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Life's Possible
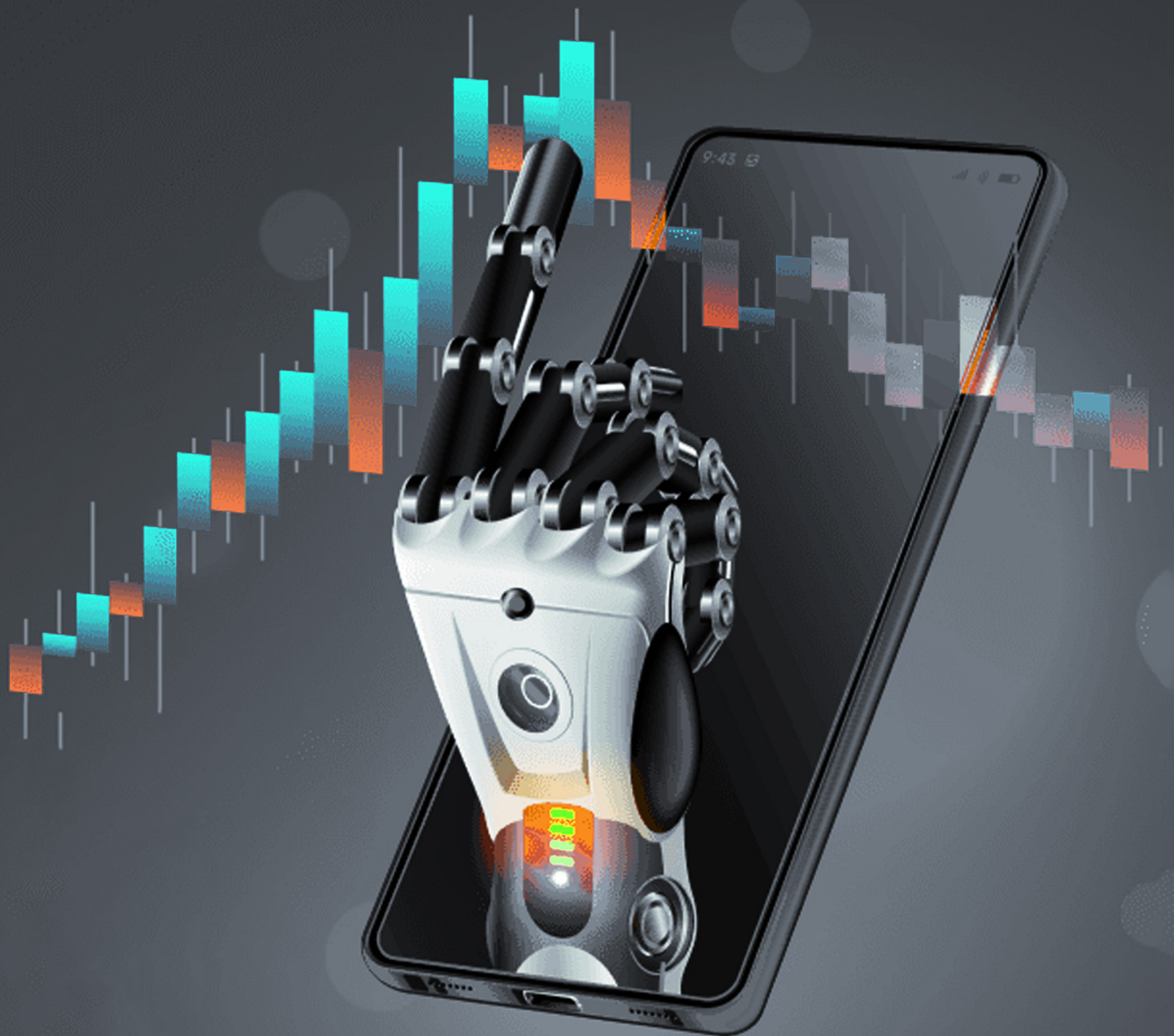
THE FINANCIAL INDUSTRY

Reinvented

GENERATIVE AI AND ITS POTENTIAL

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Inside the Report

Executive Summary

Generative AI (GenAI) is a rapidly growing technology that is significantly transforming the financial industry. It has positively impacted various sectors of the financial industry, such as banking, asset management, capital markets, wealth management, and insurance, as outlined below:

Banking

GenAI presents an opportunity for a substantial increase in revenue, estimated at 2.8% to 4.7%, through enhanced productivity. It enhances the functioning of fields such as onboarding and marketing advisory in the consumer banking sector. GenAI is expected to have a significant and immediate impact on areas such as customized solutions, detection of fraudulent and suspicious activities, and documentation and reporting.

Insurance

GenAI in the insurance sector is already being used for improved underwriting, predictive risk assessment, and faster claims processing, even though this sector has traditionally been a slow adopter of AI. Insurers anticipate a revenue increase of 15–20% and cost reductions with the involvement of GenAI.

Asset Management & Capital Markets

The integration of GenAI is anticipated to facilitate the acquisition of new clients by providing personalized solutions that help firms capture a larger share of the market. Algo-based funds are gaining traction as they use sophisticated algorithms for trading decisions.

GenAI will also aid in alpha generation through portfolio optimization, improved operational efficiency, and enhanced risk management by utilizing newer and more advanced tools.

Wealth Management

GenAI democratizes wealth management by making financial advice more accessible and affordable to a broader client base. It enhances client interaction by offering personalized and tailored recommendations. As a result, profit gains worth $817 million are expected over the next three years for firms operating in the wealth management industry

Payments and FinTech

AI capabilities at financial institutions have increased from 30% in 2022 to 37% in 2023, and this growth is expected to continue in 2024. With GenAI, the market size of the fintech industry is anticipated to reach $1.5 trillion in revenue by 20230. This growth will lead to improved transaction security and enhanced fraud detection systems in both the fintech and payment sectors.

Generative AI's Rapid Growth and Impact

A $1.3 Trillion Potential and Real-World Applications from Finance to Beyond

The 'GenAI' market is exploding rapidly, with Bloomberg predicting it will reach $1.3 trillion by 2032. It is estimated that **GenAI could add the equivalent of $2.6 trillion to $4.4 trillion** across several use cases if fully implemented across industries.

Understanding GenAI

GenAI is a subset of AI focused on creating new content – including text, images, audio, or video – that mimics human-generated data. Its models generate new content based on the patterns and structures they learn from large datasets, utilizing machine learning (ML).

In late 2022, GenAI made a significant breakthrough with OpenAI's launch of ChatGPT, which quickly attracted over 100 million active users worldwide in just two months. By March 2023, multiple competitors released their own versions, and since then, GenAI has experienced frequent updates and widespread adoption across various industries, including finance.

GenAI Use Cases in Finance and Beyond

GenAI's adoption would boost productivity and expand human knowledge. Companies are increasingly deploying GenAI tools to automate time-consuming, tedious tasks that previously required humans to assess unstructured information. The following are common areas of deployment:

1 AI-assisted Banking

Improves banking experiences through enhanced search functionality, as well as personalized messages and interactions

2 Cybersecurity

Identifies and prevents cybersecurity threats

3 Compliance and Risk

Creates and standardizes contracts to help reduce the time and effort required for legal documentation

4 Fraud Prevention and Risk Management

Helps incorporate a wider and richer set of data into risk and fraud detection.

5 Information Analysis and Summarization

Creates summaries of business conversations and generate meaningful insights

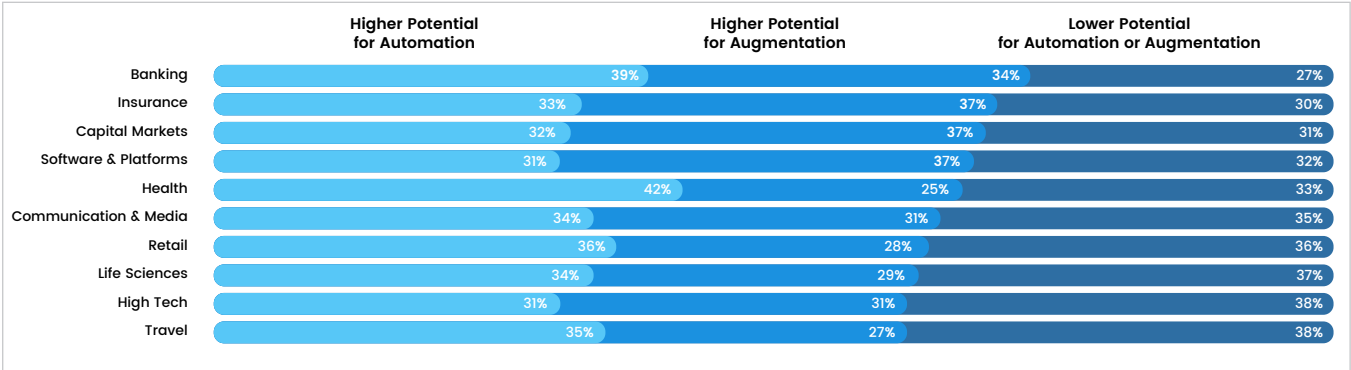# Transforming Finance: The Impact of GenAI on the Industry

GenAI is poised to revolutionize financial industry, making it more efficient, innovative, and personalized

- The market size of GenAI in the financial industry is projected to exceed $9.4 billion by 2032. Many financial firms are discovering numerous benefits associated with its adoption.

