



AI REVOLUTION: 100+ DRIVERS OF A GLOBAL TRANSFORMATION

Artificial Intelligence (AI) is transforming industries by increasing efficiency, enhancing personalization, and fostering innovation. As AI continues to evolve, its influence across multiple sectors will grow, integrating deeper into industries and driving unprecedented innovation, making its adoption essential for competitiveness.

Two key drivers ensure AI's sustained growth:

1. **Competitive Necessity:** Entities that fail to adopt AI will fall behind in efficiency, productivity, data insights, and revenue generation.
2. **Broad Applicability:** AI is applicable across all major functions in business, government, and research, from finance and marketing to healthcare and supply chains.

This document is structured into three sections:

1. [Section I](#) provides DSM's outlook on AI.
2. [Section II](#) highlights AI's impact across various sectors, detailing over 100 real-world use cases and transformative potential.
3. [Section III](#) provides a summary of AI's presence in the media, showcasing major investments and developments.

AI is a fundamental driver of economic growth and competitive advantage. The rapid pace of AI advancements, combined with its broad applicability across industries, makes it an indispensable tool for businesses and governments alike. Companies that leverage AI effectively will gain efficiency, unlock new revenue streams, and maintain a competitive edge in an increasingly AI-driven world. Strategic investments and responsible implementation will define the leaders of the AI-powered future.

SECTION I. DSM Outlook

Since the AI theme took center stage with the launch of ChatGPT in November 2022, we see several indisputable trends:

- **Unmet AI Demand:** Major players like Microsoft, Amazon, and OpenAI confirm they could fulfill significantly more AI demand if they had the necessary capacity.
- **Unprecedented Capital Expenditure:** Cloud and hyperscale companies are making record-breaking infrastructure investments, far exceeding previous forecasts, despite advanced knowledge of optimization techniques. This indicates a very long-term view of AI growth.
- **Supply Chain Growth Explosion:** Companies within the AI supply chain are witnessing and projecting growth rates between 50% and 100%, demonstrating the rapid expansion of the sector.
- **Cloud as the AI Hub:** The vast majority of AI workloads will be processed through major cloud providers, including Microsoft, Amazon, Google, and others.
- **Inference Demand Skyrocketing:** The emergence of advanced "reasoning" and multimodal AI models is driving an exponential increase in inference compute requirements, potentially 100x more than previous models.
- **AI Demand Outpacing Cost Reduction:** Decreasing compute costs are stimulating a rapid increase in demand.

We continue to believe artificial intelligence holds the potential to fundamentally reshape the global economy through several key mechanisms:

- **Increased Productivity:**
 - AI can automate tasks, optimize processes, and enhance decision-making, leading to significant gains in productivity across various industries.
 - This can translate to higher output with fewer resources, driving economic growth.
- **Innovation and New Business Models:**
 - AI enables the development of new products, services, and business models that were previously impossible.
 - This fosters innovation and creates new markets, stimulating economic activity.
- **Enhanced Decision-Making:**
 - AI can analyze vast amounts of data to identify patterns and insights that humans may miss, leading to better-informed decisions in areas such as finance, healthcare, and logistics.
 - This can improve efficiency, reduce risk, and drive better outcomes.
- **Transformation of Labor Markets:**
 - AI will inevitably change the nature of work, automating some jobs while creating new ones.
 - While this presents challenges, it also offers opportunities for workers to focus on higher-value tasks and for businesses to optimize their workforce.

- **Personalization and Customization:**
 - AI enables businesses to provide highly personalized products and services, enhancing customer experiences and driving demand.
 - This can lead to increased customer loyalty and higher revenue.
- **Scientific and Medical Advancements:**
 - AI is accelerating discoveries in fields like drug discovery, materials science, and climate research.
 - These advancements can lead to breakthroughs that improve human health, sustainability, and overall well-being, which has huge economic impacts.

We believe competitive necessity and broad applicability will drive demand looking forward.

- **Competitive Necessity:**
 - Entities (companies, industries, countries, etc.) that don't adopt AI will become less competitive.
 - AI enhances efficiency, productivity, data insights, and revenue.
 - It is a simple fact that AI usage is required to remain competitive. Failure to explore, invest in, and implement AI will result in falling behind competitors.
- **Broad Applicability:**
 - AI can be applied across all major functional areas of any organization.
 - It's being used in various sectors like finance, marketing, manufacturing, and government.
 - AI's value is not limited to sophisticated or leading-edge companies; it's relevant to diverse entities.

It is likely, in our view, that AI will rapidly transform numerous aspects of our lives and surpass expectations. Here's a breakdown of why, with examples:

- **Rapid Pace of Development:**
 - AI advances happen at an exponential rate, often outpacing societal understanding and adaptation.
 - Example: Generative AI models improved drastically in very short time spans.
- **Ubiquity and Integration:**
 - AI is becoming embedded in everyday tools and services, often invisibly.
 - Example: AI-powered algorithms in search engines, social media feeds, and recommendation systems.
- **Transformative Potential:**
 - AI has the potential to revolutionize entire industries, from healthcare to transportation.
 - Example: AI-driven drug discovery, autonomous vehicles, and personalized education.

- **Complex and Evolving Nature:**
 - The complexities of AI, including machine learning and neural networks, are difficult for the general public to fully grasp, leading to varied and often incomplete understandings.
 - **Ethical and Societal Implications:**
 - AI raises profound ethical questions about bias, privacy, and job displacement, which are still being debated.
 - Example: Concerns about facial recognition technology and algorithmic bias in lending.
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Section II: Use Case Scenarios – AI’s Transformative Power

AI is not just a technological advancement—it is a strategic necessity. As AI adoption accelerates, companies that fail to integrate AI into their operations risk falling behind their competitors. Businesses across industries are already experiencing tangible financial benefits from AI, and those that hesitate to implement these innovations may struggle to compete.

For instance, Uber has recognized the potential of Generative AI (GenAI) to drive efficiency and cost savings, with CEO Dara Khosrowshahi projecting hundreds of millions of dollars in savings within the next few years. He further emphasized that while scaling GenAI in an enterprise is challenging, the potential for savings in customer service and developer productivity could reach hundreds of millions of dollars within 2-3 years. This creates a competitive mandate—if Uber is leveraging AI to enhance customer service and developer productivity, then Lyft and other competitors must follow suit or risk losing market share.

At the foundation of AI’s impact are several key technological drivers that are enabling its widespread adoption and effectiveness. Below, we explore the **6 key drivers of AI adoption** and detail AI’s industry impact, **showcasing 100+ real-world use cases** and the transformative potential for how industries are implementing AI to maintain their competitive edge.

Key Drivers of AI Adoption

1. Increased Computing Power:

- The availability of powerful processors, especially GPUs (Graphics Processing Units), has significantly accelerated the training of complex AI models.
- Cloud computing platforms provide on-demand access to vast computing resources, making AI development more accessible.

2. Big Data:

- AI algorithms, particularly machine learning models, require massive datasets to learn and improve.
- The explosion of data generated by the internet, sensors, and other sources provides the fuel for AI development.

3. Advancements in Algorithms:

- Breakthroughs in machine learning algorithms, such as deep learning and neural networks, have enabled AI to perform increasingly complex tasks.
- Transformer models, in particular, have revolutionized natural language processing and other areas of AI.

4. Cloud Computing:

- Cloud platforms offer the infrastructure and services needed to develop, deploy, and scale AI applications. This democratizes access to AI, allowing businesses of all sizes to leverage their capabilities.

5. Open-Source Software and Frameworks:

- Open-source libraries and frameworks, such as TensorFlow and PyTorch, have made AI development more accessible and collaborative, thus fostering innovation and accelerating the pace of AI research.

