

Robot Cars and Trucks: Market Shares, Strategies, and Forecasts, Worldwide, 2015 to 2021

<https://marketpublishers.com/r/R42919BA892EN.html>

Date: March 2015

Pages: 413

Price: US\$ 4,000.00 (Single User License)

ID: R42919BA892EN

Abstracts

LEXINGTON, Massachusetts (March 26, 2015) – WinterGreen Research announces that it has published a new study Robot Cars and Trucks: Market Shares, Strategy, and Forecasts, Worldwide, 2015 to 2021. The 2015 study has 413 pages, 156 tables and figures. Worldwide markets are poised to achieve significant growth as robot cars and trucks permit users to implement automated driving. Fleet vehicles from Uber, Google and similar users are likely to be the early adopter groups.

IBM and Google are sure to be a significant software vendors for all the robot car and truck market participants. IBM has a huge head start with its excellent middleware branded integrated solutions that are hardened and reliable. Google has mindshare and early market success with its early market trials.

As automated process hits the auto industry as a disruptive force, it parallels the automated piloting of the airline industry that saw significant labor savings implementation. Automated vehicle driving can be done anywhere just by connecting the car to integrated adaptive cruise control, adaptive steering and braking, and lane assist systems all working off one central processor.

Robot cars and trucks incrementally add automated process to driving. As software is added to cars and trucks it is done in concert with modification to the steering, breaking, and other automotive systems. Autonomous functions for vehicles are increasingly adopted.

Change is incremental, we do not have fully functioning robot cars immediately, rather, steering, collision avoidance, parking, test driving, series of camera and radar based monitoring systems, lane assist, and adaptive cruise control are being implemented,

presaging rapid adoption of robot cars and trucks as the various functions mature and work in the real world.

According to Susan Eustis, team leader for the preparation of the study, “The market for robot car and truck vehicles is anticipated to expand in parallel with the deployment of appropriate roadway controls funded by government programs. The large public investments for robot vehicles so far has been for development of technology that works for military purposes. The extension of this type of automated system to commercial fleet vehicles will be rapid after 2020”

The robot car designs amalgamate a group of features to represent an automated process solution. These include the hardware, the software middleware, the steering system, adaptive cruise control, numerous software applications, an integrated systems approach, and related services. Significant investments in research and development are necessary as the emerging robot cars and trucks industry builds on incremental technology roll outs.

Robot car and truck commercial autonomous car market shipments forecasts indicate that markets beginning to develop in 2015 will rise to \$868 million by 2021. Growth is a result of various moves toward autonomous vehicles that park themselves, provide automated steering, are used as test vehicles, are used as mapping vehicles, and that provide driver alerts but fall sort of complete robotically operated car vehicles.

Market driving forces relate primarily to the need for increased safety and personalization for autos. Car manufacturers are positioning with robot car models to meet demand at the high end. Many robot vehicle car vendors are making automation for personal vehicles and trucks a reality.

WinterGreen Research is an independent research organization funded by the sale of market research studies all over the world and by the implementation of ROI models that are used to calculate the total cost of ownership of equipment, services, and software. The company has 35 distributors worldwide, including Global Information Info Shop, Market Research.com, Research and Markets, electronics.ca, Bloomberg, and Thompson Financial.

WinterGreen Research is positioned to help customers face challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust WinterGreen Research to work alongside them to ensure the success

of the participation in a particular market segment. WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

This robot car and truck shipment analysis is based on consideration of the metrics for the number of cars shipped, percent of cars outfitted with automated cruise control, and probable market penetrations of robot cars. Experience using the robot cars and trucks is another factor that contributes to development of triangulation regarding market forecasts for the sector.

