Al Literacy Whitepaper

Understanding and Implementing Al Literacy

Version 0.1



CFTE





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Before you read...

This whitepaper on "AI Literacy - Understanding and Implementing AI Literacy" is a collaborative effort intended to *provide insights and guidance on a critical emerging competency*. Like digital literacy, which has proven to yield significant economic advantages. Professionals in high-digital roles earn more than twice annually compared to those in low-digital roles.

Al literacy is expected to influence both individual career trajectories and organisational success. This whitepaper is currently under review by industry stakeholders, experts, and policymakers, and is open to feedback. While every effort has been made to ensure accuracy, the insights provided here should be viewed as a foundational guide rather than an exhaustive analysis. *Readers are encouraged to consider the perspectives within this paper as part of an ongoing dialogue about AI literacy's role in shaping the future workforce*.

Executive Summary

As AI continues to integrate into industries worldwide, defining **AI literacy** and ensuring effective tool adoption have become a critical challenge. With regulations evolving and penalties for non-compliance becoming more stringent, it is essential for the modern workforce to understand AI—not just in terms of its technical applications, but also its ethical, operational, and societal implications. This whitepaper, driven by CFTE's commitment to thought leadership, aims to clarify what AI literacy entails and how it can be implemented across industries.

Al literacy is more than just knowing how to use AI-powered tools. It encompasses understanding how AI systems work, recognising their limitations, and ensuring they are used ethically and responsibly. As new regulations emerge, organisations that fail to equip their workforce with these skills or they face the risk of penalties and reputational damage. Employees across all sectors—from finance officers and salespeople to utility workers —are now dedicating significant portions of their workdays to using digital tools, especially AI or Generative AI that demand digital proficiency. To address this, CFTE seeks to provide clarity on AI literacy and guide industries through the complexities of AI adoption.

This paper introduces a practical framework for **implementing Al literacy within organisations**. By focusing on structured training, critical thinking, ethical considerations, and continuous upskilling, businesses can ensure their teams not only comply with regulations but also leverage AI for innovation and competitive advantage. The framework is designed to be adaptable, supporting various industries in fostering a workforce that is both AI-literate and future-ready.

Did you know that according to the EU AI Act, you have to mention if you have used generative AI for creating content, images, etc. ?

So, yes, this paper has also used such generative ai tools to create text for this paper however the ideas and thoughts remain unique with human brains behind.

Introduction

The Urgent Need for AI Literacy: Empowering a Workforce for a Digital Future

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Introduction

In November 2022, **ChatGPT gained 1 million users within just 5 days of its launch**, and now, 2 years later, it has **200 million weekly active users worldwide** (Backlinko, 2024). Suddenly, everyone became aware of AI, interacting with it through personal use, internal AI tools in workplaces, or via Bring Your Own AI (BYOAI) solutions. The number of AI tool users is expected to keep growing, surpassing 700 million by the end of 2030.

Al is no longer just a futuristic concept. It's here, and it's everywhere—quietly working behind the scenes in almost every part of our daily lives. As people begin forming relationships with AI systems, this interaction has the potential to significantly boost productivity and economic gains. What started as experimental technology in research labs has quickly become a core tool for industries like healthcare, finance, retail, and manufacturing. Whether we notice it or not, AI is influencing the way we shop, the services we use, and even the decisions businesses make on our behalf.

Think about the personalised recommendations you get while shopping online or the way your bank can spot suspicious transactions before you do—that's AI at work. In hospitals, AI helps doctors diagnose illnesses faster, while in stores, it predicts what customers want, making shopping more personalised. AI is helping companies streamline their processes, reducing errors and speeding up operations. And this is just the beginning—AI adoption is expected to skyrocket **from 45% in 2022 to 85% by 2025**. In finance alone, the AI market is projected to hit over **\$22 billion** by 2026. (Grandview Research, 2024)

But as AI becomes more widespread, we're also facing new challenges.

Is this widespread adoption enough?

Are people equipped with literacy using AI correctly and effectively? Do companies have the right AI strategy across all levels? The world is digitalising at an unprecedented rate, with over 90% of jobs in Europe now requiring basic digital skills (EU, 2023). Taking it a step further, the Marketing AI Institute projects that the future of work will increasingly be shaped by humanmachine collaboration, with at least 80% of tasks performed by knowledge workers involving some level of AI assistance within the next 1-2 years.