6. API availability:

- The availability of easy-to-use Application programming interfaces allows developers to add very complex AI functionality into existing and new applications with relative ease.

AI's Industry Impact: 100+ Real World Use Cases

Agriculture:

- 1.) Automated farming equipment reduces labor costs, while AI-driven supply chains enable farmers to access better prices and track market trends, boosting income by 10-15%. Supported by government initiatives and agri-tech startups, AI adoption is expected to further revolutionize Indian agriculture, improving efficiency and sustainability. – [Source: analyticsinsight.net](https://analyticsinsight.net)

Autonomous Weapons:

- 1.) AI is transforming the defense sector by redefining mission effectiveness, operational speed, precision, and scale, with applications in predictive analytics, autonomous systems, cyber defense, and intelligence-gathering. – [Source: strategyand.pwc.com](https://strategyand.pwc.com)

Customer Service:

- 1.) AI can automate mundane tasks, offering better self-service options for customers and addressing industry challenges like employee burnout and inefficiency. It highlights that AI can enhance customer experiences while alleviating stress for service agents. – [Source: Forbes](https://www.forbes.com)
- 2.) AI can make customer service faster and more efficient by reducing wait times and automating repetitive tasks. – [Source: Forbes](https://www.forbes.com)
- 3.) GenAI-powered tools, such as chatbots and virtual assistants, streamline customer support by automating responses and reducing operational costs, while predictive analytics anticipates customer needs, boosting engagement and loyalty. – Source: [BigNewsNetwork.com](https://www.bignewsnetwork.com)

- 4.) Article details the workings of AI in customer service, including the use of chatbots and machine learning to interpret customer needs and provide accurate responses. – [Source: AISERA](#)
- 5.) The future of customer service must be AI-based for organizations to improve customer experiences and increase loyalty. It discusses how AI can analyze customer interactions to optimize operations and provide more personalized support. – [Source: IBM](#)

Data Processing:

- 1.) AI automates tasks such as data classification, cataloging, and quality control, thereby reducing errors and enhancing security. It highlights AI's role in integrating disparate data sources to create comprehensive datasets for better decision-making. -- [Source: MIT Sloan Management Review](#)
- 2.) Accelerated computing, powered by AI, handles larger datasets more efficiently, enables faster model training, and facilitates more precise results for live AI solutions, thereby advancing AI initiatives and business performance. – [Source: NVIDIA Blog](#)
- 3.) AI enhances data analytics by processing large volumes of complex data at high speeds, leading to quicker and more accurate business insights. It discusses the benefits of AI in data analytics, including improved decision-making and predictive capabilities. – [Source: IIBA](#)
- 4.) AI and machine learning have transformed data processing workflows, particularly in geospatial data analysis, by automating tasks and providing reliable, complete datasets for informed business decisions. – [Source: echo-analytics.com](#)
- 5.) A comprehensive review of approaches for automating data processing tasks in deep learning pipelines, including data cleaning, labeling, augmentation, and feature engineering, highlighting the role of AI in these processes. – [Source: arXiv](#)

Education:

- 1.) AI personalizes learning experiences and automates administrative tasks. – [Source: University of Iowa](#)
- 2.) AI tools enhance learning experiences and reduce teacher workloads. – [Source: World Economic Forum](#)
- 3.) AI tutoring personalizes learning experiences and AI tutors help students grasp concepts faster. – [Source: eSchool News](#)
- 4.) This discussion examines the transformative impact of Artificial Intelligence (AI) in educational settings, focusing on the necessity for AI literacy, prompt engineering proficiency, and enhanced critical thinking skills. – [Source: Springer Open – The International Journal of Educational Technology in Higher Education](#)
- 5.) AI allows for an educational revolution, providing AI-powered tutoring, AI personalized learning, adaptive feedback based on student progress, and data-driven insights for teachers and institutions. – [Source: Analytics Insight](#)

Energy:

- 1.) Enhancing Renewable Energy Integration: AI improves predictions of supply and demand, making it easier to integrate renewable energy sources like solar and wind into power grids. This helps balance the grid and reduces reliance on fossil fuels. – [Source: International Energy Agency](#)
- 2.) Business Insider highlights II startups that are developing solutions to make AI more energy and cost-efficient. These companies are addressing the high computational costs and energy demands associated with AI model development and deployment by focusing on areas such as data center cooling, chip efficiency, and model optimization. Venture capitalists are investing in these startups to promote more sustainable and affordable AI technologies. – [Source: Business Insider](#)
- 3.) The US Department of Energy outlines opportunities for a modern grid and clean energy economy using AI. – [Source: U.S. Department of Energy](#)
- 4.) Advancing Power Grid Management: AI enhances demand-response systems by analyzing data from sensors and monitoring equipment. This helps balance energy supply and demand, improves grid resilience, and reduces the risk of outages. – [Source: DNV](#)
- 5.) Accelerating Oil and Gas Exploration: AI is revolutionizing drilling operations by managing equipment and predicting potential issues. Companies like BP and Devon Energy have reported increased drilling efficiency due to AI, making previously inaccessible areas viable for exploration. – [Source: Reuters](#)
- 6.) AI can reduce energy consumption, optimize power grids, and enhance sustainability efforts. This article focuses on AI-driven energy reductions in commercial buildings. – [Source: Time.com](#)

Enterprise Software:

- 1.) AI can streamline repetitive tasks and optimize business processes by automating workflows. For example, SAP's Joule AI is embedded into SAP cloud applications to automate workflows, reducing manual effort and improving efficiency across enterprise operations. – [Source: SAP Joule AI](#)
- 2.) AI analyzes system performance data to predict when hardware or software might fail, enabling proactive maintenance. General Electric (GE) uses AI to monitor jet engines and IT systems, predicting maintenance needs to prevent downtime and ensure reliability. – [Source: GE Predictive Maintenance](#)
- 3.) AI-powered chatbots handle customer inquiries 24/7, reducing operational costs and improving response times. Amazon uses AI-driven chatbots to assist customers, providing instant support and facilitating purchases within its enterprise ecosystem. – [Source: AWS Chatbot Solutions](#)
- 4.) AI analyzes large datasets to provide actionable insights for decision-making. IBM's Watson integrates with enterprise software to process business data, uncover trends, and assist leaders in strategic planning across industries. – [Source: IBM Watson for Business Intelligence](#)
- 5.) This article details the integration of AI in software for business functions, specifically KeyBank, which combined AI, machine learning, intelligent documentation and robotic process automation. – [Source: OutSystems](#)

Fashion:

- 1.) Generative AI is transitioning from a conceptual phase to practical application within the fashion industry, with companies beginning to see tangible benefits in areas such as personalized marketing and inventory optimization. – [Source: Vogue Business](#)
- 2.) Generative AI can revolutionize the fashion industry by aiding in design creation, reducing marketing costs, and personalizing customer communications. The piece discusses various use cases and the potential for AI to reshape supply chains and store operations. – [Source: McKinsey & Company](#)
- 3.) This article delves into AI's role in supply chain management within the fashion sector. It highlights how AI models, trained on historical inventory and sales data, can predict future sales, thereby reducing waste, improving customer satisfaction, and increasing profits. – [Source: Forbes](#)
- 4.) AI-driven innovations in fashion, focusing on how brands utilize AI to develop visual assets for marketing and advertising. The article discusses benefits such as reduced production times, cost savings, and increased creative freedom, while also addressing challenges in ensuring AI-generated images accurately represent products. – [Source: NC State University](#)
- 5.) Various applications of AI in fashion, including enhancing marketing strategies and customer service through personalized experiences and automation. It emphasizes how AI can analyze vast amounts of data to provide actionable insights for fashion brands. – [Source: TechPacker](#)
- 6.) Fashion retailer H&M is to use artificial intelligence (AI) to create digital "twins" of 30 models. It says it will use the AI doppelgangers in some social media posts and marketing in the place of humans, if given permission by models. – [Source: BBC](#)

