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MARKET SIGHT LINES

Artificial Intelligence in the Digital Realm: Security and Finance

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In our recent series on artificial intelligence (AI), we've discussed the impact on the labor market, the path to delivering durable long-term returns, AI applications in healthcare, and how AI is playing a key role in our long-term investment themes. AI is spreading fastest in areas already digital by their nature. In cybersecurity, AI is being deployed to detect anomalies, manage threats, and automate responses. In financial services, firms are using AI to improve trading, customer engagement, and compliance tasks. AI investment is impacting economic growth, but these are early days. In this Sight|Lines, we discuss AI applications in security and finance.

THE TAKEAWAY: SECURITY AND FINANCE ARE DIGITAL-NATIVE AREAS POISED TO LEAD AI ADOPTION

AI adoption is advancing in cybersecurity and financial services, two areas that thrive on digital data and measurable outcomes. In summary:

- Organizations are testing AI across their security stacks, but most deployments are still small-scale pilots rather than enterprise-wide programs.
- AI models can process system logs, user behavior, and network traffic to spot anomalies in real time, shortening the time between breach and action.
- Attackers use the same tools defenders use, so AI must be retrained to stay effective.
- In the financial services sector, banks, insurers, and asset managers increasingly treat AI as a strategic investment that will shape their competitiveness.
- With these firms, AI is not confined to one area; it is being integrated across the front, middle, and back office in finance.
- AI-related spending is large enough to register in national accounts, showing the economic potential of this build-out.
- The most successful firms will be those embedding AI into day-to-day workflows rather than relying on one-off pilots.

IN-DEPTH: AI'S MOMENTUM IN SECURITY AND FINANCE IS REAL, BUT SUCCESS HINGES ON GOVERNANCE AND EXECUTION

Applications in cybersecurity and finance illustrate how AI can reshape workflows, at the same time highlighting the importance of governance as firms seek to produce improved earnings. Going deeper:

- Cybersecurity adoption is underway, but maturity is limited:
  - Surveys show ~34% are already using or implementing AI application-security tools.
  - Another ~56% are actively exploring, signaling interest but not yet scaled adoption.
- AI improves threat detection and response speeds:
  - The mean time to detect/respond is falling as companies automate routine monitoring.
  - AI is reducing duplicate alerts and scanning code faster, freeing staff to focus on real incidents.
- Cyber threats adapt quickly, testing defenses as they scale:
  - Adversarial prompts (to trick AI into making a mistake) and data poisoning (bad data fed to train models) highlight the need for red-teaming (playing the role of attacker) and retraining.
  - Cyberattacks rank among the most likely global risks over the next 3-5 years.
- Financial institutions now see AI as a core enabler of growth:
  - Nvidia's 2025 survey: More than half (>50%) already use generative AI, up from 40% last year.
  - 98% of executives say they plan to increase AI spending this year.
- AI applications in finance are varied, with use cases ranging from trading desks to compliance:
  - Trading desks are using AI for portfolio optimization and faster market insights, while customer-facing units use it to further personalize and improve client interactions.
  - Compliance teams can now process thousands of pages of regulation daily using AI, with measurable accuracy improvements and faster turnaround.
- The investment momentum of AI is increasingly visible in GDP and capex data:
  - AI-related capex added about 1.1% to U.S. GDP growth in the first half of 2025, outpacing consumer spending as a growth driver.
  - Data center construction hit a record $40 billion annual run rate in June; with AI hyperscalers projected to spend $342 billion on capex in 2025, a 62% year-over-year increase.
- Execution quality is the difference between leaders and laggards:
  - Investors should look for throughput improvements, reduced false positives in fraud detection, and better client service metrics.
  - Firms embedding AI into existing processes are showing better results than those experimenting.

CONCLUSION

AI applications in security and finance both highlight the promise of AI adoption. These uses demonstrate well how quickly AI can create efficiencies, from shortening detection times to accelerating compliance reporting. But creating real value over time will depend on oversight, well-defined metrics, and thoughtful execution. The lesson for investors: The enthusiasm around AI appears justified, but the winners and losers will be defined by who can – and cannot – translate investment into productivity gains and earnings, all while managing the risks thoughtfully.

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