- According to an S&P Intelligence report, one in five banks globally has launched or is about to launch applications based on GenAI technology, with use cases ranging from training call center agents to detecting fraud.

Banking, Insurance, and Capital Markets will have the highest impact

An analysis of the time spent on each task, along with an evaluation of the potential for automation and augmentation by GenAI, indicates that financial sectors – including banking, insurance, and capital markets – will likely experience the most significant impact. Banking tops the list, with three-fourths of all tasks being highly suitable for automation or augmentation.[3]

Work-time Distribution by Industry and Potential Impact across Select Industries

	Higher Potential for Automation	Higher Potential for Augmentation	Lower Potential for Automation or Augmentation
Banking	39%	34%	27%
Insurance	33%	37%	30%
Capital Markets	32%	37%	31%
Software & Platforms	31%	37%	32%
Health	42%	25%	33%
Communication & Media	34%	31%	35%
Retail	36%	28%	36%
Life Sciences	34%	29%	37%
High Tech	31%	31%	38%
Travel	35%	27%	38%

Source: Accenture

GenAI is rapidly gaining momentum in the financial industry, with spending on these technologies accelerating at a fast pace. Looking ahead, banks are expected to invest $85 billion in GenAI by 2030.

Work-time Distribution by Industry and Potential Impact across Select Industries

76%
Fraud Detection and Prevention

62%
Customer Service and Personalization

68%
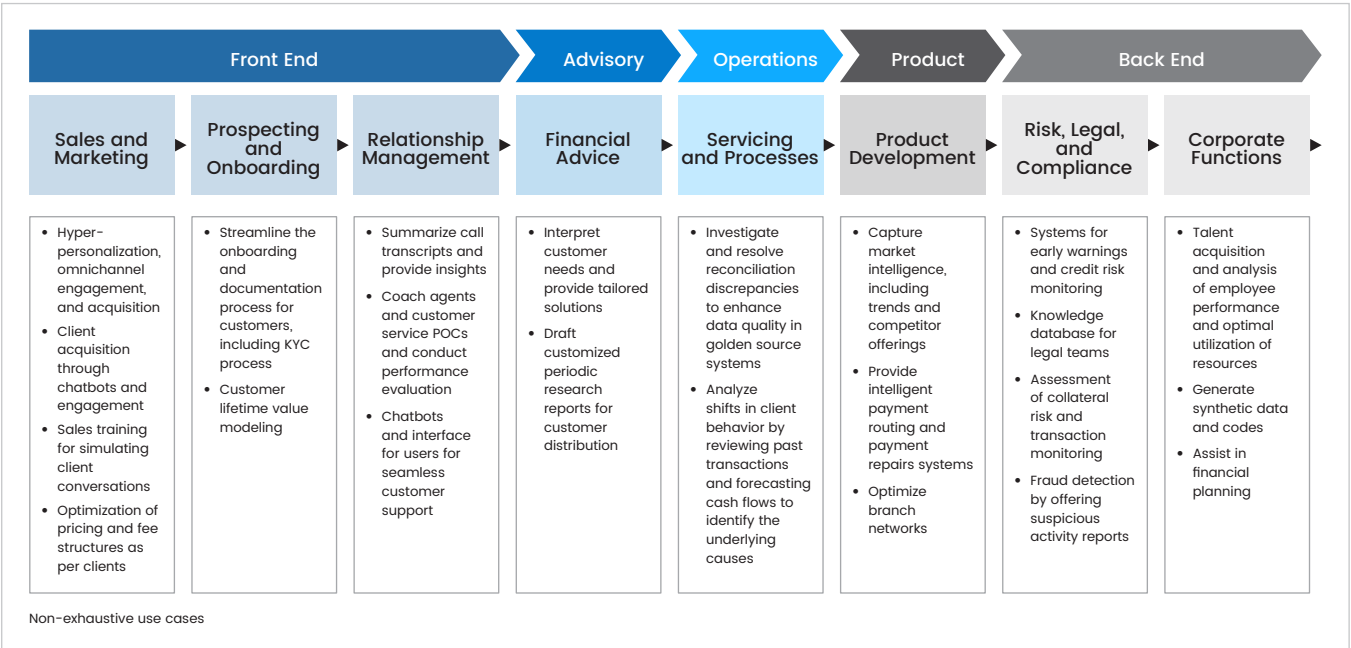Compliance and Risk

Source: KPMG Survey 2023

Harnessing GenAI Commercial Banking

Capturing the GenAI Wave in Banking

- GenAI could add between $200 billion and $340 billion in annual value, or 2.8% to 4.7% of total industry revenue. This growth will primarily be driven by enhanced productivity.

- The industry is expected to see a 30% increase in employee productivity by 2028, particularly in banking.

- The major reason for this is that GenAI has the potential to impact not just functions such as sales, marketing, and customer interaction, but also to create significantly value in areas like risk management, compliance, technology, HR, and legal.

GenAI Use Cases Segmented across Various Functions

Front End			Advisory	Operations	Product	Back End	
Sales and Marketing	Prospecting and Onboarding	Relationship Management	Financial Advice	Servicing and Processes	Product Development	Risk, Legal, and Compliance	Corporate Functions
• Hyper-personalization, omnichannel engagement, and acquisition • Client acquisition through chatbots and engagement • Sales training for simulating client conversations • Optimization of pricing and fee structures as per clients	• Streamline the onboarding and documentation process for customers, including KYC process • Customer lifetime value modeling	• Summarize call transcripts and provide insights • Coach agents and customer service POCs and conduct performance evaluation • Chatbots and interface for users for seamless customer support	• Interpret customer needs and provide tailored solutions • Draft customized periodic research reports for customer distribution	• Investigate and resolve reconciliation discrepancies to enhance data quality in golden source systems • Analyze shifts in client behavior by reviewing past transactions and forecasting cash flows to identify the underlying causes	• Capture market intelligence, including trends and competitor offerings • Provide intelligent payment routing and payment repairs systems • Optimize branch networks	• Systems for early warnings and credit risk monitoring • Knowledge database for legal teams • Assessment of collateral risk and transaction monitoring • Fraud detection by offering suspicious activity reports	• Talent acquisition and analysis of employee performance and optimal utilization of resources • Generate synthetic data and codes • Assist in financial planning

Non-exhaustive use cases

Capturing the GenAI Wave in Banking

Factors that make banks well-suited for integrating GenAI applications:

- **Ongoing Digitization and Legacy IT Systems:** Banks have long invested in technology, resulting in significant technical debt and a complex, siloed IT architecture.

- **Extensive Customer-facing Workforce:** The banking sector relies on many service professionals, including call center agents and financial advisers in wealth management.

- **Strict Regulatory Environment:** As a highly regulated industry, banking must address numerous risk, compliance, and legal requirements.

- **White-collar Workforce:** GenAI has the potential to benefit the entire organization by assisting employees with tasks such as writing emails and creating business presentations.

As the Benefits of GenAI Become Increasingly Evident, Banks are Progressively Experimenting with and Integrating the Technology

Banks	Examples
BARCLAYS	Barclays is using GenAI to detects fraudulent transactions and improves compliance with regulations.
JPMorganChase	JPMorgan Chase has developed a GenAI model to analyze statements from the U.S. Federal Reserve to determine the nature of policy signals.
Goldman Sachs	Goldman Sachs is developing multiple initiatives to integrate GenAI into its operations. Among the most advanced projects are those focused on coding through English-language commands and generating documentation.
NatWest	In 2022, NatWest Bank indicated a 6% reduction in fraud as a share of UK Industry (from 19% to 13%). It also reported a 5x increase in click-through by personalized lending on tailored customer offers on the income side.
ally BANK.	Ally Bank leverages GenAI to transcribe and summarize customer service calls, boosting efficiency and enabling faster issue resolution.
WELLS FARGO	Wells Fargo is using Large Language Models (LLMs) to help identify the information clients need to report to regulators and to enhance their business processes.
BBVA	Banco Bilbao Vizcaya Argentaria (BBVA) exemplifies a bank that has successfully transformed its operating model to enhance end-to-end personalization, optimize customer experiences, and boost the effectiveness of customer acquisition and cross-selling. Notably, the bank has reported a 30% increase in its auto-loan sales conversion rate, which is one of its key metrics.

Overall Outlook

- With many banks already experimenting with and integrating GenAI applications into their systems, they are anticipated to continue investing in and experimenting with GenAI models over the next 2–5 years.

- In the near term, banks will likely focus on incremental innovations, achieving minor efficiency improvements and enhancements tailored to specific business requirements.

- Employees will maintain an oversight role, ensuring accuracy, precision, and compliance as the technology evolves.

- Around 71% of business customers consider the relationship manager to be the most influential factor when selecting a bank and deciding on lending products.

