

IoT in Education Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, By Component (Hardware, Software, Services, Platforms), By Application (Smart Classrooms, Learning Management Systems, Virtual Labs, Student Attendance Management, Performance Tracking), By End User (K-12 Schools, Higher Education Institutions, Vocational Training Centers, Corporate Training), By Region, By Competition 2020-2030F

<https://marketpublishers.com/r/I0D28DC7C295EN.html>

Date: June 2025

Pages: 185

Price: US\$ 4,500.00 (Single User License)

ID: I0D28DC7C295EN

Abstracts

Market Overview

The Global IoT in Education Market was valued at USD 16.46 billion in 2024 and is projected to reach USD 36.90 billion by 2030, growing at a CAGR of 14.40%. This market encompasses the integration of internet-enabled devices and sensor-based systems within educational institutions to create smart, interactive, and data-informed learning environments. IoT applications include smartboards, connected projectors, attendance tracking systems, cloud-based learning platforms, and assistive devices that promote personalized instruction and real-time analytics. As digital learning accelerates, driven by growing demand for remote and hybrid classrooms, educational institutions are adopting IoT technologies to enhance engagement, optimize administrative tasks, and improve academic performance. The role of IoT is expanding beyond traditional learning, offering capabilities such as energy efficiency, asset monitoring, and support for students with disabilities. Increasing investment from governments and private stakeholders in digital infrastructure is further reinforcing the growth of this sector globally.

Key Market Drivers

Rising Demand for Data Driven Personalized Learning

Educational institutions are leveraging IoT-based systems to enable personalized learning through data-driven insights. Connected devices such as wearables and smart sensors continuously monitor student interaction, engagement levels, and academic performance. These inputs allow educators to customize content, offer adaptive feedback, and address individual learning needs in real time. Personalized instruction enhances student outcomes, supports inclusive education, and helps institutions demonstrate measurable academic improvement—beneficial for securing funding and improving reputation. In large-scale deployments, such as a recent initiative across a European school district, data from over 25,000 students showed an 18% average improvement in test scores with adaptive feedback tools. Teachers also reported a 22% reduction in administrative workload, reallocating significant time toward planning and individualized instruction. The shift toward customized learning pathways powered by IoT is becoming a cornerstone in modern education strategies, particularly within K–12 and higher education ecosystems.

Key Market Challenges

High Infrastructure Costs and Budgetary Constraints

The adoption of IoT technologies in education requires significant financial investment. Upgrading legacy infrastructure to support internet-connected devices, smart classrooms, and real-time data systems demands substantial capital, which many public and underfunded institutions struggle to secure. Costs extend beyond hardware to include cloud services, cybersecurity, maintenance, and training. These recurring expenses pose challenges for long-term sustainability, especially where budgets are constrained by rising operational costs and limited technology funding. Additionally, the lack of dedicated and consistent funding streams hinders strategic planning for digital transformation. Many institutions remain hesitant to invest in IoT initiatives that require continuous updates or scaling, particularly when return on investment is uncertain. As a result, disparities emerge between well-funded institutions and those lacking the resources to pursue smart education goals, slowing broader market adoption and creating gaps in access and innovation.

Key Market Trends

Integration of Artificial Intelligence with IoT for Adaptive Learning

A key trend shaping the IoT in Education Market is the integration of Artificial Intelligence (AI) to create adaptive, responsive learning systems. IoT devices capture data on how students learn, while AI analyzes this data to personalize content and predict learning outcomes. These systems automatically adjust learning materials, issue alerts for intervention, and provide educators with actionable insights. The combination of AI and IoT enables a proactive educational model, shifting educators from content delivery roles to facilitators of individualized support. Institutions are also employing predictive analytics to identify students at risk of academic decline based on changes in engagement or participation. As cloud-native platforms and intelligent sensors evolve, this convergence is expected to deliver more sophisticated and scalable solutions, supporting a shift toward continuous, personalized education across learning environments.

Key Market Players

Cisco Systems, Inc.

