

# Addressing the new skills in an AI World

Discussions with senior leaders at the intersection of education and artificial intelligence

Report of the Roundtable held during Singapore Fintech Festival November 2023



# 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.

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**"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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## About the Chamber

The British Chamber of Commerce Singapore operates as an exceptional business ecosystem, fostering connections with prominent brands from both the UK and Singapore.

Celebrating its 70th anniversary of unwavering support for the British business community in 2024, the Chamber boasts approximately **3,500 members** from **300 member organisations**. It is an integral part of the British Chambers of Commerce Global Network and a proud member of the Britain in South East Asia network (BiSEA).

The Chamber's diverse membership base ranges from startups and SMEs to global MNCs, representing various sectors and industries. With about two-thirds of its network in Singapore comprising British nationals or individuals employed by UK-based organisations, the Chamber maintains robust ties across the Singapore Government, actively participating in discussions on Free Trade Agreements, the UK-Singapore Digital Economy Agreement, sustainability initiatives, and Singapore's Industry Transformation Roadmaps.

Aligned with the **SG-UK Strategic Partnership**, which covers economic cooperation, defence, security, intelligence, foreign policy, climate, sustainability, green economy, energy cooperation, research, science, innovation, technology cooperation, and public sector collaboration, the Chamber operates as a registered Society. It is led by an Executive Team, overseen by an elected Board of members, and operates under a published Constitution.

The Chamber's mission revolves around fostering British business growth in Singapore, generating opportunities for its members, facilitating industry knowledge exchange, and supporting exporters from the UK. This mission is actualised through collaborative efforts with the Government, partners, and engaged members, delivering a range of services, committee engagements, activities, and opportunities throughout the year.



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# Does everyone need to learn AI?



**Tram Anh Nguyen**  
Co-founder, CFTE

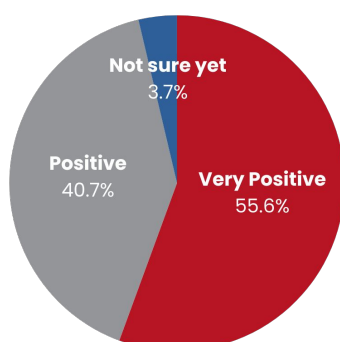
Advancements in AI are profoundly reshaping the global employment landscape, with the potential to impact over 300 million jobs. Given its disruptive nature rather than incremental, AI is going to significantly influence all sectors and lead to the development of new skills. Amidst all the trends, CFTE believes the importance of skills and talents remain the primary drivers of transformation in the industry.

To gain insights into the perspectives of industry leaders on AI and talent priorities, CFTE conducted a survey involving 50 senior figures from banking, government, and leading AI companies. The survey focused on four key areas: the impact of AI on organisations and employment, the influence of AI on an individual and skills, challenges posed, and potential solutions.

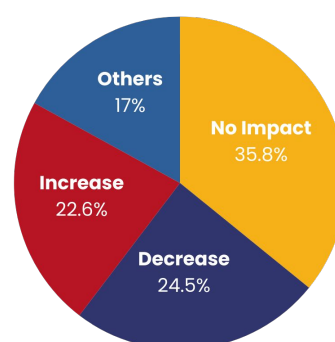
Regarding the impact of AI on organisations, an overwhelming **95%** of leaders expressed positivity, citing the potential for AI to enhance operational efficiency, automation, and customer experiences. They highlighted the positive effects on communication and personalised services, emphasising that GenAI has the capacity to significantly elevate content creation.

In assessing the impact of AI on employment, leaders often express a degree of uncertainty. Notably, insights from various perspectives indicate that the influence of AI is contingent upon specific job roles. While an estimate of the net job gain deems unreliable as of now, it is anticipated that as time progresses, a clearer understanding of the impact will emerge.

**Figure 1: Impact on Organisation**



**Figure 2: Impact on Employment**



Source: CFTE Survey of 50 senior leaders, November, 2023

## Preface

In evaluating the impact of AI on an individual level, **82%** senior leaders believe that AI will augment the capabilities of average professionals, enhancing the output of human workers by delivering better, cheaper, and faster solutions.

Delving deeper into the talent priorities identified by industry leaders, while **technological competencies** such as data analytics, AI, and programming featured prominently, a noteworthy emphasis was placed on **soft skills**. Adaptability, continuous learning, and business acumen are considered crucial attributes bridging the divide between technology and business. Furthermore, leaders acknowledged **ethical considerations** of compliance and risk management as AI tools become increasingly sophisticated.

