



Generative AI and the Capital Markets:

TRANSFORMING INVESTOR RELATIONS

GENERATIVE AI: DRIVING THE NEXT ERA OF INVESTOR RELATIONS

Amidst today's dynamic technology landscape, it's hard to find an industry, position or product that is not potentially impacted by Generative Artificial Intelligence (GenAI). From cautious skepticism to boundless optimism, opinions vary across all sectors. Within financial services, this new technology sets in motion a wave of possibilities and challenges for investor relations, asset management, trading and equity research,¹ while market participants differ on GenAI's potential to reshape these functions. As GenAI begins to impact the capital markets more broadly, investor relations officers (IROs) and their teams will continue to be vital in guiding senior management and boards through this new landscape, identifying potential challenges and opportunities as they relate to the application of AI in both communications and strategy.

Why All the Noise About Generative AI Now?

GenAI has experienced a remarkable explosion in the workplace,² driven by several factors. The availability of high-performance computing resources, like GPUs (graphics processing units) and cloud platforms, has accelerated AI development. GenAI is yet another inflection point in the evolution of AI with the rise of big data encompassing, for example, financial data, social media feeds and market trends, which have together informed AI algorithms to identify patterns and make intelligent predictions. Advanced machine learning (ML), especially deep learning neural networks, are already impacting numerous industries, including financial services, by enhancing accuracy and expanding computing capabilities. Increased investment and research in AI, along with ever-increasing demand for automation and data-driven decision making have further propelled its growth in the financial sector.

What does Generative AI mean for Investor Relations?

GenAI is already reshaping investment and research dynamics, making it imperative that IR teams are capable of guiding senior management and boards through this new landscape. Consider the potential of AI chatbots: they could provide responses to investor inquiries, summarize financial data, shape disclosures or help inform and craft investor communications. While these innovations can have a positive impact on IR, it's essential to incorporate them with care. Misused or unreviewed AI inputs can also distort data and unsecure AI can potentially compromise data security. Preparedness, organizational adaptability and robust risk management are key considerations. By focusing on these basics, IR teams can harness AI benefits while maintaining the trust of the investment community.



INITIATING THE SHIFT

- **Educate:** Conduct workshops showcasing GenAI tools with cross-functional subject matter experts, to demonstrate the potential of extracting market insights and analyzing investor sentiment while also identifying areas of potential risk for further exploration.
- **Identify case studies:** Explore use cases with GenAI that demonstrate the tangible benefits of integrating it into the IR team's work, such as advancements in stakeholder engagement, communication channels and performance metrics.
- **Audit current IR activities:** Identify repetitive, data-driven IR tasks as well as those requiring customized content that could warrant further exploration for optimization.
- **Engage thought leaders:** Leverage learnings from the AI industry and companies with successful AI-driven investor relations willing to share their experiences and insights.
- **Adapt internal use cases:** Collaborate with different departments to pinpoint successful AI implementations that can be adapted to the needs of the IR team. Assess the adaptability of these solutions in the IR context while also determining which external AI vendors can provide additional expertise for safe integration.

DEEPENING INTEGRATIONS AND COMPLIANCE CONSIDERATIONS

- **Define firmwide considerations:** Collaborate with appropriate legal, compliance and regulatory stakeholders to identify both the extent to which GenAI can be leveraged within IR work as well as any limits or gray areas. Ensure non-public information is never placed onto unsecured or public networks.
- **Perform scenario analysis:** Map out the potential implications of GenAI under different market situations, offering insights for strategic preparation.
- **Define return on investment (ROI):** Identify data illustrating GenAI's potential to improve investor relations engagement metrics, including response times, shareholder satisfaction and institutional investor attraction.
- **Foster continued learning:** Create a GenAI knowledge hub to provide ongoing educational resources and updates on evolving financial industry applications and regulatory developments. This can serve as an efficient mechanism for keeping senior management and board members informed on the topic and the IR team's implementation of GenAI.

By integrating these strategies, IR teams can help their organizations understand how GenAI affects key stakeholders like the sell-side and investors and also fully consider those implications when paving the way for more strategic, data-driven and capital market engagements aided by the use of GenAI while maintaining internal control of non-public information.

PRACTICAL USE CASES FOR GENERATIVE AI IN INVESTOR RELATIONS*

FINANCIAL REPORTING SUMMARIES

AI Capability:

Text Generators⁵

Application:

Quick generation of executive summaries or highlights from detailed quarterly and annual financial reports, making them easily digestible for stakeholders.