Finance:

- 1.) Investment banks are deploying AI to automate tasks such as creating pitchbooks and drafting regulatory filings, allowing junior bankers to focus on more strategic activities. – [Source: FNLondon](#)
- 2.) AWS has become crucial in Wall Street's technological transformation, with companies including JPMorgan Chase, Bridgewater, MUFG, and Rocket Mortgage increasingly relying on it for AI-driven advancements. AWS offers various tools like Bedrock Guardrails and SageMaker to improve data accuracy and assist in AI model development. Key focus areas for AWS include scalability, security, and compliance, with JPMorgan, for instance, using AWS to run over 1,000 applications and handle trillions of dollars in payments daily. – [Source: Businessinsider.com](#)
- 3.) Intuit introduces Intuit Assist, a Gen AI-powered financial assistant designed to enhance the financial decision-making process for small businesses and consumers. Embedded across Intuit's platform, including products like QuickBooks, TurboTax, Credit Karma, and Mailchimp, Intuit Assist leverages contextual data from these services to provide personalized recommendations, aiming to save users time and boost their financial outcomes. – Source: [Intuit](#) and [Fortune](#)
- 4.) Start up JumpAI is an AI app that integrates into financial advisors' workflows, automating tasks like meeting preparation, notetaking, compliance documentation, CRM updates, financial planning and client follow-ups. – [Source: Jump](#)
- 5.) Generative AI is breaking ground with integrating machine learning into trading platforms with the goal of providing real-time analysis and data driven conclusions. – [Source: AlgosOne](#)

Gaming:

- 1.) Python's simplicity and versatility make it a go-to language for game development, supporting tasks like AI scripting, tool creation, and rapid prototyping. It enhances game mechanics and enables AI-driven features such as adaptive difficulty and procedural content generation. – [Source: nerdbot.com](https://nerdbot.com)

Healthcare:

- 1.) AI can improve diagnostic accuracy, enabling personalized treatment plans, and using predictive analytics to forecast health outcomes. Can help detect abnormalities in medical images, predict disease progression by analyzing patient data, and tailor treatment strategies to individual patient profiles, leading to early interventions and better patient care. – [Source: Sciencedirect.com](https://www.sciencedirect.com)
- 2.) AI is revolutionizing personalized medicine by analyzing genetic data to craft individualized treatment plans. AI algorithms process extensive datasets, including genetic sequences, medical histories, and lifestyle factors, identifying patterns that inform tailored therapies. – [Source: pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov)
- 3.) AI is being used to interpret brain scans, spot bone fractures, and assess ambulance needs. Gen-AI in the healthcare market is expected to hit \$2.7 billion in 2025 and reach close to \$17 billion by 2034. – [Source: The World Economic Forum](https://www.weforum.org)
- 4.) Projections from over a dozen leaders in healthcare on how AI is slated to transform the healthcare industry. – [Source: Chief Healthcare Executive](https://www.chiefhealthcareexecutive.com)
- 5.) AI advancements in healthcare are used to analyze the medical data that helps doctors and medical providers deliver accurate diagnosis and treatment to patients and enhance productivity, which improves quality of life. – [Source: Fortune Business Insights](https://fortune.com)
- 6.) AI investments in drug discovery are expected to yield the greatest ROI as next-gen AI-powered software offerings drive significant cost/time savings and shorten development timelines. – [Source: TD Cowen](https://www.tdcowen.com)

Hospitality:

- 1.) AI is increasingly being used in the hospitality industry, primarily through narrow AI for dynamic pricing, personalized upselling, and marketing to improve revenue and guest experiences. While large hotel chains have embraced AI for both guest-facing and operational tasks, smaller hotels are implementing more focused solutions to see immediate benefits. – [Source: HospitalityNet.org](https://www.hospitalitynet.org)

Human-AI Collaboration:

- 1.) AI enhances human decision-making by providing insights and recommendations. Applications range from disaster relief to medical research. – [Source: The Conversation](https://theconversation.com)
- 2.) AI helps develop frameworks to solve complex moral dilemmas and ethical decision making. Study finds that uniquely human skills are more vital amid increasing ai adoption: relationship building, empathy, conflict resolution, and ethical decision-making. – [Source: Investor Workday](https://investorworkday.com)

Insurance:

- 1.) AI is transforming the insurance industry by improving risk assessment, claims processing, customer service, and overall operational efficiency. It helps insurers better assess risk by analyzing vast amounts of data, accelerates claim processing through AI-driven tools like image recognition, and assists in fraud detection, while AI-powered chatbots and personalized policy recommendations enhance customer experience. – [Source: Forbes](#)

Law Enforcement Support & Cybersecurity:

- 1.) AI and Machine learning are being applied to enhance automated cybersecurity and network threat identification. – [Source: Science Direct](#)
- 2.) Law enforcement agencies across the country are increasingly encountering and adopting technology equipped with AI. While officers investigate crimes that use AI, they also recognize that incorporating AI can increase efficiency and expand capabilities. AI governance is still in its infancy and law enforcement as well as state and federal policymakers are tasked with balancing the benefits of using AI with constitutional concerns. – [Source: NCSL](#)
- 3.) Police departments are experimenting with AI-assisted tools like Axon's Draft One to expedite report writing and data analysis, aiming to enhance operational efficiency. – [Source: People](#)
- 4.) Family online safety app [Aura](#) introduced first-of-their-kind tools designed to empower parents to protect their kids from the mental and physical harms of the online world. As kids spend more than three months of the year online, Aura's latest AI-powered insights reimagine modern parenting, moving beyond outdated parental controls to offer a deeper, more personalized understanding of your child's online world and its impact on their mental health. – [Source: PRNewsWire](#)
- 5.) AI enhances cybersecurity by automating tasks, improving threat detection, and boosting incident response efficiency. It helps organizations manage cybersecurity with fewer experts and addresses the global talent shortage. – [Source: Science Direct](#)

Legal Services:

- 1.) AI can assist in legal research, contract analysis, and case predictions. – [Source: AM News](#)

Manufacturing:

- 1.) Artificial intelligence is transforming the manufacturing industry by enhancing efficiency, precision and adaptability in various production processes, particularly within the context of Smart Manufacturing. – [Source: IBM](#)
- 2.) Factors contributing to the growth of artificial intelligence in the manufacturing ecosystem include the demand to complete the manufacturing activity more digitally. In this ecosystem, Eaton, Bosch, ABB, and Siemens have already started using AI at various levels in their production facilities. – [Source: Markets and Markets](#)
- 3.) Artificial Intelligence is making robotics more intelligent and more advanced - but successful integration requires a plan that accommodates business goals, safety, security, and the needs of human workers. – [Source: American Machinist](#)

- 4.) Smart manufacturing technologies are being invigorated by AI. This article presents steps companies can take to succeed when getting started with them. – [Source: Forbes](#)
- 5.) Siemens announces \$10B in US investment for manufacturing and AI infrastructure. The aim is to accelerate innovation and reduce material waste by shifting key design stages into the digital realm. The conglomerate is also expanding its AI capabilities to help streamline these processes, enhancing product development cycles across a range of industries. – [Source: 3D Printing Industry](#)

Marketing:

- 1.) AI-powered tools are automating nearly every step in digital advertising campaigns, from planning to execution. While these tools can enhance efficiency and potentially boost sales, they require marketers to relinquish some control and trust algorithms to make decisions about ad placements, targeting, and even creative elements. – [Source: Wall Street Journal](#)
- 2.) Exploration of the transformative impact of generative AI on marketing, highlighting its applications in content creation, personalized customer interactions, and market research. It emphasizes the necessity for marketers to integrate both generative and analytical AI tools to enhance efficiency and achieve superior marketing outcomes. – [Source: Harvard Business Review](#)
- 3.) By harnessing the power of AI to personalize experiences, businesses can enhance their customer relationships and drive greater success. – [Source: Medium.com](#)
- 4.) BigQuery ML is a powerful tool within Google Cloud that helps optimize Google Ads campaigns by using machine learning to enhance audience targeting, bidding strategies, and ad personalization. By analyzing data and automating key tasks, it allows advertisers to make data-driven decisions and achieve better results with greater efficiency. – [Source: Search Engine Land](#)
- 5.) Adobe is rolling out AI agents that brands can use to help consumers navigate their websites. Brands can target marketing messages to different users based on their online activity. – [Source: Reuters](#)

Media & Graphic Design:

- 1.) Google Labs offers a suite of AI tools for generating visuals, composing music, crafting fusion recipes, and enhancing writing. These tools provide an easy entry point for users without technical expertise to explore AI-driven creativity. Key features include AI image generation for artists, music creation for composers, text manipulation for writers, and recipe creation for chefs. Additionally, AI tools for coding, voice recognition, and photo analysis offer practical uses for a variety of tasks. – [Source: GeekyGadgets.com](#)
- 2.) Microsoft 365 Copilot is an innovative AI-driven tool designed to augment human creativity across various artistic and technical domains. By leveraging advanced machine learning algorithms, Co-Pilot assists users in generating, refining, and exploring creative ideas, making it a valuable asset for artists, musicians, writers, and developers. – [Source: Backendnews.net](#)

Natural Language Processing:

- 1.) Large Language Models (LLMs) are advanced AI systems trained on vast datasets to understand and generate human language, enabling tasks such as text summarization, language translation, and sentiment analysis. They use deep learning, natural language processing, and transformer architecture to process language efficiently. – [Source: eweek.com](#)

- 2.) Galaxy AI translation is enabling borderless communication in business. Samsung's Live Translate feature on the Galaxy S25 Series enables near-real-time translation of voice calls and text messages, helping businesses overcome language barriers in various contexts, such as retail, professional services, and internal collaboration. – [Source: insights.samsung.com](https://insights.samsung.com)
- 3.) AI can understand and generate human language, improving communication. Can bring the computer to life: -- [Source: Sesame](https://www.sesame.com)
- 4.) Apple has filed an AI Patent relating to the use of LLM and Vision Models for the future AI version of Siri. – [Source: Patently Apple](https://patentlyapple.com)
- 5.) The transformative impact of artificial intelligence (AI) technologies on materials science has revolutionized the study of materials problems. By leveraging well-characterized datasets derived from the scientific literature, AI-powered tools such as Natural Language Processing (NLP) have opened new avenues to accelerate materials research. – [Source: NPI](https://www.nature.com)
- 6.) Sinclair Broadcast Group is testing real-time AI-powered Spanish translations for local TV newscasts across stations, aiming to improve accessibility and engagement for Spanish-speaking viewers, using Deeptune's generative AI tools for real-time translation and dubbing. – [Source: Streamtvinsider.com](https://streamtvinsider.com)

Operations:

- 1.) Companies like Telstra and Wesfarmers have adopted AI tools to streamline customer service operations, enabling swift issue resolution and efficient information management. – [Source: MII](https://www.mii.com.au)
- 2.) Daily Harvest, a meal delivery service, utilizes AI to personalize product recommendations by analyzing customer data, thereby improving customer satisfaction and reducing operational costs. – [Source: Businessinsider.com](https://www.businessinsider.com)
- 3.) UK Prime Minister Keir Starmer discusses plans to incorporate AI and technology into government departments to boost efficiency. The article highlights how AI is being considered for streamlining public services and administrative processes in the UK, reflecting a broader trend of governmental adoption of AI tools. – [Source: BBC](https://www.bbc.com)
- 4.) Discussions between OpenAI and Meta Platforms with Reliance Industries, an Indian conglomerate, to expand AI offerings in India. The potential partnerships aim to integrate advanced AI technologies into Reliance's operations, including telecommunications and retail, to enhance services and customer experiences. – [Source: Reuters](https://www.reuters.com)
- 5.) JPMorgan Chase has rolled out a generative AI assistant to tens of thousands of its employees, the initial phase of a broader plan to inject the technology throughout the bank. The program, called LLM Suite, is already helping more than 60,000 employees with tasks like writing emails and reports. – [Source: CNBC](https://www.cnbc.com)
- 6.) Paychex (PAYX) invested in AI and automation, leading to a +180 bps in adjusted operating margins, with innovations like the GenAI-powered HR Copilot tool, developed from proprietary data, set to launch next fiscal year to enhance HR efficiency and client service. AI's been utilized across the company for nearly a decade, with hundreds of models improving decision-making in areas like discounting, risk assessment, and client retention, particularly by preempting issues before they escalate. The company sees ongoing potential in AI, with current models still being refined and new applications enhancing productivity and client value. – [Source: Investing.com](https://www.investing.com)

Pharma and BioTech:

- 1.) AI is rapidly transforming drug design, accelerating the process by identifying new drug targets, predicting drug properties, and optimizing drug development, ultimately leading to faster and more efficient drug discovery. Even MIT and Harvard among others are offering courses in how AI is being used in drug design. – [Source: MIT](#)
- 2.) Remarkable advancements in AI technology and machine learning present a transformative opportunity in the drug discovery, formulation, and testing of pharmaceutical dosage forms. – [Source: National Library of Medicine](#)
- 3.) Drug development is expensive, time-consuming, and has a high failure rate. In recent years, artificial intelligence (AI) has emerged as a transformative tool in drug discovery, offering innovative solutions to complex challenges in the pharmaceutical industry. – [Source: National Library of Medicine](#)
- 4.) AI acts as a powerful catalyst in narrowing the gap between disease understanding and the identification of potential therapeutic agents. – [Source: Science Direct](#)
- 5.) Traditional drug discovery struggles to keep pace with the ever-evolving threat of infectious diseases. New viruses and antibiotic-resistant bacteria, all demand rapid solutions. Artificial Intelligence (AI) offers a promising path forward through accelerated drug repurposing. – [Source: Science Direct](#)

Predictive Analytics:

- 1.) AI is increasingly used to model, detect, and predict extreme climate events like floods, heatwaves, and wildfires. It enhances the understanding of complex, multidimensional impacts, combining climate data, deep learning, and causal inference to improve forecasting and risk mitigation strategies. AI methods, including explainable AI (XAI), provide transparent insights into event mechanisms, enabling better decision-making and trust. – [Source: Nature.com](#)
- 2.) AI is transforming the financial industry by enabling real-time analysis of vast datasets, improving forecasting accuracy, and helping businesses make data-driven decisions. It allows for better investment strategies, risk assessment, and fraud detection, giving companies a competitive edge in financial markets. – [Source: financial-news.co.uk](#)
- 3.) Predictive analytics in real estate combines the use of historical data and algorithms to anticipate future market trends and identify potential sellers – sometimes even buyers. – [Source: Housing Wire](#)

Retail & E-commerce:

- 1.) Amazon is testing shopping and health assistance, diving further into the GenAI revolution. – [Source: CNBC](#)
- 2.) AI-driven food concierge services generate personalized, on-demand food recommendation services using AI and local experts. – [Source: AndINow.com](#)
- 3.) Instacart is leveraging technology, like AI and real-time insights, to accurately track what's on store shelves, changing how consumers get groceries. – [Source: Food & Wine](#)

