

# The Financial Technology (FinTech) Sector in the United States

Sydney Bahma  
Independent Researcher

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## Abstract

This paper analyzes the growth trajectory and current lifecycle stage of the U.S. financial technology (FinTech) sector, focusing on NAICS 522320: Financial Transactions Processing, Reserve, and Clearinghouse Activities. Using this industry as a case study for the course *AI in Economics*, the paper synthesizes quantitative indicators—such as employment, revenue growth, venture investment, and profitability—with qualitative evidence on innovation and competition. Recent industry reports suggest that U.S. FinTech revenues have grown rapidly and are projected to continue expanding, with global FinTech revenues expected to reach roughly 1.5 trillion dollars by 2030 (Boston Consulting Group [BCG], 2024; Netguru, 2025). At the same time, stabilizing funding levels and a stronger emphasis on sustainable profits indicate a shift from hypergrowth toward a more disciplined growth phase (BCG, 2025; McKinsey & Company, 2023a). The analysis concludes that NAICS 522320 is best characterized as a growing—rather than fully mature—industry. The paper also outlines data sources and analytical tools—many of them AI-enabled—that economists can use to track this sector, and it sets up later sections that connect these industry dynamics to a personal opportunity and skills plan for working at the intersection of AI, finance, and management.

## 1 Introduction

Financial technology, or FinTech, has become one of the most dynamic segments within modern financial services. It encompasses digital payments, transaction processing, clearing and settlement, and a growing suite of AI-enabled financial products. Within the North American Industry Classification System (NAICS), code 522320—Financial Transactions Processing, Reserve, and Clearinghouse Activities—refers to firms that process financial transactions, provide reserve and liquidity services (excluding central banks), and operate clearinghouse services for checks and other instruments (NAICS Association, n.d.; U.S. Census Bureau, 2022).

This paper uses NAICS 522320 as a case study in the course *AI in Economics* to show how economists can apply data, industry evidence, and AI-assisted tools to evaluate an industry's current stage—emerging, growing, mature, or declining. The goal is twofold: (a) to classify the lifecycle stage of the U.S. transaction-processing segment of FinTech and (b) to build a foundation

for analyzing how generative AI and related technologies may reshape its structure, performance, and employment in the coming decade.

This project reflects core learning outcomes of AI in Economics, particularly the application of data-driven reasoning to assess real-world industries. It integrates credible economic data, synthesizes trends, and explores how AI is actively transforming firm operations, labor markets, and decision-making tools in financial services. By combining AI tools with traditional economic analysis, the project demonstrates how emerging technologies can be responsibly integrated into professional research and career planning.

## 2 Background and Definitions

The U.S. financial technology (FinTech) sector has rapidly evolved into a central component of the broader financial services industry, especially in areas involving digital infrastructure and transaction automation. This paper focuses on NAICS 522320—Financial Transactions Processing, Reserve, and Clearinghouse Activities—which includes firms that handle financial transaction processing, provide reserve and liquidity services (excluding central banks), and operate clearinghouse systems (U.S. Census Bureau, 2022; NAICS Association, n.d.). The industry supports a wide range of financial activities, from backend card payment infrastructure to real-time bank transfers. Major players include Visa and Mastercard at the network level, and processors like Fiserv, FIS (Worldpay), and Global Payments, all of which facilitate trillions of dollars in annual transactions (Clearly Payments, 2024; Payments Dive, 2023). FinTech-native firms such as Stripe, Block (Square), and PayPal have also emerged as dominant forces in online and small-business payments, reflecting the industry’s blend of legacy infrastructure and digital-first innovation (Capital One Shopping, 2025). As of 2024, global FinTech revenues are estimated to exceed \$300 billion, with the United States accounting for a significant share of that total (Boston Consulting Group [BCG], 2025; Netguru, 2025). This industry’s accelerated integration of artificial intelligence (AI)—in fraud detection, customer service, and product development—further underscores its importance within both finance and technology. Throughout this paper, AI refers to technologies that simulate or enhance human decision-making, particularly through tools like machine learning, natural language processing, and generative AI systems. These tools are increasingly embedded in financial operations and are reshaping both firm strategy and workforce needs.

## 3 Market Size and Growth Trends (2015–2025)

Using a standard industry lifecycle framework, the evidence points to NAICS 522320 as a growing—but not yet fully mature—industry. Several quantitative and qualitative indicators support this classification.

First, revenue growth and market expansion remain well above typical mature-industry levels. U.S. FinTech revenues are projected to grow at double-digit compound annual rates through

at least the late 2020s, with the U.S. transaction-processing segment benefiting from rising card usage, e-commerce, and real-time payments (McKinsey & Company, 2023b). At the global level, Boston Consulting Group (2024, 2025) projects that FinTech revenues could reach approximately 1.5 trillion dollars by 2030, implying substantial room for continued expansion.