TAILORED INVESTOR COMMUNICATION

AI Capability:

Data Analytics & Predictive Modeling⁶

Application:

Customizing communications to specific investor profiles, ensuring relevance and increased engagement.

VISUAL DATA PRESENTATIONS

AI Capability:

Image Generators⁷

Application:

Crafting dynamic and interactive visual representations of financial data, trends, and projections to enhance investor presentations.

VOICE-ACTIVATED EARNINGS CALLS

AI Capability:

Voice Synthesis⁸

Application:

Providing voice-activated summaries, translations or Q&A sessions post earnings calls for on-demand investor queries.

INTERACTIVE IR CHATBOTS

AI Capability:

Conversational AI⁹

Application:

Through chat interfaces, offers instant answers to investor queries on topics such as stock performance, dividend policies or upcoming events.

PREDICTIVE MARKET MOVEMENT ANALYSIS

AI Capability:

Predictive Analytics¹⁰

Application:

Through chat interfaces, offers instant answers to investor queries on topics such as stock performance, dividend policies or upcoming events.

OPTIMIZED INVESTOR TARGETING

AI Capability:

Recommendation Engines¹¹

Application:

Identifying potential investors who align with the company's investment profile through data-driven analysis of investors' historical investments and preferences.

PREDICTIVE Q&A FOR INVESTOR CALLS

AI Capability:

Natural Language Processing (NLP) and Predictive Analytics¹²

Application:

By analyzing historical interactions and questions from sell-side analysts, AI can predict the most probable queries to be posed in upcoming meetings or earnings calls.

* Identification of potential uses cases should not be construed as endorsement of those use cases or an assessment of the associated legality or risk levels.

CONSIDERATIONS FOR MANAGING RISK

Consider a risk mitigation policy for GenAI in IR which could encompass the following:

Define AI in the Context of IR	Build Scope of Areas for Application	Data Integrity and Privacy
<p>Stakeholders: IR Teams, IT Departments</p> <p>Clearly define what constitutes Generative AI in the context of investor relations, ensuring a shared understanding across the organization.</p>	<p>Stakeholders: IR Teams, IT Departments</p> <p>Identify specific areas within investor relations where GenAI may be applied, such as chatbots, data analysis, or predictive modeling.</p>	<p>Stakeholders: IR Teams, IT Departments, Data Protection Officers</p> <p>Formulate and maintain clear guidelines for data management, verification and security.</p> <p>Ensure public AI tools are not used for non-public information.</p>
Validate and Verify AI Tools	Establish Boundaries of AI Use	Delineate Roles, Responsibilities & Integration
<p>Stakeholders: IT Departments, Third-party AI vendors, IR Teams</p> <p>Detail processes for testing and validating GenAI tools and emphasizing the importance of regular audits to ensure they produce reliable and unbiased outputs.</p>	<p>Stakeholders: Legal and Compliance, IR Teams</p> <p>Set clear boundaries around ethical and compliant use of AI and what it can and cannot do within the realm of IR.</p>	<p>Stakeholders: Senior Management, IR Teams, IT Departments</p> <p>Assign clear responsibilities for the management, monitoring and oversight of GenAI tools within the IR function.</p> <p>Detail how AI applications will integrate with current IR processes and platforms, ensuring seamless operations.</p>

By addressing these specific areas in the policy, investor relations teams can better manage risk, while leveraging AI’s potential to improve communication and decision making with investors and other market stakeholders.



As GenAI's adoption accelerates among investors and the sell-side, the function of investor relations will play an increasingly vital role in guiding management and the board on its implications. The application of AI promises an exponential increase in the dimensions of research and scrutiny by key constituencies. In terms of improving the effectiveness of investor relations engagement, AI presents opportunities across the board but will demand rigorous validation and risk management for positive transformative impact.”



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THE GENAI WAVE IN INSTITUTIONAL INVESTMENT

GenAI is increasingly seeing adoption within institutional investment, through portfolio management enhancement, pattern recognition and predictive analytics.¹³ For IROs, understanding the nuances of AI-augmented decision making is important. With AI, there is the potential for significant growth in investment strategies that will prioritize companies that offer more data transparency. IROs should anticipate inquiries driven by AI insights and be prepared to address them. Additionally, as AI may sharpen the focus on factors like sustainability metrics and real-time market sentiment analysis, IROs will need to adapt their communication strategies to be responsive to these developments. Embracing this shift will ensure IROs continue to help in shaping and influencing the investment narrative in what may become an AI-dominated world.

