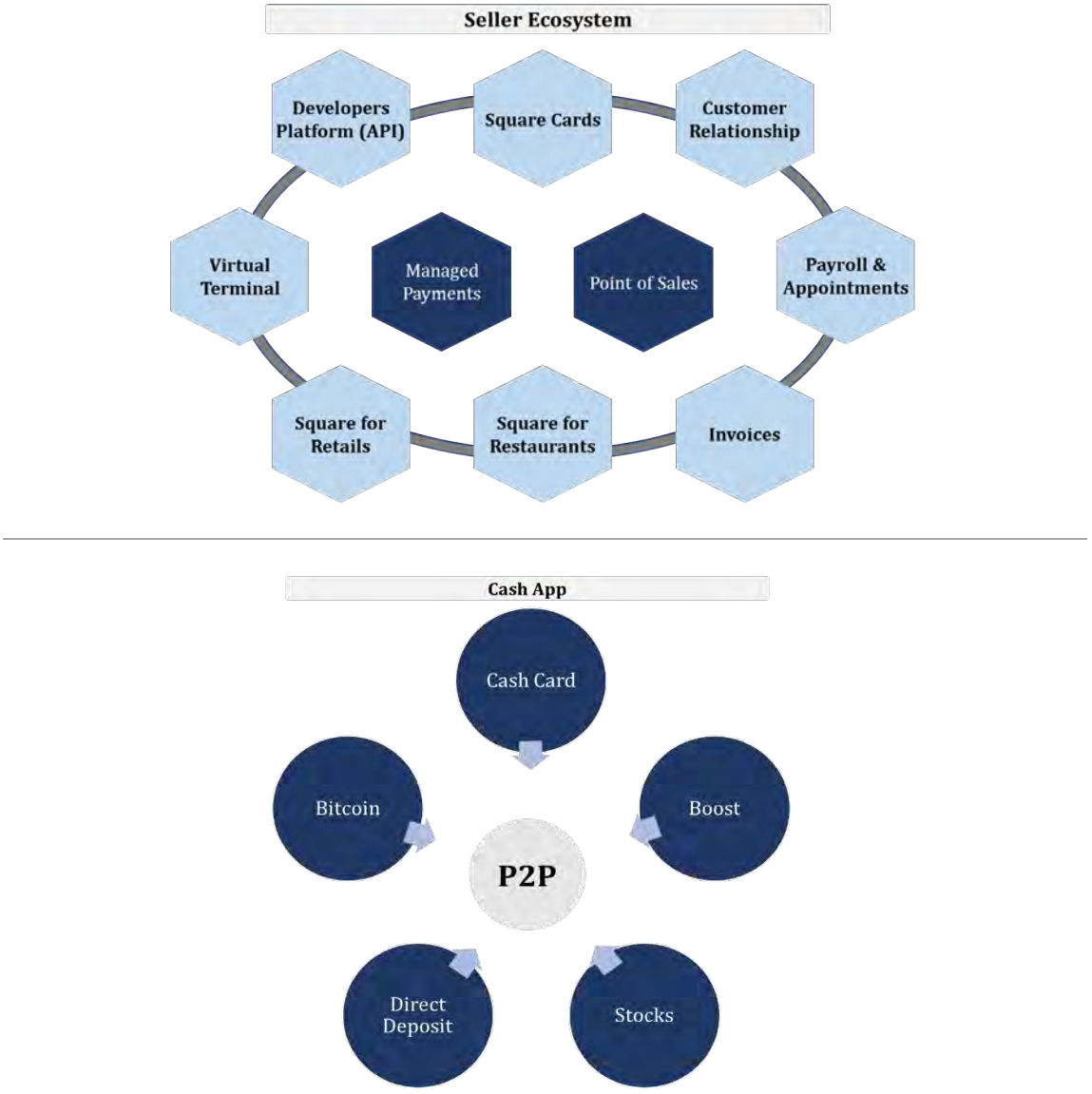
Square offers sellers hardware and software to help them run their businesses.

The company's CashApp allows money transfers as well as investment in stocks, ETFs, and Bitcoin.

Through its payment products, subscription services, and CashApp, the corporation makes money from transactions.

The Square seller ecosystem is a unified commerce environment that assists its sellers in starting, running, and growing their enterprises. As shown in Figure 7, the primary services for sellers have managed payments and point-of-sale goods and services.

Figure 7: Platforms for Developers to meet seller's needs

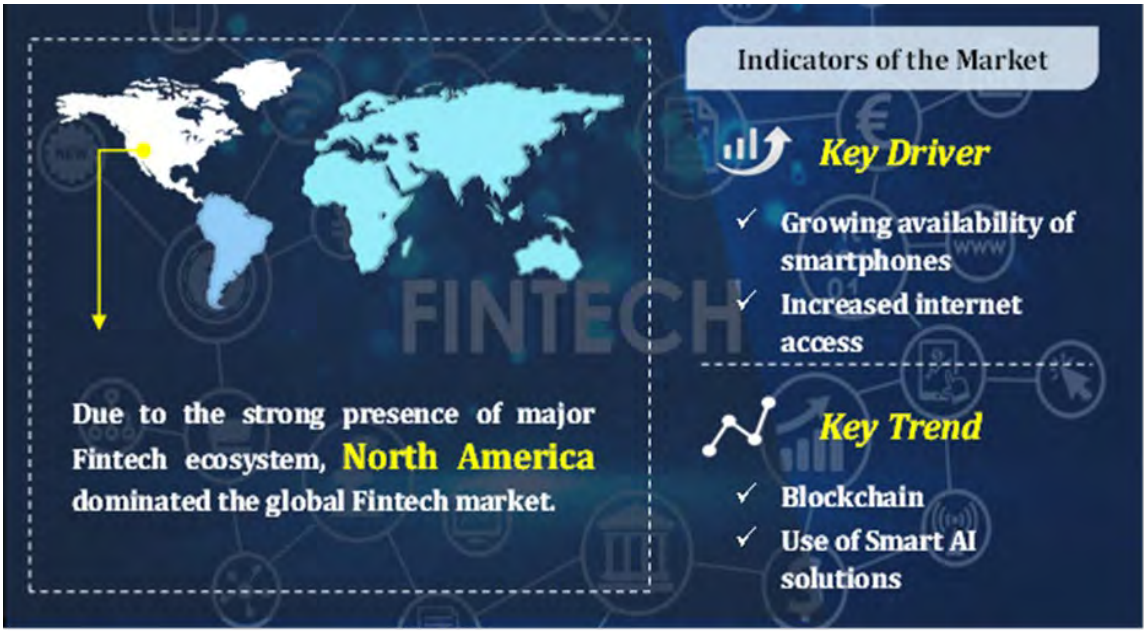


Cash App is a peer-to-peer (P2P) payment service. Peer-to-peer payment platforms enable users to pay for goods and services, pay bills, and transfer money to friends and family using their cell phones.

3. GLOBAL MARKET OVERVIEW

3.1. Global FinTech Market - Overview

FinTech (Financial Technology) is considered to be a hot topic in the financial market. The market refers to computer programs and other modern technologies used by businesses that provide automated and advanced financial services. Over the years, the FinTech industry has emerged in important ways leading to the transformation of companies into customer-focused businesses. Therefore, paving its way in many companies, from startups to technology companies to established firms worldwide. Through a participatory or challenging approach, financial services and technology companies have taken each other's paths and developed disruptive and innovative proposals in an ever-changing business environment.



Various factors have catalyzed FinTech Market development. FinTech investment have increased since the previous global financial crisis as a technological response to the shortcomings of the general financial services industry. In 2020, Covid-19 had had a negative impact on the global economy and caused havoc on many businesses. In response to Covid-19, large financial institutions partnered with emerging technology companies to reach a new market. In contrast, FinTech itself longs to partner with major financial institutions to expand its market and services. Either way, the FinTech market is booming.

In recent years, a large array of FinTechs has emerged using advanced technology designed for specific tasks or sectors such as Insurtech, Regtech, payment services etc. The technical aspect of the FinTech industry is growing rapidly. FinTech is

Global Fintech Market Overview

Significant development with double-digit CAGR growth rate

27.5% during 2016-20

Source: research and markets Oct 2021

Global Fintech Market Size
(USD Trillion)

Key Drivers

- *Rising computing power*
- *Cloud Computing*
- *Rising awareness about digital world*

APAC & America region is the largest Fintech ecosystem *with both having more than 40% of the global market share in 2020.*

Key Trends

- Use of advanced technology helps in the development
- Digital technologies are improving the market
- Digital banking and AI solutions approach helped Fintech

Global FinTech Market by Region

Asia – Pacific

- China
- Japan
- South Korea
- India
- Australia

North America

- United States
- Canada
- Mexico

The digital market increased in 2020-2021 by

83%

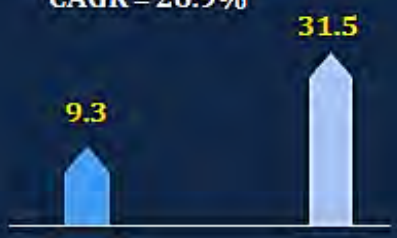
779 billion transactions

Growth Expansion in 2020

In response to lockdown and social distancing, norms during COVID-19, the market was pushed to go digital **pushed the market to go more digital**

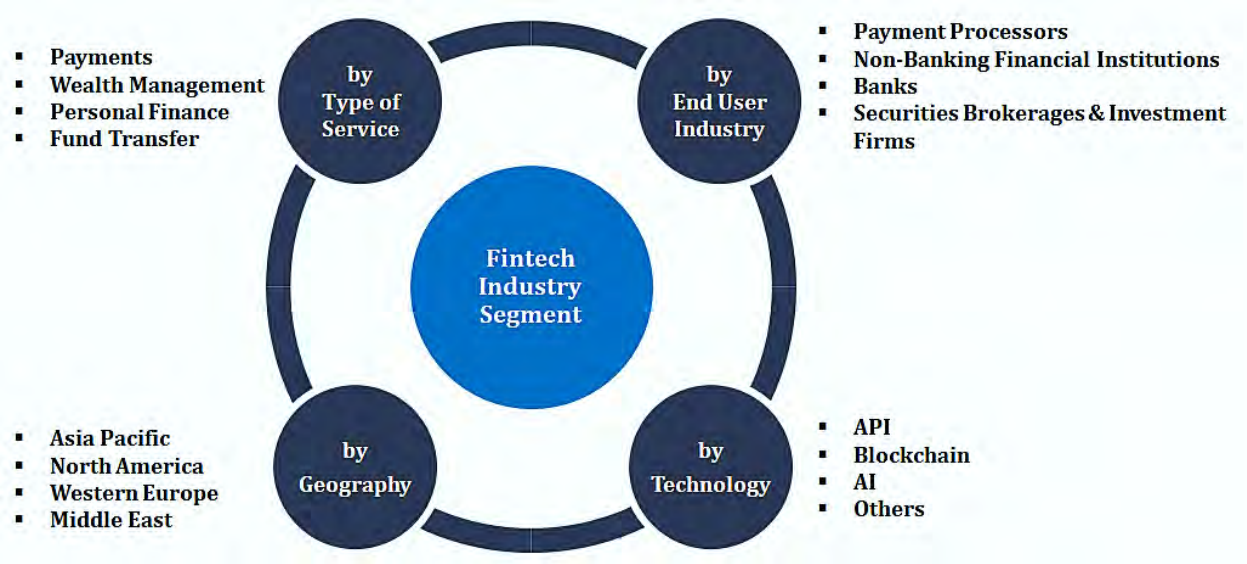
Market expected to rise
(USD Trillion)

CAGR = 26.9%



Source: finance.yahoo, Feb 2022

3.2. FinTech Market Segmentation



The FinTech market is categorized into four key segments, including by service type, en-user industry, technology, and region:

Based on the type of service FinTech market, in 2020, the payment segment accounted for the largest market share fueled by the rise in e-commerce platforms and surge in smartphone penetration. According to a report published by *Yahoo finance* in Dec 2021, the insurance industry is expected to expand the quickest in the next years.

In 2020, the banking segment dominated the market with the highest market share in the total FinTech market by end-user industry. It was anticipated to maintain the highest share in the forecasted years. The growth in this segment is likely to be driven by the development of e-wallets and payment interfaces to deliver efficient services.

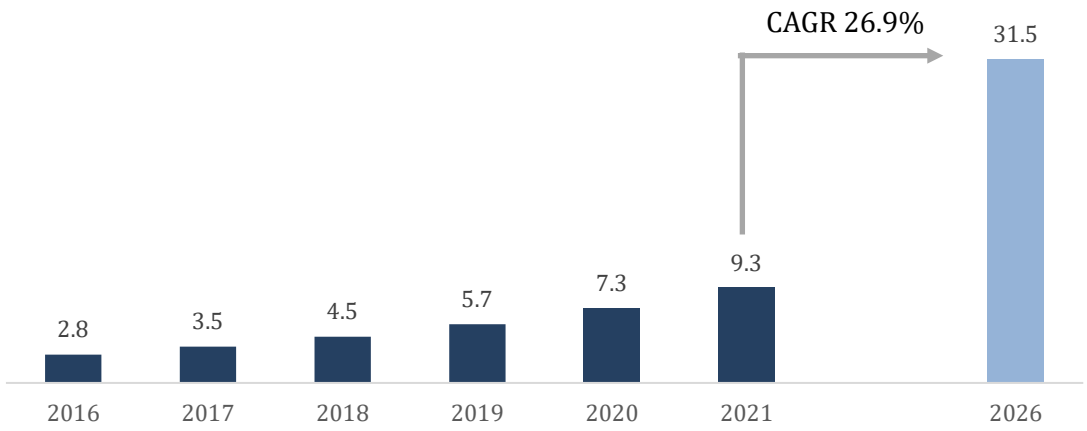
Among regions, the Asia-Pacific region is likely to present the highest growth in the forecast period primarily attributable to customer base expansion, the largest population share of Gen Z and millennials, and the growing prominence of new technology and huge market opportunity in the digital payments space.

The AI segment has emerged as a key element of the FinTech industry as it plays a critical role in collecting data, information analysis, and creating customer-centric products. As per *Yahoo Finance's report on global Ai in FinTech market published in Jan 2022,* the global AI in FinTech market size is forecasted to reach US$46.9 billion in 2030 at a CAGR of 19.8% during 2020-2030.

3.3. Global FinTech Market Size

With a striking growth rate (CAGR) of 27.5% during 2016-2020, the Global FinTech market witnessed positive automated and improved financial services developments. The market is projected to reach US$31.5 trillion in 2026 with a CAGR of 26.9% during 2021-2026. The growth is attributable to the rise in digital payment popularity, augmented investments in technology-based solutions, supportive government regulations, and a surge in the adoption of IoT devices.

Figure 8: Global FinTech Market, 2016-2026 (in USD trillion)



Source: finance.yahoo, Feb 2022 & research and markets Oct 2021

With a growing number of smartphone users interested in online transactions, coupled with the FinTech integration that greatly improves customer experience by supporting fast and easy payment and delivery of e-commerce, the global FinTech market is likely to grow significantly in the coming years.

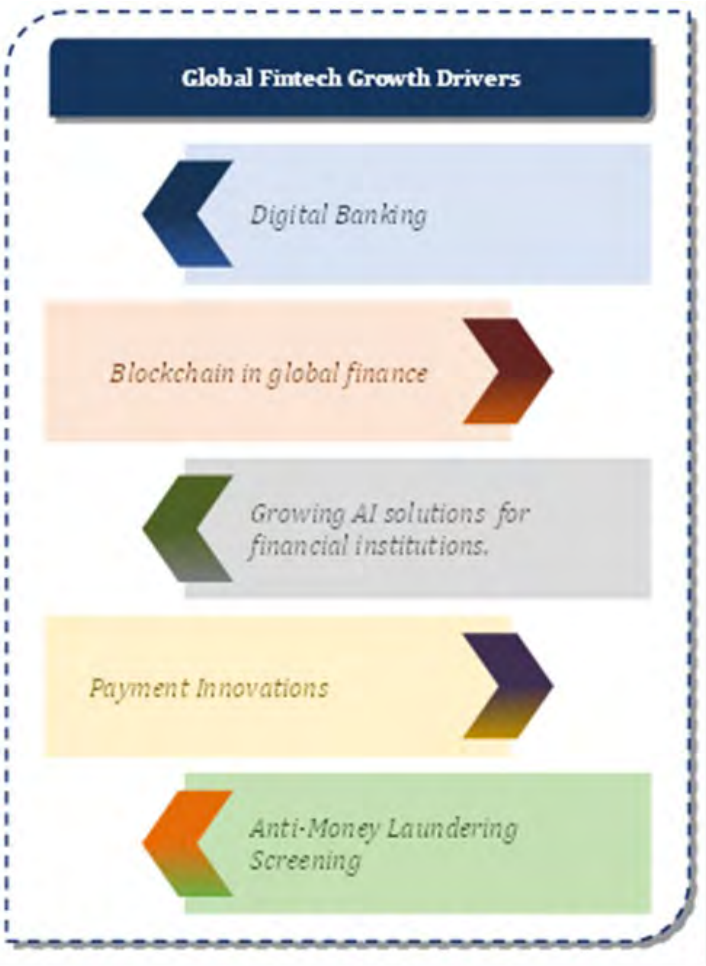
FinTech enabled services primarily include fund transfers, lending services, online or mobile payments, personal finance, insurance, loans and others such as equity and wealth management. Financial institutions are eager to work with FinTechs to develop customer-focused solutions.

