# Agents and Reasoning in the World of Finance

What financial services leaders need to know

by Vivek Madlani, Michael Curtis & Hasib Hussain



# Why this matters

At the start of 2023 we witnessed an explosion of public fascination in artificial intelligence, as large language models burst onto the scene. These models were celebrated for their ability to process data, generate insights, and create text that felt almost indistinguishable from that written by humans. Until now, however, these new AI tools have felt reactive; they have been dependent on human guidance at every step. While impressive, their use has remained constrained – they can produce content and in some cases even "think" - but certainly not take action.

#### That is changing.

AI agents represent the next leap forward for large language model (LLM) based artificial intelligence. They mark a significant shift in how we engage with conversational models, bringing us closer than ever to realising AI's true potential. Unlike traditional language models used in isolation, which primarily generate content based on patterns in their training data, AI agents integrate these skills with reasoning frameworks, planning mechanisms, and autonomous execution abilities. They don't just generate responses; they take action, work towards goals, and dynamically adjust their approach based on new information.

This leap in reasoning capabilities transforms what's possible. Earlier AI systems excelled at pattern recognition but struggled with complex, multi-step problems. Today's AI agents can deconstruct challenges, apply structured thinking, and navigate solution spaces logically, tackling problems previously beyond AI's reach. Where previous systems operated within defined parameters, reasoning-enabled agents can evaluate alternatives and craft novel solutions to unfamiliar challenges.

This transition from passive AI to independent, goal-oriented agents is more than an incremental improvement; it represents a material advancement in how we interact with machines. Up until now, users have had to meticulously manage and prompt LLMs, coaxing them through every step of a process towards the desired outcome. AI agents eliminate this friction, enabling users to issue high-level objectives and allowing the AI to determine the best course of action. It is the difference between guiding an assistant through every step and collaborating with an effective partner.

This shift does not merely enhance AI's usefulness; it multiplies it exponentially. It no longer feels like just a tool; it is an active participant in solving problems, automating workflows, and thinking creatively.

Industries are already integrating AI agents into core operations, using them to analyse data, execute strategic decisions, and complete complex multi-step processes with minimal human oversight. By reducing reliance on rigid, rules-based automation, AI agents have the potential to redefine the relationship between financial professionals and their clients, making services such as financial advice and wealth management more accessible, responsive, and intelligent than ever before. The implications are profound.

But as with any technological breakthrough, there are challenges to address. Autonomous AI must be developed responsibly, with safeguards in place to ensure these systems operate within ethical and practical boundaries. Recognising that current AI agents still have limitations, requiring robust oversight and

careful implementation is crucial. They can make reasoning errors, misunderstand context, and remain constrained by their training data. As AI's aptitudes expand, so must our ability to govern them wisely.

The potential is vast, and the opportunities are just beginning to unfold. The next era of AI is here; not just intelligent, but truly capable. We are standing at the edge of an AI-driven future where technology actively enhances human decision-making rather than merely supporting it. The road ahead will be shaped by those who embrace this shift, strategically leveraging AI agents to unlock new ways of thinking, working, and innovating.

The following pages offer a roadmap to this emerging landscape, one that promises to redefine our relationship with technology in the decades to come.



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# A primer on AI agents

### The glass ceiling of generative AI

Picture an AI that can write poetry, debug code, and hold a conversation but can't lift a finger to change the world it describes. Despite their abilities, today's most advanced language models remain hamstrung; brilliant conversationalists trapped behind an invisible barrier, unable to touch the world they describe. This central limitation reveals why even the most elaborate generative AI systems fall short in applications where real impact matters.

Generative AI refers to a class of artificial intelligence systems trained on vast datasets to create new content based on learned patterns. In our previous white paper, we explored how this tech is revolutionising personal finance by helping customers get clearer, faster, and more personalised guidance<sup>1</sup>.

Models like GPT-4, Claude, and Gemini can produce text, code, images, and other outputs that appear remarkably human-like. These systems excel at:

- **Pattern recognition**: Identifying complex relationships in data and generating coherent outputs based on learned patterns
- **Language understanding**: Processing and generating natural language with remarkable fluency and contextual awareness
- **Creative generation**: Producing novel content across domains from art to code to business strategies

However, these talents come with constraints that limit their real-world applicability:

- **Probabilistic generation**: Outputs are statistical predictions about likely token sequences, which can lead to factual inaccuracies, logical inconsistencies, or "hallucinations"
- **Contextual amnesia**: Most systems lack persistent memory beyond their immediate conversation context, limiting their ability to learn from past interactions or maintain long-term goals
- **Passive operation**: Perhaps most notable, generative AI cannot independently initiate actions or interact with external systems without human direction

These limitations become particularly problematic in high-stakes domains where accuracy, consistency, and real-world impact matter. A system that cannot verify its outputs against reality, retain learning across interactions, or take action to achieve goals will inevitably fall short in real-life applications.

### From passive models to active agents

Despite how impressive they can be, large language models operate as reactive systems. They respond to prompts but cannot independently pursue goals or take actions in the world. They represent a powerful but ultimately passive form of AI.

Unlike their predecessor technologies, AI agents don't simply process and respond to information; they perceive their environment, make decisions based on goals, and take concrete actions to achieve those

<sup>&</sup>lt;sup>1</sup> <u>Multiply AI white paper</u>

goals. They represent a shift from passive intelligence to active problem-solving entities that can operate with meaningful autonomy.

To understand why this transition matters, we must examine how AI agents fundamentally differ from generative models in both architecture and capabilities.

### The spectrum of agency

The term "agent" has been applied to a wide range of systems across computing and artificial intelligence, often leading to confusion about what constitutes a true AI agent. Some definitions are so broad they would classify even basic responsive systems like thermostats as agents. While such inclusive definitions might serve certain academic purposes, they blur critical distinctions that matter in practical applications.

An agentic system is any system designed to act independently, making decisions or performing tasks autonomously based on defined rules, logic, or heuristics. These systems pursue objectives without continuous human direction, but their methods and competencies vary dramatically. Simple thermostats regulating temperature, basic trading algorithms executing predefined rules, and robotic vacuum cleaners following straightforward obstacle-avoidance patterns all qualify as agentic systems.

Artificial intelligence agentic systems enhance their performance by incorporating machine learning or other AI functionalities. These systems can process complex inputs, recognise patterns, and operate with greater flexibility than their purely rule-based counterparts.

Generative AI powered agentic systems can employ large language models to process and incorporate natural language and visual inputs. They can further use these models as generic problem-solving algorithms that can adapt to many different scenarios without these being explicitly accounted for by their developers.

