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Top 11 Use Cases for AI in Capital Markets

Capital Markets Team
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Summary and Key Findings

The definition of artificial intelligence (AI), long established in the academic community, seems to be evolving. Rather than talk about AI, robotic process automation, machine learning, natural language processing, generative AI, and the broader nest of alphabet soup, this report looks at broader use cases under the umbrella of intelligent automation.

The use of intelligent automation in capital markets seems to fall into five main categories:

- **Document management**: Parsing documents, digitizing the data, and summarizing or integrating it with broader systems have become common areas for applying AI. Use cases include investment research, corporate actions, investment policies, onboarding, and institutional client billing. In the private markets, Datos Insights has seen increasing instances of users loading company data, documents, cash flow, and valuation data.

- **Intelligent workflow**: AI is leveraged to intelligently route everything from orders (e.g., smart order routing) to client communications and trade errors. As new trading protocols emerge in the fixed income market, workflow integration becomes crucial to manage the order flow. Integrating client communication into orders can reduce the trade errors resulting from a manual copy of instructions from the communication system into the trade order booking system.

- **Errors and omissions**: This is one of the more mature areas we see the application of AI, robotic process automation, and machine learning. Leveraging intelligent automation to support reconciliations and automate the addition of missing data can help firms move away from simply adding more bodies to the operational infrastructure and instead think more long-term regarding how to further automate the operational process to lessen recurring errors.

- **Intelligence and insights from large data sets**: We see extensive use of AI to support everything from identifying trends in data sets to leveraging tools to search, filter, and make sense of often unstructured data. Use cases include everything from trade surveillance to mining annual and other regulatory reports for specific characteristics.

- **Accelerating DevOps**: Firms are leveraging AI to identify errors and weaknesses in code, automating the data mapping of trade and position files to accelerate development and operations. Fintech firms have adopted AI to accelerate the development process for a minimum viable product and reduce the time to market. Similarly, testing teams have adopted AI tools to develop automated test case scenarios.
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