<u>*Research Article*</u>

The Fintech Revolution and the Changing Role of Financial Advisors

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Abstract

The purpose of this study is to assess the relationship between traditional financial advisors and the increasing use of robo-advisors, in the context of the financial technology (fintech) revolution that we are witnessing now. Contrary to the doomsday outlook of many, these services complement each other and therefore are inclusive. A growing trend, however, is the democratization of the use of fintech in an increasingly varied realms associated with personal finance. While those with higher incomes and more wealth tend to pay for the services of traditional advisors, clients with lower levels of income and wealth utilize robo-advisors more often. Continuous advancements in fintech provide a somewhat customized service but the robot's lack of ability to manage certain types of investments and integrate intangible yet critical human factors into the assessments limit the effectiveness of these tools, at least currently.

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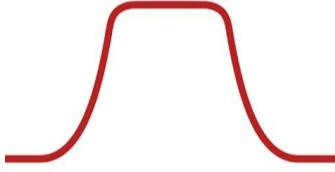
Fintech Devrimi ve Finansal Danışmanların Değişen Rolü

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Öz

Bu çalışmanın amacı, geleneksel finansal danışmanlar ile robo-danışmanların artan kullanımı arasındaki ilişkiyi şu anda tanık olduğumuz finansal teknoloji (fintech) devrimi bağlamında değerlendirmektir. Birçoğunun kıyamet günü görüşünün aksine, bu hizmetler birbirini tamamlar ve dolayısıyla kapsayıcıdır. Bununla birlikte artan bir eğilim de kişisel finansla ilişkili giderek daha çeşitli alanlarda fintech kullanımının demokratikleşmesidir. Daha yüksek gelire ve daha fazla servete sahip olanlar, geleneksel danışmanların hizmetleri için ödeme yapma eğilimindeyken, daha düşük gelir ve servet seviyelerine sahip müşteriler, robo-danışmanları daha sık kullanır. Fintech'teki sürekli gelişmeler biraz özelleştirilmiş bir hizmet sağlıyor, ancak robotun belirli yatırım türlerini yönetme ve maddi olmayan ancak kritik insan faktörlerini değerlendirmelere entegre etme yeteneğinin olmaması, en azından şu anda bu araçların etkinliğini sınırlandırıyor..

Anahtar Kelimeler: Fintech, Finansal Hizmetler, Refah, Robo-Danışman, Entegrasyon, Kişisel Finans.

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1. Introduction

Wealth management and investment services used to be considered a luxury as they were only accessible to the wealthy. For the past 50 years, a global technology transformation has helped speed up many of our daily tasks and by now, financial technology (fintech) has an ever-greater impact upon the financial services industry (Puschmann, 2017). FinTech appropriates existing technologies in other fields while also develop specific finance related technologies. The way we view, use, interact with, and manage our money has tremendously benefited from these technologies (Goldstein, Jiang, & Karolyi, 2019). The availability of several channels and tools has increased access to financial advice and it has also forced wealth management companies to update their communication channels and provide access through new pathways and devices. For example, mobile apps have become an essential tool. More recent advances in AI / ML and blockchain technologies in general opened up new frontiers for offering financial services, observe Hendershott et al. (2021).

Financial technology, according to the Oxford definition, refers to all "computer programs and other technologies needed to support or allow banking and financial activities." Related services that use this technology are wealth management, payments, crowdfunding, banking services, online insurance, digital lending, or e-commerce. Moreover, fintech professionals have also come up with treasury management, risk management, data analysis tools, and trade processing systems. As a result, financial technology companies have helped improve the speed, quality, accessibility, efficacy, and convenience of all of these processes (Bollaert, Lopez-de-Silanes, & Schwienbacher, 2021). Understanding how these technologies work has become a must-have skill of financial professionals, companies, and even customers in order to keep up with such a fast paced and evolving environment. The entire finance industry now understands that it must use technology as a strategic asset. Digitalization is expected to fundamentally revolutionize the financial services industry because the industry is built around information and digital revolution is also about information revolution (Puschmann, 2017).

Because the future of finance is going to be directly tied to technology, most banking and finance professionals are going to need to learn how to incorporate these technologies into their work (if they haven't yet), according to Ebong & George (2021). Robotic advisors are increasingly becoming a popular financial decision support alternative for individual investors. The phrase "robo-advisor" refers to any automated investment or financial planning service that aims to appeal to the general public by making financial information, advice, products, and services accessible to them at a low cost (Berger, 2015).