Al is no longer something only tech experts deal with. It has become a part of daily tasks and essential skills for professionals across various industries, often without them even realising it. Yet, in our conversations with industry leaders, a common theme keeps coming up: many people are using AI without fully understanding how it works or the implications it carries.

The real challenge lies in ensuring that AI is utilised responsibly and efficiently. This is where AI literacy becomes crucial. It's not enough to just know how to use AI-powered tools; we need to understand what's happening behind the scenes. Without this knowledge, there's a risk of blindly trusting AI's decisions—sometimes leading to mistakes or even ethical issues. By fostering a workforce that's not only skilled in using AI but also capable of critically evaluating its outputs, we can unlock AI's true potential while avoiding its pitfalls.

The Growing Demand for an AI-Literate Population

As Artificial Intelligence (AI) becomes a part of almost every aspect of modern life, the need for widespread AI literacy has never been more urgent. No longer limited to research labs or technical experts, AI now influences our daily experiences—often without us even realising it. From the algorithms curating content on social media to the systems managing healthcare and financial services, AI quietly shapes the information we consume and the decisions we make. But with this growing influence comes a significant risk: the rise of misinformation and disinformation. In this landscape, understanding *AI isn't just a nice-to-have—it's essential for everyone, not just specialists.*

One of the clearest examples of AI's potential for harm is the rise of deepfakes—AIgenerated videos and audio designed to deceive. These manipulated pieces of content are increasingly convincing and accessible, making it harder to separate fact from fiction. A notable case occurred on September 3, 2024, when a deepfake video featuring the Central Bank governor of Luxembourg and a journalist spread across social media. The video falsely portrayed them as endorsing a fraudulent investment scheme, tricking viewers into believing the scam was legitimate. This incident highlights a dangerous reality: misinformation powered by AI can easily mislead large audiences.

To counter these threats, developing an AI-literate population is crucial. It's no longer enough to passively consume information; individuals must be able to **critically assess** the authenticity of content and recognise when AI is being misused. Whether in professional settings or as everyday consumers of media, people need the skills to question AI-driven outputs, identify manipulated content, and use tools to verify information. Without these skills, we risk becoming increasingly vulnerable to misinformation, particularly as *AI-generated content blurs the line between what's real and what's fabricated.* Al literacy goes beyond spotting deepfakes. It's also about understanding the broader social impacts of AI. From biassed algorithms affecting job applications to AI systems that may worsen inequalities in healthcare or finance, knowing how AI works—and where it can go wrong—is essential for holding companies and governments accountable. A population that understands AI will be better positioned to demand transparency, advocate for fairness, and push for ethical AI use in high-stakes areas like hiring, policing, and justice.

Take the Luxembourg deepfake incident as a case in point. If more people had the knowledge to detect that something was off in the video, the damage caused by the misinformation could have been mitigated. This underscores a critical truth: widespread AI literacy isn't just about understanding technology—it's about safeguarding society from the risks AI can introduce when misused or misunderstood. Other important aspect of having an AI literate professional is upskilling. In practice, people with higher digital skills have seen significantly better wages compared to those with non-digital skills. For example, professionals in high-digital jobs earned an average salary of around **\$73,000 per year**, whereas those in jobs with low digital content earned just **\$30,000 on average**. This disparity is not just about higher earnings; it also reflects the broader economic impact of digital skills. Professionals proficient in digital tools have access to more opportunities and are less susceptible to automation. (Brookings, 2017)



What's even more critical is the speed of this shift. While the transition to a digital economy took nearly 20 years with the rise of the internet, the influence of AI and advanced digital technologies is happening at a much faster pace, with similar wage gaps and job impacts emerging in just a few years

This rapid acceleration underscores the urgency for professionals to acquire digital competencies. The gap between digital and non-digital skills is widening, and individuals without digital fluency risk falling behind in a labour market increasingly dominated by technology.

Thus, in today's rapidly evolving economy, *having AI literacy is not just advantageous* —*it is becoming essential for securing higher wages and maintaining job security*. It

equips individuals to navigate a complex digital age where reality is increasingly shaped by algorithms, and helps ensure that we remain in control of the technology shaping our lives. AI literacy includes the ethical, practical, and technical aspects that are essential for organisations to maximise the benefits of AI while minimising risks.