- Hyper-personalization of services will play a significant role in fostering more meaningful relationships with customers.
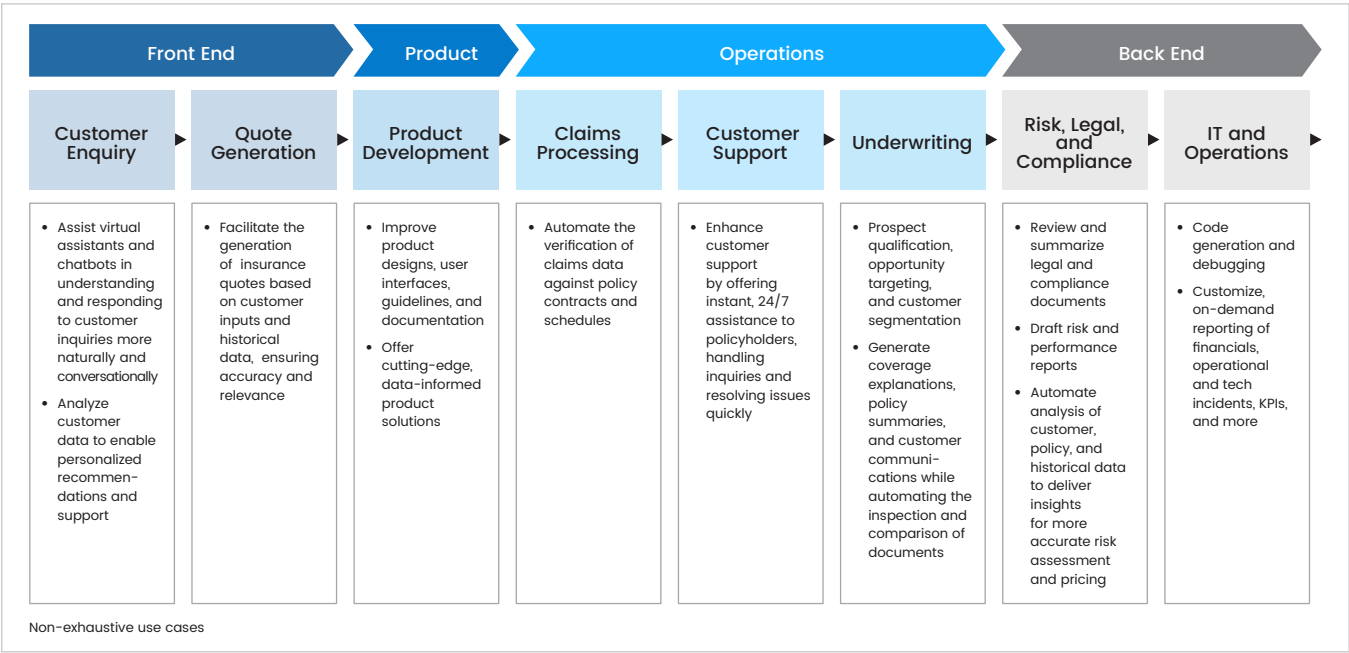
Harnessing GenAI in Insurance
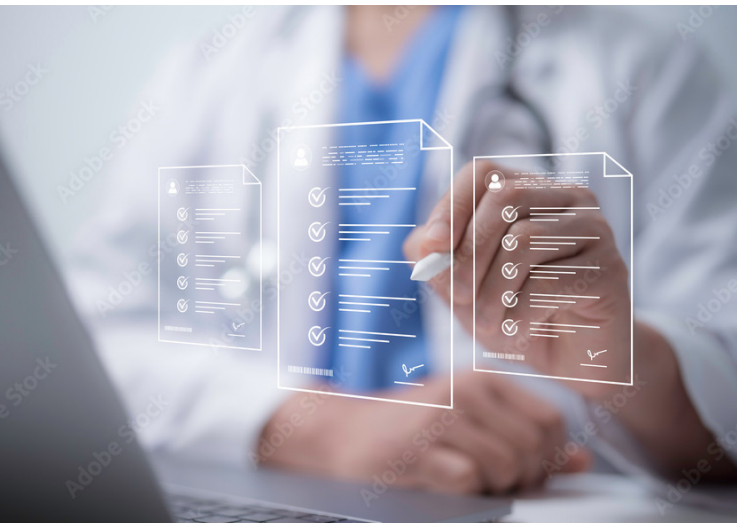
Capturing the GenAI Wave in Insurance

- Traditionally seen as slow to adopt new technology, insurers across various sectors are now actively investing in GenAI and forming specialized teams.

- Both near- and long-term applications of GenAI in the insurance industry aim to improve underwriting, predictive risk assessment, and personalized product recommendations.

- The use of GenAI in insurance industry could boost revenue by $1.1 trillion.

- The revenue of $400 billion could come from improvements in pricing, underwriting, and promotion, while $300 billion could be generated from enhanced customer service and personalized offerings.

GenAI Use Cases Segmented across Various Functions in Insurance

Front End		Product	Operations			Back End	
Customer Enquiry	Quote Generation	Product Development	Claims Processing	Customer Support	Underwriting	Risk, Legal, and Compliance	IT and Operations
• Assist virtual assistants and chatbots in understanding and responding to customer inquiries more naturally and conversationally • Analyze customer data to enable personalized recommen-dations and support	• Facilitate the generation of insurance quotes based on customer inputs and historical data, ensuring accuracy and relevance	• Improve product designs, user interfaces, guidelines, and documentation • Offer cutting-edge, data-informed product solutions	• Automate the verification of claims data against policy contracts and schedules	• Enhance customer support by offering instant, 24/7 assistance to policyholders, handling inquiries and resolving issues quickly	• Prospect qualification, opportunity targeting, and customer segmentation • Generate coverage explanations, policy summaries, and customer communi-cations while automating the inspection and comparison of documents	• Review and summarize legal and compliance documents • Draft risk and performance reports • Automate analysis of customer, policy, and historical data to deliver insights for more accurate risk assessment and pricing	• Code generation and debugging • Customize, on-demand reporting of financials, operational and tech incidents, KPIs, and more

Non-exhaustive use cases

Capturing the GenAI Wave in Banking

- **Fraud Detection:** AI algorithms can be trained to detect patterns of fraud in insurance claims, helping companies identify fraudulent activities before they result in significant financial losses.

- **Personalization for Customers:** By leveraging customer data, insurers can utilize AI to develop personalized products and services that better meet individual customer needs.

- **Faster Claims Processing:** AI can automate routine customer inquiries and claims processing, allowing insurers to provide more efficient service with 24/7 support.

- **Legacy System Solutions:** AI can extract the logic and data from legacy systems while enabling APIs to feed into AI solutions.

- **Underwriting Process:** GenAI can enhance the underwriting and distribution process. Notably, 69% of insurers are focusing on transforming specific areas of the value chain to achieve quick wins.

- **Learning and Development (L&D):** The future of L&D, aided by AI, will likely involve constant reskilling, making learners more agile and responsive to industry and organizational changes.

Capturing the GenAI Wave in Insurance

Insurers are seeking to leverage GenAI across all insurance products:

Insurers	Examples
TOKIO MARINE	Tokio Marine North America is also exploring GenAI, including real-time translation of programming languages and the automation of manual tasks such as drafting reports and creating marketing content.
Anthem	Anthem Inc. is partnering with Google Cloud to develop a synthetic data platform, aiming to generate 1.5 to 2 petabytes of data of medical histories and healthcare claims. This represents a significant use case of GenAI to increase operational efficiency.
Lemonade	Lemonade, Inc., a $256 million New York-based P&C insurer, is utilizing GenAI across various applications, expecting a significant financial impact by 2024.

Overall Outlook

- **Revenue Growth:** GenAI has potential to increase revenue in the Insurance Industry by 15–20% while reducing costs by 5–15%.

- **Profitability:** Strategically investing in GenAI enables insurers to uncover new growth opportunities, improve product offerings, and broaden their market reach, ultimately boosting profitability.

- **Operational Efficiency:** GenAI will significantly enhance back-office support and policy servicing over time, positively impacting operational cost and customer satisfaction.

- **Customer Experience:** GenAI can provide tailored support and customized solutions, reducing customers confusion regarding insurance products and simplifying the process of purchasing decision.
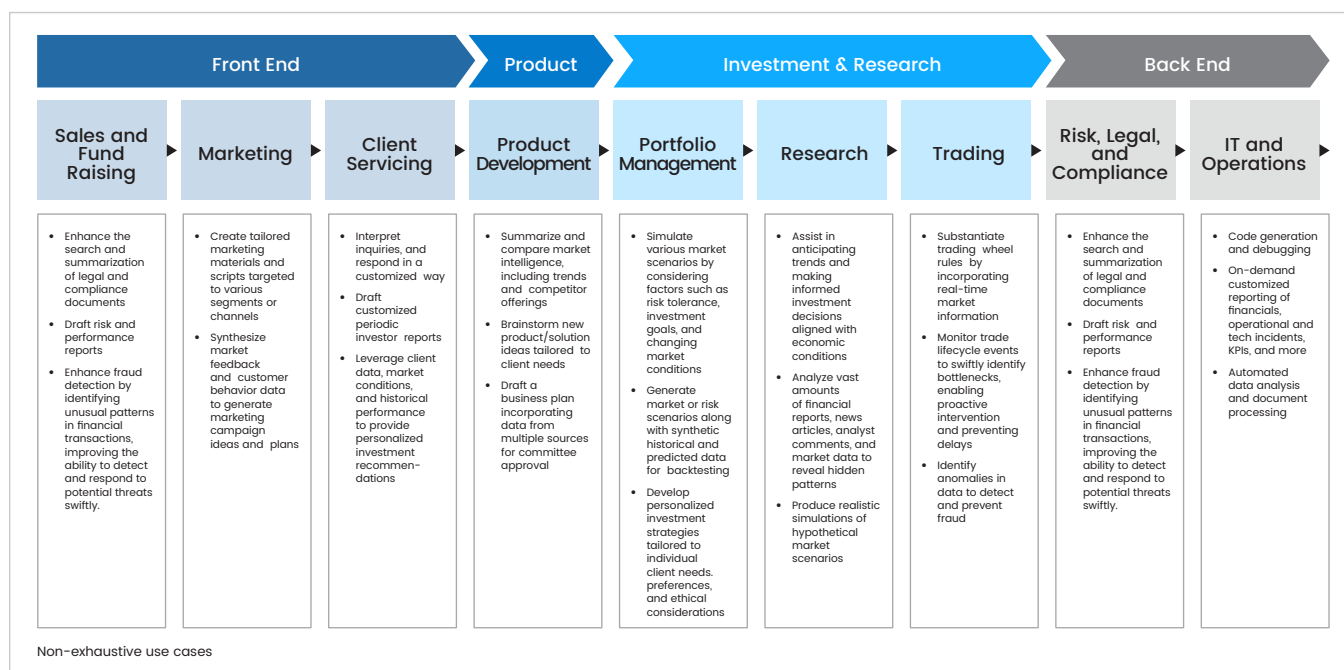
Harnessing GenAI in Capital Market & Asset Management