Lastly, with regards to the challenges posed by the tech-driven landscape, senior leaders mentioned talent recruitment and retention, staying technologically current, and bridging skill gaps. In response to these challenges, initial suggestions include:

- Integration of AI into business operations is non-negotiable, provided clear objectives are set for an AI strategy.
- An open and collaborative organisational culture that fosters partnerships is also endorsed by many leaders.
- Continuous upskilling is highlighted by the majority of leaders in the face of rapid technological evolution.

Recognising the multifaceted nature of this challenge, CFTE and British Chamber of Commerce Singapore convened a roundtable to provide a unique forum for industry leaders and experts to share **real-time** insights, strategies, and best practices regarding AI training.



# Preface

This collaborative dialogue serves as a method for planning and guiding organisations through the complexities and challenges associated with the impact of AI. The goal is to collect the best practices from both the public and private sectors in navigating the rapidly changing landscape of skills in finance.

The roundtable hosted an assembly of distinguished leaders from the Institute of Banking and Finance Singapore, United Overseas Bank, Standard Chartered, FactSet, Coventry University and leading AI companies. This diversity brings a range of perspectives and experiences to the discussion, offering insights from stakeholders actively involved in AI training.

Senior leaders at the roundtable identified the most important skills in AI, revealed practical guidance, lessons learned, and nuanced considerations that are only available through the format of open dialogue.

**10 November 2023**

## ***Addressing the new skills in an AI World***

Roundtable at the Singapore Fintech Festival, co-hosted by British Chamber of Commerce Singapore and CFTE

During the session, **ten participants contributed diverse expertise and real-world examples**, each offering a view into the fascinating world of AI training in the context of a guided conversation with their peers.

This summary report will provide a high-level perspective on the direction of AI education. With up-to-date knowledge from developed markets, we hope to help organisations make more informed and strategic decisions that confer competitive advantage.

We trust this report will initiate further discussion into new skills in an AI world; and contribute to national and corporate-level strategies for upskilling and reskilling, so that no-one is left behind.

CFTE would like to thank British Chamber of Commerce Singapore for their support in organising an exclusive dialogue with industry leaders on one of the most important topics in the finance industry.

# Contributors

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# Executive Summary

As AI technology rapidly advances, the need for new skills and updated education methods becomes increasingly important. It's essential for businesses and educational institutions to adapt, focusing not just on technical AI skills but also on soft skills like adaptability and problem-solving. This changing landscape calls for a fresh approach to learning, making sure that people are not only familiar with AI but also ready to use it effectively in their jobs.

This summary report, drawing insights from "**Addressing the new skills in an AI World**" roundtable held during the Singapore Fintech Festival, presented opinions of senior leaders in Finance on the state of training in AI and how we should move forward. It is structured into three critical sections..

The first topic of the discussion, "**Current Landscape of AI Skills**" addresses the most in-demand skills for financial professionals in an AI-powered industry and challenges associated with an AI skills gap:

- All speakers viewed Generative AI skill has disrupted the AI landscape and called for a new skills framework.
- There is an emerging consensus that a basic understanding of AI is essential for all workforce levels, not just specialists, to adapt effectively to an AI-driven future.
- Alongside technical understanding of AI, the speakers agreed that soft skills such as flexibility, professional ethics, and social perceptiveness are crucial for adapting to AI's impact in the workplace.
- Some pointed to a disconnect between current educational curricula and the rapidly evolving demands of AI applications for the current AI skills gap.
- Impacts of the skills gap are seen in industries like finance, where it raises concerns about over-reliance on AI, potential job losses, and the necessity to continually adapt and learn new skills.

The second section, "**Role of Stakeholders in AI Education and Adoption**" brought together sharing from the public sector and the private sector on who is responsible for AI training:

- There is a mutual understanding that individuals in school and in the workforce need to actively learn AI.
- Private organisations play a key role in providing practical AI training and creating a learning culture from leadership level to employee level and across departments.

# Executive Summary

- On a company level, a structured 3-step training programme, encompassing basic AI awareness, practical AI application, and advanced AI fluency, is recommended to upskill employees.
- Governments are pivotal in shaping AI education and adoption, in creating conducive regulatory environments and in fostering collaboration among all stakeholders.

Finally, the roundtable addresses the "**Best Practices in Bridging AI Skills Gap**". Senior leaders shared country and company-level examples, this theme aims to glean successful strategies and address challenges in imparting AI skills within the financial sector.

- Singapore's model for AI training and integration is highly structured and government-driven, focusing on collaboration between government, regulators, and industries to draw a skills map for holistic AI development.
- The UK adopts a more market-driven approach to AI, emphasising adaptation to technological changes and advancements across various sectors.