Nonetheless, this imperative for technology education need not come from the undue fear that their jobs are going to go away. Although many may still think the opposite, fintech is a complement and not a substitute to traditional financial advisors. The people element is not easily replaceable without losing some competitive advantage (Barbu et al., 2021). However, if finance professionals are not adequately trained to make the best use of these technologies to augment their already existing skills, their value addition to the customers are going to be far less (Migliavacca,

2020). In this regard, continuing fintech illiteracy among the professionals could make them irrelevant.

In this backdrop, this paper will explore the way fintech is fundamentally altering the landscape of the financial services sector and discusses ways by which traditional human financial services advisors could remain their relevance in the onslaught of the robotic process automation of financial services.

The rationale for this study is multi-fold. One, most extant research on fintech in financial services is focused on the technology side of the equation. People, especially customer service, is a critical link in creating competitive success; the human element needs to be studied better. This paper aims to fill that gap. Two, even those studies discussing about ethics in digital transformation adopt a very classical philosophy approach. This paper brings pragmatism without diluting scholarly rigor. Third, unlike most other extant works, this paper does not stop lamenting that the technology takeover is a one-way path creating only losers of humans. It suggests means for financial advisors to prepare and stay ahead of the curve.

2. Wealth Management

Money has historically been a generally accepted medium of exchange, but its treatment has changed overtime. The introduction of credit cards in 1950s is viewed as the beginning of the fintech revolution. People stopped carrying cash at all times to pay for their expenditures. Later on, in the 1960s, ATMs were introduced. Stock trading started its transition to an electronic format in the 1970s. The creation of the first IBM computer in 1981 paved the way for e-commerce business models and the internet thriving in the 1990s while also allowing online stock trading. Since the 1980s, the United States transitioned to a system dominated by countrywide universal banks and some of them had products outside of the traditional realm of banking. By the year 2000, a small number of big banks operating across the country offered an unparalleled breadth of financial services. These included wealth management, advising, and planning services (Calomiris, 2021).

The tools, actions, and tactics used to improve someone's financial state or position are referred to as wealth management (Sharman, 2017). It combines investment and portfolio management with financial life planning to achieve specific goals over a period of time. A widespread misconception is that only families, business owners, and individuals with high net worth can take advantage or afford these services, in fact, anyone with a financial goal can benefit from them. According to the article 'Chartering the Fintech Future' by Charles Calomiris, some of the barriers that have contributed to this phenomenon are high transaction-costs of serving "small-dollar" customers, high uncertainty, challenges differentiating risk levels (on the supply side), the limited financial resources of those with lower incomes, the limited familiarity with financial service providers, and their particular preferences which in many cases do not match those of the clients who generate higher revenues. Advisors can plan for retirement, accounting & tax services, estate & legal planning, and provide a personalized strategy under a portfolio while they constantly bring up recommendations for fund allocation to the investors or clients (Hackethal, Haliassos, & Jappelli, 2012).

Wealth management professionals first gain an understanding of clients' needs and wants, life goals, family situations, spending patterns, and priorities; then, they can offer any of the above-mentioned services, but most times they are trained or specialized in specific ones (Phoon & Koh, 2017). Their services are offered in a consultative manner allowing the client to make his or her own decisions. The reason for that is the uncertainty that goes along with financial markets. Very

few kinds of investments can have a guaranteed return. Morgan & Stanley, JP Morgan, Bank of America Corporation, Charles Schwab, and Goldman Sachs are some of the most dominant wealth management service providers in the country. These major players have all adopted strategies and tools that align with the recent fintech advancements to facilitate their expansion and minimize the gap between their supply and customer demand. Their ability to increase awareness for upcoming technologies and innovate when it comes to using technology to enhance customer relationships is going to be key for them to maintain their industry leadership positions and stay on top of their business (Tertilt & Scholz, 2018).

