

Global AI-based Image Analysis Market Size study & Forecast, by Deployment Mode (On-premises, Cloud-based), by Technology (Deep Learning, Traditional Machine Learning, Hybrid & Other AI Technologies), by End-use Industry, and Regional Forecasts 2025–2035

<https://marketpublishers.com/r/G14D4A92CD19EN.html>

Date: November 2025

Pages: 285

Price: US\$ 3,750.00 (Single User License)

ID: G14D4A92CD19EN

Abstracts

The Global AI-based Image Analysis Market is valued approximately at USD 29.63 billion in 2024 and is anticipated to grow with an impressive CAGR of 22.70% during the forecast period 2025–2035. AI-based image analysis has transformed the landscape of diagnostics, automation, and data interpretation by enabling machines to extract, interpret, and act on visual data with human-like precision and speed. By combining the power of deep learning algorithms and neural networks, these systems can detect minute anomalies in medical scans, industrial inspections, and surveillance footage, far beyond human visual capacity. The integration of AI into image processing not only enhances decision-making and accuracy but also significantly reduces operational turnaround times. This surge is fueled by increasing digitization in healthcare imaging, the proliferation of big data analytics, and the growing focus on precision diagnostics and automation across diverse industries.

A rapid expansion in healthcare digitization, coupled with the demand for early and precise diagnostic tools, has driven the adoption of AI-based image analysis globally. The exponential rise in the volume of medical imaging data, coupled with the shortage of radiology professionals, has compelled healthcare systems to embrace AI-driven tools that can automate detection, classification, and segmentation tasks. According to industry analyses, over 90% of all medical data generated globally is image-based, creating an enormous opportunity for AI algorithms to optimize clinical workflows.

Additionally, sectors such as automotive, security, and manufacturing are increasingly deploying AI image analysis for visual inspection, defect detection, and object recognition, further broadening its industrial footprint. However, the lack of standardized protocols and data privacy concerns continue to pose challenges, although advancements in federated learning and cloud-based solutions are steadily mitigating these barriers.

The detailed segments and sub-segments included in the report are:

By Deployment Mode:

On-premises

Cloud-based

By Technology:

Deep Learning

Traditional Machine Learning

Hybrid & Other AI Technologies

By End-use Industry:

Healthcare

Automotive

Manufacturing

Security & Surveillance

Agriculture

Retail & E-commerce

Others

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Italy

Spain

Rest of Europe

Asia Pacific

China

India

Japan

South Korea

Australia

Rest of Asia Pacific

Latin America

Brazil

Mexico

Middle East & Africa

Saudi Arabia

UAE

South Africa

Rest of Middle East & Africa

Cloud-based Deployment is Expected to Dominate the Market

The Cloud-based segment is expected to dominate the global AI-based image analysis market during the forecast period, owing to its scalability, accessibility, and cost efficiency. Cloud infrastructure empowers organizations to handle massive image datasets while leveraging AI capabilities without heavy on-premises hardware investments. With continuous improvements in cloud security, interoperability, and computational power, enterprises are increasingly migrating from traditional setups to flexible cloud ecosystems. The cloud model also facilitates real-time collaboration and remote diagnostics, which is vital for modern healthcare and industrial inspection workflows. Moreover, partnerships between leading cloud service providers and AI developers are further accelerating this migration, as organizations strive for operational agility and data-driven innovation.

Deep Learning Technology Leads in Revenue Contribution

Among technologies, Deep Learning dominates the revenue share of the global AI-based image analysis market. Deep neural networks have redefined image

interpretation by allowing systems to learn hierarchical features and detect complex patterns automatically. Their unparalleled capability in identifying tumors, predicting material defects, and enabling autonomous vision systems makes them the backbone of most AI imaging solutions. While traditional machine learning methods retain utility in specific tasks with structured data, deep learning models are now being combined with hybrid frameworks and edge computing architectures to enhance processing efficiency. This growing fusion of deep learning with other AI technologies underscores its central role in the evolution of intelligent visual analytics across sectors.

North America currently leads the AI-based image analysis market, driven by strong R&D investment, the widespread adoption of AI across healthcare and technology sectors, and favorable regulatory frameworks supporting innovation. The region's robust digital healthcare infrastructure, combined with a dense concentration of tech giants and AI startups, continues to foster breakthroughs in medical imaging and industrial automation. Meanwhile, the Asia Pacific region is anticipated to witness the fastest growth during 2025–2035, propelled by rapid urbanization, expanding healthcare expenditure, and rising investments in AI infrastructure in countries such as China, India, and Japan. Europe also remains a strong contributor, particularly in healthcare and automotive applications, while Latin America and the Middle East & Africa are expected to see growing adoption as digital transformation initiatives gain momentum across industries.

