Guide to AI Literacy for Professional and Financial Services Firms

AI Literacy

October 2025

UK**RI** Innovate UK and ESRC

whitecap
COMMERCIAL CLARITY ™

Contents

Introduction

Artificial Intelligence (AI) is fast becoming a key topic for Professional and Financial Services (PFS) organisations. Senior decision makers need to understand its basic terms and applications. Without this knowledge, organisations risk missing out on the productivity, efficiency and revenue that AI can offer.

Many PFS firms see AI as an opportunity but also feel uncertain. Some fear the fast pace of change, while others worry about automation. Whilst these concerns are valid, they often stem from a lack of understanding about AI – what it is, how it works and how to implement it successfully.

This guide is an introduction. It will help you to understand the basics, how to apply them in a business context and how to identify AI tools for your organisation. If you are already familiar with AI, we hope this guide serves as a useful refresher and offers new ideas for introducing the topic to others.

The Fundamentals
Critical questions this guide will help you answer

1

What is Artificial Intelligence (AI)?

A set of technologies that enable computers to perform a variety of advanced functions. AI can be used to solve problems, analyse data, make recommendations, understand language and recognise patterns. There is already a wide-reaching scope for applications of AI in the PFS industry.

2

Where do I start, given the breadth of potential that AI offers?

Whilst we spend a lot of time in this guide talking about visions, strategy and objectives there is no reason not to start small, experiment and create an open dialogue in your organisation. Though, there will come a time when having a clearly defined overall plan and policies will be important.

3

How do I create an AI strategy, including a vision for my organisation?

Consider whether you would like to be creative and ambitious or reserved with an incremental trajectory. Whatever you go with should link strongly to your organisation's purpose and formalised strategies for operations, sales and marketing, client account management, technology and data.

"

"It is helpful to identify why you want an AI solution and where it might sit within your business. Do you want it to support your business as usual activities e.g. making an existing process more efficient, or do you want to create a strategic or competitive advantage from it e.g. launching a new AI-powered product or service? Also, do you want it to create something you can see and touch e.g. a client or customer portal, or enhance something in the background like a back-end process, or improve the data quality in your CRM? Following this approach makes it easier to identify which type of AI solution you need, including identifying how you could source it (build vs buy vs customise)." – Adam Roney, Founder and CEO, Calls9

"The technology needs to be explained in terms of the benefits it offers. Give several use cases and what the benefits are to the customer and to you. Build some examples of where AI can support the operational model." – Paul D'Ambra, CEO, Consectus

"

The Fundamentals
Critical questions this guide will help you answer

4

How do I most appropriately communicate AI within my organisation?

Whilst for some AI is an exciting and engaging subject, for others it is a source of concern. This is why a people-centric approach from experts around AI is recommended. For instance, when devising messaging on how AI could help to streamline processes, remove bottlenecks, or optimise content engagement. As for mechanics to make this happen, senior and expert led is usually best.

5

How do I scope a potential AI tool?

Like any piece of software, being really clear about the impact you want it to deliver is critical. Link this to an identified need or problem and be specific about the use case – whilst the tool may be able to do many things, success may only require it to do one thing well. Once you have a clear idea about what you want to achieve, lean on vendors for support or consider building capabilities internally through recruitment or training.

6

What impact will AI have on my organisation's skills requirement?

If the aim is to make gradual yet steady progress, then the impact will be less noticeable in the short term. Whereas with organisation-wide change, you may see significant impact in the medium term. Ensure that you develop specialist AI and data skills internally throughout the AI onboarding process, as well as generalists who can help to simplify numerous processes with a holistic approach.

"

"AI has become more involved in people's day-to-day lives, following innovations like ChatGPT and wider accessibility of technology including AI functionality like that integrated in Google's Pixel smartphone. This has helped to remove some of the barriers to the adoption of AI. People are increasingly willing to engage with AI tools in the workplace because they are used to talking and writing with these technologies on their phones." – Katy Mason, Co-Investigator UKRI TiPS Accelerator; Professor of Markets and Management and PVC Dean; University of Salford; President, British Academy of Management.

