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REVIEW ARTICLE

Campfire paradox: Reassessing career development and vocational education for financial professionals in the artificial intelligence era

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ABSTRACT

Vocational educators and career advisors commonly urge aspiring financial professionals to aggressively embrace artificial intelligence (AI) to secure their future. This paper challenges that prevailing wisdom by introducing the "campfire paradox", a phenomenon where the earliest and most enthusiastic adopters of a new technology face the greatest risk of career displacement. Drawing on a decade of observation of the Internet+ and AI's impact on finance, we argue that this paradox is particularly acute in risk-averse industries. Through comparative case studies, the paper investigates the profound, often negative, vocational consequences for practitioners, revealing how over-specialization in nascent technologies can lead to professional vulnerability. We contend that the core function of finance, prudent risk management, remains a fundamentally human endeavor that current AI cannot yet replace, making those who pivot too quickly prime candidates to be "burned". The discussion extends this cautionary analysis to vocational education, questioning pedagogical strategies that prioritize specific tech skills over developing students' irreplaceable core competencies, such as critical judgment and complex problem-solving. By re-examining the fundamental relationship between technology, labor, and industry demand, this paper provides a critical lens for educators, students, and young professionals. It concludes with strategic advice on building adaptable, resilient careers by engaging with new technologies cautiously while doubling down on enduring human value.

Key words: Internet+, artificial intelligence, financial industry, financial practitioners, financial jobs

INTRODUCTION

In 2024, the following result of a census commissioned by the National Bureau of Statistics of China drew public attention: That by the end of 2023, the total number of practitioners in the country's financial industry was 12.355 million, 32% lower than five years earlier, in 2018. At the same time, by the end of 2023, the total assets of financial corporate legal entities in China were approximately 50.6 trillion yuan, 57.2% higher than at the end of 2018 (National Bureau of Statistics, 2024). The financial industry has been rapidly developing while quickly eliminating redundant practitioners. Structurally, the insurance industry was affected most, with a manpower decline of up to 44%. Numerous insurance sales jobs were replaced by telephone and Internet sales jobs, largely due to online marketing. Analyses have indicated that the decrease in insurance practitioners might also be attributed to changes in statistical categories, as some individual insurance agents not employed by companies were not included in the statistics. Nevertheless, it is undeniable

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that a large number of offline insurance practitioners have been replaced by new technologies.

From the perspective of technological transformation in the financial industry, the past decade has been the decade of Internet plus (Internet+). While other financial technology innovations—such as blockchain, big data, and the Internet of Things—have also received significant attention from the financial industry and fintech companies, Internet finance (IF) has remained the most important field for attracting capital and labor inflows over the past decade. Nevertheless, in the next decade, artificial intelligence (AI) might replace IF as the most critical arena for fintech (Financial Stability Board, 2020; Sahay *et al.*, 2020). To gain valuable insights into this possible shift, this article reflects on the impact of IF on financial industry practitioners over the past decade and explores the reasons behind it.

IMPACT OF INTERNET+ ON THE FINANCIAL INDUSTRY AND PRACTITIONERS

The concept of Internet+ was officially introduced by the State Council of the People's Republic of China (2015) as the use of Internet technologies to transform and upgrade traditional industries. Internet+ has brought revolutionary changes to numerous sectors, including the financial industry—which is both traditional and deeply influential on the broader economy and society. Initially, expectations of the impact of Internet+ were extremely high. Many finance and technology professionals believed that the integration of these two fields would yield significant synergy that would drive the exponential growth of the financial industry and expand career development opportunities (McKinsey Global Institute, 2021). Thus, Internet+ prompted numerous professionals and managers from traditional financial institutions to jump ship and join IF enterprises.

This narrative is even grander for capital markets, where finance and technology are both hot topics. In fact, finance embodies capital markets. Although the financial industry has a unique and vital position within the broader economy, it has historically become a pricing valley in capital markets. Financial companies generally have very low price-to-earnings ratios, and many listed financial firms even trade below a price-to-book ratio of 1. This stands in stark contrast to technology companies, which frequently boast price-to-earnings ratios in the hundreds. Consequently, many investors believe that integrating technology concepts into finance would significantly boost valuation and lead to higher capital market success.

Internet+ has indeed greatly enhanced the efficiency of financial services, expanded the supply of financial services, created new demands, and consequently had a tremendous impact on financial practitioners. In particular, many low-end, face-to-face offline financial service jobs have been replaced by online services.