The investing community and big organizations such as Google, Intel, Salesforce, and others are very interested in FinTech. The banking industry is also beginning to embrace FinTech technologies to build distribution channels and compete with third parties.

3.4. Global FinTech Market Growth

FinTech is a term that alludes to the combination of technology and financial services that has revolutionized the way businesses operate. In recent years, the FinTech sector has risen dramatically, leading to a shift in company strategy toward a more customer-centric approach. banking, financial institutions, and technology firms have taken a demanding attitude and proceeded with new and disruptive tactics in a constantly changing business environment.

The pandemic's developments have expedited FinTech tendencies that were already in motion. The way businesses connect with customers and sell their products, as well as the ongoing need for eCommerce, and digital payments, are some of the key driving factors. Since eCommerce has grown more digital, the requirement for rapid, dependable, and strong cross-border transactions reached the top of the priority list for merchants contemplating or currently conducting business globally. The pandemic demonstrated the adaptability of businesses that reacted quickly and shifted their operating model to a digital-first approach as well as payment solutions.



When the pandemic began, the usage of digital wallets surged to 83% in 2021, and according to Juniper Research's report, the industry will be worth over US$10 trillion a year by 2025. Moreover, 2020 saw over 779.0 billion digital transactions worldwide, which is going to turn cash payments into the least common payment method by 2022 (as per Capital On Tap, 2020).

3.5. FinTech Market Key Players

Major Competitors are

- PayPal Holdings, Inc.
- Ant Financial Services Group
- Tencent Holdings Ltd.
- Square, Inc.
- Envestnet, Inc.

3.6. Other Players Include

- Shopify Inc.
- SoFi Inc.
- LendingClub Corporation
- Ripple
- Coinbase
- Paytm
- Mobikwik
- Xero Limited
- Checkout
- Adyen N.V.

4. US FINTECH MARKET

4.1. Overview

The US FinTech Market is expanding rapidly as a result of changing business models and a greater focus on improving customer interaction. Also, the increasing digitization of businesses and growing investment in FinTech companies offers lucrative growth opportunities to the market. FinTech is altering the financial industry in the United States, including how consumers lend, invest, choose loans, support start-ups, and even purchase insurance**.** One out of three digitally active customers utilize two or more financial technology services.

The growing need for improved client interaction has fueled the advanced technologies in the FinTech industry, like artificial intelligence (AI). FinTech organizations are increasingly relying on AI-based virtual help to address customer issues and successfully communicate with clients. Robo- advisors and automated customer care are two of the most prevalent AI technologies that improve customer experience.

According to a report published by Research and Markets (2021), the global digital payment market reached US$5.4 trillion in 2020 and is forecasted to register significant growth at a CAGR of 11.2% during 2021-2026 to reach US$11.3 trillion in 2026

Many FinTech firms, including PayPal, Stripe, Transfer Wise, Venmo, and others, provide digital payment services to businesses and individuals. As more Americans rely on e-commerce platforms to purchase daily-use items, particularly in the aftermath of the COVID-19 epidemic, the digitalization of their life contributes to the expansion of the FinTech business. As per Statista report,2021, Digital Payments will be the largest category in 2022, with a total transaction value of US$1,511,684m and 293.9m users by 2025.

The large enterprises' segment in FinTech is primarily driven by the growing adoption of blockchain-based solutions and services to streamline their workflow and provide advanced security features. The adoption of blockchain technology supports enterprises to enhance their existing digital infrastructure, faster transactions, improved security, and improve process efficiency and others.

The SME-sized enterprises market is projected to witness impressive growth in future. The SME-sized enterprises' market segment is primarily driven by the rising adoption of distributed ledger technology such as blockchain for faster transactions and enhanced security. The availability and use of blockchain-as-a-service and other

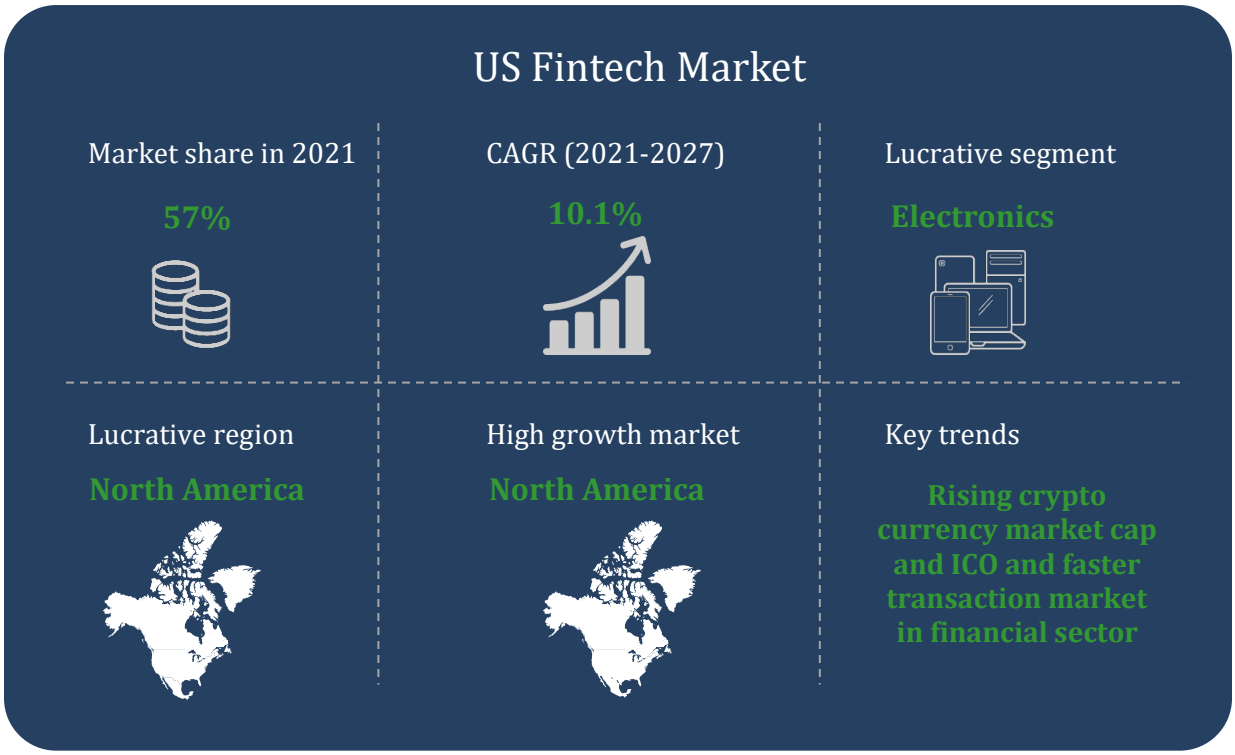
blockchain technologies in organizations that minimize infrastructure development costs drive industry growth.

Geographically, the global FinTech blockchain market has been segmented into North America, Europe, Asia Pacific and the rest of the world (ROW).

North America is likely to contribute 44% in the global FinTech market growth in the coming years

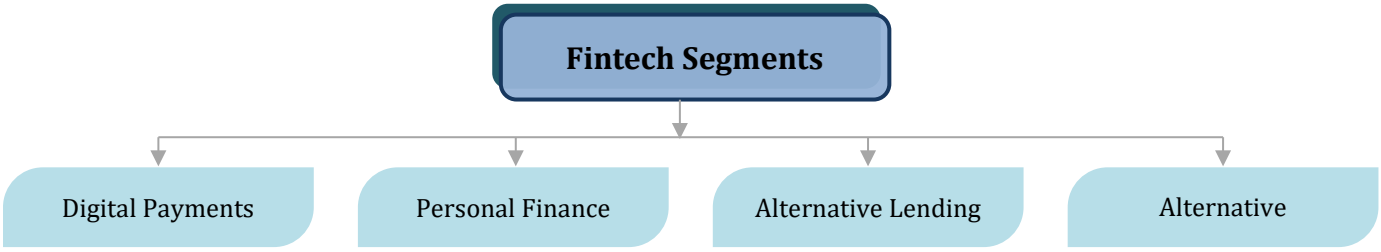
Source: Yahoo Finance (Nov 2021)

Among regions, North America accounted for the largest market share in the FinTech blockchain industry in terms of revenue. According to a report published by Mordor Intelligence (2021), the North American Fintech market will grow at a CAGR of 8.5% during 2021-2026. Asia-Pacific is expected to dominate the FinTech blockchain market in 2021, followed by North America, Europe, Latin America, the Middle East and Africa. Increasing usage of technologies like blockchain, AI, and IoT is expected to propel the market in North America to new heights during the coming years. Furthermore, rising demand for digital payment systems, rising usage of cryptocurrencies, and favorable government policies and regulations across North America are likely to significantly enhance the market growth in the upcoming years.



Source: BlueWeave Consulting,2021

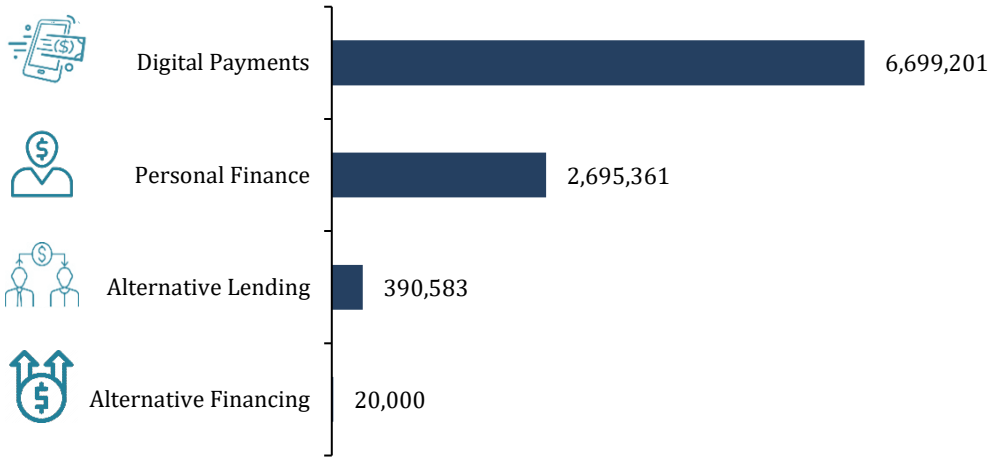
4.2. US FinTech Market Segmentation



FinTech has been seamlessly interwoven into the US financial system. As a result, all financial services, whether loans, savings, personal finance, or insurance, have adopted and are leveraging FinTech in some form or another. The most significant contributors to the growth rate of FinTech in the United States are financial services, are:

- Digital payments
- Personal finance
- Alternative lending
- Alternative financing

Figure 9: Top FinTech segments by Transaction value,2020 (*million US$)*



Source: financesonline.com

- **Digital Payments**: The digital payment segment has the largest growth with the given volume of transactions. It has recorded US$6,699,201 million worth of transactions. All virtual payments, such as mobile payments, app-based payments, net banking, and so on, are considered digital payments.

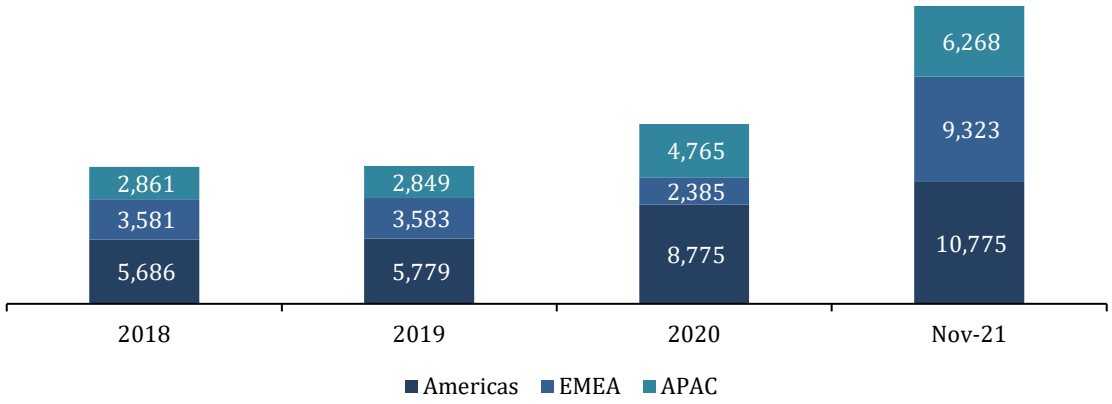
- **Personal Finance**: This section has a transaction value of $2,695,361 million. Personal finance in the United States has promoted FinTech using automated investing services. It has aided consumers/investors in receiving improved portfolio management services, investment strategy, automated suggestions, and data analytics.
- **Alternative Lending**: In the United States, a consortium of 16 digital lenders increased loan volume by 30.1 per cent year on year. SoFi Money, for example, provided wealth management services as well as high-yield deposits. As market possibilities develop, digital lenders are broadening their activity area in finance and product providing.
- **Alternative Financing:** Alternative lending has been the preferred funding option for start-ups and small enterprises, and company growth loans are assisting firms in expanding further. According to industry analysts and economists, 2020 will create a solid basis for the future expansion of FinTech in general and alternative lending in particular.

4.3. US FinTech Market sizing

As per the article published by BlueWeave Consulting, the FinTech market in the United States is projected to expand at a CAGR of 10.1% during 2021-2027. Government regulations governing digital payment systems, banking, and credit are also expected to fuel the expansion of the FinTech industry in the United States over the forecast period.

The FinTech business in the United States is flourishing, with start-ups in various industries, including banking, healthcare, and education. Consumers will have more access to a wider range of services and platforms as the number of start-ups grows. Brex, a FinTech start-up, offers corporate cards for credit lines and corporate lab expenditures. Another platform, Varo, functions as a digital bank for people, providing financial services such as savings accounts, money transfers, cash withdrawals, etc. As a result of the increasing number of start-ups, the United States FinTech sector is expected to expand.

Figure 10: Number of FinTech Start-ups worldwide, 2018-2021, by region

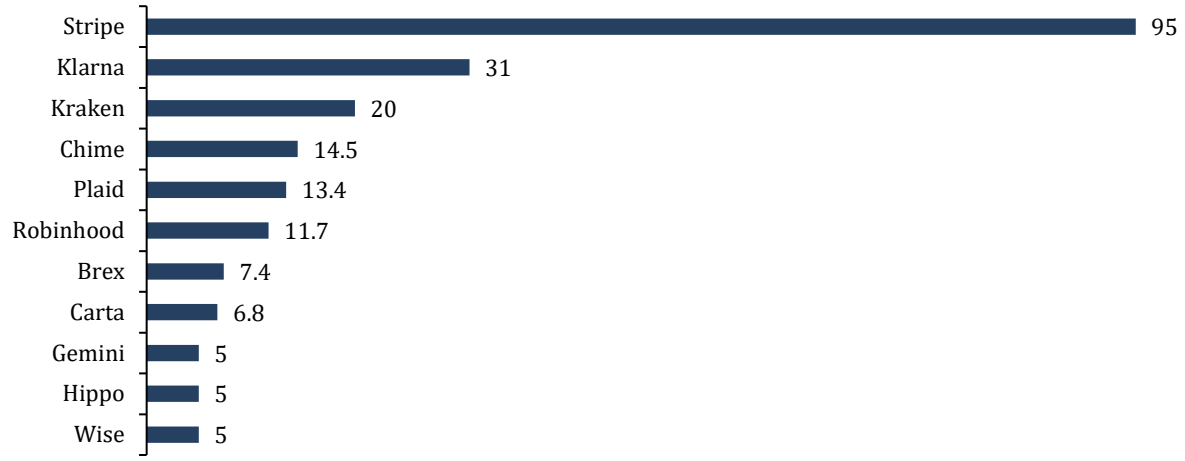


Source: statista.com, 2022

As of Nov 2021, America registered 10,755 FinTech (financial technology) start-ups, making it the area with the most FinTech start-ups in the world. The EMEA region had 9,323 such start-ups, while the Asia Pacific region had 6,268.

Various start-ups across the globe are dealing in FinTech blockchain. Also, these companies are involved in exploring the potentials of blockchain technology across the financial sector. Blockchain technology provides various advantages in the FinTech sector, such as greater speed, reduced cost, more transparency and easy tracing. The most promising technology mix, which has the potential to revolutionize the fintech industry, is the marriage of blockchain and fintech. Fintech blockchain, or the application of blockchain technology in finance, provides organizations with solutions, software, and other fintech blockchain services to improve and automate financial services. Factors such as rising consumer desire for bitcoin ownership and investment drive growth in the worldwide fintech blockchain business.

Figure 11: Largest FinTech companies in the US in 2021 *(in billion US$)*



Source: statista.com

Stripe, Klarna, Kraken, Chime, Carta, and other well-known companies dominate the US financial industry. Market participants are aggressively investing in expanding their fintech services beyond payment and insurance and are focusing on developing areas such as blockchain and cryptocurrency, digital lending and credit, and so on. Furthermore, a slew of fintech start-ups, such as Clyde, Digit, MANTL, and others are gaining traction and posing a serious threat to existing businesses.

