Report Information

More information from: https://www.marketresearchfuture.com/reports/smart-building-market-1860

Smart Building Market Research Report - Forecast till 2032

Report / Search Code: MRFR/SEM/1328-CR **Publish Date:** February, 2024

Request Sample

Price	1-user PDF : $ 4950.0	Site PDF : $ 5950.0	Enterprise PDF : $ 7250.0

Description:

Global Smart Buildings Market Overview

Smart Buildings Market Size was valued at USD 109120.2 Million in 2023. The Smart Buildings market industry is projected to grow from USD 129525.6774 Million in 2024 to USD 509007.5 Million by 2032, exhibiting a compound annual growth rate (CAGR) of 18.66% during the forecast period (2024 – 2032). The global Smart Building market is consistently growing due to the Increasing advancements in Smart Building and government support driving market growth across globe and technological advancement within the building industry. Smart buildings provide a great amount of useful building data regarding how they are used. Analyzing this data can provide insight into usage patterns and trends, allowing you to make educated decisions about how to improve your building, resulting in the following benefits.

Figure1: Smart Buildings Market, 2018 - 2032 (USD Million)

Smart Buildings Market

Source: Secondary Research, Primary Research, MRFR Database, and Analyst Review

Smart Buildings Market Driver

- ### Growing Need for Energy Efficient Building

Energy efficiency is a key factor for the sustainable development of a country. Due to the increasing global warming and government stringency, measures are increasingly being taken to reduce energy consumption as well as carbon pollution. The building sector accounts for a significant percentage of the world's total energy consumption. According to a survey conducted by the International Energy Agency (IEA), the global building sector consumes 42% of the total generated electricity. With the increasing urbanization in developing countries, the number and size of smart buildings is expected to increase leading to an increased demand for energy-efficient building solutions.

The growing concerns of increasing energy consumption worldwide are expected to fuel more advanced and energy-efficient technology. For instance, as per the lot and smart building report of IBM Corporation, commercial and real estate buildings utilize 50% water and energy. The report further states that buildings are expected to consume maximum energy by the end of 2025. Similarly, according to Schneider Electric Whitepaper, 36% of carbon emission comes from buildings. This high consumption and wastages exponentially increase the overall cost of operations and maintenance. However, strict governance on energy consumption and green building initiatives boost the demand for energy efficient technology across buildings. This factor is expected to propel the implementation of intelligent building solutions globally. According to the IBM Corporation report, implementing advanced technology, including AI, IoT, and others helped reduce energy usage by 40% and 10%-30% maintenance costs. Similarly, as per Deloitte's report, the implementation of smart technology and lot devices witnessed 70% energy saving in three years. This factor is expected to fuel the smart building market growth. In October 2021, the U.S. Department of Energy (DOE) announced USD 61 million in funding for ten pilot projects using new technology to transform thousands of homes and workplaces into cutting-edge, energy-efficient structures. These Connected Communities can interact with the electrical grid to optimize their energy consumption, significantly reducing carbon emissions and energy costs.

Smart Buildings Market Automation Segment Insights

Smart Buildings Automation Insights

Based on the Automation, the global Smart Building market is segmented into IntelligentSecurity System, Building Energy Management System, Infrastructure Management System, and Network Management System. The Building Energy Management System segment held the majority share in 2022, contributing around ~ 38.2% to the market revenue. A building energy management system (BEMS) is a sophisticated method for monitoring and controlling the energy needs of a structure. Buildings use energy to perform various operations such as heating, ventilation, and air-conditioning. This energy accounts for a high operating expense. Therefore, smart buildings are equipped with energy management systems which monitor, measure, and manage energy consumption and increase operational efficiency, reducing energy wastage and operation cost, and providing various environmental and sustainability benefits. A building energy management system has been sub-segmented into energy management platform, HVAC control system, and lighting control system.