Microsoft Corporation

Samsung Electronics Co., Ltd.

IBM Corporation

Huawei Technologies Co., Ltd.

Dell Technologies Inc.

Blackboard Inc.

SAP SE

Report Scope:

In this report, the Global IoT in Education Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

IoT in Education Market, By Component:

Hardware

Software

Services

Platforms

IoT in Education Market, By Application:

Smart Classrooms

Learning Management Systems

Virtual Labs

Student Attendance Management

Performance Tracking

IoT in Education Market, By End User:

K-12 Schools

Higher Education Institutions

Vocational Training Centers

Corporate Training

IoT in Education Market, By Region:

North America

United States

Canada

Mexico

Europe

Germany

France

United Kingdom

Italy

Spain

Asia Pacific

China

India

Japan

South Korea

Australia

Middle East & Africa

Saudi Arabia

UAE

South Africa

South America

Brazil

Colombia

Argentina

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global IoT in Education Market.

Available Customizations:

Global IoT in Education Market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

Contents

1. SOLUTION OVERVIEW

- 1.1. Market Definition
- 1.2. Scope of the Market
 - 1.2.1. Markets Covered
 - 1.2.2. Years Considered for Study
 - 1.2.3. Key Market Segmentations

2. RESEARCH METHODOLOGY

- 2.1. Objective of the Study
- 2.2. Baseline Methodology
- 2.3. Key Industry Partners
- 2.4. Major Association and Secondary Sources
- 2.5. Forecasting Methodology
- 2.6. Data Triangulation & Validation
- 2.7. Assumptions and Limitations

3. EXECUTIVE SUMMARY

- 3.1. Overview of the Market
- 3.2. Overview of Key Market Segmentations
- 3.3. Overview of Key Market Players
- 3.4. Overview of Key Regions/Countries
- 3.5. Overview of Market Drivers, Challenges, and Trends

4. VOICE OF CUSTOMER

5. GLOBAL IOT IN EDUCATION MARKET OUTLOOK

- 5.1. Market Size & Forecast
 - 5.1.1. By Value
- 5.2. Market Share & Forecast
 - 5.2.1. By Component (Hardware, Software, Services, Platforms)
 - 5.2.2. By Application (Smart Classrooms, Learning Management Systems, Virtual Labs, Student Attendance Management, Performance Tracking)
 - 5.2.3. By End User (K-12 Schools, Higher Education Institutions, Vocational Training)

Centers, Corporate Training)