One of the Early Adopters of GenAI in the Industry

- The asset management industry has leveraged AI for several years, primarily to generate investment ideas and optimize portfolio allocation.

- Technology has long been integral to capital markets activities, and AI/ML can be viewed as extensions of areas like quantitative finance, which already relies on advanced statistical analysis.

- Recent advancements include the use of deep learning models to improve decision-making and optimize portfolios. GenAI can further enhance trading operations, allowing teams to conduct complex research activities and gain valuable insights into key risk indicators (KRIs).

GenAI Use Cases Segmented across Various Functions in Asset Management

Front End			Product	Investment & Research			Back End	
Sales and Fund Raising	Marketing	Client Servicing	Product Development	Portfolio Management	Research	Trading	Risk, Legal, and Compliance	IT and Operations
• Enhance the search and summarization of legal and compliance documents • Draft risk and performance reports • Enhance fraud detection by identifying unusual patterns in financial transactions, improving the ability to detect and respond to potential threats swiftly.	• Create tailored marketing materials and scripts targeted to various segments or channels • Synthesize market feedback and customer behavior data to generate marketing campaign ideas and plans	• Interpret inquiries, and respond in a customized way • Draft customized periodic investor reports • Leverage client data, market conditions, and historical performance to provide personalized investment recommendations	• Summarize and compare market intelligence, including trends and competitor offerings • Brainstorm new product/solution ideas tailored to client needs • Draft a business plan incorporating data from multiple sources for committee approval	• Simulate various market scenarios by considering factors such as risk tolerance, investment goals, and changing market conditions • Generate market or risk scenarios along with synthetic historical and predicted data for backtesting • Develop personalized investment strategies tailored to individual client needs, preferences, and ethical considerations	• Assist in anticipating trends and making informed investment decisions aligned with economic conditions • Analyze vast amounts of financial reports, news articles, analyst comments, and market data to reveal hidden patterns • Produce realistic simulations of hypothetical market scenarios	• Substantiate trading wheel rules by incorporating real-time market information • Monitor trade lifecycle events to swiftly identify bottlenecks, enabling proactive intervention and preventing delays • Identify anomalies in data to detect and prevent fraud	• Enhance the search and summarization of legal and compliance documents • Draft risk and performance reports • Enhance fraud detection by identifying unusual patterns in financial transactions, improving the ability to detect and respond to potential threats swiftly.	• Code generation and debugging • On-demand customized reporting of financials, operational and tech incidents, KPIs, and more • Automated data analysis and document processing

Non-exhaustive use cases

Key Applications across Investment Management & Execution

- GenAI is recognized as a powerful tool that can significantly enhance the investment decision-making process by analyzing vast amounts of data, identifying patterns, and automating routine tasks. This allows professionals to focus more on strategic activities, such as alpha generation.

- Additionally, GenAI plays a critical role in assessing potential risks by simulating various market scenarios and stress-testing portfolios, helping asset managers develop strategies to mitigate those risks.

- Traders can leverage a mix of AI models to improve their trading decisions. For instance, they might use one model to generate an idea, and then employ a

GenAI model to test whether that idea would have been successful in the past.

- As the SEC shortens the standard settlement cycle from 'T+2' to 'T+1,' firms are compelled to reassess legacy systems, streamline batch processes, and enhance straight-through processing (STP). GenAI offers a solution by automating and transforming post-trade operations.

- Integrating GenAI into these workflows allows firms to boost productivity, scalability, and risk management. For instance, when addressing settlement fails, GenAI enables quick analysis of complex issues and facilitates prompt action.

Capturing the GenAI Wave in Asset Management

Asset Management Firms are Actively Exploring and Implementing GenAI

Financial Institutions	Examples
JPMorganChase	JPMorgan has launched IndexGPT, which leverages OpenAI's GPT-4 model to construct thematic investment baskets based on emerging trends. This tool uses AI-generated keywords extracted from news articles to inform investment decisions, showcasing a direct application of GenAI in portfolio management.
Morgan Stanley	The firm is developing solutions that utilize GenAI to assist advisors in customer service. This includes creating chatbots designed to handle client inquiries, thereby streamlining communication and improving response times.
citi	Citigroup is leveraging GenAI to evaluate the impact of new U.S. capital regulations.
Broadridge	Broadbridge Financial Solutions has announced the launch of BondGPT, a tool designed to answer bond-related questions and assist users in identifying corporate bonds on the LTX platform, thereby enhancing liquidity and price discovery.

GenAI and Robo-advisors

Advantages of Robo-advisors

- **Cost-effective:** Robo-advisors provide traditional investment management services at significantly lower fees than human financial advisors, with much lower minimum investment requirements compared to financial planners.

- **User-friendly and Secure:** Robo-advisors simplify investing across various asset classes through mobile or web applications. They provide comprehensive portfolio management tools, offering users greater flexibility and security.

Algorithm-based Investment Funds

The emergence of algorithm-based investment funds represents a significant advancement facilitated by GenAI.

- **Automated Trading with Real-time Data:** GenAI-powered funds use algorithms to analyze real-time data and execute trades automatically, optimizing portfolio performance.

- **Reduced Human Error:** Automation minimizes human errors and biases, enhancing consistency and risk management in investment decisions.

Overall Outlook

- **Operational Efficiency:** GenAI can automate routine tasks, enabling asset managers to streamline operations and reduce costs. For instance, it can assist with trade processing and performance management.

- **Cost Reduction:** Automation leads to substantial cost reductions in operational processes, allowing firms to invest more in innovation rather than maintaining legacy systems.

- **Decision-making:** GenAI provides data-driven insights that help managers make informed decisions quickly, improving responsiveness to market changes.

- **Compliance:** GenAI is bringing a paradigm shift in how financial institutions categorize regulatory reports, address investment-related queries, and provide insights into decision-making.

- **Emergence:** Key emerging trends include the integration of big data, explainable AI for regulatory compliance, advanced natural language processing, and the potential of quantum computing for complex financial modeling.

- **Reporting & Communication:** GenAI automates the generation of reports and client communications, translating complex financial data into coherent narratives.

- **Transformation:** The integration of GenAI into asset management transforms how firms operate by addressing existing challenges in client engagement, risk management, and data utilization.
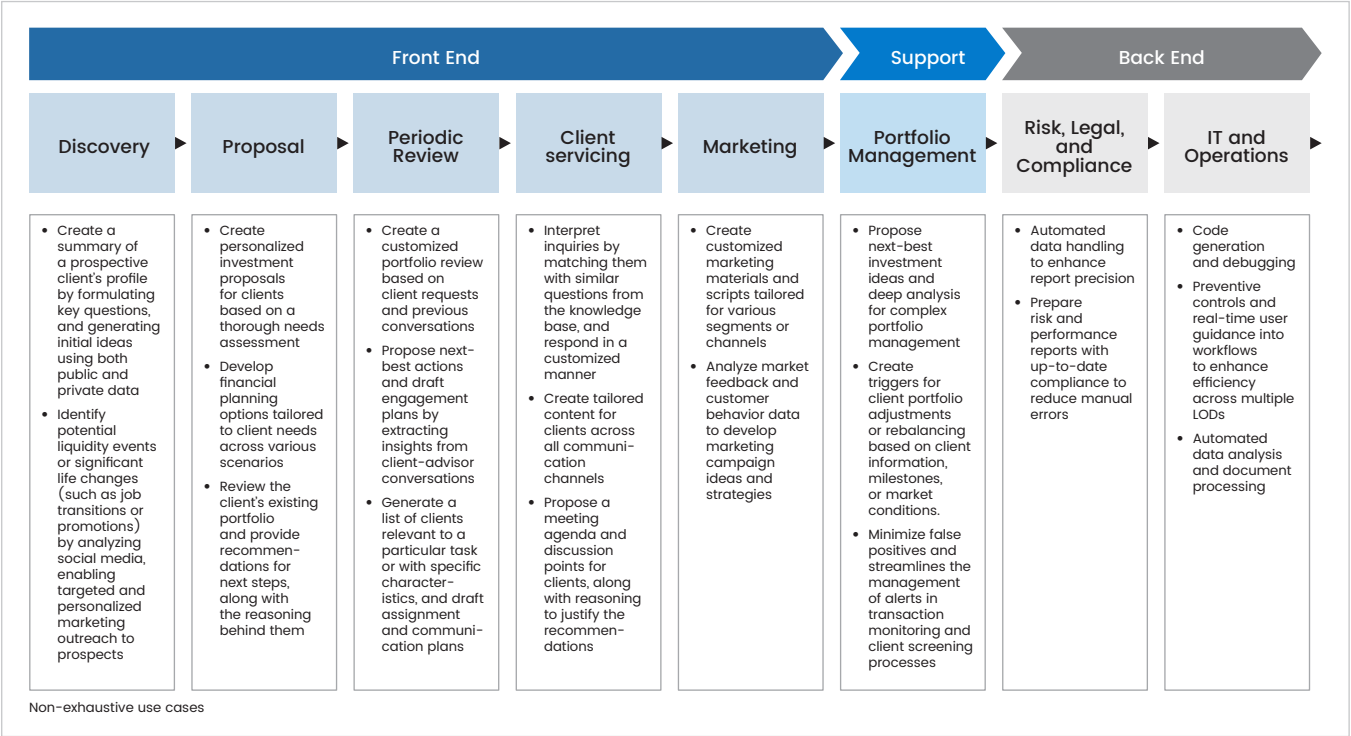
Harnessing GenAI in Wealth Management