Overall the sentiment across the roundtable is an urgent need to acknowledge the importance of AI literacy and to address the skills gap in AI. As the development of AI applications in finance has accelerated at a unpredictable pace, there has not been a standard model that guarantees the success of upskilling the whole workforce. But senior executives from organisations of all sizes agreed a comprehensive skills set encompassing hard skills, soft skills, industry knowledge and a learning mindset will set apart talents in an AI world.

## Part 1

# Current Landscape of AI Skills

Addressing the new skills in an AI World



### Structuring AI Skills

In the rapidly evolving field of AI, new skills have emerged. Statistics collected by a banking executive shows a notable **21-fold** increase for roles involving ChatGPT and AI, and an astounding **300-fold** rise for positions related to GenAI, computer vision, and natural language processing (NLP). On the other hand, machine learning engineers is expected to grow **five times** faster than data scientists. Plain numbers have reflected the growing demand for expertise in cutting-edge technologies.



***“There's no question that Gen AI skills would be the most in-demand eventually”***

Looking beyond the surging interest in GenAI, senior leaders at the roundtable emphasised the need for a well-structured **framework** to assess the demand for this innovative skill set. While technical proficiency can span from fundamental understanding of AI to specialised expertise in Large Language Models, the ultimate value driver is the ability to apply AI effectively in business contexts.



***“Leveraging these capabilities, both from a technical standpoint, and from a soft skill standpoint to create new business models is the way.”***

**Senior leaders highlighted the following skills that will make up a comprehensive skills set in the world powered by AI:**

- **Hard skills:** The focus is clear on how Generative AI has emerged as a disruptive skill but the importance of classical AI is also highlighted (eg. fundamental analytical capabilities and basic statistical regression analysis). They are skills that are essential for grasping the foundational concepts of AI regardless of one's background.
- **Soft skills and Mindset:** Some think the ability to adapt, ethical decision-making, social perceptiveness, self-management, and problem-solving are critical skills, as they remain difficult for AI to replace. Others identified innovation, active learning, strategic thinking, complex problem-solving, management skills, and creativity as key attributes that will be highly valued by employers.
- **Industry knowledge:** Use case and business domain knowledge are indispensable for AI professionals. These competencies enable the effective application of the technology in specific industries or business contexts, ensuring that AI solutions are aligned with industry needs.