Part 1 The Hidden Gaps

Al literacy is essential across industries, emphasising responsible and effective Al use; however, there is a lack of a unified definition.

The Ambiguity in Definition

One reason AI literacy is hard to define is that it means different things depending on the context. For example, the EU AI Act defines it through a legal and ethical lens, focusing on transparency, fairness, and accountability, especially in highrisk AI applications.

On the other hand, UNESCO's definition of literacy is broader and involves the ability to "identify, understand, interpret, create, communicate, and compute." When applied to AI, this could mean knowing how to use AI tools, but also how to interpret their outputs and communicate their implications.



Part of Chapter I: General Provisions

Article 4: Al literacy

 Date of entry into force:
 According to:

 2 February 2025
 Article 113(a)

 See here for a full implementation timeline.

Inherited from: Chapter I

SUMMARY -

This article states that companies that create and use AI systems must make sure their employees and anyone else who operates or uses these systems on their behalf are well-educated about AI. This includes considering their technical knowledge, experience, education, and training, as well as the context in which the AI systems will be used and the people or groups who will be using them.

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Providers and deployers of AI systems shall take measures to ensure, to their best extent, a sufficient level of AI literacy of their staff and other persons dealing with the operation and use of AI systems on their behalf, taking into account their technical knowledge, experience, education and training and the context the AI systems are to be used in, and considering the persons or groups of persons on whom the AI systems are to be used.

Source: EU AI Act, June 2024

This raises an important question: Is AI literacy about creating, deploying, or simply using AI? For developers, it may mean having the technical skills to build AI systems.

For policymakers, it involves understanding AI's broader societal impacts. And for most professionals, it's about interpreting AI outputs and recognising ethical and operational risks.

Without a consistent definition, companies are left to create their own interpretations, often leaving employees unprepared for the complexities AI brings.

Fragmented Approaches

Achieving AI literacy is not a straightforward journey. Many organisations adopt fragmented approaches, where **different departments train employees in isolation**. Technical teams may understand the inner workings of AI, but non-technical teams might not grasp its broader implications. This siloed approach creates gaps in understanding, leading to poor communication, inefficiencies, and sometimes costly mistakes.

Take the finance industry, for example. Risk analysts might understand the outputs of an AI model, but executives making high-level decisions may not have the knowledge to interpret these results critically. This disconnect can lead to missed opportunities or even financial and legal risks, as AI tools can sometimes amplify biases or produce flawed predictions if they're not properly managed.



Box-Ticking vs. True Understanding

One of the most common pitfalls is when organisations treat AI literacy as a **"box-ticking"** exercise. They may implement the latest AI tools and train their employees to use them but fail to ensure a deeper understanding. *This surface-level engagement often means that employees know how to use AI but don't fully grasp how it works or what risks it might pose.*

This box-ticking mentality might meet short-term operational goals, but it does little to prepare organisations for the complexities AI can introduce. True AI literacy goes deeper: it's about understanding the data behind AI systems, recognising their limitations, and being able to question AI outputs. It's about knowing when an AI-driven decision could be biased, ethically questionable, or simply wrong.

When organisations treat AI as infallible, serious consequences can follow. Across industries, *flawed AI implementations have led to biased hiring processes, customer discrimination, and even regulatory breaches.* These mistakes have cost companies both financially and reputationally. The ability to critically evaluate AI, rather than blindly accept its outputs, is at the heart of true AI literacy.



Part 2 Defining Al Literacy

Al literacy is a vital modern skill, yet defining it is complex. By comparing it to the evolution of other literacies and digital rights movements, we can trace its development and underscore its significance today.

Understanding Literacy in the Traditional Sense (1800s - 2000s)

Traditionally, literacy has been defined as *"the ability to read and write"* (Oxford English Dictionary, 19th century). In the 19th and early 20th centuries, basic literacy was the foundation of education and participation in society. Those who were literate had access to knowledge, economic opportunities, and social engagement, while those who were not were left behind.

Over time, the definition of literacy expanded to include not only the ability to read and write but also to understand and interpret information in meaningful ways. According to UNESCO, *"literacy is the ability to identify, understand, interpret, create, communicate, and compute, using printed and written materials associated with varying contexts"* (UNESCO, 2004).