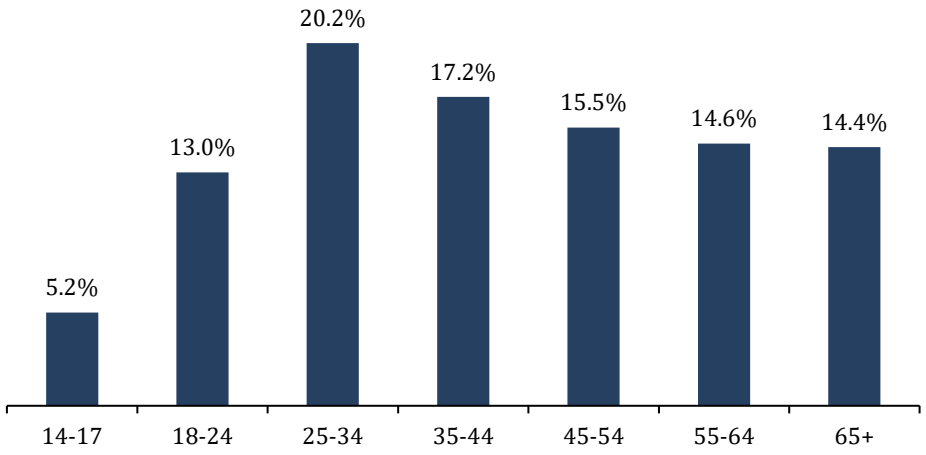
More collaborations and financial start-ups are expected in the future, particularly with the SaaS model. Other major businesses are expected to enter the FinTech industry and expand their products, which will enhance consumer platforms and data access. FinTech start-ups are focusing on fighting with internet behemoths such as Google, Facebook, Apple and others, who are aiming to expand their reach into the financial services industry, which includes payments, credit, insurance, and deposits. The banking sector will soon see new advancements as a result of successful collaboration and engagement with technology.

4.4. US FinTech Market Key Driver

4.4.1. Increasing role of digital-age consumers

The key elements encouraging FinTech businesses to exist in the industry are the use of technology-based solutions and mobile devices. With the rising demand for better financial and banking solutions, this industry has emerged as a key player to cater to consumers' evolving needs. Adopting people-centric insights technology and aligning business capabilities with consumer demand for reinvestment in brands and loyalty are also the major drivers for the increasingly digital age consumers.

Figure 12: Distribution of digital buyers in the US (as of February 2020), by age group



Source: statista.com

Millennials aged 25 to 34 are the most prominent demographic in US digital purchases. As of February 2020, this particular demographic group accounted for 20.2% of digital buyers in the United States. The second-largest online buyer audience was 35 to 44-year-olds, accounting for 17.2% of US digital buyers.

4.4.2. Low-Interest Rates

The low cost of loan disbursement with FinTech is the most attractive part. The Federal Reserve has also helped by lowering the interest rate in the range between 1.5% and 1.75%.

Effect of low-interest rates

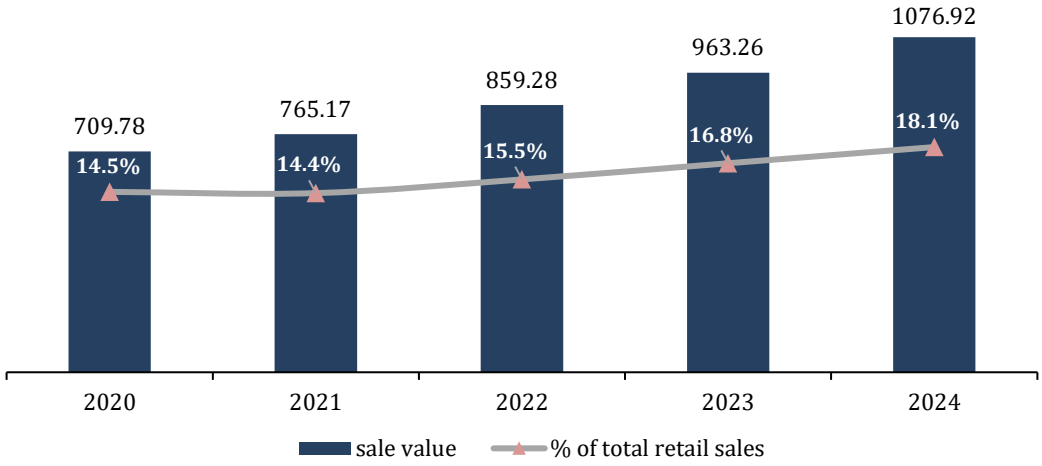
Personal	Economy
▪ Lower cost of borrowing ▪ Cheap mortgage payments ▪ Low return for savers – low dividend payments ▪ Decrease in the real value of savings ▪ Low-interest rates are less profitable for banks	▪ The currency will tend to depreciate, leading to more competition in exports ▪ In theory, it should boost economic growth ▪ Could cause inflationary pressure ▪ Investment likely to be more desirable ▪ The government will see relatively low borrowing costs

▪ Asset prices could rise as cheap to borrow	

4.4.3. A rise in e-commerce sales

Because of the development in e-commerce shopping and services, the usage of digital payments and e-wallets has grown in popularity, particularly among consumers.

Figure 13: US Retail Ecommerce Sales, 2020-2024 *(in US$ billion)*



Source: eMarketer, May2020

4.5. FinTech Blockchain Market

North America's market is projected to expand rapidly in the coming years, owing mostly to the increased usage of blockchain AI and IoT technologies.

The market's primary drivers have increased interoperability with the financial sector environment, expanded cryptocurrency market valuation and Initial Coin Offerings (ICO), faster transaction, and reduced total cost of ownership. The future growth opportunities for the market include the rising adoption of blockchain applications, such as payments, clearing, and settlements, smart contracts, identity management, and a new breed of a programmable blockchain platform.

The FinTech blockchain market is divided into a platform of 3 providers: application and solution providers, middleware providers, and infrastructure and protocol providers. These providers provide infrastructure upgrades to blockchain-based platforms. Among these types, the application and solution providers segment is the fastest-growing segment in the entire market. The introduction of advanced blockchain solutions has seen a certain acquisition level in financial companies, thereby stimulating overall market growth.

FinTech blockchain applications are becoming increasingly popular in the financial business. Payments, smart contracts, and compliance management/KYC applications assist banks, investment banks, and insurance businesses in improving efficiency and lowering infrastructure costs. Due to the rising relevance of FinTech blockchain applications, non-bank financial services such as asset management and wealth management have a strong chance of dominating the market throughout the upcoming period. This is seen as increasing customer satisfaction, prevent fraudulent transactions, deliver speedier services, and lower the total cost of ownership.

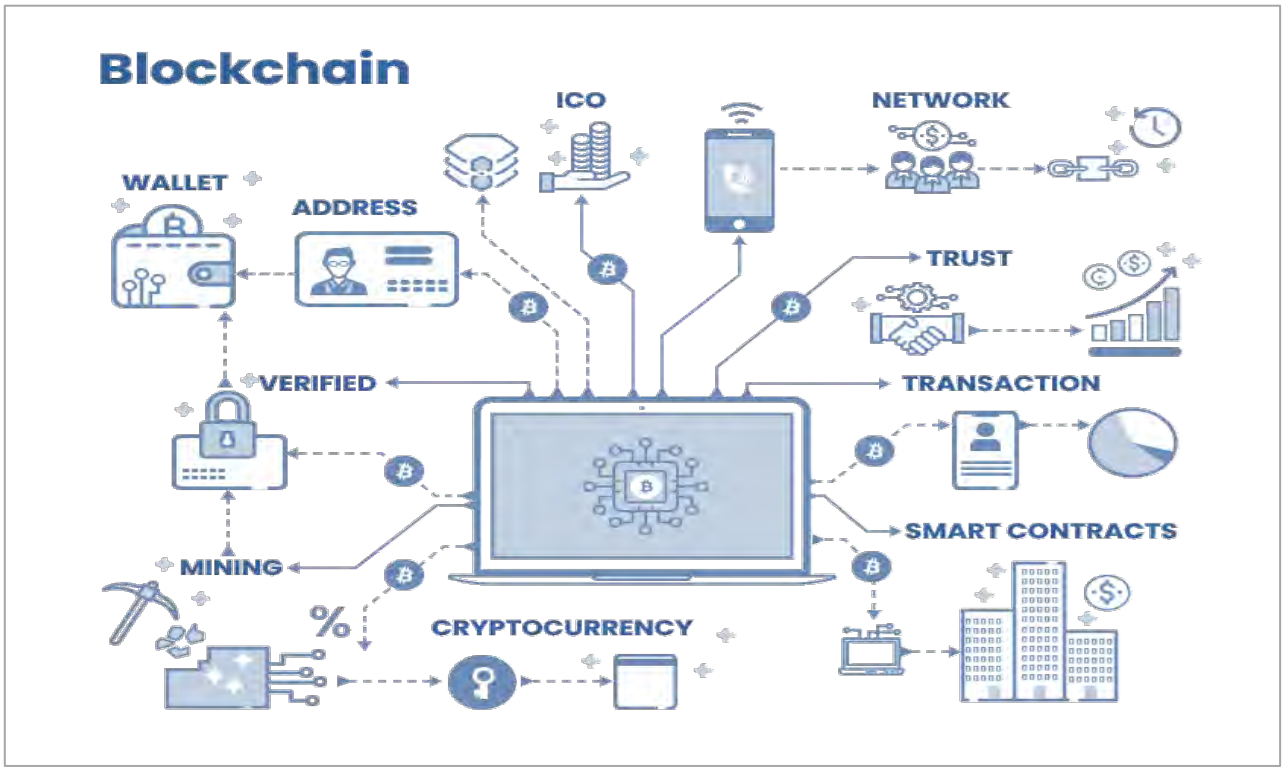
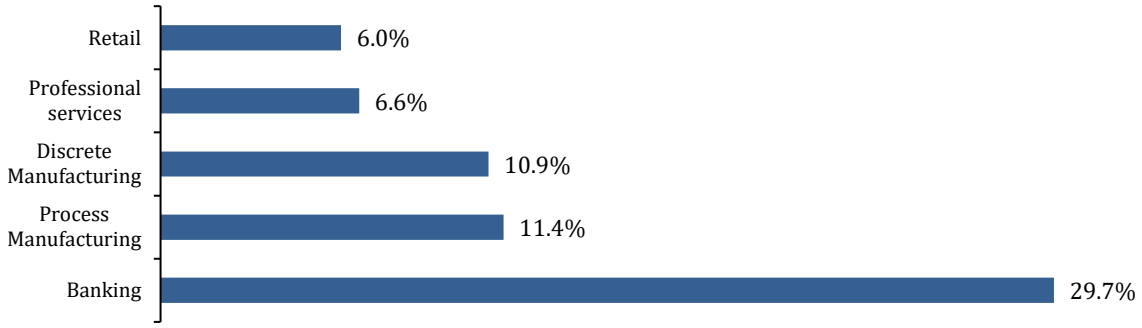
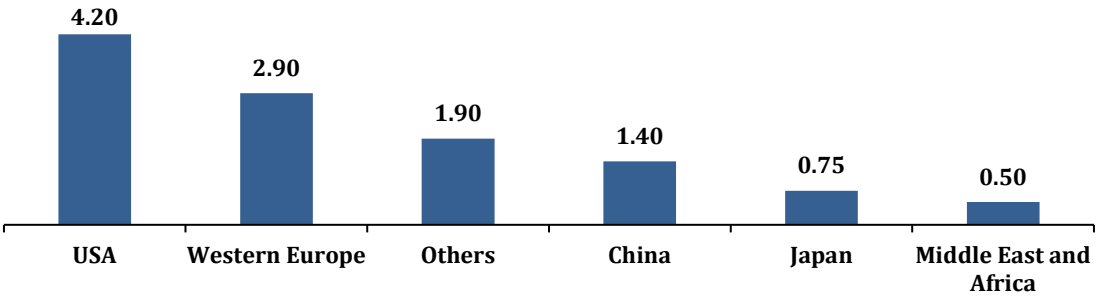


Figure 14: Top Blockchain Spenders Worldwide, 2022 estimates (by industry)



Source: financesonline.com and IDC, 2020

Figure 15: Top Blockchain Spenders by Country or Region (2022 estimates in US$ mn)



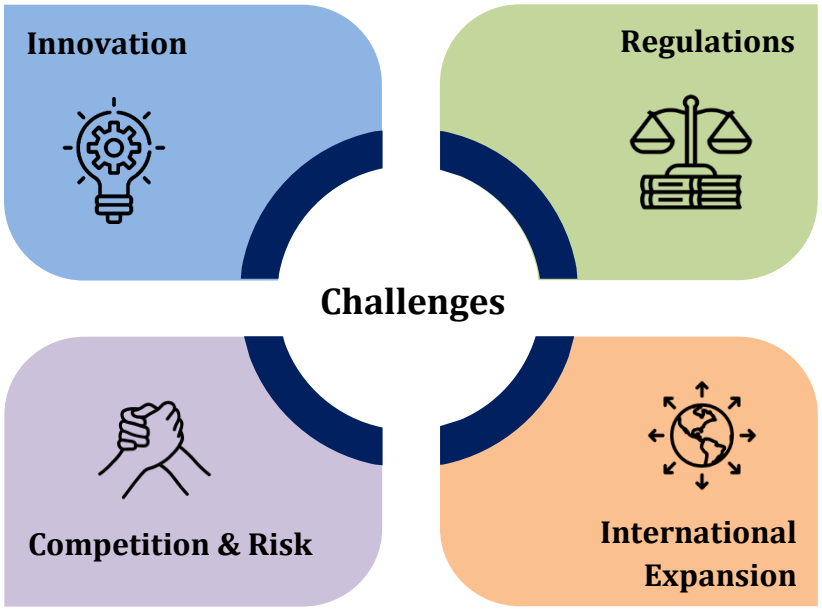
Source financesonline.com,2020

The blockchain (and broader distributed ledger [DLT]) sector is beginning to show potential. The worldwide blockchain market is projected to grow over the next decade. This has resulted in firms such as Coinbase and Square leading the way in blockchain income and IBM and Ant Financial filing several active blockchain patents. The US is the largest contributor to blockchain expenditure. North America is the most developed area in terms of technology and infrastructural usage. Financial institutions in the region are using blockchain technology.

Furthermore, the blockchain market is expected to grow more in future. North America accounted for 44% of the worldwide blockchain technology industry in 2020. Government organizations utilized blockchain technology, which aided growth in the United States and Canada. The worldwide blockchain industry is estimated to increase from US$3 billion in 2020 to US$39.7 billion by 2025. Worldwide investment in blockchain solutions is estimated to reach US$17.9 billion by 2024, growing at a CAGR of 46.4% between 2020 and 2024. The key FinTech blockchain technology vendors in the U.S. have heavily relied on partnerships,

agreements, collaborations, and new product releases as essential growth tactics to provide clients with feature-rich blockchain technology solutions and further reach new markets.

4.6. US Fintech Market Challenges



- **Innovation**

  FinTech's strength is its ability to innovate. It's what offers FinTech firms a competitive advantage: they're a breath of fresh air and new ideas in the banking sector. New technology gives change to a difficult, often conventional sector. The influence may be felt all across the planet (FinTech has spread to North Korea, in fact).

  However, innovation may be a two-edged sword. It introduces a perpetual state of flux and competing improvements, and it's easy to lose sight of the human factor at the heart of financial services. New inventions and disruption have an amazing benefit - for each other. Banks quickly collapsed behind FinTech companies while playing a key role in the global financial industry. These technological differences create tensions as banks struggle to adapt.

  Due to FinTech's design and technology capabilities, the market looks for new, faster, more automated services. The fact is, most clients intend to work with someone when managing their finances - not to mention security and resistance to the changes that come with digitalization. FinTech need to focus on their customers' wants while upgrading to new shiny technology.

- **Regulations**

  One of the most significant FinTech difficulties start-ups face is managing regulatory risk and compliance. It's a factor that's inherent in the financial business, but it's felt very deeply by FinTech firms.

  In the past few years, the legal issue has been at the forefront, with broad rules such as the PSD2, which controls payment services, and the GDPR, which regulates data usage. These rules have an impact on all parts of the financial business. With the introduction of so many international rules, fintech are forced to remain compliant, which is critical for both partner and client trust.

  AML (Anti-Money Laundering) is a set of procedures, rules, and regulations to prevent money laundering through illicit activities. Fintech and financial services companies are subject to strict testing requirements, and failing to comply results in risk penalties, license suspensions or revocations, and product reputation damage. Financial service companies try to meet the stringent AML and Know-Your-Customer regulations (KYC).

  Maintaining AML compliance is generally more difficult in digital financial services as they rely on speedier, less productive processes.

  Many banks negatively perceive FinTech organizations: they regard FinTech as risky and difficult to support. As a result, banks are cancelling their accounts with FinTech and shuttering the industry. Many FinTech enterprises are left to fend for themselves with the financial resources they require due to this reluctance from legitimate banking institutions.