The application of Internet technology in the financial industry has also ruthlessly played out the story of "machines devouring jobs" (Allen *et al.*, 2014). For example, in the past few years many insurance companies have greatly eliminated offline auto insurance sales, replacing them with telephone and online sales, thereby substantially reducing labor costs. In the banking sector, the abundance of self-service machines in lobbies has greatly decreased employment of bank tellers, leading many banks to open only one counter each day (Guo, 2023). Online customer acquisition, account application processing and approval, and lending have had a tremendous impact on traditional account managers and loan officers regarding employment.

The widespread use of the Internet and other digital technologies, and the resulting elimination of simple laborers who depended on face-to-face marketing services, aligned with people's expectations. However, their impact on IF practitioners was somewhat unexpected, as they experienced a roller-coaster trend of initial highs followed by lows.

In retrospect, the period after 2015 was the epic era of IF in China. By 2017, there were more than 5600 peer-to-peer (P2P) lending platforms nationwide, with many platforms handling transaction volumes exceeding hundreds of billions of yuan (Jiang *et al.*, 2021). Online consumer loans, insurance policies, securities, and other financial products proliferated, making the Internet seem like a magic wand—capable of turning stone into gold and transforming the mundane into the miraculous. Every sector flourished, and the future appeared bright. IF companies not only attract capital and funds but also become magnets for professionals and talents. According to a financial risk expert who had returned to China from the United States, nearly every IF company and P2P platform in China at this time considered a Chief Risk Officer with experience at Capital One a standard hire. Large numbers of traditional bank managers and financial professionals embraced, mastered, and rushed to enter the IF industry, including leading firms such as Ant Financial and WeBank, as well as many lesser-known IF platforms; and career planners widely recommended IF as a promising path. It was commonly believed that acquiring IF expertise would confer a competitive edge in future job markets and early entry into the sector might position individuals as elite players atop the financial pyramid.

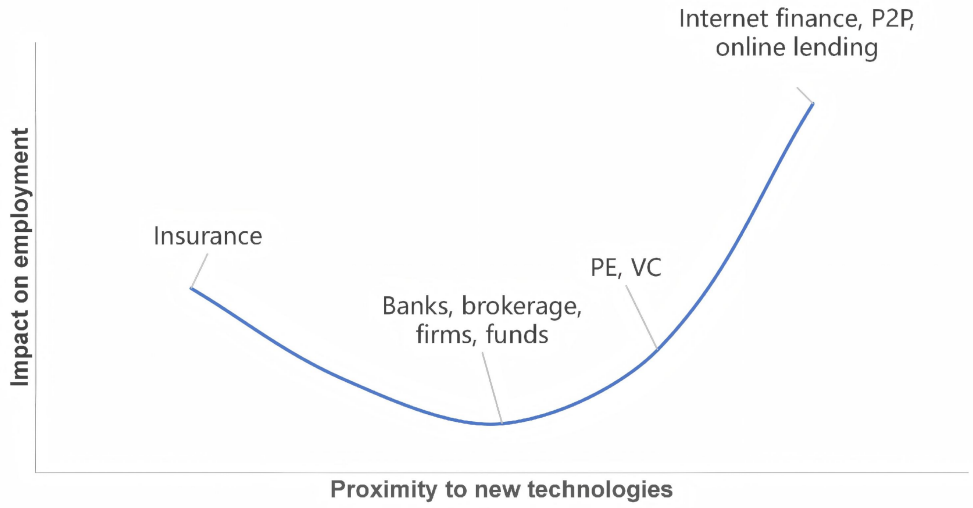

Figure 1. Impact of Internet+ on employment in various financial sectors. P2P, peer-to-peer; PE, private equity; VC, venture capital.

Then, we witnessed what unfolded in the following years. The so-called IF boom created enormous speculative bubbles, resulting in countless losses for investors. Of the more than 5000 once-thriving P2P lending companies, fewer than 10 were operating normally. In 2024, a colleague—formerly the president of a leading domestic IF company—observed in group photos from IF conferences he had attended that 80% of the companies no longer existed. By the end of 2024, the P2P business had essentially been cleared to zero, with the industry closure rate exceeding 99%. These closures caused numerous practitioners to lose their jobs, and some faced even greater troubles, including legal issues.

Ultimately, with the bursting of the IF bubble, many of the industry's earliest entrants were severely affected. Across financial subsectors, the impact of Internet+ on practitioners resembled an inverted parabolic distribution: Industries furthest from the new technology experienced the highest elimination rates, which then gradually decreased—while the subsectors closest to the new technology again reached a peak in elimination rates.

Figure 1 suggests that industries closest to new technologies are not necessarily those that survive the wave of technological change. The reasons are complex, including the immaturity and risks of new technologies, excessive influx of capital and manpower, and oversupply, to name a few.

