



# The Rise of Agentic AI in Finance: Opportunities, Risks, and Human-Centric Integration

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### Context

Agentic AI refers to systems that can perceive, reason, and act autonomously across multi-step tasks, going well beyond responding to prompts. Financial services are among the fastest-moving adopters. This practitioner review maps the most significant use cases across back-office and customer-facing operations, sets out the key deployment risks, and makes the case for human-in-the-loop governance as the dominant responsible integration model.

### Key Insights

#### From pilot to production

- 44% of finance leaders expect to use agentic AI by 2026 (Wolters Kluwer, May 2025 survey, n=392)
- Consulting firms as users at scale: EY plans to integrate across 30 million tax processes; PwC reduced K-1 tax production from nearly 2 weeks to 1 day; Accenture states 20-30% productivity gains at global banks

#### 4 critical deployment risks

- **Data debt:** legacy systems and siloed records mean errors scale rapidly when flawed data feeds autonomous agents, causing erroneous payments or operational failures at speed
- **ROI opacity:** cloud provider credits mask true costs at adoption; vendor lock-in becomes apparent once credits expire, turning quick wins into long-term cost burdens
- **Security:** broad system access to sensitive financial data creates higher security risks due to broad access to sensitive systems/ data
- **Regulatory exposure:** EU AI Act classifies credit scoring systems as high-risk, needing human oversight and nondiscriminatory data before usage; non-compliance risks fines

TABLE 1. How agentic AI is revolutionizing financial services: Use cases and examples.

Capability	Description	Example and Impact
Automated trading	Uses advanced algorithms to execute trades quickly and precisely by analyzing market trends and timing.	QuantEdge uses agentic AI for hyper-timely trades, producing portfolios that outperform manual strategies by ~15% annually.
Fraud detection and security	Identifies suspicious transaction patterns and anomalies in real time to enhance security.	Mastercard employs AI agents for fraud defense, enabling biometric authentication and dispute resolution. Detection of compromised cards doubled, false positives reduced by 200%, and risk identification sped up 3x.
Personalized financial advice and wealth management	Analyzes extensive customer data to provide tailored investment strategies and automated financial management.	Era is advancing agentic AI for real-time personalized wealth care using institutional-grade automation.
Autonomous portfolio management and risk modeling	Continuously monitors and adjusts investment strategies based on evolving goals and market conditions, synthesizing macroeconomic data for risk mitigation.	Agentic AI autonomously adapts asset allocations, proactively rebalances portfolios, and issues hedge recommendations for optimal returns.
Regulatory compliance automation	Streamlines compliance processes like AML and KYC by automating investigations and decision support.	Oracle Financial Services integrated agentic AI into its Investigation Hub Cloud Service for efficient financial crime investigations and compliance.

#### Human-in-the-loop (HITL) as governance standard

- Agents propose, humans decide: preserves accountability while capturing efficiency gains
- Feedback loop: human corrections improve model accuracy over time, as shown in PwC's tax operations
- Hard limits: AI is still unsuitable for policy interpretation & high-touch client interaction, where complex reasoning and relationship require a human

### Implications

Key FORGOOD dimensions most relevant here:

- Fairness: algorithmic bias in credit/risk decisions
- Openness: explainability of autonomous decisions
- Goals: whose interests the agent optimises for
- Opinions: front page test for autonomous decisions
- Delegation: regulatory right, HITL as legal requirement