The rest of this paper will focus on generative AI agentic systems and their implications for finance.

### Core characteristics of AI agents

At their core, AI agents have several key characteristics:

- 1. **Autonomy** Operates without step-by-step human instruction, enabling seamless execution of tasks without manual oversight.
- 2. **Goal-oriented reasoning** Defines objectives and determines the best method to achieve them, making strategic choices rather than simply responding to inputs.
- 3. **Adaptive decision-making** Alters its approach when circumstances change, learning from successes and failures to refine its strategies over time.
- 4. **Tool integration** Accesses external data sources, APIs, and automation frameworks to extend its abilities beyond what is possible with an isolated model.
- 5. **Memory and learning** Retains historical data to refine future decisions, improving performance and personalisation based on prior interactions.

This combination of attributes enables a system that doesn't just respond to queries but actively pursues goals through deliberate action.



Core characteristics of AI agents

### The forces driving AI agent evolution

While the concept of AI agents has existed for decades, large language models have supercharged their faculties:

- Agents can now **easily ingest natural language** and images without any preprocessing
- Agents can now **output text and images** without the need for templating
- LLMs can act as **generic reasoning engines** that can connect different components without the need for explicit mappings and decision trees

These advances are in addition to incremental improvements in computation efficiency and the increasingly sophisticated digital ecosystems available, but they also use LLM-specific advances.

- Advanced decision-making frameworks like ReAct, Chain-of-Thought, and Tree-of-Thoughts (developed 2022-2023) have built upon and refined existing reasoning approaches, enhancing agents' problem-solving abilities.
- **Multimodality**, by which we mean that LLMs can now incorporate different content types natively (rather than these content types being explicitly mapped to text before being fed in). This includes images, audio files, and live video.

To understand the full implications of these advances on what agents can do, we need to look in more detail at how agents are put together.

# Agents vs models vs workflows

### From theory to implementation

To understand agency in practise, we must look under the hood at the architectures that make it possible. There are three distinct architectural approaches to building agentic systems with generative AI: augmented models, workflow systems, and AI agents. Each represents a different point on the agency spectrum, with implications for potency, complexity, and appropriate use cases.

Organisations implementing AI must understand these architectural distinctions to select solutions aligned with their requirements. A mismatch between expectations and implementation often leads to disappointment, either through overly complex systems for simple needs or insufficient capabilities for ambitious objectives.

By examining the specific components and structures of each approach, we can better understand when each is most appropriate.

### Augmented models: Enhanced prediction with limited agency

At the most basic level, augmented models enhance foundational AI models with additional context, memory, or tools, while still essentially operating as prediction systems. These architectures maintain the core LLM as the central component but extend its capacities through context augmentation and simple integrations.

The typical architecture of an augmented model includes the base language model surrounded by lightweight enhancements such as:

- Context management systems that maintain conversation history
- Retrieval components that incorporate external data sources
- Simple memory mechanisms that persist limited information between interactions
- Basic tool interfaces with minimal reasoning about when or how to use them

When applied to technical support, an augmented model might incorporate documentation into its responses and maintain awareness of the current troubleshooting session. For example, when addressing WiFi connectivity issues, it provides increasingly specific suggestions based on previous responses in the conversation. However, it still fundamentally generates text predictions rather than taking autonomous actions.

Augmented models excel at providing more contextually appropriate responses than base models while maintaining simplicity. They operate effectively for information-oriented tasks where direct action isn't required, such as customer service, content creation, and general advisory functions. Their limitations become apparent when tasks require complex reasoning, sequential decision-making, or autonomous action, all of which remain beyond their architectural parameters.



### Workflow systems: Structured pathways with defined logic

Workflow systems place the language model within a controlled execution framework. Rather than allowing the model to determine its own path, workflows embed the AI within predetermined decision trees and action sequences that constrain and direct its operation.

The architecture of a workflow system typically includes:

- A central orchestration layer that controls the flow between steps
- Decision nodes with explicit criteria for path selection
- Execution loops that can repeat until conditions are satisfied
- Predefined integration points with external systems and tools
- Structured error handling and fallback mechanisms

In technical support applications, a workflow-driven system follows an explicit troubleshooting protocol. When addressing connectivity issues, it systematically evaluates potential causes according to a predefined decision tree, first checking physical connections, then router status, followed by device-specific settings, and only then considering more complex network problems. The system might loop through verification steps multiple times but always adheres to its programmed pathways.

Notable architectural patterns in workflow systems include retrieval-augmented generation (RAG), which incorporates relevant information at specific points, and chained reasoning workflows, which validate multiple conditions through structured logic before proceeding to subsequent steps. These patterns enhance abilities while maintaining the fundamental characteristic of predetermined execution paths.

Workflow systems provide reliability through consistent execution of best practices. Their architecture ensures predictable behaviour in well-understood domains where optimal processes can be defined in

advance. However, they struggle with novel situations that fall outside their programmed pathways and lack the flexibility to develop new approaches to unfamiliar problems.



### AI agents: Autonomous perception-action cycles

True AI agents implement an inherently different architecture centred on autonomous planning and action rather than predefined pathways. These systems incorporate a perception-reasoning-action cycle that enables them to determine their own approach to achieving objectives based on environmental feedback.

The architecture of an AI agent typically includes:

- Perception systems that gather and process environmental information
- Planning components that formulate action strategies based on objectives
- Reasoning modules that evaluate options and make decisions
- Tool-use frameworks that execute actions and integrate external facilities
- Memory systems that maintain both short and long-term information
- Control mechanisms that ensure safety and alignment

Agent architectures implement sophisticated reasoning patterns such as ReAct (reasoning and acting), which interleaves thinking and action steps, or reflective approaches that evaluate and adjust strategies based on outcomes. These patterns enable iterative problem-solving that adapts to changing circumstances and novel situations.

An agent-based system demonstrates markedly different behaviour when addressing technical problems. For WiFi troubleshooting, it might first reason about potential causes, then actively diagnose the network by pinging the router, checking signal strength, and examining configuration settings. Based on these findings, it could execute appropriate interventions, perhaps reconfiguring DNS settings, restarting specific services, or initiating a firmware update, all while monitoring results and adjusting its approach accordingly.

This architectural approach enables agents to handle complex, dynamic situations that require adaptation and autonomous decision-making. However, this power comes with corresponding implementation challenges, including increased development complexity, potential safety risks from autonomous action, and greater difficulty in predicting system behaviour.