In the practice of IF, those closest to the new technology suffered the greatest adverse impact. Consider the following scene: On a cold winter night, many lost people are wandering in the wilderness. Suddenly, a massive campfire is lit somewhere. Everyone rushes toward it. By sunrise, those who collapse are the exhausted ones who could not reach the fire and freeze to death, and the brave ones who are pushed into the fire pit in the crowd. This is the campfire paradox.

REASONS FOR THE NEGATIVE IMPACT OF IF

Internet+ has played a significant role in many industries, especially in some traditional sectors such as retail and media, with devastating consequences. In the financial industry, it must be highlighted that Internet+ has introduced numerous positive changes, but it has also caused critical challenges for the industry itself and for many of its practitioners. There are mainly two reasons for this: First, the new technology has amplified risks; and second, it has failed to facilitate the core functions of the financial industry.

First, from the risk perspective, the application of Internet technologies in the financial industry, especially P2P technology, has greatly expanded credit risk. While new technology brings convenience, it does not enhance risk-control capabilities. Ironically, with the massive entry of competitors, involutionary competition has prompted many enterprises to substantially relax their financial risk management practices. Returning to the campfire paradox, some rational individuals might have walked into the fire because they were pushed into the fire pit by those coming from behind. People rushing from all directions, eager to get close to the flames, may push the first ones to reach the campfire directly into the fire pit.

Researchers have reached similar conclusions regarding

the development of fintech. Elekdag *et al.* (2024) revisited a continuing debate about the impact of competition on financial stability, in which one side argues that greater competition encourages greater risk taking (the competition-fragility hypothesis) while the other side asserts that greater competition can enhance financial stability (the competition-stability hypothesis). Their findings were drawn from more than 10,000 databases covering all kinds of financial institutions and global fintech activities. A strong relationship was found between increased fintech influence and increased risk taking, supporting the competition-fragility hypothesis rather than the competition-stability hypothesis. In other words, greater competition in the financial industry has intensified risk taking, and conversely, the extensive use of fintech has increased the risks borne by enterprises.

Second, from the functional perspective, the core functions, as well as the basic logics, of the financial industry should not be ignored. How can Internet+ solve or enhance these functions? Why did Internet+ bring significant positive changes to many traditional industries but cause a mess in the financial industry? What is the difference between the financial industry and other traditional industries in this regard? In 2014, while I was working at a large financial enterprise, we had an internal executive training class. The trainer asked us participants to share our views on whether IF would make a significant contribution to our industry, arguing that its impact has been exaggerated mainly because Internet technologies do not have particular advantages in supporting the core functions of the financial industry. While they have many characteristics, the most prominent being high efficiency, convenience, interactivity, and personalization, these characteristics have had the greatest impact on two traditional industries. The first is the retail industry, where Internet+ makes shopping faster through next-day or even same-day delivery, significantly enhancing convenience; substantially personalizes product selection by enabling the purchase of many niche and outdated products from afar through search and express delivery; and notably enhances interactivity by supporting customer evaluations and after-sales experiences that strongly influence seller behavior. These characteristics are unattainable in traditional retail and have undoubtedly revolutionized the retail landscape. The second industry is the media industry. Traditional media—such as newspapers, television, radio, and even websites—typically deliver content unilaterally, not allowing for personalized selection; but in the Internet era, selection can be personalized through search, customization, and push notifications, and interaction with content creators is possible, such as during live streaming.

Therefore, the Internet's high efficiency, personalization, and interactivity have significantly benefited the retail and media industries by enhancing their core functions. Additionally, the Internet has driven notable progress in many other industries that rely on interpersonal and offline interactions.

However, this is not the case in the financial industry. Its core functions include facilitating the flow of funds, preserving and enhancing customer value, and identifying, managing, and mitigating risks. In a sense, the financial industry seeks to cover risks with returns to achieve the expected profits. Unfortunately, over the past decade, IF technologies have not delivered substantial improvements in these areas. In terms of risk control, they have not demonstrated greater effectiveness than traditional financial risk management techniques. Moreover, their main strengths—such as convenience, personalization, and interactivity—are not the aspects that financial customers value most. This is explained as follows. (1) Convenience: borrowers hope to borrow money conveniently, but investors would not want the institution they invest in to lend money conveniently—meaning rashly—or in ways they do not approve of. (2) Personalization: when customers deposit money in a financial institution or purchase wealth management products, apart from safety, what they care about most might be only the terms and the interest rate. They might not really care which bond the wealth management products are invested in or which nonstandard project they fund. For insurance products, which are complex, ordinary customers are unlikely to understand the differences between them and have to rely on agents to choose for them, making personalized search irrelevant for them. (3) Interactivity: when customers purchase wealth management or insurance products, or invest in stocks through a securities company, they do not care which product manager serves them, nor do they need to communicate with the financial institution's back-end service staff. Most financial service customers are concerned only with the preservation and enhancement of value, safety, interest rates, and so on. These factors are not closely related to convenience, personalization, and interactivity.

