Lenovo | NVIDIA

Lenovo and NVIDIA® unlock the power of generative AI for every industry

Introducing a new era of creativity and innovation

What is generative AI?

Generative AI (GenAI) is a type of artificial intelligence that creates new content, such as text, images, audio, and video.

It learns by analyzing large amounts of data and identifying patterns. It then uses these patterns to quickly generate high-quality new content.

Key components:

- **LARGE LANGUAGE MODELS (LLMs)**
- **FOUNDATION MODELS**
- **DEEP LEARNING**
- **DATA**
- **COMPUTE POWER**
- **ACCELERATED SOFTWARE**

$17.8B
Venture capital firms have invested $17.8 billion in GenAI solutions in 2023 alone and $26 billion over the last 5 years.[1]

$1.3T
By 2032, the GenAI industry will grow to $1.3 trillion.[2]

70%
GenAI has the potential to automate up to 70% of business activities by 2030.[3]

+70%
By 2025, 70% of enterprises will identify the sustainable and ethical use of AI among their top concerns.[4]

$200B+
GenAI is set to save banks and the financial services sector $200–$340 billion annually.[5]

+40%
40% of worldwide retailers and brands are in the experimentation phase of GenAI.[5]

+27%
27% of manufacturers already invest in GenAI technologies.[6]

+30%
By 2025, Gartner expects more than 30% of new drugs and materials to be systematically discovered using GenAI.[7]

Private vs. public GenAI:
The search for a competitive edge

Organizations looking to implement GenAI have the choice of private or public models:

Private GenAI:
- Trained on custom data
- Customized to meet specific needs
- Secure private hosting on-premises or in the cloud

e.g., BloombergGPT

Public GenAI:
- Trained in public data
- Off-the-shelf functionality, with no customization available
- Publicly accessible and less secure

e.g., OpenAI ChatGPT

And there are three customization options, which scale in time to adoption and complexity:

Low complexity

Fast to adopt

General purpose GenAI
Ready-to-use, pay-as-you-go, designed for broad applications, with minimal customization.
e.g., OpenAI ChatGPT and Google Bard

Moderately customized GenAI
Fine-tuned from a foundation model using a company's data. Offers a balance between customization and control and is ideal for tasks that require private data.
e.g., Lenovo's Pre-Trained AI Chatbot and McKinsey Lilli

Extensively customized GenAI
Built from the ground for unique applications. Offers customization and control and is best suited for specialized applications that rely heavily on specialist data.
e.g., BloombergGPT

Slow to adopt

High complexity

Take control with a private GenAI model

A private GenAI model will help:

Protect sensitive business data
e.g., Social Security numbers, medical diagnosis, and banking information.

Ensure live access to business information
e.g., customer purchases, real-time inventory levels, proprietary software code.

Maintain a competitive edge
e.g., algorithmic trading strategies, customer behavior analytics, and patented manufacturing processes.

Enterprise applications with transformative impacts

Powering AI workloads and applications across:

Financial services
Smarter customer experiences and automated call centers
- **Enterprise Document Search**
- **Banking Assistant**
- **Investment Insights**

Retail
Hyper-personalized communication, virtual product advisor services, and omnichannel automation
- **Employee Concierge**
- **Personalized Customer Service**
- **Supply Chain Management**

Manufacturing
Synthetic data for system training and defect detection
- **Design Collaboration**
- **Product Development**
- **Insider Threat Detection**

Healthcare
Molecular simulation and predictive modeling
- **Personalized Healthcare**
- **Enhanced Medical Imaging**
- **Assisted Genomic Analysis**

Turning data into knowledge and real-world value

To succeed in GenAI, enterprise customers require an experienced partner to provide:

Robust innovation ecosystem + Accelerated compute power + Practical technical expertise

The impacts are endless

- Increased revenue opportunities
- Costs & productivity optimization
- Mitigated risk

Realize the potential of GenAI with Lenovo and NVIDIA

Leverage Lenovo and NVIDIA AI-ready solutions, the industry's most comprehensive AI-optimized infrastructure, and access to AI experts and workshops.

Innovative AI solutions
Accelerate GenAI deployment with Lenovo and NVIDIA's prevalidated solutions and AI Innovators software programs.

Optimized AI-ready infrastructure
Explore the industry's most comprehensive AI-ready portfolio, optimized for speed and acceleration with Lenovo ThinkSystem and ThinkEdge servers and NVIDIA accelerated computing and NVIDIA AI Enterprise software.

Enabled AI discovery
Access the Lenovo and NVIDIA technical AI expertise to deploy and scale GenAI through the Lenovo AI Discover Lab.

Start your GenAI journey today

Learn more about how Lenovo and NVIDIA can help you use GenAI.

Visit our GenAI campaign page

Contact the team at Lenovo to kickstart your AI journey.

Speak to the AI experts

[1] dealroom.co, 2023, Generative AI
[2] Bloomberg, 2023, Generative AI to Become a $1.3 Trillion Market by 2032, Research Finds
[3] McKinsey Digital, 2023, The economic potential of generative AI: The next productivity frontier
[4] Gartner, 2022, Gartner Predictions for CMOs: Show AI, Social Toxicity, and Data Privacy Forge the Future of Marketing
[5] IDC, 2023, How Retailers and Brands are Taking Advantage of Generative AI
[6] IDC, 2023, How Generative AI is Impacting Industries
[7] Gartner, 2023, Beyond ChatGPT: The Future of Generative AI for Enterprises