### Architectural comparison

The following table summarises the key differences between these three approaches:

Feature	AI Model (LLM)	Workflow System	AI Agent
Autonomy	None only generates enhanced text	Low follows predefined paths	High adapts dynamically
Decision-Making	None	Basic, follows rules	Independent, adjusts strategy
Tool Use	Limited, predetermined	Structured at specific steps	Dynamic, agent-controlled

Feature	AI Model (LLM)	Workflow System	AI Agent
Learning	Simple context persistence	No memory, static rules	Learns from past interactions
Example	Context-aware customer support chatbot	Tech support flowchart	Self-healing network agent
Key Strengths	Enhanced responses with context awareness; Fluent, human-like responses; Simple to implement and scale	Consistent execution of best practices; Predictable behaviour and outputs; Structured handling of common scenarios	Handles novel situations adaptively; Autonomous operation with minimal oversight; Continuous improvement through learning
Key Limitations	Limited tool usage; Minimal memory beyond conversation context; Cannot autonomously decide when to use tools	Cannot handle unexpected scenarios; Fails when problems don't match predefined paths; Limited adaptability to new situations	Complex to develop and maintain; Requires robust safety guardrails; Higher risk of unexpected behaviours

### Looking forward to key components

Understanding these architectural distinctions provides the foundation for examining how AI agents function internally. As we've seen, real AI agents require sophisticated components working in concert to enable autonomous operation. It is worth noting that leading AI research organisations such as Anthropic and Google emphasise that simpler solutions like workflows are often better if they meet the use case. The added complexness of full agent architectures should be justified by the application's requirements.

In the next section, we'll explore these internal mechanisms in detail – the perception systems that gather information, decision engines that determine courses of action, execution frameworks that implement them, learning systems that improve performance, and control mechanisms that ensure safety.

# The key components of AI agents

### Architecture of an AI agent

AI agents represent systems integrating multiple distinct yet coordinated components that work together.

The interconnectedness of these components forms a cognitive architecture, allowing agents to reason, adapt, and act in complex, changing scenarios without constant human oversight.

This cognitive architecture underpins an AI agent's ability to process information, reason logically, learn from interactions, and execute actions autonomously. It mimics human cognition by enabling iterative cycles of data intake, processing, action, feedback analysis, and adaptation.

AI agents typically include five core components:

- Perception (sensors/input)
- Decision-making engine
- Action execution
- Learning and memory
- Control systems

These elements collectively allow AI agents to interact intelligently with their environment, make informed decisions, execute practical actions, learn continuously, and maintain safety and compliance. Understanding each component provides insight into how AI agents function as integrated systems rather than merely advanced algorithms.



### **Core components of AI agents**

### **Perception (sensors/input system)**

The perception component serves as the interface between the AI agent and its environment, collecting various forms of data crucial for informed decision-making. This system gathers and aggregates information from diverse sources such as:

- Digital interfaces
- External applications, e.g. via open banking APIs
- Physical devices, such as smart speakers or home automation systems
- Data shared through protocols such as the Model Context Protocol (MCP)

Perception systems continuously monitor their environment, converting raw data into structured formats suitable for processing and managing errors and anomalies that inevitably arise. Such systems increasingly handle multimodal inputs, including textual, numerical, visual, auditory, and more.

For example, the perception system for an AI agent operating in financial markets might include stock ticker feeds, news sentiment analysis, transaction data and even accessing a trader browsing through news on their laptop.

The challenges of perception are sizable. Real-world data can be noisy, ambiguous, or incomplete. Input mechanisms might be inaccurate (for example, a camera in low light), requiring agents to filter noise and cope with uncertainty. Misinterpreting inputs can lead to poor decisions and outcomes that cascade through subsequent processes. Consequently, robust perception systems often incorporate redundancy and validation mechanisms to mitigate these risks.

The Model Context Protocol (MCP) is a step forward in enabling AI agents to perceive and interact with data sources through standardised connections. Functioning like a "USB-C port for AI applications," MCP is really just a uniform interface between AI models and external resources, allowing agents to access diverse information without custom integration for each source. This protocol will enable AI agents to connect with data sources like your calendar, your emails or your local file system in a consistent way.

MCP is unlikely to be the last word on how we share information with agents, but it represents progress in standardising how applications provide context to language models, which will ultimately eliminate the need to build custom integrations for every data source and tool, reducing development complexity. For financial institutions, this will mean that AI agents can securely access relevant data, from transaction records to market feeds, while maintaining appropriate access controls and compliance boundaries.

### **Decision-making engine**

The decision-making engine acts as the agent's "brain", evaluating inputs to determine optimal responses or actions. This system incorporates complex reasoning faculties that enable sophisticated problem-solving across various scenarios. It performs inference and logical reasoning to analyse available data, utilises predictive modelling to anticipate future outcomes or trends and balances multiple objectives through optimisation frameworks.

Decision engines synthesise information using a blend of approaches. Rule-based approaches follow fixed if-then rules defined by humans, providing transparency but limited flexibility. Probabilistic methods use statistics and probabilities to handle uncertainty, weighing which outcome is most likely correct given limited information. Learning-based approaches adapt through experience, as in reinforcement learning where the agent tries actions and learns from feedback.

The decision engine often operates under conditions of uncertainty and incomplete information. If a situation falls outside its rules or training, the agent may struggle to determine appropriate actions. Ensuring correct, fair, and unbiased decisions remains an ongoing challenge, particularly as agent autonomy increases.

Consider how a virtual customer service AI evaluates incoming queries against historical interaction data, sentiment analysis, and predefined customer service standards to determine the most appropriate response or escalation route. When processing a complex warranty claim, the decision engine analyses the product purchase date, warranty terms, customer history, and claim details. It weighs multiple factors before deciding whether to approve the claim automatically or route it to a human specialist with specific recommendations. The probability of product failure, cost of replacement versus repair, customer lifetime value, and precedent from similar cases.

### Action execution

The action system implements decisions through real-world interactions or digital interventions, transforming cognitive decisions into tangible, executable outcomes. This component executes tasks through API calls, digital transactions, robotic movements, and other automated interactions. It manages and oversees these processes, ensuring accuracy and reliability while coordinating with other automated systems to maintain multi-agent interoperability and alignment.

Action systems maintain structured workflows to ensure precise task execution, monitoring execution status, providing transactional integrity, and managing exceptions that arise during operations. They must detect and respond to failures in execution, implementing fallback strategies when primary actions cannot be completed.

An agent's actions are constrained by its available interfaces and integration functions. A robot cannot exceed its physical design limitations, and a software agent can only operate within the systems it can access. Failures can occur: motors jam, API calls fail, and network connections drop, requiring safety checks and graceful degradation paths to prevent harm.

