Artificial Intelligence In Transportation Market: Segmented By Machine Learning (Deep Learning, Computer Vision, Context Awareness, NLP): By Application (Semi & Full-Autonomous, HMI, Platooning): By Offering (Hardware, Software): By Process (Signal Recognition, Object Recognition and Data Mining) Global Analysis by Market size, share & trends for 2020-2021 and forecasts to 2031

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Abstracts

[177+ Pages Research Report] Artificial Intelligence In Transportation Market to surpass USD 29.389 billion by 2031 from USD 1950.14 billion in 2021 at a CAGR of 25.36% within the coming years, i.e., 2021-31.

Product overview
Artificial Intelligence In Transportation can collect traffic information to reduce congestion and improve the preparation of public transport. Transport is influenced by traffic flow. AI will enable updated traffic patterns. Smarter traffic light procedures & real-time tracking can regulate higher and lower traffic patterns successfully. This can be applied to public transport for ideal development & routing. Artificial Intelligence is used in forecast & discovery of traffic accidents and conditions by changing traffic radars into intelligent agents using cameras, it is used in resolving switch & optimization problems, Autonomous Trucks have been started all over the world in current times Autonomous trucks will save expenses, lower emissions, and advance road safety as compared to traditional trucks with human drivers.

Market Highlights

Artificial Intelligence In Transportation Market is predicted to project a notable CAGR of 25.36% in 2031

The rapid use of AI and machine learning technology for device innovation such as self-driving cars, parking, and lane-change assists, and smart energy systems are extremely driving the AI in transportation market. Furthermore, the rising need for advanced transportation planning, data management, driver behavior, traffic signaling, and so on are soaring the growth of the market. These significant features are, therefore, fueling the growth of AI in transportation market during the forecast period.

Recent News and Development

In July 2020, Microsoft China broadcast strategic partnership with Human Horizons, an innovative mobility company for cooperatively developing an on-board AI assistant, HiPhiGo, for Human Horizons' premium smart all-electric vehicles, HiPhi.

Artificial Intelligence In Transportation Market: Segments
Deep Learning segment to grow with the highest CAGR during 2021-2031

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Platooning Segment to grow with the highest CAGR during 2021-2031

Artificial Intelligence in Transportation Market by Applications is segmented into Semi & Full-Autonomous, HMI, Platooning, and others. The market size of the Platooning segment is anticipated to grow at the highest CAGR during the forecast period. The rising environmental alarms, increasing fuel efficiency, stringent government regulations for emission, and concerns of traffic congestion have enhanced the growth of the truck platooning market. According to the Intelligent Transport Systems for Commercial Vehicles study by Ertico, platooning can reduce CO2 discharges by up to 16% from the

trailing vehicles and up to 8% from the lead vehicle, as the trucks drive closer together at a constant speed, with less rushing and braking.

Artificial Intelligence In Transportation Market: Market Dynamics
Drivers

Development of autonomous vehicle

The development of autonomous vehicles is a major factor in the growth of artificial intelligence in the transportation market. AI is new technology for autonomous driving systems because it is the only technology that allows reliable, real-time credit of objects around the vehicle. Currently, there are important investments to come in the automotive industry, mainly for the optimization of autonomous driving technology.

Growth of Traffic Management

Most of the countries are using advanced technologies for vigorous traffic management that include the sensors, devices and cameras joined everywhere on the road. These devices transmit vast amount of data about the traffic details that involves improved analysis. Thus, the data collected is sent to the cloud where data is analyzed and exposed with the help of an AI-powered system. Thus, the growing need to analyze and forecast the data collected through improved traffic management will further drive the AI in transportation market.

Restraints
Expensive bandwidth to power system

Artificial Intelligence-based systems are cloud-based, requiring expensive bandwidth to power the system. Moreover, it is a new technological solution that requires better training and skills, which integrated into high costs. These important challenges result in high operating costs for AI when used in transportation costs. Additionally, AI-powered machines include a variety of individual processors, relays, and other components that requires maintenance from time to time. All these factors hinder the market growth.