Sample AI Applications	Investment Management Impact
Behavioral Signal Analysis¹⁴	There are deep learning AI initiatives exploring how to combine the nuances in spoken language, facial expressions and body language, alongside the spoken content to gain a more comprehensive understanding of the intended, or unintended, communication. This may be utilized during earnings calls, media interviews or conference presentations by investors to try to glean insights into senior management’s conviction.
Orchestration¹⁵	AI-driven optimization algorithms that continuously assess market conditions, macroeconomic factors and real-time data streams. These algorithms will dynamically adjust portfolio allocations, not just based on historical data and predefined strategies, but also in response to emerging trends and unexpected events. The goal is to optimize portfolio performance by swiftly adapting to changing market dynamics, allowing asset managers to navigate uncertain terrains with unparalleled agility and precision.
Spatial Finance¹⁶	Spatial finance integrates geospatial data and analysis – using remote sensors and aerial imagery, for example – with financial services to proactively identify climate and environmental risks before they impact the market. By leveraging Earth Observation (EO), it enables the finance industry to detect trends and make informed decisions, effectively addressing challenges posed by climate change.



Artificial Intelligence is rapidly influencing the knowledge industry, including the realm of investments. As the technology develops, its potential to aggregate and synthesize vast amounts of information can provide a critical tool to investors as they look to filter through innumerable data sources. For instance, some are looking into AI's capability to refine information on communication platforms for a more targeted investor experience. The full scope of AI/ML's impact remains to be seen, but critical to future success is having an open mind today.”



BROCK CAMPBELL

Head of Global Equity
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NAVIGATING AI'S IMPACT ON THE **SELL-SIDE**

GenAI's growing integration into sell-side activities, particularly in equity research and trading, prompts new considerations for IROs. The introduction of GenAI means sell-side analysts now have access to significantly more data sources, which may lead to more frequent and varied research outputs on issuers. This accelerated cadence and expanded scope of research underscore the necessity for IR teams to be conversant with how AI impacts trading decisions. As such, IR professionals play a critical role in translating these AI-driven shifts for their management and boards of directors, ensuring stakeholders' understanding of the changing landscape. Moreover, to counterbalance any potential overreliance on AI-informed sell-side research, IR teams should be prepared to increase engagement with investors, emphasizing that human insight remains paramount in investment decision making.



AI's widespread adoption in investment research is inevitable, profoundly transforming global market interactions. Swift analysis of vast datasets uncovers insights and patterns beyond human capability, informing better investment decisions and data-driven strategies. However, AI-enabled human investment practitioners must oversee machine-powered strategies and strike the right balance between artificial and human intelligence.”



JOHN ARABADJIS

Head of Macro Strategy
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Sample AI Applications	Investment Management Impact
Behavioral Insights for Optimized Research Content and Distribution	<p>Data analytics and predictive modeling AI can analyze when and how investors prefer to consume research (e.g., time of day, device type) and optimize the distribution strategy accordingly, ensuring research is delivered at the most opportune moments. By analyzing reading patterns, AI can customize research reports to highlight the most relevant sections for individual investors, ensuring they receive insights tailored to their preferences and past behaviors.</p>
Interactive Research Platforms	<p>Conversational AI-powered platforms can engage investors with interactive Q&A sessions, helping them dive deeper into specific areas of a report or topic they're interested in, enhancing the research experience.</p>
Automated Trading Strategies	<p>AI algorithms can be employed to develop high-frequency trading (HFT) strategies that automatically execute trades based on predefined market conditions and signals. Reinforcement learning techniques can be used to create autonomous trading bots that continuously learn and adapt to changing market dynamics to optimize trade execution.</p>

REGULATORY IMPLICATIONS AND OUTLOOK

The regulatory landscape for AI in financial services is gradually taking shape as policymakers and regulatory bodies navigate the complexities of this rapidly evolving technology. Striking a balance between promoting innovation and ensuring consumer protection, market integrity and systemic stability are key regulatory objectives. Efforts are underway to develop specific guidelines and principles for AI, focusing on areas such as algorithmic transparency, clarity, fairness and compliance with privacy and data protection regulations like the European Union's General Data Protection Regulation (GDPR).¹³

Stricter regulations may require enhanced governance frameworks, robust risk management systems, and increased compliance costs for financial institutions. Collaborative efforts between regulators, industry players and experts will be crucial in shaping an effective regulatory framework that fosters innovation, protects consumers and helps maintain stability in the financial system.