# Current Landscape of AI Skills

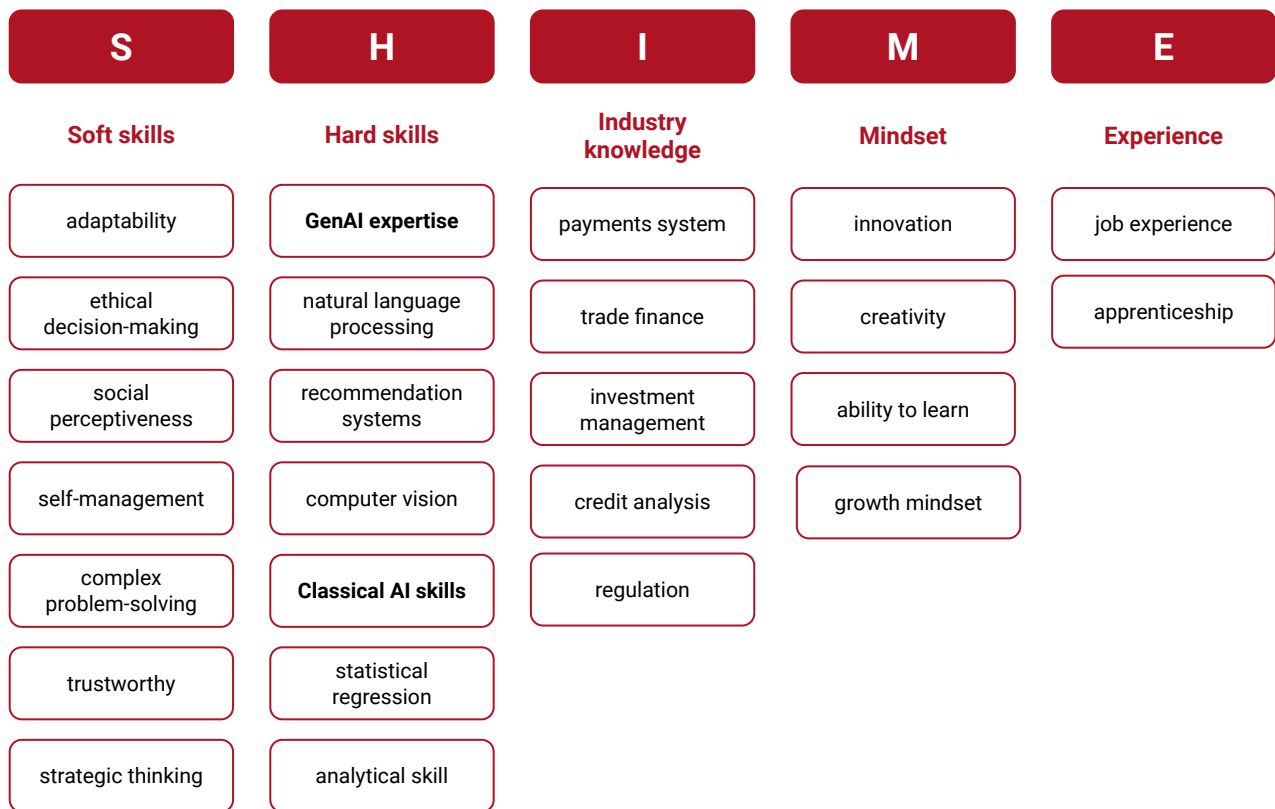


***“The key skill you need to have is an ability to learn”***

The evolving nature of AI suggests a shift from purely technical skills to a more holistic approach that combines technical expertise with soft skills, adaptability, and creativity to navigate the changing landscape and create new business models.

We could summarise the list of future skills for finance professionals based on CFTE’s SHIME framework as follows. The list of skills includes those mentioned by the discussants but it is not exhaustive.

**Figure 3: SHIME skills Framework by CFTE, with contributions from speakers**



***“The people who will prosper are the people who will evolve themselves”***

***“The key skills you need to have are a pretty good ability to learn. Learn how to learn and learn continuously”***

### Challenges in Bridging the AI Skills Gap

In the current landscape of rapid technological evolution, coupled with the number of new skills required by senior leaders in the previous question, there exists a pressing need to learn AI skills. However, the constraints of time and resources both on organisational level and individual level pose several challenges.

Firstly, discussants pointed to different types of knowledge gap that organisations and individuals face in:

- **How to learn AI:** The gap is seen in educational institutions, where curricula struggle to keep pace with the fast-evolving nature of AI technology and evolving skill requirements.



***“To develop a curriculum for the future we must foresee the future. There's definitely a gap in what we are teaching that is useful and applicable for the future”***

- **How to apply AI:** There is a skills gap, particularly in understanding how to apply AI technology ethically and effectively across various industries. There is clearly a disparity between the current technical skills taught and the rapidly evolving demands of AI applications in various industries.
- **How to keep up with AI:** The skills gap is acknowledged in the context of the rapid pace of technological change and its impact on various job roles and functions. For example, the transition from classical AI which required hardcore tech skills, to more democratised forms like ChatGPT, has led to different use cases and adoption patterns.



***“AI has a huge spectrum of outcomes. It can be descriptive, it can be predictive, it can be prescriptive. I think now the biggest gap that we have is just the last part.”***

The AI skills gap extends across various stages, encompassing not only the initial learning phase but also the crucial transition to practical application and the ongoing process of skill development in pace with developments of AI. This multifaceted challenge poses issues for both the present and future workforce.

Here are some challenges brought forward in the roundtable when it comes to adapting to a future of work driven by AI:

- **The “trust” component:** In the evolving landscape of finance, professionals must balance analytical skills with the enduring importance of trust. Concepts like the Mosaic theory highlight the value of connecting information from various sources to form sound investment opinions, emphasising the continued relevance of fundamental principles in investment management in a high-tech future.
- **Human-computer interface:** Among transformative shifts in the human-computer interface brought by AI applications, leaders anticipate a future where "high touch" elements, like natural voice-activated interactions, play a prominent role, introducing additional considerations and potential risks in the implementation process.
- **“Narrow” thinking problem:** There's a concern that the reliance on AI for information processing could diminish critical thinking and problem-solving skills, which are essential in various industries.



*“Diversity of thought is going to be a challenge, which is why perhaps the soft skills will be becoming more critical. It's not what's the answer, but what are the questions you're seeking.”*

### Executive brief

In essence, AI stands as a pivotal asset in the ongoing evolution of financial services, positioning itself as a crucial tool within our strategic toolkit. However, its effective utilisation requires a comprehensive skill set: Soft skills, Hard skills, Industry knowledge, Mindset and Experience.

There is a common theme throughout the discussion highlighting the urgency in equipping the current and the future workforce with the right knowledge and skills to use AI effectively and responsibly.