Contents

ROBOT CARS AND TRUCKS EXECUTIVE SUMMARY

Robot Car and Truck Market Driving Forces

Robot Car and Truck Market Shares

Robot Car and Truck Market Forecasts

1. ROBOT CARS AND TRUCKS MARKET DEFINITION AND MARKET DYNAMICS

1.1 Advanced Technology

1.1.1 Adaptive Cruise Control

1.1.2 Driver-Assist Technologies

1.1.3 Ford Robotic Auto Control System

1.2 Legal Hurdles Remain

1.2.1 Robot Cars and Trucks Operation

1.2.2 Robot Cars and Trucks Technology Trends

1.2.3 Vehicle Sharing

1.3 Urban Move to Mega Cities

1.4 Robot Car Enabling Technologies

1.4.1 Sensor Processing

1.4.2 Machine Autonomy

2. ROBOT CARS AND TRUCKS MARKET SHARES AND MARKET FORECASTS

2.1 Robot Car and Truck Market Driving Forces

2.2 Robot Car and Truck Market Shares

2.2.1 Google

2.2.2 Google Self-Driving Car

2.2.3 Google Self-Driving Car from Auto Components

2.2.4 First Fully Autonomous Audi expected by 2017

2.2.5 Ford / Lincoln

2.2.6 Lincoln Adaptive Cruise Control

2.2.7 Tesla

2.2.8 Jaguar Driverless Cars

2.2.9 IBM

2.2.10 IBM / Ford Automotive Vehicle System M2M

2.2.11 Ford Robotically Controlled Vehicles On Test Track

2.2.12 Toyota Production LS 2013 Model Self-Driving Tools Technology

- 2.2.13 Hyundai Genesis Smart Cruise Control
- 2.2.14 Nissan
- 2.2.15 BMW
- 2.2.16 Daimler AG / Mercedes-Benz Self Driving Car
- 2.2.17 GM Chevrolet Impala 2015
- 2.2.18 Kairos Autonami Pronto4
- 2.3 Robot Car and Truck Market Forecasts
 - 2.3.1 Autonomous Vehicle Integration Software Market
 - 2.3.2 Advanced Autonomous Car Software
 - 2.3.3 Automotive Market Discussion
 - 2.3.4 Commercial Car Adaptive Cruise Control
- 2.4 Robot Car and Truck Regional Market Segments
 - 2.4.1 Ford North America
 - 2.4.2 Ford South America
 - 2.4.3 Ford Europe
 - 2.4.4 Ford Asia Pacific Africa
 - 2.4.5 Robot Car Regional Analysis

3. ROBOT CARS AND TRUCKS PRODUCT DESCRIPTION

- 3.1 Tesla
 - 3.1.1 Tesla Dual Motor Model S
 - 3.1.2 Tesla Hardware Safety Features
 - 3.1.3 Tesla Software Safety Features
 - 3.1.4 Tesla Model S
 - 3.1.5 Tesla Driverless Car Features
 - 3.1.6 Tesla Autopilot
 - 3.1.7 Tesla Autopilot Parking
 - 3.1.8 Tesla Safety
- 3.2 Google
 - 3.2.1 Google in Talks with Ford, Toyota and Volkswagen
 - 3.2.2 Google Self Driving Car
 - 3.2.3 Google Ride Sharing
- 3.3 Uber99
 - 3.3.1 Uber / Carnegie Mellon Partnership
 - 3.3.2 Uber Endorses Self-Driving Cars for Its Business
 - 3.3.3 Uber Ride Sharing App
- 3.4 Apple
 - 3.4.1 Apple Testing Auto-Pilot

3.5 IBM / Ford

- 3.5.1 IBM Addresses The Internet of Things
- 3.5.2 IBM Works With Ford On Self-Driving Cars
- 3.5.3 IBM / Ford Automotive Vehicle System M2M
- 3.5.4 Ford Leveraging IBM Partnership, Using Sensors
- 3.5.5 IBM Smarter Planet Strategy

3.6 Ford Self Driving Car

- 3.6.1 Ford Robotic Auto Control System
- 3.6.2 Ford Adaptive Cruise Control
- 3.6.3 Ford / Lincoln
- 3.6.4 Lincoln Adaptive Cruise Control
- 3.6.5 Lincoln Active Park Assist
- 3.6.6 Lincoln Lane-Keeping System
- 3.6.7 Lincoln Intelligent Access with Push-Button Start
- 3.6.8 Lincoln BLIS with Cross-Traffic Alert

3.7 Mercedes

- 3.7.1 Mercedes Self Driving Car Interior
- 3.7.2 Mercedes-Benz F 015
- 3.7.3 Mercedes-Benz Leads In Concept Cars: Safety Leads the Research
- 3.7.4 Daimler Robot Driving Truck

3.8 Nissan

- 3.8.1 Nissan and NASA Team Up To Build Zero-Emission Driverless Car
- 3.8.2 Nissan EPORO Robot Car

3.9 GM / Cadillac

3.10 Toyota

- 3.10.1 Toyota Lexus Division Modified Lexus LS Sedan.
- 3.10.2 Toyota Lexus Adaptive Cruise Control
- 3.10.3 Toyota: Automated Cars Won't Be Driverless Cars