Second, investment and firm dynamics remain consistent with a growth-stage industry. Venture and private equity funding in FinTech has increased over the last decade and, although it cooled after the 2021 peak, remains elevated by historical standards (McKinsey & Company, 2023b). Even as investors’ focus has shifted from “growth at all costs” to profitability, the number of firms operating in FinTech and transaction processing remains high, and consolidation has not yet resulted in a small, stable set of dominant incumbents. This combination—many active firms, increased but more selective funding, and rising exit activity—is characteristic of a sector in a disciplined growth phase rather than one that has fully matured.

Third, profitability and operational metrics suggest that the industry is transitioning toward more sustainable growth, not decline. Boston Consulting Group (2025) reports that approximately 69% of public FinTech companies were profitable in 2024, up from less than half the year before, and that average EBITDA margins rose by roughly 25% year over year. This improvement indicates that many FinTech and transaction-processing firms have shifted from early-stage customer acquisition toward monetization and cost discipline while continuing to achieve above-average revenue growth.

Taken together, these indicators—moderating yet strong revenue growth, sustained investment, a high number of active firms, and improving profitability—support the classification of NAICS 522320 as a growing industry showing early signs of gradual maturation.

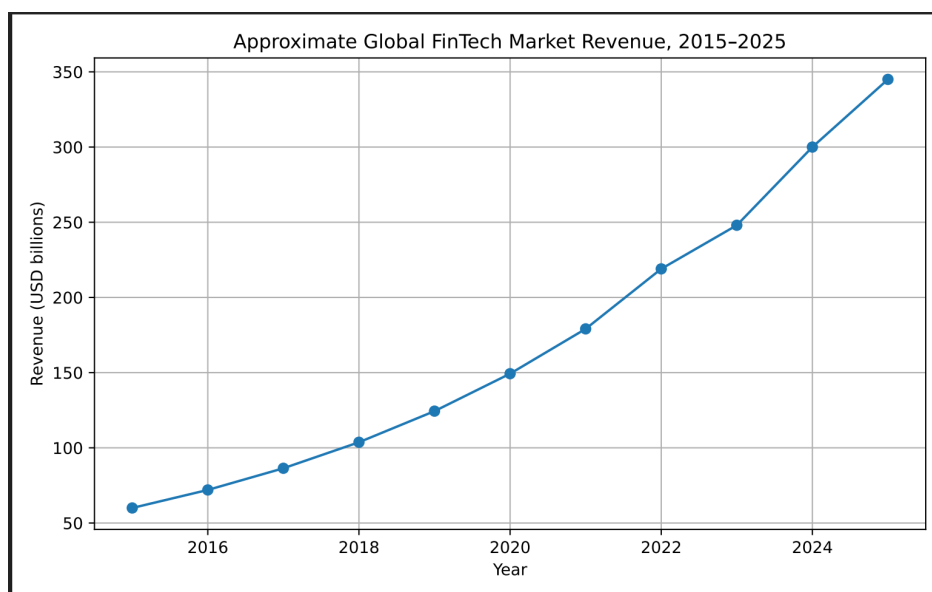


Figure 1: Approximate global Fintech market revenue, 2015–2025

This chart highlights the rapid expansion of the FinTech sector over the past decade. Starting from a relatively modest base in the mid-2010s, global FinTech revenues approximately quadrupled

by the mid-2020s, reflecting sustained double-digit growth. This upward trend aligns with projections from Boston Consulting Group and QED Investors, who estimate that FinTech revenues will reach approximately \$1.5 trillion by 2030 (QED Investors, 2024). It also supports findings by McKinsey & Company that FinTech and payments firms have captured a growing share of value within financial services, driven by rising digital adoption, e-commerce expansion, and the integration of AI-enabled business models (McKinsey & Company, 2023).