  Banks' distrust can be a huge roadblock. FinTech and financial services organizations have encountered doubts from the banks they rely on to operate, especially globally, as risk mitigation has taken hold of the industry.

  The flip side of the coin is customer trust. FinTech companies offer many new benefits but often suffer from a lack of reputation or industry trust. Customers may not be aware that FinTech companies are regulated as banks; money is such a sensitive issue that further reassurance is essential.

4.7. Outlook

Technological advancement and innovation are the pillars of FinTech development, and they will continue to disrupt numerous financial services business models. According to McKinsey, one of the leading consulting firms, predicts that seven primary technologies will drive FinTech development and define the competitive financial landscape over the next decade.

- **Artificial intelligence will generate enormous value creation**

According to McKinsey, it is estimated that artificial intelligence (AI) might add up to US$1 trillion in value to the global banking sector per year. Banks and other financial institutions are expected to adopt an AI-first strategy, preparing to combat encroachment by growing technology businesses.

Many financial institutions continue to use AI haphazardly and dispersedly, frequently confining the technology to certain use cases or verticals. Leaders in the banking sector, on the other hand, are revolutionizing their operations by systemically using AI throughout the whole lifecycle of their digital activities.

- **Blockchain will disrupt established financial protocol**

Distributed Ledger Technology (DLT, of which blockchain technology is a subset) enables the recording and sharing of data across numerous data stores and the recording, sharing, and synchronization of transactions and data across a distributed network of participants at the same time. Some DLTs store and transmit their data using blockchains and cryptographic and algorithmic ways to record and synchronize the data throughout the network in an immutable manner.

DLT will progressively support ecosystem financing by allowing financial transactions to be stored in several locations at the same time. Smart contracts, zero-knowledge proof, and distributed data storage and exchange will continue to play an important part in existing FinTech developments such as digital wallets, digital assets, decentralized financing (DeFi), and non-fungible tokens (NFT).

Furthermore, conventional stakeholders, like institutional investors and funds, are steadily increasing the proportion of digital assets in their portfolios, extending access to finance and boosting blockchain and DLT's ability to disrupt existing markets. Decentralized finance (DeFi).

- **The financial services industry will benefit from cloud computing**

According to McKinsey, cloud technology will account for more than US$1 trillion in EBITDA across the world's top 500 corporations by 2030. According to research,

using the cloud effectively can increase the efficiency of migrated application development and maintenance by 38%, increase infrastructure cost efficiency by 29%, and reduce migrated application downtime by 57%, resulting in a 26% reduction in costs associated with technical violations. At the same time, through automated and incorporated security processes and controls, the cloud may increase platform integrity.

The cloud will continue to be used by financial institutions as they add more agile capabilities and establish new businesses that require high market and customer responsiveness and scalability flexibility. Meanwhile, demand for cloud-based elastic computing, which allows computing resources to be dynamically modified to match demand variations, will rise as big data analytics is used at scale.

Banks will also see the opportunity to scale cloud-based microservice architecture in the coming years, where application programming interfaces (APIs) enable machine-to-machine communication and allow services to scale independently without expanding the overall offering's coding base. Financial will undergo a micro-service-driven architecture revolution due to the next generation of core banking applications.

- **IoT will guide an era of trust in finance**

  IoT is developing, with huge financial repercussions, after years of languishing at the bottom of the hype cycle. Perception and smart sensor systems, wireless communication networks, and application and operations support are the three layers that makeup IoT systems. RFID labelling, on the sensor front, provides a lot of untapped potential for automating item identification and logistics management. IoT communication solutions are also increasing, casting a larger net for devices to communicate via wired and wireless networks, near-field communication solutions, low-power wide-area networks, narrow-band IoT, linked end-point devices, and centralized control management. Finally, embedded-system and smart technologies are rapidly evolving, allowing for more intelligent communication with things.

  Consider the fact that, in terms of financial applications, environmental, social, and corporate governance (ESG) considerations are progressively influencing numerous investment strategies and regulatory legislation. Several big countries, for example, have committed to achieving peak carbon emissions and carbon neutrality. Aside from the increased use of renewable energy, success in meeting these targets will be dependent on improved monitoring and control of industrial energy and power efficiency. This is an ideal environment for IoT applications. Carbon trading, for example, will increasingly be linked to IoT measures, creating new opportunities for perceptive participants.

Insurers have started using IoT to improve risk assessment along with consumer interaction and speed up and simplify the underwriting and claims processes. For example, auto insurers have traditionally set premiums based on characteristics, including a driver's age, residence, and creditworthiness.

- **Open source, SaaS, and serverless technologies will lower entry barriers.**

  The digital economy's strong rivalry and winner-take-all dynamics necessitate speed and scalability for new businesses and financial innovation. For technology businesses and traditional financial institutions wanting to launch new FinTech initiatives, open-source software, serverless architecture, and software-as-a-service (SaaS) have all become must-haves.

  SaaS allows businesses to utilize software as required without owning or maintaining it. In contrast, serverless architecture eliminates the need for businesses to manage their servers, freeing up time and resources for customers and operations. The serverless design also saves money since costs are tied to running software code rather than being created around the clock, independent of business requirements. It also promotes flexible scaling, which reduces idle and loss while increasing development efficiency. Open-source software is a lifesaver for organizations trying to grow because it provides free-to-use source code that allows developers to get a head start on creating their apps.

- **No-code and low-code will redefine application development**

  No-code development platforms (NCDPs), sometimes known as low-code platforms, enable programmers and ordinary users to create programs using graphical user interfaces and settings (such as drag-and-drop) rather than traditional computer programming. While still in their infancy, the platforms have the potential to eliminate the requirement for scarce and expensive software skills.

  NCDPs are frequently used by businesses to speed the development of cloud-based apps while maintaining business strategy alignment. Compliance can be maintained and improved, for example, by automating audit trails and document generation on no-code or low-code systems. Financial institutions and FinTech firms that need to react swiftly to market shifts will benefit greatly from this.

- **Manual labor will be replaced by hyper-automation. The commencement of AI, deep learning, event-driven software, and robotics is called hyper-automation.**

  Process Automation (RPA) and other technology and tools that help with decision-making and labor automation.

  RPA, which enables businesses to deploy software robots such as chatbots at scale easily, is already a key component of digital transformation, but technology is

continuously pushing its limits. The primary objective of RPA is to delegate the management of workflow information and business interactions to robots, therefore automating and standardizing business operations. The primary criteria for validating RPA tech viability are high repeatability, clear rationale, and robust stability. RPA will become more completely integrated with AI in the future, increasing its efficacy in dealing with increasingly complicated business scenarios and expediting financial service offerings.

5. LITIGATION AND LAWSUITS

5.1. H&R filed a case against the company for changing its name to Block

Source: *https://www.theverge.com/2021/12/17/22841182/square-block-hr-block-trademark-lawsuit-jack-dorsey*

Published On: Dec 17, 2021

Published By: Jasmine Hicks

The Company named H&R Block filled a suit against Square, Inc. for changing their company name into Block, Inc. as trademark infringement on Thursday, 16 Dec 2021. The Square Inc. name changed on December 1st 2021, as company CEO Jack Dorsey says it acknowledges the Company's growth.

Company H&R Block CEO Jeff Jones points out some arguments against Block, Inc.

- Square, Inc.'s new name competes directly with Block in several areas of financial services, including a recently purchased tax service named Cash App Tax — previously Credit Karma Tax which is a service similar to H&R Block.
- Filing is done to prevent consumer confusion and ensure a competitor cannot leverage the reputation and trust they built over more than six decades.
- Company H&R Block experienced numerous indications that consumers are drawing a link between the companies due to their similar names

5.2. Patent infringement lawsuit against Square, filed by AnywhereCommerce

Source:*https://www.businesswire.com/news/home/20190828005179/en/AnywhereCommerce-Files-Patent-Infringement-Lawsuit-Against-Square*

Published On: Aug 28, 2021

AnywhereCommerce Inc. files a lawsuit for patent infringement against Square, Inc. The lawsuit was filed on July 26, 2019, in the California federal court (case number 3:19-cv -04311). It stated that unauthorized use of patented technologies is prohibited by law and intended to protect AnywhereCommerce's investment in its innovative mPOS technology. It is also recognized as the de facto patent family relating to a variety of payment card reading equipment connected to a smartphone or tablet.

- AnywhereCommerce company seeks monetary damages from Square for infringing its patents.

- The patent holder company also states that Square has been deliberately infringing on these patents for years, despite previously acknowledging the priority of these patents in different filings with the US Patent Office.
- AnywhereCommerce also alleges to have approached Square Inc. in January regarding its market share and business success to compensate for the use of AnywhereCommerce's technology on which Square's business made significant profit.
- Despite patent infringement in the industry, AnywhereCommerce sells millions of card readers in 15 countries and continues to offer products and services to the industry.
- AnywhereCommerce lead counsel Oliver Griffin stated that this company had made a huge contribution to the mPOS industry by innovating technology that made it affordable and easily accessible to consumers, which also requires heavy financial investments, dedication, hard work from skilled R&D engineers.
- Patents and other intellectual property are the results of these investments and their pursuit of innovation and commitment.
- AnywhereCommerce is very much known in the mPOS (mobile payments point of sale) industry. It sells a product to many payment processors, ISV's, merchant acquirers and fin-tech companies.
- It owns eight patents, headed "Apparatus and Method for Commercial Transactions Using a Communication Device," issued between 2012 and 2017. These patents cover the technology used by Square and others for Magstripe Readers, EMV Chip Card Readers, Bluetooth contactless and Chip Readers.

5.3. Card reader patent lawsuit against Square

Source: https://techcrunch.com/2010/12/02/jack-dorseys-square-embroiled-in-nasty-litigation-over-card-reader-patent/

Published On: Dec 2, 2010

The inception story of Square, Inc. started in February 2009, Jim Mckelvey was not able to sell his glass art products because he couldn't accept a credit card as payment as it requires long applications, expensive hardware, and complex process. Due to this reason, Jim Mckelvey came up with the idea to invent something which will help businesses and individuals to easily accept and process credit card payments, using the cell phone and a card reader for reading magnetic card stripes that was small enough to be plugged into a user the cell phone with ease and as a result square company was born a few days later.

But according to recent updates, McKelvey, who is Square's Chairman, is not listed as a co-inventor of U.S. patent no. 7,810,729, entitled "Card reader device for a cell phone and method of use".

McKelvey, Co-Founder of Square, discussed the idea with the Twitter inventor and Chairman Jack Dorsey to exploit his inventions and his friend, Mr Robert Morley, Jr, to help build a prototype magnetic card reader. Mr Morley is a professor at Washington University who has experience working with magnetic card readers.

McKelvey, Morley and Dorsey jointly discussed obtaining patent protection for the magnetic card reader, which allegedly used a circuit designed by Morley but was guided and incorporated by McKelvey

- On June 10, 2009, Mr Chervitz, who is a patent attorney, filed the '134 Application, which listed only Mr Morley as the sole named inventor, but the listing was wrong as Mr Morley was (reportedly) not the sole inventor; McKelvey was, as well.
- The '134 Application was issued as the '729 Patent on October 12, 2010. On the '729 Patent, Mr Morley was credited as the only named inventor. Because Mr Morley was purportedly not the only inventor of the innovations claimed in the '729 Patent,' that listing alleged as erroneous.
- On October 21, 2010, Mr Chervitz received a letter informing him of the mistake in omitting Mr McKelvey as a designated inventor on the '729 patent.
- Neither Mr Morley nor Mr Chervitz has taken action to correct the error.

As a result of all the errors in patents, a potential problem arose for Square, as a company, as Mr McKelvey does not have any claim to the invention through such a critical patent. The patent is also potentially deficient, as well. Square apparently had high hopes for the U.S. justice system, in which the requesting court issued an order directing the Commissioner for Patents of the USPTO to correct the patent-in-suit by adding Mr McKelvey as a co-inventor.

From the Plaintiff's perspective:

Square, Inc. is a business that allows anyone with a Square account and a smartphone to take credit card payments by inserting a small, square-shaped credit card reader ("Square Reader") into the headphone jack of a smartphone, swiping the card through the reader, and processing the card using the Square application on the smartphone. Dr. Robert Morley and his company REM Holdings 3, LLC claim that the defendants --- Square, Jack Dorsey, and Jim McKelvey --- improperly use his contributions to the defendants' "Square Reader" technology and wrongfully cut him out of the now billion-dollar business. The Counts that remain unstayed in this case pertain to plaintiffs' state

law claims for joint venture, trade secret, and related claims. Defendants have moved for summary judgment on all of plaintiffs' claims (#296).

Morley v. Square, Inc., Case No. 4:14cv172, (E.D. Mo. Apr. 22, 2016)

The case was resolved in 2016: ***The company has settled an ongoing lawsuit brought about by Robert Morley for $50 million.*** Morley claims to have invented the Square credit card reader.

5.4. Jack Dorsey, Block (Square) CEO, filed a lawsuit against Craig Wright over the copyright ownership over the Bitcoin White Paper.

Source:https://www.benzinga.com/markets/cryptocurrency/21/04/20601996/why-jack-dorseys-co-founded-crypto-patent-alliance-sues-self-proclaimed-bitcoin-creator

Published On: April 30, 2021

Published By: Adrian Zmudzinski

The Crypto Open Patent Alliance (COPA), which is a non-profit blockchain intellectual property pooling group formed by Twitter Inc. Co-Founder and CEO Jack Dorsey, filed a complaint against Craig Wright in the High Court of Justice in England and Wales, alleging that Mr Wright does not possess the copyright to the Bitcoin White Paper.

This movement aims to support the Bitcoin community who have been threatened by Wright for the first document describing the coin. According to COPA, Mr Craig is not a known person in the industry for making multiple claims to be the Bitcoin creator with the help of Satoshi Nakamoto's pseudonym and promoting alt-coins claiming that they are the real Bitcoin. Craig promoted alt-coins such as Bitcoin Cash (CRYPTO: BCH) and later Bitcoin SV (CRYPTO SV). Several powerful companies operating in the crypto asset space are against Wright from his activities

Later in the claims, they ask the court to declare that Wright is not the author or owner of the Bitcoin white paper and that the claimant's use of the material will not infringe on any copyright that he holds. They also ask for an injunction to prevent Wright from claiming that he is the author or owner of the document in question.

COPA's members include cryptocurrency exchanges Coinbase, Kraken, and BitBank, hardware wallet manufacturer SatoshiLabs, Bitcoin payment processor BitPay, Michael Saylor's Bitcoin investment and market intelligence business Micro Strategy, and blockchain development firm Blockstream.

Nulla Diligentia Malum– Said Differently – Zero Due Diligence Is A Bad Thing

Simply put, there has been close to zero due diligence regarding intellectual property risks and liabilities in the crypto, blockchain and distributed ledger space – since inception! This has led to ample opportunity for some early visionaries, and significant potential liabilities for many of those who chose to forgo proper due diligence.

The cause of such apathy can be traced to the culture of the cypherpunk and opensource code developer community who were the bulk of the users of the early blockchain space. They apparently eschewed intellectual property laws, rights and protections. This was prevalent and doable as long as they did not have business interests that required having unique, proprietary or valuable property that had to be sold for a profit or properties of importance that would be devalued if replicated without cost or sold freely or given away for free.

As the crypto/blockchain/DLT space matured and actual profitable businesses started to form, many of these very same teams realized that there was a significant and material need to restrict others from taking and replicating work product for free when it took tens of millions of dollars and man years to develop. Thus, formerly fully open source, non-IP protected projects such as AAVE, Uniswap, Compound Labs, Curve Finance, and many others backtracked on their early ideology and instituted copyrights, restrictive commercial edelicenses and other machinations designed to protect their intellectual property. By this time, it was too late to stake much of the early fertile ground in the patented IP space, though.

Of course, by the time this has happened, it was also already too late to prevent the pirating – whether inadvertently or purposefully – of tens (or hundreds) of billions of dollars' worth of intellectual property. Some of this IP stood as the cornerstone of much of the significant pillars that the entire industry stands on today and is using to grow into the future. This is known as foundational technology. Thus, the original concepts, projects, ideas and code were built on already patented concepts, devices, systems and methods, and then freely copied by competitors (large and small) who chose not to write their own unique code or build their own unique systems. This patented IP began to permeate throughout global financial and technological behemoths, sectors and subsectors.

The result? Core patented, foundational technology IP being absorbed, and reverberated throughout the entire industry. As it stands now, this core IP is literally the foundation of much of the industry. A perfect example of this is conditional value transfer and decentralized finance (DeFi).

In 2013, Reggie Middleton thought of creating a system of exchanging value between two or more participants on a peer-to-peer, non-custodial basis, using distributed ledger technology, without the use of an authoritative middlemen, and without traditional counterparty and/or credit risk. Essentially, it is a zero-trust device, method or system of autonomous value transfer.