Major market players included in this report are:

IBM Corporation

NVIDIA Corporation

Microsoft Corporation

Intel Corporation

Google LLC (Alphabet Inc.)

Amazon Web Services (AWS)

Siemens Healthineers AG

Philips Healthcare

GE Healthcare

Arterys Inc.

Zebra Medical Vision Ltd.

Clarifai, Inc.

DeepVision AI

PathAI, Inc.

Aidence B.V.

Global AI-based Image Analysis Market Report Scope:

Historical Data – 2023, 2024

Base Year for Estimation – 2024

Forecast period – 2025–2035

Report Coverage – Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Regional Scope – North America; Europe; Asia Pacific; Latin America; Middle East & Africa

Customization Scope – Free report customization (equivalent to up to 8 analysts' working hours) with purchase. Addition or alteration to country, regional & segment scope*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values for the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within the countries involved in the study. The report also provides detailed information about crucial

aspects, such as driving factors and challenges, which will define the future growth of the market. Additionally, it incorporates potential opportunities in micro-markets for stakeholders to invest, along with a detailed analysis of the competitive landscape and product offerings of key players. The detailed segments and sub-segments of the market are explained below:

Key Takeaways:

Market Estimates & Forecast for 10 years from 2025 to 2035.

Annualized revenues and regional-level analysis for each market segment.

Detailed analysis of the geographical landscape with country-level analysis of major regions.

Competitive landscape with information on major players in the market.

Analysis of key business strategies and recommendations on future market approach.

Analysis of the competitive structure of the market.

Demand side and supply side analysis of the market.

Contents

CHAPTER 1. GLOBAL AI-BASED IMAGE ANALYSIS MARKET REPORT SCOPE & METHODOLOGY

- 1.1. Research Objective
- 1.2. Research Methodology
 - 1.2.1. Forecast Model
 - 1.2.2. Desk Research
 - 1.2.3. Top Down and Bottom-Up Approach
- 1.3. Research Attributes
- 1.4. Scope of the Study
 - 1.4.1. Market Definition
 - 1.4.2. Market Segmentation
- 1.5. Research Assumption
 - 1.5.1. Inclusion & Exclusion
 - 1.5.2. Limitations
 - 1.5.3. Years Considered for the Study

CHAPTER 2. EXECUTIVE SUMMARY

- 2.1. CEO/CXO Standpoint
- 2.2. Strategic Insights
- 2.3. ESG Analysis
- 2.4. key Findings

CHAPTER 3. GLOBAL AI-BASED IMAGE ANALYSIS MARKET FORCES ANALYSIS

- 3.1. Market Forces Shaping The Global AI-based Image Analysis Market (2024-2035)
- 3.2. Drivers
 - 3.2.1. integration of AI into image processing not only enhances decision-making and accuracy
 - 3.2.2. surge is fueled by increasing digitization in healthcare imaging
- 3.3. Restraints
 - 3.3.1. lack of standardized protocols and data privacy concerns continue
- 3.4. Opportunities
 - 3.4.1. proliferation of big data analytics

CHAPTER 4. GLOBAL AI-BASED IMAGE ANALYSIS INDUSTRY ANALYSIS

Global AI-based Image Analysis Market Size study & Forecast, by Deployment Mode (On-premises, Cloud-based), by...

- 4.1. Porter's 5 Forces Model
 - 4.1.1. Bargaining Power of Buyer
 - 4.1.2. Bargaining Power of Supplier
 - 4.1.3. Threat of New Entrants
 - 4.1.4. Threat of Substitutes
 - 4.1.5. Competitive Rivalry
- 4.2. Porter's 5 Force Forecast Model (2024-2035)
- 4.3. PESTEL Analysis
 - 4.3.1. Political
 - 4.3.2. Economical
 - 4.3.3. Social
 - 4.3.4. Technological
 - 4.3.5. Environmental
 - 4.3.6. Legal
- 4.4. Top Investment Opportunities
- 4.5. Top Winning Strategies (2025)
- 4.6. Market Share Analysis (2024-2025)
- 4.7. Global Pricing Analysis And Trends 2025
- 4.8. Analyst Recommendation & Conclusion

CHAPTER 5. GLOBAL AI-BASED IMAGE ANALYSIS MARKET SIZE & FORECASTS BY DEPLOYMENT MODE 2025-2035

- 5.1. Market Overview
- 5.2. Global AI-based Image Analysis Market Performance - Potential Analysis (2025)
- 5.3. On premises
 - 5.3.1. Top Countries Breakdown Estimates & Forecasts, 2024-2035
 - 5.3.2. Market size analysis, by region, 2025-2035
- 5.4. Cloud Based
 - 5.4.1. Top Countries Breakdown Estimates & Forecasts, 2024-2035
 - 5.4.2. Market size analysis, by region, 2025-2035

CHAPTER 6. GLOBAL AI-BASED IMAGE ANALYSIS MARKET SIZE & FORECASTS BY TECHNOLOGY 2025-2035

- 6.1. Market Overview
- 6.2. Global AI-based Image Analysis Market Performance - Potential Analysis (2025)
- 6.3. Deep Learning

- 6.3.1. Top Countries Breakdown Estimates & Forecasts, 2024-2035
- 6.3.2. Market size analysis, by region, 2025-2035
- 6.4. Traditional Machine Learning
 - 6.4.1. Top Countries Breakdown Estimates & Forecasts, 2024-2035
 - 6.4.2. Market size analysis, by region, 2025-2035
- 6.5. Hybrid & Other AI Technologies
 - 6.5.1. Top Countries Breakdown Estimates & Forecasts, 2024-2035
 - 6.5.2. Market size analysis, by region, 2025-2035

CHAPTER 7. GLOBAL AI-BASED IMAGE ANALYSIS MARKET SIZE & FORECASTS BY END USE INDUSTRY 2025–2035

- 7.1. Market Overview
- 7.2. Global AI-based Image Analysis Market Performance - Potential Analysis (2025)
- 7.3. Healthcare
 - 7.3.1. Top Countries Breakdown Estimates & Forecasts, 2024-2035
 - 7.3.2. Market size analysis, by region, 2025-2035
- 7.4. Automotive
 - 7.4.1. Top Countries Breakdown Estimates & Forecasts, 2024-2035
 - 7.4.2. Market size analysis, by region, 2025-2035
- 7.5. Manufacturing
 - 7.5.1. Top Countries Breakdown Estimates & Forecasts, 2024-2035
 - 7.5.2. Market size analysis, by region, 2025-2035
- 7.6. Security & Surveillance
 - 7.6.1. Top Countries Breakdown Estimates & Forecasts, 2024-2035
 - 7.6.2. Market size analysis, by region, 2025-2035
- 7.7. Agriculture
 - 7.7.1. Top Countries Breakdown Estimates & Forecasts, 2024-2035
 - 7.7.2. Market size analysis, by region, 2025-2035
- 7.8. Retail & E-commerce
 - 7.8.1. Top Countries Breakdown Estimates & Forecasts, 2024-2035
 - 7.8.2. Market size analysis, by region, 2025-2035
- 7.9. Others
 - 7.9.1. Top Countries Breakdown Estimates & Forecasts, 2024-2035
 - 7.9.2. Market size analysis, by region, 2025-2035

CHAPTER 8. GLOBAL AI-BASED IMAGE ANALYSIS MARKET SIZE & FORECASTS BY REGION 2025–2035

- 8.1. Growth AI-based Image Analysis Market, Regional Market Snapshot
- 8.2. Top Leading & Emerging Countries
- 8.3. North America AI-based Image Analysis Market
 - 8.3.1. U.S. AI-based Image Analysis Market
 - 8.3.1.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.3.1.2. Technology breakdown size & forecasts, 2025-2035
 - 8.3.1.3. End Use Industry breakdown size & forecasts, 2025-2035
 - 8.3.2. Canada AI-based Image Analysis Market
 - 8.3.2.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.3.2.2. Technology breakdown size & forecasts, 2025-2035
 - 8.3.2.3. End Use Industry breakdown size & forecasts, 2025-2035
- 8.4. Europe AI-based Image Analysis Market
 - 8.4.1. UK AI-based Image Analysis Market
 - 8.4.1.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.4.1.2. Technology breakdown size & forecasts, 2025-2035
 - 8.4.1.3. End Use Industry breakdown size & forecasts, 2025-2035
 - 8.4.2. Germany AI-based Image Analysis Market
 - 8.4.2.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.4.2.2. Technology breakdown size & forecasts, 2025-2035
 - 8.4.2.3. End Use Industry breakdown size & forecasts, 2025-2035
 - 8.4.3. France AI-based Image Analysis Market
 - 8.4.3.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.4.3.2. Technology breakdown size & forecasts, 2025-2035
 - 8.4.3.3. End Use Industry breakdown size & forecasts, 2025-2035
 - 8.4.4. Spain AI-based Image Analysis Market
 - 8.4.4.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.4.4.2. Technology breakdown size & forecasts, 2025-2035
 - 8.4.4.3. End Use Industry breakdown size & forecasts, 2025-2035
 - 8.4.5. Italy AI-based Image Analysis Market
 - 8.4.5.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.4.5.2. Technology breakdown size & forecasts, 2025-2035
 - 8.4.5.3. End Use Industry breakdown size & forecasts, 2025-2035
 - 8.4.6. Rest of Europe AI-based Image Analysis Market
 - 8.4.6.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.4.6.2. Technology breakdown size & forecasts, 2025-2035
 - 8.4.6.3. End Use Industry breakdown size & forecasts, 2025-2035
- 8.5. Asia Pacific AI-based Image Analysis Market
 - 8.5.1. China AI-based Image Analysis Market
 - 8.5.1.1. Deployment mode breakdown size & forecasts, 2025-2035