Therefore, generally speaking, the prominent advantages of Internet technology have not contributed meaningfully to strengthening the core functions of the financial industry. This may be the fundamental reason for the formation of bubbles in IF over the past decade.

IMPACT OF AI ON THE FINANCIAL INDUSTRY AND ITS PRACTITIONERS

AI is rapidly penetrating financial institutions in China—particularly since the emergence of DeepSeek (a large language model developed in Hangzhou, China) during

the Spring Festival of 2025—leading to widespread adoption of large-scale models (LSMs) and generative AI (GenAI) in financial enterprises.

Within only a few months, significant changes have occurred. A year ago, discussions about AI in financial institutions were still largely conceptual, often limited to ideas such as digital employees or robotic outbound. Today, AI applications have permeated nearly every aspect of financial operations. For instance, some bank managers have told me that they now utilize DeepSeek models to generate credit reports. In my own daily work, an increasing number of employees rely on DeepSeek to draft and submit their business analysis reports.

According to the 2024 Chief Insight Report on Chinese Fintech Enterprises (2024 China Fintech Report) released by KMPG China and the National Internet Finance Association of China Financial Technology Development and Research Committee (2024), among the more than 280 publicly disclosed projects involving the innovation of the People's Bank of China's regulatory tools using fintech, 72.9% and 69.3% are extensively deploying big data and AI applications, respectively (Barocas & Selbst, 2016). Meanwhile, GenAI and LSMs are emerging vigorously in the financial sector and driving the transformation of financial business models.

The 2024 China Fintech Report further indicates that the distribution pattern of core technological elements in the fintech sector is changing notably with the rapid innovation and deepening application of frontier technologies. Against the backdrop of rapid advances in AI large language model technology, approximately 18% of financial enterprises have identified AI as their core technological element this year, marking a considerable increase from 13% last year. This clearly demonstrates that fintech enterprises are actively embracing new technologies and paradigms.

Within the AI domain, machine learning (ML), financial LSMs, and GenAI are equally prominent at 55%, representing the most closely watched subfields. However, only 11% of enterprises selected financial LSMs and GenAI as their top priority—significantly lower than the 44% that prioritized ML—largely because large language model technologies are still being optimized, and their commercial models remain exploratory.

As these technologies become more deeply integrated into operations, concerns about their reliability and accuracy are growing accordingly. A recent anecdote recounts how an employee from a legal and compliance department submitted a compliance analysis report generated by AI but discovered later that the report incorrectly cited some regulatory documents (from personal communication). This error likely resulted from AI's referencing of Internet content rather than the original regulatory documents. These mistakes can have more serious consequences in real-world scenarios. Moreover, institutions using AI for risk screening have observed that these tools often exhibit similar patterns in enterprise selection (PwC, 2023). Although individual risks may seem manageable when assessed in isolation, they can be amplified when many investors select the same enterprises—inadvertently increasing concentration risk.

Foreign institutions have also noted this. The U.S. Department of the Treasury (2024) report "The Use, Opportunities, and Risks of Artificial Intelligence in Financial Services" highlighted the increasing adoption of AI across the financial sector and emphasized that AI, including GenAI, has the potential to expand opportunities but can also amplify certain risks, such as related to bias, data privacy, and third-party service providers.

Indeed, algorithmic bias is a thorny challenge accompanying AI integration in finance. The European Commission (2021) reported that up to 25% of AI-driven credit decisions in European banks exhibited unintended racial or gender biases due to flawed training data. Similarly, Kleinberg *et al.* (2019) analyzed U.S. lending data and found that algorithmic models exacerbate unequal access to credit—but could reduce discrimination by 40% if properly regulated through robust human oversight frameworks. To mitigate these substitution effects and safeguard ethical AI deployment across financial roles, policymakers and compliance officers need to prioritize the development of adaptive regulations, such as mandatory bias audits and explainability requirements.

However, bias is only one aspect of the regulatory challenges in the financial sector concerning the Internet and AI technologies. Given these challenges, careers in finance can evolve responsibly only by carefully analyzing the core value of each role in relation to AI's strengths and regulatory requirements—thereby turning a double-edged sword into a shield.