- 4.) AI powered technology helps retailers spot theft or fraud using surveillance software that uses machine learning algorithms and biometric technology to spot suspicious body movements. – [Source: Financial Times](#)
- 5.) Walmart is investing \$520M in AI robotics platform to improve e-commerce fulfillment. – [Source: Total Retail](#)
- 6.) AI recommends products, predicts trends, and enhances user experience on e-commerce platforms. – [Source: Nature.com](#)

Robotics:

- 1.) Collaborative robots (cobots) and humanoid robots will enhance productivity, safety, and precision by working alongside humans. Sustainability efforts will be integrated, focusing on energy efficiency and waste reduction, with market growth projected in industrial, collaborative, and humanoid robots. – [Source: MarketsandMarkets.com](#)

Space Exploration:

- 1.) AI enhances mission planning, trajectory optimization, and autonomous decision-making, enabling spacecraft to navigate vast distances with minimal human input and handle emergencies. It also aids in analyzing massive amounts of astronomical data, helping discover exoplanets, classify galaxies, and operate space rovers. It also supports robotic systems for tasks like space station maintenance and exploration of celestial bodies. – [Source: TechBullion](#)

Sports:

- 1.) AI is revolutionizing sports by enhancing athlete performance, game strategy, and officiating through real-time data analysis, personalized training, and advanced performance tracking. Additionally, AI is improving fan engagement by delivering tailored content and interactive experiences, transforming the way sports are enjoyed both on and off the field. – Source: [Forbes.com](#)
- 2.) AI is improving player performance through data-driven insights and creating tailored experiences for fans. All of these innovations mean reduced workloads for teams and, ultimately, more successful outcomes. – [Source: Forbes](#)
- 3.) This article outlines applications and real-world examples of Gen AI in sports – A Case Study. – [Source: Medium](#)
- 4.) This article delves into how AI is revolutionizing the sports industry by enhancing performance tracking, improving coaching strategies, and preventing injuries. It discusses the integration of machine learning and data analytics into decision-making processes in sports. – [Source: Medium](#)
- 5.) Artificial intelligence technologies, such as computer vision, machine learning, and natural language processing, are being deployed to analyze vast amounts of data and provide valuable insights that were previously unattainable. As a result, artificial intelligence has touched nearly every sport organization, and its impact will continue to grow in the coming years. – [Source: American Military University](#)

Supply Chain Optimization:

- I.) AI-powered supply chain management tools that optimize demand forecasting, logistics, and inventory management, improving business operations and reducing costs. Tools like Blue Yonder Luminate, SAP IBP, and Oracle SCM Cloud leverage AI for real-time analytics, automation, and predictive insights to streamline supply chain processes and enhance agility across industries. – [Source: knowinsiders.com](https://www.knowinsiders.com)

Travel:

- I.) Travel agent can use it to summarize long industry reports, record client conversations, transcribe them, and upload them. Then can summarize client patterns and anticipate where they want to go and what they want to do. – [Source: Travel Weekly](https://www.travelweekly.com)

Waste Reduction:

- I.) Technologies like AI, IoT, and blockchain help optimize resource use, reduce energy consumption, and minimize waste in manufacturing processes. Examples include AI analysis of production data, smart sensors for energy efficiency, and emissions governance frameworks. These innovations improve cost efficiency, reduce environmental impacts, and support corporate sustainability goals. – [Source: Forbes](https://www.forbes.com)

Section III: AI in the Media - Major Investments and Market Growth

This section provides a summary of AI's presence in the media, showcasing major investments and developments. This is a growing list, which will change weekly, if not daily and new use cases emerge.

A Big Coal Plant Was Just Imploded to Make Way for an AI Data Center – [WSJ.com](https://www.wsj.com)

- The former Homer City Generating Station, once Pennsylvania's largest coal plant, was recently imploded to make way for a massive AI data center campus that will be powered by a 4.5 gigawatt natural-gas plant - potentially the country's largest gas-fired power facility.
- The \$10+ billion redevelopment project in rural Pennsylvania will draw natural gas from the Marcellus Shale, highlighting how AI's enormous energy demands are driving tech companies toward locations with abundant power sources, even when those sources are fossil fuels.
- The 3,200-acre site offers unique advantages for data centers including existing power infrastructure and connections to major electrical grids, with construction potentially starting this year and power generation beginning in late 2027.

Over half of US consumers intend to use genAI when shopping online this year - [emarketer.com](https://www.emarketer.com)

- Increasing GenAI Adoption: Over half (53%) of U.S. consumers plan to use generative AI (genAI) for online shopping this year, a significant increase from 39% in previous years, according to Adobe Analytics. This rise reflects the growing role of genAI in retail, integrated into everything from search to customer service.
- Boost in Traffic and Engagement: Retail sites are experiencing a surge in traffic from genAI sources, with visits up by 1,200% in February compared to July 2024. GenAI-driven traffic leads

to higher engagement, with shoppers spending more time on sites and showing greater interaction compared to other sources like paid search and social media.

- How GenAI Is Used: Consumers primarily use genAI for product research (55%), receiving recommendations (47%), and finding deals (43%). About 35% of shoppers have used AI-powered tools like chatbots to aid in their purchases, making the shopping experience more efficient and personalized.

‘Our GPUs Are Melting,’ OpenAI’s Altman Warns – Could US Natural Gas Power AI Revolution? [Benzinga.com](https://www.benzinga.com)

- AI-driven data centers could consume up to 660 TWh by 2035—more than 10% of total U.S. electricity use.
- OpenAI CEO Sam Altman said “our GPUs are melting” as ChatGPT demand forces temporary usage limits.

North America Data Center Report – Setting records and defying power constraints us.jll.com

- Data center occupancy has increased at an astounding 28% CAGR since 2020. In 2024, AI represented about 15% of data center workloads and by 2030 it could grow to 40%. AI will be a key source of growth for the sector.
- Power availability remains the primary challenge facing the data center industry. In many cases, proposed data center projects have to wait four years or more for a grid connection. This is because nearly all suitable sites for data center development are challenged by one or more of the following: power capacity, scale or transmission. As a result of these challenges, data center supply is not keeping up with demand and the disparity is increasing. Data center vacancy is near 0% and the majority of product under construction is preleased.
- For several years, utility companies have struggled to differentiate legitimate data center projects from land speculators flooding the market with power requests. In many cases, up to 75% of these requests were from speculators who had no immediate plans for development, instead acquiring large amounts of land and securing power to later sell the land at a significant profit. To address this issue, utilities began implementing more stringent policies by mid-2024, including intake forms, application fees, and take-or-pay contracts, aimed at distinguishing genuine projects from speculative ventures.
- While the supply chain for data center equipment is improving, challenges persist, with lead times still 50% longer than pre-pandemic levels. The imbalance in global supply chains remains a key issue, as the U.S. accounts for 50% of the global data center market but relies heavily on Asia for over 70% of equipment manufacturing. Reshoring manufacturing to the U.S. is expected to help alleviate these delays, but significant improvements won’t be seen until 2026-2027. In the meantime, many data center operators are turning to natural gas turbines as a temporary solution to bridge the gap while they wait for grid connections.

Data center bubble? Maybe not.... Ed Yardeni research report. [linkedin.com](https://www.linkedin.com)

- Tight market in 2024. The US data center vacancy rate fell to a record low of 2.6% by the end of last year. It’s even tighter in the more popular markets, like Northern Virginia, where vacancy is only 0.6%. “Tenants looking to lease any sizable amount of data center capacity must wait 24 months on average. Limited availability is constraining sector growth,” the report stated. Given the tight market, data center owners were able to boost rents on average by 12% y/y in 2024, and rents have risen by roughly 50% over the past five years.