"Invest in passionate AI experts to direct your strategy, identify necessary resources and coordinate responses across stakeholders. Support them with connections to AI networks for feedback and self-improvement, ensuring a solid foundation for AI deliverables." – Associate Professor Joel Mills SFHEA, Head of Generative AI and Digital Learning, BPP Education Group

"

What is Artificial Intelligence (AI)?

AI automates tasks such as problem-solving, decision-making, language understanding and pattern recognition by analysing structured and unstructured data. It can identify patterns, categorise information and make predictions using rule-based or pre-trained algorithms often through Large Language Models (LLMs).

Generative AI (GenAI), an advanced form of AI, processes unstructured data and adapts its outputs based on patterns. It can generate personalised content, code, summaries, transcriptions and translations across various formats (visual, audio, text) and languages.

"

"Artificial intelligence (AI) is predicted to add £35bn to the financial and professional services (FPS) sector over the next five years."

City of London Corporation, 2024

AI, particularly GenAI, is being actively explored in almost all functions of PFS organisations and its impact is expected to be significant.

The list of potential use cases is impressive and here are just some application examples:

- anti-money laundering (aml)
- asset allocation and management
- automated trading and investment strategies
- chatbots for customer queries
- claims processing and management
- case and workflow management
- contract analysis and review
- contract drafting and review
- credit scoring and risk assessment
- data encryption and protection
- financial forecasting and analysis
- fraud detection and prevention
- governance risk management
- loan processing and approval
- risk assessment and underwriting
- sustainability reporting and analysis
- threat detection and response

Examples of the benefits that AI can provide to PFS organisations

Financial Services benefits include:

- enhanced efficiency through automating tasks like data entry, processing transactions and simple customer queries
- improved risk management, including fraud detection and default rates
- greater personalisation of customer interactions through tailored support or recommendations

Accounting benefits include:

- enhanced efficiency through automating tasks like data entry, reconciliation and invoice processing
- improved decision-making through configurable real-time financial forecasting
- improved accuracy of financial data, through autonomous identification and correction of anomalies

Legal Services benefits include:

- enhanced efficiency through automating tasks like document and case management
- improved case preparation through predictive analytics, based on historic legal data
- accelerate responses to client queries

The AI Glossary

The topic of AI is littered with jargon. On this page, we introduce some of the common buzzwords you should be aware of and where they can be applied in PFS organisations.

Machine Learning (ML)

A core method that enables machines to learn from data and make decisions or predictions without being explicitly programmed. ML is essential for many AI applications including fraud detection, transaction categorisation and legal document analysis.

Algorithms
Sets of rules or processes that guide Machine Learning (ML) models to make decisions, solve problems and learn from data.

Models
Once a ML algorithm is run on a set of data, it creates a model which reflects what the algorithm learned from that data.

Agents
An autonomous algorithm or set of algorithms that can acquire, interpret and learn from data on its own.

Ways To Train Through Machine Learning

Unsupervised
An algorithm is provided unlabelled data and must find patterns on its own. Use cases may include customer segmentation, anomaly and fraud detection, grouping case files and research.

Supervised
An algorithm is provided labelled data, meaning it is clear to the algorithm how to link the inputs to a desired output. Use cases may include credit scoring, expense prediction and contract review.

Reinforcement
An agent learns to make decisions by taking actions and measuring the impact on a desired outcome. Use cases may include creating and testing trading strategies, financial planning and litigation strategies.

Deep Learning (DL)

A type of ML that uses Neural Networks to analyse and learn from data. Use cases include complex risk assessment, market trend prediction, financial statement analysis and other predictive tasks.

Neural Networks
Aimed to simulate the processes of the brain, using layers of nodes or neurons to analyse and learn from data.

Natural Language Processing (NLP)

The branch of AI which is focused on understanding and communicating effectively with humans through natural language.