## 4 Major Firms and Industry Landscape

The U.S. FinTech sector’s payments infrastructure is dominated by a combination of long-standing incumbents and FinTech-native companies. At the network level, Visa and Mastercard form a duopoly in card payments, with Visa alone handling approximately 52% of U.S. card payment volume (FinTech Magazine, 2025). Smaller networks like American Express maintain a notable presence (around 10% market share) but trail significantly in scale (Upgraded Points, 2024). In transaction processing, a few major firms handle most clearing and payment operations. Fiserv (following its acquisition of First Data) and Fidelity National Information Services (FIS), via its Worldpay unit, are among the largest merchant processors, each managing \$1.7 to \$2 trillion in annual U.S. card transactions (Payments Dive, 2023). J.P. Morgan Chase’s merchant acquiring arm has also grown significantly, processing approximately 41 billion U.S. card transactions in 2024, the highest volume nationwide (GlobeNewswire, 2025). Other key contributors to the consolidated processing infrastructure include Global Payments (which merged with TSYS) and Elavon (a U.S. Bank subsidiary) (Clearly Payments, 2024). Alongside these incumbents, FinTech-native firms have gained substantial market share. PayPal, for instance, processed over \$1.53 trillion in total payment volume in 2023, making it a dominant force in peer-to-peer and online payments (Capital One Shopping, 2025). High-growth firms such as Stripe (with around \$350 billion in 2023 payment volume) and Block, Inc. (Square) (approximately \$200 billion) have carved out major roles in e-commerce and small-business payments (Clearly Payments, 2024). Together, these firms—whether managing global payment networks, merchant acquiring services, or digital platforms—form the backbone of the U.S. FinTech payments ecosystem.

The structure of the U.S. FinTech industry is characterized by a consolidated core of large firms and a fragmented periphery of niche and emerging players. Over the past decade, the sector has undergone several consolidation waves. The year 2019 saw peak merger activity among processors (e.g., Fiserv–First Data, FIS–Worldpay, Global Payments–TSYS), and 2023 was widely viewed as a “year of consolidation” as the market shifted toward maturity (FinTech Magazine, 2023). These mergers have led to a more concentrated infrastructure, with only a few firms managing most payment volume—though some, such as FIS, have faced post-merger challenges and moved to spin off acquisitions like Worldpay (TechCrunch, 2023). Despite the strength of incumbents, the sector remains dynamic. Thousands of FinTech startups continue to operate across areas like digital banking, lending, and blockchain, and merger and acquisition activity remains high. In 2024, global

FinTech deal volume was on track to exceed 2022 levels, driven in part by “rampant consolidation in the North American market” (Capstone Partners, 2024). Many FinTechs have also pivoted from a “growth at all costs” mindset toward sustainable operations—approximately 50% of publicly traded FinTech companies were profitable by 2022, reflecting greater cost discipline (FinTech Magazine, 2023). Increasingly, the relationship between legacy financial institutions and FinTech firms is one of collaboration rather than competition. Banks now partner with or acquire FinTechs to modernize their offerings, while FinTech firms often rely on bank charters and infrastructure to scale (FinTech Magazine, 2024). This convergence is visible in services like Zelle, a bank-driven digital payments platform that competes with FinTech alternatives, and in traditional banks integrating budgeting tools and AI-driven features once unique to FinTechs. Innovation continues to shape the industry landscape. The Federal Reserve’s launch of FedNow in 2023 brought real-time payments to banks nationwide (TechCrunch, 2023), and digital wallets now account for nearly 50% of U.S. e-commerce transactions (Clearly Payments, 2024). Similarly, “buy now, pay later” (BNPL) services reached around 30% adoption among U.S. consumers in 2023, offered by both FinTech firms like Affirm and incumbent financial institutions (Clearly Payments, 2024). Altogether, the FinTech industry in the U.S. represents a maturing but innovative ecosystem, with a small number of dominant infrastructure providers operating alongside a continually refreshing pool of digital challengers. Together, they are reshaping the payments landscape through a mix of consolidation, collaboration, and technological advancement.

## 5 Geographic Concentration of FinTech Hubs

FinTech activity in the United States is highly clustered in a few key geographic hubs, with several emerging centers gaining national prominence. Silicon Valley (San Francisco Bay Area) remains the foremost FinTech hub, leveraging its deep pool of tech talent and robust venture capital base. The San Francisco area is home to over 600 FinTech startups and major innovators such as Stripe, SoFi, and Chime. In 2023 alone, San Francisco-based FinTech companies raised approximately \$3.8 billion across 176 deals—the highest total in the nation (FinTech Magazine, 2024). New York City is a close rival, benefiting from its status as a global financial center. Hosting over 1,500 FinTech firms, New York blends finance and technology expertise. In 2023, its FinTech companies attracted about \$3.2 billion in venture capital across 159 deals, accounting for roughly 15% of all U.S. FinTech funding (FinTech Magazine, 2024).