Challenges of trust, lack of diversity of thoughts and a multifaceted skills gap will remain with a potential of widening if today's students and employees are not prepared for “high tech, high trust and high touch” future.

## Part 2

# Role of Stakeholders in AI Education and Adoption

Addressing the new skills in an AI World





# Role of Stakeholders in AI Education and Adoption

The forthcoming section delves into a critical aspect of addressing the AI skills gap. Recognising that bridging this gap is anyone's sole responsibility, discussants from senior leadership embraced a collective and cooperative process to adequately train the workforce. Each stakeholder in the industry plays a pivotal role in contributing unique perspectives and expertise to overcome the challenges in AI training.

## Role of Individuals

When the question of "Does everyone need to learn AI" was raised, there was a consensus among industry leaders that individuals in school and in the workforce need to actively learn AI.

From a skills perspective, not everyone needs to become a data scientist. However, a basic understanding of AI is considered important for all, especially to prevent misuse and ensure responsible AI use. It starts with the most fundamental building blocks of AI, such as basic statistical regression analysis, and progresses towards purposeful application.

- **Basic understanding:** This basic understanding is vital for adapting to AI's impact in the workplace. It applies not only to users who are directly involved in its development, but also users who will see AI increasingly being integrated in their daily tasks. All university students are encouraged to understand the building blocks of AI in order to apply to their future jobs, whether they will be business leaders or engineers.



***"I think AI will be used like Microsoft Word, PowerPoint, and Excel spreadsheets are these are the common everyday tools"***

- **Knowledge of use cases:** AI applications in finance vary significantly across different job functions like credit analysts, fraud analysts, or bank tellers, which means a need for cross-disciplinary approaches to AI literacy. A two-pronged approach is advocated—one that caters to basic understanding for all and more in-depth upskilling for those interested in operationalising their expertise through AI.
- **Awareness of limitations:** Individuals are encouraged to understand AI's capabilities as well as limitations, which helps prevent them from abusing AI in their professional and personal lives.

## Role of Private organisations

Private organisations contribute to addressing the AI skills gap by committing to promote lifelong learning and having a multi-level approach to AI education. They need to collaborate with governments by actively participating in skills mapping, and building industry-specific curricula, ensuring a dynamic alignment with evolving needs of the industry.



***“If you don't train your ground staff to sort of understand and appreciate the usage of AI, even if you have the best tool out there, they wouldn't know how to use it.”***

Leaders that represent the financial workforce, management and board level of global banks and consultancy, and AI companies brought forward some of the roles of the private sector:

- **Lifelong learning:** Leading organisations emphasise the concept of lifelong learning, encouraging adults to continually acquire new skills.
- **Multi-level approach:** Organisations in general are adopting a multi-level approach to AI education, targeting different segments of their workforce. This includes basic AI awareness for all employees and more advanced training for those interested in deeper involvement with AI.
- **Collaboration with government:** They collaborate with the government and regulatory bodies to implement training programs and initiatives.
- **Participation in skills mapping:** They actively participate in the mapping and transitioning of traditional roles to jobs of the future.
- **Professional bodies and institutions:** also contribute by shaping industry-specific curricula, ensuring that education remains dynamic and aligned with the evolving needs of the workforce

The roundtable has put forward a suggestion for a **three-step AI Training Program** for organisations:

### Basic AI Awareness

The first step of the program is to ensure that all employees, regardless of their role, understand the basics of AI. This includes an introduction to what AI is, how it functions, and its relevance to their specific job functions. This foundational level is crucial even for those in non-technical roles, such as bank tellers, as it helps build a general awareness of AI and its impact on various aspects of the business.

## Operational AI Application

The second step targets employees interested in deeper AI integration into their roles. These 'AI-Driven Individuals' will attend upskilling courses focused on how their expertise can be operationalised through AI. This phase involves more advanced training, ensuring that the application of AI skills is practical and relevant to the current job market.

## Cross-Disciplinary AI Fluency:

The final step is designed for those aspiring to become AI fluent. This advanced level addresses the need for a cross-disciplinary approach, involving calibrated training that combines AI knowledge with domain-specific expertise. It aims to create an environment where different professionals, such as data scientists, engineers, and product managers, collaborate and contribute to AI projects.

This approach sets the foundation for AI education, firstly for employees of an organisation, and then potentially with revision and adaptation could be applied for the industry.

