

Smart Railways Market by Offering (Solutions (Rail Asset Management and Maintenance, Operation and Control, Communication and Networking, Security and Safety, Rail Analytics) and Services (Professional and Managed)) Region - Global Forecast to 2027

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Abstracts

MarketsandMarkets projects the smart railways market to grow from USD 28.9 billion in 2022 to USD 43.0 billion by 2027 at a Compound Annual Growth Rate (CAGR) of 8.3% during the forecast period. The requirement for urban connectivity is predicted to expand along with the integration of IoT-based solutions and the increased focus on emissions reduction, which will all contribute to the growth of the smart railway system. Providing appropriate transit capacity for rising volumes of products and people necessitates the introduction of smart solutions. Truly integrated and intermodal transport systems are anticipated to be made possible by trends including machine-to-machine technology, using embedded sensors, increasing computing power, and incorporating Big Data and the Internet of Things.

By offering, the solutions segment to account for a higher market share during the forecast period

A pivotal role is played by solutions in handling all railway operations-related activities that include entry, marking, handling, processing, and transit of goods from the supplier end to the manufacturing site and eventually to the consumer. The growing need to improve efficiency, reduce emissions, and minimize costs and productivity is driving the growth of the solutions segment. The solutions autonomously support the technician and other personnel in reducing traffic congestion, efficiently signaling over traffic, and managing ticket collection and monitoring security systems leading to a higher degree of competence and reduced expenses.

By services, the professional service segment to hold the largest market size in 2022

Professional services offer support services to clients involved in technical projects. These services include consulting, system integration and deployment, training, support, and maintenance. Professional services are growing at a steady pace in the smart railway sector; with the rapid digitization and adoption rates of these cutting-edge technologies, to increase efficiency and reduce expenses, personnel operating these machineries require support from external technological experts. As the adoption of technology-based solutions is steadily growing, the demand for smart railways services will grow proportionally.

By region, Asia Pacific to grow at the highest CAGR during the forecast period

During the forecast period, Asia Pacific is estimated to be the fastest-growing region in terms of the growth of the smart railways market, with the growing adoption of upcoming and state-of-the-art technologies, larger investments in digitization, and the growth in the Gross Domestic Product of the APAC countries. In order to boost engagement in public-private partnership initiatives for the smart railway system, several Chinese banks have partnered together. Japan is also attempting to incorporate smart solutions in upcoming projects and revamps, such as leveraging artificial intelligence to provide a customized concierge service for travelers. The high population growth rate in the region has also fueled the need to transform and expand the existing rail infrastructure.

Chief Executive Officers (CEOs), marketing directors, innovation and technology directors, and executives from several prominent firms engaged in the smart railways market participated in in-depth interviews.

The breakup of the profiles of the primary participants is given below:

By Company Type: Tier 1 – 35%, Tier 2 – 39%, and Tier 3 – 26%

By Designation: C-Level Executives– 33%, Director Level – 25%, and Managers–42%

By Region: North America – 38%, Europe – 20%, APAC – 30%, and Rest of the World – 12%

The following smart railways market vendors are profiled in the report:

Alstom (France), Cisco (US), Wabtec (US), ABB (Switzerland), IBM (US), Hitachi (Japan), Huawei (China), Indra Sistemas (Spain), Siemens (Germany), Honeywell (US), Thales (France), Advantech (Taiwan), Fujitsu (Japan), Toshiba (Japan), Alcatel-Lucent Enterprise (France), Moxa (Taiwan), EKE-Electronics (Finland), Televic (Belgium), Uptake (US), Eurotech (Italy), Tego (US), KONUX (Germany), Aitek S.p.A (Italy), Assetic (Australia), Machines With Vision (UK), Delphisonic (US), Passio Technologies (US), Cloud MOYO (US), and Chemito (India).

Research Coverage

The smart railways market is segmented by offering (solutions and services) and region. A detailed analysis of the key industry players has been undertaken to provide insights into their business overviews; services; key strategies; new services and product launches; partnerships, agreements, collaborations; business expansions; and competitive landscape associated with the smart railways market.

Reasons to Buy the Report

The report would help the market leaders and new entrants in the following ways:

It comprehensively segments the smart railways market and provides the closest approximations of the revenue numbers for the overall market and its subsegments across different regions.

It would help stakeholders understand the pulse of the market and provide information on the key market drivers, restraints, challenges, and opportunities in the market.

It would help stakeholders understand their competitors better and gain more insights to enhance their positions in the market. The competitive landscape section includes the competitor ecosystem, new service developments, partnerships, and acquisitions.

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About

The concept smart railway implies a set of new generation solutions, services and modern transportation with the help of Information and Communication Technology (ICT).

It combines software products to make more intelligent use of all rail assets, from tracks to trains, so companies can meet the increasing consumer demand for more efficient and safer services. Trends like regulation, sustainability, demographics (growing traffic and ageing population), economics (limited public funding and price sensitivity), mobility and Information Technology (IT) innovations are impacting the rail industry. As a result, every aspect of the value chain—from passenger service to the back-end organization—is changing.

The main long-term drivers of the railway market are linked to economic and demographic growth in the emerging markets. In mature markets, they are related to the renewal and up gradation of existing infrastructures, as well as increased environmental and sustainability awareness. In spite of the recent global economic downturn with slower growth and governments' mounting deficits, the long-term outlook for the railway industry remains positive, with investments in rail and urban transport projects not being significantly impacted.

The future rail industry is expected to rely upon smarter transportation systems that leverage technologies over larger rail network infrastructure. New technologies include integrated service management solutions, asset management software and predictive analytic tools are expected to help rail management companies to manage optimal routes, schedules and capacity in near real-time.

With the increasing presence of smart technologies in the rail transportation, the associated solutions and services market will grow at higher growth rates globally. The emerging technologies such as smart ticketing, rail analytics, cloud adoption, smart traffic and operation solutions will enable efficient and better rail infrastructure.

It will also improve timely decision-making for such issues such as asset deployment, utilization and maintenance. The high growth rate in the overall rail spending worldwide, with major boom from regional economies such as APAC, Europe and MEA, and the large number of ongoing and upcoming smart rail transportation projects worldwide are expected to create room for the smart rail systems. The global smart railways market is

estimated to grow from \$XX billion in 2013 to \$XX billion in 2018, at a Compound Annual Growth Rate (CAGR) of XX% during the forecast period.

The report outlines key trends that will shape the evolution of the passenger and freight rail industry. Smart railway infrastructure services and solutions are poised to catalyze the next phase of growth in the rail transportation industry. Smart railway transportation can drive the transformation of rail networks from a basic means of transport to complex systems that are indispensable to society.

Rail executives must strive to meet the demand for rail systems that are integrated into the global economy, competitive with other transportation systems and flexible enough to meet global trade and passenger demands. Smart rail infrastructure is expected to lead to an expanded rail ecosystem, asset optimization, new revenue model opportunities and new ways to serve customers.

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