Capturing the GenAI Wave in Wealth Management

- GenAI is poised to revolutionize the wealth management sector by enhancing client interactions, streamlining operations, and enabling data-driven decision-making.

- Currently, over 50% of advisors' time is spent on client interactions. GenAI can enhance this by providing deeper insights and tailored recommendations, improving both the quality and efficiency of client meetings.

- In Asia, where affluent and mass-affluent market segments are nearing a tipping point, GenAI is expected to drive incremental revenue for wealth managers ranging from $5–25 billion over the next three years.

- However, human assistance will continue to play a key role in the industry. Advisors will need to always review GenAI-generated products before offering them to clients and validate if these products and investment guidelines are correct.

GenAI Use Cases Segmented across Various Functions in Wealth Management

Front End					Support	Back End	
Discovery	**Proposal**	**Periodic Review**	**Client servicing**	**Marketing**	**Portfolio Management**	**Risk, Legal, and Compliance**	**IT and Operations**
• Create a summary of a prospective client's profile by formulating key questions, and generating initial ideas using both public and private data • Identify potential liquidity events or significant life changes (such as job transitions or promotions) by analyzing social media, enabling targeted and personalized marketing outreach to prospects	• Create personalized investment proposals for clients based on a thorough needs assessment • Develop financial planning options tailored to client needs across various scenarios • Review the client's existing portfolio and provide recommendations for next steps, along with the reasoning behind them	• Create a customized portfolio review based on client requests and previous conversations • Propose next-best actions and draft engagement plans by extracting insights from client-advisor conversations • Generate a list of clients relevant to a particular task or with specific characteristics, and draft assignment and communication plans	• Interpret inquiries by matching them with similar questions from the knowledge base, and respond in a customized manner • Create tailored content for clients across all communication channels • Propose a meeting agenda and discussion points for clients, along with reasoning to justify the recommendations	• Create customized marketing materials and scripts tailored for various segments or channels • Analyze market feedback and customer behavior data to develop marketing campaign ideas and strategies	• Propose next-best investment ideas and deep analysis for complex portfolio management • Create triggers for client portfolio adjustments or rebalancing based on client information, milestones, or market conditions. • Minimize false positives and streamlines the management of alerts in transaction monitoring and client screening processes	• Automated data handling to enhance report precision • Prepare risk and performance reports with up-to-date compliance to reduce manual errors	• Code generation and debugging • Preventive controls and real-time user guidance into workflows to enhance efficiency across multiple LODs • Automated data analysis and document processing

Non-exhaustive use cases

Key Impacts of GenAI in Wealth Management

- **Data Handling:** GenAI can synthesize data for forecasting and portfolio optimization, resulting in more accurate and improved recommendations for clients.

- **Accessibility:** GenAI in wealth management has the potential to close the gap between affluent clients and those who have traditionally lacked access to professional financial advice.

- **Increase in Client Base:** By harnessing this technology, wealth management firms can offer more affordable and accessible services to a broader client base. This shift will benefit individuals and contribute to wider economic growth.

Source(s): Accenture, EY, KPMG and other secondary sources

Capturing the GenAI Wave in Wealth Management

Recent Technological Innovations in Wealth Management

Financial Institutions	Examples
BNY	BNY Mellon launched Wove, which provides essential tools for advisors, including advanced data analytics, financial planning, flexible billing, and cross-custodian trading. Advisors can also access direct indexing strategies, such as BNY Mellon's Precision Direct Indexing S&P 500, allowing them to offer customized solutions that mirror the S&P 500 performance.
J.P.Morgan	JP Morgan launched IndexGPT, an AI service designed to offer investment advice and help its customers understand how and where to invest money better.
RBC Royal Bank	RBC introduced GenAI for its team of advisors, equipping them with a suite of AI tools to deepen client relationships and identify potential missed opportunities.

Overall Outlook

- **Operational Efficiency:** By taking over mundane and repetitive tasks, GenAI allows advisors to dedicate more time to the strategic and personalized aspects of wealth management.

- **Emphasis on Revenue-generating Activities:** GenAI can also reduce preparation time and handle administrative tasks, allowing advisors to focus more on revenue-generating activities.

- **Client Base Expansion:** With its greater customization capability, GenAI allows wealth firms to broaden their client base and offer a wide range of recommendations.

- **Revenue Growth:** By leveraging GenAI, firms could boost top-line revenue by up to 8% annually through improved investment content, which may lead to higher client satisfaction rates.

- **GenAI and Human Interaction:** Even with GenAI's involvement in the industry, humans will remain at the center, as GenAI's products, investment recommendations, and other offerings will be first reviewed and validated by humans before being presented to clients.
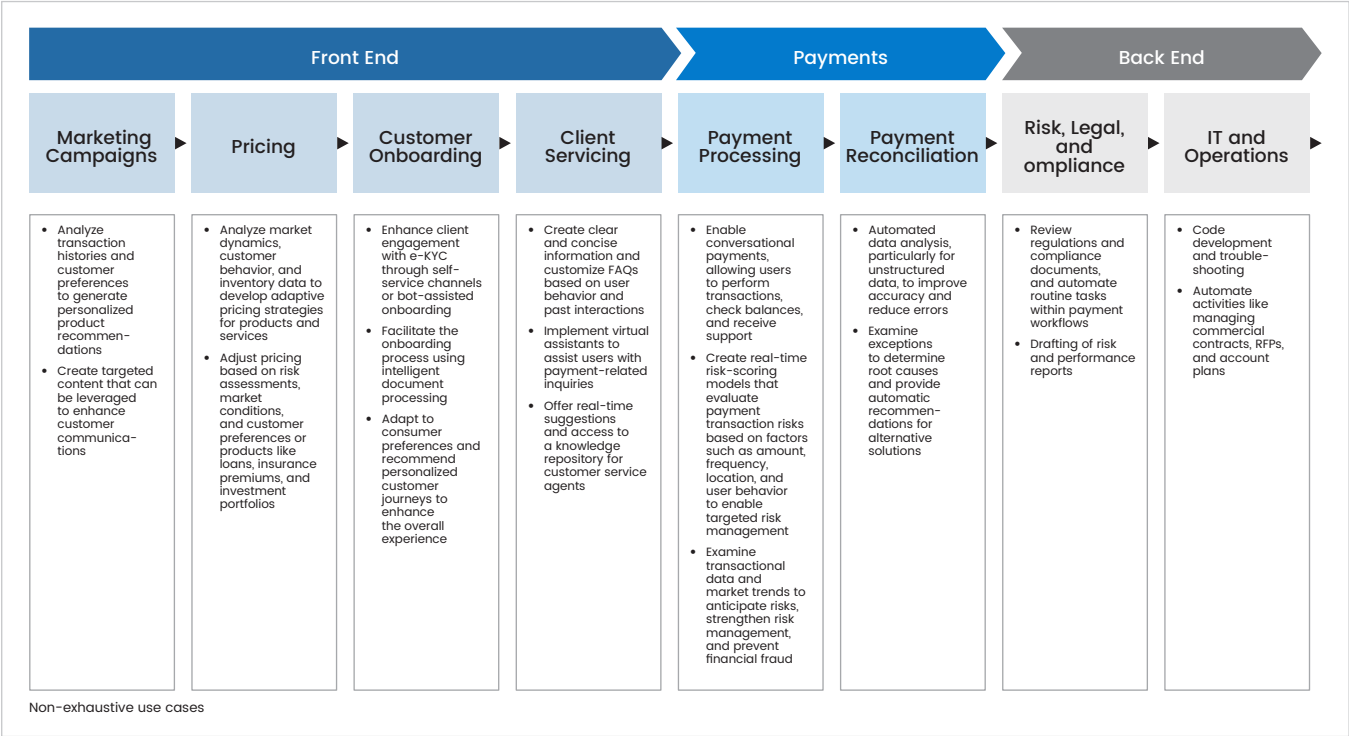
Harnessing GenAI in Payments and Fintech

Capturing the GenAI Wave in Payments and Fintech

- The global pandemic significantly accelerated the digitalization of financial services as more of the economy shifted online. Recent technology adoption has removed many physical barriers to opening financial accounts, purchasing homes, and completing legal documents.