3.11 Volkswagon / Audi / Porsche

- 3.11.1 First Fully Autonomous Audi Expected by 2017
- 3.11.2 Audi Self-driving Car Travels 550 Miles from San Francisco to Las Vegas
- 3.11.3 Volkswagen
- 3.11.4 Porsche / Volkswagen

3.12 Volvo

- 3.12.1 Volvo's Self-Parking, Driverless Car
- 3.12.2 Volvo Mobile App of the iPhone 'Park Now' Button

3.13 BMW

- 3.13.1 BMW Partially Automated Driving Functions
- 3.13.2 BMW Autonomous Car Safety Features

- 3.13.3 BMW Performance Limits Of Its Driverless Car
- 3.13.4 BMW's Driverless Cars in China
- 3.14 Subaru Adaptive Cruise Control
- 3.15 Honda
 - 3.15.1 Honda Self-Driving Car in Detroit
- 3.16 Hyundai Genesis Smart Cruise Control
- 3.17 Tata Motors Limited / Jaguar Adaptive Cruise Control
 - 3.17.1 Jaguar Driverless Cars
 - 3.17.2 Tata Motors Limited / Jaguar / Land Rover
 - 3.17.3 Land Rover Smart Driver Assistance Technologies
 - 3.17.4 Land Rover Reverse Traffic Detection
 - 3.17.5 Land Rover Electric Power-Assisted Steering with Park Assist
 - 3.17.6 Land Rover Powerful Braking With Lightweight Brembo Calipers
 - 3.17.7 Land Rover Enhanced Active Safety Technologies
 - 3.17.8 Land Rover Engineered for Maximum Occupant Protection
 - 3.17.9 Driverless Cars Shaped by Land Rover Technology
- 3.18 GM 2015
 - 3.18.1 GM Safety Technology
 - 3.18.2 Buick LaCrosse 2015
- 3.19 Chrysler 300 SRT8
 - 3.19.1 Chrysler Technology Recognizes When Things Slow Down
 - 3.19.2 Chrysler Backup, Safety & Security
 - 3.19.3 Dodge Durango 2014
- 3.20 Kongsberg CORTEX
- 3.21 BAE Systems Land Vehicles Given a Brain of their Own
- 3.22 Kairos Autonomi Pronto4 Retrofitting System for Existing Vehicles or Vessels208
 - 3.22.1 Kairos Pronto4 Agnostic Autonomy System Features
 - 3.22.2 Kairos ProntoMimic Software Suite
- 3.23 Lockheed Martin SMSS
 - 3.23.1 Lockheed Martin SMSS User-Proven Autonomy
 - 3.23.2 Lockheed Martin SMSS Unmanned Capabilities
- 3.24 General Dynamics Robotic Systems
 - 3.24.1 General Dynamics Mobile Detection Assessment and Response System (MDARS)218
 - 3.24.2 General Dynamics Tactical Autonomous Combat – Chassis (TAC - C)

4. ROBOT CARS AND TRUCKS TECHNOLOGY

4.1 Robot Car Test Facility in UK

- 4.2 MIT Demonstrates Swarm Of Modular Robots That Self-Assemble Into Larger Shapes
- 4.3 Robotic Car Fish-Inspired Technology
- 4.4 Adaptive Cruise Control (ACC)
 - 4.4.1 Distance Measured By A Small Radar Unit
 - 4.4.2 ACC Technology
 - 4.4.3 Adaptive Cruise Control
 - 4.4.4 Lexus_IS250_ACC Adaptive Cruise Control
- 4.5 Advanced Robot Technology: Navigation, Mobility, And Manipulation
 - 4.5.1 Robot Intelligence Systems
 - 4.5.2 Real-World, Dynamic Sensing
- 4.6 User-Friendly Interfaces
 - 4.6.1 Tightly-Integrated, Electromechanical Robot Design
- 4.7 Field Based Robotics Iterative Development
 - 4.7.1 Next-Generation Products Leverage Model
 - 4.7.2 Modular Robot Structure And Control
 - 4.7.3 Lattice Architectures
 - 4.7.4 Chain / Tree Architectures
 - 4.7.5 Deterministic Reconfiguration
 - 4.7.6 Stochastic Reconfiguration
 - 4.7.7 Modular Robotic Systems
- 4.8 Intel Military Robot Cultivating Collaborations
- 4.9 Hitachi Configuration Of Robots Using The SuperH Family
 - 4.9.1 Hitachi Concept of MMU And Logic Space
 - 4.9.2 Robotic Use of Solid State Thin Film Lithium-Ion Batteries
- 4.10 Network Of Robots And Sensors
 - 4.10.1 Sensor Networks Part Of Research Agenda
 - 4.10.2 Light Sensing
 - 4.10.3 Acceleration Sensing
 - 4.10.4 Chemical Sensing
- 4.11 Military Robot Technology Functions
- 4.12 Carbon Nanotube Radio
- 4.13 Military Robot Funded Programs
 - 4.13.1 XM1216 Small Unmanned Ground Vehicle (SROBOT CARS)
 - 4.13.2 UUV Sub-Pillars
 - 4.13.3 Hovering Autonomous Underwater Vehicle (HAUV)
 - 4.13.4 Alliant
 - 4.13.5 ATSP is a Government-Wide Contracting Vehicle
 - 4.13.6 Quick, Efficient Contracting Vehicle