Another crucial hub is Atlanta, Georgia, often referred to as “Transaction Alley.” Approximately 70% of U.S. credit, debit, and prepaid card transactions flow through companies with major operations in Georgia, which collectively employ over 40,000 workers in the state (PaymentsJournal, 2023). Atlanta-based firms such as Global Payments, NCR, and Equifax are joined by companies like Fiserv, Worldpay, and InComm, all of which maintain significant operations there, contributing to a dense payments industry cluster. Beyond these top three, additional FinTech hubs are expanding quickly. Los Angeles has experienced notable growth, raising \$1.2 billion in 2023 and

supporting over 250 startups, fueled by the region’s tech and media ecosystem (FinTech Magazine, 2024). Austin, Texas, has emerged as a vibrant FinTech locale—its startup count grew by approximately 70% from 2022 to 2024, while venture capital investment nearly doubled during that period (Foothold America, 2024). Similarly, Miami, Florida, has positioned itself as an up-and-coming FinTech and crypto hub, aided by strong ties to Latin America and a business-friendly environment. Greater Miami now hosts more than 500 FinTech startups, and in 2023 local firms raised nearly \$1 billion in capital (Miami-Dade Beacon Council, 2023).

Other regions such as Chicago—with its strengths in trading technology and payments—and Boston—with its focus on insurance and asset management technologies—also contribute to the national FinTech landscape, albeit on a smaller scale. In summary, U.S. FinTech employment and innovation are concentrated in a handful of metropolitan areas, most notably the Bay Area, New York, and Atlanta, while cities like Los Angeles, Austin, and Miami are rapidly expanding their influence. Each hub’s development is shaped by local strengths: Silicon Valley by tech innovation, New York by financial sector density, and Atlanta by payments infrastructure, with newer hubs leveraging their own competitive advantages to attract FinTech activity.

## 6 Data and Method

A key goal of this project is to illustrate how economists can use public data and APIs—often with AI tools assisting in search and interpretation—to analyze an industry such as NAICS 522320.

**Bureau of Labor Statistics (BLS).** The BLS provides detailed statistics by industry and occupation, including employment, wages, and occupational distribution for many 3-, 4-, and 5-digit NAICS codes (U.S. Bureau of Labor Statistics [BLS], 2025). Through programs such as the Quarterly Census of Employment and Wages and the Occupational Employment and Wage Statistics, researchers can track labor market dynamics in finance and insurance subsectors, including transaction processing. In the context of AI in economics, combining BLS data with AI tools enables automated retrieval and visualization of employment trends for NAICS 522320 and related occupations (e.g., software developers, financial analysts).

**Bureau of Economic Analysis (BEA).** The BEA’s industry accounts report value added (GDP by industry), compensation, and gross operating surplus by sector over time. These data can be used to estimate the contribution of transaction-processing activities to U.S. GDP and to compare its growth with other industries. AI tools can assist in extracting time series, computing growth rates, and generating visualizations to assess whether FinTech-related value added is expanding faster than that of broader financial services.

**FRED (Federal Reserve Economic Data).** FRED aggregates economic series from BLS, BEA, and other federal agencies and provides access via a user-friendly interface and API. For this project, FRED is valuable for accessing time series on employment in financial services, electronic payments, and related indicators. AI tools can assist in identifying relevant data, generating queries to the FRED API, and analyzing co-movements between FinTech activity and macroeconomic

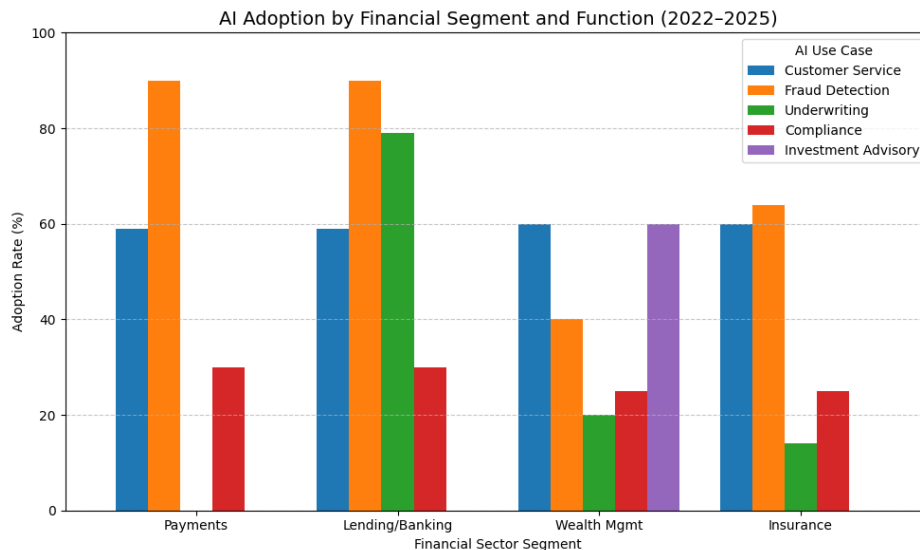


Figure 2: AI Adoption by Financial Segment and Function

trends.