3. Fintech in Wealth Management

In 2020, the wealth management industry was valued at $1,25 Trillion. Now, it is expected to raise over $3.4 Trillion as a result of a 10.7% CAGR (Compounded Annual Growth Ratio) during the forecast period of 2021 through 2030. The appearance of fintech and its consequent disruption has helped the industry reduce stress and it has immensely contributed to the growth of the market. More specifically, investments such as private equity, commodities, hedge funds, real estate investment trusts, and intellectual property are some of the most increasingly demanded services and are considered driving forces of today's wealth management market. There exists significant opportunities for growth in emerging or developing economies as many high-net-worth businesspeople located in those countries need these services as well (Allied Market Research, 2021).

Robo-advisor technology is being progressively used among wealth management providers, as it involves automated & algorithm-based systems that helps to provide a faster, customized portfolio management advice to the customers (Uhl & Rohner, 2018). A 2019 study conducted by Ernst & Young Global Limited (a multinational professional service) projected that the usage of fintech in combination with traditional, human services will increase from 38% to 45% in the next three years. This increase will boost the wealth segment (35% growth and 41% growth among high-net-worth individuals). Growth in fintech undeniably enhances efficiency and transparency in wealth management business operations, which, as a result, is significantly fueling the market growth (Allied Market Research, 2021). Some threats that need to be considered include a lack of transparency when it comes to fee pricing. More consistent rules and government wealth management regulations are going to be demanded by clients. Otherwise, this could be a factor that could drive many out of business or limit their growth potential. Still, robo-advisers and Artificial Intelligence are contributing to the betterment of the customers' experience. According to the previous study, "the robo-advisory segment will grow at the highest CAGR of 26.4% during 2021 – 2030" (Allied Market Research, 2021), therefore it is instrumental that firms learn how to incorporate these services into their offering and so that they can maintain am sustainable growth and avoid falling behind to those who did learn how to do so.

Machine learning systems use data to become more accurate at predicting results. Internet cookies help website identify users and has become a topic of controversy in recent years. Traditional advisors don't generally suffer from confidentiality or privacy issues whereas fintech tools may do more often. Although customers are willing to trust their money to algorithms and artificial intelligence, that does not mean they are willing to give up their information and put their data in jeopardy (Greve & Meyer, 2021). The fintech industry faces the challenge of keeping all data safe so that it can be trusted by its customers. The uncertainty and lack of transparency about how user data is going to be used are concerns that impact consumer choice (Bartlett & McCarley, 2019).

The near future may seem blurry for the more skeptical. Robo-advisors definitely have the potential to positively disrupt the financial advising and investment market. Wealth management firms have learned to incorporate these tools in a collaborative rather than competitive way. While some have externalized them, many companies have even learned how to build them in-house. A prime example is Goldman Sachs. Organizations that offer financial advisory services need to continue to strive to offer the most efficient service to their clients. Following are a few strategies they should consider in order to take advantage of available technology while also maintaining the benefits of maintaining personal relationships with their clients. It is going to be important to facilitate the speed and efficiency of processes on the supply end Embracing customer engagement is going to be key. For that, integration taking advantage of the use of the internet of things, artificial intelligence, and big data analytics are great fintech tools and ideas that apply here. Also common are chatbots (which can be perceived as user-friendly) and capabilities related to language processing and machine learning which are set to be determinant in asking clients' questions, placing orders, perform remote functions.

"White labeling" robo-advisors is a strategy traditional financial planning will need to increasingly engage in (Ludwig & Stegmann, 2021). In other words, human advisors will need to use robo-advisors to their convenience. Tedious tasks such as picking and choosing assets are something that can be done by robo-advisors, allowing human advisors to use their time with clients discussing other aspects that require irreplaceable human attention (i.e.: individual tax, estate, and financial planning issues). This hybrid combination of human and robo-advising services offers clients an opportunity for lower-cost investment management while having that personal touch and relationship with an advisor (Brenner & Meyll, 2020).

4. **Robotic Versus Human Financial Advisors**

Robotic Advisors provide low-cost advice (Jung, Dorner, Glaser, & Morana, 2018). They also have less carbon footprints (Tao et al, 2022). They are expected to manage at least a tenth of future global wealth in the near future. A robo-advisor's input is algorithm-based, giving birth to what is known as automated wealth management advice (Kim, 2019). While we have increasingly accepted and used technology to our advantage, what makes these tools attractive is that they are accessible online, and do not require high balances. More complex algorithms are also used to analyze client-specific situations, which leads to customized asset allocations and financial plans. Many fields have incorporated robo-like technology such as real-time investment and trade (taking history into account as well), retirement (1-2% "human fee to a staggering 0.14-0.15% fee), and with no minimum asset requirement.