Moreover, while Internet and AI technologies are revolutionizing the financial industry in developed countries, they are both turning stone into gold and brewing unexpected troubles in financial systems in emerging economies due to uneven infrastructure, patchwork regulations, and varying levels of financial literacy. For example, in Kenya, AI-enhanced mobile money platforms such as M-Pesa (by Safaricom, Kenya's largest mobile-network operator) boosted financial inclusion by 22% from 2014 to 2021 (GSMA, 2020; Ndung'u, 2018; World Bank Group, 2025) but have also

disrupted traditional banking jobs due to outdated regulations and limited financial literacy—reported at only 35% of the population. Similarly, in India, fintech companies such as Paytm have used AI credit scoring to extend loans to 150 million underserved users by 2022 (Alves *et al.*, 2021; Chen *et al.*, 2019; Ray *et al.*, 2024); but as a result, numerous local accountants and risk assessors have been displaced due to limited (only 25%) rural Internet penetration and fragmented regulations. Thus, AI has functioned as a double-edged sword—carving out new financial frontiers while disrupting existing systems (Deloitte, 2017). These case studies from emerging markets illustrate that analyzing the core functions of finance alongside AI's advantages and substitution effects requires a global perspective—one that informs career evolution strategies tailored to help professionals bridge literacy gaps, allowing the future to flourish across both developed and emerging regions.

Returning to this article's central theme, do financial enterprises in the AI era face a "campfire paradox"? Could the earliest adopters of AI be the first to get burned—or even consumed—by its flames? This concern arises from the unique nature of financial institutions, which often prioritize risk management over convenience. Even if AI tools can generate 1000 analytical reports or craft 1000 polished presentations, what keeps managers awake at night is whether AI's conclusions can truly and effectively identify and mitigate risk. Based on current practices, a definitive answer remains elusive.

Today, many educators and vocational education planners are advising financial professionals to embrace and master AI, and even to pivot into the AI industry early. Admittedly, learning, understanding, and mastering new technologies is essential. However, widespread AI adoption may not always yield positive outcomes. This applies not only to the financial sector, but even more so to education. In many university classrooms, students rely heavily on AI—not only to write essays, a trend that has already raised concerns among professors, but also to compile materials and draft reports—which, in some respects, undermines their writing skills and academic development.

In this context, two key issues need to be considered from a career planning perspective: First, the impact of new technologies on industry development, and second, their effect on labor supply and demand. While new technologies may boost productivity and reduce labor needs, they can also generate or expand overall market demand. If this expanded demand outweighs labor savings, the net effect could positively impact employment within the sector.

While Internet+ and AI have reshaped finance over the past decade, the following fundamental questions must be reconsidered to ensure regulation, governance, and risk management keep pace with technological change: What is the core function of finance? What is AI's core advantage How significant is its substitution effect? How might careers evolve under its influence? These inquiries resonate across every financial domain—risk management, accounting, credit, supply chains, and beyond.

In fact, certain trends are already beginning to surface. The 2024 China Fintech Report (KPMG China & National Internet Finance Association of China Financial Technology Development and Research Committee, 2024) noted that, contrary to expectations, the proportion of tech personnel in fintech firms has declined year by year. Only 32% of the surveyed companies reported that tech employees comprise over 60% of their workforce—down from 42% in 2022 and 39% in 2023. Moreover, 31% of the companies identified their top priority for the next 3-5 years as "expanding markets and building brands", surpassing "deepening technical expertise to enhance competitiveness". Thus, the report concluded that firms are shifting their focus toward market expansion and brand development in response to internal and external economic pressures and the maturation of fintech.

Perhaps some fintech enterprises and professionals have learned to stand at a distance from the campfire—close enough to it to stay warm but far enough to watch the horizon for new fires that may ignite across the plains.

CAREER OUTLOOK AND ADVICE FOR FUTURE YOUNG FINANCIAL PRACTITIONERS

As the readers of this journal likely include vocational and technical education teachers and students, preliminary suggestions will be offered from the perspective of a financial industry practitioner.

Financial career success hinges on careful assessment of the disruptions and transformations that booming AI technologies are certain to bring to traditional industries (Lewinson, 2021). Recent or prospective entrants to the financial workforce should be aware that the sector's employment landscape is under immense pressure from economic downturns and technological disruptions, heightening the likelihood of discouraging news. To illustrate this, recent developments in two traditionally prominent subsectors of finance—securities and banking—warrant closer examination.

First, in the securities industry, 36 domestic firms in China announced their closure of a total of 213 branches

and subsidiaries in 2024—averaging one shutdown every one to two days. According to a recent report, the industry employed 332,400 people by the fourth quarter of 2024, marking a decline of 18,000 from the end of 2023. Primarily displaced were general business staff and brokers (Hu, 2024).