Just as the concept of literacy evolved, we can think of AI literacy as not just understanding AI on a surface level, but gaining deeper insights into how AI works, what its outputs mean, and its broader societal impact.

The Evolution of Internet Literacy (2000s-2010s)

In the early 1990s, the rapid rise of the internet sparked the need for internet literacy. In the initial stages, this simply meant being able to access websites and perform basic online navigation. However, as the internet became a more integral part of society, internet literacy grew to encompass much more.

By the early 2000s, it became essential to understand how to evaluate the credibility of online sources, protect one's personal data, and participate in digital spaces. Internet literacy evolved from a basic skill into a necessity for navigating the complexities of the digital world. According to the American Library Association, *"digital literacy"* now refers to *"the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills"* (ALA, 2013).

As we moved into the 2010s, discussions around the right to internet access became more prominent. *In 2016, the United Nations declared internet access a human right*, recognising its fundamental role in ensuring participation in the modern economy and society (<u>UN, 2016</u>). This shift mirrors how essential AI literacy will become as AI technologies proliferate.

Recognising the evolution of AI as a transformative force in various sectors, *the EU Commission's Guidelines on Trustworthy AI stress that AI systems must be ethical, transparent, and accountable*. These guidelines also highlight the importance of AI literacy in fostering a society where people understand how AI works, the ethical issues involved, and how AI affects them directly. This is a key consideration in defining AI literacy—it must include the ability to critically engage with AI's ethical and social dimensions (<u>EU, 2019</u>).

The beginning of AI Literacy (2020s)

In 2024, the EU AI Act came into force, signalling a call to upskill in AI literacy in every organisation across different levels and functions. The EU AI Act includes AI literacy requirements under Article 4. To comply with the new legislation, organisations must address the challenge of ensuring AI literacy among their workforce. *AI literacy encompasses the skills and knowledge necessary for stakeholders from providers, deployers, to individuals to understand the deployment of AI systems, the associated opportunities and risks*.

Providers and deployers of AI systems must take measures to ensure sufficient AI literacy among their staff, tailored to their technical knowledge, experience, education, and the context of AI usage. Starting February 2025, organisations employing AI systems must ensure their staff possess appropriate AI knowledge relevant to the systems' contexts and their potential impacts on different groups.



What is Al Literacy?

Just as basic literacy and internet literacy have become essential skills in the modern world, AI literacy is now emerging as a crucial competency. As artificial intelligence increasingly influences our daily lives—shaping everything from the media we consume to the decisions made in healthcare and finance—understanding AI is no longer optional. AI literacy is not a one-dimensional skill; it is a multifaceted ability that touches on the technical, practical, and ethical elements of AI.

By learning from past literary movements and tailoring them to the opportunities and risks unique to AI, we can create a roadmap for what AI literacy should look like in today's world.

"Al literacy is the ability to grasp basic Al concepts, efficiently use Al tools, critically assess Al-generated outputs, understand the responsible use of Al, and stay adaptable in a rapidly evolving digital landscape."

This definition of AI literacy comprises five core components: *Foundational Knowledge of Basic AI Concepts, Practical Proficiency in AI Technologies, Critical Evaluation of AI Outputs, Responsible Use of AI, and Continuous Learning and Adaptability.* Together, these elements ensure individuals are well-prepared to engage with AI responsibly and confidently.



1 Foundational Knowledge of Basic Al Concepts

Much like how traditional literacy begins with understanding letters and words, Al literacy starts with a grasp of core AI concepts. This involves *knowing what AI is, how it works, and its fundamental building blocks, such as algorithms, machine learning, and data processing*

Think of this as understanding how the internet worked in the 1990s. Just as users needed to know what a browser or website was to navigate online, today's AI-literate individuals need to know what AI is, how it learns from data, and what types of AI are at play..

Example: Knowing what AI is, how it learns from data, and recognising the different types of AI technologies is similar to understanding how the internet connected people through a network of computers in the 1990s. Without this foundational knowledge, deeper engagement is impossible.

This knowledge is universal because AI is being used globally, across industries and sectors, and understanding its core functions is essential for everyone, regardless of their background.