Spotlight on EU Regulation— Leading the Global Regulatory Drive

The EU has been spearheading legislative reform in the AI space by proposing the [AI Act](#). The draft legislation, which was published in April 2021, aimed to create harmonized rules across the EU, focusing on increasing transparency, creating a uniform definition of AI systems, strengthening data requirements by ensuring full adherence with existing data protection rules and for providers and users of AI, and ensuring human oversight and accountability. The Act is not specific to financial services but will have implications for all AI applications and systems, including the financial services space. The legislation is still being negotiated between the co-legislators, the EU Parliament and the Council of Member States, with an expectation to conclude negotiations before the end of the current legislative cycle in early June 2024. For companies subject to the AI Act, the new rules help avoid a fragmented legal landscape around the use of AI by providing a uniform framework but also comes with penalties attached in the case of noncompliance.



The EU’s AI Act is an important milestone from a public policy perspective, setting out a first set of legislative requirements for AI providers and users active in the EU. As the AI space evolves and companies continually develop use cases, policymakers will also continue to iterate their own oversight approach through legislation, regulation and supervisory measures.”



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INSTITUTIONAL CHECKLIST: BUILDING YOUR GENAI IR MUSCLE

For investor relations professionals, adopting AI requires a thoughtful approach that balances its potential with responsible implementation. Below are some considerations for building a roadmap to integrate the use of AI into IR roles and responsibilities.



Build AI Knowledge

- Develop a deep understanding of AI, ML, and natural language processing, Establish a taskforce if necessary to research and disseminate the knowledge within the organization.
- Identify insightful thought leaders on social media, participate in AI events organized by global investor relations associations and monitor content from AI vendors to stay informed about practical applications.



Identify AI Applications

- Explore AI's potential to enhance investor engagement, communication, and data analysis.



Prioritize Data Privacy and Security

- Comply with data privacy regulations when leveraging AI technologies.
- Ensure AI solutions and users handle sensitive investor information responsibly and adhere to data protection standards.



Improve Investor Communication

- Leverage AI chatbots where appropriate and useful to provide responses to investor inquiries.
- Implement AI-driven tools to enhance communication efficiency and address common questions.



Leverage Sentiment Analysis

- Consider AI-powered sentiment analysis tools to gain insights into investor sentiment and market perception.
- Consider incorporating sentiment analysis outputs into investor relations strategies and messaging.



Collaborate with Sell-Side Analysts

- Engage with sell-side analysts to understand AI's impact on company valuation and industry trends.
- Discuss how AI-driven insights can complement traditional research and analysis methods.



Stay Compliant with Regulations and Legal Frameworks

- Keep abreast of regulatory guidelines related to AI adoption within financial services.
- Ensure AI applications align with data privacy, transparency, and disclosure regulations.
- Keep abreast of litigation updates related to AI and ensure AI applications align with relevant legal frameworks.



Understand AI Risks and Limitations

- Identify biases and limitations associated with AI algorithms, particularly when identifying data sources and analyzing complex financial data.
- Recognize the significance of human oversight and judgment in validating AI-driven insights.



Invest in Employee Training

- Provide comprehensive training on AI developments for investor relations team members, senior management and the board of directors.
- Equip employees with the knowledge to understand AI's implications for competitiveness, along with the ability to identify opportunities for productivity and efficiency enhancements.



Continuously Evaluate and Adapt

- Set key performance indicators (KPIs) to assess any effectiveness of AI initiatives while monitoring peer adoption and developments.
- Regularly evaluate the ROI of any AI implementation and stay updated on emerging best practices in AI applications within finance.

Despite the constantly evolving nature of AI in financial services, IROs should adopt the perspective that AI can serve as a supportive tool, augmenting human capabilities and improving efficiency in investor relations. In doing so, not only can IR professionals be seen as empowering their organizations to embrace AI responsibly, but also can help harness its potential to enhance investor engagement, communication, and data analysis effectively.