- 4.13.7 Facilitates Technology And Insertion Into Fielded Systems
- 4.13.8 Access to All Northrop Grumman Sectors
- 4.14 iRobot Technology
 - 4.14.1 iRobot AWARE Robot Intelligence Systems
 - 4.14.2 iRobot Real-World, Dynamic Sensing.
 - 4.14.3 iRobot User-Friendly Interface
 - 4.14.4 iRobot Tightly-Integrated Electromechanical Design.
- 4.15 Evolution Robotics Technology Solutions
- 4.16 Military Robot Technology Enablers
 - 4.16.1 Military Robot Logistics
- 4.17 MRAP ATV: Requirements and Contenders
- 4.18 Military Robot Enabling Technology
- 4.19 Intel Integrated Circuit Evidence-Based Innovation
 - 4.19.1 Open Robotic Control Software
 - 4.19.2 Military Robot Key Technology

5. ROBOT CARS AND TRUCKS COMPANY DESCRIPTION

- 5.1 Apple
- 5.2 Allen Vanguard
 - 5.2.1 Allen Vanguard Rapid Development
- 5.3 BAE Systems
- 5.4 BMW
 - 5.4.1 BMW Strategy
 - 5.4.2 BMW Revenue
- 5.5 Bosch Group
 - 5.5.1 Evatran Group Plugless Sales Go Live with Bosch
 - 5.5.2 Bosch Business Overview
 - 5.5.3 Bosch Group Reorganized Its Business Sectors
- 5.1.1 Bosch Consumer Goods sales
- 5.1.2 Bosch Automotive Technology sales
- 5.1.3 Bosch Industrial Technology Sales
- 5.1.4 Bosch Group
- 5.1.5 Bosch Healthcare Supports Independent Living At Home
- 5.1.6 Bosch Security Systems Division
- 5.6 Chrysler / Dodge
 - 5.6.1 Chrysler Revenue
- 5.7 Daimler AG/Mercedes-Benz
 - 5.7.1 Daimler AG Revenue

- 5.8 ECA Robotics
- 5.9 Elbit Systems
 - 5.9.1 Elbit Systems Principal Market Environment
 - 5.9.2 Elbit Systems
 - 5.9.3 Elbit Systems Principal Market Environment
- 5.10 Evatran Group
- 5.11 Ford / Lincoln
 - 5.11.1 Ford Business
 - 5.11.2 Ford Motor Vehicle Fuel Economy
 - 5.11.3 Ford Revenue
- 5.12 Fuji Heavy Industries / Subaru
 - 5.12.1 Subaru Automotive Business
 - 5.12.2 Subaru of America
- 5.13 G-NIUS
- 5.14 General Dynamics
 - 5.14.1 Sequester Mechanism
 - 5.14.2 General Dynamics Revenue
 - 5.14.3 General Dynamics Robotic Systems
 - 5.14.4 General Dynamics Robotic Systems (GDRS) Vision
 - 5.14.5 General Dynamics Robotic Systems (GDRS) Manufacturing
 - 5.14.6 General Dynamics Autonomous Land And Air Vehicle Development
- 5.15 Google Self-Driving Car
 - 5.15.1 Google Cars Address Vast Majority Of Vehicle Accidents Due To Human Error
 - 5.15.2 Google Business
 - 5.1.7 Google Corporate
 - 5.15.3 Google Search
 - 5.1.8 Google Revenue
 - 5.1.9 Google Revenues by Segment and Geography
 - 5.19.3 Google Fourth Quarter and Fiscal Year 2014 Revenue
- 5.16 GM / Cadillac
 - 5.16.1 GM Business
 - 5.16.2 GM Strategy
 - 5.16.3 GM Revenue
 - 4.19.4 GM / Buick
- 5.17 Honda
- 5.18 Hyundai
- 5.19 Kairos Autonomi
 - 5.19.1 Kairos Autonomi Autonomy ROI
 - 5.19.2 Kairos Autonomi Upgrades Robot Conversion Kit