Practical Proficiency in AI Technologies

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Just as internet literacy involves the use of digital tools like search engines and social media, AI literacy requires practical skills in using AI-driven technologies. This means knowing *how to interact with everyday AI tools—whether it's voice assistants, chatbots, or AI features in productivity software—and leveraging them to enhance efficiency and decision-making*.

Al proficiency isn't just about knowing how to use these tools; it's about understanding how to apply them effectively, much like how people began optimising their use of digital tools to streamline workflows in the 2000s.

Example: Using AI-driven scheduling tools to manage tasks or AI-powered creative tools to enhance productivity mirrors how internet users once learned to navigate websites or send emails.

These skills are *scalable*; where users can start small, perhaps with personal AI assistants and gradually build up to mastering more complex AI systems as they progress.

Critical Evaluation of AI Outputs

In the early days of the internet, a major challenge became evaluating the credibility of information found online. Today, we face a similar challenge with AI: How do we trust the output of AI systems? Critical thinking is vital in evaluating AI-generated content, understanding potential biases in AI decision-making, and questioning the reliability of outputs.

Critical evaluation involves *questioning AI recommendations, recognising potential biases in the algorithms, and understanding the limitations of AI systems*. Without this skill, individuals risk placing too much trust in AI without considering its fallibility.

Example: When a recommendation engine suggests products or media, AI-literate users should be able to ask why certain options are presented, understanding that biases in the data could skew results. This is similar to how we learned to distinguish credible websites from unreliable ones on the internet.

This capacity to think critically is vital in a world where AI is often seen as a *"black box,"* allowing users to make *informed, responsible decisions* based on AI output.

3



As AI continues to reshape industries like employment, healthcare, and justice, being AI-literate means understanding its *ethical, legal, and societal implications*. This includes recognising how AI can influence issues like *personal privacy, data protection, and social equity*.

Much like how digital rights movements have advocated for data privacy and equitable access to the internet, AI literacy requires a deep understanding of the *ethical risks* involved, such as bias in hiring algorithms, surveillance, or breaches in privacy. Users need to be aware of how AI can be misused and how these risks are addressed through *regulations* like the EU AI Act.

Al literacy also involves grasping the importance of transparency and accountability in AI, especially regarding data usage and privacy. Users must be aware of how AI can be misused, from mass surveillance to undermining privacy rights, and how regulatory frameworks like EU AI Act aim to mitigate these risks.

Example: Knowing how AI is used in screening job applications or making credit decisions is analogous to understanding how the internet enabled new forms of digital activism while also creating spaces for cybercrime and data breaches.

This awareness ensures individuals engage with AI *responsibly*, recognising its societal impacts and advocating for transparency and accountability.

Continuous Learning and Adaptability

If we look at *digital literacy* from about 20 years ago, the landscape has certainly evolved with the rise of smartphones, laptops, and tablets. However, the core concept of internet usage—accessing information, communication, and digital services—has remained largely consistent. The tools have advanced, but the foundation has stayed the same.

In contrast, *Al literacy is advancing at a much faster pace*. Just two years ago, Al tools were impressive but limited, perhaps capable of generating an image from a prompt in seconds. Today, Al can build entire virtual worlds or automate complex business processes with a single click, demonstrating its exponential growth. This rapid transformation requires users to continuously learn and stay updated with the latest Al advancements to remain effective and competitive.

Given AI's unprecedented pace of development, *continuous learning* becomes one of the most critical aspects of AI literacy. Individuals need to stay current with new tools, technologies, and ethical considerations to fully engage with AI's potential. Those who fail to adapt may find themselves outpaced by AI's progress.

Example: Initially, OpenAI's ChatGPT was known for generating text and images. However, with the release of o1-preview, the AI can now "think" before responding, tackling complex reasoning tasks and solving problems that require deep thought, like building entire digital systems or solving intricate logic puzzles. This rapid advancement highlights the importance of continuous learning to keep up with AI's fast evolution.

This need for ongoing learning ensures that AI literacy remains *future-proof*, allowing users to keep up with cutting-edge developments like AI-generated media, automation systems, or virtual environments. It's not just about knowing today's AI but about staying *ready for tomorrow's breakthroughs*.

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Part 3 Minimum Criteria to be Al Literate

Discover the AI Literacy Framework that defines universal, scalable criteria, empowering informed, ethical participation in an AI-driven world.