Large Language Models (LLM)
Advanced forms of NLPs, like ChatGPT or BERT, which have been trained on vast amounts of data to the point they are able to have a coherent written conversation with a human. Use cases include chatbots and content generation platforms that can be used to draft annual reports and legal documents.

Computer Vision

The branch of AI which is focused on understanding and developing images and videos.

Use cases include document verification (such as ID), visual or video content generation and photo and video evidence analysis.

Where Do I Start?
Experiment and start small

In the very beginning, just exploring what AI tools are available to you and what they are capable of is an excellent first step. Discover, experiment and play with different tools, prompts and outputs.
Think about what task you most dislike and see if you can get an open source tool to make it easier for you. Though, be wary of what data you provide in your prompts. For instance, you would not want to share client details or yet to be published data.

As you begin to broaden your understanding about what tools and functionality is available have a think about a low risk, simple process your organisation runs in the background. Can these AI tools be used to make processes easier, faster or more accurate? Speak with your team(s) about it, what would they be willing to explore, where do you need additional skills or expertise – start an open and explorative dialogue.

" "Firms can get overwhelmed with what they can do with AI as they feel they need to tackle big problems from the word go. Whilst you can deliver big transformation projects, there are lots of efficiencies you can generate from plug and play software, for example, in software engineering, customer support and content writing. If you are looking for inspiration, speak to your software vendors, exploring what tools they have available is a good first step." – Daniel Howitt, CEO, Recap Technologies Limited

Focus initially on discovery and learning

Start with public AI tools like ChatGPT, Claude or Llama3, or ideally those already included with your organisation's software stack like Microsoft's Co-Pilot or Google's Gemini.

Look for different forms of outputs such as articles, reports, frameworks or charts, images, etc. Try a range of different formats for prompts, for example:

- imagine you are a corporate lawyer advising a start-up on its legal structure in the UK, what factors would you consider and what recommendations would you make?
- you are a tax advisor helping a client optimise their tax strategy in the UK, what recommendations would you make to minimise their tax liability while ensuring compliance with tax laws?
- you have been asked to develop a financial literacy workshop for young adults who are not in higher education in the Midlands, what topics would you cover and how would you engage the audience?

Start small, draw on nearby support if needed

It is not a requirement that you start with the highest value processes from the start. **Start with a low risk, back-end process** to begin with, like transcription.

Explore options with your existing vendors who might already offer a tool to suit this process – be open and explorative. Does Xero use AI in its tools, what about LEAP, or Temenos?

Creating and Sharing a Vision

The following pages of the guide give you some tools to explore opportunities for action regarding AI, which will form the focus of your AI strategy and also the motivation behind your AI vision.

AI vision What and why?	AI strategy How and when?	Internal communications People are and forever will be central to execution and adoption
Key focus areas and questions		
• what do you want your organisation to achieve with the use of AI over the next five to ten years? • are you looking to redefine your operating model, business model or a specific set of processes? • are you looking for incremental change?	• what specific objectives and use cases do you need to deliver the vision? • these should also be supported by considerations about leadership, governance, data and infrastructure, people and skills and risk management • it should also be strongly linked with the organisation's existing strategies, particularly its business, tech and data strategy	• what messaging will you use to describe your vision, strategy and planned actions internally? • who internally needs to inform, shape and drive this message? • who needs to own these initiative(s)? • are cross-functional teams required to coordinate and who needs to actively manage risk, policies and compliance?
Practical guidance and examples		
• radically improve and lead legal services in process efficiency, passing savings onto our clients • introduce a new set of adjacent advisory services to our core accounting offering	• improve case and workflow management, using AI tools, including upskilling our employees on these tools • develop a data insight proposition, using AI tools to scan publicly available material, as well as recruit an informed data specialist to help guide this	• make your message people centric. • how is this innovation going to improve their work? • change programmes always benefit from a senior lead, as well as a subject matter specialist

Scoping an AI Tool
1. Zone in on the desired outcome

A common pitfall with the adoption of new technology is to start with the tool and look for a problem. That is not to say it is impossible to achieve successful outcomes this way, it does however risk selecting the best tool for the wrong problem.