- 8.5.1.2. Technology breakdown size & forecasts, 2025-2035
- 8.5.1.3. End Use Industry breakdown size & forecasts, 2025-2035
- 8.5.2. India AI-based Image Analysis Market
 - 8.5.2.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.5.2.2. Technology breakdown size & forecasts, 2025-2035
 - 8.5.2.3. End Use Industry breakdown size & forecasts, 2025-2035
- 8.5.3. Japan AI-based Image Analysis Market
 - 8.5.3.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.5.3.2. Technology breakdown size & forecasts, 2025-2035
 - 8.5.3.3. End Use Industry breakdown size & forecasts, 2025-2035
- 8.5.4. Australia AI-based Image Analysis Market
 - 8.5.4.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.5.4.2. Technology breakdown size & forecasts, 2025-2035
 - 8.5.4.3. End Use Industry breakdown size & forecasts, 2025-2035
- 8.5.5. South Korea AI-based Image Analysis Market
 - 8.5.5.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.5.5.2. Technology breakdown size & forecasts, 2025-2035
 - 8.5.5.3. End Use Industry breakdown size & forecasts, 2025-2035
- 8.5.6. Rest of APAC AI-based Image Analysis Market
 - 8.5.6.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.5.6.2. Technology breakdown size & forecasts, 2025-2035
 - 8.5.6.3. End Use Industry breakdown size & forecasts, 2025-2035
- 8.6. Latin America AI-based Image Analysis Market
 - 8.6.1. Brazil AI-based Image Analysis Market
 - 8.6.1.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.6.1.2. Technology breakdown size & forecasts, 2025-2035
 - 8.6.1.3. End Use Industry breakdown size & forecasts, 2025-2035
 - 8.6.2. Mexico AI-based Image Analysis Market
 - 8.6.2.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.6.2.2. Technology breakdown size & forecasts, 2025-2035
 - 8.6.2.3. End Use Industry breakdown size & forecasts, 2025-2035
- 8.7. Middle East and Africa AI-based Image Analysis Market
 - 8.7.1. UAE AI-based Image Analysis Market
 - 8.7.1.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.7.1.2. Technology breakdown size & forecasts, 2025-2035
 - 8.7.1.3. End Use Industry breakdown size & forecasts, 2025-2035
 - 8.7.2. Saudi Arabia (KSA) AI-based Image Analysis Market
 - 8.7.2.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.7.2.2. Technology breakdown size & forecasts, 2025-2035

- 8.7.2.3. End Use Industry breakdown size & forecasts, 2025-2035
- 8.7.3. South Africa AI-based Image Analysis Market
 - 8.7.3.1. Deployment mode breakdown size & forecasts, 2025-2035
 - 8.7.3.2. Technology breakdown size & forecasts, 2025-2035
 - 8.7.3.3. End Use Industry breakdown size & forecasts, 2025-2035

CHAPTER 9. COMPETITIVE INTELLIGENCE

- 9.1. Top Market Strategies
- 9.2. IBM Corporation
 - 9.2.1. Company Overview
 - 9.2.2. Key Executives
 - 9.2.3. Company Snapshot
 - 9.2.4. Financial Performance (Subject to Data Availability)
 - 9.2.5. Product/Services Port
 - 9.2.6. Recent Development
 - 9.2.7. Market Strategies
 - 9.2.8. SWOT Analysis
- 9.3. NVIDIA Corporation
- 9.4. Microsoft Corporation
- 9.5. Intel Corporation
- 9.6. Google LLC (Alphabet Inc.)
- 9.7. Amazon Web Services (AWS)
- 9.8. Siemens Healthineers AG
- 9.9. Philips Healthcare
- 9.10. GE Healthcare
- 9.11. Arterys Inc.
- 9.12. Zebra Medical Vision Ltd.
- 9.13. Clarifai, Inc.
- 9.14. DeepVision AI
- 9.15. PathAI, Inc.
- 9.16. Aidence B.V.

