

INSIGHT REPORT

The New Skills in Financial Services

The Nonchalance for Adult Education



Centre for Finance, Technology and Entrepreneurship

CFTE

Founded in 2017 in London, CFTE is a global platform for education in Fintech and the future of Financial Services.

More than 100,000 professionals from 100+ countries have participated in CFTE programmes to accelerate their careers in Fintech and new finance. In addition to London, CFTE is present in Singapore (accredited by Institute of Banking and Finance), Abu Dhabi (Abu Dhabi Global Market Academy), Hong Kong (Cyberport), Malaysia (Asian Banking School), Luxembourg (Luxembourg Academy of Digital Finance with LHOFT) and Budapest (Budapest Institute of Banking).

CFTE's objective is to equip professionals and students with the **skills to thrive in the new world of finance**. This includes online courses and specialisations, leadership training and hands-on entrepreneurship experiences in topics such as Fintech, Open Banking, Digital Payments and Artificial Intelligence.

CFTE courses are designed with the principle of **For the industry, By the Industry**. Our courses are taught by senior leaders from fast-growing Fintech companies such as Revolut, Plaid, and Starling Bank, innovative financial institutions such as Citi, DBS and Ping An, tech companies such as Google, IBM and Uber and regulators from MAS, ECB and MNB.

In total, more than 200 CFTE experts provide a global view of what's really happening in this new world of finance.

"In a tech world, we bet on people" is CFTE's motto. Our global community is the core of CFTE. Thanks to an innovative and open mindset, CFTE alumni progress in their careers and help others do the same, with notable alumni leading transformation in their organisations. They also attend events and share advice, tips and job opportunities. CFTE alumni have also made an impact through the world's largest Global Fintech Internship by mentoring over 1,000 students from all over the world.

CFTE believes that the new world of finance will be inclusive, diverse, innovative and will have a positive impact on society and people. This starts with people having the right knowledge and mindset so that no one is left behind. Whether you want to learn, contribute or more generally be part of the new world of Financial Services, we are looking forward to welcoming you.



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It is no longer about the *why*, but the *how* to upskill people



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In 2009, Paul Volcker, the former chairman of the Federal Reserve, argued that the only useful innovation in finance was the ATM.

It might have been the case at that time, but since then, the finance industry has transformed at a staggering pace:

- In the last decade, thousands of new players have entered finance, and seriously challenged the incumbents, from Ant Group to Stripe, from Revolut to Nubank.
- Incumbents have had to reinvent themselves, with digital transformation, new ventures and partnerships at the core of their strategies.
- New regulations have emerged, from Open Banking to Digital Bank licensing or MICA.
- Technologies that were barely used 5 years ago in Financial Services are now widespread, from Cloud to AI to Blockchain.
- And most importantly, this led to a global phenomenon where billions of consumers and organisations are now users of digital finance.

For finance professionals, these accelerated changes represent an opportunity for some, but is a challenge for many, who are being asked to constantly adapt: **changing jobs, disappearing jobs, new skills required, digitalisation, and much more.**

The “New Skills in Financial Services” report gives an important understanding of the skills that are required in a world of digital finance, and identifies potential solutions for the industry to support the transformation of people. It should prove insightful for professionals working in the industry, those who want to join finance, but more generally for the industry which needs to transform its workforce.

Looking ahead, the “New Skills in Financial Services” is much more than an analysis of skills in finance. It is an urgent reminder that adults cannot be expected to go through their whole professional lives equipped only with the knowledge they learnt when they were 20. And that most countries today do not have a strategy of adult education to support their workforce.

Preface

These are important considerations that are relevant to not only individuals, but also and especially to governments, regulators, the private sector and universities.

We would like to thank Elevandi and the senior leaders who participated in Elevandi Insights Forum during Singapore Fintech Festival 2022 for their very insightful contributions, and the CFTE team as well as the organisations who contributed inputs to this report.

We hope that this report will help many to think of the skills that will help them thrive in the world of digital finance, and we see it as a starting point to encourage more dialogue so that the industry as a whole can adapt to a new world of adult education.



Addressing the New Skills Gap in Financial Services Roundtable at the Singapore Fintech Festival, during the Elevandi Insights Forum

This report highlights the key takeaways from an invite-only, deep-dive roundtable hosted by CFTE as a knowledge partner of Elevandi. Elevandi was created by the Monetary Authority of Singapore, missioned to build a global knowledge and collaboration platform that helps shape the future of finance.

The carefully curated dialogue addressed the pain points in the future of skills in Financial Services, convening Central Banks, policymakers, Financial institution executives, Technology leaders, founders, and investors. Together senior officials from the public sector and C-level discussants from the private sector developed a strategy to solve the new skills gap.



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New Skills in Financial Services



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Executive Summary

A decade ago, the finance industry was emerging from the Subprime Crisis, and it seemed that its future was one of a slow, boring industry.

This is not what happened, and finance has never experienced so much transformation than in the last 10 years, from **new technologies** to **new players** to **new business models** and so much more.

This Report on New Skills in Finance aims to provide an overview of the skills now required for professionals, analyse the current skills gaps and discuss possible approaches to support the development of people.

Since technology has accelerated the transformation of the industry, new roles are being created, others are becoming obsolete, and skills are ever changing. This requires a **constant adaptation for professionals, employers, regulators, governments and universities**.

Although skills development is intrinsically a **personal** issue, it becomes a **societal** issue when millions are at risk of falling on the wrong side of the digital divide and find themselves with outdated skills in a world that speaks AI or Blockchain.

Although some countries are actively tackling this issue, most have not prioritised Adult Education for the 21st century, and we decided to title this report “**The Nonchalance for Adult Education**”. This is because, despite the profound changes in life expectancy, work patterns and industry transformation, education is still reserved to children and young adults in their early 20s. Other key findings of the report include:

- Hard skills such as Python or Data Science are important, but are far from sufficient. **SHIME** (Soft Skills / Hard Skills / Industry Knowledge / Mindset / Experience) is a good framework to consider the breadth of skills required.
- **Mindset and Soft Skills** are critical traits that employers are looking for, although they are harder to teach and assess than Hard Skills.
- There is a very high demand for professionals with **Hybrid Skills**, who are experienced domain experts with a good mastery of digital skills.
- As job roles are quickly changing, the focus on **Transferrable Skills** is increasing.
- There is a **Skills Gap** between individuals, but also between **companies, sectors and even countries**.
- The Skills Gap result in **talent shortage, loss of revenues, and growing inequalities** between people, companies, sectors and countries.
- The skills gap is caused by the acceleration of the industry with **more**

Executive Summary

transformation in the last decade than the previous half century combined.

- With an education system focused on children and young adults, those above 30 years old never have the opportunity to spend time learning new skills.
- Solving the Skills Gap require a concerted strategy. Some countries tend to be more **Top Down** (Singapore, Middle East), others **Bottom Up** (UK, USA). **A Top Down approach has so far yielded better results.**
- **Alignment between stakeholders** is a key success factor, from governments / central banks / regulator bodies / private sector / higher learning institute / individuals. This is similar to the required alignment for primary, secondary or higher education.
- In particular, **collaboration with the private sector** is essential, with adults learning in very different ways from children.

Part 1

The Skills Gap in Financial Services

New Skills in Financial Services



1. A New Framework: SHIME

A year ago, CFTE's *Fintech Job Report* analysed 40,000 jobs in Fintech and found that jobs in Fintech were closer to jobs of tech companies (80%) rather than jobs of financial services (20%). This led to the title "Tech is eating Finance". Based on this title, many thought that Hard Skills such as Python or Data Science were the most important, but this is actually not the case.

With feedback from Fintech CEOs and senior leaders in Financial Services, our research demonstrated that while hard skills matter, they only represent one dimension of a skill set.