Second, in banking, leading global bank Citigroup (2025) recently announced its plans to streamline its global operations, including downsizing its Global Technology Solutions Center—Citigroup Financial Information Services (China) Co., Ltd. (Citigroup Financial) —in Shanghai and Dalian. This restructuring will displace approximately 4000 technology staff, including third-party personnel and approximately 500 individuals.

The challenges faced by Chinese financial practitioners are not unique, though. A similar international example is the restructuring of HSBC, one of the world's largest banking and financial services organizations. In 2020, it announced a plan to cut 35,000 jobs over three years as part of its strategy to reduce costs and shift its focus toward digital banking and high-growth markets in Asia. This restructuring disproportionately affected technology roles and junior staff, highlighting the vulnerability of younger employees even in globally renowned institutions (CBS News, 2020).

Furthermore, the impact of technological disruptions and economic shifts on the financial job market extends beyond mainland China to Hong Kong, Macau, Southeast Asia, and globally, where financial hubs and emerging markets coexist. In Hong Kong, the rapid adoption of fintech solutions and digital banking has significantly reduced traditional banking roles and entry-level opportunities for young professionals due to the contraction of physical branch networks (Pang, 2024). In Macau, the financial sector—often intertwined with the gaming industry—faces pressure to integrate technology for efficiency yet offers limited opportunities for local youth in a highly specialized market. Across Southeast Asia, countries such as Singapore and Malaysia are aggressively positioning themselves as Asia's fintech leaders, but their young professionals often encounter a skills mismatch due to limited advanced training and international exposure in the financial sector (Beck, 2020).

The financial industry's "winter" has affected not only traditional banking but also advanced investment banking. The impact is not limited to frontline marketing staff but extends to technology personnel within financial institutions. Ironically, those driving technological transformation are often the first to be displaced by it.

In academia, international studies have revealed the precarious position of new entrants in the financial sector amid technological disruptions. For instance, Frey and Osborne (2017), in their widely cited study, argued that automation poses a high risk to routine and mid-level financial roles. Younger workers, in particular, often lack the seniority or specialized skills needed to secure these positions. A large-scale industry survey conducted by the World Economic Forum in 2020, estimated that automation will have displaced 85 million jobs across sectors within the next few years. Within financial services, a projected 23% net decline is expected in jobs such as junior analysts and some administrative staff, which are disproportionately held by individuals under the age of 35 (World Economic Forum, 2020). The survey results also underscored the need for continuous upskilling and adaptability, but unfortunately, it did not receive sufficient attention from the education sector. Global trends and academic insights reinforce the urgency of a critical reassessment—particularly by young professionals worldwide—of the long-term implications of technological shifts for career planning.

Today, many large domestic financial institutions proudly claim to employ tens of thousands of technology staff, positioning themselves as fintech companies rather than traditional banks or insurers. However, the widespread adoption of big data and AI technologies is driving layoffs primarily of technology professionals. For instance, many basic programming tasks and data processing analyses can now be fully automated *via* AI. The impact of these technologies resembles a chilling wind sweeping through a dark wilderness, touching every individual in its path. The financial industry has not been, is not, and will not be exempt from this impact.

Prospective domestic and international financial practitioners face the challenge of balancing opportunities arising from regional fintech growth with the realities of intense competition and the demand for specialized, globally competitive skills (Philippon, 2016). This challenge underscores the importance of young professionals cultivating irreplaceable competencies, adapting to technological changes and critically evaluating their career paths in response to them, and pursuing continuous learning.

As a financial industry practitioner with more than 20 years of experience, I offer the following advice to young individuals entering or preparing to enter the field.

Acknowledge the harsh realities of the financial industry's "winter"

Low interest rates, narrow profit margins, and sluggish

growth have become the norm in the financial sector and may persist for a considerable period. Young practitioners must be mentally prepared for a long and challenging journey to endure this prolonged season.

Strive to enhance your core competencies and value

Focus on cultivating skills and qualities that are difficult to replace. Within an organization, an individual's value is determined not solely by technical skills or "hard power" but also by "soft power"—including interpersonal networks and management experience. While newcomers may lack experience, their energy, passion, and creativity are often their most valuable assets.