## Role of Governments

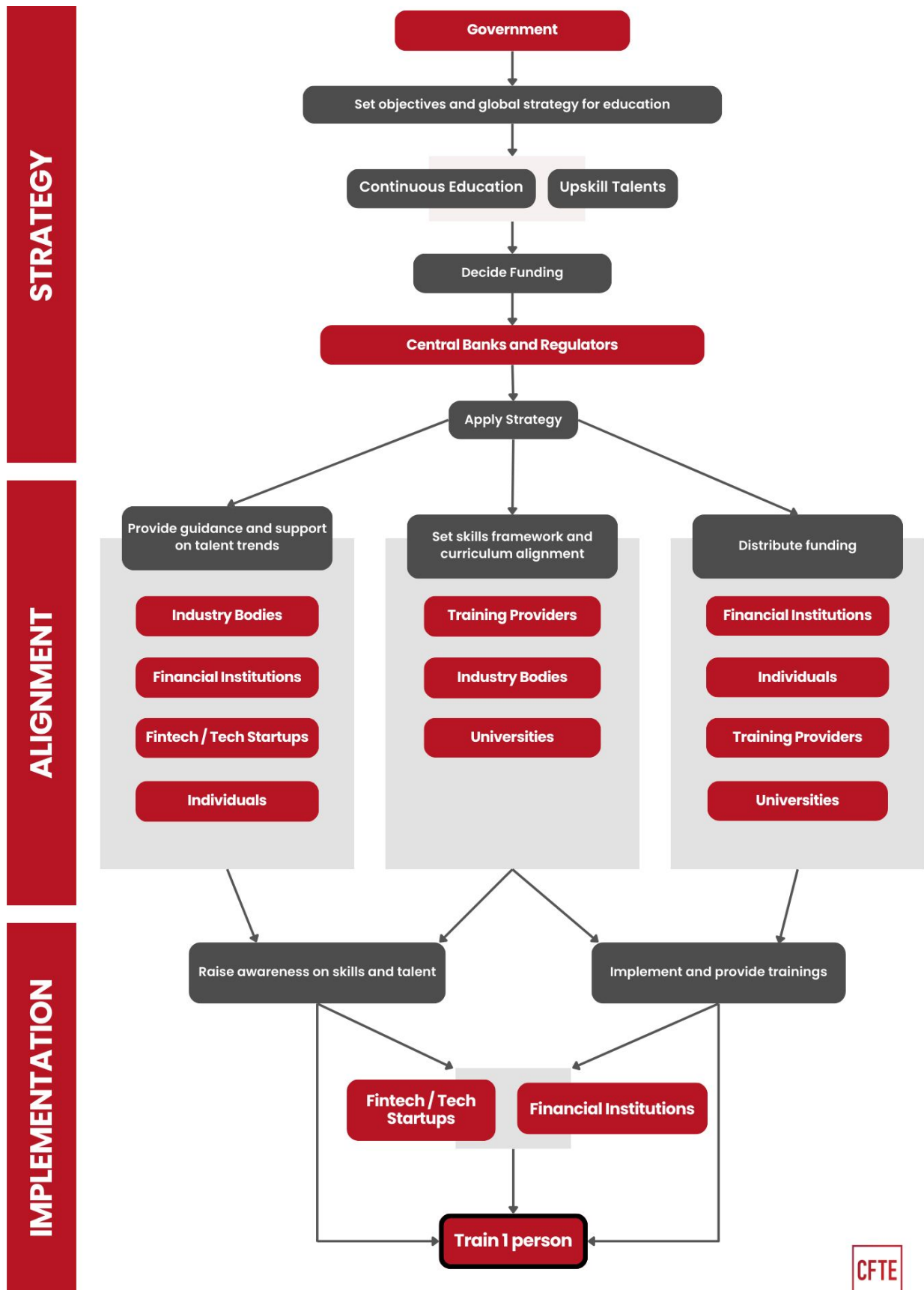
To transform the whole workforce to align with emerging technologies, the government's role is said to include acknowledging the skills gap, preventing job losses, and fostering a conducive regulatory environment for the advancement of AI.

- **Acknowledgement of the skills gap:** Understanding the evolving demands of the job market will help align the workforce with industry needs, promoting collective innovation, enhancing competitiveness and ensuring social inclusion.
- **Job loss prevention:** Governments are said to have the responsibility of preventing job losses by upskilling and reskilling to avoid the hire-fire model.
- **Policy provision:** The government needs to provide clear policies, strategies, and action plans, creating a conducive regulatory environment for AI advancement.