The demand and customer expectations have changed during the past years. "Not only are new unbundled fintech providers more profitable and efficient than traditional banks, but their technologies are also proving to be very promising for improving access to financial services for many people who have not been served well by traditional banks, especially lower-income people" (Calomiris, 2021). Millennials (Generations X and Y) will determine the future. While they demand unique treatment, and their preferences are mostly tied to convenience (i.e., mobile apps), investment models (i.e., passive and non-traditional investments) and general skepticism about traditional finance will drive change. "The term 'wealth management' is being reimagined as millennials reinvent the future to fit their lifestyles, social consciences and goals" (PWC). Truth is that there has been a shift of power to investors.

The Edelman Trust Barometer is a recognized research project that reveals an epidemic of misinformation and widespread mistrust of societal institutions and leaders. One of its sections measured average levels of trust by sector. The financial services industry recorded the lowest score (Barometer, 2019). That speaks highly of the importance of earning clients' trust in this sector. Humans have a better ability to do so than robo-advisors and their algorithms. However, fintech that is built around open-source technologies could eventually change this. Customers also value the usefulness, consistency, and quality of the financial strategies being used to manage their money. While robo-advisors may, at times, check most of these boxes, they will not do these at a human level. That depends on the complexity of each client's situation and his or her specific needs and wants. According to Fulk et al (2018), a majority of current users are in their 30's or below. The age of those born in the late 1970's currently represents an inflection point in the use of digital technologies and the genesis of an ear where everything is being gamified.

The following table (table 1) offers a contrast between human and robotic advisors, in terms of their services.

Table 1. Financial services provided by robotic Vs human advisors

AUTOMATIZED	HUMAN
• Less expensive to customers. • Financial advice based on mathematical algorithms (no emotion, human intervention). • Good at allocating and managing client assets. • Regularly uses indexed strategies. • Helps fill a gap from which many asset management companies do not make a profit. • Not efficient in times of heightened volatility. • Complement, / enhances the client-advisor experience but does not substitute human-client relationships.	• More expensive to customers. • Financial advice is based on a human assessment of each specific situation. • Ability to evaluate the full range of variables influencing investments, in an objective manner. • Expanded investment universe from which to work. • Human reassurance and persuasion – interaction, deeper understanding of goals and priorities. • Able to provide services that add value • More thorough investment management • Ability to communicate with clients • Ability to assess variables that go beyond asset allocation and portfolio rebalancing. I.e.: upcoming tax code change, pending business sales, short term deficiencies in cash flow, concentrated investments, changes in employment / marital status, death of members

As summarized in the table above, human investment and wealth management professionals are not in jeopardy of becoming obsolete. Robo advisors and all other forms of digital financial advice are less expensive and are good at allocating and managing client assets. Also, it created a new segment of ultra-low budget investors whom human advisors would consider to be insignificant (Jung, Glaser, & Köpplin, 2019). There are relative merits and demerits in both pathways and there is a high probability that human advisors might remain, albeit to serve more

niche markets. Particularly, products and value propositions in financial services that cannot be expressed in the form of algorithms will continue to need human agents to serve.

These tools' operations are based on mathematical algorithms which, of course, cannot consider human emotion. They help fill a gap that many assets management companies do not always find profitable. In turn, a downfall to these systems is their lack of efficiency in times of heightened volatility. While robo advisors are a great complement that enhances the client-advisor experience, these tools should not quite be considered substitutes because they aren't able to evaluate the full range of variables influencing investment that humans can (Xiao & Adekola, 2021). That includes traditional and non-traditional investments. The lack of ability to persuade, reassure, interact, and gain a deep understanding of client goals and priorities plays a role too (Ge, Zheng, Tian, & Liao, 2021). This can be a key factor because still, many clients continue to prioritize face-to-face interactions (especially the older generations). At times, there is also a need to assess variables that go beyond asset allocation and portfolio rebalancing. Examples can include upcoming tax code changes, pending business sales, short-term deficiencies in cash flow, concentrated investments, changes in employment, changes in marital status, death of family members, the inclusion of a 401(k) plan into an overall investment strategy to name a few. Automatized financial management tools work best when dealing with assets that have quantifiable risk levels. They aren't as effective with unquantifiable risks like market crashes. Tax-loss harvesting is another field in which many firms have developed automated systems. This aids investors in paying the lowest possible taxes in non-tax-sheltered accounts but is not what's best for every case. Clients in need of social security and tax guidance would be better off by hiring human financial assistance rather than exclusively relying on automated systems, especially those with high incomes. Typically, the higher the income, the greater the need to involve human advising to avoid automated mistakes.