Security intelligence is the process of collecting, standardizing, and analyzing data created in real time by networks, apps, and other IT infrastructure, and then using that information to assess and improve an intelligent building's security posture. Smart buildings are equipped with intelligent security systems which provide physical security solutions to the buildings using video surveillance systems, access control systems, and emergency management systems that deliver overall security to the assets and infrastructure of the building from various security threats, suspicious activities, vandalism, thefts, and break-ins. Intelligent security systems are further sub-segmented into video-surveillance systems, access control systems, and energy management systems.

Figure2: Smart Buildings Market, by Automation, 2022 & 2032 (USD Million)

Smart Buildings Market, by Automation, 2022 & 2032

Source: Secondary Research, Primary Research, MRFR Database, and Analyst Review

Smart Buildings Market Application Segment Insights

Smart Buildings Application Insights

Based on the Application, the global Smart Building market is segmented into Commercial, Industrial, Government & Public Infrastructure, and Residential. The Commercial segment held the majority share in 2022, contributing around ~ 46.24% to the market revenue. Commercial offices, shopping complexes, and hotels that are smart are outfitted with building automation systems such as intelligent security systems, infrastructure management systems, and energy management systems. The adoption of smart buildings in the commercial segment is more as compared to residential and industrial segments. Commercial spaces have been the early adopters of smart buildings and contribute to the significant market share. Building operating cost is the second highest expenditure of commercial businesses after employee salaries.

Smart industrial buildings reduce environmental impact, boost staff productivity, raise output, safeguard occupant health and safety, and promote operational efficiency by integrating security services, building automation, surveillance, and technology. Smart industrial buildings are generally equipped with improved building system controls, integration of systems, and enterprise management features. Industry buildings require a controlled environment and high amount of energy for its operations. Therefore, smart buildings provide industries a controlled environment and contribute to social development by making industry workspace safer and healthier. Manufacturing industries such as steel and iron plants have the most hazardous working environments; smart buildings can improve the working conditions by providing proper air-conditioning, medical technology, and safety protocols.

Smart Buildings Regional Insights

Based on region, the global Smart Building market is segmented into North America, Europe, Asia-Pacific, and Rest of the World (ROW). North America accounted for highest market share of 36.87%. North America consists of US, Canada and Mexico. Smart building solutions are being used and accepted more frequently in the area. The large number of early adopters in the United States and Canada account for a sizeable portion of the market share in North America. Due to its developed infrastructure that can support smart automation solutions in the residential and commercial segments, the region is anticipated to dominate the global market over the time of the forecast.

Innovative door-related products such as access control systems, smart door locks, safety systems, and other door hardware accessories are considered in the smart building market. The necessity for innovative/intelligent security system components to deter theft has been prompted by increased crimes, including robbery and burglary at residential and commercial properties. For instance, the European Union records at least one burglary every 1.5 minutes, with some Member States recording 1,000 burglaries virtually every day, according to the European Union Agency for Law Enforcement Cooperation. Thus, the proliferation of smart building technologies in European nations is fueled by growing security and privacy concerns and the IoT trend. The need for smart building solutions is expanding quickly across Europe. In Europe, the Netherlands, Spain, France, Germany, Italy, and the United Kingdom are the top countries for linked device adoption.

Further, the major countries studied in the market report are the U.S., Canada, Germany, France, the UK, Italy, Spain, China, Japan, India, Australia, South Korea, and Brazil.

The Asia Pacific market participants also aim to improve the smart building services by creating IoT-enabled building management systems throughout the region. China, India and Japan are essential players in the development of regional technology. For instance, their businesses are heavily investing in smart building activities like the incorporation of building systems and building controls to influence energy efficiency and energy storage and to distribute safer, smarter, and more sustainably constructed buildings. Rest of the World consists of Middle East and Africa and South America. Due to the rising need for energy-efficient smart building solutions, the Middle East and Africa are experiencing high growth rates. Additionally, the area tends to cut carbon emissions and uses intelligent technologies to achieve it. The UAE is one of the sustainable cities that has embraced green building and smart infrastructure programs.

