

AI in finance: what it is and how it works

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EXECUTIVE SUMMARY

- Finance functions are increasingly moving towards faster, more automated ways of working, aiming to reconcile activity as it happens and give leadership a real time view of current and future profit and cash.
- This ambition is underpinned by a strong data foundation, with accurate financial and operational information flowing automatically from source systems into a unified platform.
- Finance teams do not, however, need to wait for the perfect data foundation before starting the automation journey. They can start now and develop iteratively, using AI and automation on routine tasks to build AI fluency and free up time for the process and data improvements that follow.
- The first practical step on the automation journey is to understand what sits under the AI label. For finance, three technologies matter most: deterministic rules, machine learning and generative AI. Only the last two are genuinely AI.
- With those technologies understood, the next step is to match them to the work. In practice, this means automating areas with clear rules, using machine learning for prediction and a large language model (LLM) at judgement points, while always keeping a person accountable for the numbers.
- Finance teams can access AI and automation technology through five routes: general purpose AI tools, ERP features, specialist finance products, workflow platforms and custom development.
- How that AI and automation technology is used is a separate decision. An AI assistant works at a person's direction, a workflow follows predefined steps with AI at judgement points, and an AI agent chooses its next actions within agreed limits. A standing agent also starts work independently on a schedule or trigger.
- A successful experiment is not yet a production finance process. Production requires a named owner, integration with the systems of record, testing, controls and ongoing maintenance.

01 — THE FINANCE FUNCTION AI IS HELPING TO CREATE

Picture a finance function that records and reconciles activity as it happens, completes the formal close on the first working day, and keeps the board updated in real time with a current and future view of revenue, profit and cashflow. The strongest finance functions are already heading this way. The most advanced are built around an organisation wide data strategy in which accurate, comprehensive and real time information flows automatically

into a unified data platform. AI applied on this foundation then unleashes its full potential. However, the process of adopting AI does not need to and should not wait for the perfect data environment. Getting started sensibly, using AI to automate routine tasks, frees up time almost immediately and benefits compound as AI fluency develops within finance teams. Time saved can then be invested in the process and data groundwork that builds towards that optimal data environment.

Indeed, few finance teams operate across a robust and comprehensive organisational level data environment today. Numbers sit across disconnected systems, spreadsheets and PDFs, and much of the team's time goes on gathering and reconciling that data rather than using it. The month end close still runs for many days, with a multi tab Excel workbook often bridging the gaps between systems. This series of articles sets out to support finance functions and leaders in this position, offering practical help to close the gap between the current state and a truly AI enabled finance function. It starts here, with the foundational context the rest of the article series builds on: what AI for finance is, what it does, and how to use it.

02 — WHAT SITS BENEATH THE AI LABEL

Hype and noise surround AI, and the facts, the detail and any path to practical use are easily lost within them. To progress beyond the hype, a useful starting point is to understand the core technologies sitting under the AI automation label that matter most in finance:

- Deterministic, rules based approaches. The same answer every time, fixed by the rules: matching, validation, scheduling, data pulls, arithmetic. Automation, not AI.
- Machine learning. Statistical techniques over historic data to classify what is there and predict what comes next: expense and revenue timing, seasonality, anomaly spotting, forecast assumptions. AI.
- Generative AI. AI that interprets or creates content, working with language, documents, code and numbers. In finance, the large language model, or LLM, is the main form. Typical initial use cases include variance commentary, board narrative, reading messy documents, drafting and summarising. AI.

Of the three, only machine learning and generative AI are genuinely AI, with rules based approaches belonging in the domain of automation. AI and automation terms are often used interchangeably but an awareness of the difference improves both deployment and outcomes. Generative AI is good at drafting, explaining and reading a messy document, but it is an expensive way to run a routine pull from the ERP that can be handled by a straightforward workflow automation. From a practical perspective the processes within a modern finance function usually combine all three, rather than choosing between them, with these technologies reaching the finance function in productised form, through the five routes outlined in the next section.

03 — HOW FINANCE TEAMS GET ACCESS TO AI

The first route is the general purpose AI tools: ChatGPT, Claude and Gemini, and the copilots that put the same capability inside everyday applications such as Excel. The agentic environments go further. Claude Cowork and OpenAI's Codex let the team hand over a whole task, such as preparing the bank reconciliation from the statement export and the ledger.

The second route is the ERP's own AI, features such as automated close modules the major systems now include, delivered inside software the team already runs.

The third route is the specialist finance products that sit on top of those systems: the accounts payable, receivable, cash, close and planning tools, each with the AI already built in and configured for its process. Many finance teams start here, bought rather than built.

The fourth route is the workflow products, n8n, Workato, or an RPA tool where no API exists, which wire automation and AI steps into one process. Building these connections is far quicker than it used to be, since an LLM can now write much of the connecting code in hours, work that once needed a specialist developer.