5.20 Kongsberg

5.21 Lockheed Martin

5.21.1 Lockheed Martin Symphony Improvised Explosive Device Jammer Systems

5.21.2 Lockheed Martin Aeronautics Revenue

5.21.3 Lockheed Martin Electronic Systems

5.21.4 Lockheed Martin

5.22 Mesa Robotics

5.22.1 Systems Development Division of Mesa Associates

5.22.2 Mesa Robotics Affordable Robotic Solutions

5.22.3 Mesa Robotics Revenue

5.23 Mitsubishi

5.24 Nissan

5.24.1 Nissan Revenue

5.25 Qualcomm

5.25.1 Qualcomm Business

5.25.2 QMC Offers Comprehensive Chipset Solutions

5.25.3 Qualcomm Government Technologies

5.25.4 Qualcomm Internet Services

5.25.5 Qualcomm Ventures

5.25.6 Qualcomm / WiPower

5.25.7 Qualcomm Standardization Capabilities

5.25.8 Qualcomm Regulatory and Compliance Capabilities

5.26 Tata Motors Limited / Jaguar / Land Rover

5.26.1 Jaguar Land Rover

5.27 Tesla

5.27.1 Tesla's Mission Is To Accelerate The World's Transition To Sustainable Transport³⁷⁶

5.27.2 Tesla Autopilot

5.31 Thales Group

5.30.1 Thales Core Businesses

5.30.2 Thales: - A Global Player

5.30.4 Thales Key Technology Domains

5.30.5 Thales Open Research

5.30.6 Thales Stance on Environment

5.30.7 Thales Product Design

5.30.8 Thales Site Management

5.30.9 Thales Alenia Space Integration Of Service Module For The Fourth ATV

5.30.10 Thales Sonar 'Excels' In Anti-Submarine Warfare Exercise

5.30.11 Thales Group Ground Alerter 10

- 5.30.12 Thales Group Ground Master 400 (GM 400)
- 5.30.13 Thales Group Ground Smarter 1000
- 5.30.14 Thales Group
- 5.31 Toyota / Lexus
 - 5.31.1 Lexus Division of Toyota Motor Sales
 - 5.31.2 Toyota / Lexus
 - 5.31.3 Toyota
 - 5.31.4 Toyota Avalon Wireless Charging Pad
- 5.32 Uber
- 5.33 Vecna Technologies
- 5.34 Volkswagen
 - 5.34.1 Volkswagon Brands
 - 5.34.2 Porsche SE
 - 5.34.3 Porsche SE
 - 5.34.4 Volkswagen / Audi
 - 5.34.5 Audi Gets The Second Driverless Car Permit In Nevada
- 5.35 Volvo
 - 5.35.1 Volvo Revenue
- 5.36 Visteon
 - 5.36.1 Visteon Revenue
- 5.37 WiTricity

List Of Tables

LIST OF TABLES AND FIGURES

Table ES-1 Driving Forces

Table ES-2 Autonomous Vehicle Safety Features Used in Robotic Cars

Table ES-3 Leaders in Development of Robot Cars and Trucks

Figure ES-4 Robot Commercial Car Market Shipments Forecasts Dollars, Worldwide, 2015-2021

Figure 1-1 Ford Robotic Auto Control System

Table 1-2 Highly Homogenized Global Car Market Characteristics

Table 2-1 Driving Forces

Table 2-2 Autonomous Vehicle Safety Features Used in Robotic Cars

Table 2-3 Leaders in Development of Robot Cars and Trucks

Figure 2-4 Google Driverless Car

Figure 2-5 IBM MessageSight Ford

Table 2-6 Toyota Production LS 2013 Model Self-Driving Tools Technology

Figure 2-8 Robot Commercial Car Market Shipments Forecasts Dollars, Worldwide, 2015-2021

Table 2-9 Robot Car Shipments and Installed Base, Dollars and Units, Worldwide, 2015-2021

Table 2-10 Autonomous Vehicle Integration Software Components

Figure 2 Children Look Inside A Self-Driving Car At Google Headquarters in Mountain View, Calif., on April 25, 2013