We outline four key steps for successful AI adoption and it does not start with AI:

1. Desired outcome
2. Specific use case
3. Data readiness
4. Data security

As with any innovation or adoption process the start point is a desired outcome, be it solving a problem or supercharging something that is already performing well. As a way of sharpening your thinking about what specific outcome you and your organisation would be interested in, see if you can answer the following questions.

> **"It is really important that you are clear about why you are using AI. For instance, is it going to augment your business as usual activities, or provide you with a strategic or competitive advantage? Digital transformation, which includes AI implementation and workforce upskilling, often affects Professional and Financial Services organisations in three main ways: the client experience, the employee experience and the business model. What key challenges is your organisation facing in these areas and what sort of change will you look to deliver?"** – Adam Roney, Founder and CEO, Calls9

Sharpen your thinking: desired value and appetite for change

Clarifying the intended value:

What is the main business value you want to generate? To answer this, you may also wish to answer the below:

Revenue:

- do you want to deploy AI to add new products and services?
- do you want to improve customer experience with the help of AI?
- do you want AI to increase customer engagement?

Costs:

- do you want to increase internal efficiencies and productivity through the implementation of AI?

Function:

- which company unit is this business value relevant to?

Understanding the business' appetite and readiness for change:

- what is the firms' risk appetite?
- what value or other resource expenditure would we be able to recover from and over what time period?
- how many processes is your organisation willing to modify to achieve this goal?
- does the firm have a preference between buying from third-party sources or building in-house?
- how much time and money are you willing to invest in training in pursuit of this goal?

Scoping an AI Tool
2. Focus on a specific AI use case

Being really clear about how you wish to use AI is crucial. Whilst this may seem obvious, given the breadth of use cases AI offers there is a risk to any ideation or implementation.

Consider whether what you are looking to introduce would do lots of things poorly or one or two things really well. As a way of sharpening your thinking about what, specifically, you want AI to do for your organisation, review the following use cases.

Sharpen your thinking: AI use case

For new products and services, AI can help to:
- analyse customer behaviour to identify saving trends
- build financial forecasts for your clients
- summarise client feedback, case outcomes or audit reports

- develop code to automate compliance checks, financial reporting or case note drafting
- assess financial, legal or operational risk across your client portfolios or own business operation

To create process efficiencies, use AI to:
- identify errors in a process
- identify fraud in transactions
- generate marketing content for social media adverts and blog posts
- summarise documents, like regulatory updates, contracts, or financial reports
- create transcripts from client meetings, legal briefings, or consultations

To enhance customer experience, AI can:
- recommend financial products, legal services or accounting packages based on client profile or past interactions
- improve chatbot outputs based on interactions with users
- offer real-time support to clients such as answering FAQs, guiding them through forms or explaining financial or legal terms

"The limiting factor in most AI use cases is not the technology, it is the questions you ask, the prompts you create and the vision you have. Focus on a specific process and get your hands dirty, talk to Claude or ChatGPT and ask it to build you an automation. If you feed in the right spreadsheet at the beginning and you are looking for a specific output at the end, it is really impressive what you can do and to see first-hand just how simple automation is becoming."
– Lee Bryant, Co-Founder and Director, Shift*Base

NB: It is not recommended to enter information and data into AI that is sensitive, such as client data.

Scoping an AI Tool
3. Data readiness

In many use cases, PFS organisations will feed data into an AI tool either during the AI training process or by submitting requests or prompts to engineer the AI response. Especially those who are regulated or have legacy or disparate data sets, data is often a key concern and a barrier for AI adoption. The concept of data readiness is key for PFS firms to successfully adopt AI. However, there is a misconception that data readiness means performing organisation-wide data restructuring.

If you have clearly articulated your AI vision, have clearly and tightly scoped your use case, making the appropriate data available to an AI should not feel like the behemoth task many PFS organisations believe it to be. To help guide your thinking about the current state of your data, see if you can answer the following questions.