Impact of the COVID-19 on the Artificial Intelligence In Transportation Market

Since the COVID-19 virus outbreak in December 2019, the disease has spread to almost every country around the world with the WHO declaring it a public health emergency. The global impacts of the coronavirus disease 2019 are already starting to

be felt, and will significantly affect the Artificial Intelligence in the Transportation market in 2021. The outbreak of COVID-19 has brought effects on many features, like aircraft terminations; travel bans and quarantines; restaurants, cafes closed; all outdoor events restricted; over forty countries state of emergency declared; massive slowing of the supply chain; stock market instability; dropping business confidence, building panic among the population, and doubt about future.

Artificial Intelligence In Transportation Market: Key Players
Continental AG

Company Overview, Business Strategy, Key Product Offerings, Financial Performance, Key Performance Indicators, Risk Analysis, Recent Development, Regional Presence, SWOT Analysis

Robert Bosch GmbH
NVIDIA Corporation
Microsoft Corporation
Volvo Group
Diamler AG
Scania Groups
MAN SEPACCAR Inc.
ZF Friedrichshafen AG
Valeo SA
Intel Corporation
Alphabet Inc.
Other prominent players
Artificial Intelligence In Transportation Market: Regions
Artificial Intelligence In Transportation Market is segmented based on regional analysis into five major regions. These include North America, Latin America, Europe, Asia Pacific, and the Middle East, and Africa. North America is estimated to contribute the largest share of the Artificial Intelligence In Transportation Market during the forecast period. Moreover, a large number of players functioning in this region also influence to drive growth of the market in North America. Asia Pacific also holds a major share of the global market. The market in the region is also projected to register the highest CAGR during the forecast period.

Artificial Intelligence In Transportation Market is further segmented by region into:

North America Market Size, Share Trends, Opportunities, Y-o-Y Growth, CAGR-United

States and Canada

Latin America Market Size, Share Trends, Opportunities, Y-o-Y Growth, CAGR-Mexico, Argentina, Brazil, and Rest of Latin America

Europe Market Size, Share Trends, Opportunities, Y-o-Y Growth, CAGR- United Kingdom, France, Germany, Italy, Spain, Belgium, Hungary Luxembourg, Netherlands, Poland, NORDIC, Russia, Turkey and Rest of Europe

Asia Pacific Market Size, Share Trends, Opportunities, Y-o-Y Growth, CAGR-India, China, South Korea, Japan, Malaysia, Indonesia, New Zealand, Australia, and Rest of APAC

Middle East and Africa Market Size, Share Trends, Opportunities, Y-o-Y Growth, CAGR – North Africa, Israel, GCC, South Africa, and Rest of MENA

Artificial Intelligence In Transportation Market report also contains analysis on:

Artificial Intelligence In Transportation Market Segments:

By Machine Learning

Deep Learning

Computer Vision

Context Awareness

NLP

By Application

Semi & Full-Autonomous

HMI, Platooning

By Offering

Hardware

Software

By Process

Signal Recognition

Object Recognition

Data Mining

Artificial Intelligence In Transportation Market Dynamics

Artificial Intelligence In Transportation Market Size

Supply & Demand

Current Trends/Issues/Challenges

Competition & Companies Involved in the Market

Value chain of the Market

Market Drivers and Restraints

Artificial Intelligence In Transportation Market Report Scope and Segmentation

Report Attribute Details

Artificial Intelligence In Transportation Market: Segmented By Machine Learning (Deep Learning, Computer Visio...

Market size value in 2021 USD 3.066 billion

Revenue forecast in 2031 USD 29.389 billion

Growth Rate CAGR of 25.36% from 2021 to 2031

Base year for estimation 2021

Quantitative units Revenue in USD million and CAGR from 2021 to 2031

Report coverage Revenue forecast, company ranking, competitive landscape, growth factors, and trends

Segments covered Machine Learning, Application, Offering, Process and End-user

Region scope North America; Europe; Asia Pacific; Latin America; Middle East & Africa (MEA)

Key companies profiled

Robert Bosch GmbH, NVIDIA Corporation, Microsoft Corporation, Volvo Group, Daimler AG, Scania Groups

MAN SEPACCAR Inc., ZF Friedrichshafen AG, Valeo SA, Intel Corporation, Alphabet Inc.

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**The above given segmentations and companies could be subjected to further modification based on in-depth feasibility studies conducted for the final deliverable.

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