GLOSSARY OF AI TERMS²¹

Algorithm:

- A set of rules or instructions followed by a computer program to solve a specific problem or perform a task. In AI, algorithms play a crucial role in training models, making predictions and generating insights.

Artificial Intelligence (AI) vs Generative AI:

- AI, or Artificial Intelligence, refers to machines mimicking human tasks, especially relevant in financial services for tasks like data analysis and fraud detection. Generative AI, a subset of AI, creates new financial content using patterns from data, like generating market insights and investment strategies.

Bias:

- In AI, bias refers to systematic errors or prejudices that can occur when training models on biased or unrepresentative data. Addressing bias is essential to ensure fairness and avoid discriminatory outcomes.

Chatbot:

- An AI-powered computer program designed to simulate human conversation through text or voice interactions. Chatbots can provide automated responses, answer queries, and assist with tasks.

Computer Vision:

- A field of AI that trains computers to capture and interpret information from image and video data.

Data Privacy:

- The protection and proper handling of personal or sensitive data, ensuring compliance with privacy laws and regulations. AI applications must uphold data privacy standards to maintain trust and confidentiality.

Deepfakes:

- AI-generated manipulated media that convincingly alters faces or voices, creating realistic yet fake content.

Deep Learning:

- A subfield of machine learning that utilizes neural networks with multiple layers to learn and extract complex patterns and representations from large datasets, enabling more advanced decision making and analysis.

Ethics in AI:

- The ethical considerations and principles guiding the development, deployment, and use of AI. It encompasses fairness, accountability, transparency, privacy, and avoiding harm in AI applications.

Explainability / Interpretability:

- The ability to understand and interpret the decisions and predictions made by AI models. Explainable AI is crucial for ensuring transparency, accountability, and trust in AI-driven systems.

Machine Learning (ML):

- A subset of AI that focuses on developing algorithms and models that allow computers to learn from and make predictions or decisions based on data without being explicitly programmed.

Natural Language Processing (NLP):

- A branch of AI that enables computers to understand, interpret and generate human language. It involves tasks such as text classification, sentiment analysis, machine translation and chatbot interactions.

Neural Networks:

- Computational models inspired by the structure and function of the human brain. Neural networks consist of interconnected nodes (neurons) that process and transmit information, enabling pattern recognition and learning.

Large Language Models (LLMs):

- Advanced AI systems capable of understanding and generating human-like language, enabling various natural language processing tasks.

Prompt Engineering :

- Prompt engineering is both an AI engineering technique for refining large language models (LLMs) with specific prompts and recommended outputs and the term for the process of refining input to various generative AI services to generate text or images.

Reinforcement Learning:

- A machine learning paradigm where an agent learns by interacting with an environment and receiving feedback or rewards for its actions. Reinforcement learning is often used in complex decision making and game-playing scenarios.

Robotics Process Automation (RPA):

- The use of software bots or robots to automate repetitive and rule-based tasks traditionally performed by humans. RPA aims to improve efficiency and reduce human error.

Supervised Learning:

- A machine learning approach where models are trained on labeled data, with known input-output pairs, to learn patterns and make predictions or classifications on unseen data.

Unsupervised Learning:

- A machine learning approach where models analyze unlabeled data to find patterns, relationships, or structures without explicit guidance. Unsupervised learning is useful for exploratory data analysis and clustering.