Aim to become irreplaceable

We once discussed the following intriguing questions with a colleague: Why do corporate executives earn high salaries? Is it because they work harder, bear greater responsibilities, or contribute more? Is it because they hold the power to set their own compensation? Our view is that all these factors play a role, but they are not the fundamental reasons. From a market perspective, compensation reflects an individual's value in the labor market, which is shaped by supply and demand—the rarer the skill or role, the higher its price. Thousands of marketing professionals, technicians, or engineers can be trained over time and at scale, but cultivating thousands of executives with experience managing a workforce of 10,000 is nearly impossible. In organizations of this size, such individuals are exceptionally rare, whereas many others may hold similar technical qualifications. In short, leadership and management experience remain central to becoming rare—and indispensable.

Engage with and learn new technologies but be cautious of directly entering new fields

One way to identify the latest employment trends is by browsing recruitment and headhunting websites, where trending industries and roles often dominate the listings. These job postings can, to some extent, serve as indicators of shifts in the labor market. However, a common phenomenon is that roles in high demand today may face significant layoffs within a few years. Due to the immaturity of emerging sectors and the overcrowding of talent, career stability in new domains is often far lower than in traditional roles. Careful observation is essential to discern whether a new field or technology represents a promising "blue ocean" of opportunity—or a fleeting trap.

CONCLUSION

This article explored the impact of Internet+ and AI on the financial industry by analyzing its nature, institutional mechanisms, and underlying logic. It offers educators and students planning to enter the financial sector a more critical lens, while preparing them for future educational and professional trajectories. In essence, the disruption, transformation, and evolution of the financial industry—driven by IF and AI advancements—present both opportunities and challenges for prospective practitioners. As competition intensifies, young professionals must prioritize adaptability, continuous skill development, and strategic career planning to thrive in this dynamic and rapidly evolving field.

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REFERENCES

Allen, F., Carletti, E., Cull, R., Qian, J., Senbet, L., & Valenzuela, P. (2014). The African financial development and financial inclusion gaps. *Journal of African Economies*, *23*(5), 614-642. https://doi.org/10.1093/jae/eju015

Alves, N., Bonfim, D., & Soares, C. (2021). Surviving the perfect storm: The role of the lender of last resort. *Journal of Financial Intermediation*, *47*, 100918. https://doi.org/10.1016/j.jfi.2021.100918

Barocas, S., & Selbst, A. D. (2016). Big data's disparate impact. *California Law Review*, *104*(3), 671-732. https://doi.org/10.15779/Z38BG31

Beck, T. (2020). *Fintech and Financial Inclusion: Opportunities and Pitfalls*. Asian Development Bank Institute.

CBS News. (2020, February 18). HSBC to cut headcount by 35,000, shed $100 billion in assets. CBS News. Retrieved June 17, 2025, from https:/

/www.cbsnews.com/news/hsbc-cuts-headcount-by-35000-shed-100-billion-in-assets

Chen, M. A., Wu, Q., & Yang, B. (2019). How valuable is fintech innovation? *The Review of Financial Studies*, *32*(5), 2062-2106. https://doi.org/10.1093/rfs/hhy130

Citigroup. (2025, June 5). Citi realigns its technology workforce in China as part of global simplification. Retrieved June 17, 2025, from https://www.citigroup.com/global/news/press-release/2025/citi-realigns-technology-workforce-china-global-simplification

Deloitte. (2017, October). Fintech and regulatory compliance: Understanding risks and rewards. Deloitte. Retrieved June 17, 2025, from https://www.deloitte.com/us/en/services/consulting/articles/future-of-fintechs-risk-and-regulatory-compliance.html

Elekdag, S. A., Emrullahu, D., & Naceur, S. B. (2024, January 26). Does fintech increase bank risk taking? International Monetary Fund. Retrieved June 17, 2025, from https://www.imf.org/en/Publications/WP/Issues/2024/01/26/Does-FinTech-Increase-Bank-Risk-Taking-544028

European Commission. (2021, April 21). Proposal for a regulation laying down harmonized rules on artificial intelligence. European Commission. Retrieved June 17, 2025, from https://digital-strategy.ec.europa.eu/en/library/proposal-regulation-laying-down-harmonised-rules-artificial-intelligence

Financial Stability Board. (2020, November 9). Artificial intelligence and machine learning in financial services: Market developments and financial stability implications. Financial Stability Board. Retrieved June 17, 2025, from https://www.fsb.org/2017/11/artificial-intelligence-and-machine-learning-in-financial-service/

Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerisation? *Technological Forecasting and Social Change*, *114*, 254-280. https://doi.org/10.1016/j.techfore.2016.08.019

GSMA. (2020, February 20). State of the industry report on mobile money 2019. Payments Cards & Mobile. Retrieved June 17, 2025, from https://www.paymentscardsandmobile.com/research/state-of-the-industry-report-on-mobile-money-gsma/