Minimum Criteria to be Al Literate

To make AI literacy tangible, we propose an *AI Literacy Framework* that outlines the essential criteria for becoming AI literate. These criteria are designed to be universal, applicable across various domains, from education to the workplace, ensuring that they cater to diverse audiences.

The framework is also scalable, meaning individuals can start with foundational concepts and gradually advance as AI technologies become more sophisticated. *Meeting these criteria empowers individuals to make informed, ethical decisions in an AI-driven world.*

Much like traditional literacy allowed individuals to participate fully in society, AI literacy ensures that individuals are active participants in shaping the AI-driven future.





Minimum Criteria for AI Literacy

	Minimum Criteria	Examples
Foundational Knowledge of Basic Al Concepts	Can explain fundamental AI concepts (e.g., machine learning, algorithms) in simple terms, and knows where AI is applied (e.g., chatbots, smart devices).	Describing machine learning as "AI learning from data" and identifying AI applications such as AI-powered recommendation systems on Netflix.
Practical Proficiency in AI Technologies	Able to use AI tools effectively, both in everyday tasks and in professional environments, to enhance productivity.	Using AI assistants like Google Assistant to automate tasks, or creating custom GPTs for professional tasks.
Critical Evaluation of Al Outputs	Can evaluate AI-generated content critically, understanding when AI may make errors or decisions influenced by bias in its training data.	Questioning why YouTube suggests certain videos and considering whether the recommendations are relevant or biased, or recognising the limitations of AI filters in hiring.
Responsible Use of Al	Understand the importance of accountability in AI deployment, ensuring that AI decisions can be explained and justified.	Ensuring an AI-based hiring tool can explain why it rejects or selects candidates, with clear accountability for its decisions.
	Keeps up-to-date with new Al	
Continuous Learning and Adaptability	trends, applications, and tools. Able to spot AI-generated content and recognise AI's role in shaping the digital world.	Staying informed about new Al- powered tools, or identifying a deepfake video of a politician in the news.

Part 4 Al Literate Workforce

Identify AI literacy within different functions and prepare AI-ready workforce.

Empowering the Workforce for an AI-Driven Future

In the rapidly evolving industry landscape, AI literacy has emerged as a critical competency. As AI continues to revolutionise various business functions, it's important to identify AI literacy within different functions. Organisations are facing a critical challenge: preparing a workforce that is predominantly composed of AI users, not AI builders.

While only about 15% of the workforce will be directly involved in designing, developing, or programming AI systems, 85% will rely on AI to perform their daily

tasks. This creates a pressing need for widespread AI literacy—not just for specialists but for all employees who will interact with AI systems to make decisions, solve problems, and enhance productivity.



Why Focus on Al Users?

While AI developers will be crucial to driving innovation, the majority of the workforce will engage with AI through user-facing applications. These employees won't need to know how to code AI systems, but they will need the skills to effectively operate AI tools, understand AI-driven insights, and critically assess AI outputs.



For example:

- In retail, customer service representatives will rely on AI chatbots to assist with routine customer queries, requiring them to monitor and guide the bot's interactions.
- In healthcare, doctors will use AI diagnostic tools that analyse patient data, but they must understand the AI's limitations and potential biases to make informed clinical decisions.

As AI continues to integrate into every aspect of business, upskilling the workforce to effectively use AI tools will be essential to ensuring that organisations stay competitive.

According to LinkedIn's 2024 Future of Work Report, AI and machine learning skills are among the top 5 most in-demand skills, but less than 30% of the global workforce is confident in their AI abilities . This indicates an urgent need for upskilling. (<u>LinkedIn, 2024</u>)

Implementing AI literacy in an organisation doesn't just mean knowing how to use AI tools—it's about understanding AI deeply, critically engaging with its outputs, and adapting to its rapid evolution.

Here are five practical ways to embed AI literacy in your organisation, aligned with the key components of AI literacy:

Establish a strong understanding of Al Fundamentals

To create a foundation of AI literacy, it's essential that all employees, regardless of their role, grasp *basic AI concepts* like algorithms, machine learning, and how AI systems work. This knowledge helps demystify AI and prepares employees to engage with more complex AI tools and applications.

How to implement:

- Organise **introductory Al online programmes**, **workshops** that break down these concepts into simple and relatable terms.
- Use **industry specific examples** to demonstrate how AI is already influencing everyday tasks and taking decisions in your field.