An automated logistics AI demonstrates these principles in action when it schedules deliveries by confirming inventory availability, organising shipping logistics, and notifying customers. When a severe weather event affects a primary shipping route, the action system automatically recalculates optimal alternative routes, reschedules deliveries based on priority and feasibility, updates warehouse systems to adjust picking schedules, and communicates revised delivery estimates to affected customers. The system executes dozens of interdependent actions across multiple platforms without requiring manual intervention, all while maintaining service level agreements wherever possible.

### Learning and memory

Learning and memory systems enable AI agents to enhance their performance over time by utilising past experiences to inform future decisions. These systems maintain short-term memory for immediate context preservation as well as longer-term historical data for pattern identification and trend analysis.

The learning system adapts by analysing outcomes of past decisions, reinforcing effective strategies, and adjusting approaches to minimise errors or inefficiencies. It improves through iterative cycles of action, feedback, and adjustment, gradually optimising agent behaviour for its operating environment and objectives. To achieve this, they will often employ various machine learning techniques such as reinforcement learning, supervised learning, and unsupervised learning.

Memory management presents distinct challenges for agent architects. Deciding what to remember or update requires balancing several factors. Too little memory means losing context, while too much can flood the system with irrelevant or outdated information. Learning new information can sometimes overwrite prior essential knowledge, effectively "forgetting" previous lessons – a phenomenon known as 'catastrophic forgetting' in neural networks.

A predictive maintenance AI agent exemplifies effective learning and memory when it analyses historical equipment failures, performance data, and sensor readings to predict potential failures and proactively schedule repairs or replacements. Over time, it refines its predictive models based on observed outcomes, learning which patterns are truly predictive versus merely coincidental and adapting to changes in equipment behaviour as systems age or operating conditions evolve.

### **Control systems**

Control mechanisms oversee the AI agent's operations to ensure safety, reliability, and compliance with regulatory standards and ethical guidelines. These systems implement fail-safes to prevent unintended or dangerous actions, monitor operations in real-time to intervene when deviations or anomalies occur, and enforce strict adherence to predefined policies, standards, and legal regulations. In practical

implementations, the control system and decision-making engine often work as complementary parts of the same system. Control mechanisms provide rigid guidelines and boundaries that the LLM-powered decision-making engine must operate within, ensuring the agent remains both useful and safe.

Control systems continuously monitor agent behaviour, ensuring operations remain within prescribed safety and regulatory boundaries. They incorporate three primary safeguard types: human oversight, where humans monitor or approve certain high-risk decisions; predefined rules and limits that establish hard boundaries the agent cannot violate; and fail-safe mechanisms that automatically activate if the agent exceeds allowed parameters.

The design of control systems involves carefully balancing agent autonomy with safe, predictable behaviour. Too much autonomy risks unintended results and potential harm, while excessive restrictions limit usefulness and adaptability. Without proper controls, an agent could act in ways that violate ethical guidelines or safety requirements, even while technically fulfilling its programmed objectives.

A medical diagnostic AI illustrates effective control implementation when it includes safeguards ensuring that recommendations never override established medical guidelines without human review, maintaining patient safety and regulatory compliance. Similar principles apply across domains where agent actions could have serious consequences, requiring appropriate guardrails proportionate to potential risks.

### Example walkthrough: DateNight AI in action

To illustrate how these components work together in practise, consider a DateNight AI helping a user - let's call him Tim - organise a special evening. The interaction unfolds across all five components working in concert:

Tim's fifth wedding anniversary is approaching, but between dealing with deadlines at work and interviewing for a new job, he's had no time to plan. This evening matters, and he wants it to be perfect, but as the date draws near he becomes increasingly anxious and turns to DateNight AI for help.

In the perception phase, the AI scans Tim's personal calendars, checks restaurant databases and review websites, evaluates transport options and schedules, and considers weather forecasts. It detects that rain is likely during the evening hours and notes that Tim's calendar shows that he has an early meeting the following day. It also observes that he typically prefers restaurants within a 5-mile radius on weeknights and has recently shown interest in Mediterranean cuisine based on recent searches and dining history.

The decision-making engine then evaluates Tim's preferences across cuisine types, pricing, ratings, and distance. It selects optimal options based on these multi-faceted criteria, weighing several competing factors: indoor dining options (due to predicted rain), proximity to home (given tomorrow's early meeting), availability at short notice, and cuisine preferences. It ranks options based on a composite utility score derived from these factors, ultimately selecting a highly-rated Mediterranean restaurant with confirmed indoor seating availability. The engine prioritises establishments known for attentive service and intimate atmosphere, recognising that this evening carries emotional significance beyond just dining.

In the action execution phase, the AI autonomously prepares for the date. The action system secures a reservation through the restaurant's booking API, schedules a rideshare service with pickup and return times, adds the event to Tim's calendar with appropriate travel buffer times, and sends him a detailed itinerary with confirmation codes and venue details. As details arrive on their phone, Tim immediately feels

relief. What would have taken hours of research and calls has been handled seamlessly, allowing him to focus on the evening itself rather than its logistics.

After the evening, the learning system collects feedback from Tim. Tim rates the experience highly but mentions the restaurant was slightly noisier than he preferred. The learning system updates its user preference model to prioritise quieter venues in future recommendations while reinforcing the positive aspects of the decision (cuisine choice, timing, transportation).

Throughout the process, the control system validates decisions against known dietary restrictions, budget limits, and reservation confirmations to ensure compliance with user-set constraints. Before finalising the plan, it verifies that the selected restaurant accommodates Tim's gluten sensitivity (flagged in his dietary profile), that the total estimated cost falls within his typical spending patterns, and that cancellation policies align with his preferences. These guardrails work invisibly, preventing potential disappointments that could ruin an emotionally momentous evening.

Now that we have explored the internal mechanics of AI agents and the resulting positive impact on Tim's love life, what might their usage look like within financial services?

# Use cases in the UK financial market

Today's financial institutions operate through complex networks of human-provided services, many of which have resisted traditional automation approaches. These services often involve navigating ambiguous information across disparate systems, processing unstructured communications, and making nuanced judgments; tasks that rule-based systems struggle to handle effectively.

Agentic AI represents a fundamental shift in what's possible because it combines two key abilities previously unavailable in single systems:

- 1. **Perception and integration** The ability to ingest, understand, and consolidate information from multiple sources and formats extracting meaning, intent, and context that was previously only possible with human judgment. This ranges from structured databases to unstructured documents and content going way beyond APIs and other existing methods.
- 2. **Autonomous decision-making and action** The ability to formulate plans, execute multi-step processes, and dynamically adjust strategies based on new information, operating within defined boundaries.