**Firm- and Market-Level Sources (Crunchbase and Industry Reports).** Firm-level datasets like Crunchbase offer insight into FinTech company founding dates, funding rounds, and investor activity, which are critical for analyzing innovation dynamics and patterns of firm entry and exit. Industry reports by McKinsey & Company (2023a, 2023b) and Boston Consulting Group (2024, 2025) synthesize these data to highlight trends in capital allocation, valuation, and firm profitability. In future stages of this project, these sources can be used to assess how many FinTech firms market AI-enabled products and to evaluate the performance of AI-focused startups relative to other FinTech segments.

## 7 The Impact of AI on the FinTech Market Sector

Figure 2 illustrates two key patterns. First, AI adoption is highest in fraud detection and customer service, especially in payments and lending/banking, where more than half of firms report using AI tools. This aligns with the economics of information-intensive, high-volume activities: once an AI model is trained, the marginal cost of applying it across millions of transactions or customer interactions is very low, allowing for substantial scale economies. Second, adoption in underwriting and investment advisory is more concentrated in specific segments—underwriting in lending/banking and investment advisory in wealth management—while compliance shows moderate, non-trivial adoption across all segments. Economically, this suggests that AI is diffusing first into tasks that either (a) directly manage risk (fraud, underwriting, compliance) or (b) automate standardized front-office interactions (customer service), before gradually reaching more discretionary, relationship-driven activities. For NAICS 522320 firms, the high adoption rates in payments-related fraud detection and customer service indicate that AI is already deeply embedded

in production processes, with implications for productivity, risk management, and workforce skill requirements.

Artificial intelligence has become a core production technology in the FinTech ecosystem, particularly in the transaction-processing and payments infrastructure captured by NAICS 522320. In global banking, generative AI is estimated to add between \$200 and \$340 billion in value annually—representing 2.8% to 4.7% of industry revenues—primarily through productivity gains in customer operations, marketing, software, and risk management (McKinsey & Company, 2024). FinTech firms operating payment networks and clearing services are among the earliest adopters of such tools, as their business models rely on processing massive volumes of standardized transactions at low cost and with minimal error. Figure 2 in this report, “AI Adoption by Financial Segment and Function (2022–2025),” summarizes these patterns across four financial segments and five common use cases. Drawing on adoption rates from recent financial sector surveys, it shows that fraud detection and customer service lead in AI adoption, particularly in payments and lending (NVIDIA, 2024; SME Finance Forum, 2024). By contrast, adoption remains more uneven in underwriting, compliance, and investment advisory. Economically, this implies that AI spreads first to domains where marginal costs fall sharply with scale and where predictive accuracy has direct financial consequences (e.g., fraud or credit risk), and only later into areas where human discretion is central.

### **7.0.1 Impacts on Workers and Occupations**

For workers in NAICS 522320, AI is reshaping the task composition of jobs more than eliminating entire occupations. Tasks such as transaction monitoring, first-line customer inquiries, and routine reconciliation are increasingly handled by AI models capable of classifying anomalies or generating real-time responses. This allows human workers to focus on complex exceptions, escalations, and relationship management. Industry case studies report that AI-enabled fraud detection can screen transactions far more efficiently than rule-based systems, and that chatbots can resolve a significant share of customer queries without human intervention (NVIDIA, 2024).

FinTech firms increasingly demand hybrid skill sets that combine domain knowledge in finance with data literacy and model governance. Surveys show that AI is used across front-office, risk, and operational functions, implying rising demand for roles such as AI product owners, model risk managers, and analytics-driven product managers (NVIDIA, 2024). These positions complement rather than replace traditional economic and managerial skills—workers must be able to interpret model outputs, question assumptions, and translate technical results into actionable business or policy insights.

At the same time, global research highlights the potential for labor market polarization. The International Monetary Fund (IMF) estimates that approximately 60% of jobs in advanced economies are exposed to AI; about half of these may benefit from productivity gains, while the other half could face job displacement or wage pressure (IMF, 2024). A BCG employee survey finds that regular users of generative AI save time but also report heightened anxiety about job security (Boston



Consulting Group [BCG], 2024). In the transaction-processing sector, this suggests that routine roles may contract over time, while demand rises for higher-skill positions focused on analysis, oversight, and strategic implementation—raising important questions about retraining and career pathways.