- The market's tightness was apparent yesterday. Microsoft abandoned leases on new data center projects set to use two gigawatts (GW) of electricity in the US and Europe because it decided "not to support additional training workloads from ChatGPT, maker of OpenAI," Reuters reported. But don't expect those data centers to remain dark. Alphabet's Google and Meta Platforms are expected to take over the leases.
- In 2024, construction was completed on 2.5 GW of colocation capacity, and almost all of it was absorbed at delivery. At the end of last year, 6.6 GW of colocation capacity was under construction, and 72% of that space has already been leased. Demand comes from cloud providers (43%) and the technology (23%) and finance (9%) industries.

Related Companies announcing it plans to raise as much as \$8B to pursue data center development, with the firm committing \$500M of its own funds - [related.com](#)

- Related Companies has launched Related Digital, a data center development and investment platform, with a \$45 billion development pipeline to support AI and cloud hyperscale technology companies. The platform has committed a minimum of \$500 million to its pipeline and is raising up to \$8 billion in capital.

Gartner Survey - Nearly 60% of Finance Teams Now Using AI - [businesschief.com](#)

- Gartner's survey of CFO clients indicates a strong and ongoing interest in AI and machine learning (AI/ML) tools, with 52% of respondents planning new software purchases in AI/ML and 46% in generative AI platforms in 2025. Despite this enthusiasm, only 58% of finance teams have adopted AI, and merely 14% have measured a return on investment from their AI initiatives. This underscores the need for AI solutions that deliver clear, quantifiable benefits to gain widespread acceptance among finance leaders.

Equinix executive appearing on [CNBC](#)

- Jon Lin, Chief Business Officer of Equinix, highlighted robust demand for the company's services, noting that while AI is a key driver, it represents only a portion of the overall demand.
- Despite this, the CEO emphasized that power constraints remain a significant challenge, which continues to limit the company's capacity to fully meet growing demand. However, there are no signs of slowing demand from customers, indicating a strong and sustained need for Equinix's data center services.

H&M to use digital clones of models in ads and social media - [bbc.com](#)

- Fashion retailer H&M is to use artificial intelligence (AI) to create digital "twins" of 30 models. It says it will use the AI doppelgangers in some social media posts and marketing in the place of humans, if given permission by models.

OpenAI Expects Revenue will Triple to \$12.7 Billion This Year - [Bloomberg](#)

- OpenAI expects revenue to triple to \$12.7 billion in 2025 and reach \$29.4 billion in 2026.
- Despite rapid growth, it won't be cash-flow positive until 2029 due to heavy AI investments.
- The company is close to securing \$40 billion in funding, valuing it at \$300 billion.

Nvidia AI Chip Shortage in China - [Yahoo Finance](#)

- China's H3C warns of Nvidia H20 AI chip shortages due to high demand and supply chain issues.
- Tech giants like Tencent and Alibaba are heavily ordering these chips, worsening the supply crunch.

- The H20 is China's most advanced AI chip under U.S. export limits, with Huawei and Cambricon offering alternatives.

Bill Gates says a 2-day work week is coming in just 10 years, thanks to AI replacing humans 'for most things' - [Fortune](#)

- Bill Gates predicts AI advancements will lead to a two-day workweek within a decade by automating most human tasks.
- He believes AI will significantly boost productivity, allowing people to focus on creative and meaningful work.
- Gates acknowledges challenges, including job displacement, but emphasizes the need for policies to ensure a smooth transition.

Sky to replace thousands of call centre workers with chatbots – [Yahoo Finance](#)

- Sky is set to reduce its workforce by approximately 2,000 positions, representing about 7% of its employees, as it transitions from traditional call centers to digital and AI-driven customer service solutions.
- The company plans to close customer service centers in Stockport, Sheffield, and Leeds, while scaling back operations in Newcastle and Dunfermline.
- This strategic move is in response to a projected decline in annual customer service calls from 25 million to 17 million by 2029, as more customers prefer managing tasks digitally.

BT to cut up to 55,000 jobs and replace a fifth with AI - [telegraph.co.uk](#)

- BT Group plans to cut up to 55,000 jobs over the next decade, replacing 20% of these positions with AI technology.
- The restructuring aims to boost efficiency and reduce costs, while shifting the company's workforce toward digital and automated operations.

VNET Group sees growth in AI and data center services - [investing.com](#)

- VNET Group, a leading Chinese data center operator, has experienced significant growth in recent years, driven by surging demand for cloud computing and AI infrastructure.
- To capitalize on this growing demand, VNET has announced plans to expand its data center capacity significantly. The company aims to deliver approximately 297 megawatts (MW) of new capacity over the next 12 months, from the fourth quarter of 2024 to the third quarter of 2025. This expansion includes delivering about 191 MW in the upcoming fourth quarter of 2024 and the first quarter of 2025, followed by approximately 105 MW in the second and third quarters of 2025.

How NICE Ltd. is Revolutionizing Customer Service with Cutting-Edge AI Solutions - [cash-platform.com](#)

- NICE Ltd. integrates advanced AI technologies, such as the CXone platform and Enlighten AI engine, to enhance customer service operations, automate tasks, and improve agent productivity.
- Through strategic acquisitions like LiveVox and AI-driven features, the company revolutionizes customer interactions, boosts efficiency, and ensures compliance with regulatory standards while enhancing customer satisfaction.

BWG experts dinner on AI infrastructure. Largely bullish and no slowdown. – [Source: DSM](#)

- “From the dinner panel, three enterprise infrastructure guys indicated that their spending is on track. They have not gotten direction to pullback infrastructure spending. The VAR shared the opposite. His year on new purchases has been starting very slowly and his enterprise customers are deferring discretionary purchases. The integrator also is fully committed out and has not seen any slowdown in new bookings. The colocation provider has aggressive expansion plans. He sees the stark undercapacity and low vacancy at their DCs. He indicated that there’s been no wavering in their capex plans.

Paychex to Acquire Competitor Paycor HCM - [seekingalpha.com](#)

Paychex, a leading provider of payroll and human resource services, has significantly advanced its integration of artificial intelligence (AI) to enhance operational efficiency and client services. Key developments include:

- AI-Driven HR Copilot Tool: Paychex has developed a Generative AI (GenAI)-powered HR Copilot tool designed to address frequently asked HR questions from clients. This tool leverages proprietary data from extensive client interactions, aiming to provide efficient and effective responses. The testing phase is nearing completion, with a planned launch at the start of the next fiscal year. Seeking Alpha
- Ongoing AI Investments and Margin Improvement: The company has been utilizing AI models for nearly a decade, applying them across various decision-making processes, including risk assessment and client retention strategies. Recent AI applications have led to better decision-making at critical touchpoints, such as sales and service interactions, proactively addressing potential client issues. These efforts have contributed to a notable 180 basis-point increase in adjusted operating margins compared to the previous year. These efforts have contributed to a notable 180 basis-point increase in adjusted operating margins compared to the previous year.

Amazon Lays Off Around 200 Fulfillment Support Staff - [theinformation.com](#)

- Amazon has laid off some support staffers who work with the merchants who use its Fulfillment by Amazon warehousing and delivery service, a company spokesperson confirmed. Around 200 people in the division had their jobs cut this week, according to a person with direct knowledge.
- “Following a recent review, we’ve eliminated some roles in the FBA organization,” the Amazon spokesperson said. “We will also continue to offer the same level of support and services to our selling partners; they will not be impacted by these changes.”
- Amazon has recently touted artificial tools designed to support merchants. In September, the company unveiled a chatbot called Project Amelia that can help resolve issues for merchants, including with tracking and monitoring their inventory in Amazon warehouses.