Smart Buildings Key Market Players & Competitive Insights

With a strong presence across different verticals and geographies, the Smart Buildings market is highly competitive and dominated by established, pure-play vendors. Over 10 vendors cater to this market, and they continually innovate their solutions to meet the evolving needs of businesses by adopting new technologies to make business more effective. These vendors have a robust geographic footprint and partner ecosystem to cater to diverse customer segments. The Smart Buildings market is highly competitive, with many vendors offering similar products and services.

The major players in the market include Control4 Corporation (Snap One, LLC), HCL Technologies Limited, Panasonic Corporation, Advantech Co. Ltd, Johnson Controls International PLC, Hitachi Ltd, Sony Corporation, IBM Corporation, Cisco Systems, Honeywell International, Inc., Emerson Electric Co, Overkiz, ABB Group, Huawei Technologies Co. Ltd, and Siemens AG. HCL has strategic partnerships and alliances with global technology vendors, customers, and niche solution providers. The company has alliances with approximately 150 companies in various technology areas including go-to-market alliances, partnerships for specific customer requirements, and specialist partnerships for niche technologies. It has strategic partnerships with digital technology providers, including Adobe, Appian, MuleSoft, Pegasystems, Apigee, AWS, Hortonworks, and Celonis. The company invested in an alliance partner center of excellence (CoEs), which builds solution frameworks and accelerators. HCL also invests in joint solutions with partners to create solutions for customers. HCL's global strategic alliances include Microsoft, Cisco, Dell EMC, SAP, HPE, Oracle, IBM, TIBCO, and Infor.

The Smart Buildings Market is a consolidated market due to increasing competition, acquisitions, mergers, and other strategic market developments and decisions to improve operational effectiveness.

Key Companies in the Smart Buildings market include

- Control4 Corporation (Snap One, LLC)
- HCL Technologies Limited
- Panasonic Corporation
- Advantech Co. Ltd
- Johnson Controls International PLC
- Hitachi Ltd
- Sony Corporation
- IBM Corporation
- Cisco Systems
- Honeywell International, Inc.
- Emerson Electric Co
- Overkiz
- ABB Group
- Huawei Technologies Co. Ltd
- Siemens AG

Smart Buildings Industry Developments

- In October 2022, Overkiz launched Kizconnect. The newly launched Kizconnect stands out within the market due to its technical specifications. One of these features is a DIN Rail gateway with one-click wiring, a living room gateway with embedded WiFi, pairing in just a few clicks from the Pro app, as well as the ability to manage and create scenarios involving multiple products and brands with the user app.
- In January 2022, Honeywell and Acalvio Technologies had launched a new solution designed to detect known and unknown (zero-day) attacks across the operational technology (OT) environments in commercial buildings. Honeywell Threat Defense Platform (HTDP) powered by Acalvio employs sophisticated active defense – featuring autonomous deception tactics to outsmart attackers – and provides high-fidelity threat detection.
- In June 2022, Honeywell launched its new Carbon & Energy Management, a carbon energy management software that enables building owners to track and optimise energy performance against carbon reduction goals down to a device or asset level.

Smart Buildings Market Segmentation:

Smart Buildings Automation Outlook

- Intelligent Security System
- Building Energy Management System
- Infrastructure Management System
- Network Management System

Smart Buildings Application Outlook

- Commercial
- Industrial
- Government & Public Infrastructure
- Residential

Smart Buildings Regional Outlook

- North America
    - US
    - Canada

- Europe
    - Germany
    - France
    - UK
    - Italy
    - Spain
    - Rest of Europe

- Asia-Pacific
    - China
    - Japan
    - India
    - Australia
    - South Korea
    - Rest of Asia Pacific
    - Middle East & Africa
    - Saudi Arabia
    - UAE
    - South Africa
    - Rest of Middle East & Africa

- South America
    - Brazil
    - Argentina
    - Rest of South America

Table of Content:

Contents

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES