

2024 AI & IoT Technology Research Review

Market Research Report | 2025-03-21 | 154 pages | BCC Research

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Report description:

Description

Research Review Scope

Artificial Intelligence (AI) and the Internet of Things (IoT) are revolutionizing industries by enhancing automation, optimizing operations, and improving efficiency. The global AI market is witnessing significant investment as businesses recognize its potential to drive innovation, streamline processes, and create new revenue opportunities. Particularly in the oil and gas sector, AI technologies are being integrated to optimize exploration, predictive maintenance, and resource management, helping companies improve operational efficiency and reduce costs. On the other hand, AI is also making a profound impact in life sciences, transforming drug discovery, patient monitoring, and healthcare analytics. In cancer research, AI-driven solutions are enhancing early detection, diagnosis, and personalized treatment plans, leading to better patient outcomes. Furthermore, integrating AI in clinical and molecular diagnostics is advancing precision medicine by enabling faster and more accurate disease detection. The Industrial IoT (IIoT) market is expanding as businesses leverage connected devices and smart automation to optimize manufacturing, logistics, and supply chain operations. These advancements in AI and IoT are driving digital transformation across industries, enabling businesses to enhance decision-making, reduce costs, and maintain a competitive edge in the global market. Research Reviews from BCC Research provide market professionals with concise market coverage within a specific research category. This 2024 Research Review of AI and IoT technology provides a sampling of the type of quantitative market information, analysis, and guidance that BCC Research has been developing since its inception in 1971 to help its customers make informed business decisions. This Research Review includes highlights and excerpts from the following reports published by BCC Research in 2023:

- IFT189C Global Artificial Intelligence (AI) Market: Investments vs Potential
- IFT305A AI in Oil and Gas: Global Markets and Technologies
- BIO255A Artificial Intelligence (AI) in Lifesciences Market
- BIO196B Artificial Intelligence (AI) in Cancer
- BIO261A AI in Clinical and Molecular Diagnostics Market

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- IFT299A Industrial IoT (IIoT): Global Markets

After you survey the excerpts in this Research Review, we encourage you to follow up on these topics by checking out the full market research reports associated with each topic. BCC Research looks forward to serving your market intelligence needs in the future.

Executive Summary

Summary:

- The global market for artificial intelligence (AI) is estimated to increase from \$148.8 billion in 2023 to reach \$1.1 trillion by 2029, at a compound annual growth rate (CAGR) of 39.7% from 2024 through 2029.
- The global market for AI Technology in the Oil and Gas Sector is estimated to increase from \$2.8 billion in 2023 to reach \$5.1 billion by 2028, at a CAGR of 12.9% from 2023 through 2028.
- The global market for artificial intelligence (AI) in life sciences products was valued at \$8.0 billion in 2023. The market is estimated to grow from \$9.8 billion in 2024 to \$33.5 billion by the end of 2029, at a CAGR of 27.9% from 2024 to 2029.

Artificial Intelligence (AI) and the Internet of Things (IoT) are revolutionizing industries by enhancing automation, optimizing operations, and improving efficiency. The global AI market is witnessing significant investment as businesses recognize its potential to drive innovation, streamline processes, and create new revenue opportunities. Particularly in the oil and gas sector, AI technologies are being integrated to optimize exploration, predictive maintenance, and resource management, helping companies improve operational efficiency and reduce costs. On the other hand, AI is also making a profound impact in life sciences, transforming drug discovery, patient monitoring, and healthcare analytics. In cancer research, AI-driven solutions are enhancing early detection, diagnosis, and personalized treatment plans, leading to better patient outcomes. Furthermore, integrating AI in clinical and molecular diagnostics is advancing precision medicine by enabling faster and more accurate disease detection.

The Industrial IoT (IIoT) market is expanding as businesses leverage connected devices and smart automation to optimize manufacturing, logistics, and supply chain operations. These advancements in AI and IoT are driving digital transformation across industries, enabling businesses to enhance decisionmaking, reduce costs, and maintain a competitive edge in the global market.

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