

Global Al-Enabled Biometric Market Size, Share, Trends & Analysis by Technology (Face Recognition, Fingerprint Recognition, Iris Recognition, Voice Recognition, Behavioral Biometrics), by Application (Mobile Biometrics and Smart Devices, Biometric Access Control Systems, Identity Verification and Authentication, Surveillance and Security, Others), by End User (Defense, Home Security, Government, BFSI, Healthcare, Others) and Region, with Forecasts from 2024 to 2034.

https://marketpublishers.com/r/GFD4822473B9EN.html

Date: November 2024 Pages: 183 Price: US\$ 3,585.00 (Single User License) ID: GFD4822473B9EN

# **Abstracts**

Market Overview

The Global AI-Enabled Biometric Market is anticipated to experience substantial growth from 2024 to 2034, propelled by advancements in artificial intelligence, increasing security concerns, and the need for more accurate and efficient identity verification methods. In 2024, the market is valued at USD XX.XX billion and is projected to reach USD XX.XX billion by 2034, with a compound annual growth rate (CAGR) of XX.XX%. Al-driven biometric technology, which encompasses face recognition, fingerprint recognition, iris recognition, and behavioral biometrics, offers sophisticated and secure solutions for identity verification across a wide range of industries. Growing adoption across sectors such as defense, healthcare, and finance is driving market expansion, as organizations look to enhance security protocols and streamline authentication processes.



#### Definition and Scope of AI-Enabled Biometrics

AI-Enabled Biometrics refers to the integration of artificial intelligence with biometric technologies, allowing for real-time processing, accuracy enhancement, and predictive capabilities in biometric systems. This technology uses algorithms and machine learning to analyze physical and behavioral traits, such as facial structure, voice, or typing patterns, making it possible to identify individuals with high accuracy. AI-based biometric solutions support various applications, including mobile device access, surveillance, identity verification, and security management, delivering seamless and reliable authentication for both commercial and governmental use.

#### Market Drivers

Increasing Demand for Enhanced Security and Authentication: Rising concerns over data breaches, identity theft, and cybersecurity have amplified the need for robust biometric systems across industries.

Technological Advancements in AI and Machine Learning: Innovations in AI and machine learning are enhancing the speed, accuracy, and scalability of biometric systems, making them essential tools for secure identity management.

Government Initiatives and Regulatory Support: Governments worldwide are implementing policies and regulatory frameworks that promote biometric adoption for national security, surveillance, and public safety.

#### Market Restraints

Privacy and Data Protection Concerns: Growing awareness of data privacy issues poses challenges, as biometric data is sensitive, requiring robust measures to protect against misuse and unauthorized access.

High Implementation Costs: The initial investment for AI-enabled biometric systems, including software, hardware, and infrastructure, can be prohibitive for smaller organizations, limiting market reach.

#### Opportunities



Expansion in Emerging Markets: Emerging economies like India, China, and Brazil offer significant growth potential as urbanization, digitalization, and security infrastructure investment increase.

Integration with Emerging Technologies: The rise of IoT, blockchain, and wearable technology opens new avenues for AI-enabled biometric applications, such as real-time monitoring and secure decentralized identity systems.

Market Segmentation Analysis

By Technology

Face Recognition

**Fingerprint Recognition** 

**Iris Recognition** 

Voice Recognition

**Behavioral Biometrics** 

By Application

Mobile Biometrics and Smart Devices

**Biometric Access Control Systems** 

Identity Verification and Authentication

Surveillance and Security

Others

By End User

Defense



Home Security

Government

BFSI (Banking, Financial Services, and Insurance)

Healthcare

Others

Regional Analysis

North America: North America leads the Al-enabled biometric market, with high demand for security applications, advanced technology infrastructure, and regulatory support promoting biometric adoption across sectors like BFSI and defense.

Europe: Europe shows steady growth, driven by strong security standards and government initiatives, particularly in applications such as surveillance, access control, and border security.

Asia-Pacific: Asia-Pacific is expected to witness rapid growth, with rising adoption in the government, healthcare, and BFSI sectors in countries such as China, India, and Japan, driven by the need for digital identity verification and security solutions.

Rest of the World: The market in Latin America, the Middle East, and Africa is poised for moderate growth, supported by increasing investments in security infrastructure, particularly in government and defense applications.

The Global AI-Enabled Biometric Market is on a strong growth trajectory, fueled by advancements in AI, growing security concerns, and regulatory support for biometric technology adoption. Emerging opportunities in IoT integration and expansion into new markets will drive further growth, as the demand for efficient, AI-powered security solutions continues to rise globally.

#### Competitive Landscape



Key players in the Global AI-Enabled Biometric Market include:

**NEC** Corporation

Thales Group

IDEMIA

Cognitec Systems GmbH

FaceTec, Inc.

Aware, Inc.

BioID

Daon, Inc.