Similar to how employees learned basic internet navigation in the 1990s, introduce AI by explaining how AI systems power recommendation engines (Like Netflix) or virtual assistants (Like Siri).

Promote Practical Proficiency with AI Tools

Al literacy includes *hands-on proficiency* with Al technologies. Employees should be trained to use Al-powered tools that can enhance their productivity and decision-making. Familiarity with Al in practical settings builds confidence and ensures they can fully leverage its capabilities.

How to implement:

- Offer **task-specific AI training** on tools relevant to each department's needs—such as AI-driven data analysis software, scheduling tools, or customer service bots.
- Integrate AI use into **everyday workflows** to ensure frequent practice and skill development.

Just as professionals once learned to optimise workflows by using email and digital calendars, they should now be trained to use AI tools like AI-powered scheduling apps or smart assistants or custom GPTs for time management.

Encourage Critical Evaluation of Al Outputs

A crucial part of AI literacy is developing the ability to *critically assess AI-generated results*. Employees need to question the accuracy, fairness, and potential biases in AI outputs. Without this, they risk over-relying on AI decisions without considering the context or limitations.

How to implement:

- Host **critical thinking sessions** where teams analyse AI-driven recommendations and discuss potential biases or inaccuracies.
- Encourage a culture where employees **challenge AI outputs** rather than taking them at face value, fostering a more thoughtful engagement with AI.

Similar to learning to verify the credibility of websites during the internet's rise, employees should be trained to question why an AI system recommends certain products or decisions and whether there may be underlying biases.

Instil Responsible and Ethical Use of AI

Understanding the *ethical implications* of AI is essential. AI literacy includes recognising the potential societal, privacy, and fairness issues that arise with AI use. Employees should be aware of how their use of AI affects data privacy and broader ethical concerns.

How to implement:

- Provide **ethical AI training** focused on real-world issues like algorithmic bias, data privacy, and compliance with regulations such as **GDPR or the EU AI Act**.
- Create **clear guidelines** on how to use AI responsibly, ensuring accountability and transparency in AI-driven decisions.

Much like awareness campaigns on data privacy during the early internet era, employees should be educated on the risks and ethical responsibilities when using AI in processes such as hiring, customer profiling, or decision-making.

Foster a Culture of Continuous Learning and Adaptability

With the rapid advancement of AI, staying up-to-date with AI innovations is vital. AI literacy is not static—employees must continuously learn about new AI tools, capabilities, and ethical considerations to stay effective in their roles.

How to implement:

- Develop a **continuous AI education programme** with regular workshops, updates, and opportunities for employees to explore new AI technologies.
- Encourage **experimentation** with emerging AI tools to foster a culture of curiosity and adaptability.

As AI capabilities evolve from simple text generation to more advanced applications, like OpenAI's O1 preview, employees should be exposed to cutting-edge tools that transform workflows and business models, similar to how they once adapted to smartphones and the cloud.

Challenges

Despite the structured approach, several obstacles can impede the journey toward a truly AI-literate workforce. These challenges demand careful navigation, as they significantly impact the effectiveness of AI training efforts. *Incorporating these challenges shows not only the strategic approach to achieving AI literacy but also the reality of the obstacles that must be overcome to realise this vision*.



1. Overcoming Skill Gaps

Employees without a technical background often feel overwhelmed by AI's complexity. They may struggle with technical jargon, reducing engagement and leading to resistance.

Example: Tools like Google Assistant and Grammarly introduce non-technical staff to AI concepts in ways they can easily relate to, providing a low-pressure entry point into AI literacy.



2. Resistance to Al Adoption

Fear of job displacement is a recurring issue. When workers perceive AI as a threat to their roles, they resist adopting it, viewing automation as a risk to job security rather than a tool for enhancing productivity.

Example: Walmart successfully reskilled retail employees for AI-driven inventory management systems, reducing turnover by 20% and improving morale through targeted reskilling.



3. Keeping Pace with Technological Change

Al technologies evolve at a rapid pace, leaving many training programs obsolete within months. Continuous learning is essential, but organisations often lack the resources to update programs frequently enough.

Example: Regular AI skill audits ensure employees' knowledge is aligned with the latest technological advancements, helping them stay relevant and competitive.