### **7.0.2 Impacts on Firms: Costs, Competition, and Market Power**

For firms in NAICS 522320, AI is transforming cost structures and competitive dynamics. Once a fraud detection or customer service model is trained, the marginal cost of applying it across millions of interactions approaches zero. This scale advantage is particularly valuable in transaction processing, where speed, accuracy, and volume are critical. McKinsey’s estimates indicate that generative AI delivers several percentage points of additional revenue-equivalent productivity, which firms can retain as margin or pass on to customers via lower fees (McKinsey & Company, 2024).

AI also reinforces data-driven competitive advantages. Large incumbents in payments and processing possess extensive historical datasets on customer behavior and fraud patterns. Because model accuracy improves with larger, more diverse training data, these firms can often outperform newer entrants in predictive tasks, increasing market concentration. BCG’s 2024 global FinTech report finds that top-quartile firms—many of them scaled incumbents—are widening performance gaps relative to smaller peers, as the industry shifts from “growth at all costs” to a model centered on profitability and operational discipline (BCG, 2024).

Nevertheless, AI also enables targeted innovation and lowers barriers to entry in specific niches. A startup can train a specialized model—for example, to detect card-not-present fraud or assess real-time merchant risk—and offer it as a service to financial institutions. This dynamic explains the industry’s bifurcation into “scaled winners” and “emerging disruptors” (QED Investors, 2024). Consolidation and innovation now coexist, each accelerated by AI capabilities.

### **7.0.3 Risks and Harms**

Despite its promise, AI introduces significant risks and potential market failures in FinTech. On the labor front, highly automatable roles may disappear without adequate reskilling or support, exacerbating inequality and job insecurity (IMF, 2024).

On the consumer side, AI models trained on biased or incomplete financial data may reproduce and amplify discrimination in credit decisions, fraud detection, or identity verification. The World Economic Forum (2025) warns that these complex, proprietary models are often difficult to interpret or audit, increasing the risk of unfair outcomes on a large scale.

Systemically, the Financial Stability Board (2025) has highlighted risks arising from overreliance on a narrow set of AI vendors or similar model architectures across firms. Because NAICS 522320 firms play a central role in financial infrastructure, disruptions—whether due to model failure, cyberattacks, or vendor outages—could cascade through the broader economy. These challenges call for strong model governance, transparency, and redundancy in AI applications across the financial system.

#### 7.0.4 Opportunities and Future Pathways

AI also creates significant opportunities for innovation and inclusion in FinTech. Advanced fraud detection tools can reduce losses for firms and consumers alike. Surveys show that nearly three-quarters of financial institutions already use AI for fraud prevention, and usage is expected to grow further in coming years (SME Finance Forum, 2024). In the payments segment, this aligns with Figure 2’s finding that fraud detection has the highest adoption rate, suggesting that AI can reduce deadweight loss and enhance confidence in digital payments.

AI-driven personalization and modeling also enable new product offerings. By analyzing transaction histories and non-traditional data, firms can offer tailored digital wallets, micro-loans, or budgeting tools at scale. Recent research suggests that combining generative AI with mobile and open-banking platforms could promote financial inclusion for underserved populations—provided transparency and fairness are built into the design (Consultative Group to Assist the Poor [CGAP], 2024).

Finally, for early-career professionals, the rise of AI in NAICS 522320 unlocks new career paths. Consulting reports note that FinTech is among the sectors realizing the greatest returns from AI investment, with firms prioritizing workforce upskilling (Business Insider, 2025). Emerging roles at the intersection of economics, analytics, and management—such as strategy analysts, product managers, and model governance leads—are increasingly critical to guiding AI development and deployment in financial infrastructure.

In summary, AI is deeply embedded in the production processes of the FinTech industry, particularly in transaction processing and payments. It reshapes work, transforms firm behavior, and offers both opportunities and systemic challenges. Navigating this transition effectively will require responsible innovation, continuous reskilling, and smart regulation at the intersection of technology and economics.

## 8 Findings and Discussion

The analysis of the U.S. financial technology (FinTech) sector, particularly under NAICS 522320, reveals a dynamic and maturing industry characterized by high growth, structural consolidation, technological adoption, and evolving labor dynamics. Key economic indicators—such as sustained double-digit revenue growth, increased firm profitability, and significant venture investment—consistently support the classification of this sector as being in a late-stage growth phase. Revenue estimates reconstructed from BCG and QED Investors indicate that global FinTech revenues rose from approximately \$60 billion in 2015 to nearly \$300 billion by 2024, with U.S. firms representing a substantial share of that growth. This trend suggests continued expansion, albeit with a growing emphasis on profitability and operational discipline.

