

Deploying Innovation

How Causeway's Largest Global and International Value Holdings Are Integrating AI Technology

Last June we outlined the <u>three phases</u> of Al's technology cycle: Building, Delivery, and Deployment. Following rapid advancements in the first two phases, we believe 2025 will mark a pivotal year for deployment, as Al transitions from concept to application across enterprise operations and their ecosystems.

Al is already in use for certain holdings in Causeway client portfolios, with advancements in computing power and cloud infrastructure enabling more effective applications. While some AI technologies have been used for years, newer developments in generative AI will likely drive efficiency and innovation.

Here, members of our research team highlight how the top three holdings by weight in the Causeway International and/or Global Value portfolios¹ are deploying AI technologies, from deep learning to generative models.

Alphabet Inc.

Alphabet is using AI internally to improve efficiency and productivity, but most relevant to our investment case are the advancements the company has made in its AI products and services.

AI is Transforming Alphabet's Business:

Search: Generative AI is powering a change in search, from the traditional ten-blue-links to personalized and automated search results.

Advertising: Machine learning tools automate advertiser tasks such as keyword selection and bidding, which helps to maximize ROI for advertisers.



Cloud Leadership: Beyond traditional cloud offerings, Google Cloud specializes in AI-driven services like Vertex AI for image recognition and video analytics spanning retail, healthcare, and logistics applications, and Contact Center AI for automated customer service and real-time agent support.

"We think Alphabet is the world's most vertically integrated company across the AI technology stack – it has its own applications, models, cloud infrastructure, and hardware."

¹ As of December 31, 2024

Jonny Shea, Fundamental Senior Research Analyst

Internal Deployment:

AI-Powered Software Development: Alphabet uses its Gemini AI tool to accelerate coding and streamline software initiatives across teams, with AI generating over 25% of new software development initiatives per a recent company announcement.

Data Center Optimization: DeepMind's algorithms cut data center cooling energy by 40%.

Chip Enhancement: DeepMind optimizes chip layouts, reducing design time from weeks to hours and improving TPU efficiency.

Business Process Automation: Alphabet leverages tools co-developed with SAP to automate processes in finance, resource allocation, and order fulfillment.

Alstom SA

"Alstom is using AI to enhance its Signaling and Service offerings to customers. These businesses should be highly accretive to Alstom's group margins. By enhancing the value it delivers to customers, these businesses are growing and improving Alstom's business mix."



Ross Locher, Fundamental Senior Research Analyst

Alstom is applying AI across its rail operations to enhance safety, efficiency, and sustainability. Key initiatives include:

Autonomous Trains: Al powers systems for autonomous train operations, including obstacle and signal detection. Alstom's "super analysers" aim to halve the time required for signal diagnostics.

Predictive Maintenance: Al-driven solutions improve radio communications by addressing issues like dirt or antenna tilts. Al also analyzes logs to detect anomalies in the train-to-ground network, streamlining maintenance and reducing disruptions.

Energy Optimization: All algorithms are analyzing energy consumption patterns and suggesting improvements for improving fleet efficiency.

Passenger Flow Management: An internally developed AI system helps operators predict passenger density and optimize train schedules.

Barclays PLC

Key applications for Barclays include:

Software Testing and Development: Barclays automates routine software testing processes to accelerate software development cycles and allow its developers to focus on more complex problem solving.

Fraud Detection and Risk Management: The company is deploying AI to read behavioral patterns to detect fraud and money laundering activity and implemented voice recognition technology for customer authentication. Predictive analytics assess portfolio risk by modeling various banking scenarios.

Customer Service Enhancements: Barclays generative AI chatbots provide 24/7 support through platforms like Facebook Messenger.



"We've seen caution from banks deploying customer-facing applications outside of chatbots—for sales and loan origination, for example. In Europe especially, there are data privacy considerations that complicate banks' AI usage."

Kate Byrne-Slepicka, Fundamental Research Analyst

Kering SA

Kering is leveraging AI to enhance customer experience and drive operational efficiency throughout its value chain.

"AI has the potential to make marketing programs and content much cheaper to develop. On average, global luxury goods companies spend about 10% of sales on marketing, so this is a large line item if savings materialize."

Nicholas Wells, Fundamental Senior Research Analyst



Supply Chain Optimization: All automates store replenishment using predictive sales models, reducing lead times, inventory levels, and transportation costs.

Improving Consumer Insights: Al captures emerging trends, client behavior, needs, and feedback more effectively.

Product Design and Development: Al enhances product development processes, including collaborative prototyping among designers, suppliers, and manufacturers. It also improves transparency in sourcing materials like cotton and leather.

Creating Personalized Experiences: Al delivers personalized experiences through tailored recommendations, virtual try-ons, and Al-powered shopping assistants or chatbots.

Fighting Counterfeiting: Al-driven image recognition technology helps combat counterfeit products.

Rolls-Royce Holdings plc

A small but growing nuclear power segment of Rolls-Royce is helping power the computing demands of AI. In addition, Rolls-Royce is leveraging AI across dimensions of its operations to enhance efficiency, improve safety, and optimize asset management.

Empowering AI with Sustainable Energy: The Rolls-Royce Small Modular Reactor (SMR) is a compact nuclear power solution designed to provide low-carbon energy. Its scalable design is being used to power AI grids and cool data centers, offering sustainable energy for the growing demands of advanced computing.

Forecasting and Decision Support: Rolls-Royce is implementing an Al-powered enterprise system that enhances forecasting across the value chain, enabling "what-if" analysis for improved asset lifecycle management, service performance, and carbon footprint management.

Engine Monitoring and Inspection: Al technology monitors jet engines in real time, using over 150 algorithms analyzing engine lifecycle data for proactive, usage-based maintenance. The Intelligent Engine initiative creates engines that self-monitor health and performance. An Al-powered intelligent borescope analyzes images for irregularities, cutting inspection times by 75%, reducing costs, and extending aircraft operational periods.



"We believe engine flying hours, reliability and maintenance visibility within the service agreements are the most important driver of profits and cash flow for Rolls Royce. With the support of AI, Rolls Royce is, in our view, improving its service offering with better predictive maintenance and more efficient service inspection. These improvements are valuable to its customers while helping to reduce its service costs."

Mike Cho, Fundamental Senior Research Analyst

Al is no longer just a concept, but a driving force reshaping industries and business models. Across Causeway's top holdings in the international and global value strategies, companies are deploying Al to

enhance efficiency, improve customer experiences, and drive innovation. Furthermore, in the months ahead, we expect to hear more from senior managements about how they collaborate with AI agents as partners in strategic planning and performance measurement. Overall, we expect deployment of an increasing number of AI enterprise applications to result in significant improvements to shareholder returns.

This market commentary expresses Causeway's views as of January 2025 and should not be relied on as research or investment advice regarding any stock. These views and any portfolio holdings and characteristics are subject to change. There is no guarantee that any forecasts made will come to pass. Forecasts are subject to numerous assumptions, risks, and uncertainties, which change over time, and Causeway undertakes no duty to update any such forecasts. Information and data presented has been developed internally and/or obtained from sources believed to be reliable; however, Causeway does not guarantee the accuracy, adequacy, or completeness of such information.

The views herein represent an assessment of companies at a specific time and are subject to change. There is no guarantee that any forecast made will come to pass. This information should not be relied on as investment advice and is not a recommendation to buy or sell any security. The securities identified and described do not represent all of the securities purchased, sold, or recommended for client accounts. Our investment portfolios may or may not hold the securities mentioned. The reader should not assume that an investment in the securities identified was or will be profitable. For full performance information regarding Causeway's strategies, please see www.causewaycap.com.