There are other skills that are equally if not more crucial in Finance. **Soft skills**, that relate to an individual's interactions with colleagues, customers and overall management of work like collaboration, or one's capacity for task completion. **Mindset**, a set of attitudes such as resilience and adaptability, is highly valued by professionals in the industry as they can shape one's way of thinking. In addition, having **Industry Knowledge** such as the latest news or trends is vital in digital finance, regardless of one's technical background. Last but not least, previous **Experience** in either Finance or Tech is preferable to none.

When it comes to new skills in Finance, it is therefore important to think beyond hard skills. As a result, CFTE designed a framework called **SHIME**, a qualitative tool incorporating all the important skills— soft skills, hard skills, industry knowledge, mindset and experience (Figure 1).

Figure 1 | **SHIME Fintech Skills Framework**



Soft Skills

These are human qualities that relate to a candidate's interactions with colleagues, customers and overall management of work. While the general perception is that hard skills are important, soft skills influence the success and progression of a career today. They are the kind of abilities that, so far, only people possess and cannot be replicated by machines and AI.

There are dozens of soft skills, and the tables below illustrate some important soft skills, as well as 3 skills that were considered critical by a large panel of senior leaders.

Sought After Soft Skills

Cross-functional collaboration

Problem-solving

Teamwork

Soft Skills in Financial Services

Communication

Written communication

Oral communication

Presentation skills

Empathy

Friendliness

Leadership

Motivates others

Social intelligence

Networking

Knows how to influence

Storytelling

Collaborative

Cross-functional collaboration

Coordination

Teamwork

Delegation

Negotiation

Decision-making

Analytical

Problem-solving

Critical thinking

Decision-making

Logical reasoning

Hard Skills

Hard skills can be examined and assessed through an exam or project such as a programming language, e.g. Python or open banking regulations. Most emphasis is placed on acquiring and showing know-how in hard skills. Hard skills tend to be very specific depending on the jobs.

The hard skills of a data scientist will be very different from a product manager. This is why there are some hard skills that are useful for all roles (digital tools, finance) but some that are job specific. Below are the 3 most mentioned hard skills.

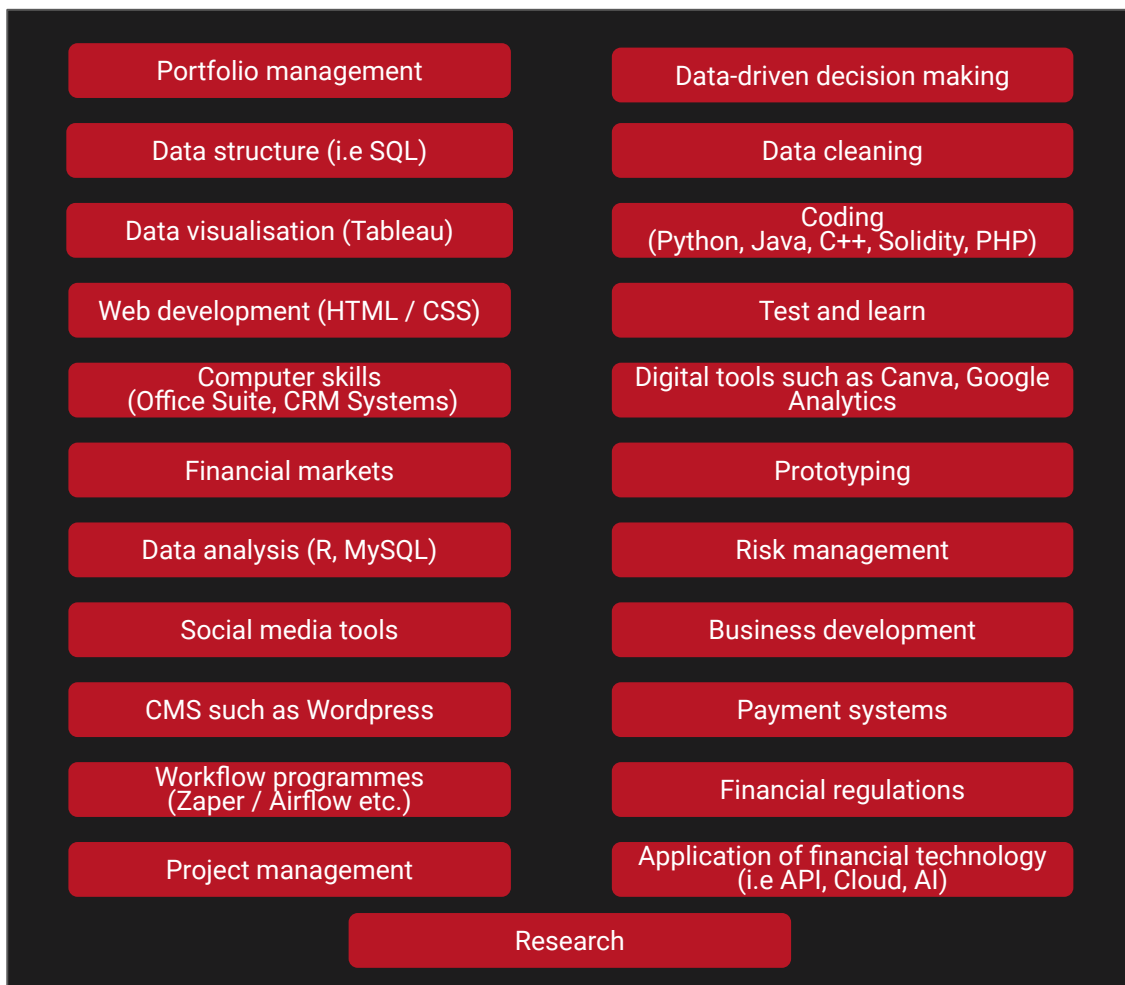
Sought After Hard Skills

Project management

Business development

Research

Hard skills in Financial Services



Industry Knowledge

Industry knowledge was often mentioned as one of the large gaps, with finance professionals unaware of the latest industry developments, from Digital Banking to Open Banking, the utilisation of technology such as Cloud or Digital Assets. Conversely, those coming from a tech sector have little knowledge of core finance, such as the finance industry or compliance.

A large panel across Fintech and Financial Services highlighted these 3 areas as being very important Industry Knowledge today:

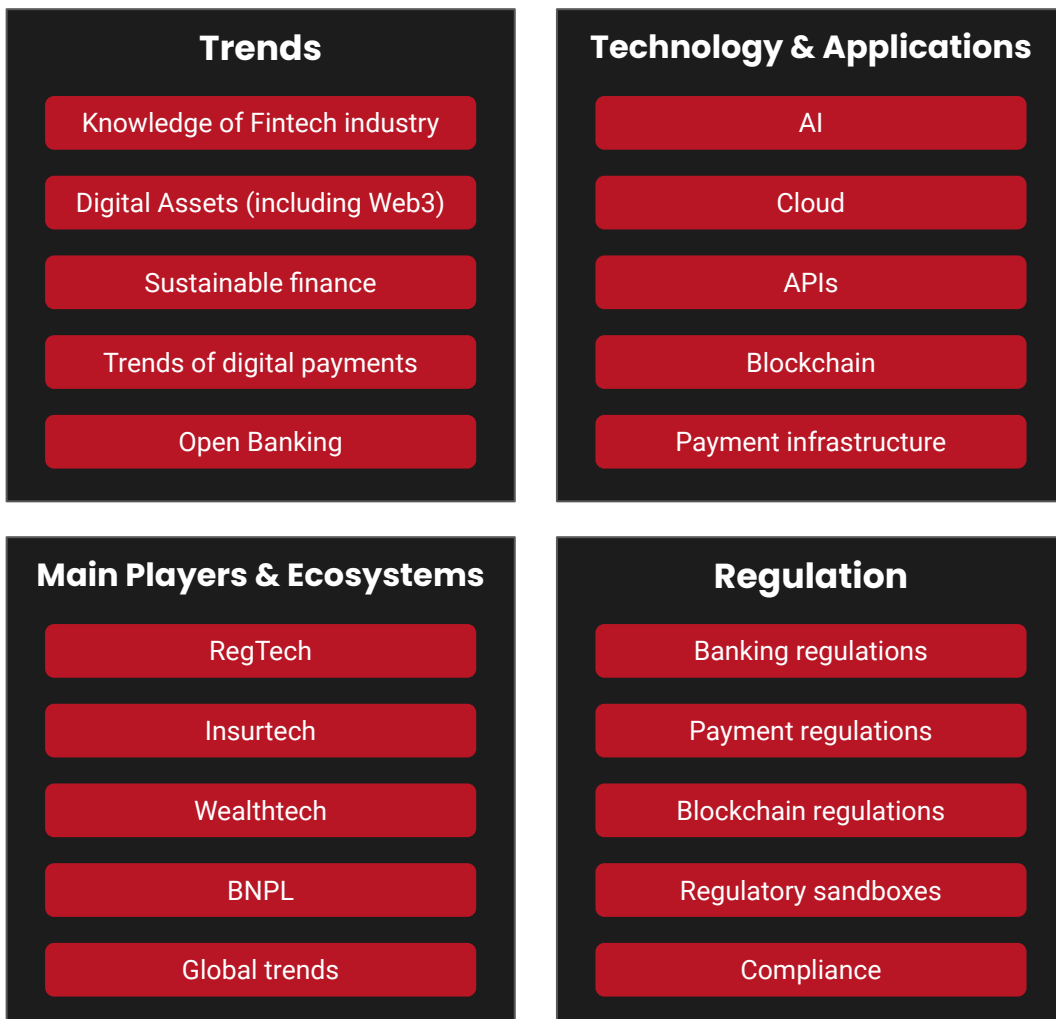
Sought After Industry Knowledge

Digital Assets

Artificial Intelligence

Compliance

Industry knowledge in Financial Services



Mindset

A way of thinking reflected in one's behaviour, such as adaptability or resilience. In a fast changing environment, even large organisations are looking for employees who can think like entrepreneurs, and can help drive change.

Below are some of the Mindset traits most frequently mentioned by a diverse panel of senior professionals.

Sought After Mindsets

Perseverant

Can easily adapt

Takes ownership

Mindset in Financial Services

Entrepreneurial

Can easily adapt

Resilient

Perseverant

Accountable

Takes ownership

Diligent

Reliable

Innovative

Customer-oriented

Creative

Comfortable with ambiguity

Decides with limited information

Comfortable with change

Experience

Experience in financial services used to be very linear, with employees joining the industry after university, and rising through the ranks. There is now much more diversity of career path, both in terms of employers (Financial Institutions, Fintech startups, tech companies, embedded finance, etc.), and previous experience of employees.

As a result, employers in finance are also looking for different types of experience that can help them accelerate their transformation. 3 experiences which were frequently mentioned are:

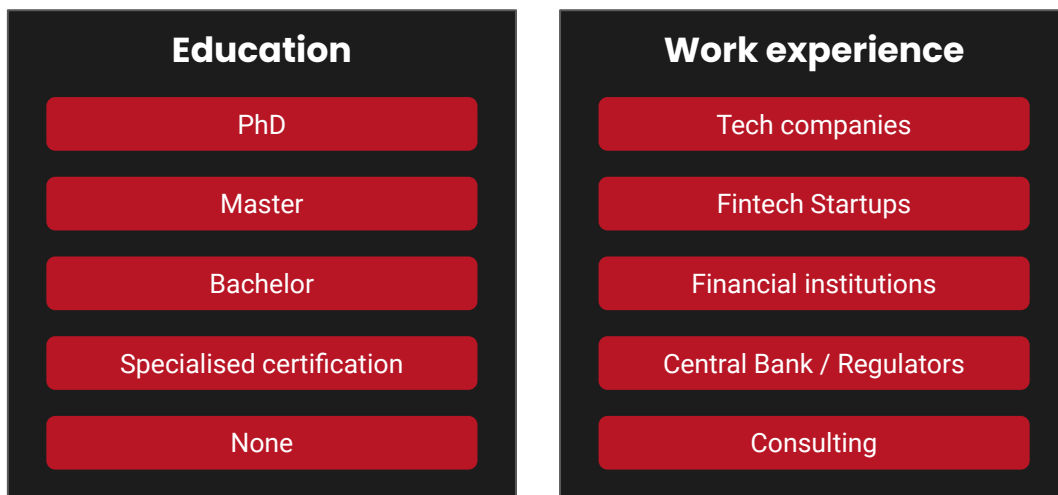
Sought After Experiences

Fintech startups

Tech companies

Certificate

Experience in Financial Services



2. What is the current skills gap?

Soft skills

Soft Skills were often mentioned as one of the biggest gaps for the current workforce. The gap most mentioned by central bankers, bank CEOs and Tech leaders at the roundtable is in Collaboration, Communication Skills and Emotional intelligence. This is now especially important with Hybrid Working / Working From Home more widespread.



“The hard skills are very important but soft skills are the real hard skills. Collaboration within a group [...] and how can someone work in an environment with a high-level of ambiguity, can be seen as one of the biggest gaps.” shared one of the contributors.

Hard skills

There is tendency to think of Hard Skills as programming or data skills, but Hard Skills are actually very dependent on the job role. For example, a copywriter, digital marketer or data scientist will require very different hard skills. Speakers on the panel thought that hard skills were important, but usually not the biggest challenge in terms of skill gap.

Industry knowledge

Industry knowledge is easily overlooked by individuals who carry out “routine” tasks in traditional industries. But keeping up with latest news, regulations and trends is a skill to learn in today’s finance, because the next chapter of financial innovation is running 24/7 and 365 days a year.

Mindset

With the rate of change in Digital Finance, thinking like an entrepreneur could be the best way to summarise the required mindset to advance and innovate. Speakers across the panel agreed to a large extent that creativity, adaptability, resilience, feeling comfortable with ambiguity and uncertainty are lacking among the current workforce. Fortunately, mindset can be trained.



“You need people who are used to being very resilient, being very equipped with the ability to absorb information, quickly process it and do something with it” mentioned one of the contributors.

The Skills Gap in Financial Services

Experience

Diverse experiences in Fintech startups, Tech companies and large financial institutions are usually stated as 'preferable' during the discussion. However, the speakers also mentioned the challenge of finding candidates with this kind of experience.



“If you go back to the history of DeFi and the Ethereum blockchain it is around two to three years. You can't really get people with 10 years (of experience)” added one of the contributors.

It was mentioned that there is an intense competition to hire candidates with a demonstrated domain expertise. Therefore, combining skills, experiences and knowledge areas may offer a solution to that gap.

Hybrid skills

The type of skill that many leaders found missing is “hybrid skill” - combining at least two domains, such as domain expertise and digital skills. For example, there is a higher need for data scientists who are commercially minded, those with a more generalised skill set who can work “horizontally” across departments, or compliance officers who can speak AI.