SoftBank May Pledge \$1 Trillion for AI Effort in US, Nikkei Says - [bloomberg.com](#)

- Massive AI Investment: SoftBank Group Corp. plans to invest over \$1 trillion in developing artificial intelligence (AI) industrial parks across the United States, aiming to enhance manufacturing capabilities with autonomous, AI-powered robots to address labor shortages.
- Leadership Engagement: Founder and CEO Masayoshi Son is expected to visit the U.S. to present these plans, underscoring SoftBank's commitment to advancing AI infrastructure and technology within the country.
- Collaborative AI Initiatives: In January, SoftBank, in partnership with OpenAI and Oracle Corp., announced a \$100 billion joint venture to fund AI infrastructure in the U.S., with intentions to increase this investment to at least \$500 billion, starting with data center development in Texas.

Accenture (hosted by Goldman Sachs) – [DSM Summary:](#)

- AI Adoption Progress: 20% of Accenture's clients have moved from proof-of-concept (POC) to scaled AI deployments, compared to just 10% to 90% 6-9 months ago, indicating accelerated AI adoption across industries.
- Wide Industry Application: AI is being applied across all industries and functional areas, confirming its broad relevance and utility for enterprises.
- AI Budget Prioritization: In budget-constrained companies, AI is taking a larger share of technology budgets, with enterprises prioritizing AI projects over other non-AI tech initiatives.
- Cost Reductions and Efficiency: While AI costs are high, Accenture expects that as AI becomes more efficient and prices decrease, enterprises will consume more AI services.
- Scaling Challenges: Accenture highlights challenges in scaling AI, including performance issues, high costs related to inference and token usage, and a shortage of specialized talent, with Accenture helping clients overcome these hurdles.

When Will We See Mass Adoption of Gen AI? - [McKinsey](#)

- Generative AI adoption is taking longer than expected. But AI innovation is rapidly accelerating, and businesses must seize the opportunity to stay competitive.
- Will generative AI live up to its hype? On this episode of the At the Edge podcast, tech visionaries Navin Chaddha, managing partner at Mayfield Fund; Kiran Prasad, McKinsey senior adviser and CEO and cofounder of Big Basin Labs; and Naba Banerjee, McKinsey senior adviser and former director of trust and operations at Airbnb, join guest host and McKinsey Senior Partner Brian Gregg. They talk about the inevitability of an AI-supported world and ways businesses can leverage AI's astonishing capabilities while managing its risks.
- Kiran Prasad: For a start-up like mine, it's happening now. If you look at all of the tools we're using, everything is AI. I probably use AI 300 times a day, easily, and not just for the coding side of it. It's to build our logo, build our website, build our marketing materials, and build our customer support site.....I recently tried to raise funding and needed legal advice, so I set up five different AI lawyers with different personalities. I uploaded the contract, and they diagnosed and argued with each other about what the pros and cons were.

Hundreds of Lloyds Bankers Head Back to School to Learn AI - [Bloomberg](#)

- Lloyds Banking Group Plc has partnered with the University of Cambridge to train 300 senior staff members in artificial intelligence, aiming to foster an "AI-first" mindset as part of a broader technology overhaul.
- The 80-hour course, starting this month, is designed to equip Lloyds' leaders with skills to integrate AI into the bank's operations, according to Rohit Dhawan, head of AI and advanced analytics at Lloyds.
- This initiative reflects the banking industry's growing emphasis on leveraging AI to enhance services and stay competitive, with Lloyds taking a proactive step to upskill its workforce.

Powerful AI is Coming. We're Not Ready – [nytimes.com](#)

- A columnist at the New York Times argues that artificial general intelligence (AGI) may emerge within the next few years, with AI systems rapidly advancing in areas like math, coding, and reasoning.
- Despite the transformative potential of AGI, the columnist says most governments and institutions are unprepared, raising urgent questions about economic, political, and technological implications.

Jensen Huang Says ‘DeepSeek Was Fantastic:’ Next-Gen Models Demand 100x More Compute as Nvidia Smashes Earnings Records – [benzinga.com](https://www.benzinga.com)

- During NVIDIA's annual GTC conference on March 18, 2025, Huang emphasized the increasing computational demands of advanced AI models.
- He highlighted that reasoning AI models require significantly more computing resources than traditional models, stating that the "amount of computation necessary to do that reasoning process is 100 times more than what we used to do."

UBS Detailed GenAI Enterprise Survey - [ubs.com](https://www.ubs.com)

- GenAI adoption is widespread, but most companies remain in the experimentation phase with internal hurdles slowing progress.
- Large-scale deployments are rare and often delayed.
- GenAI budgets are expected to double in 2025, shifting funding from traditional IT services.
- AI is driving growth beyond AI-specific projects, benefiting cloud vendors.
- Microsoft/OpenAI are strengthening their cloud AI lead, while Google appears to be losing ground.

Elon Musk confirms that Grok 3 is coming soon — pretraining took 10X more compute power than Grok 2 on 100,000 Nvidia H100 GPUs - [tomshardware.com](https://www.tomshardware.com)

- Elon Musk confirmed xAI's Grok 3's pretraining is complete, using 10X the compute power of Grok 2.
- Training leveraged xAI's Colossus Supercomputer, with Grok 3 pretrained on 100,000 Nvidia H100 GPUs, with plans to expand Colossus to 200,000 GPUs for future models.
- Colossus enables faster, large-scale training to compete with OpenAI, Google DeepMind, and Anthropic.
- Future models will scale to a million GPUs, with xAI aiming to deploy over 1 million GPUs, developing LLMs with trillions of parameters for enhanced accuracy and reasoning.
- xAI and OpenAI are racing toward Artificial General Intelligence (AGI), with future models expected to surpass Grok 3 and GPT-4o in reasoning and capability.

Infosys Knowledge Institute unveiled its largest survey of AI effectiveness to date titled Infosys AI Business Value Radar. - [prnewswire.com](https://www.prnewswire.com)

- The report surveyed 3,240 companies worldwide across 132 different AI business use cases and highlights a significant shift in AI deployment. Many organizations are now transitioning from experimentation to scaled deployment, thanks to decreasing costs and increasing success rates.

The era of custom chips - [venturebeat.com](https://www.venturebeat.com)

- AI power demand is surging, with AI energy use growing 44.7% annually, set to double by 2028, making data centers the 6th largest electricity consumer globally (comparable to Japan).
- Custom AI chips are critical for efficiency. Custom silicon (XPU) will optimize power, reduce costs, and boost memory efficiency, with 25% of AI accelerators going custom by 2028.
- AI data centers will operate like factories, with future AI infrastructure being measured by cost per token, downtime, and efficiency, favoring those with the best operational design.
- The chip industry is entering a customization era, with companies shifting to custom-built chips with optical interconnects and modular designs to scale AI beyond current CPU-GPU setups.

AI is reshaping semiconductor manufacturing, with AI-driven automation cutting chip design time from months to minutes, forcing the industry to balance customization with mass production.

16 Changes to the Way Enterprises Are Building and Buying Generative AI - a16z.com

- Enterprise AI budgets are skyrocketing, with AI spending 2x-5x higher in 2024, shifting from one-time budgets to permanent software costs. Some enterprises are even allocating AI budgets toward headcount savings, cutting customer service costs by 90% per call.
- Companies are adopting multi-model and open-source AI, with enterprises moving beyond a single model, testing multiple AI models for cost, flexibility, and performance. 46% now prefer open-source models, prioritizing customization and security over cost savings.
- Measuring AI ROI remains a challenge, with companies struggling to quantify AI's impact, often relying on soft metrics like productivity and customer satisfaction. However, over the next 2-3 years, enterprises expect to develop more concrete ROI measures tied to revenue and efficiency gains.
- Enterprises are building in-house AI solutions for now, with many developing their own AI applications (e.g., chatbots, marketing tools) rather than buying pre-built solutions. But as the market matures, businesses expect to adopt third-party AI tools that better integrate with enterprise data.
- AI adoption is accelerating at an unprecedented pace, with enterprise AI spend exceeding \$5B in 2024, up from \$1.5B-\$2B in 2023. In addition, AI deployment cycles have shortened—deals that once took a year now close in 2-3 months.