When referring to robot and human fees, there is no such thing as a "normal" fee. Instead, there are different pricing models.

- Fee-only advisors don't earn commissions. Instead, they charge separate fees for their services.
- Commission-only advisors are compensated through commissions on the investments when they are sold and bought.
- Fee-based advisors earn their income by doing both: charge fees and receive commissions.

The commissions charged range between .25 and 1% of assets under management, based on the balance. The separate fees for specific services, flat annual fees, hourly fees, and per-plan fees (retirement, college savings, insurance, estate planning, etc.) vary depending on the company.

When it comes to robo-advisors, "That algorithm enhanced advice isn't the only thing that will take some of your money when you invest. There are typically management fees associated with the funds and ETFs robo-advisors select for you" (Schrodt). The main advantage of these fintech tools is that they keep costs as low as possible. However, depending on the amount of funds, it isn't always wise to assume that a robot will offer a less expensive service – especially if the algorithms do not offer transparency about choices and that these choices have continuing adverse effects.

5. A Pathway for Human Advisors to Stay Relevant

It is fair to claim that the human vs robo-advisor topic is not a winner takes all matchup. There are areas in which human advisors will stay relevant and therefore have an edge over robot advisors. We know that financial advising services consist in providing insights and solutions based on financial markets to achieve objectives, build long-term financial stability, and/or protect a legacy. That includes areas such as retirement, insurance, tax assistance, savings, or investments and considers current market situations, risks, future goals, and such. Achieving a synergy involving all areas while also generating revenue as well as sustainable growth is not easy to achieve. That is why human advisors will retain the advantage when it comes to creating total financial integration for clients. Put differently, while robo advisors are mainly able to take care of individual parts of a bigger financial picture, as of now, human advisors have the better ability to bring all of the parts together into a single system that functions as one. Other niche areas in which human advisors will remain hard to replace due to the significant gap or difference in efficiency are non-traditional investments such as derivate equity, venture capital, hedge funds, managed futures, art and antiques, commodities, derivatives contracts, or even real estate.

The wealth management and financial advising market will continue to expand. There is a possibility that this could become a democratized industry. The appearance of robo-advisor services has started to trigger this phenomenon. Robo-advisors tend to have low to non-existent minimum balance requirements and fees. That is commonly perceived as an advantage and a broken barrier to smaller investors as it often gives them access to a tool they wouldn't have otherwise even considered. However, many are not aware that these features may end up causing adverse effects. The difference in costs (robo vs. human) could potentially lead towards a path of exclusion in which lower-income and less wealthy individuals will be the primary users of automatized financial services while the wealthy, higher-level investors will be the ones hiring human services. Fully automated access to advice and financial markets (portfolios with regular use of indexed strategies) has a limited potential for future success and profit. Nevertheless, the ease of access due to lower fees and flexible requirements will continue to help increase the revenue generated (as the 10-year prediction data from Allied Market Research shows).

According to data from the Bureau of Labor Statistics, traditional financial advisors make on average $89,330 per year or $42,95 per hour. Their typical entry-level education is a bachelor's degree. In 2020, there were 275,200 jobs. The employment of financial advisors is projected to grow 5 percent over the 2020 to 2030 period. It is expected that there will be 21,500 openings each year, on average, over the current decade. While some of these openings will be due to the need to replace workers who transfer or exit the labor force, the increase in demand for these types of services will also play a role. Factors that directly affect this increase in demand are going to be the aging population (baby boomers approaching retirement ages seeking financial planning and advice), or longer lifespans (and therefore, longer retirement periods).