This combination allows AI agents to tackle previously intractable problems in financial services, navigating regulatory complexity, handling ambiguous customer requests, and executing complex multi-stage processes with both precision and adaptability. Let's examine two high-impact applications where this step change in proficiency is driving tangible business value.

### **Regulatory compliance and financial crime prevention**

Financial institutions face immense challenges in compliance and financial crime prevention. A large bank might process millions of transactions daily while navigating hundreds of regulatory requirements across multiple jurisdictions. Compliance teams struggle with document-heavy KYC processes, high false-positive

rates in transaction monitoring, and the ever-present risk of missing critical regulatory breaches in communications or trading activities.

### The current state

Compliance functions typically operate through fragmented approaches:

- KYC processes involve manual document reviews, siloed database checks, and limited cross-referencing capacities
- AML monitoring generates excessive false positives (often 90-95%), overwhelming investigation teams
- Communications surveillance relies on keyword matching and sampling, missing contextual nuances and patterns
- Regulatory updates require manual interpretation and implementation across multiple systems

These limitations lead to significant operational costs. Large institutions often employ thousands of compliance professionals while still facing regulatory fines and reputational damage from inevitable gaps in coverage.

### The agent approach

A comprehensive Compliance AI Agent alters these processes through its integrated framework:

#### Perception components:

- Ingests and processes multiple document types (IDs, proof of address, company records)
- Monitors transaction patterns across accounts, products, and time periods
- Analyses communications across channels (email, chat, voice) to understand context and intent beyond keywords
- Tracks regulatory updates and internal policy changes in real-time

### Decision-making engine:

- Evaluates identity verification evidence against risk-based criteria, determining when additional verification is needed
- Assesses transaction patterns against behavioural profiles and typologies of money laundering techniques
- Weighs communication context against regulatory requirements, distinguishing harmless mentions from actual risks
- Prioritises investigations based on risk scoring that incorporates multiple factors

#### Action execution:

- Triggers appropriate verification workflows based on risk assessment
- Routes suspicious activity to specialised investigators with relevant context
- Issues targeted requests for additional information from customers or internal stakeholders
- Documents decision rationales for regulatory audit trails
- Implements new controls based on regulatory changes

Learning and memory:

- Retains customer verification history to streamline future interactions
- Refines risk models based on investigation outcomes
- Builds institutional knowledge of regulatory interpretations and precedents

#### **Control systems:**

- Maintains human oversight of consequential decisions
- Enforces consistent application of regulatory requirements
- Prevents unauthorised access to sensitive customer information

This agent architecture enables financial institutions to achieve several outcomes impossible with previous approaches:

- 1. **Risk-based, dynamic verification** Instead of applying the same checks to every customer, the agent appropriately intensifies due diligence only when warranted by specific risk factors, improving both security and customer experience.
- 2. **Contextual understanding** The agent can distinguish between legitimate and suspicious activities based on holistic patterns rather than isolated triggers, dramatically reducing false positives while increasing detection of actual risks.
- 3. **Regulatory adaptation** As regulations evolve, the agent can rapidly implement new requirements across all affected processes without massive retraining initiatives.

For financial institutions, this translates to tangible business outcomes: 60-70%<sup>2</sup> reduction in false positives, faster customer onboarding, and substantively enhanced regulatory compliance, all while reducing operational costs by 30-40%<sup>3</sup>.

The key differentiator making this possible now is the combination of advanced perception capabilities that can extract meaning from unstructured information and reasoning frameworks that can apply domain-specific compliance knowledge in context-appropriate ways, something that was not possible in earlier automation approaches.

### **Customer support and service automation**

Financial services customer support faces persistent challenges with response times, consistency, and resolution quality. Customers frequently endure long wait times for relatively straightforward inquiries, while support teams struggle with siloed information systems and complex product offerings.

### The current state

The typical customer support experience in financial services:

- Average wait times of 15-30 minutes per call for even basic inquiries
- Multiple transfers between departments to resolve a single issue
- Repeated requests for the same information as customers move between channels

<sup>&</sup>lt;sup>2</sup> FinTech Magazine: Reducing false positives using contextual AI

<sup>&</sup>lt;sup>3</sup> <u>UK Finance: The transformative potential of Generative AI in financial services</u>

- Limited service hours that don't align with when customers need help
- Inconsistent advice depending on which representative handles the inquiry

These limitations result in poor customer satisfaction and high operational costs, with financial institutions operating large contact centers while still struggling to meet service demands.

### The agent approach

A Customer Support AI Agent transforms this experience through its integrated components:

Perception components:

- Analyses customer inquiries across channels (chat, voice, email) to understand intent and emotional context
- Accesses customer profiles, transaction histories, and product information across previously siloed systems
- Monitors sentiment and satisfaction throughout the interaction
- Recognises complex or unusual scenarios that require specialised attention

#### Decision-making engine:

- Determines the most appropriate response pathway based on inquiry type, customer history, and available information
- Identifies when to execute actions directly versus when to provide guidance
- Balances efficiency with regulatory compliance requirements
- Evaluates when escalation to human specialists is warranted

### Action execution:

- Provides consistent, accurate information across products and services
- Executes transactions such as payments, transfers, or service changes when authorised
- Generates and delivers personalised documentation
- Escalates complex situations to appropriate specialists with full context

#### Learning and memory:

- Maintains conversation context across multiple interactions and channels
- Remembers customer preferences and previous issues
- Incorporates feedback to improve future interactions

#### Control systems:

- Enforces authentication requirements before accessing sensitive information
- Maintains compliance with financial regulations and privacy requirements
- Prevents unauthorised transactions or information disclosure

This architecture enables significant enhancements in customer service:

1. **Responsive 24/7 support** – While not truly instantaneous, the agent can provide meaningful responses in seconds rather than minutes or hours, regardless of time or day.

- 2. **Consistent, cross-channel experience** Customers receive the same high-quality service whether they're on the website, mobile app, or calling in, with full context maintained across interactions.
- 3. **Proactive problem resolution** Rather than waiting for customers to report issues, the agent can identify potential problems from transaction patterns and reach out with solutions.

Financial institutions implementing such agents report 70-80%<sup>4</sup> resolution of routine inquiries without human intervention, a reduction in time to resolution for complex cases, and vast improvements in customer satisfaction scores. The most advanced implementations are seeing measurable impacts on customer retention and share of wallet.