List Of Tables

LIST OF TABLES

- Table 1. Global AI-based Image Analysis Market, Report Scope
- Table 2. Global AI-based Image Analysis Market Estimates & Forecasts By Region 2024–2035
- Table 3. Global AI-based Image Analysis Market Estimates & Forecasts By Segment 2024–2035
- Table 4. Global AI-based Image Analysis Market Estimates & Forecasts By Segment 2024–2035
- Table 5. Global AI-based Image Analysis Market Estimates & Forecasts By Segment 2024–2035
- Table 6. Global AI-based Image Analysis Market Estimates & Forecasts By Segment 2024–2035
- Table 7. Global AI-based Image Analysis Market Estimates & Forecasts By Segment 2024–2035
- Table 8. U.S. AI-based Image Analysis Market Estimates & Forecasts, 2024–2035
- Table 9. Canada AI-based Image Analysis Market Estimates & Forecasts, 2024–2035
- Table 10. UK AI-based Image Analysis Market Estimates & Forecasts, 2024–2035
- Table 11. Germany AI-based Image Analysis Market Estimates & Forecasts, 2024–2035
- Table 12. France AI-based Image Analysis Market Estimates & Forecasts, 2024–2035
- Table 13. Spain AI-based Image Analysis Market Estimates & Forecasts, 2024–2035
- Table 14. Italy AI-based Image Analysis Market Estimates & Forecasts, 2024–2035
- Table 15. Rest Of Europe AI-based Image Analysis Market Estimates & Forecasts, 2024–2035
- Table 16. China AI-based Image Analysis Market Estimates & Forecasts, 2024–2035
- Table 17. India AI-based Image Analysis Market Estimates & Forecasts, 2024–2035
- Table 18. Japan AI-based Image Analysis Market Estimates & Forecasts, 2024–2035
- Table 19. Australia AI-based Image Analysis Market Estimates & Forecasts, 2024–2035
- Table 20. South Korea AI-based Image Analysis Market Estimates & Forecasts, 2024–2035

.....

List Of Figures

LIST OF FIGURES

- Fig 1. Global AI-based Image Analysis Market, Research Methodology
- Fig 2. Global AI-based Image Analysis Market, Market Estimation Techniques
- Fig 3. Global Market Size Estimates & Forecast Methods
- Fig 4. Global AI-based Image Analysis Market, Key Trends 2025
- Fig 5. Global AI-based Image Analysis Market, Growth Prospects 2024–2035
- Fig 6. Global AI-based Image Analysis Market, Porter’s Five Forces Model
- Fig 7. Global AI-based Image Analysis Market, Pestel Analysis
- Fig 8. Global AI-based Image Analysis Market, Value Chain Analysis
- Fig 9. AI-based Image Analysis Market By Application, 2025 & 2035
- Fig 10. AI-based Image Analysis Market By Segment, 2025 & 2035
- Fig 11. AI-based Image Analysis Market By Segment, 2025 & 2035
- Fig 12. AI-based Image Analysis Market By Segment, 2025 & 2035
- Fig 13. AI-based Image Analysis Market By Segment, 2025 & 2035
- Fig 14. North America AI-based Image Analysis Market, 2025 & 2035
- Fig 15. Europe AI-based Image Analysis Market, 2025 & 2035
- Fig 16. Asia Pacific AI-based Image Analysis Market, 2025 & 2035
- Fig 17. Latin America AI-based Image Analysis Market, 2025 & 2035
- Fig 18. Middle East & Africa AI-based Image Analysis Market, 2025 & 2035
- Fig 19. Global AI-based Image Analysis Market, Company Market Share Analysis (2025)

.....

I would like to order

Product name: Global AI-based Image Analysis Market Size study & Forecast, by Deployment Mode (On-premises, Cloud-based), by Technology (Deep Learning, Traditional Machine Learning, Hybrid & Other AI Technologies), by End-use Industry, and Regional Forecasts 2025–2035

Product link: <https://marketpublishers.com/r/G14D4A92CD19EN.html>

Price: US\$ 3,750.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G14D4A92CD19EN.html>