The industry structure further reflects this evolution. A few large firms dominate the transaction-processing and payment infrastructure segment. Visa, Mastercard, Fiserv, and FIS anchor the core of the industry, with massive transaction volumes and extensive infrastructure. At the same time,

newer entrants such as Stripe and Block (Square) have captured significant market share through innovation and agility. The broader FinTech ecosystem remains competitive, with thousands of smaller firms operating across verticals. Consolidation trends and strategic acquisitions over the past five years reflect a shift toward scale and integration, yet continued innovation at the periphery ensures that the industry remains dynamic. Collaboration between incumbents and fintech-native firms—particularly in the areas of digital payments and real-time settlement—suggests convergence rather than displacement.

Artificial intelligence (AI) is accelerating this evolution by reshaping both firm-level strategies and occupational demands. AI is most widely adopted in fraud detection and customer service functions, especially among firms in the payments segment. Tasks historically performed by large teams—such as transaction monitoring or customer queries—are increasingly automated, reducing marginal costs and boosting productivity. Simultaneously, new hybrid roles are emerging that require fluency in financial operations, data analytics, and model governance. These transitions are not without risk: automation may displace some routine roles, and the reliance on proprietary AI models raises concerns about bias, exclusion, and systemic vulnerabilities.

Geographically, fintech activity remains concentrated in a few major hubs. Silicon Valley, New York, and Atlanta collectively anchor the U.S. FinTech sector. San Francisco and New York serve as the leading innovation and capital centers, while Atlanta continues to dominate transaction processing. Secondary hubs such as Austin, Miami, and Los Angeles are growing rapidly and expanding the geographic footprint of FinTech employment and investment. The distribution of firms reflects both historical advantages and contemporary shifts in digital infrastructure and talent flows.

Overall, the U.S. FinTech industry sits at a pivotal juncture: no longer emerging but not yet saturated. The evidence suggests it is navigating the transition from rapid scaling to strategic consolidation and productivity-led growth. Continued attention to innovation, ethical AI deployment, and equitable labor transitions will determine how the sector evolves over the next decade.

## 9 Personal Opportunity and Skills Plan

Several aspects of the FinTech industry appeal to me as a future job-seeker, particularly the intersection of finance, analytics, and emerging technologies. I am especially interested in three roles: an analytics-driven product manager, a financial analyst, and a model risk manager. Each of these roles combines financial knowledge with analytical thinking and decision-making, and all involve working in a collaborative environment where I can continue to learn and grow professionally.

Among these options, the role that aligns most closely with my background and interests is an analytics-driven product manager. This position bridges product design and business strategy, using data to guide product development. My coursework in small business finance, policy in private markets, and econometrics has prepared me to understand market dynamics, consumer behavior, and financial analysis. I enjoy working on complex problems with others, which makes

the team-oriented and iterative nature of product management especially appealing.

Financial analyst is another strong match for my skills and interests. In this role, I would apply market and operational data to help clients with budgeting, financial planning, and investment strategy. Technological innovation is reshaping this position rapidly; as AI and analytics tools evolve, financial analysts are expected to adopt and integrate these resources into their work to increase precision and efficiency.

The third role I am exploring is that of a model risk manager. In the FinTech sector, these professionals monitor and manage the risks associated with AI models used in fraud detection, underwriting, and customer service. Because these models often deal with sensitive customer data and decisions, strong oversight is essential. This role appeals to me because it sits at the critical intersection of AI, ethics, and financial decision-making.

The FinTech sector values candidates who possess both domain expertise and technical fluency. For roles like product manager, analyst, or model risk manager, essential skills include data analysis, financial operations knowledge, familiarity with AI model concepts, and communication skills to bridge teams across business and technical areas. Technical proficiency with tools like Python, SQL, R, and Tableau is increasingly expected. Professionals in this field also need to understand how AI models are built, evaluated, and governed—especially as these models become more central to decision-making.

In addition to technical skills, collaboration and communication are crucial. These roles require working closely with developers, financial professionals, and non-technical stakeholders. Explaining insights clearly to mixed audiences is just as important as producing them. My current academic training in economics and business analytics has prepared me with a strong foundation in data interpretation and market reasoning, but I recognize that continued upskilling will be key to my success in this industry.

My current strengths include a strong foundation in economics, applied analytics, and business reasoning. Through my undergraduate and graduate coursework, I have developed an understanding of how markets operate, how to conduct empirical analysis, and how to approach strategic decision-making. I also have exposure to tools like R and Microsoft Excel.

At the same time, I recognize areas where I need further development. My most important gap is technical proficiency in programming—especially in Python, which is widely used in AI development and financial analytics. I am also seeking to build deeper familiarity with AI modeling and its applications in financial services. While my background in economics introduces some finance and marketing principles, I would benefit from more formal instruction in these subjects to support product development and investment analysis. Gaining introductory experience in marketing analytics and risk modeling will help me become a more well-rounded candidate for roles at the intersection of finance and technology.