4. Choosing the Right Training Partner

Organisations face a dilemma when choosing training partners. **Internal training can be time-intensive, but outsourcing to universities often means the curriculum lags behind real-world AI advancements.** Tech companies, meanwhile, tend to focus on upskilling AI developers, not the majority of employees who will use AI. Consultants can identify gaps but are often prohibitively expensive.

Example: Central Bank of Egypt partnered with CFTE, creating scalable, practical AI learning tracks that balance cost, scalability, and the evolving nature of AI.



5. Training as a Budget-Driven Checklist

In many organisations, Learning and Development (L&D) departments treat training as a budgetary line item rather than an opportunity to foster genuine skills development. *This "checklist" mentality often results in underwhelming trainings that fulfill budgetary requirements but fail to deeply engage employees or impart knowledge.*

Example: A CIPD 2023 study found that 40% of L&D programs focus on budget compliance over meaningful upskilling, creating a gap between training and workforce readiness.

Conclusion

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Al literacy is vital for compliance and productivity; this whitepaper offers a framework for implementation.

Conclusion

Al literacy is rapidly becoming a non-negotiable requirement for businesses, especially as new regulations make compliance essential. Defining AI literacy and creating clear pathways for its implementation will be critical for industries looking to avoid penalties and maximise AI's potential. With the reasoning of Literacy and Digital Literacy it is safe to define:

Al literacy is the ability to grasp basic Al concepts, efficiently use Al tools, critically assess Al-generated outputs, understand the responsible use of Al, and stay adaptable in a rapidly evolving digital landscape

This whitepaper also introduces a framework as the practical guide for implementing AI literacy within your organisation.

This whitepaper offers a solid foundation, but the journey doesn't stop here. The next version of this paper, to be released soon, will dive deeper into how organisations can assess AI literacy within their workforce. It will provide concrete tools and methods to measure AI competencies, ensuring that businesses can identify knowledge gaps and address them effectively.

CFTE's ongoing thought leadership aims to equip industries with the knowledge and frameworks needed to navigate the evolving AI landscape confidently and responsibly. Stay tuned for future updates on how to assess and certify AI literacy within your organisation.

About CFTE

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

More than 100K professionals from 100+countries have participated in CFTE programmes to accelerate their careers in Fintech and new finance. In addition to London, CFTE operates in **Singapore** (accredited by Institute of Banking and Finance), **the UAE** (Abu Dhabi Global Markets, Emirates Institute of Finance), **Egypt** (Fintech Egypt / EBI), Hong Kong (Cyberport), **Malaysia** (Asian Banking School), **Luxembourg** (Luxembourg Academy of Digital Finance Academy 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 extrapreneurship experiences in topics such as Fintech, Open Banking, Digital Payments or Artificial Intelligence.

"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.

CFTE believes that the new world of finance will be inclusive, diverse, and innovative and will positively impact society and people. This starts with people having the proper knowledge and mindset so that no one is left behind. Whether you want to learn, contribute or generally be part of the new world of financial services, we look forward to welcoming you.

Link to CFTE: <u>https://courses.cfte.education/</u>



About AIFA

Launched in 2018, AIFA has trained thousands of professionals in financial services.

The AI in Finance Academy (AIFA), launched in 2018, is designed to help governments, central banks, and financial institutions upskill their workforce with critical AI knowledge and capabilities. AIFA offers a holistic curriculum covering key areas such as AI foundations, tools, applications, data, and emerging trends, all aimed at empowering professionals to implement AI effectively within their organisations.

Through strategic learning, industry insights, and tailored programs, *AIFA ensures participants gain a competitive edge, foster innovation, and stay ahead in the rapidly evolving AI landscape*. The program also includes hands-on workshops, self-paced online courses, and practical case studies to ensure learners gain actionable, real-world AI expertise.

AIFA's offerings are customised for specific sectors: governments benefit from national transformation strategies and talent development, while central banks receive specialised training in AI regulation and supervision. Financial institutions are supported with executive AI strategies, foundational knowledge, and advanced certifications.

The academy follows a structured approach to AI readiness, helping organisations discover their current AI capabilities, learn through hands-on training, apply AI with the right tools and resources, and continuously enhance their skills with the latest AI trends and updates.

Link to AIFA: https://courses.cfte.education/ai-in-finance-academy/

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