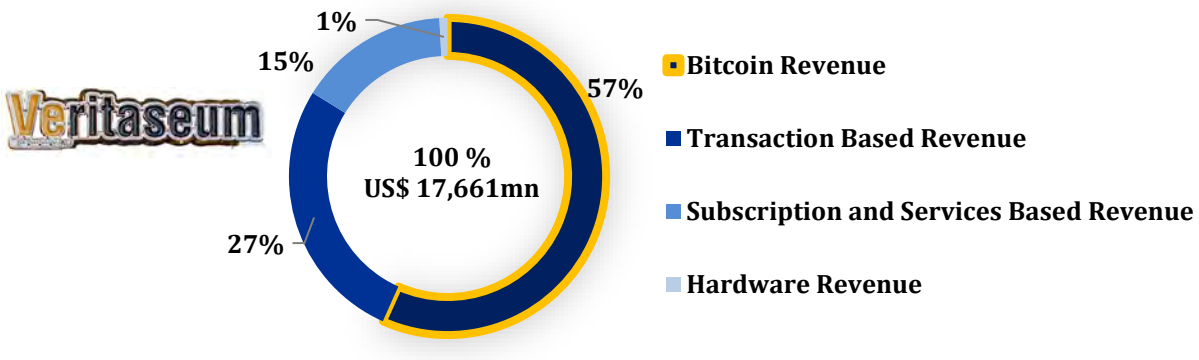
He patented this technology in May 2014, after building out a functional software system based on his invention on the Bitcoin blockchain. Subsequently, Reggie Middleton has been awarded Patents in the following jurisdictions.

- Japan: JP6813477B2 - awarded on January 13 2021.
- USA: US11196566B2 - awarded on December 7 2021.

Veritaseum considers this to be foundational technology and believes wide swaths of multiple industries are affected by it, including the technologies that Block utilizes in its use of Bitcoin, and in particular that of the Bitcoin Lightning Network. Bitcoin now accounts for the majority of Block's revenues. Block was sent notification of Veritaseum's opinion that the patents cover Block's use of the Bitcoin Lightning Network on the blockchain during the 2021 calendar year – before Block announced its global rollout of Lightning Network. Block, consequently, rolled out the network's use anyway through its CashApp product, on January 18, 2022.

We believe that 57% of total corporate revenues potentially infringing on patented IP is material information from an investor's perspective, and the typical equity and debt investor, as well as other material stakeholders, would want to be notified of such.

Figure 16: Revenue by Segment, 2021



Source: Square's Annual reports

We have scoured Blocks Q4-2021 and 2021 annual report filings and have found no such notification or disclosure. What was found was the following revolving credit agreement from Goldman Sachs Bank, USA.

REVOLVING CREDIT AGREEMENT[1]

dated as of

May 1, 2020

among

BLOCK, INC. (f/k/a SQUARE, INC.),

The Lenders Party Hereto

and

GOLDMAN SACHS BANK USA
as Administrative Agent

GOLDMAN SACHS BANK USA

and

SUMITOMO MITSUI BANKING CORPORATION

The text on page 68 of said agreement appears to concur with our assessment that potential infringement that can materially affect revenues is worthy of disclosure. The key variable is whether the patents and notice in question are considered "material".

results of operations of the Borrower and its Restricted Subsidiaries, taken as a whole, or on the ability of the Borrower to consummate the Transactions.

Section 3.05 Properties. (a) Each of the Borrower and its Restricted Subsidiaries has good title to, or valid leasehold interests in or rights to use, all its real and personal property material to its business, except for minor defects in title that do not interfere with its ability to conduct its business as currently conducted or to utilize such properties for their intended purposes.

(b) Each of the Borrower and its Restricted Subsidiaries owns, or has the valid and enforceable right to use, all Intellectual Property material to its business as currently conducted, free and clear of all Liens other than Liens permitted by Section 6.02, and the operation of such business or the use of such Intellectual Property rights by the Borrower and its Restricted Subsidiaries does not infringe upon, misappropriate, or otherwise violate the rights of any other Person, except for any such infringements, misappropriations, or violations that, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect. The Borrower and its Restricted Subsidiaries have taken commercially reasonable actions to protect and maintain the integrity, operation and security of their material software and systems, and to the knowledge of the Borrower, there have been no material breaches, violations, outages or unauthorized accesses of same, other than those that were resolved without material adverse harm.

Section 3.06 Litigation and Environmental Matters. (a) There are no actions, suits or proceedings by or before any arbitrator or Governmental Authority pending against or, to the knowledge of the Borrower, threatened in writing (including "cease and desist" letters and invitations to take a patent license) against or affecting the Borrower or any of its Restricted Subsidiaries (i) that could reasonably be expected, individually or in the

68

The SEC rule we found regarding this (§ 229.105 (Item 105) Risk factors), reads as follows [excerpted and emphasis added]…

(a) Where appropriate, provide under the caption "Risk Factors" a discussion of the ***material*** factors that make an investment in the registrant or offering speculative or risky. This discussion must be organized logically with relevant headings and each risk factor should be set forth under a subcaption that adequately describes the risk….

[85 FR 63761, Oct. 8, 2020]

Our understanding of the term ***material***, as gleaned from the Cornell Law Library site, is as follows:

> *The term material, when used to qualify a requirement for the furnishing of information as to any subject, limits the information required to those* ***matters as to which an average prudent investor ought reasonably to be informed before buying or selling any security of the particular company.***

This begs the question, is the potential infringement of patented IP that may affect the majority of a company's revenues something that the "average prudent investor ought reasonably to be informed about"?

We will leave that up to reader to ponder, for we are not legal professionals, and this is neither a legal treatise nor legal advice - for which we are not qualified to give.

We do feel we are qualified to model the effects of a potential hit to revenues, cash flows and valuation in the event the patented IP issue adversely effects Block, though. This is laid out via sensitivity analysis below.

6. FINANCIALS - HISTORICAL

6.1 Revenue and Cost Components of Operations

6.1.1 Revenue

- **Transaction-based revenue:** Transaction fees are charged as a percentage of the total transaction amount. The transaction fees collected from the seller's customer's bank are recognized as gross revenue.
- **Subscription and services-based revenue:** It includes revenue that the Company gains from instant deposits and cash cards, square capital, website hosting and domain name registration services, and other SaaS products. Per transaction fee is charged for bank deposits by customers and while using the funds stored in the Cash App via Visa prepaid card (cash card)

  Through Square Capital service, the Company purchases loans from partnering banks and offers to sellers that are either repaid through withholding a percentage of the combined seller's receivables processed or a specified monthly instalment.
- **Hardware revenue:** Revenues are recognized through the sale of hardware through e-commerce and other retail distribution channels. Hardware revenue includes sales of contactless and chip readers, Square Stand, Square Register and other equipment.
- **Bitcoin revenue:** Through Cash App, customers can purchase bitcoin, a cryptocurrency. It generates revenue when customers purchase bitcoin, which is transferred to their account. Square buys bitcoin from private broker-dealers or Cash App customers and apply a small margin before selling it to their customers. ***The sale amounts received from their customers are recorded as revenue on a gross basis and the associated bitcoin cost as the cost of revenues.***

6.1.2 Cost

- **Transaction-based costs:** primarily includes interchange and assessment fees, processing fees, and bank settlement fees paid to third-party payment processors and financial institutions**.**
- **Subscription and services-based costs:** primarily comprise costs related to Cash App including Instant Deposit, Cash Card usage and Instant Transfer for sellers.
- **Hardware:** It includes product costs associated with contactless and chip readers, Square Terminal, Square Stand, Square Register, and third-party peripherals.

Product costs include manufacturing-related overhead and personnel costs, certain royalties, packaging, and fulfilment costs.

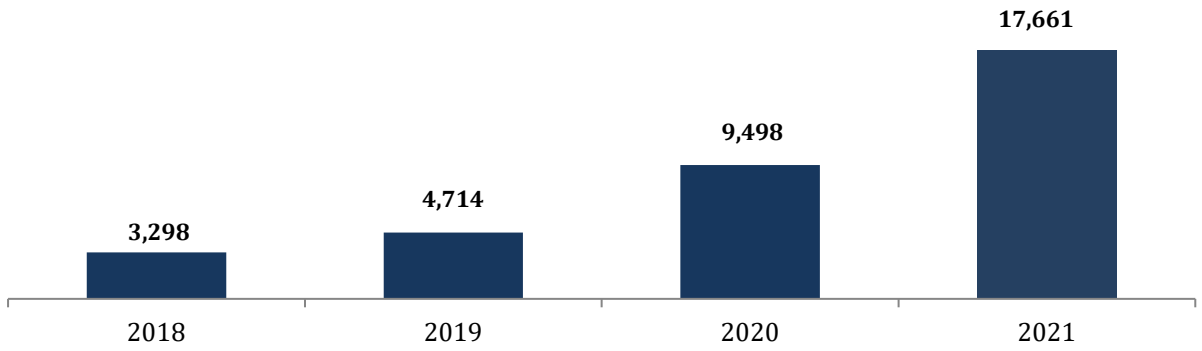
- **Bitcoin costs.** Bitcoin's cost of revenue includes the cost Square pay to purchase bitcoin.

6.2 Total Revenue

In 2021, the Company registered net revenue of US$17,661 million, exhibiting an impressive growth at a CAGR of ~75% during 2018-2021. The significant increase in net revenues was supported by growth in Bitcoin revenues during 2018-2021. Excluding Bitcoin revenues, net revenue grew at a CAGR of ~35% during 2018-2021 as the Company continued to benefit from growth in gross processing volumes (GPV) from its existing and new sellers.

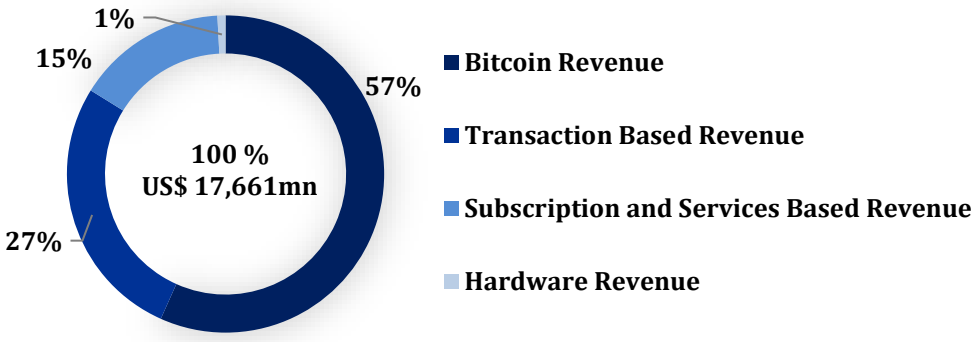
In 2021, in line with economic recovery and re-opening of the US markets, the Company witnessed improved GPV performance in the in-person sellers' and Cash app business.

Figure 17: Historical Revenue Growth (US$ mn): 2018-2021



Source: Square's Annual reports

Figure 18: Revenue by Segment, 2021



Source: Square's Annual reports

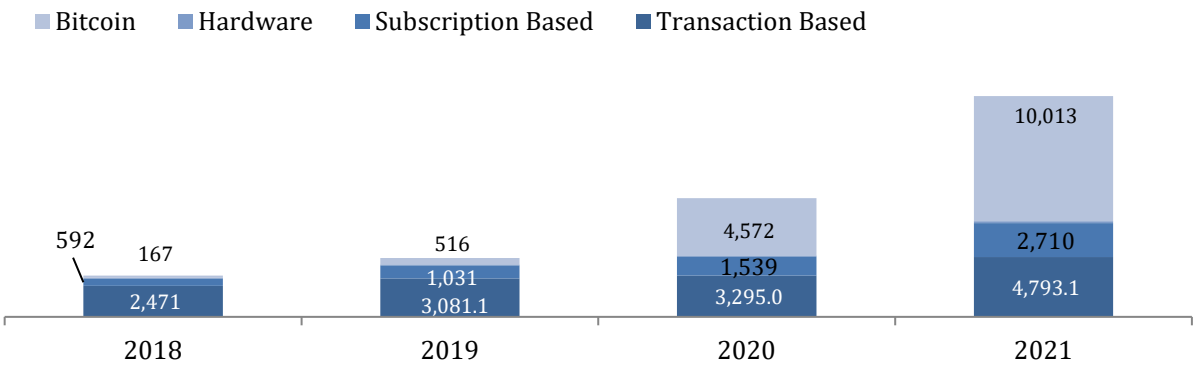
6.2.1 Segmental Revenues

On a segmental basis, Bitcoin Revenue accounted for the lion's share in net revenue of ~57%, in 2021. During 2018-2019, the combined revenue from transaction-based earnings and subscription-based earnings accounted close to 90% share in net revenues.

The growth in transaction-based and subscription-based revenues is attributable to growth in GPV generated by sellers and adoption of contactless commerce by the seller during the COVID-19 pandemic.

Bitcoin revenues witnessed significant growth at a CAGR of 292% during 2018-2021 fueled by the increase in Bitcoin market price and growth in the number of active bitcoin customers coupled with the increase in volume per consumer.

Figure 19: Segmental Revenue (US$ mn): 2018 -2021



Source: Square's Annual reports

6.3 Total Cost of revenue

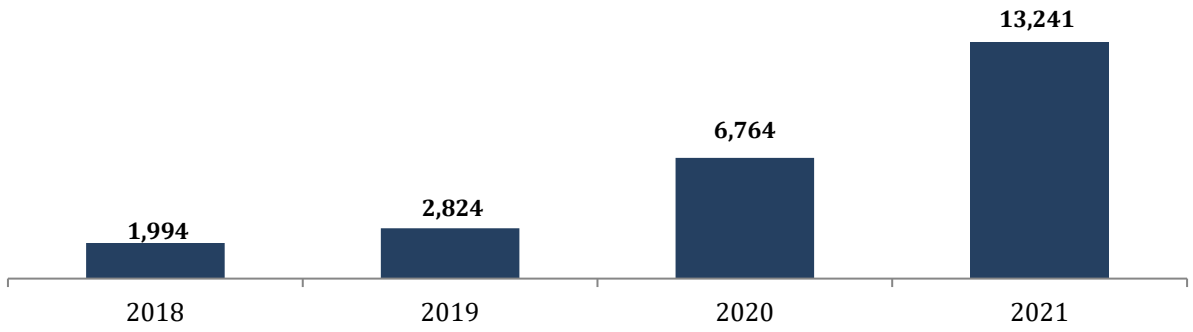
The total cost of revenue during 2018-2021 grew at a CAGR of 88%, primarily due to the direct cost incurred for Bitcoin purchases and fluctuation in the market price of Bitcoins. Bitcoin cost of revenue increased significantly in line with the rise in Bitcoin revenues during 2018-2021.

Excluding Bitcoin, the total cost of revenue increased by US$1623.8 million during the year 2018-2021. During 2019-2021, transaction-based cost of revenues decreased primarily due to a rise in debit card transactions and an increase in average transaction

sizes, which lowered the average cost per transaction, which was offset in part by an increase in GPV.

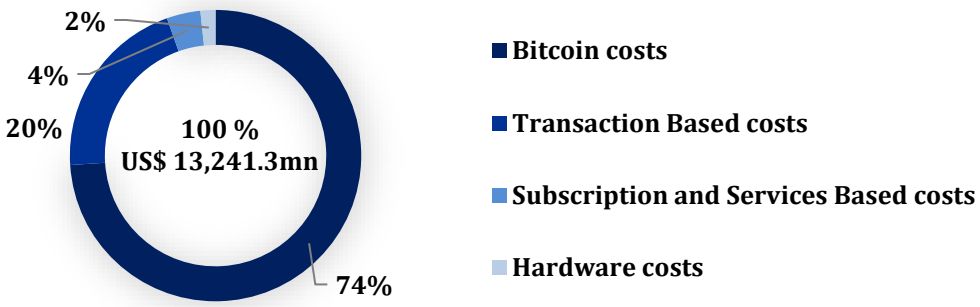
Subscription and service-based costs dropped in 2020 by Y-o-Y of 5% compared to 2019, owing to the sale of the Caviar business on October 2019. However, in 2021, transaction-based and subscription-based costs rose due to surge in GPV and expenses related to the music streaming services post acquisition of TIDAL in Q2 2021.