- This growing acceptance of online solutions has paved the way for a new generation of tools to further automate fintech and payments industry—a trend likely to accelerate with the integration of GenAI.

- Between 2022 and 2023 alone, the number of decision-makers at financial institutions with improved AI capabilities rose from 30% to 37%, and this trend has continued to grow in 2024.

GenAI Use Cases Segmented across Various Functions in Payments

Front End				Payments		Back End	
Marketing Campaigns	Pricing	Customer Onboarding	Client Servicing	Payment Processing	Payment Reconciliation	Risk, Legal, and ompliance	IT and Operations
• Analyze transaction histories and customer preferences to generate personalized product recommen-dations • Create targeted content that can be leveraged to enhance customer communica-tions	• Analyze market dynamics, customer behavior, and inventory data to develop adaptive pricing strategies for products and services • Adjust pricing based on risk assessments, market conditions, and customer preferences or products like loans, insurance premiums, and investment portfolios	• Enhance client engagement with e-KYC through self-service channels or bot-assisted onboarding • Facilitate the onboarding process using intelligent document processing • Adapt to consumer preferences and recommend personalized customer journeys to enhance the overall experience	• Create clear and concise information and customize FAQs based on user behavior and past interactions • Implement virtual assistants to assist users with payment-related inquiries • Offer real-time suggestions and access to a knowledge repository for customer service agents	• Enable conversational payments, allowing users to perform transactions, check balances, and receive support • Create real-time risk-scoring models that evaluate payment transaction risks based on factors such as amount, frequency, location, and user behavior to enable targeted risk management • Examine transactional data and market trends to anticipate risks, strengthen risk management, and prevent financial fraud	• Automated data analysis, particularly for unstructured data, to improve accuracy and reduce errors • Examine exceptions to determine root causes and provide automatic recommen-dations for alternative solutions	• Review regulations and compliance documents, and automate routine tasks within payment workflows • Drafting of risk and performance reports	• Code development and trouble-shooting • Automate activities like managing commercial contracts, RFPs, and account plans

Non-exhaustive use cases

Impacts of GenAI in Fintech and Payments

- **Regulatory Compliance:** GenAI can help firms stay compliant by monitoring transactions and identifying suspicious activities, thereby reducing the burden of regulatory reporting.

- **Enhanced Customer Insights:** AI can analyze customer behavior and preferences, enabling fintech companies to refine their offerings and improve the user experience.

- **Faster Payment Processing:** AI can optimize transaction processes, reducing delays and improving overall transaction speed, which is crucial for customer satisfaction.

- **Predictive Analytics:** GenAI can forecast market trends and customer needs, allowing companies to make informed strategic decisions.

Capturing the GenAI Wave in Payments and Fintech

GenAI use cases in Fintech Platforms (GenAI Innovations in Payment Security, User Experience, and Fintech Performance)

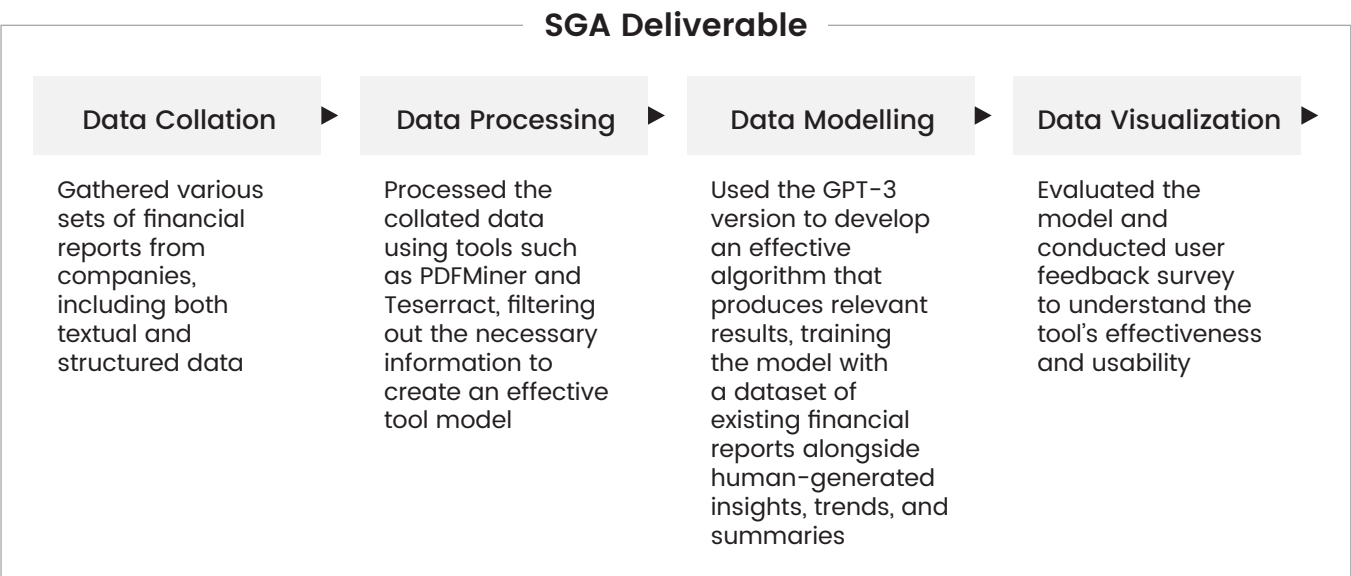| Industry Line	Financial Institutions	Examples
Fintech	neo	Personalized AI Banker: Offer real-time recommendations. Product Innovation: Generate of new products by analyzing market trends and customer feedback. Customer Engagements: Offer customized complimentary services, deals, and discounts. Chatbots and Virtual Assistants: Enhance customer communication and query resolution
	bunq	Bunq, a European fintech, has integrated GenAI into its transaction-monitoring system, increasing data processing efficiency by over five times and speeding up fraud detection model training by nearly 100 times.
Payment	Klarna.	Fintech firm Klarna reports that over 87% of its employees are now using GenAI tools, including OpenAI's ChatGPT and its own internal AI assistant. The company has highlighted AI as a key driver of its financial performance as it shifts its focus away from the rapid growth experienced in 2020 and 2021.
	VISA	Visa uses a GenAI tool called Visa Account Attack Intelligence (VAAI) Score to detect and score enumeration attacks. Initially available to U.S. issuers, the VAAI Score assigns real-time risk scores to transactions, helping to reduce fraud and operational losses in card-not-present (CNP) transactions. VAAI Score has achieved an 85% reduction in false positives.
	PayPal	PayPal announced its move toward passwordless, one-click native in-app experiences and is implementing the next generation of advanced checkout by utilizing its data and AI capabilities.
	stripe	Stripe, a leading payment platform, harnesses GenAI to gain deeper insights into customer usage patterns and deliver personalized support, all while enhancing its ability to combat fraudulent transactions.
	mastercard	The use of GenAI in Mastercard has resulted in a twofold increase in the speed of identifying compromised cards and a 300% boost in detecting at-risk merchants.

Overall Outlook

- **Market Growth:** With GenAI, the market size of the fintech industry is expected to reach $1.5 trillion in revenue by 2030, appoximately five times today's numbers.

- **Adoption:** As of March 2024, 90% of financial institutions have a centralized Gen AI function in their infrastructure.

- **Security & Risk Management:** GenAI in fintech has significantly improved data security, fraud detection, risk mitigation and client satisfaction.

- **Payments Innovation:** GenAI in payments can enables payment firms to shorten innovation cycles and improve time-to-market with an agile and configurable tech stack.

Case Study

SGA transforming Financial Reporting: Leveraging GenAI for Enhanced Analysis

Client	Data Types Handled	Area of Work
Investment Banking Firm	Financial Reports	Financial Planning & Analysis

The client sought a tool that could automate the interpretation and analysis of financial reports, enabling investors, analysts, and stakeholders quickly grasp key insights and actionable data.

SGA Deliverable

Data Collation	Data Processing	Data Modelling	Data Visualization
Gathered various sets of financial reports from companies, including both textual and structured data	Processed the collated data using tools such as PDFMiner and Teserract, filtering out the necessary information to create an effective tool model	Used the GPT-3 version to develop an effective algorithm that produces relevant results, training the model with a dataset of existing financial reports alongside human-generated insights, trends, and summaries	Evaluated the model and conducted user feedback survey to understand the tool's effectiveness and usability

Value Delivered/ Impact

- Created cost efficient solution to reduce manual efforts and eliminate the probability of errors
- Automate their manually run excels in form of dashboards
- Delivered insights like sales, margins, targets and costs etc.

VC and PE Activity

## Investor Spotlight: Capitalizing on the GenAI Revolution

The volume of capital invested in the AI/ML sector is on the rise, as venture capitalists (VC) and private equity (PE) firms show increasing interest. Pre-money valuations for GenAI companies across various industries have experienced a significant surge.