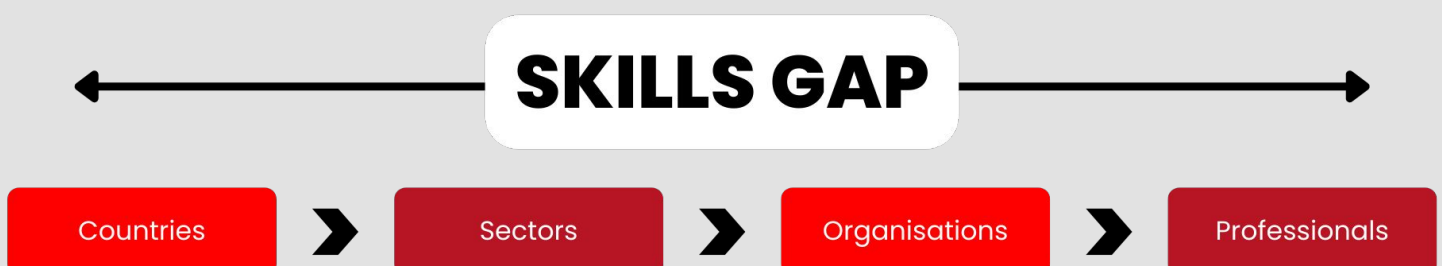
Transferable skills

Transferable skills are likely to have the most far-reaching implications on employability. While in the past, a specific role might dictate the required skills, in the current and future job market, many roles will disappear or be replaced, resulting in urgent demand for skills to become more dynamic, or “transferable”. Thus employees with transferable skills can be qualified for multiple job roles, including across industries.

3. Who does it apply to?

The skills gap challenge is not limited to the context of an organisation or an individual. The evidence of the skills gap can be seen across all levels of participants in Finance; and it should be addressed by all stakeholders involved (Figure 2).

Figure 2 | Skills Gap Across All Levels in Finance



The Skills Gap in Financial Services

Across countries

Representatives from various regions including the Middle East, Africa, US, UK, Europe and Asia Pacific all acknowledged there is a skills gap between developed markets and emerging ones.

Across sectors

Speakers commented that the Skills gap existed between sectors, and that sectors with higher wages (such as Technology or Finance) could afford to attract more talents with digital skills, to the detriment of others such as Healthcare or Hospitality. They also mentioned the need for the public sector, including Central Banks or Regulators to sometimes lag the private sector.



“They [governments and regulators] love the opportunity to standardise because it makes it easier to monitor. So that change has to happen in Government and the regulator” mentioned one of the contributors.

Across participants in the financial market

Technological changes are happening at a higher rate with all private players in the space, regardless of their vertical: Banking, Digital Commerce, Digital Assets, Mobile Payments, etc. According to Robert Walters 62% of Financial Services professionals are willing to move jobs in 2022. They would also face significant challenges if they lack industry knowledge and a “growth” mindset.

Across professionals

From top to bottom and across departments, some called for better equipment of industry knowledge, ‘hybrid’ skills and ‘transferable’ skills. For instance, board members may have to consider taking technology degrees. Those in leadership positions also need to understand the direction of the industry to build a resilient strategy.



“In the Philippines, the regulators recently came up with a rule for the financial industry that the board must at least have one member that has more than three years of experience in technology.” added one of the contributors.

The skills gap in Financial Services

In short, it is widely agreed that there is a skills gap in new finance which poses a serious challenge to all participants in the market. Individuals who try to navigate their career may find themselves lacking across a spectrum of skills. Meanwhile, global corporations constantly need new talents to compete and to re-invent themselves. The speed of change also forces governments to upskill and implement more timely policies. But so far there has not been a complete solution to bridge the demand and supply gap in skills.

Part 2

Impact of the Skills Gap

New Skills in Financial Services



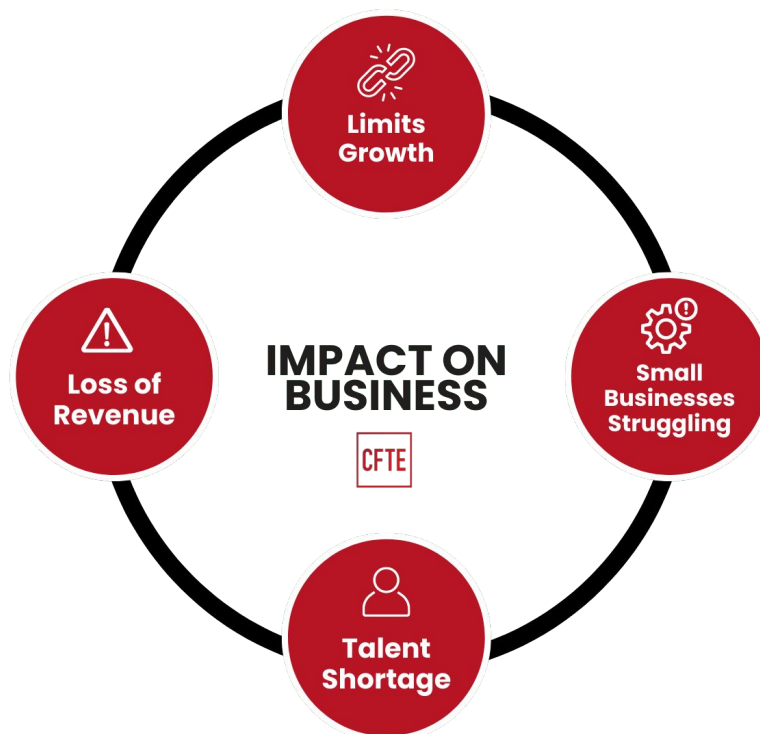
1. Impact on Business

The most significant impacts on businesses include talent shortage, small business struggling, loss of revenue and limited growth (Figure 3).

In today's competitive environment, Financial Institutions may not have enough people with the right skills and mindset to expand their business virtually or geographically. Those with experience, industry knowledge and 'hybrid' skills, however, may "ask for a more competitive salary or they will leave". The constant rise in talent acquisition and talent retention costs affect bottom lines of both Financial Institutions and Fintech startups, especially small businesses. These will limit the growth of the industry, or more broadly, of countries.

Some discussants argued that the financial services industry has even become an employee's market. The younger workforce's average tenure is now half of that of the older generation. Loyalty is running low, due to growing competition in the job market regarding pay, learning curve, work policy, etc.

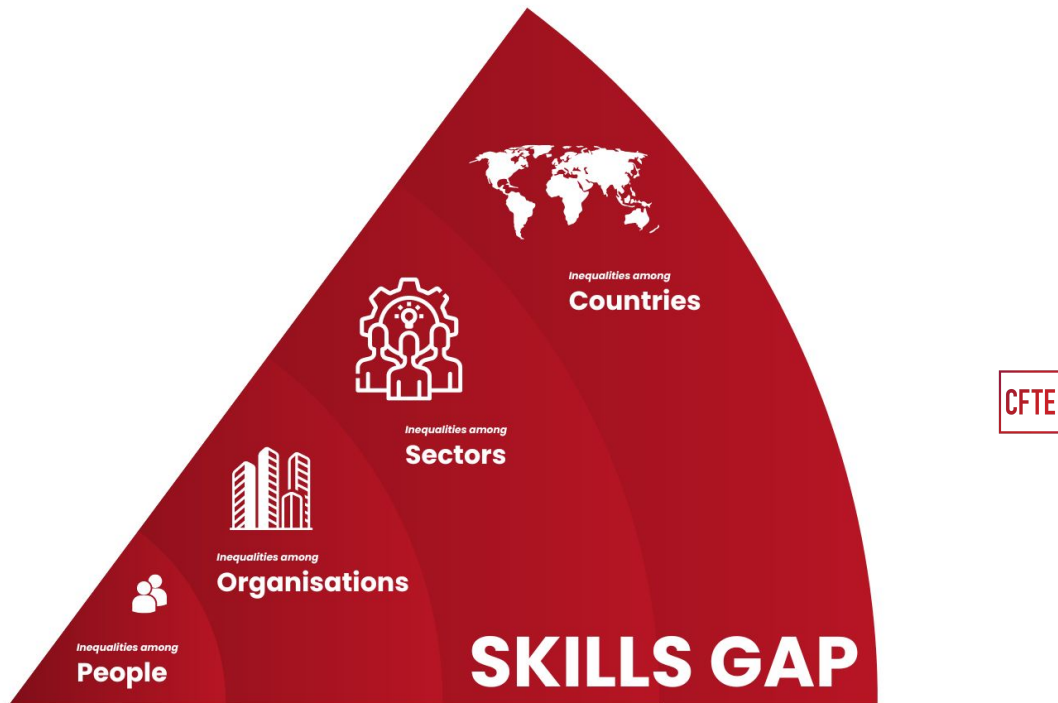
Figure 3 | Impact of Skills Gap on Business



2. Impact on Society

The skills gap also negatively affect the society on different levels (Figure 4).

