Department	Region	Q1 Sales	Q2 Sales	Q3 Sales	Q4 Sales	Total Sales
Electronics	North America	500K	600K	550K	620K	2.27M
Electronics	Europe	400K	420K	410K	430K	1.66M
Clothing	North America	300K	350K	320K	370K	1.34M
Clothing	Europe	250K	280K	260K	290K	1.08M
Home & Kitchen	North America	200K	250K	220K	270K	940K
Home & Kitchen	Europe	150K	170K	160K	180K	660K

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From Wikipedia, the free encyclopedia

(Redirected from Generative AI)

Not to be confused with Artificial general intelligence.


***Théâtre D'opéra Spatial*, an image made using generative AI**

Part of a series on

Artificial intelligence (AI)

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Major goals

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Generative artificial intelligence (Generative AI, GenAI,[1] or GAI) is a subset of artificial intelligence that uses generative models to produce text, images, videos, or other forms of data.[2][3][4] These models learn the underlying patterns and structures of their training data and use them to produce new data[5][6] based on the input, which often comes in the form of natural language prompts.[7][8]

Improvements in transformer-based deep neural networks, particularly large language models (LLMs), enabled an AI boom of generative AI systems in the 2020s. These include chatbots such as ChatGPT, Copilot, Gemini, and LLaMA; text-to-image artificial intelligence image generation systems such as Stable Diffusion, Midjourney, and DALL-E; and text-to-video AI generators such as Sora.[9][10][11][12] Companies such as OpenAI, Anthropic, Microsoft, Google, and Baidu as well as numerous smaller firms have developed generative AI models.[7][13][14]

Generative AI has uses across a wide range of industries, including software development, healthcare, finance, entertainment, customer service,[15] sales and marketing,[16] art, writing,[17] fashion,[18] and product design.[19] However, concerns have been raised about the potential misuse of generative AI such as cybercrime, the use of fake news or deepfakes to deceive or manipulate people, and the mass replacement of human jobs.[20][21] Intellectual property law concerns also exist around generative models that are trained on and emulate copyrighted works of art.[22]

History

[edit]

Main article: History of artificial intelligence

Early history

[edit]

Since its inception, researchers in the field have raised philosophical and ethical arguments about the nature of the human mind and the consequences of creating artificial beings with human-like intelligence; these issues have previously been explored by myth, fiction and philosophy since antiquity.[23] The concept of automated art dates back at least to the automata of ancient Greek civilization, where inventors such as Daedalus and Hero of Alexandria were described as having

designed machines capable of writing text, generating sounds, and playing music.[24][25] The tradition of creative automations has flourished throughout history, exemplified by Maillardet's automaton created in the early 1800s.[26] Markov chains have long been used to model natural languages since their development by Russian mathematician Andrey Markov in the early 20th century. Markov published his first paper on the topic in 1906,[27][28] and analyzed the pattern of vowels and consonants in the novel *Eugeny Onegin* using Markov chains. Once a Markov chain is learned on a text corpus, it can then be used as a probabilistic text generator.[29][30]

Academic artificial intelligence

[edit]

The academic discipline of artificial intelligence was established at a research workshop held at Dartmouth College in 1956 and has experienced several waves of advancement and optimism in the decades since.[31] Artificial Intelligence research began in the 1950s with works like *Computing Machinery and Intelligence* (1950) and the 1956 Dartmouth Summer Research Project on AI. Since the 1950s, artists and researchers have used artificial intelligence to create artistic works. By the early 1970s, Harold Cohen was creating and exhibiting generative AI works created by AARON, the computer program Cohen created to generate paintings.[32]

The terms generative AI planning or generative planning were used in the 1980s and 1990s to refer to AI planning systems, especially computer-aided process planning, used to generate sequences of actions to reach a specified goal.[33][34] Generative AI planning systems used symbolic AI methods such as state space search and constraint satisfaction and were a "relatively mature" technology by the early 1990s. They were used to generate crisis actio

Region	Product	2022 Sales	2023 Sales	Growth (%)
North America	Smartphones	1.0M	1.2M	20%
	Laptops	850K	900K	5%
Europe	Smartphones	900K	950K	5%
	Laptops	700K	750K	7%
Asia	Smartphones	1.3M	1.5M	15%
	Laptops	850K	900K	6%
	Tablets	500K	600K	20%

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Category	Metric	2022	2023	Forecast 2024
Revenue	Total	5.0M	5.5M	6.0M
	Growth (%)	7%	10%	8%
Expenses	Total	2.0M	2.2M	2.3M
	Increase (%)	5%	10%	5%
Profit	Total	3.0M	3.3M	3.7M
	Margin (%)	60%	60%	62%

Company	Metric	Q1 2023	Q2 2023	Q3 2023	Q4 2023
TechCorp	Revenue	1.2M	1.5M	1.4M	1.6M
	Expenses	800K	900K	850K	950K
	Profit	400K	600K	550K	650K
MegaCo	Revenue	900K	1.0M	1.1M	1.2M

	Expenses	600K	650K	700K	750K
	Profit	300K	350K	400K	450K