"Readiness is key and includes data. Questions like 'how can we connect our data' can sound big and challenging but can be chunked into smaller questions and actions. Not all AI use cases require a data transformation project, you are only trying to make some of your data available so that AI algorithms can try to make sense of it." – Lee Bryant, Co-Founder and Director, Shift*Base

Sharpen your thinking: data readiness

Data quality:

- is your data organised and standardised?
- how old is this data?
- is the data consistent across data sets and are there any contradictions in the data?
- is there missing contextual data AI would need to know to draw accurate outputs?
- is the data reliable, accurate and free from bias?
- is the data in relevant formats, categories and values?
- are there outliers in the data which could misinform AI outputs?

Data handling:

- how is data stored and what is the organisation's data strategy?
- is the technology infrastructure consistent across the different business units or is data handled differently across the company?
- what business units' data would the AI need to draw upon?
- is the data compliant with existing regulations?
- how is the organisation ensuring bias and errors are flagged and resolved?

Scoping an AI Tool
4. Data security

In most cases you will need to feed data into an AI tool through 'training' AI on it or via submitting it through requests or prompts. No matter which AI tool and in which use case, your data goes somewhere.

To help navigate where and when data is used, you ought to have clear guidance for each use case and stick to data protection policies. If you are looking to explore an AI-enabled chatbot for financial support queries which asks for customer's financial data, you may opt for an

AI tool deployed in a private environment that would not be accessible by external parties. However, if you are simply looking to develop automated templates for legal documents, you may be happy to use a public GenAI or off-the-shelf tool.

As a way of sharpening your thinking, see if you can answer the following questions.

Sharpen your thinking: data security

- how concerned are you about the availability of data beyond the confines of the company?
- how confidential and sensitive is the data that the AI tool will be handling?
- how significant is the compliance and regulatory risk if this data is breached?
- are you familiar with how the terms and conditions of AI platforms and tools could impact your data and your client's data?
- do you know whether sustainability is of importance to the software provider you wish to use?

Key consideration

Ethical AI practice starts with data. Trust, transparency, fairness and accountability are critical and asking 'how will our data be used' is critical to managing this.

"Guardrails are key. Ensure that these have been built in such a way that although you are using advanced LLM technology, you have full control over where it is able to source its information. Also, use a tool that tells you where it got that information from." – Paul D'Ambra, CEO, Consectus

"Employees who have had data privacy training are typically more cautious about playing with ChatGPT, which makes sense, as keeping their data safe is extremely important to them. Creating an AI usage policy can be a helpful tool for building safeguards and user confidence." – Laura Gemmell, Founder, TaughtByHumans

Scoping an AI Tool
Putting it all together

The exercises you have worked through in the previous sections are key. Try applying them to three to five AI use cases, scoring each based on importance and risk. Use the template below if needed. Once completed, sort the use cases by their total score (treat data risk as a negative factor) and select the top one or two for further review.

Including potential examples for PFS organisations

Desired business outcome	Desired use case to achieve this outcome?	How concerned are you about data security?	Quality of data required / is available today	Format of data required / is available today	Score the importance between 1-10			
					Desired business outcome	Desired use case	Data readiness	Present data risk*
Improve efficiency in legal research and document review	Implement an AI tool to automate the analysis of legal documents and case law.	High concern due to the sensitive nature of legal documents and client information.	High-quality, accurate and up-to-date legal documents and case law.	Structured text data in formats such as PDFs, Word documents and databases.				
Enhance accuracy and speed in financial reporting and auditing	Use an AI tool to automate data entry, reconciliation, and anomaly detection in financial records.	High concern due to the confidentiality of financial data.	High-quality, accurate and comprehensive financial records.	Structured data in formats such as spreadsheets, databases and accounting software outputs.				
Improve customer service and personalised financial advice	Deploy an AI tool to analyse customer data and provide tailored	High concern due to the sensitive nature of personal financial information.	High-quality, accurate and detailed customer financial data.	Structured data in formats such as databases, CRM systems and financial statements.				