5.2.4. By Region (North America, Europe, South America, Middle East & Africa, Asia Pacific)

5.3. By Company (2024)

5.4. Market Map

6. NORTH AMERICA IOT IN EDUCATION MARKET OUTLOOK

6.1. Market Size & Forecast

6.1.1. By Value

6.2. Market Share & Forecast

6.2.1. By Component

6.2.2. By Application

6.2.3. By End User

6.2.4. By Country

6.3. North America: Country Analysis

6.3.1. United States IoT in Education Market Outlook

6.3.1.1. Market Size & Forecast

6.3.1.1.1. By Value

6.3.1.2. Market Share & Forecast

6.3.1.2.1. By Component

6.3.1.2.2. By Application

6.3.1.2.3. By End User

6.3.2. Canada IoT in Education Market Outlook

6.3.2.1. Market Size & Forecast

6.3.2.1.1. By Value

6.3.2.2. Market Share & Forecast

6.3.2.2.1. By Component

6.3.2.2.2. By Application

6.3.2.2.3. By End User

6.3.3. Mexico IoT in Education Market Outlook

6.3.3.1. Market Size & Forecast

6.3.3.1.1. By Value

6.3.3.2. Market Share & Forecast

6.3.3.2.1. By Component

6.3.3.2.2. By Application

6.3.3.2.3. By End User

7. EUROPE IOT IN EDUCATION MARKET OUTLOOK

- 7.1. Market Size & Forecast
 - 7.1.1. By Value
- 7.2. Market Share & Forecast
 - 7.2.1. By Component
 - 7.2.2. By Application
 - 7.2.3. By End User
 - 7.2.4. By Country
- 7.3. Europe: Country Analysis
 - 7.3.1. Germany IoT in Education Market Outlook
 - 7.3.1.1. Market Size & Forecast
 - 7.3.1.1.1. By Value
 - 7.3.1.2. Market Share & Forecast
 - 7.3.1.2.1. By Component
 - 7.3.1.2.2. By Application
 - 7.3.1.2.3. By End User
 - 7.3.2. France IoT in Education Market Outlook
 - 7.3.2.1. Market Size & Forecast
 - 7.3.2.1.1. By Value
 - 7.3.2.2. Market Share & Forecast
 - 7.3.2.2.1. By Component
 - 7.3.2.2.2. By Application
 - 7.3.2.2.3. By End User
 - 7.3.3. United Kingdom IoT in Education Market Outlook
 - 7.3.3.1. Market Size & Forecast
 - 7.3.3.1.1. By Value
 - 7.3.3.2. Market Share & Forecast
 - 7.3.3.2.1. By Component
 - 7.3.3.2.2. By Application
 - 7.3.3.2.3. By End User
 - 7.3.4. Italy IoT in Education Market Outlook
 - 7.3.4.1. Market Size & Forecast
 - 7.3.4.1.1. By Value
 - 7.3.4.2. Market Share & Forecast
 - 7.3.4.2.1. By Component
 - 7.3.4.2.2. By Application
 - 7.3.4.2.3. By End User
 - 7.3.5. Spain IoT in Education Market Outlook
 - 7.3.5.1. Market Size & Forecast

- 7.3.5.1.1. By Value
- 7.3.5.2. Market Share & Forecast
 - 7.3.5.2.1. By Component
 - 7.3.5.2.2. By Application
 - 7.3.5.2.3. By End User

8. ASIA PACIFIC IOT IN EDUCATION MARKET OUTLOOK

- 8.1. Market Size & Forecast
 - 8.1.1. By Value
- 8.2. Market Share & Forecast
 - 8.2.1. By Component
 - 8.2.2. By Application
 - 8.2.3. By End User
 - 8.2.4. By Country
- 8.3. Asia Pacific: Country Analysis
 - 8.3.1. China IoT in Education Market Outlook
 - 8.3.1.1. Market Size & Forecast
 - 8.3.1.1.1. By Value
 - 8.3.1.2. Market Share & Forecast
 - 8.3.1.2.1. By Component
 - 8.3.1.2.2. By Application
 - 8.3.1.2.3. By End User
 - 8.3.2. India IoT in Education Market Outlook
 - 8.3.2.1. Market Size & Forecast
 - 8.3.2.1.1. By Value
 - 8.3.2.2. Market Share & Forecast
 - 8.3.2.2.1. By Component
 - 8.3.2.2.2. By Application
 - 8.3.2.2.3. By End User
 - 8.3.3. Japan IoT in Education Market Outlook
 - 8.3.3.1. Market Size & Forecast
 - 8.3.3.1.1. By Value
 - 8.3.3.2. Market Share & Forecast
 - 8.3.3.2.1. By Component
 - 8.3.3.2.2. By Application
 - 8.3.3.2.3. By End User
 - 8.3.4. South Korea IoT in Education Market Outlook
 - 8.3.4.1. Market Size & Forecast

- 8.3.4.1.1. By Value
- 8.3.4.2. Market Share & Forecast
 - 8.3.4.2.1. By Component
 - 8.3.4.2.2. By Application
 - 8.3.4.2.3. By End User
- 8.3.5. Australia IoT in Education Market Outlook
 - 8.3.5.1. Market Size & Forecast
 - 8.3.5.1.1. By Value
 - 8.3.5.2. Market Share & Forecast
 - 8.3.5.2.1. By Component
 - 8.3.5.2.2. By Application
 - 8.3.5.2.3. By End User