Figure 4 | Impact of Skills Gap on Society



Inequality among people

While inequality initially caused high entry barriers to Fintech (“exclusivism” issue), the resulting weak skills among underprivileged minorities led to further inequality in job opportunities and income. The vicious cycle develops and affects the livelihood of many generations, eroding their trust in the system.

Inequality among organisation types

Small and medium enterprises, accounting for more than 90% of businesses globally, are not able to generate a bigger share of the GDP if they cannot compete with large enterprises for high-skilled labour.



“There's a huge bidding war on talent [...] driving the cost up [...] the big companies can afford to pay some of this. But what it drives out is the small companies that can't afford to lose out on the impacts” mentioned one of the contributors.

Inequality among sectors

Fast growing areas like Fintech and the digital economy attract more talents and investments, while fundamental areas like healthcare and transportation are neglected. If it continues, the economy will become more concentrated, exposed more to systemic risks.

Inequality among countries

The reignition of the war for talents is happening between countries when borders are no longer a restriction. It has been shared that least developed countries are being depleted of talents in general, and Fintech in particular, which intensifies the global digital divide.



“... in the last 18 to 24 months, on the back of the great resignation, which has adversely impacted Sub Saharan Africa, as many people are moving to the more developed world, in pursuit of what they call a better quality of life” added one of the contributors.

Distrust in institutions

More globally, a key risk mentioned by the speakers was the general distrust in institutions, led by increasing inequalities between those (organisations / individuals) who are doing very well in a digital world, vs. those who are falling behind and do not have the skills to find new opportunities.

Part 3

Reasons Behind the Skills Gap

New Skills in Financial Services

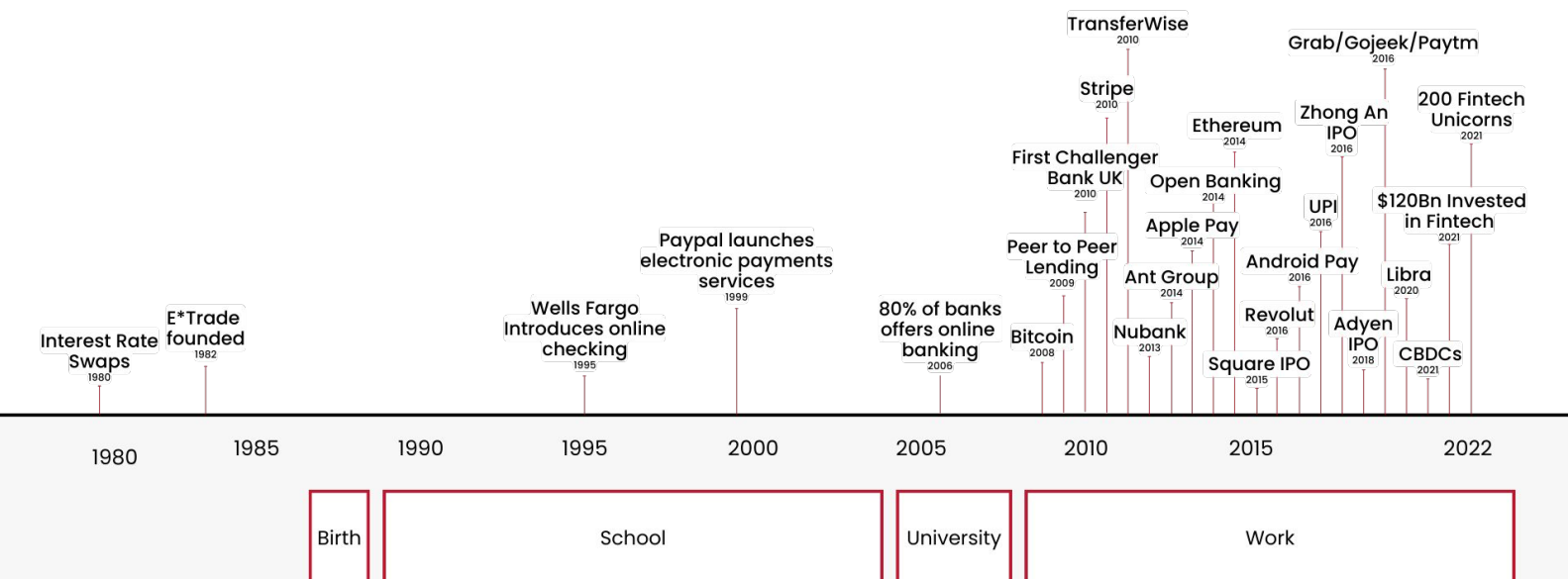


1. Current System Inadequacy

In the 2000s, finance was seen as a large industry, that was largely immune to the disruptions that other industries - such as travel, advertising or retail - were facing because of technology. Then after the 2008 subprime crisis, it saw exponential growth in the number of innovative milestones, from the first Bitcoin mined to \$120Bn being invested in Fintech in 2022 (Figure 5). Covid was a major catalyst for the transformation, with 63% of consumers world-wide now using Fintech services. As a result, 5 out of 10 biggest financial services providers today are platform-based.

Because of these innovations, new players emerged, new activities were created, old roles were transformed or disappeared, and new roles appeared. New skills are therefore required to understand this new world.

Figure 5 | Acceleration of the Developments in Finance



Learning journey of a 35 years old



However, even professionals in their early 30s might find it difficult to understand these changes. A 35-year old, born in 1987, would have left university around 2010, at exactly the same time when all these changes started to happen. All these new industry trends (from Open Banking to Digital Assets to Challenger Banks or Digital Payments) which affect all sectors of payments happened after that professional left school.

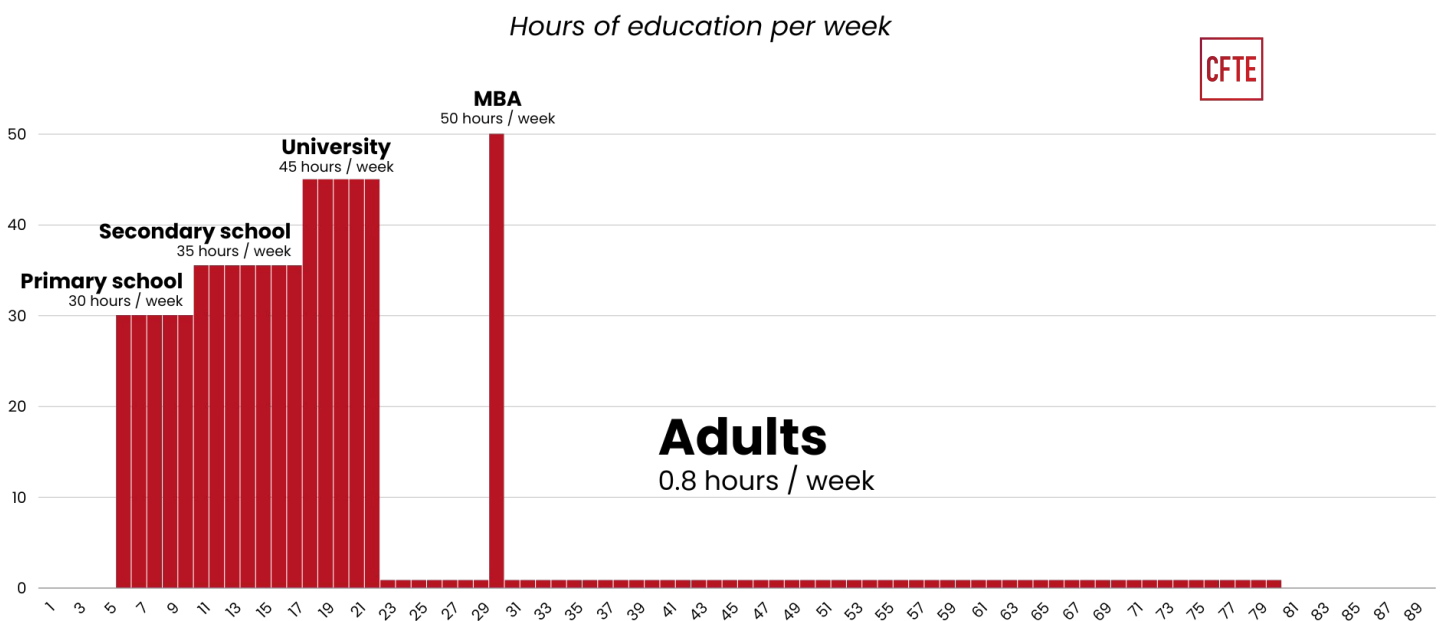
This avalanche of new knowledge that happened during the work life of this 35-year old demonstrates the need for a system for Adult Education.

