IoT in Construction Market Expected to Reach $44.2 Billion | Trimble, Pillar, Hilti, Topcon, Oracle Corporation

rise in application in different sectors such as construction & infrastructure development & urbanization industrial development sector is driving the market

WILMINGTON, DE, UNITED STATES, December 16, 2024 /EINPresswire.com/ -- IoT in Construction Market Analysis

A report by Allied Market Research titled ["IoT in Construction Market"](#) reveals that the IoT in construction market was valued at $11.2 billion in 2021. It is projected to grow to $44.2 billion by 2031, registering a compound annual growth rate (CAGR) of 14.6% from 2022 to 2031.

Download PDF Sample Copy: https://www.alliedmarketresearch.com/request-sample/A07565

Purpose and Functionality of IoT in Construction
The primary objective of IoT in the construction industry is to optimize resource use, adopt advanced technical approaches, and manage costs efficiently. IoT serves as a platform that integrates electronic hardware and software to monitor and manage operations in real-time. Connected devices such as sensors, drones, CCTV cameras, and RFID tags enable seamless coordination of inventories, equipment, and workforce on construction sites.

IoT technologies provide real-time data on workers, equipment, and site activities. RFID tags and sensors on materials enhance workflows, improve equipment maintenance, and allow proactive ordering of materials. These innovations contribute to minimizing downtime, enhancing time management, and saving costs.

Industry Insights and Technological Advancements
Research conducted by McGraw Hill Construction found that 97% of contractors using Building Information Modeling (BIM) in Japan reported a positive return on investment (ROI). To strengthen their market presence, key players are focusing on acquisitions and product launches.

For instance, Hexagon AB acquired iConstruct Pty Ltd in September 2022, a BIM software developer. iConstruct Pro allows integration of design and construction information into a single 3D model, enhancing data accessibility and automation. Businesses adopting such technologies

reported significant outcomes: a 41% reduction in errors, 21% improvement in project estimation, 23% better waste management, and a 31% decrease in rework.

In October 2021, Hilti Corporation launched Jaibot, a semi-autonomous ceiling drilling robot aimed at improving productivity and addressing labor shortages. The use of BIM and IoT technologies like Jaibot drives efficiency, productivity, and overall growth in the IoT construction market.

Challenges and Limitations

Despite the promising benefits, IoT adoption in construction faces challenges. Cybersecurity is a significant concern as IoT systems and connected devices are prone to targeted cyberattacks. These breaches can compromise data integrity and confidentiality, leading to reputational harm, legal repercussions, and potential fines.

Additionally, the COVID-19 pandemic disrupted supply chains globally, halting logistics and manufacturing activities. This significantly impacted the growth of IoT in construction. However, with governments easing restrictions, the industry is gradually recovering.

Sustainability and Waste Management

The construction industry is a major consumer of natural resources and a substantial contributor to global carbon emissions, mainly due to the extensive use of cement and other materials. Traditional waste management approaches focus on post-production waste control. However, IoT technologies integrated with BIM offer an alternative by enabling resource planning and waste minimization during the early stages of project design and planning.

Data-driven decision-making through IoT systems can prevent excessive waste generation and promote sustainable construction practices. By optimizing resources and reducing waste, IoT helps drive sustainable growth in the construction sector.

Purchase Enquiry: https://www.alliedmarketresearch.com/purchase-enquiry/A07565

Market Trends and Insights

Key findings from the report highlight emerging trends and insights in the IoT in construction market:

Application: Predictive maintenance was the leading segment in 2021.
Component: The services segment is projected to grow at the highest CAGR during the forecast period.
End User: The non-residential sector generated the highest revenue in 2021.
Regional Insights: Asia-Pacific accounted for the largest market share in 2021.

David Correa
Allied Market Research

+ 1 800-792-5285
email us here
Visit us on social media:
Facebook
X

This press release can be viewed online at: https://www.einpresswire.com/article/769361823