Current examples of successful robo-advisors include Goldman Sachs, UBS Advice Advantage, Betterment, SoFi, Morgan Stanley Access Investing, Schwab Intelligent Portfolios, or Fidelity Go. The global investment bank Goldman Sachs, which is also one of the world's top 10 wealth management firms (Wealth Professional) has recently built its own robo advisor. "Advisors struggle with small clients and what to do with them. (…) One of the things that we've been thinking about adding... is a robo to help advisors. This is something that Goldman Sachs has

actually built". With Goldman's purchase financial and investment services powerhouse United Capital, came along intellectual capital in the form of robo-algorithms and technology which is now being used. "Robo advice has fueled an explosion of new discretionary accounts (…) and Assets on digital platforms are expected to top $1.26 trillion by 2023" (Alloca). Although robo advice may not be Goldman's core strategy or main business, their well-thought moves prove the increasing role fintech is earning in the industry as a supporting tool to help increase revenue.

6. Conclusion

There is no sector of the economy left untouched by digital transformation (George & Paul, 2020). The revolutionary technological changes sweeping the financial services sector these days are ripples of the greater way of the digital transformation of our societies (Ebong & George, 2020). The financial advice industry is undergoing a period of change and adaptation. As of today, many still prefer to trust their finances, savings, retirement plans, and such to the ability and understanding of human advisors. While related technologies have the ability and potential to disrupt this industry, technology solutions cannot yet be considered a substitutive threat because there are still many situations that require and can only be properly managed by human knowledge. That said, analysis is complicated due to the presences of numerous confounding factors.

Many seem to believe that fintech will eventually replace human financial professionals. This paper described situations and explained why robo-advisors can't replace human advisors due to their inability to perform certain tasks. Traditional financial advisors are not going away, they are here to stay. The emergence of robo-advisors, computer programs that provide automated investment advice based on user inputs, will partially temper demand for personal financial advisors. However, the impact of this technology should be limited as consumers continue turning to human advisors for more complex and specialized investment advice over the next 10 years", observes the U.S. Bureau of Labor Statistics.

The unification of automatized and human capabilities is set to benefit all parties involved and provide a better financial experience, enhance relationships, accelerate tasks, and increase productivity and effectiveness (Hendershott, Zhang, Zhao, & Zheng, 2021). Finance professionals should learn and incorporate recent technologies to remain competitive. They should embrace fintech today so that they can remain competitive tomorrow. Then, in the big picture, it is also important to recognize that financial service professionals are only one stakeholder group here; there are studies showing the green economic impacts of fintech in financial services (Muganyi, Yan, & Sun, 2021). Given that sustainability is critical to our common existence, we car argue for or against something without factoring the same.

While it is true that in years to come, the expectation is that financial advisors will continue to play an essential role in the wealth management, financial planning, and investments industry, their job might also be redesigned. Being flexible, quick to learn, and technology savvy are top qualities employers look for today. All of them are traits that future financial advisors will need to possess to excel at what they do. According to a Wealth management report from PWC, the type of people needed for success will change hugely. As an example, it claims that data scientists will be just as coveted as research analysts. Those in leadership positions won't just need to run a business but also to understand the next generation of technology. There'll be a far more diverse range of skills required, as well as more innovative and agile mindsets. What's more, firms will need new ways of attracting, motivating, and organizing people. Diversity will matter more than ever as well, in all of its forms -from gender, generation, ethnicity, sexuality, and disability to people with different

skill levels or industry experience. To that, we add that given that trust between client and advisor is going to continue to be a key aspect in this business, diversity will favor these relationships as firms increase the chances of having their customers feel identified with who is attending them.

Fintech research makes our world a better place to live (Lagna & Ravishankar, 2022). Widespread financial literacy not only favors our personal finances but also increases the health of the economy (Al Hudithi & Siddiqui, 2021). The typical level of education of entry-level advisors is a bachelor's degree even though having a master's degree and other specific certifications can improve chances for advancement in the occupation. While most university programs have in their curriculums many courses that involve a high degree of familiarity with technological resources, it is speculated that those future improvements in fintech may require a higher level of technical competency and solvency (Kursh & Gold, 2016). For that, we believe that schools should revise their curricula and incorporate more advanced levels of financial technology literacy to better prepare future professionals of the industry at all levels. Financial institutions will also have the duty and responsibility to provide and spread fintech education and literacy, not only to its employees but also to customers and stakeholders. Firms could profit from this, as it could help them gain trust, increase perception of transparency and ethical behaviors, to ultimately build longer-term relationships with its customers and potentially descendent generations.

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