In the next 6 to 12 months, I will pursue the following learning goals to strengthen my readiness for the FinTech workforce:

Learn Python through an online course. I will start by exploring structured beginner classes

on platforms like LinkedIn Learning (available through UMass) or Coursera. If needed, I will supplement these with free YouTube tutorials to reinforce core programming concepts.

Develop basic familiarity with AI modeling. Because formal courses in this area are limited, I will read at least three academic papers or industry white papers to better understand how AI models are built, evaluated, and used in financial contexts.

Explore certification options in finance and marketing. I will meet with my Isenberg advisor to identify finance or marketing courses I can take for credit, or certification options that can be completed by Summer 2026.

Practice applied analytics tools. I will continue to develop skills in R and begin learning tools like Tableau or SQL if opportunities arise in my coursework or through online tutorials.

Build a small portfolio. Where possible, I will apply what I learn to personal or class projects—such as designing a financial product prototype, analyzing fintech market trends, or visualizing economic data using real-world sources.

This plan reflects both my long-term aspirations and my current capacity as a student. By focusing on practical, attainable goals over the next year, I will expand my qualifications and improve my readiness to pursue roles that align with my interests at the intersection of economics, technology, and business strategy.

## 10 Reflection

Using AI to aid in the creation of this project has alerted me to the vast and growing capabilities of modern technology. When ChatGPT was first launched, I used it to help me with homework and to give context for new concepts I was learning in school. I noticed that it was often wrong, and I had to double-check all of its output. While completing this project, I learned that there are ways to significantly improve the accuracy of AI-generated content by guiding it to use factually correct output from credible web sources. This will be beneficial to me when I use AI in the future.

I learned that AI is incredible at scouring the web for resources that can be used as ideas or credible sources while writing a paper or researching a specific topic. Finding sources is often the hardest part of writing an essay because of the overwhelming amount of information available online. Using AI is incredibly efficient, even though all sources should be double-checked to confirm their credibility.

Overleaf and Colab are two useful platforms I discovered through this class. Colab is a great resource for beginner coders, and I will be using it when I learn Python. Overleaf is slightly more advanced but a great resource for formatting PowerPoint slides, research papers, and essays. ChatGPT is also incredible at creating correctly formatted bibliographies. Platforms such as BibMe are also useful for this, but are less convenient and often require a subscription.

While working on my project, I found myself revising paragraphs I had written earlier, as the overall flow improved when newer sections were written with more context. I found that AI works best with significant context and clear guidelines, and that the paper flowed better if some sections

were redone with the most recently written paragraphs added as context.

Learning about the FinTech sector has enlightened me that I possess a unique blend of skills that can be applicable to many different markets. I now see that further education is necessary for me to reach my full potential, especially since many of these fields overlap with computer science and AI modeling. When I started this paper, I believed that I would be going into data analysis or economic consulting. Now, I have an interest in AI and believe that it will be crucial to whichever industry I enter in the future. I will likely be working closely with AI as well as other emerging technologies. AI is, and will increasingly be, deeply embedded in data science and business. Writing this paper has broadened my understanding of both the current landscape and the future potential of the business world, and it has encouraged me to get ahead of the curve to ensure success.

## 11 Conclusion and Implications

This report concludes that the U.S. financial technology sector—specifically within NAICS 522320—is best characterized as a growing industry approaching maturity. The sector has experienced rapid expansion over the past decade, driven by a combination of digital transformation, strong venture capital investment, and the mainstream adoption of financial technology services. While the growth trajectory remains positive, recent trends such as market consolidation, a shift toward profitability, and AI-driven efficiency gains suggest that the industry is transitioning into a more disciplined and sustainable phase.

Artificial intelligence plays a central role in shaping this evolution. It is already embedded in core operational areas such as fraud detection, customer service, and real-time payments, allowing firms to reduce costs and scale rapidly. At the same time, AI introduces new risks related to labor displacement, algorithmic bias, and system-level vulnerabilities—underscoring the need for responsible deployment and regulatory oversight. The geographic concentration of fintech hubs in places like San Francisco, New York, and Atlanta, along with the rise of new centers such as Austin and Miami, reflects the industry’s dependence on both financial infrastructure and technical talent.

The implications for economists, firms, and future workers are clear: sustained success in this sector will require adaptability, cross-disciplinary skill sets, and ongoing engagement with emerging technologies. For students preparing to enter the workforce, roles at the intersection of economics, analytics, and management—particularly within AI-enabled financial firms—offer promising and dynamic career paths.

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