*for this specific use case
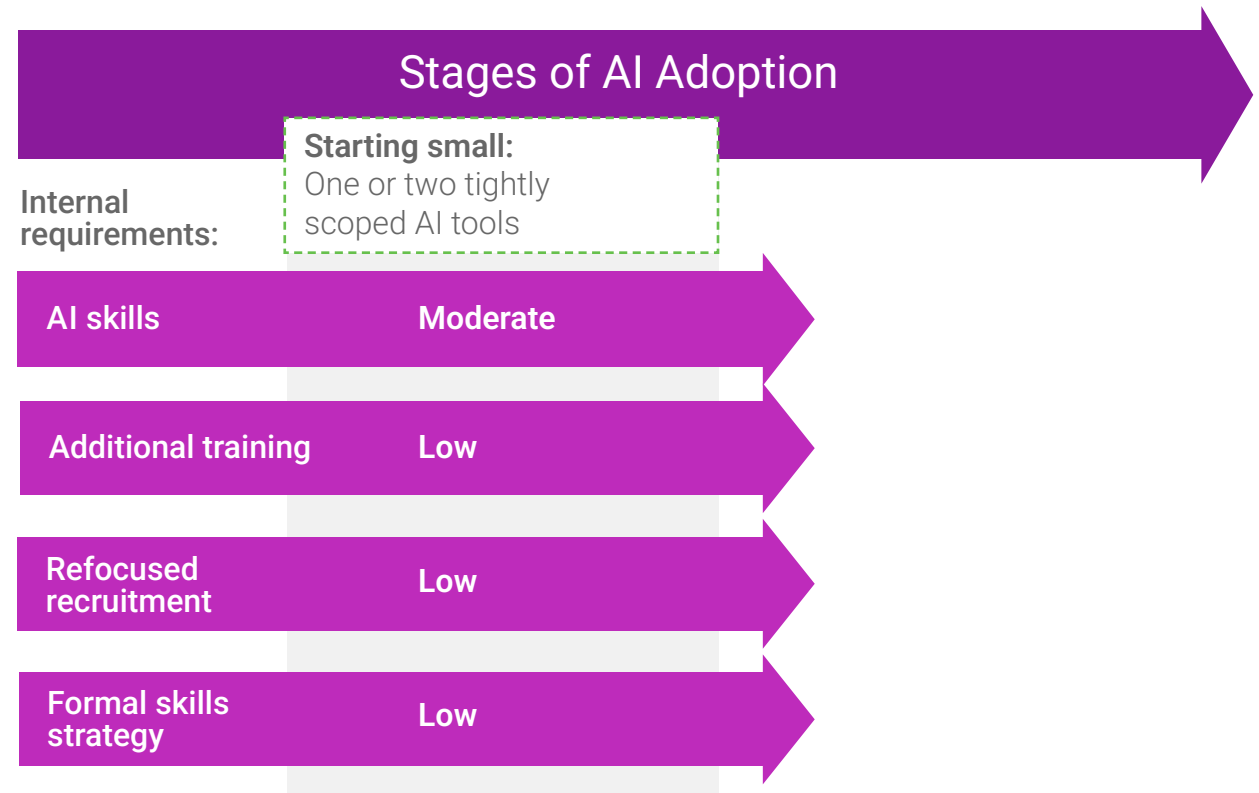
A Talent and Skills Perspective
Starting small

The following graphic helps to outline four key requirements which you should examine as you progress your AI adoption. In the first case, adopting a tightly scoped AI tool, the requirement for significant organisation change is low. However, action is still required.

- **AI skills:** the employees who scope, onboard and begin to use these tools should at least understand the different types of AI, the key terminology, how to use the tool and how to spot when it is not working as intended.

- **Additional training:** to ensure your organisation possesses the skills above, additional training is a good first step.

- There is limited requirement to **refocus recruitment** or develop a **formal skills strategy** around AI in this case.