Reasons Behind the Skills Gap

However, not many countries have a system for adult education. Contrary to high school and tertiary education, which has been developed for centuries to provide foundational knowledge, adult education encompasses different areas and varies in its format - because it will last longer and will grow more complex over the lifetime.

In reality, years of neglect and low funding have given a perception of adult education to be substandard, poor-quality and low in prestige. According to a research by the institute for Fiscal Studies, the total spending on adult education fell by 38% between 2010 and 2020, and 50% for spending on classroom-based education. Furthermore, there is no structure designed to educate adults. This has demotivated mature learners and organisations, reducing learning time per week to 0.8 hours on average (Figure 6).

Figure 6 | Education for Individuals (Hours/week)



Technological developments that affect all areas of Finance underscore the importance of upskilling and continuous learning. Yet, the **lack of a structured adult education system** makes it harder for finance professionals to accrue the right skills and knowledge to stay relevant.

2. Other Issues

University education

The current education system tends to be slow to adapt in many parts of the world. Curriculums from leading masters in finance in 2022 wouldn't seem out of place in 2000, with similar modules (i.e corporate finance or financial accounting and reporting). Current masters education don't reflect the significant importance of digital topics that have been transforming finance for the past decade. Moreover, training provided by schools and universities lacks continuation after their students graduate. Meanwhile leaders in the private sector and the public sector mutually believe in the need for longer accretion of experience and soft skills before and after graduation.

Figure 7 | **Core Electives of Leading Masters in Finance in 2022**

Behavioral and Sustainable Finance	Asset pricing
Corporate Valuation	Corporate finance
Securities Market	Financial econometrics
Financial Statement Analysis	Economics
Introduction to Finance	Ethics & finance
Probability and Statistics Refresher	Accounting
Financial Accounting and Reporting	Data Analytics for Finance
International Macroeconomic	Empirical Methods in Finance
Asset Management	Financial Accounting and Analysis
Economics of Financial Regulation	Investments
The Purpose of Finance	Corporate Finance and Valuation

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Corporate training

Some may argue corporate training can substitute adult education. However, it is insufficient in time (usually less than 1h / week) and substance (with most corporate training in finance focused on mandatory compliance training). In general, the discussants noticed that most organisations do not encourage a "culture of learning". And some work cultures do not allow a psychological safety for internal talents to experiment and learn from trials, errors and iterations, ie. an intrapreneurial approach.

Post-covid working conditions

The new way of working requires individuals to learn more digital skills, spanning across hard skills like software usage and soft skills like online collaboration, in a short period of time. But challenges already emerge as remote teams can be less effective in co-operating, communicating, and learning from each other. The ability to work from anywhere means competition for a job is now international. For employers, it is even a policy to attract and keep talents; but only few business models are agile enough to have fully digitalised operations. So open positions are harder to fill.



“We've had references to the great resignation of post Covid... For talent and skills, it's become very much an employee's market” mentioned one of the contributors.

According to PwC, one in three jobs is likely to disappear in the next decade because of technological changes. But new economies will re-invent more jobs such as cybersecurity specialists and Fintech product managers. It turns out it is never a problem of job shortage but the lack of dynamic skills.

Short-term thinking

For firms, hiring from competitors is just a “quick fix” to a deep-rooted challenge - an inadequate focus on skill development, impacting both top level management and their employees. Leaders without understanding of new skills cannot build an appropriate talent management strategy. Similarly, “talent import” cannot enhance a country’s long-term productive workforce.



“The only quick fix they may have is to promote migration. But that doesn't work for everyone” added one of the contributors.

Political and social issues

Political factors, such as Brexit and retirement age policy, can affect the skills gap by changing the makeup of working immigrants and labour demographics as seen in Britain. Geopolitical tensions or COVID rules have also lead international migrations since 2020.

Reasons Behind the Skills Gap

Inequality is another cause. For example, in 2019, Internet usage in the EU nations was 4 times higher than that in the African region. So 62% of the population in developed economies use Internet banking, compared to 9.8% in Africa. Without access to the latest technology and knowledge, the skills deficit will further exaggerate the inequality issue, causing a spiralling problem.

Part 4

Solving the skills gap

New Skills in Financial Services



Solving the Skills Gap

There has been a huge transformation in the financial sector, resulting in the skills mismatch and talent shortage in the market. To fix the skills gap, there are two main approaches (Figure 8). First, the top-down approach suggests adult education is part of the government's mandate. Second, the bottom-up approach indicates education beyond university is the responsibility of individuals.


Figure 8 | **Approaches for Skills Gap**

Top

Down

Adult education is part of the government's mandate

I.e Singapore, Middle East

Up

Bottom

Education beyond university is the responsibility of individuals

I.e UK, US

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At the roundtable, the top-down mandate has been emphasised by the discussants to be the important to solve the skill gap. In fact, most of the best use cases and recommendations shared by the contributors were following a **top-down approach**.

Therefore, the report proposes a solution that follows this approach and incorporates unity and alignment to address the new skills gap in finance. It should be noted however that different countries will have different political systems and ideologies, and there is not a "one size fits all".

1. Short-term solutions

There could be "quick fixes" to the skills gap issue, such as: companies can expand the talent pool to include young students, giving them experience via internships, or share intellectual and human resources with their competitors.

Internships

Universities can make internships a part of the curriculum to encourage students to have real world experience. This requires some level of partnership with the industry. It is advised that they should request banks and Tech companies to give more students

and graduates the experience needed in the SHIME framework, which is usually referred to as “company-led training”. In return, hackathons and business competitions at universities are where banks and Tech firms can look for more talent for their pipelines.

Governments should ask companies to include more socio-economic backgrounds to reduce inequality. If they provide extended internships, they should be subsidised to lessen the pressure, especially on startups.



“Perhaps not just doing an internship at one bank, but some of your own Fintech partners where they could then go and spend time, because that's where we're going to get the ideas” added one of the contributors.

Other partnerships

Firstly, training for the government needs industry support. For instance, central banks can partner with Fintech companies to gain understanding of the market and develop more impactful projects, which later would benefit the industry.

Among private players, one solution could be traditional institutions and Big Techs can outsource their projects to startups, which strengthens the ecosystem and makes use of each other's resources. Secondly, businesses can partake in the “gig economy” by hiring from an external pool of experts and consultants on a project basis.

Working with central banks, universities can give undergrads from computer science and engineering degrees problem statements in Fintech as part of their graduation thesis. Thinking ahead about the solutions is helpful for young workers to earn industry experience and an entrepreneurial mindset.