Total Deals
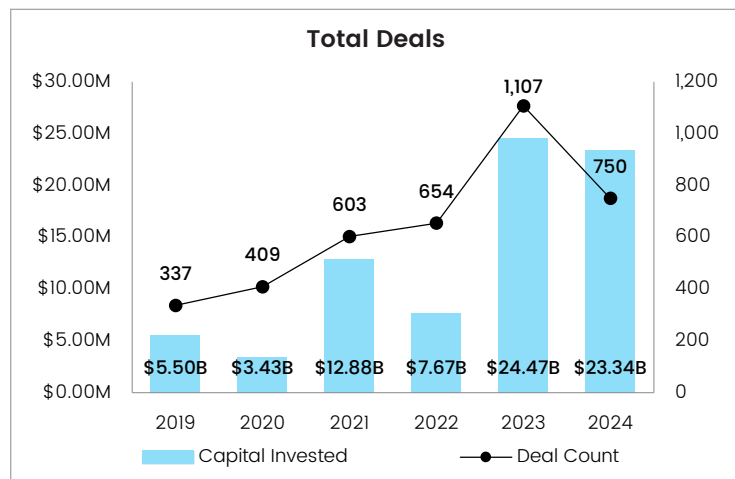
- In 2023, there was a significant surge in VC investments in the GenAI space.
- Three major investments in 2023 included OpenAI-Microsoft, Anthropic-Amazon, and Inflection-Microsoft
- North America is leading the market for GenAI investments, followed by Europe.
- Investments in Vertical AI (niche and specific) are expected to rise as the focus shifts from general-purpose AI and LLMs, driving an increase in deal volume and investment in the coming years.

Median Pre-money Valuation
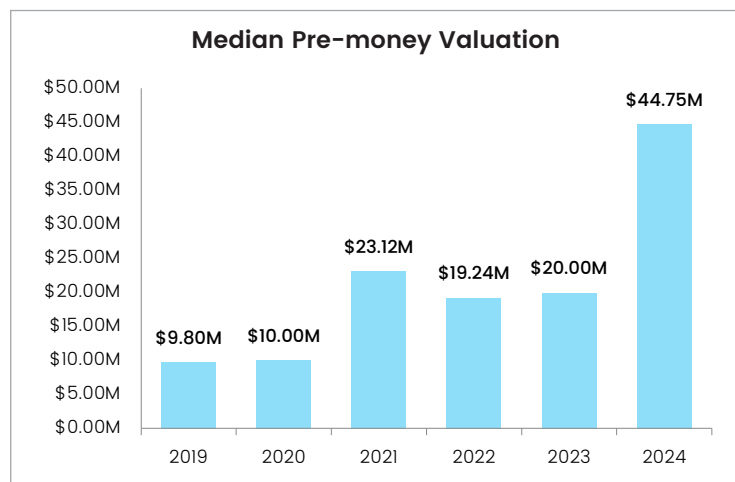
- The jump in 2024 can be attributed to several factors:
  - Selective investment climate with fewer high-quality deals leading to intense competition among VCs.
  - Recovery in the broader stock market boosting investor confidence.
  - Continued strong revenue growth and rapid adoption for many Gen AI startups.
- These factors reflects the immense investor interest and capital flowing into the Gen AI space.

Funding Value to GenAI-based Companies in Financial Services
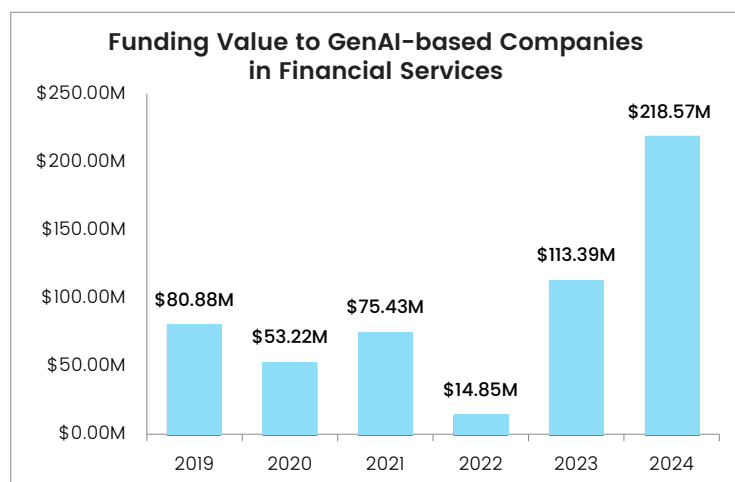
- The technology is now considered a core strategic priority at the CEO level, with 60% of banking executives acknowledging it as a top-of-the-house strategic initiative.
- Gen AI is being utilized to improve customer interactions through virtual assistants and chatbots.
- Financial institutions like JPMorgan Chase and Capital One are leveraging Gen AI for advanced fraud detection systems.
- Firms are using Gen AI to generate personalized investment strategies based on client data and market trends.

Source: SG Analytics Research

Investor Spotlight: Recent Largest GenAI Funding Rounds

- Global VC investment in GenAI reached $3 billion in Q1 2024 and is expected to reach $12 billion for the year
- The overwhelming majority of GenAI investment to date was primarily in the North American region.

Below are some of the recent largest GenAI funding rounds:

Company	Description	Deal Date	Deal Type	Deal Value ($M)	Investors(s)
Perplexity AI Inc.	Developer of an AI-based search engine platform designed to provide large language models and search engines.	9-Aug-24	Early-Stage VC	313.0	Daniel Gross, Jeffrey Bezos, Nvidia
Glean Technologies	Developer of an AI-powered platform aimed at improving workplace efficiency by connecting and managing enterprise data.	8-Aug-24	Later Stage VC	450.0	Kleiner Perkins, Lightspeed Venture Partners
HeyGen Inc.	Developer of AI video generation platform designed to generate spokesperson marketing videos.	20-Jun-24	Early-Stage VC	60.0	Benchmark Capital Holdings
Eleven Labs Inc.	Developer of an AI voice dubbing tool designed to automatically dub videos and podcasts into multiple languages.	18-Jun-24	Early-Stage VC	82.6	Earlybird Venture Capital, Andreessen Horowitz, Daniel Gross, Nat Friedman
Anthropic	Operator of an AI safety and research company intended to build reliable, interpretable, and steerable large-scale AI systems.	31-May-24	Growth Stage	650.0	3 Comma Capital, Amazon.com, Bessemer Venture Partners, Elevation Capital (Canada), Hermitage Capital, IronArc Ventures, Menlo Ventures and others
Magic AI Inc.	Operator of a metaverse company intended to build a virtual world.	28-Mar-24	Early-Stage VC	337.3	Nat Friedman, NFDG
Hippocratic AI Inc.	Developer of a healthcare platform intended to improve healthcare accessibility and health outcomes worldide.	18-Mar-24	Growth Stage	53.0	General Catalyst, Premji Invest (US)
Quora. Inc	Developer of an online question-and-answer platform designed to facilitate interaction between people to share and expand the world's knowledge.	10-Jan-24	Mature Stage	75.0	Andreessen Horowitz
Exafunction Inc.	Provider of a low-code deep learning application development platform.	12-Dec-23	Early-Stage VC	65.0	Greenoaks Capital Partners
Kore.ai Inc.	Developer of an optimization platform designed to help organizations design, develop, test, and manage chatbots for internal or customer-facing business scenarios.	8-Dec-23	Later Stage VC	150.0	FTV Capital

Source: SG Analytics Research

Investor Spotlight: Recent Largest GenAI Funding Rounds

Below are some of the recent GenAI funding rounds in the finance industry for the period from January 2024 to August 2024.

Company	Description	Deal Date	Deal Type	Deal Value ($M)	Investors(s)
Aiera	Developer of an event intelligence and AI-driven research management platform designed to enhance fundamental investment strategies.	01-Aug-2024	Later Stage VC	1.0	NA
ForwardLane	Developer of an innovative AI-powered decision intelligence platform that leverages data to drive growth and enhance client engagement.	10-Jun-2024	Seed Round	3.0	NA
Grasp (Financial Software)	Developer of an AI-based assistant intended to automate research tasks.	14-May-2024	Early-Stage VC	2.0	Philian Invest, Yanno Capital (Anna Storåkers)
Theia Insights	Developer of a deep tech company focused on building foundational AI for the global investment community.	01-May-2024	Accelerator/ Incubator	NA	AWS Startups
Monai (Financial Services)	Developer of a blockchain platform designed to advance the decentralized, uncensored generative AI ecosystem.	16-Apr-2024	Accelerator/ Incubator	NA	NVIDIA Inception
zypl.ai	Developer of proprietary GenAI-based designed to apply ML in fintech, telecommunications, and retail sectors.	05-Apr-2024	Early-Stage VC	NA	Commercial Bank International (ADS: CBI) (Ali Sultan Al Amri)
KredosAi	Developer of a fintech platform designed to improve payment outcomes by utilizing GenAI trained on domain-specific knowledge.	04-Apr-2024	Early-Stage VC	2.3	Early Light Ventures, Okapi Venture Capital, SaaS Ventures, SeaChange Fund (Peter Mueller), StartFast Ventures Management, Stout Street Capital
Fairmind	Provider of GenAI services intended to help businesses enhance their productivity.	01-Apr-2024	Early-Stage VC	NA	NA
AI2 Incubator	Provider of acceleration and incubation services intended to promote the growth of early-stage AI startups.	08-Mar-2024	Later Stage VC	200.0	NA
NayaOne	Developer of a fintech platform designed to help financial institutions transform their technology adoption.	28-Feb-2024	Later Stage VC	4.7	Carthona Capital (Dean Dorrell), EJF Capital (Michael Cherepnin), Valley Ventures (Neal Kapur)
NVolume	Developer of a digital currency trading platform designed to help clients invest in cryptocurrencies using AI.	15-Feb-2024	Seed Round	1.1	NA
Rogo (Financial Software)	Developer of an analytics platform that utilize natural language processing to transform traditional data workflows.	15-Feb-2024	Seed Round	7.0	AlleyCorp, BoxGroup, Company Ventures, ScOp Venture Capital
Traidy	Developer of a stock market platform designed to automate trading.	26-Jan-2024	Seed Round	2.0	Three Sigma Ventures
Context Nature	Developer of an AI-based consulting platform designed to accelerate the transition to a nature-positive economy.	08-Jan-2024	Accelerator/ Incubator	0.2	Entrepreneurs Roundtable Accelerator