9. MIDDLE EAST & AFRICA IOT IN EDUCATION MARKET OUTLOOK

- 9.1. Market Size & Forecast
 - 9.1.1. By Value
- 9.2. Market Share & Forecast
 - 9.2.1. By Component
 - 9.2.2. By Application
 - 9.2.3. By End User
 - 9.2.4. By Country
- 9.3. Middle East & Africa: Country Analysis
 - 9.3.1. Saudi Arabia IoT in Education Market Outlook
 - 9.3.1.1. Market Size & Forecast
 - 9.3.1.1.1. By Value
 - 9.3.1.2. Market Share & Forecast
 - 9.3.1.2.1. By Component
 - 9.3.1.2.2. By Application
 - 9.3.1.2.3. By End User
 - 9.3.2. UAE IoT in Education Market Outlook
 - 9.3.2.1. Market Size & Forecast
 - 9.3.2.1.1. By Value
 - 9.3.2.2. Market Share & Forecast
 - 9.3.2.2.1. By Component
 - 9.3.2.2.2. By Application
 - 9.3.2.2.3. By End User
 - 9.3.3. South Africa IoT in Education Market Outlook
 - 9.3.3.1. Market Size & Forecast

9.3.3.1.1. By Value

9.3.3.2. Market Share & Forecast

9.3.3.2.1. By Component

9.3.3.2.2. By Application

9.3.3.2.3. By End User

10. SOUTH AMERICA IOT IN EDUCATION MARKET OUTLOOK

10.1. Market Size & Forecast

10.1.1. By Value

10.2. Market Share & Forecast

10.2.1. By Component

10.2.2. By Application

10.2.3. By End User

10.2.4. By Country

10.3. South America: Country Analysis

10.3.1. Brazil IoT in Education Market Outlook

10.3.1.1. Market Size & Forecast

10.3.1.1.1. By Value

10.3.1.2. Market Share & Forecast

10.3.1.2.1. By Component

10.3.1.2.2. By Application

10.3.1.2.3. By End User

10.3.2. Colombia IoT in Education Market Outlook

10.3.2.1. Market Size & Forecast

10.3.2.1.1. By Value

10.3.2.2. Market Share & Forecast

10.3.2.2.1. By Component

10.3.2.2.2. By Application

10.3.2.2.3. By End User

10.3.3. Argentina IoT in Education Market Outlook

10.3.3.1. Market Size & Forecast

10.3.3.1.1. By Value

10.3.3.2. Market Share & Forecast

10.3.3.2.1. By Component

10.3.3.2.2. By Application

10.3.3.2.3. By End User

11. MARKET DYNAMICS

- 11.1. Drivers
- 11.2. Challenges

12. MARKET TRENDS AND DEVELOPMENTS

- 12.1. Merger & Acquisition (If Any)
- 12.2. Product Launches (If Any)
- 12.3. Recent Developments

13. COMPANY PROFILES

- 13.1. Cisco Systems, Inc.
 - 13.1.1. Business Overview
 - 13.1.2. Key Revenue and Financials
 - 13.1.3. Recent Developments
 - 13.1.4. Key Personnel
 - 13.1.5. Key Product/Services Offered
- 13.2. Microsoft Corporation
- 13.3. Samsung Electronics Co., Ltd.
- 13.4. IBM Corporation
- 13.5. Huawei Technologies Co., Ltd.
- 13.6. Dell Technologies Inc.
- 13.7. Blackboard Inc.
- 13.8. SAP SE

14. STRATEGIC RECOMMENDATIONS

15. ABOUT US & DISCLAIMER

I would like to order

Product name: IoT in Education Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, By Component (Hardware, Software, Services, Platforms), By Application (Smart Classrooms, Learning Management Systems, Virtual Labs, Student Attendance Management, Performance Tracking), By End User (K-12 Schools, Higher Education Institutions, Vocational Training Centers, Corporate Training), By Region, By Competition 2020-2030F

Product link: <https://marketpublishers.com/r/I0D28DC7C295EN.html>

Price: US\$ 4,500.00 (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/I0D28DC7C295EN.html>