The fifth route is custom development with IT, building what the other routes cannot provide, and the exception rather than the rule. Whichever the route, in a company setting these products run as enterprise deployments, with IT setting the access, connections and controls.

04 — FOUR WAYS OF WORKING WITH AI

These five routes deliver the AI and automation capability, and a finance process typically draws on them in one of four ways. Across those four ways, a person or a trigger starts the process, while either automation follows a fixed route or the AI chooses each next step. Ordered from most to least human involvement, the primary ways of AI deployment are as follows:

- AI assistant. A person starts the work, directs it and reviews the result. Most finance teams begin here, with a review of a financial model, a board pack first draft or a forecast refresh, each one requested and checked by the person running it.
- Workflow automation with AI judgement points. A predefined process where the route is known in advance, and an LLM works only at the points needing interpretation. The reporting pack runs on rules, for example, while the LLM drafts the variance commentary for a person to edit.
- AI agent. A capability that selects or adapts its own actions towards a defined objective, within set permissions, with an LLM typically making the choices. The route is not fixed in advance, so an agent fits work where the next step depends on what the last step found, such as tracking down the evidence behind a reconciliation break.
- Standing agent. An agent that starts work on its own, on a schedule or trigger, rather than waiting to be asked. Overnight invoice chasing is a standard example, with the results waiting for review each morning.

How the work is run directly impacts the review approach. Rules based, automated worksteps repeat: the same inputs, once tested, return the same result every run. The AI worksteps, an LLM at a judgement point or the same model driving an agent, do not. The same question can return a different answer on a second run, and a wrong answer reads as fluently as a right one. A person therefore reviews the LLM's output and remains accountable for anything that moves money or changes the accounts. The setup must also provide a clear audit trail for any output or action that relies on AI. [The governance article](#) sets out how to run that review without slowing the team down.

05 — MATCH THE APPROACH TO THE WORK

For a given finance task, which approach to use, and whether to use AI at all, comes down to two questions: is the task messy enough to need judgement rather than a rule, and does it happen often enough to be worth building into

a process? Set against each other, those two questions point to the right move:

	ONE OFF OR OCCASIONAL	FREQUENT AND REPEATABLE
Clear rules, structured data	Excel, a query, code or by hand. An assistant can help build the method but is not needed to run it.	Deterministic workflow automation or a production finance system. Automate without a model.
Messy information, needs judgement	An AI assistant, with a person reviewing the result.	A workflow with LLM judgement points, or an agent where the route cannot be fully set in advance.

The default approach is to automate where the rules are clear and several steps chain together, since a deterministic tool is cheaper, faster and easier to control than a model. Machine learning is brought in where the task is prediction or classification, and an LLM where the work needs interpretation and judgement. Those judgement points are where the gains are greatest. KPMG's May 2026 Global AI in Finance report, surveying 1,013 senior finance leaders, found the same pattern: performance gains cluster in decision heavy work, led by decision making quality, decision making speed and forecast accuracy. The future finance function runs this way: rules and automation do the deterministic work, AI takes the judgement, every output is auditable, and a person stays accountable for the numbers.

Where AI and automation capability comes from is a critical early decision. In short, the order that usually works is: determine the biggest pain points, start with what the company already pays for, buy an established product where process is standard, connect an AI tool to the company's own data and systems where it is not, and build custom software only rarely. AI does not need to be everywhere either, and deployment is best approached in phases that prioritise ROI. [The buy, build or assemble article](#) sets out this decisioning and approach in more detail.

06 — EXPERIMENTATION IS NOT PRODUCTION

Early success with these tools comes quickly. A team member asks an assistant to explain a variance or clean an export, checks the answer, and the task is done. That is real value, but it is not yet an operational finance process. The work ran once, on one person's initiative, with no record of the method.

A saved, reusable instruction set, called a Skill in some AI assistants, is the first move towards repeatability. It gives the task the same instructions on every run, so the method survives its author. A person still starts and reviews each run, and the scope stays at one person's task. [The fluency article](#) covers how a team builds and shares these Skills.

Turning that task into a finance process the business depends on is a bigger undertaking, and the aim is worth naming: a process that no longer lives in one person's head, runs the same way whoever is in that day, and survives handovers and leavers. That resilience is one of the bigger advantages automation and AI bring, and later articles return to it. The process moves into workflow automation or an agent, connected to the finance systems it runs on, but the build is the smaller part of the change. What makes it production grade is everything around it: a named owner, integration with the systems of record, testing before live use, controls in operation, and maintenance as models, processes and connected systems change. Without those conditions the process is still an experiment, however well it performs.

07 — FROM CONTEXT TO DELIVERY

Putting those conditions in place is the work the rest of the article series covers, and it runs from decisions to delivery. [The strategy article](#) sets the destination, the ownership and the economic case. [The implementation roadmap](#) then gives the practical order across fluency, data organisation and hygiene, sourcing and governance. The deeper articles develop each of those areas where more detail is useful.

THE AI IN FINANCE SERIES

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