Figure 20: Historical Cost of Revenue (US$ mn): 2018-2021



Source: Square's Annual reports

Figure 21: Cost of revenue By Segment, 2021



Source: Square's Annual reports

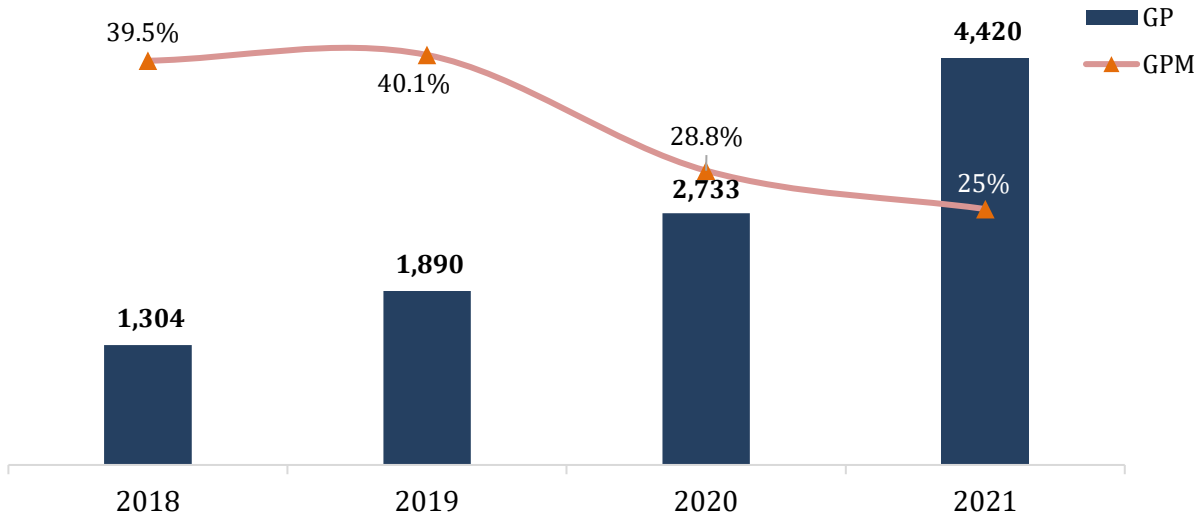
6.4 Total Gross Profit

The gross profit of the Company improved during 2018-2019 and exhibited a positive trend. The gross profit of the Company reached US$ 2.7 billion in 2020 from US$1.3 billion in 2018, and for the 2021, it stood **at US$4.4 billion**. ***The surge is mainly due to the increase in bitcoin revenue.***

Growth in revenue from the Cash App ecosystem and surge in GPV in the Sellers ecosystem also supported increase in gross profits during 2018-2021.

The gross profit margin in 2021 over the levels in 2020 mainly due to a significant increase in share of Bitcoin revenue which has lower gross margin compared to the revenues in other segments.

Figure 22: Total Gross Profit (US$ mn) and Gross Profit Margin, 2018 -2021

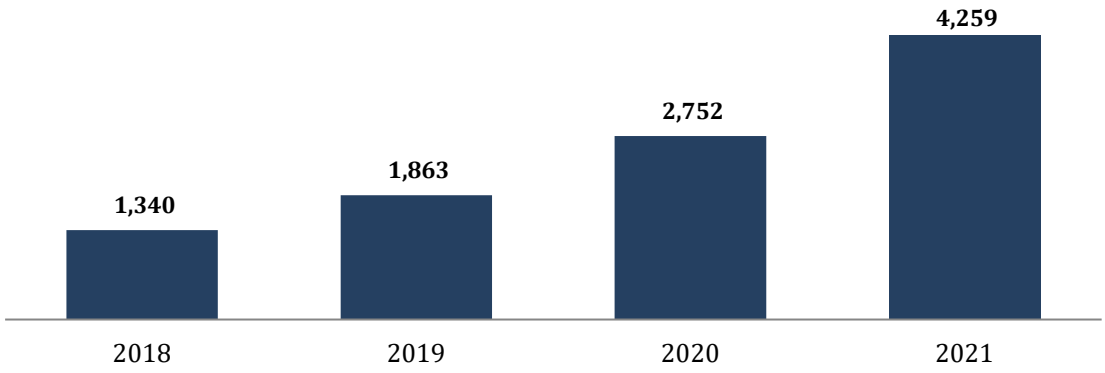


Source: Square's Annual reports

6.5 Operating Income

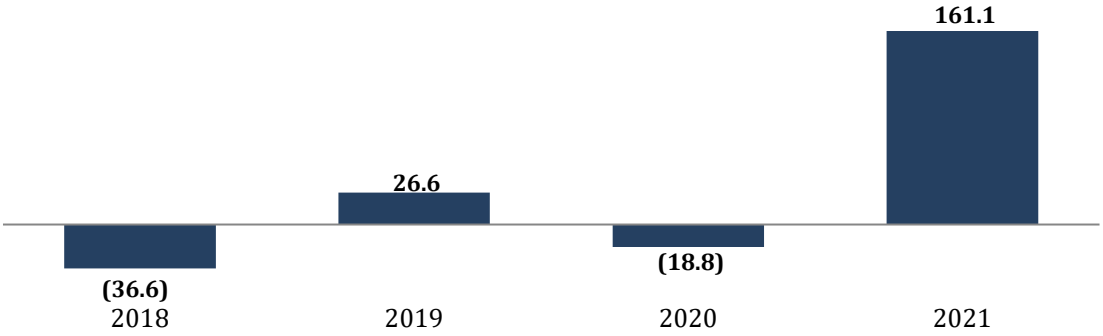
After the increase in 2019, the company's operating income declined in 2020 mainly due to a significant increase in operating expenses, particularly selling and marketing expenses (Y-o-Y growth of 78%). In 2020, the Company spent to improve its communication channels to increase the awareness and usage of products among sellers and customers. Operating income rose to US$161.1 million in 2021, owing mostly to increased revenues.

Figure 23: Overall Operating Expense (US$ mn): 2018-2021



Source: Square's Annual reports

Figure 24: Operating Income/ (Loss) (US$ mn): 2017-2021

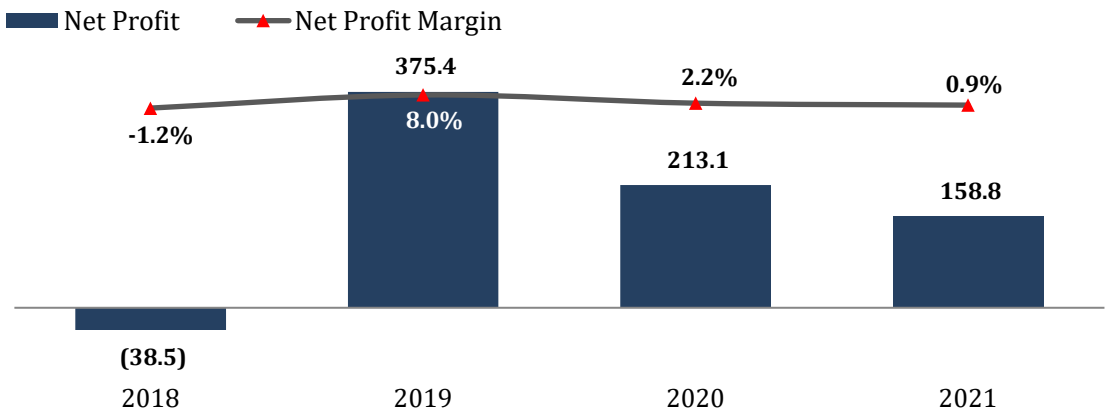


Source: Square's Annual reports

6.6 Net Income/ (Loss)

The Company incurred net losses in 2018. However, it improved in 2019 and reached US$375.5 million, mainly due to gain from the sale of asset group (Caviar business) to Doordash Inc. In year 2021 it decreased to US$158.8 million.

Figure 25: Net Profit and Net Profit Margin



Source: Square's Annual reports

7. FINANCIALS – FORECASTED

7.1. Revenue Based Financials

As shown in the earlier section in this report, the Company's revenue is driven by four key segments - transaction, subscription, hardware, and Bitcoin revenues.

For detailed insights into projected numbers, revenue is further bifurcated into sub-segments. For instance, Transaction-based Revenue is further sub-divided into six sub-segments, whereas subscription-based revenue has 11 sub-segments.

The following weights have been allocated to the following sub-segments based on our understanding:

Weightage under Transaction-based Revenue	Percentage
In-person and mobile card payments	**20%**
Invoiced and Online payments	**20%**
Recurring billing and card-on-file transactions.	**10%**
Keyed-in payments and card-not-present	**10%**
Virtual Terminal transactions	**20%**
ACH Bank Transfers	**20%**

Weightage under Subscription-based Revenue	Percentage
Square Invoices Pricing	**20%**
Invoices paid with a card on file	**10%**
Invoices Plus	**10%**
Risk Manager	**5%**
Square Gift Cards	**5%**
Virtual Terminal	**10%**
Square online	**20%**
Client Prepayments for Appointments	**5%**
Team Management	**5%**
Appointments	**5%**
Payroll	**5%**

The historical data depicts that the Company's CashApp customer count is increasing, and Square is recovering from the Covid-19 pandemic. Furthermore, the Company is working to attract new consumers and boost sales to both prospective and updated suppliers; as a result, it is expected that transaction-based Revenue and subscription-based Revenue would increase in volume throughout the predicted period, i.e., 2022-2026.

On the other hand, **Bitcoin played a significant role, with a revenue growth rate of 119% during the period 2020-2021. Also, it contributed 57% of the total revenue in 2021 and caused 48% of the increase in total revenues in 2021.**

In the future, bitcoin revenue and gross profit may fluctuate due to changes in customer demand or the market price of bitcoin. Thus, it is assumed that bitcoin revenue growth should be around ~13% on average for 2022-2026.

We have considered the three cases – Base, Best, and Worst cases - to get a clearer and more appropriate picture for future financials. The Best case depicts the positive growth in the company's business in the future due to changes in the technology and updating of the features in the systems of the Company. On the other hand, the Worst case depicts lower growth as technology and the environment evolve quickly in addition to improvements in payment methods and payment processing, resulting in market rivalry at an all-time high. To keep up with the fast-changing environment, businesses are always altering and upgrading their payment processing units, software, terminals, and so on**. Apple, for example, has been increasing its payment processing push in recent years, and it is now launching a new service that would allow small companies to accept payments directly on their iPhones without the use of any additional gear.** The change may impact payment providers who rely on Apple's iPhones to conduct purchases, but there will be no problem if Apple allows any app to utilize the new technology. However, it is unclear if the payment acceptance option will be labelled as part of Apple Pay or released separately. The Apple system would only accept contactless payments and not accept chip or magnetic-stripe cards. Contactless payments account for only about 20% to 30% of face-to-face transactions in the United States. As a result, it looks unlikely that many merchants will abandon other hardware in favour of Apple's contactless service alone. It appears to be a move to increase iPhone sales in the market rather than getting into the payments business. As such, an increase in competition and competitors will not cause the Company to perform poorly or lose money, but it will impact the business at some level.

The graphs depicted below are based on the Base case Scenario.

Figure 26: Transaction-Based Revenue (US$ mn): 2022-2026

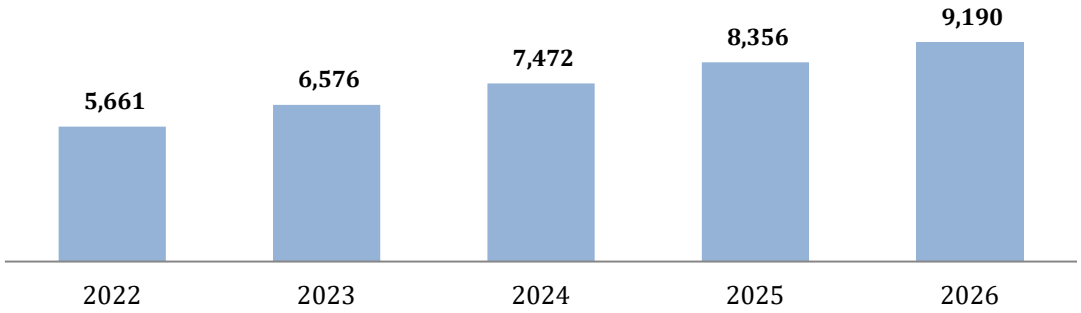


Figure 27: Subscription & Service-Based Revenue (US$ mn): 2022-2026

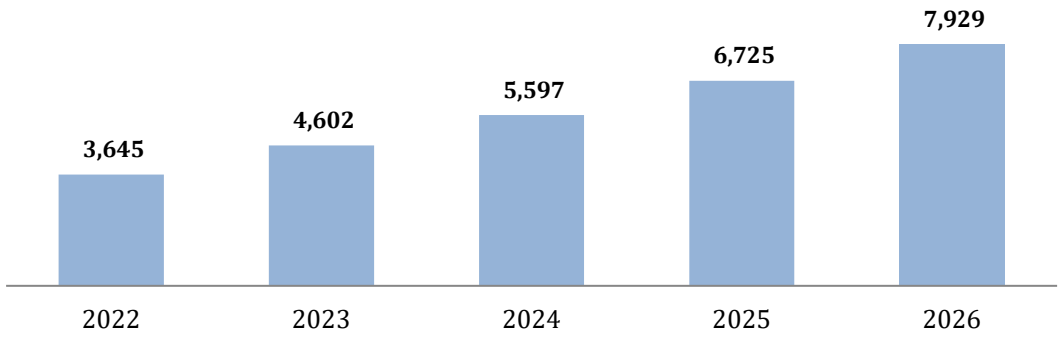


Figure 28: Hardware-Based Revenue (US$ mn): 2022-2026

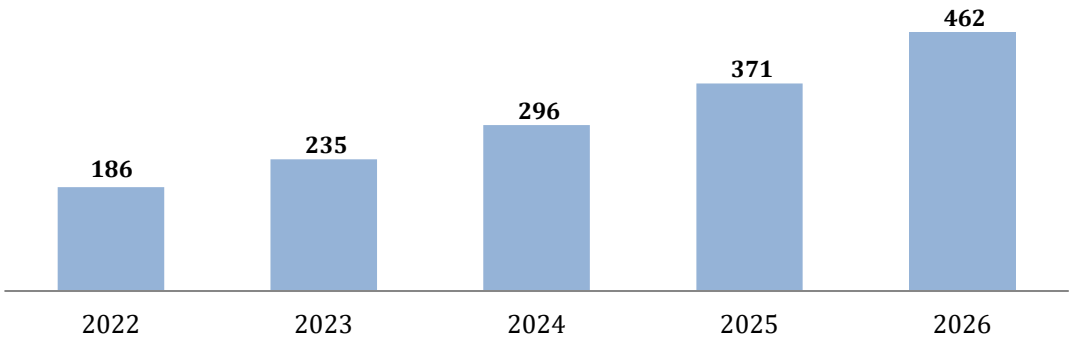
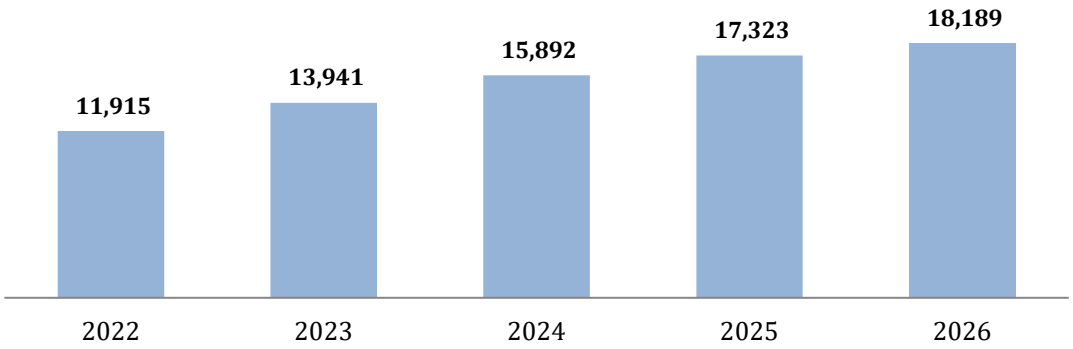


Figure 29: Bitcoin Revenue (US$ mn): 2022-2026



7.2. Cost of Sales (COS) financials

The COS projections are linked to the segmental growth in revenues of the Company. Thus, direct costs associated with transaction-based, subscription and services-based, hardware costs and bitcoin costs are assumed to surge in line with growth in revenues. In all cases, it is assumed that the Cost of Sales (COS) as a percentage of revenue will increase due to a decline in prices and an increase in the cost of each service type.