Source: SG Analytics Research

Public Comparable Analysis

GenAI Pure-play companies are trading at higher valuation mainly because of the higher volume of capital being invested on the back of potential upside for this particular area

Generative AI - Conglomerates

Company Name	Current Stock Price ($)	Market Cap ($M)	52 Week High	%-Off 52 Week	Enterprise Value	EV/Revenue		EV/EBITDA	
						(LTM)	2025E	(LTM)	2025E
JPMorgan Chase & Co.	$215.5	$612,990.7	$217.56	(1.0%)	$0.0	0.00x	NMF	NMF	NMF
Salesforce, Inc.	$265.4	$257,153.2	$318.72	(16.7%)	$252,875.2	7.10x	6.10x	27.50x	16.50x
Adobe Inc.	$563.1	$249,687.4	$638.25	(11.8%)	$247,712.4	12.10x	10.40x	31.60x	20.80x
ServiceNow, Inc.	$832.9	$171,454.2	$850.33	(2.1%)	$164,824.2	16.60x	12.50x	100.60x	35.40x
Uber Technologies, Inc.	$74.2	$155,847.5	$82.14	(9.7%)	$159,138.5	4.00x	3.20x	56.90x	18.80x
Moody's Corporation	$470.1	$85,601.6	$471.94	(0.4%)	$90,366.6	13.80x	12.40x	29.10x	25.90x
Workday, Inc.	$232.6	$61,714.7	$311.28	(25.3%)	$57,876.7	7.70x	NMF	104.50x	20.80x
Zoom Video Communications, Inc.	$59.8	$18,501.0	$75.91	(21.2%)	$11,194.5	2.50x	2.30x	13.60x	5.90x
Tenable Holdings, Inc.	$42.7	$5,086.0	$53.50	(20.2%)	$5,011.1	5.90x	5.00x	448.40x	22.30x
ZipRecruiter, Inc.	$9.1	$907.0	$16.80	(45.7%)	$938.5	1.70x	1.80x	14.70x	11.50x
Mean						7.14x	6.71x	91.88x	19.77x
Median						6.50x	5.55x	31.60x	20.80x

Generative AI - Pure-Play

Company Name	Current Stock Price ($)	Market Cap ($M)	52 Week High	%-Off 52 Week	Enterprise Value	EV/Revenue		EV/EBITDA	
						(LTM)	2025E	(LTM)	2025E
CrowdStrike Holdings, Inc.	$266.8	$64,923.8	$398.33	(33.0%)	$62,047.5	18.90x	12.60x	427.50x	46.60x
Duolingo, Inc.	$117.2	$39,517.6	$138.61	(15.4%)	$37,519.9	15.70x	11.70x	421.30x	45.10x
Datadog, Inc.	$207.2	$9,020.4	$251.30	(17.6%)	$8,189.3	12.90x	8.70x	187.30x	31.60x
ZoomInfo Technologies Inc.	$9.5	$3,484.8	$19.39	(50.8%)	$4,479.0	3.60x	3.70x	20.80x	9.40x
Recursion Pharmaceuticals, Inc.	$7.2	$2,008.9	$15.74	(54.6%)	$1,624.5	32.70x	24.10x	NMF	NMF
CS Disco, Inc.	$5.0	$1,775.7	$10.25	(51.7%)	$1,580.1	28.50x	10.40x	NMF	NMF
SoundHound AI, Inc.	$4.3	$1,369.1	$4.99	(14.0%)	$1,005.8	6.20x	5.10x	NMF	755.20x
Matterport, Inc.	$1.4	$342.6	$4.80	(71.4%)	$476.6	3.20x	2.40x	NMF	NMF
Veritone, Inc.	$5.5	$324.8	$9.84	(44.5%)	$203.1	1.40x	1.30x	NMF	NMF
BigBear.ai Holdings, Inc.	$3.7	$141.7	$7.76	(52.1%)	$239.3	1.80x	NMF	NMF	NMF
Mean						12.49x	8.89x	264.23x	177.58x
Median						9.55x	8.70x	304.30x	45.10x

Source: Capital IQ as of 19 Aug 2024

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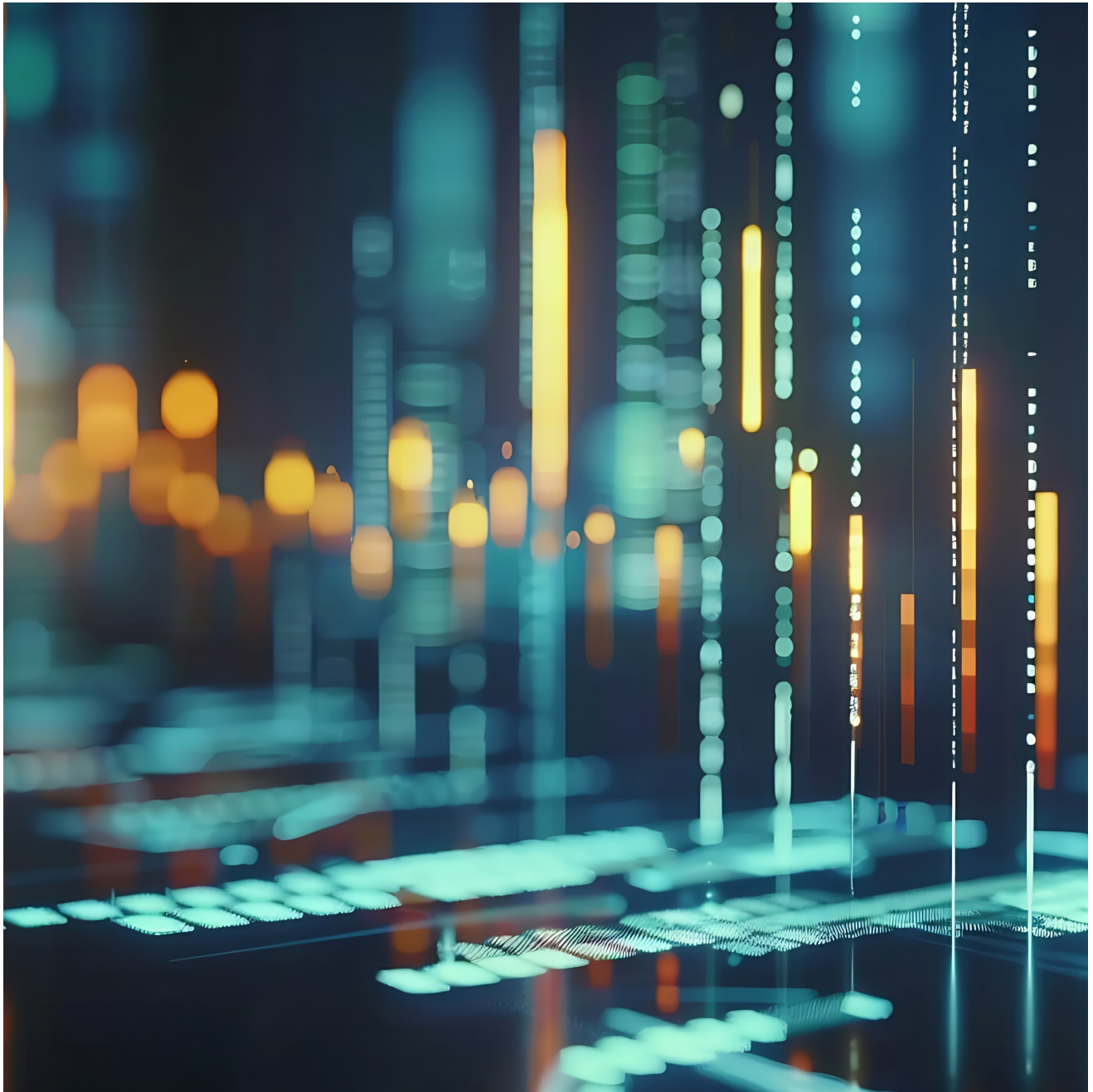
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