> "Anyone can learn how to use AI if the education is tailored to them. AI education is not about technology – it is about people. Meet them where they are, speak their language and show them how AI can help them grow, not replace them." – Laura Gemmell, Founder, TaughtByHumans

Stages of AI Adoption

Internal requirements:

Starting small: One or two tightly scoped AI tools

AI skills	Moderate
Additional training	Low
Refocused recruitment	Low
Formal skills strategy	Low

Practical steps to talent and skills when 'starting small':

Broader AI literacy and specific areas of technical competency (for those using the tool) is helpful to make the most of your organisation's first set of AI tools.

Literacy can be enhanced through running AI Literacy workshops. Make the most of people with a keenness on the subject first and then draw on external speakers if required. There are plenty of open seminars, workshops and events that focus on this subject, task someone with attending these and bringing the key insights back to base.

Technical competency can be accelerated through user manuals or guides for the specific tools, leaning on vendors (if used) for customer service support.

A Talent and Skills Perspective
Enterprise automation

If your vision is to imbed AI across your organisation, this will require significant awareness and proficiency as well as changes to key business practices that help develop and support these skills over time. More specifically:
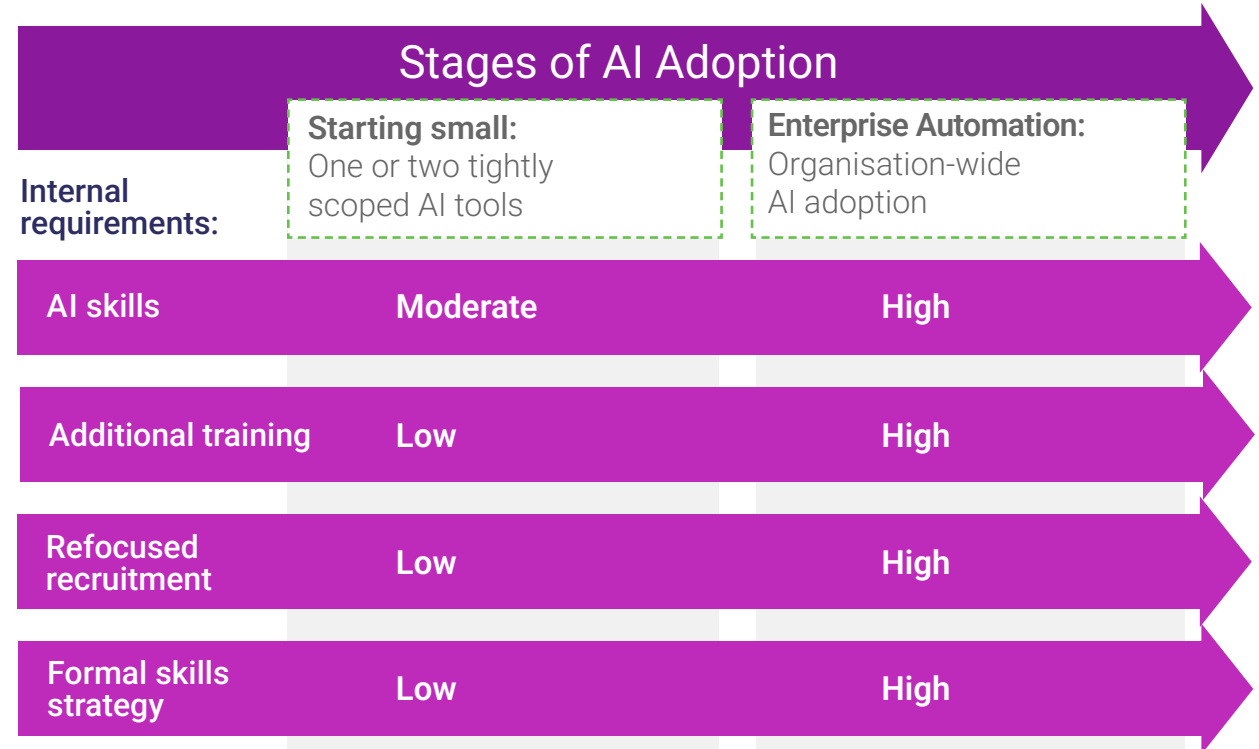
AI skills
Depending on the delivery model of your AI system, some of your staff may need to become experts at developing, implementing, managing and governing AI tools. Those who use these systems should have a deep understanding about how they work and integrate and how to ensure quality and security.