***“We're also operating in a much more disconnected operating environment, where there's regulatory arbitrage, there is judicial arbitrage, there's political arbitrage and economic arbitrage, more than we've ever seen in the last 10 years. So what the regulator's can actually do is continuing that pathfinding mission to bring guardrails and standardisation where possible.”***

Figure 4: Top-down approach by government in upskilling



Source: CFTE New skills in Financial Services Report, 2022

## Role of Stakeholders in AI Education and Adoption

For countries like Singapore, the focus is on future-proofing the workforce by creating a **top-down model** that involves collaboration between all stakeholders, including government, industry, and educational institutions. (See Figure 4) For instance, IBF has reskilled traditional roles such as bank tellers into “digital ambassadors”. They also set a goal to encourage senior employees to reskill and encourage women to take up tech roles, with 42 financial institutions taking part in the initiatives.



***“So, as the water level rises our workforce must be able to rise with water, but that alone is insufficient because who is watching out for the big waves coming on. The challenge is not about preventing losses, but preparing them for taking on new waves.”***

For **market-driven approach** seen in the UK, the role of the government is more heavily placed on setting guardrails so that the workforce can safely evolve with market demand without compromising innovation prowess. But it is important for regulators to be responsive to the market.

At this early stage, it is hard to determine the superior approach, due to the complex nature of the AI landscape. A top-down approach demonstrates strength in ensuring ethical standards and responsible practices in education and talent management, that involves all relevant stakeholders. On the other hand, the bottom-up approach exhibits strength in fostering workforce evolution aligned with industry demands, emphasising adaptability and competitiveness.

### **Executive brief**

While not everyone needs to become an AI expert, there is a growing need for AI literacy across all levels of the workforce.

The future of AI requires a collaborative effort from individuals, private organisations, and governments. Each plays a unique role in fostering an environment where AI can be understood, used responsibly, and integrated effectively into various job functions and industries.

While speakers from the private sector expressed the need to adapt to fast advancements of AI, they shared expectations for regulators to speed up AI regulation simultaneously to ensure responsible use of emerging technologies.

## Part 3

# Best Practices in Bridging AI Skills Gap

Addressing the new skills in an AI World



There isn't a one-size-fits-all standard model for fostering skills adoption. However speakers shared practical insights of what has worked to promote learning and development, that could be applied to learning new AI skills.

### At An Organisational Level

Private companies are creating a conducive environment for AI learning and application, providing upskilling opportunities and ensuring that employees can apply their new skills in real-world scenarios and adopting agile innovation management practices.

- **Continuous learning culture:** Employees are encouraged to continuously learn and understand how AI tools can help their daily tasks. Furthermore, allowing employees the freedom to experiment with AI applications can lead to groundbreaking developments and practical solutions.



***"You've got to provide the space, the freedom to share and develop knowledge. So learning and development is part of our company growth measurement."***

- **Investing in employees:** Organisations are reminded by senior leaders to invest in employee training by offering meaningful learning opportunities, establishing clear objectives for the training, and developing a comprehensive strategy. Rather than categorising these initiatives solely as Corporate Social Responsibility (CSR) programmes, the emphasis should be on generating tangible and substantial impacts, which would be accomplished together with the right training partner.



***"First, you have to continue to invest in our staff. Second is, through that continued investment, allow your people the opportunity to experiment."***

- **Bite-sized and applicable programmes:** Organisations should facilitate a dynamic learning environment where comprehensive courses spanning several months or years are not mandatory. Instead, individuals can acquire knowledge within a brief timeframe, promptly apply it, share their experiences openly, and contribute to a collective learning journey, fostering a culture of continuous knowledge dissemination and multiplication.
- **Post-training Engagement:** The actual transformation of a financial professional does not end at the completion of a course, but rather, what happens afterwards within their job. Leaders should recognise that failures in experimentation are valuable for learning and growth, encouraging a risk-taking mindset.

- **Cross-Functional Collaboration:** In order to build an innovative environment for AI applications, private companies also need to encourage cross-functional collaboration where diverse skills contribute to AI development.
- **Apprenticeship and Internship:** This type of employment is shared as a practice that promotes earning and learning and building skills in a fast changing market without going through the higher education system to get a degree. It could be a model for the financial services industry where upskilling happens more easily on the job.

### At A Country Level



***“For the government it is all about preventing job losses by transforming our workforce in a way that it takes advantage of the new technology”***

The influence of AI technology in both financial and non-financial industries becomes increasingly significant, which proportionately increases the responsibility of governments.