- ¹ Shabsign, Ghiath, and El Bachir Boukherouaa. 2023. "Generative Artificial Intelligence in Finance: Risk Considerations." IMF Fintech Note 2023/006, International Monetary Fund, Washington, DC.
- ² "McKinsey Study Confirms How Much Generative AI Has Exploded," AI Magazine, August 3, 2023, <https://aimagazine.com/articles/mckinsey-study-confirms-how-much-generative-ai-has-exploded>.
- ³ Woodie, Alex. "ChatGPT Puts AI At Inflection Point, Nvidia CEO Huang Says," Datanami, March 22, 2023, <https://www.datanami.com/2023/03/22/chatgpt-puts-ai-at-inflection-point-nvidia-ceo-huang-says>.
- ⁴ "How Artificial Intelligence Is Transforming Business." <https://www.businessnewsdaily.com/9402-artificial-intelligence-business-trends.html>.
- ⁵ Nguyen, Kim. "How AI Text Generators Will Change the Content Industry." Neuroflash, May 16, 2022. <https://neuroflash.com/blog/ai-text-generator>.
- ⁶ Lawton, George, Joseph M. Carew, and Ed Burns. "Predictive Modeling." Enterprise AI, January 21, 2022. <https://www.techtarget.com/searchenterpriseai/definition/predictive-modeling>.
- ⁷ "Future Is Now: Use Generative AI for Data Analytics – EcoAGI," August 19, 2023. <https://docs.kanaries.net/articles/data-analytics-generative-ai>.
- ⁸ Marr, Bernard. "How AI Creates Synthetic Speech." Forbes, November 2, 2021. <https://www.forbes.com/sites/bernardmarr/2021/11/02/how-ai-creates-synthetic-speech/?sh=35614027632f>.
- ⁹ "AI Chatbot for Banking - IBM Watson Assistant," n.d. https://www.ibm.com/products/watson-assistant/banking?utm_content=SRCWW&p1=Search&p4=43700076741414490&p5=e&gclid=EAlaIqOBChMI4t-19brgAMVi_J3Ch0XNQ7DEAAYASAAEgIfIPD_BwE&gclid=aw.ds.
- ¹⁰ "What Is Predictive Analytics? 5 Examples | HBS Online, Business Insights Blog, October 26, 2021. <https://online.hbs.edu/blog/post/predictive-analytics>.
- ¹¹ Sharaf, M.M., Ezz El-Din Hemdan, Ayman El-Sayed, and Nirmeen A. El-Bahnasawy. "A Survey on Recommendation Systems for Financial Services." Multimedia Tools and Applications 81, no. 12 (March 3, 2022): 16761–81. <https://doi.org/10.1007/s11042-022-12564-1>.
- ¹² Gruetzmacher, Ross. "The Power of Natural Language Processing." Harvard Business Review, April 22, 2022. <https://hbr.org/2022/04/the-power-of-natural-language-processing>.
- ¹³ Limited, Prudour Private. "Generative AI in Asset Management Market to Witness Positive Growth at 19% CAGR." Enterprise Apps Today, July 12, 2023. <https://www.enterpriseappstoday.com/news/generative-ai-in-asset-management-market-to-witness-positive-growth-at-19-cagr.html>.
- ¹⁴ "Machine Learning for Cognitive Behavioral Analysis: Datasets, Methods, Paradigms, and Research Directions." PubMed, July 31, 2023. <https://doi.org/10.1186/s40708-023-00196-6>.
- ¹⁵ Handbook of Artificial Intelligence and Big Data Applications in Investments." CFA Institute Research Foundation. Larry Cao, Ed. <https://www.cfainstitute.org/-/media/documents/article/ai-and-big-data-in-investments.pdf>.
- ¹⁶ Papanbrock, Jochen. "Spatial Finance Uses AI to Estimate Risk, Analyze Claims." NVIDIA Blog, June 27, 2023. <https://blogs.nvidia.com/blog/2023/06/28/spatial-finance-uses-ai-to-estimate-risk-monitor-assets-analyze-claims>.
- ¹⁷ Dwivedi, Vedant. "How Is AI Used in Investment Banking? - DataDrivenInvestor." Medium, April 26, 2023. <https://medium.datadriveninvestor.com/how-is-ai-used-in-investment-banking-63a9fdb5ecc3>.
- ¹⁸ Groette, Oddmund. "Artificial Intelligence Trading Strategies (AI) – Quantified Strategies." May 8, 2023. <https://www.quantifiedstrategies.com/artificial-intelligence-trading-strategies>.
- ¹⁹ Koerner, Katharina. "Privacy and Responsible AI." International Association of Privacy Professionals, May 25, 2023. <https://iapp.org/news/a/privacy-and-responsible-ai>.
- ²⁰ https://eur-lex.europa.eu/resource.html?uri=cellar:e0649735-a372-11eb-9585-01aa75ed71a1.0001.02/DOC_1&format=PDF.
- ²¹ Eusanio, Ashley. "AI From A to Z: The Generative AI Glossary for Business Leaders." Salesforce, June 26, 2023. <https://www.salesforce.com/blog/generative-ai-glossary>.
- ²² Lawton, George. "Prompt Engineering." Tech Target, May 1, 2023. <https://www.techtarget.com/searchenterpriseai/definition/prompt-engineering>.



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