HID Global

Nuance Communications



## Contents

### **1. INTRODUCTION**

- 1.1. Definition of AI-Enabled Biometrics
- 1.2. Scope of the Report
- 1.3. Research Methodology

## 2. EXECUTIVE SUMMARY

- 2.1. Key Findings
- 2.2. Market Snapshot
- 2.3. Key Trends

### **3. MARKET DYNAMICS**

- 3.1. Market Drivers
  - 3.1.1. Rising Demand for Enhanced Security Solutions
  - 3.1.2. Growing Adoption of AI in Biometric Technologies
  - 3.1.3. Other Market Drivers
- 3.2. Market Restraints
  - 3.2.1. Data Privacy and Ethical Concerns
  - 3.2.2. High Implementation Costs
  - 3.2.3. Other Market Restraints
- 3.3. Market Opportunities
  - 3.3.1. Advancements in AI and Machine Learning
  - 3.3.2. Increasing Use of Biometrics in Emerging Economies
  - 3.3.3. Other Market Opportunities

### 4. GLOBAL AI-ENABLED BIOMETRIC MARKET ANALYSIS

- 4.1. Market Size and Forecast (2024-2034)
- 4.2. Market Share Analysis by:
  - 4.2.1. Technology
    - 4.2.1.1. Face Recognition
    - 4.2.1.2. Fingerprint Recognition
    - 4.2.1.3. Iris Recognition
    - 4.2.1.4. Voice Recognition
    - 4.2.1.5. Behavioral Biometrics



### 4.2.2. Application

- 4.2.2.1. Mobile Biometrics and Smart Devices
- 4.2.2.2. Biometric Access Control Systems
- 4.2.2.3. Identity Verification and Authentication
- 4.2.2.4. Surveillance and Security
- 4.2.2.5. Others
- 4.2.3. End User
- 4.2.3.1. Defense
- 4.2.3.2. Home Security
- 4.2.3.3. Government
- 4.2.3.4. BFSI
- 4.2.3.5. Healthcare
- 4.2.3.6. Others
- 4.3. Value Chain Analysis
- 4.4. SWOT Analysis
- 4.5. Porter's Five Forces Analysis

### **5. REGIONAL MARKET ANALYSIS**

- 5.1. North America
  - 5.1.1. Market Overview
  - 5.1.2. Market Size and Forecast
  - 5.1.3. Key Trends
  - 5.1.4. Competitive Landscape
- 5.2. Europe
  - 5.2.1. Market Overview
  - 5.2.2. Market Size and Forecast
  - 5.2.3. Key Trends
  - 5.2.4. Competitive Landscape
- 5.3. Asia Pacific
  - 5.3.1. Market Overview
  - 5.3.2. Market Size and Forecast
  - 5.3.3. Key Trends
- 5.3.4. Competitive Landscape
- 5.4. Latin America
  - 5.4.1. Market Overview
  - 5.4.2. Market Size and Forecast
  - 5.4.3. Key Trends
  - 5.4.4. Competitive Landscape



- 5.5. Middle East & Africa
  - 5.5.1. Market Overview
  - 5.5.2. Market Size and Forecast
  - 5.5.3. Key Trends
  - 5.5.4. Competitive Landscape

## 6. COMPETITIVE LANDSCAPE

- 6.1. Market Share Analysis of Key Players
- 6.2. Company Profiles of Key Players
  - 6.2.1. NEC Corporation
  - 6.2.2. Thales Group
  - 6.2.3. IDEMIA
  - 6.2.4. Cognitec Systems GmbH
  - 6.2.5. FaceTec, Inc.
  - 6.2.6. Aware, Inc.
  - 6.2.7. BioID
  - 6.2.8. Daon, Inc.
  - 6.2.9. HID Global
- 6.2.10. Nuance Communications
- 6.3. Recent Developments and Innovations
- 6.4. Strategic Initiatives

### 7. FUTURE OUTLOOK AND MARKET FORECAST

- 7.1. Market Growth Prospects
- 7.2. Technological Trends and Innovations
- 7.3. Investment Opportunities
- 7.4. Strategic Recommendations

### 8. KEY INSIGHTS AND REITERATION OF MAIN FINDINGS

### 9. FUTURE PROSPECTS FOR THE GLOBAL AI-ENABLED BIOMETRIC MARKET



## I would like to order

Product name: Global AI-Enabled Biometric Market Size, Share, Trends & Analysis by Technology (Face Recognition, Fingerprint Recognition, Iris Recognition, Voice Recognition, Behavioral Biometrics), by Application (Mobile Biometrics and Smart Devices, Biometric Access Control Systems, Identity Verification and Authentication, Surveillance and Security, Others), by End User (Defense, Home Security, Government, BFSI, Healthcare, Others) and Region, with Forecasts from 2024 to 2034.

Product link: https://marketpublishers.com/r/GFD4822473B9EN.html

Price: US\$ 3,585.00 (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 <u>https://marketpublishers.com/r/GFD4822473B9EN.html</u>