“We're taking it to the next level by injecting (them) in an incubation programme as a way of rewarding those ideas” mentioned one of the contributors.

2. Long-term solution

Strategy

Firstly, the objectives, which are upskilling and reskilling talents in Finance and facilitating the continuous learning process, need to be highlighted. To achieve these goals, governments need to set out a strategy and shape education policies at a country level (Figure 9). They are also responsible for deciding funding amounts and schemes for supporting the workforce and prioritise those most in need of upskilling.



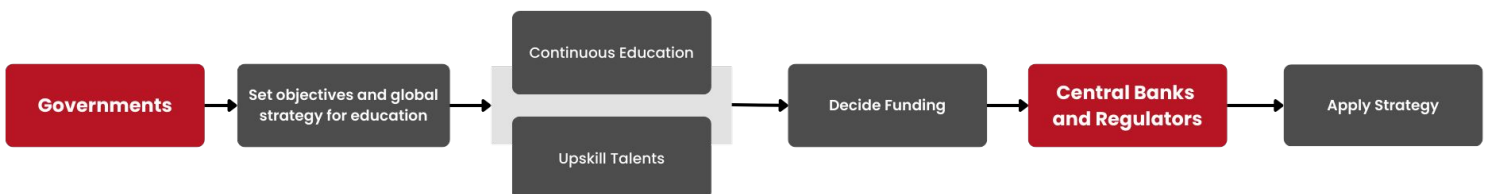
“The starting point is to acknowledge that there is a problem. And then the next thing would be to put this at the top of our agenda.”
added one of the contributors.

Next, regulators and central banks play important roles in implementing those strategies and enforcing alignment to make sure that every stakeholder is on the same page about facilitating education for a more resilient future workforce.



“The government people should be the first to understand what is happening to support the whole country and the private sector”
shared one of the contributors.

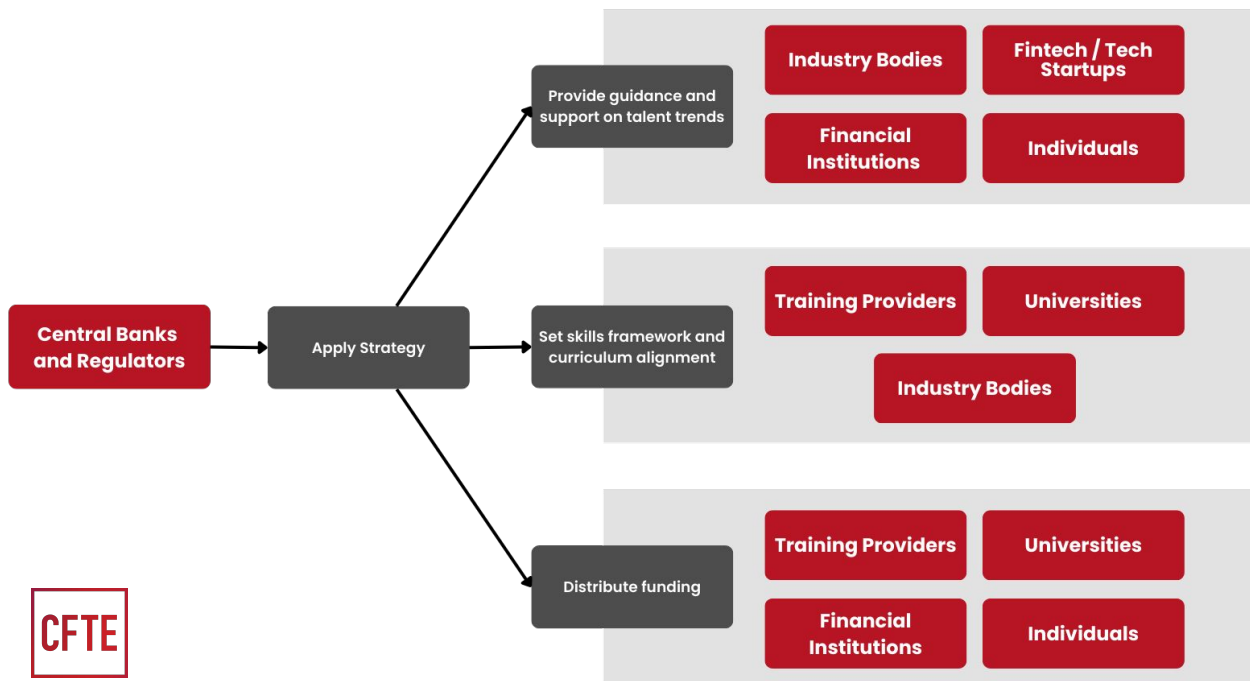
Figure 9 | Long-term Solution: Strategy



Alignment

There are three main actions of alignment from the central banks and regulators to other stakeholders (Figure 10).

Figure 10 | Long-term Solution: Alignment



First, **providing guidance and support on talent trends** in cooperation with industry bodies, financial institutions, Fintech/tech, private sector, and individuals who want to enter, transition or grow in financial services. Guidance and policies represent the standard of skills that private actors need to aim for, ensuring their investments of time and money yield positive results and career pathways are clearly informed to individuals.

Second, **setting skills framework and curriculum** in alignment with industry bodies, universities and training providers. Associations are often considered industry enablers, who connect member companies with regulators and with each other. Universities work directly with the students and increasingly with executives. Training providers are specialised in designing effective programmes. An alignment between regulators and these three important actors can ensure key skills such as SHIME are embedded in the training curriculum.

Last but not least, **allocate funding to stakeholders** including training providers, universities, financial institutions, Fintech/tech, private sector, industry bodies, and individuals. Funding is necessary to promote education but should come with conditions. For example, universities and training providers are required to develop quality courses to be eligible for government subsidy. Incentives provided to companies

enable them to increase focus on employees' skills development. Funding directed to individuals to upskill and reskill helps them get back into the workforce so they can contribute back to society later. An interesting case study is Singapore's generous subsidies for training at all ages. In 2022 Singaporean citizens over 40 years old only need to pay 10% of their upskilling cost; and others paying from 30% to 50%, meaning no-one is left behind to learn new skills.



“Singapore has been one of the most advanced countries in terms of culture of learning, operating and any people from 30, 40, 50, 60, even 70 year old ” shared one of the contributors.

Implementation

After strategies are outlined and actions are aligned, all stakeholders should put efforts into raising awareness on digital and financial literacy and implementing them through regular training. Through a multi stakeholder coalition, the implementation, whether happens at a company level or at an individual level, is a contribution to upskilling at scale (Figure 11).



“It's about collaboration between the public sector, the private sectors, and all the policymakers, because the impact can be really achieved” added one of the contributors.