Figure 30: Transaction-Based Cost (US$ mn): 2022-2026

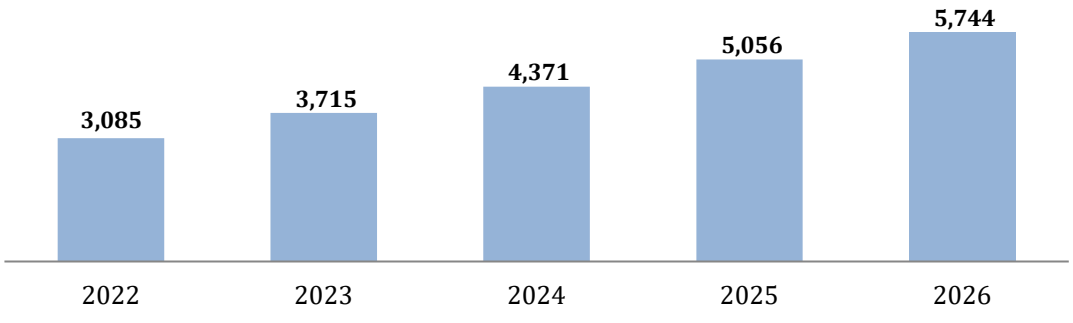


Figure 31: Subscription & Service Based Cost (US$ mn): 2022-2026

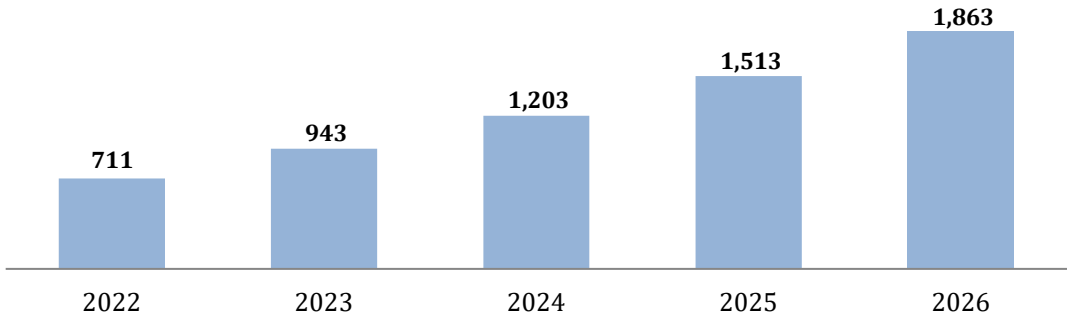


Figure 32: Hardware-Based Cost (US$ mn): 2022-2026

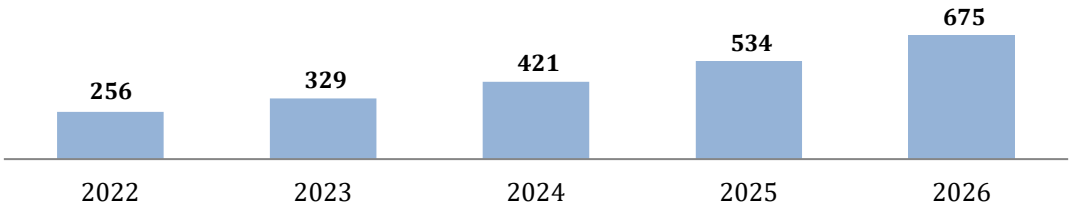
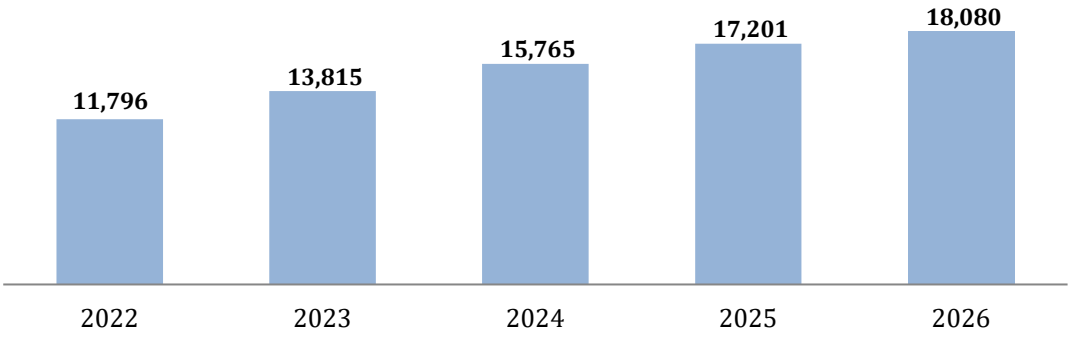


Figure 33: Bitcoin Based Cost (US$ mn): 2022-2026



7.3. Gross Profit & Gross Margins financials

During 2022-2026, the Company's gross profit is expected to increase at a CAGR of ~14 % due to higher sales growth. Gross profit margins are estimated to be at an average of 26%.

The segmental gross profits for transaction-based and subscription and services-based are assumed to grow with the rise in transaction volumes of each sub-segments.

Figure 34: Transaction-Based Gross Profit (US$ mn) & Gross Profit Margin 2022-2026

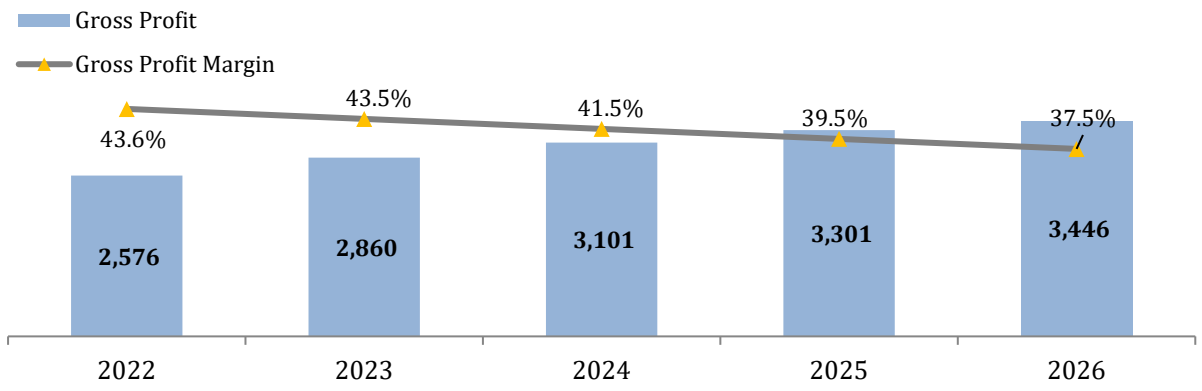


Figure 35: Subscription-Based Gross Profit (US$ mn) & Gross Profit Margin 2022-2026

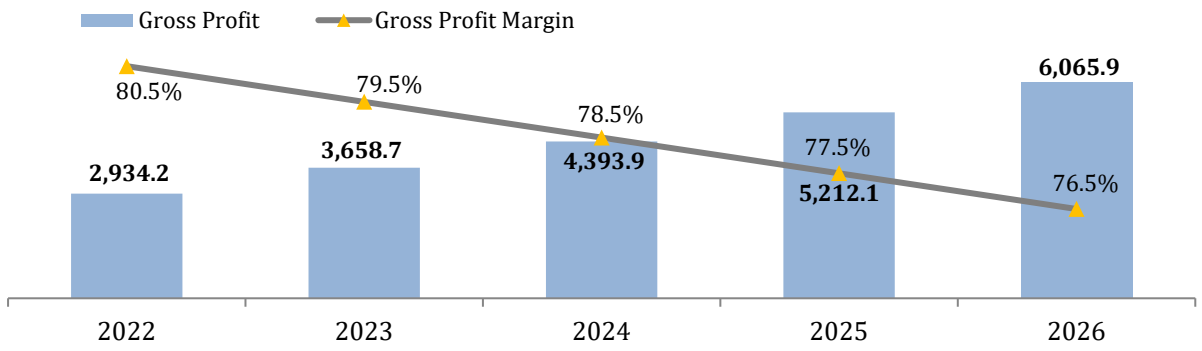


Figure 36: Hardware-Based Gross Profit (US$ mn) & Gross Profit Margin 2022-2026

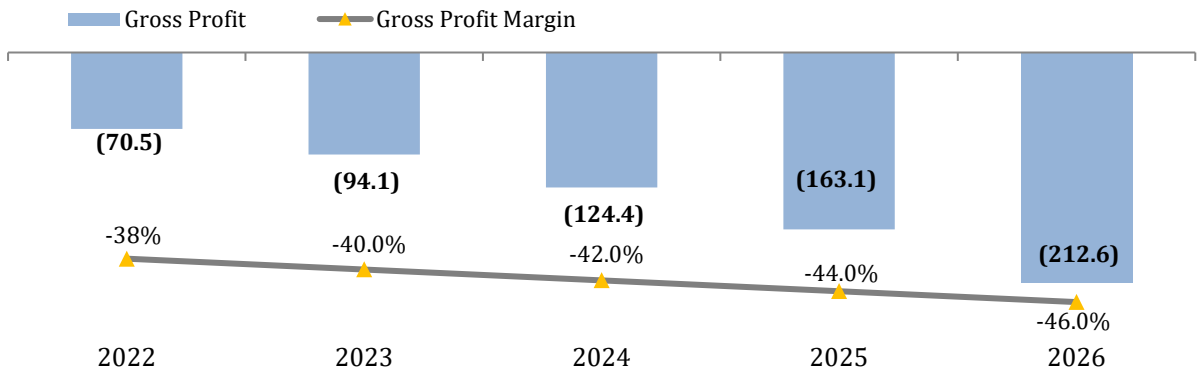
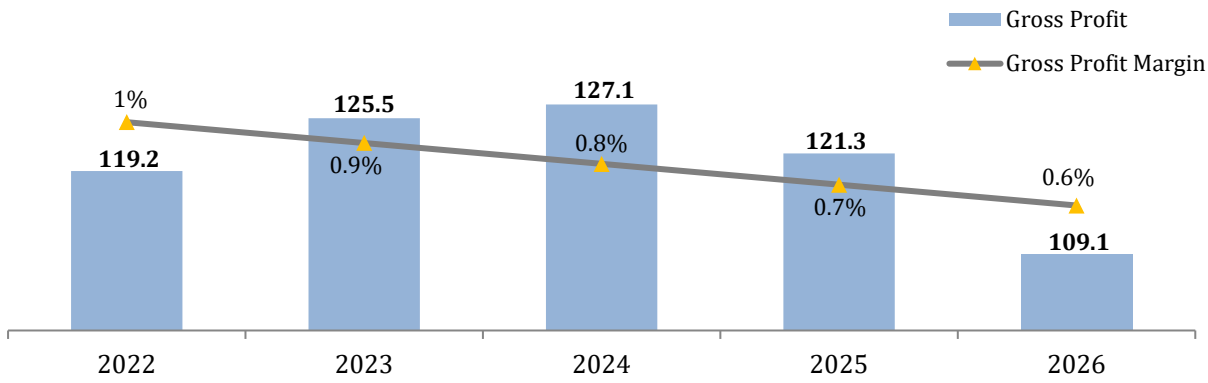


Figure 37: Bitcoin Based Gross Profit (US$ mn) & Gross Profit Margin 2022-2026



7.4. Operating Expenses Financials

Operating expenses include product development, sales and marketing, general and administrative expenses, transaction and loan losses, and amortization of acquired customer costs. Product development expenses currently represent the largest component of the Company's operating expenses.

It is assumed that product development, sales, and marketing expenditures, as well as transaction, loan, and advance losses, are correlated to revenues. As a result, these costs will rise in line with the revenue, albeit at different rates in the three scenarios.

General & Administrative expenses will also increase based on the average historical Y-o-Y growth rate.

Figure 38: Product Development Expense Forecasting (US$ mn): 2022-2026

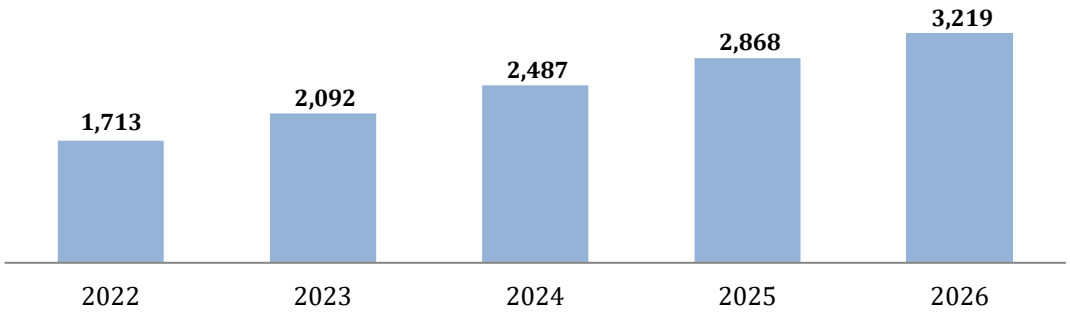


Figure 39: Sales and Marketing Forecasting (in US$ mn), 2022-2026

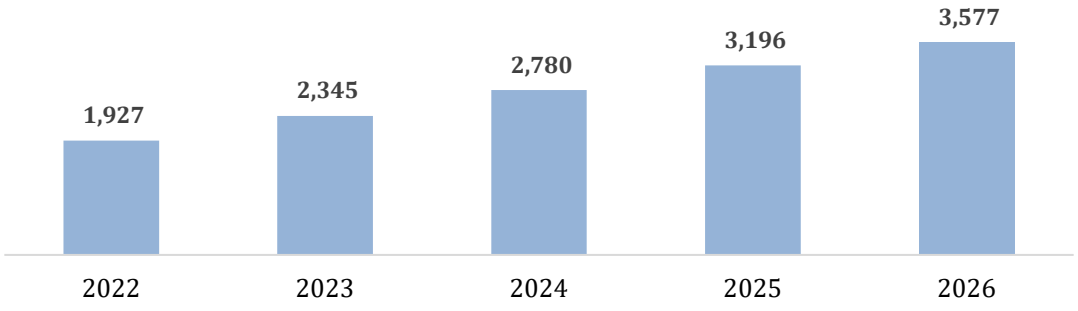


Figure 40: General and Administrative (in US$ mn), 2022-2026

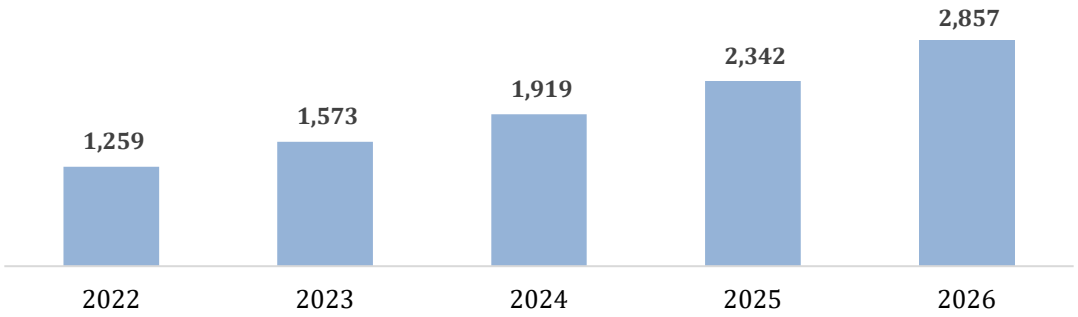


Figure 41: Transaction, loans and advances losses (in US$ mn), 2022-2026

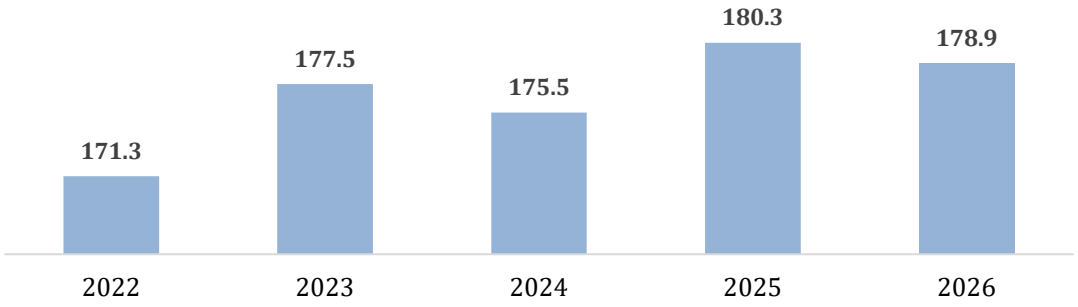
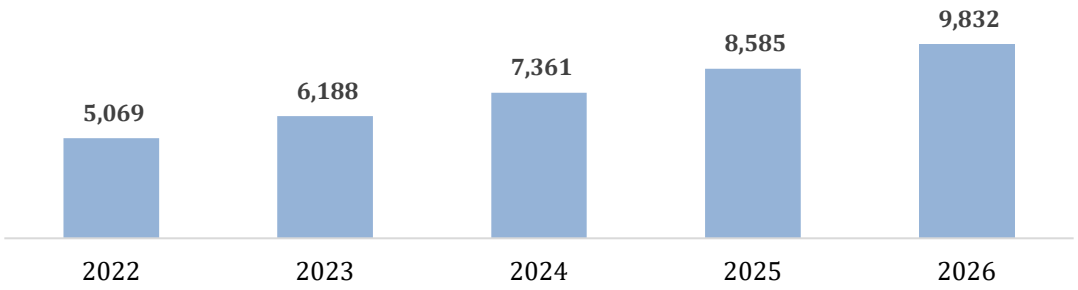


Figure 42: Overall Operating Expense (in US$ mn), 2022-2026

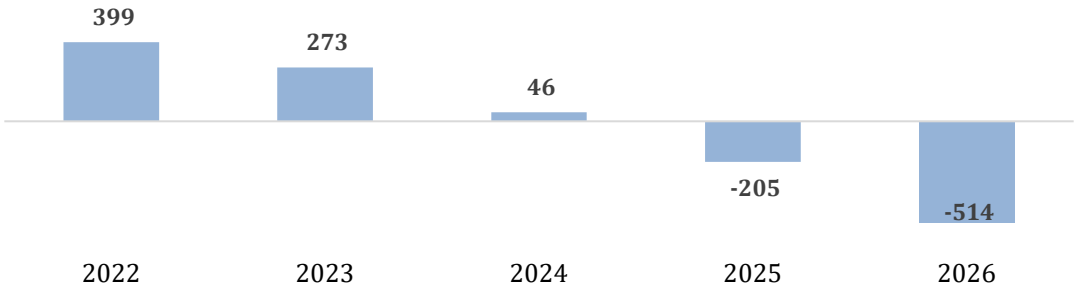


Note: Including Amortization of acquired customer assets forecasting

7.5. Operating Income/ (Loss)

The Company is projected to record operating loss as there will be a significant rise in the operating expenses due to an increase in sales & marketing, product development and general and administrative expenses. The gross margins will also get squeezed, as mentioned earlier.