SoftBank in Talks to Invest Up to \$25 Billion in OpenAI - bloomberg.com

- SoftBank Group Corp. is in discussions to invest up to \$25 billion in OpenAI, potentially becoming the largest shareholder in the AI startup.
- This investment is part of a broader initiative called "Stargate," a \$100 billion joint venture involving SoftBank, OpenAI, and Oracle Corp., aimed at funding artificial intelligence infrastructure.
- The Stargate project has received backing from the U.S. government, with President Trump announcing the venture to maintain U.S. leadership in AI.
- SoftBank's founder, Masayoshi Son, is leading this significant investment push, reflecting the company's commitment to expanding its presence in the AI sector.
- Despite a recent quarterly loss, SoftBank is negotiating to borrow \$16 billion to fund its AI investments, indicating a strong belief in the future potential of artificial intelligence.

Why AI Spending Isn't Slowing Down - wsj.com

- SoftBank is in talks to invest \$15 billion to \$25 billion in OpenAI, potentially surpassing Microsoft's nearly \$14 billion commitment.
- OpenAI, SoftBank, Oracle, and MGX have launched Stargate, aiming to invest up to \$500 billion in AI data centers over the next four years.
- OpenAI's new partnerships indicate a move away from exclusive reliance on Microsoft for cloud services, allowing collaboration with other providers.
- OpenAI faces significant delays and costs with its GPT-5 project, highlighting the need for substantial infrastructure investments.
- The Stargate initiative reflects a strategic effort to expand AI infrastructure globally, involving key players like SoftBank and Oracle.

OpenAI, Oracle Eye Nvidia Chips Worth Billions for Stargate Site - [Bloomberg.com](https://www.bloomberg.com)

- OpenAI and Oracle are building a massive data center in Abilene, Texas, as part of their \$100 billion Stargate project, with plans to install 64,000 Nvidia GB200 chips by 2026, starting with 16,000 chips this summer.
- The Stargate venture highlights the growing demand for Nvidia's chips for AI models, with plans for additional data centers in locations like Pennsylvania, Wisconsin, Oregon, and Salt Lake City.

Dell gives strong profit outlook with AI server backlog climb - [Bloomberg.com](https://www.bloomberg.com)

- Dell Technologies has seen its AI server backlog increase to \$9 billion, up from \$4.1 billion at the end of the previous fiscal year. This surge is attributed to significant deals with clients such as Elon Musk's xAI. Dell projects that for the fiscal year ending in January 2026, it will ship \$15 billion worth of AI servers, representing a 50% increase over the previous year's \$9.8 billion.

Bank of New York Mellon Corp (BNY) entering a multiyear partnership with OpenAI - [wsj.com](https://www.wsj.com)

- The collaboration aims to enhance BNY's internal AI platform, Eliza, by integrating OpenAI's advanced tools like Deep Research and reasoning models. In exchange, OpenAI seeks insights into the real-world application of its models in complex tasks.

JPMorgan CEO Dimon: JPM has 450 AI use cases, we're likely to have 1,000 in a year – [financialjuice.com](https://www.financialjuice.com)

- JPMorgan is scaling AI adoption from 450 to 1,000 distinct use cases within a year, reflecting a significant commitment to enhancing efficiency and decision-making processes using these technological advancements.
- Currently, approx. 100,000 employees utilize JPM's in-house LLM Suite, a generative AI tool used for preparing briefing materials and processing legal documents, thereby improving productivity.
- JPMorgan is also collaborating with Amazon Web Services (AWS) to enhance AI capabilities, particularly in model development and compliance processes, streamlining operations and reducing errors.
The bank aims to utilize AI to automate repetitive tasks typically assigned to junior bankers, allowing them to focus on more valuable work and potentially altering future hiring practices to favor candidates proficient in AI tool interaction.

TSMC Says US Expansion Due to Large Customer Demand – [Bloomberg.com](https://www.bloomberg.com)

- TSMC's U.S. expansion, including a \$100 billion investment, is driven by "very large customer demand," with its U.S. capacity for 2025 and 2026 already fully booked. The company emphasized that the U.S. has not pressured Taiwan regarding this expansion.
- TSMC is seeking fairness from U.S. policies and clarified that the expansion is based on customer needs, not subsidies, while also accelerating investments in Taiwan, including building 11 new production lines this year.

Taiwan Semiconductor's capacity is fully booked for 2025-2027 due to strong demand - press conference (6-Mar in Taiwan) - [streetaccount.com](https://www.streetaccount.com)

Chip giant Taiwan Semiconductor Manufacturing Co. plans to invest \$100 billion in the United States – [APNews.com](https://apnews.com)

- Taiwan Semiconductor Manufacturing Co. (TSMC) plans to invest an additional \$100 billion in the U.S., on top of a previously announced \$65 billion investment. This will fund the construction of three new chip manufacturing plants and two packaging facilities in Arizona.
- President Trump appeared with TSMC CEO C. C. Wei at the White House and hailed the investment as critical to U.S. economic security. He emphasized that semiconductors are essential for powering industries like AI, automobiles, and advanced manufacturing, and that the U.S. must be able to produce these chips domestically.
- Wei noted that this massive investment will create thousands of high-paying jobs, boosting the U.S. economy and workforce.

Key takeaways from the Coreweave (GPU-dedicated cloud provider) IPO filing – [SEC.gov](https://sec.gov)

- Coreweave's operating margins of 17% are higher than expected, signaling strong demand for GPU-as-a-Service (GPUaaS) and suggesting that the model is not running at a loss or breakeven, even at an early stage.
- Coreweave's revenue soared from \$229M in 2023 to \$1.92B in 2024, driven by heavy capital expenditures (\$8.7B in 2024 and \$2.3B in 2023). Despite 64% EBITDA margins, the company remains heavily free cash flow (FCF) negative, likely due to these capital investments.
- Microsoft played a crucial role, increasing its share from 35% of revenue in 2023 to 62% in 2024 (\$81M to \$1.2B) and highlighting MSFT's increasing demand for GPU compute power, thus reinforcing the notion that they are compute-limited for AI workloads and are turning to third-party providers like Coreweave.

Anthropic CEO Dario Amodei gave an impressive update and touched on two major debates in the AI / Tech industry darioamodei.com

- First, he affirmed that pre-training is *not* dead, which matters for NVDA and the broader AI capex / power complex. There has been a debate around AI Scaling Laws hitting a wall since last year, with OpenAI's GPT-4.5 release adding fuel to the argument, though Amodei says he is 'not seeing any diminution' in pre-training as models continue to scale. He believes post-training is also very exciting for reasoning models and says that pre-training is a good 'general education' vs post-training good for specific topics. ft.com
- Second, he said media narrative on DeepSeek as a new breakthrough requiring less AI chips / capex is 'completely crazy' to someone inside the industry. In the months since DeepSeek's release, Anthropic's business has seen zero impact as revenue curves look the exact same. DeepSeek merely reflects an existing industry dynamic with intelligence / model costs getting 4x cheaper per year, but that's actually driving *more* spending to train models given more 'bang for buck' in a form of Jevon's Paradox. That's also bullish for the AI capex / power names. pymnts.com

Lightspeed announces a lead investment in Anthropic's \$3.5 billion Series E financing – lsvp.com

- Founded in 2021, Anthropic has advanced AI with key models like Claude and formed strategic partnerships, expanding globally with a \$3.5 billion Series E funding round led by Lightspeed.
- AI is driving a transformative shift in content creation, coding, and scientific research, accelerating advancements in algorithms and real-time reasoning.
- Lightspeed's investment supports AI-as-a-service adoption and ongoing innovation.

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