Figure 11 | Long-term Solution: Implementation

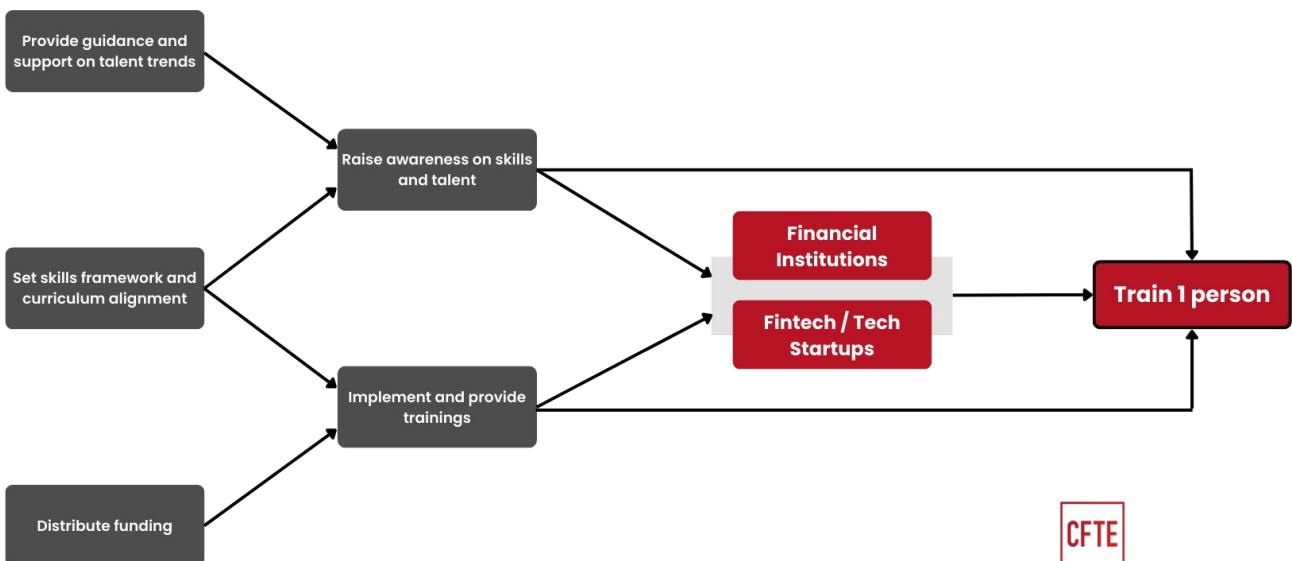
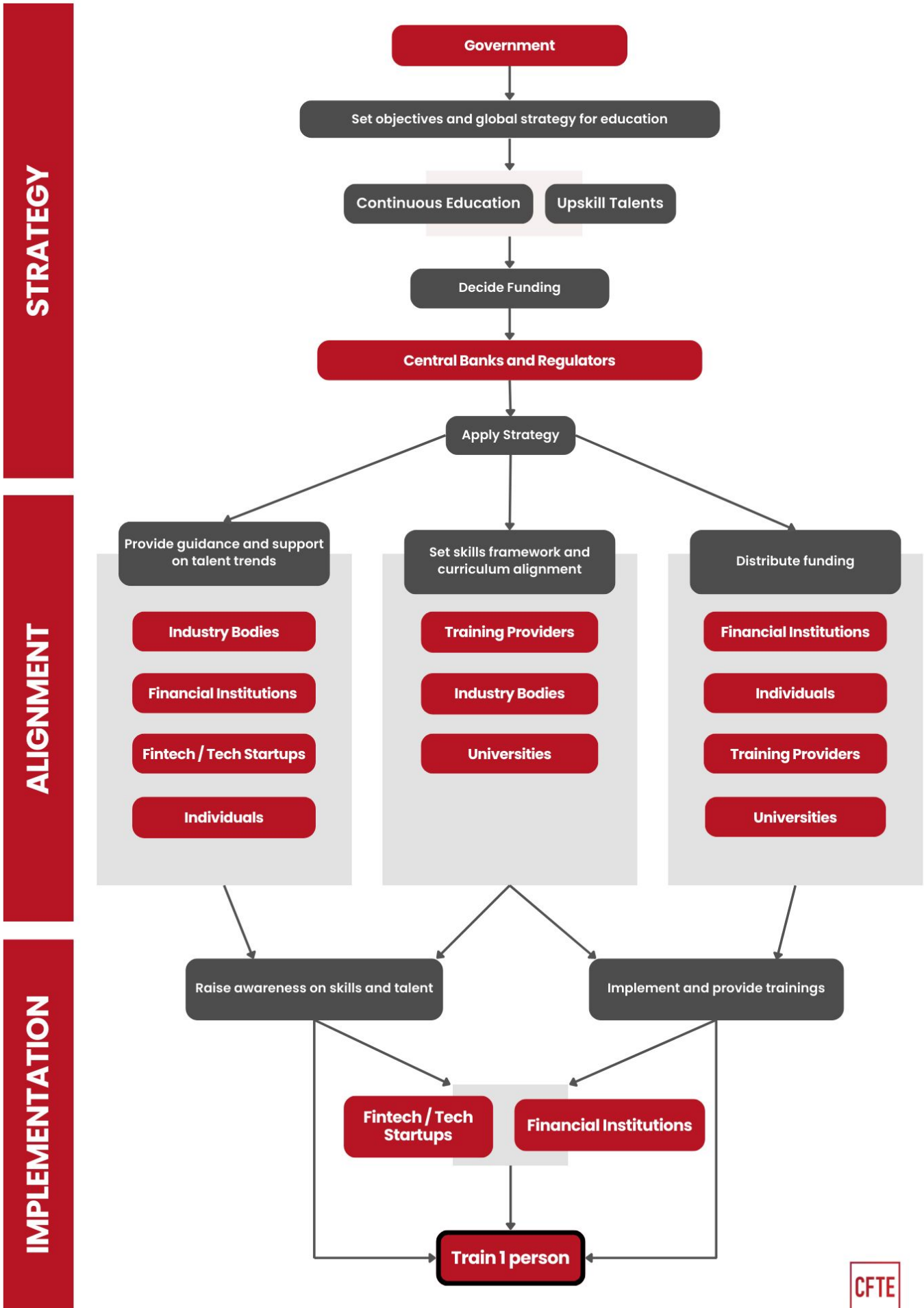


Figure 12 | Long-term solution of education



Innovation

The first to need innovation is universities who should use new technologies in the delivery of new knowledge. Millennials and gen Z who were born digital-native would find it hard to absorb new information in the way their parents were taught. Diversifying lesson formats is one example of an improvement to the curriculum.

The same can be said for corporate training. Engaging and training professionals is challenging, so more modern approaches should be designed to best achieve learning objectives, such as live sessions, hands-on projects, curated self-paced courses, and bite-sized continuous learning, especially for more technical knowledge.

Content wise, Soft skills and Mindsets are usually excluded from competency programs. They are also more difficult to teach on Learning Management System. So workshops should be used for professionals to learn directly from industry experts. It is also advised by successful tech companies to use “simulation” to train juniors and entry-level workers, without risking the company’s growing strategy.



“70% hands on experience, whether it's through projects, 20% is by learning from industry, you know, going to conferences, 10% is the structure training that you get whether it's online self learning, or in classroom” added one of the contributors.

On the other hand, businesses would need to innovate their operational models, for instance utilising AI technologies to automate tasks for employees, so they get more time to learn. Some firms have even made training an essential part of performance management, determining the amount of year-end bonus.



“Because a lot of times your staff will be doing very mundane, repeatable work. So if you can automate or outsource certain functions, which is lower value added, and then free them the time to do high value added work plus acquire new skills.” mentioned one of the contributors.

Solving the Skills Gap

With more innovative education models, not only can companies find more talents with transferable skills and the right mindset, but individuals can also keep up with industry trends and develop soft skills more easily.

Conclusion

The skills gap in Financial Services is now a reality that was caused by the accelerated transformation of the industry in the last decade, and impacts all countries, organisations and millions of professionals.

Lack of strategy and structure for **Adult Education** is the biggest systematic reason for the widening gap, with education systems designed for children and young adults, but not for continuous education of adults.

What started as a discussion about New Skills in Financial Services therefore led to a broader discussion about the provision of lifelong learning, and the urgency for governments and society to prioritise this topic, or risk widening gaps, acceleration of inequalities, and social issues.

There is no silver bullet to quickly and immediately solve this issue, and there are many ways to approach it. However, some countries, such as Singapore, have shown that high impact initiatives can be implemented in a short amount of time, and there is much knowledge sharing that can be leveraged around the world.

This report doesn't aim to provide any definitive answer to this complex question, but should be seen as a catalyst for all those involved - governments, regulators, central banks, industry bodies, private sectors, higher education institutes, training providers, individuals - to start asking questions and try new approaches.

Appendix

New Skills in Financial Services

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