These outcomes are enabled by the convergence of advanced language understanding that can interpret customer intent beyond keywords, and the ability to coordinate multiple actions across systems, developments that have only recently reached practical implementation maturity.



### Implementation considerations for financial institutions

As financial institutions develop their AI agent strategies, the distinction between domain-specific expertise and general AI competance becomes increasingly critical. While general-purpose models demonstrate impressive abilities, they lack the specialised knowledge required for regulatory compliance in financial services.

Consider the regulatory complexity: a single phrase like "competitive rates" can trigger regulatory violations in specific contexts, resulting in substantial fines.

<sup>&</sup>lt;sup>4</sup> IBM: Digital customer care in the age of AI

General-purpose AI lacks the deep institutional knowledge of specific regulatory interpretations, precedents, and nuanced application requirements that financial institutions have developed through decades of compliance experience.

Financial institutions must therefore build AI agents that incorporate their proprietary regulatory expertise rather than relying solely on external AI models. This means developing specific components that encode compliance knowledge, regulatory boundaries, and institution-specific practices. These domain-specific elements serve as both guardrails and differentiators – ensuring compliance while utilising the unique expertise that financial institutions have accumulated.

The path forward lies not in choosing between institutional expertise and advanced AI capabilities, but in their thoughtful integration. Successful implementations will enhance human expertise with AI tools while maintaining the critical domain knowledge that defines safe operations in highly regulated environments. As we move toward increasingly autonomous systems in financial services, this balance becomes not just a technical consideration but a strategic imperative.

# Challenges and how to overcome them

Imagine deploying an AI agent to automate mortgage application processing at your bank. The morning after launch, you discover the agent has approved a £2.5 million loan for an applicant with substantial credit risks. This decision would never have passed human review. What went wrong?

The implementation of AI agents represents a significant advancement over traditional AI systems, introducing distinct challenges that financial institutions must address. Their autonomous, action-oriented nature amplifies both potential benefits and risks. Unlike passive generative AI, agents can take consequential actions in the world, introducing challenges around alignment, explainability, security, and integration that require specialised approaches.

But here's the good news: while these challenges may seem novel, the underlying principles for addressing them align closely with risk management frameworks already familiar to financial institutions. You don't need to reinvent your governance approach, you need to adapt it.

### Key challenges and practical solutions

### Goal alignment: When good intentions go awry

### The challenge:

An investment management firm deployed an AI agent to optimise client portfolios. The agent was instructed to "maximise returns" without proper constraints. It began shifting conservative clients into

high-risk assets that technically aligned with its objective but violated the clients' risk tolerance and regulatory suitability requirements.

This illustrates the specification problem, the difficulty of fully and accurately encoding what we actually want into machine-interpretable objectives. In financial services, where objectives like "customer satisfaction," "regulatory compliance," and "risk management" involve nuanced tradeoffs, alignment becomes especially critical.

#### How to address it:

Financial institutions can approach this challenge much like they manage model risk today, but with additional safeguards:

**Multi-dimensional objective design:** Rather than optimising for single metrics, implement balanced scorecards that simultaneously evaluate performance across multiple dimensions. For example, a lending agent might balance approval rates against default risk, customer satisfaction, and regulatory compliance.

*Ask your technical teams:* "How does our agent balance competing objectives like efficiency, regulatory compliance, and customer satisfaction? Can you show me how constraints are explicitly encoded?"

**Constitutional principles:** Financial institutions can encode their core organisational values and regulatory boundaries as non-negotiable constraints on agent behaviour. This approach formalises the guardrails that human employees already intuitively understand.

*Ask your technical teams:* "What principles or constraints have we encoded to ensure our agents operate within our regulatory and ethical boundaries? How do we verify these are being followed?"

Adaptive triage systems: Start with limited autonomy and controlled environments. A trading surveillance agent might begin by flagging potential issues for human review, only gradually gaining the authority to take direct action as its judgement is validated. This mirrors how junior staff are typically given increasing responsibility as they demonstrate sound judgement.

### **Explainability: Opening the black box**

#### The challenge:

A major UK bank implemented an AI agent to assess loan applications. When a business owner questioned why her application was denied, neither the loan officer nor the IT team could provide a clear explanation. The opacity of the decision process undermined customer trust and raised regulatory concerns about fair lending practices.

Explainability is particularly critical in financial services where regulatory requirements and customer trust demand transparency. If an AI agent cannot explain why it flagged a transaction as suspicious or recommended a particular investment, it becomes impossible to validate its reasoning or defend its decisions to regulators.

#### How to address it:

**Reasoning traces:** Require your AI agents to document their decision-making process in auditable logs. Each significant decision should be accompanied by a trace showing the factors considered, alternatives evaluated, and rationale for the final choice. This approach parallels documented decision processes already required in many financial functions.

*Ask your technical teams:* "Can we trace how our agent arrived at this decision? What were the key factors in its reasoning?"

**Decision forests over neural networks:** For regulated decisions, consider using more interpretable models like decision trees or linear models in critical components of your agent architecture. These approaches sacrifice some flexibility for much greater transparency, a tradeoff already familiar in regulatory compliance.

**Explanation by design:** Build explanation frameworks directly into agent architecture rather than treating them as add-ons. This might include requiring agents to articulate their reasoning in natural language that stakeholders can understand.

### Security: Protecting against manipulation

### The challenge:

A wealth management firm deployed an agent to manage client communications. An attacker submitted a carefully crafted query that exploited a vulnerability in the agent's decision process, causing it to inadvertently disclose sensitive information about other clients. The breach was detected only after several days, exposing the firm to significant regulatory penalties and reputational damage.

AI agents present unique security vulnerabilities because they actively interact with multiple systems. An attacker who successfully manipulates an agent's perception or decision-making could potentially trigger unauthorised transactions, extract sensitive information, or disrupt critical processes.

### How to address it:

**Defence in depth:** Apply the same multi-layered security approach you use for other critical systems. For AI agents, this includes:

- Input validation to filter potentially malicious instructions
- Action verification to evaluate proposed actions against security policies
- Anomaly detection to flag unusual agent behaviour patterns
- Privilege limitation to restrict agent authorities to those specifically required

*Ask your technical teams:* "What specific security measures prevent an agent from being manipulated into taking unauthorised actions? How do we detect if an agent begins behaving unusually?"

**Model Context Protocol (MCP):** Implementing MCP can significantly enhance security by creating standardised, controlled interfaces between AI agents and data sources. This approach allows financial institutions to maintain strict control over what information agents can access and what actions they can take, reducing the attack surface available to potential adversaries.