- **AI-conducive regulatory environment:** Governments are tasked with creating a regulatory framework that supports AI education and application while ensuring ethical use. They need to ensure that leaders and professionals are educated about regulatory constraints and possibilities.
- **Collaboration Between Industry, Academia, and Regulation:** A collaborative approach involving industry, and regulatory bodies and training providers (a tripartite model) is seen as essential in accelerating training efforts and accrediting AI programmes. When all parties convene to build strategies and action plans, each stakeholder can take ownership of the both strategies and execution
- **Investing in Research and Development:** To avoid being left behind in the competitive landscape of AI adoption, governments need to allocate resources towards AI research and development to keep pace with global advancements in AI technology. In addition, serious consideration should be taken to set aside budget for Workforce development initiatives.



## Best Practices in Bridging AI Skills Gap

- **Government-led initiatives:** Most innovative central banks in the world have extended their role to conducting skills assessment at granular levels and identifying skill needs, through the interventions and monitoring of a training arm. Additionally, they recognise the importance of a diverse training ecosystem to cater to varying learning styles and speeds.

The highlighted example at the roundtable was the Singaporean approach, marked by detailed planning and strong execution, which showcases a proactive and inclusive strategy in preparing its workforce for the AI-driven future. The Technology in Finance Immersion Programme (TFIP), initiated by IBF in 2019, aimed to reskill early to mid-career candidates without a tech background for roles in Artificial Intelligence, Business Analysis, Cloud Computing, Cybersecurity, Data Analytics, Software Engineering, and more. Over three cohorts from 2019 to 2022, with more than 1000 trainees aged mid-20s to 60, the program achieved a 70% placement rate, with almost 55% in deep tech areas such as Artificial Intelligence. Notably, mature trainees (40 years and above) constituted 16% of enrollees, with a promising 57% eventually placed in permanent tech roles, challenging stereotypes about their adaptability to reskilling.

### Executive brief

Senior leaders advocate a strategic approach to AI skills for organisations in financial services, prioritising a continuous learning culture, encouraging cross-functional collaboration, and investing in employee training for AI readiness. By fostering experimentation, adapting agile methodologies, and celebrating failures and learning, organisations of all sizes could adopt a growth mindset for a resilient, innovative workforce.

At the national level, leaders recommend such initiatives as implementing government-led AI education, creating an AI-conducive regulatory environment, and fostering public-private partnerships. Regulators should invest in research to stay competitive, invest in promoting AI awareness, and incentivising AI adoption.

These practices collectively equip the financial industry with the comprehensive skills set that is required for the workforce in finance - where AI will increasingly be integrated in their jobs.

# Conclusion

Widespread adoption of AI necessitates a new skill set for finance professionals, encompassing both technical and soft skills. Technical skills, particularly in Generative AI together with a foundational understanding of AI principles like analytics and statistical regression, form the core of technical AI expertise. Equally important are soft skills, including adaptability, ethical decision-making, and complex problem-solving, complement AI capabilities. This holistic framework is crucial for professionals to navigate and excel in an AI-driven future.

In response to the current skills gap in finance and in AI, the role of stakeholders - individuals, private organisations, and governments - is pivotal in shaping AI education and implementation. Individuals are encouraged to continuously learn to stay relevant. Companies need to create conducive environments for AI application, providing practical training and fostering a culture of innovation. Governments are responsible for creating regulatory frameworks that support AI education and ethical use.

Current best practices in AI skills development emphasises on:

- Collaborative efforts to align workforce skills with industry changes
- Prioritising training over traditional hiring and firing methods
- Adopting diverse training methods to cater to different learning styles and speeds, ensuring that all employees, irrespective of their roles, are equipped to handle AI's impact.

The roundtable has set out clear directions for upskilling in the AI world: education is the only way forward. The efforts need to come from the individual level, company strategy, leadership, industry-wide collaboration and government's initiatives.

This comprehensive approach to AI skills development is critical in ensuring that the workforce is not only AI-literate but also ready to apply these skills effectively in their jobs. More importantly, it prepares the workforce for the changes that AI and Generative AI will bring about in an already fast-evolving industry.

# Appendix

Addressing the new skills in an AI World

# Researchers

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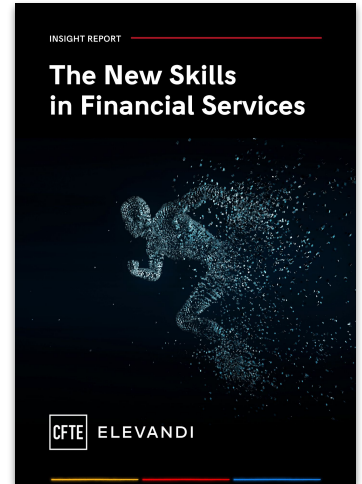
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# Addressing the new skills in an AI world



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