Formal skills strategy:
Given the significant shift in skills requirement, a more structured plan is recommended to describe a target skills profile and methods of attaining it, at least from an AI perspective. This may include a modified recruitment strategy and perhaps a dedicated training plan.

Top tip

The ideal future state is that employees qualified in AI are responsible for both the development of AI in the organisation, as well as how to use AI tools appropriately.

Internal requirements:	Stages of AI Adoption	
	Starting small: One or two tightly scoped AI tools	**Enterprise Automation:** Organisation-wide AI adoption
AI skills	Moderate	High
Additional training	Low	High
Refocused recruitment	Low	High
Formal skills strategy	Low	High

How to move from low to high:

Skills assessments, including a gap analysis, are commonly used tools for developing a clearer view of an organisation's future skill requirements and, critically, what actions need to be taken to deliver them. There are also numerous change management frameworks and practices that can be used to support this process and provide the necessary context behind a new skills strategy.

The solution to skills challenges, driven by AI or not, is not just a hiring or just a training problem. Ideally, all of these levers need to be explored. A skills plan, including supportive recruitment and education and training plans, are a common form of forward thinking which might include best practice methods, training modules, enablement of cross-functional insight sharing and activities to support employee trust in AI tools.

How to Continue to Progress with Artificial Intelligence
Useful links

Publicly available materials for further reading:

Gain a better sense of the potential impact of AI on PFS:

City of London Corporation, Financial and professional services: The future of AI and the workforce

Thomson Reuters, 2nd annual "Future of Professionals Report"

Lexi Nexis, Fast law: why speed is the priority for lawyers using AI

Bank of England, Artificial intelligence in UK financial services - 2024

Detailed introductions to the topic of AI and further practical support for adoption:

Innovate UK, BridgeAI

PwC, AI Skills Hub

Calls9, The Ultimate GenAI Guide

The Alan Turing Institute, AI in Financial Services

Next Generation Services, AI Readiness Toolkit

Department for Science, Innovation and Technology, Responsible AI Toolkit

Digital Catapult, AI Adoption Toolkit

Government Digital Service, AI Playbook for the UK Government

Sources for inspiration about AI use cases and adoption in the future:

Google Cloud, 601 real-world gen AI use cases from the world's leading organizations

Intel, Artificial Intelligence (AI) Use Cases and Applications

Shift*Academy, Beyond Simple Office Automation: The Rise of Super Operators

Shift*Base, Will We See the First Programmable Organisations In 2025?

Contributors to this guide:

Adam Roney at Calls9

Paul D'Ambra at Consectus

Katy Mason at TiPS

Joel Mills at BPP

Daniel Howitt at recap

Lee Bryant at Shift*Base

Laura Gemmell at TaughtByHumans

Join the Innovate UK AI for Services Network:

Scan the QR code to stay up-to-date with all relevant opportunities and events for PFS, or **click this link.**

Innovate UK

Innovate UK, part of UK Research and Innovation, is the UK's innovation agency. It works to create a better future by inspiring, involving and investing in businesses developing life-changing innovations.

Its mission is to help companies to grow through their development and commercialisation of new products, processes and services, supported by an outstanding innovation ecosystem that is agile, inclusive and easy to navigate.

www.ukri.org/councils/innovate-uk

Economic and Social Research Council (ESRC)

ESRC is the UK's largest funder of economic, social, behavioural and human data science.

www.ukri.org/councils/esrc

Whitecap Consulting

Whitecap is a regionally focused strategy consultancy which works across a wide range of sectors, including Professional and Financial Services and its high growth sub-sectors such as FinTech and LegalTech.

The firm typically works with boards, executives and investors of predominantly mid-sized organisations and helping clients analyse, develop and implement growth strategies.

www.whitecapconsulting.co.uk