Guo, Z. S. (2023, December 6). [Standard Chartered's branch in China approved for closure, eight foreign banks closed 17 outlets this year, and the digital wave is also changing foreign banks]. Cailian Press. Retrieved June 17, 2025, from https://www.cls.cn/detail/1536941

Hu, J. (2024). Securities Investment in China—Market Research Report (2014-2029). IBISWorld. Retrieved June 17, 2025, from https://www.ibisworld.com/china/industry/securities-investment/951/

Jiang, J., Liao, L., Wang, Z., & Zhang, X. (2021). Government Affiliation and Peer-To-Peer Lending Platforms in China. *Journal of Empirical Finance*, *62*, 87-106. https://doi.org/10.1016/j.jempfin.2021.02.004

Kleinberg, J., Ludwig, J., Mullainathan, S., & Sunstein, C. R. (2019). Discrimination in the age of algorithms. *Journal of Legal Analysis*, *10*, 113-174. https://doi.org/10.1093/jla/laz001

KPMG China & National Internet Finance Association of China Financial Technology Development and Research Committee. (2024, September 12). [2024 chief insight report on Chinese fintech enterprises]. KPMG. Retrieved June 17, 2025, from https://kpmg.com/cn/zh/home/insights/2024/09/2024-chinese-fintech-ceo-survey-report.html

Lewinson, E. (2021, September 18). Artificial intelligence in finance: Opportunities and challenges. Towards Data Science. Retrieved June 17, 2025, from https://towardsdatascience.com/artificial-intelligence-in-finance-opportunities-and-challenges-cee94f2f3858/

McKinsey Global Institute. (2021, February 18). The future of work after COVID-19. Mckinsey & Company. Retrieved June 17, 2025, from https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-after-covid-19

National Bureau of Statistics. (2024, December 26). [Bulletin of the fifth economic census]. National Bureau of Statistics. Retrieved June 17, 2025, from https://www.stats.gov.cn/sj/zxfb/202412/t20241226_1957897.html

Ndung'u, N. (2018). The MPesa technological revolution for financial services in Kenya: A platform for financial inclusion. In D. L. K. Chuen & R. Deng (Eds.), *Handbook of blockchain, digital finance, and inclusion* (pp. 37-56). Academic Press. Retrieved June 17, 2025, from https://doi.org/10.1016/B978-0-12-810441-5.00003-8

Pang C. (2024, August 23). Disassembling the exit of 34 subsidiaries this year: Why are foreign capitals continuously "downsizing"? 21st Century Business Herald. Retrieved June 17, 2025, from https://www.21jingji.com/article/20240823/herald/384183a545a170a69af61dc423665f59.html

Philippon, T. (2016). The fintech opportunity (NBER Working Paper No. 22476). National Bureau of Economic Research. Retrieved June 17, 2025, from https://doi.org/10.3386/w22476

PwC. (2023). AI in financial services: Navigating the risk - opportunity equation. PwC. Retrieved June 17, 2025, from https://www.pwc.co.uk/industries/financial-services/understanding-regulatory-developments/ai-in-financial-services-navigating-the-risk-opportunity-equation.html

Ray, P., Bandyopadhyay, A., & Basu, S. (2024). *India Banking and Finance Report 2024*. National Institute of Bank Management.

Sahay, R., Eriksson von Allmen, U., Lahreche, A., Khera, P., Ogawa, S., Bazarbash, M., & Beaton, K. (2020, July 1). The promise of fintech: Financial inclusion in the post COVID-19 era. International Monetary Fund. Retrieved June 17, 2025, from https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2020/06/29/The-Promise-of-Fintech-Financial-Inclusion-in-the-Post-COVID-19-Era-48623

State Council of the People's Republic of China. (2015, July 4). State Council guidance on actively advancing "Internet+" actions. State Department. State Council of the People's Republic of China. Retrieved June 17, 2025, from http://www.gov.cn/zhengce/content/2015-07/04/content_10002.htm

U.S. Department of the Treasury. (2024, December 19). Treasury releases report on the uses, opportunities, and risks of artificial intelligence in financial services. U.S. Department of the Treasury. Retrieved June 17, 2025, from https://home.treasury.gov/news/press-releases/jy2760

World Bank Group. (2025, January 27). Financial inclusion overview. World Bank Group. Retrieved June 17, 2025, from https://www.worldbank.org/en/topic/financialinclusion/overview

World Economic Forum. (2020, October). The future of jobs report 2020. World Economic Forum. Retrieved June 17, 2025, from https://www3.weforum.org/docs/WEF_Future_of_Jobs_2020.pdf