Figure 43: Net Operating Income/ (Loss) (in US$ mn), 2022-2026



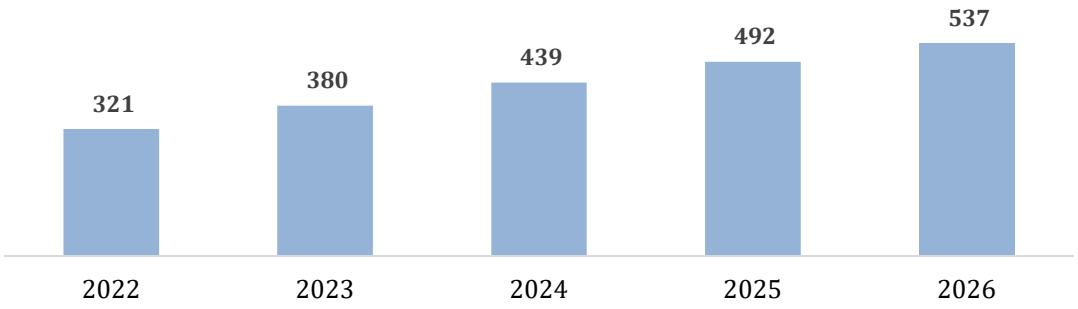
7.6. Infringement Cost

We have assumed patent licensing expenses (royalties, or cost of infringement if the company chooses the more costly litigation route which ***has the potential to result in punitive treble damages as well as compensatory damages***) equivalent to 1.0%, 1.5%, and 2.0% of the revenues in Best, Base and Worst cases, respectively. The licensing costs will rise in tandem with the company's revenue and is levied as a percentage of revenue. As sales rise, so will the cost of IP licensing fees.

The levy of IP licensing fees will thus result in losses in the Base case and Worst-case and will have nominal profit in the Best case.

It is possible for Block to negotiate licensing deals that avoid the risk of litigation and punitive damages. We are considering a deeper dive into those scenarios in our modeling, to be released in a future update. The IP, if licensed and used creatively, can be net accretive to earnings, i,e., the use of stabilized bitcoin values throughout the lightning network, that effectively give merchants stable dollar values moving through the Bitcoin network for pennies per transaction. Such a service should dramatically increase adoption and use across a wide range of customers and merchants, internationally.

Figure 44: Infringement Cost (in US$ mn), 2022-2026

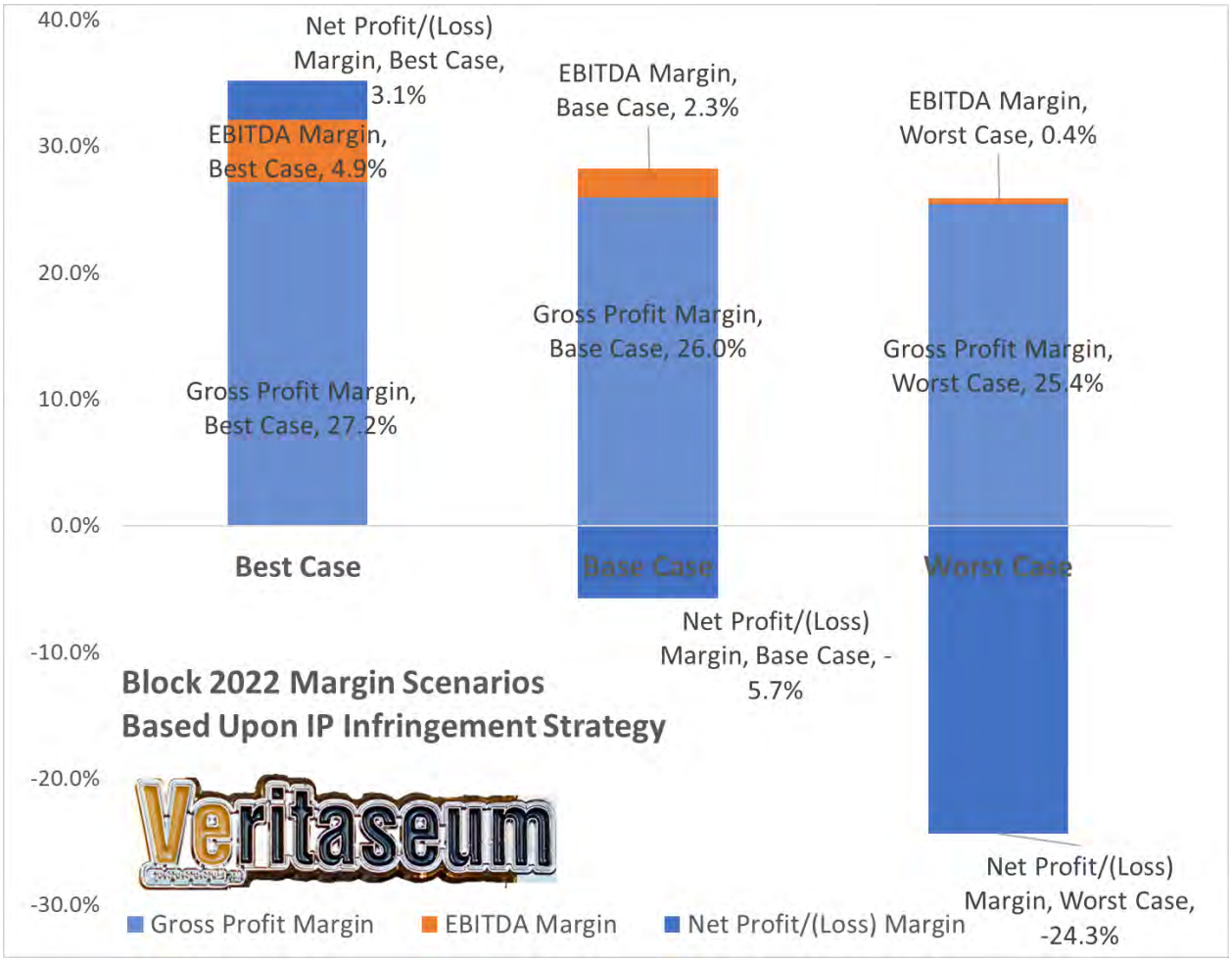


7.7. Voluntary Patented IP Licensing vs Compensatory & Punitive Damages

We have assumed payment for the use of patented IP licensing in three contingent scenarios, as follows:

- the base case, the Company licenses IP from patent holder which will result in a license fee from the defaulting company.
- the worst case, there will be a maximum payout due to deliberate ongoing infringement, resulting in litigated treble (3x) damages to the defaulting company.
- the best case, Company partners with patent holder, implements new products based and consulted on with the patent holder, which recoup revenues spent on licensing, basically allowing for the use of the patented IP without net additional economic cost and no risk of litigation.

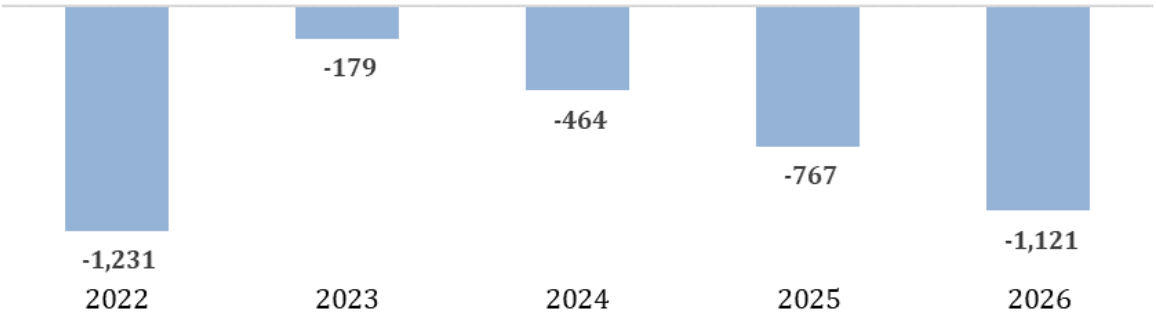
[US$'000]	**Base Case (1x Damage)**	**Worst Case (3x Damage)**	**Best Case**
Collaborative Partnership vs Compensatory Reimbursement vs Punitive Treble Damages	(1,238,383)	(4,585,575)	-



7.8. Net Income / (Loss)

The Company is expected to register losses between 2022 and 2026 under the Base case as there will be punitive treble damages to be bear by the defaulting company.

Figure 45: Net Income/ (Loss) (in US$ mn), 2022-2026



8. SCENARIOS – BEST, BASE, & WORST

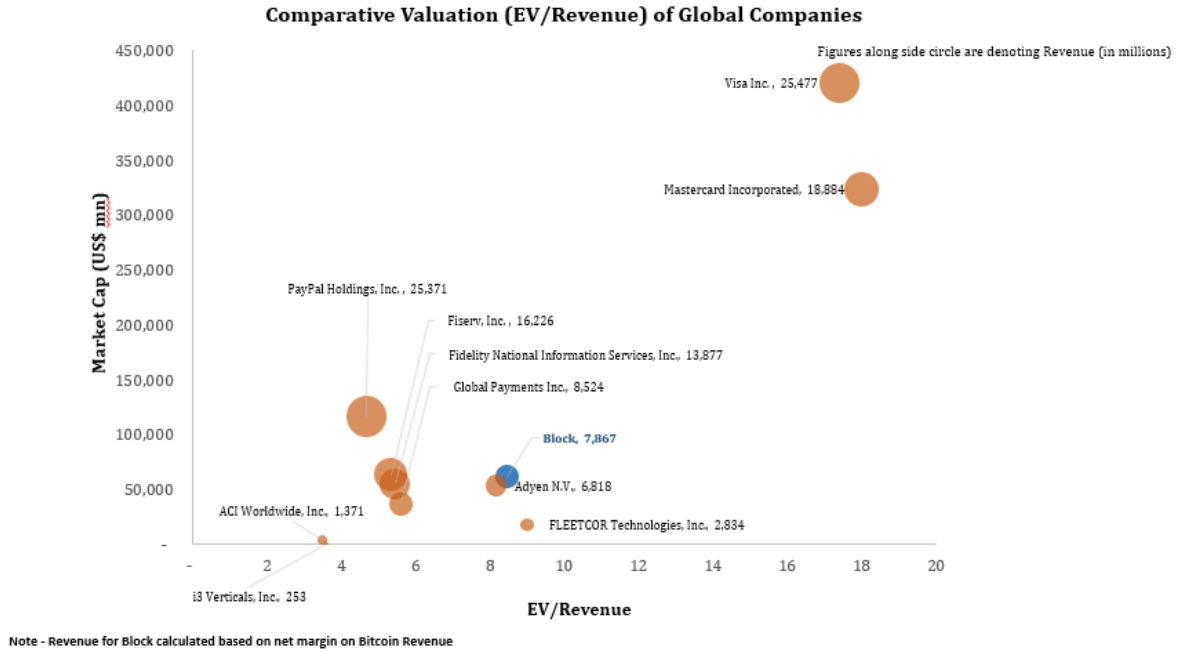
We have assumed three case scenarios: Best, Base and Worst case. The scenarios are typically used to estimate changes in the value of a business or cash flow, taking into consideration potentially favorable and unfavorable events that would impact the company.

In USD Million	Revenues			Cost of Revenue			Gross Profit			EBITDA			Net Profit /Loss		
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Best Case	17661	22,365	27,705	(13,241)	(16,284)	(20,022)	4,420	6,080	7,683	231	1,098	1,435	159	684	936
Base Case	17661	21,407	25,354	(13,241)	(15,848)	(18,803)	4,420	5,559	6,550	231	490	363	159	(1,231)	(179)
Worst Case	17661	20,844	24,054	(13,241)	(15,547)	(18,032)	4,420	5,297	6,022	231	90	-234	159	(5,074)	(876)

In USD Million	Gross Profit Margin			EBITDA Margin			Net Profit/(Loss) Margin		
	2021	2022	2023	2021	2022	2023	2021	2022	2023
Best Case	*25.0%*	*27.2%*	*27.7%*	*1.3%*	*4.9%*	*5.2%*	*0.9%*	*3.1%*	*3.4%*
Base Case	*25.0%*	*26.0%*	*25.8%*	*1.3%*	*2.3%*	*1.4%*	*0.9%*	*-5.7%*	*-0.7%*
Worst Case	*25.4%*	*25.4%*	*25.0%*	*1.3%*	*0.4%*	*-1.0%*	*0.9%*	*-24.3%*	*-3.6%*

9. COMPARATIVE VALUATION

We carried out an analysis of Block's Valuation relative to other prominent listed companies in the payment processing and related services.



Note - Revenue for Block calculated based on net margin on Bitcoin Revenue

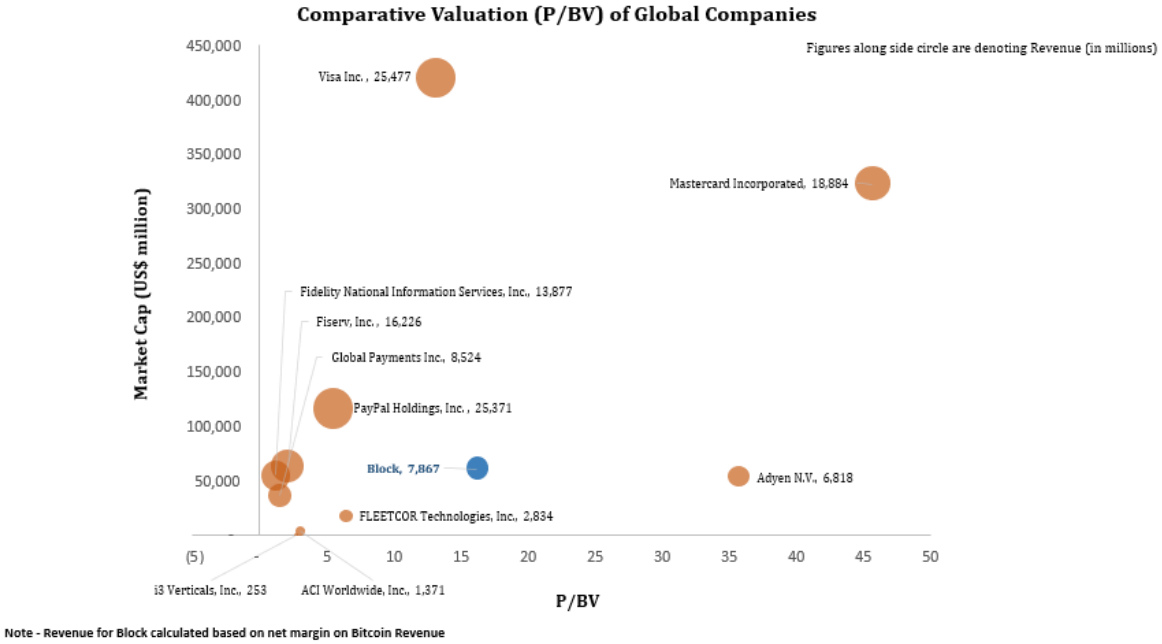
Based on Revenue for Block Inc. (which is adjusted to include gross margin on Bitcoin sales instead of total Bitcoin revenue because this is the right approach to value the company), the Company is trading at a high EV/Revenue multiple of almost 8X, behind Fleetcor Technologies, Mastercard and Visa only.

Alternatively, based on Price to Book Value multiple, Block Inc. is trading at a multiple of 16x, after Adyen N.V. and Master Card only.

The Company commands higher valuation multiples compared to most of its peer set. It is an expensive stock at its level (scale) of operations. It should be noted that MasterCard and Visa have:

- dramatically higher levels of international diversification,
- dramatically higher cash flows,
- dramatically larger margins
- significantly more cash.

This results in more stable, and better funded operations relative to Block. In addition, Block is dramatically more susceptible to competition – from Apple to other blockchain competitors.



The sensitivity of the Company's profitability to external factors like competition, margin pressure, patent infringement cost is extremely high.

Disclaimer

Veritaseum LLC and Boom Bust Blog analysis and conclusions in this presentation are based on publicly available information. Veritaseum LLC recognizes that there may be confidential information in the possession of the Companies discussed in the presentation that could lead these Companies to disagree with Veritaseum LLC's conclusions. The analyses provided may include certain statements, estimates and projections prepared with respect to, among other things, the historical and anticipated operating performance of the Companies. Such statements, estimates, and projections reflect various assumptions by Veritaseum LLC concerning anticipated results that are inherently subject to significant economic, competitive, and other uncertainties and contingencies and have been included solely for illustrative purposes. No representations express or implied, are made as to the accuracy or completeness of such statements, estimates or projections or with respect to any other materials herein.

Actual results may vary materially from the estimates and projected results contained herein. Veritaseum LLC and its affiliates may own investments that are bullish or bearish on the subject entity in this material. These investments may include credit-default swaps, equity put or call options, warrants and short sales of common stock. Veritaseum LLC is in the business of creating and trading – bringing into existence, buying and selling - public and private assets and properties, including intellectual properties. It is possible that there will be developments in the future that cause Veritaseum LLC to change its position regarding the Companies and possibly increase, reduce, dispose of, or change the form of its investment or positions in (or relative to) the Companies.

This information and work is copyrighted.