**Human circuit breakers:** For high-risk operations, implement human approval workflows. For example, a trading agent might flag unusual trading patterns but require human approval before executing actual trades above certain thresholds. This approach aligns with existing approval hierarchies in financial operations.

### **Integration: Connecting without breaking**

The challenge:

A retail bank deployed an agent to streamline customer onboarding. However, after a routine update to their legacy customer database, the agent began creating incomplete customer profiles because it couldn't properly interpret the modified data structure. The issue wasn't detected for several days, creating a backlog of problematic accounts requiring manual correction.

AI agents derive much of their value from interfacing with external systems, but this integration introduces significant challenges, particularly in financial services where institutions often maintain complex ecosystems of legacy systems alongside modern platforms.

How to address it:

**Abstraction layers:** Build stable interfaces between agents and underlying systems. By creating consistent APIs that translate between agent requirements and system functions, you can shield agents from changes to underlying systems, an approach already common in financial technology architecture.

*Ask your technical teams:* "How does our agent architecture handle changes or failures in connected systems? What testing processes validate integration stability after system updates?"

**Graceful degradation:** Design agents to continue providing value even when some integrated systems are unavailable. For example, a customer service agent might still answer general questions even if it temporarily cannot access transaction data. This approach parallels business continuity planning for other critical systems.

**Comprehensive monitoring:** Track not just agent performance but the health and responsiveness of all integrated systems and data sources. This visibility enables proactive management of integration issues before they impact agent functionality.

### **Moving forward confidently**

The challenges associated with AI agents may seem daunting, but remember that financial institutions already possess many of the governance foundations needed to address them. The same principles that guide risk management, compliance, and operational resilience in other contexts can be adapted to manage AI agent risks effectively.

As you evaluate potential agent implementations, focus on asking the right questions:

- How are objectives and constraints defined and enforced?
- How can we validate agent reasoning and explain decisions?

- What protections prevent manipulation or misalignment?
- How will the agent handle integration challenges and system changes?

By approaching these technologies with informed caution rather than either uncritical enthusiasm or excessive fear, financial institutions can unlock the potential of AI agents while managing their unique risks appropriately.

As these technologies continue to evolve, regulatory frameworks will inevitably adapt to address the specific challenges they present. The next section explores the current and emerging regulatory landscape for AI agents, providing guidance for navigating compliance requirements while maintaining the innovation benefits these technologies offer.

# Regulation

### The evolving regulatory landscape for AI agents

The emergence of autonomous AI agents introduces new regulatory considerations for financial institutions. While these systems offer tremendous opportunities, they also present novel risks that existing frameworks may not fully address. This section explores how financial firms can navigate this evolving landscape while ensuring compliance and fostering innovation.

### Regulatory continuity in a changing technology environment

It's important to recognise a fundamental truth that sometimes gets lost in discussions about AI governance: **regulators regulate outcomes, not technologies**. Financial regulations requiring fair treatment of customers, market integrity, and prudent risk management remain unchanged regardless of whether decisions are made by humans, traditional software, or AI agents.

The FCA has consistently maintained that firms bear full responsibility for regulatory compliance regardless of which technologies they employ. As stated in their 2022 guidance on AI in financial services: "The use of AI and machine learning does not change firms' regulatory obligations; firms must continue to meet the standards expected by our rules."

This principle of "technological neutrality" means financial institutions should approach AI agent implementation not as a novel regulatory challenge, but as a new means of delivering regulated activities, with all existing obligations intact.

### **Emerging considerations for AI agents**

While core regulatory requirements remain unchanged, autonomous AI agents do introduce specific considerations that merit attention:

#### **Disclosure and transparency**

When an AI agent interacts directly with customers, clear disclosure becomes essential. Consider a chatbot that provides information about financial products. Without proper guardrails, it might inadvertently cross the line into regulated advice, potentially creating compliance risks.

**Practical approach:** Financial institutions could implement clear declarations at the beginning of AI interactions. For example, a retail bank could display this disclaimer at the start of all AI chatbot conversations:

"You are interacting with an AI assistant that can provide general information about our products and services. This interaction does not constitute financial advice. For personalised recommendations, please speak with our qualified advisers."

Such disclosures establish appropriate expectations and create clear boundaries for AI agent engagement.

### Managing unpredictable outputs

Unlike traditional software with fixed logic paths, AI agents can generate unpredictable outputs. This is particularly the case when interacting with users attempting to manipulate or confuse them. This "jailbreaking" risk requires specific mitigations in regulated contexts.

Practical approach: Financial institutions could implement multi-layered defences that include:

- Topic boundary enforcement that prevents discussions of unauthorised subjects
- Response filtering that screens outputs for compliance with regulatory standards
- Human oversight for high-risk interactions
- Comprehensive logging for audit and improvement

### The "black box" training data challenge

A unique challenge with current AI models involves limited visibility into their training data. This creates potential risks when these models form the foundation of agent systems making consequential financial decisions.

**Practical approach:** Institutions might address this through:

- Extensive pre-deployment testing across diverse scenarios
- Continuous monitoring of agent outputs for bias or unexpected patterns
- Supplementing general models with domain-specific training on curated financial datasets
- Maintaining multiple independent validation mechanisms

### **Regulatory expectations and standards**

While no comprehensive regulatory framework specifically addresses AI agents yet, financial authorities are signalling their expectations through guidance, discussion papers, and enforcement actions.

The Bank of England and FCA's Artificial Intelligence Public-Private Forum has emphasised that responsible AI deployment requires:

- 1. Clear governance and accountability structures
- 2. Robust testing and monitoring frameworks
- 3. Appropriate human oversight mechanisms
- 4. Transparency proportionate to potential impact
- 5. Technical resilience and contingency measures

Institutions that proactively implement these principles are likely to be well-positioned as more specific regulatory guidance emerges.

#### The sandbox approach

Regulators recognise that innovation requires space for experimentation. The FCA's regulatory sandbox and the Bank of England's AI Public-Private Forum represent approaches that allow controlled testing of new technologies while managing risks.

**Practical example:** An asset management firm could use a regulatory sandbox to test an AI agent that provides retirement planning guidance. This controlled environment would allow them to refine safeguards and monitoring systems before wider deployment, while giving regulators insight into emerging practices and potential concerns.

This collaborative approach benefits both regulators and regulated entities, facilitating innovation while ensuring appropriate protections remain in place.

### **Toward industry standards**

As AI agent adoption accelerates, industry standards are beginning to emerge. Financial industry working groups could develop preliminary guidelines for AI agent deployment in financial services, covering:

- Minimum testing requirements before customer-facing deployment
- Standard disclosure language for AI interactions
- Logging and audit trail specifications
- Incident response protocols for unexpected agent behaviour

Financial institutions that adopt these emerging standards may benefit from a "regulatory dividend", streamlined compliance assessments and reduced regulatory uncertainty, as supervisory approaches continue to evolve.

### **Moving forward responsibly**

Financial institutions seeking to implement AI agents should:

- Establish clear accountability Designate responsible executives and governance structures for AI
  agent oversight
- 2. **Implement proportionate controls** Apply oversight mechanisms appropriate to the impact and autonomy of each agent
- 3. **Maintain comprehensive documentation** Record design decisions, testing processes, and monitoring frameworks

4. **Engage proactively with regulators** – Participate in discussions and consultations on emerging standards

By approaching AI agent implementation with regulatory considerations integrated from the start, financial institutions can harness these powerful technologies while maintaining the trust of both customers and supervisors.

# Conclusion

# The dawn of AI workforces: Where we stand and what comes next

Throughout this white paper, we've explored the transformative potential of AI agents for the financial services industry. We began by distinguishing these autonomous, action-oriented systems from their more passive predecessors, traditional generative AI that, while impressive, remains fundamentally responsive rather than proactive. We've examined the spectrum of agentic systems, from augmented models that enhance LLMs with basic context management, to workflow systems that guide AI through structured processes, to true agents capable of autonomous perception, decision, and action cycles.

The five-component architecture we've outlined, perception systems that gather information, decision engines that determine courses of action, action systems that implement decisions, learning mechanisms that improve performance, and control systems that ensure safety, provides a framework for understanding how these systems function as integrated wholes rather than isolated algorithms.

In financial services specifically, we've seen how AI agents have the potential to transform regulatory compliance and financial crime prevention by replacing fragmented, manual approaches with holistic, risk-based frameworks. And we've explored how they can revolutionise customer support by providing consistent, responsive service across channels.

### The road ahead: Emerging patterns

As we look to the future, several patterns are becoming clear:

**Specialisation before integration:** The initial wave of successful AI agent deployments will likely be specialised vertical agents focused on specific domains where the knowledge boundaries are well-defined and the regulatory requirements are clear. These vertical solutions will build domain expertise into their architecture, ensuring compliance with industry-specific requirements. Over time, we expect to see these vertical specialists increasingly integrated into broader horizontal frameworks that coordinate their activities while maintaining their specialised knowledge.

**Team collaboration before replacement:** Rather than wholesale replacement of human teams, AI agents will initially augment human skills, taking on routine aspects of complex workflows while humans handle exceptions and high-judgment activities. As trust and proficiency grow, we'll see increasingly autonomous agent teams collaborating on complex processes, but this evolution will be gradual rather than revolutionary.

**Constrained before expansive:** The most successful early implementations will focus on constrained domains where the cost of errors is manageable. Much like how autonomy in vehicles began with parking assistance and lane-keeping before progressing to more comprehensive self-driving functions, AI agents will first tackle well-bounded problems before expanding to more consequential decisions.

### Finding the sweet spot: Strategic implementation

The ideal starting point for AI agent implementation lies at the intersection of value, complexity, and acceptable risk. Tasks that are:

- 1. Valuable: Processes that consume significant resources or create bottlenecks
- 2. **Complex**: Activities that require coordination across multiple systems or steps
- 3. Risk-manageable: Domains where errors can be contained and corrected

These characteristics describe numerous processes within financial services, from customer onboarding to routine compliance monitoring to standard reporting functions, making the industry particularly well-positioned to benefit from early agent adoption.

As agent technologies mature and governance frameworks evolve, the range of suitable applications will expand into areas with higher stakes and greater complexity. However, this progression will and should be measured, with each step building on validated success in lower-risk domains.

### **Recommendations for financial institutions**

### 1. Start with assessing existing workflows and processes

Before diving into implementation, conduct a systematic assessment of your organisation's processes to identify the most promising candidates for agent-based automation:

- Which processes consume disproportionate resources?
- Where do information silos create inefficiency or inconsistency?
- Which activities would benefit most from 24/7 operation?
- Where could reduced response times create a competitive advantage?

This assessment should engage stakeholders across business, technology, risk, and compliance functions to ensure a holistic view.

### 2. Build internal capacity

While external partners will play important roles in agent development, financial institutions should prioritise building internal expertise:

- Establish cross-functional teams combining domain experts, data scientists, and engineers
- Invest in training programmes that bridge AI technical knowledge with financial domain expertise
- Create governance frameworks specifically addressing agent deployment and oversight
- Develop evaluation methodologies for assessing agent performance and compliance

Institutions that treat agent development as a core competency rather than an outsourced function will gain lasting advantages in both implementation quality and speed of innovation.

### 3. Adopt incremental implementation

Rather than big-bang deployments, pursue staged implementation that builds confidence and expertise:

- Begin with limited pilot projects in well-defined domains
- Implement robust monitoring and feedback mechanisms
- Establish clear metrics for success and expansion criteria
- Scale gradually as performance and governance mature

This measured approach aligns with financial services' traditionally cautious innovation culture while still enabling meaningful progress.

### 4. Engage proactively with regulators

As regulatory frameworks continue to evolve, financial institutions should position themselves as constructive contributors:

- Share implementation plans and governance approaches with supervisors
- Participate in regulatory sandboxes and innovation hubs
- Contribute to industry working groups developing standards and best practices
- Provide feedback on emerging regulatory guidance

This engagement serves both to reduce regulatory uncertainty and to ensure that evolving frameworks remain practical and innovation-friendly.

### A call to action

The transition from passive AI to autonomous agents represents a once-in-a-generation shift in how technology integrates with human activities across all sectors. While the full transformation will unfold over years rather than months, the foundations being laid today will determine competitive positioning for the decade ahead.

Organisations now face a choice: approach AI agents as mere efficiency tools to be cautiously deployed at the margins, or recognise them as strategic assets that will reshape how services are delivered, operations are conducted, and value is created.

Those who choose the latter path, who invest in understanding agent architectures, developing internal capabilities, and thoughtfully implementing these technologies with appropriate safeguards, will not merely reduce costs.

They will reimagine what's possible in their industries, creating new forms of value for customers, employees, and shareholders alike.

The age of AI agents has arrived. The question is not whether these technologies will change how we work and live, but which organisations will lead that transition.