Table 2-13 Automotive Industry Market Factors

Table 2-14 Automotive Industry Limits On The Ability To Reduce Costs

Figure 2-21 Military Ground Robot Regional Market Segments, Dollars, 2012

Table 2-22 Military Ground Robot Regional Market Segments, 2012

Figure 3-1 Tesla Dual Motor Model S and Autopilot

Table 3-2 Tesla Hardware Safety Features

Table 3-3 Tesla Software Safety Features

Figure 3-4 Tesla Model S

Figure 3-5 Tesla Model S All-Wheel Drive Dual Motor

Figure 3-6 Tesla Autopilot

Figure 3-7 Google Self Driving Car

Table 3-8 IBM Robot Car EcoSystem Positioning

Table 3-9 Value of IBM Advanced Analytics And Optimization

Figure 3-10 IBM MessageSight Ford

Figure 3-11 Ford Self Driving Car

Figure 3-12 Ford Robotic Auto Control System
Figure 3-13 Ford Robotic Auto Control System
Figure 3-14 Mercedes Self Driving Car Open Interior
Figure 3-15 Mercedes Self Driving Car Interior
Figure 3-16 Mercedes-Benz F 015
Figure 3-17 Mercedes Self Driving Car Vision Is To Raise Comfort And Luxury To A New Level By Offering Maximum Of Space And A Lounge Character
Figure 3-18 Mercedes-Benz Self Driving Car Interior
Figure 3-19 Mercedes-Benz Self Driving Car Impact-Protected Installation Of F-Cell Plug-In Hybrid Drive System
Figure 3-20 Nissan Self Driving Car
Figure 3-21 Nissan Zero-Emission Driverless Car
Figure 3-22 GM Cadillac Self Driving Car
Figure 3-23 GM EN-V Hands Free Driverless Auto
Figure 3-24 GM EN-V Hands Free Driverless Auto
Figure 3-25 2013 Red Sonic General Motors Auto Driving
Figure 3-26 Toyota Self Driving Car
Figure 3-27 Toyota Self Driving Car Wheel
Table 3-28 Toyota Autonomous Driving Tools
Table 3-29 Toyota Production LS Model Self-Driving Tools Technology
Figure 3-30 Lexus Adaptive Cruise Control
Figure 3-31 Lexus_IS250_ACC Adaptive Cruise Control
Figure 3-32 Audi Connect
Figure 3-33 Volkswagen Self Driving Car
Figure 3-34 Volkswagen TAP Autopilot
Table 3-35 Volkswagen TAP Automatic Driving Support Technology
Figure 3-36 Porsche Adaptive Cruise Control Illustrated
Figure 3-37 Volvo Self Driving Car Functions
Figure 3-38 Volvo Self Driving Car Auto Parking
Table 3-39 Technologies Needed To Equip A Car With A Self-Parking Capability
Figure 3-40 Volvo Self Driving Vehicle
Figure 3-41 High End Volvo With Safety Package
Figure 3-42 BMW Self Driving Car
Figure 3-43 BMW Autonomous Driving Race Car
Figure 3-44 BMW Autonomous Car GPS Systems
Table 3-45 Subaru Adaptive Cruise Control Features
Figure 3-46 Honda Car Safety Adapter Systems
Table 3-47 Hyundai Genesis Smart Cruise Control
Figure 3-48 Land Rover Range Rover

Figure 3-49 Land Rover Range Rover
Table 3-50 Land Rover Terrain Response Functions
Figure 3-51 Land Rover Range Rover
Table 3-52 Land Rover Enhanced Active Safety Technologies
Figure 3-53 Land Rover Range Rover
Figure 3-54 LandRover Velodyne LIDAR Sensor
Figure 3-55 GM Self Driving Cadillac
Table 3-56 GM Safety Technology
Figure 3-57 Buick LaCrosse 2015
Figure 3-58 Chrysler Adaptive Cruise Control
Figure 3-59 Dodge Durango 2015
Figure 3-60 Kongsberg CORTEX
Figure 3-61 BAE Systems Remote Military Land Vehicles
Figure 3-62 Kairos Autonami Pronto4 Retrofitting System for Existing Vehicles or Vessels
Figure 3-63 Kairos Pronto4 Agnostic Autonomy System
Table 3-64 Kairos Pronto4 Agnostic Autonomy Sub-Systems
Table 3-65 Kairos ProntoMimic Software Suite Features
Figure 3-66 Lockheed Martin SMSS
Table 3-67 General Dynamics GDRS Functions Needed To Perform A Variety Of Military, Government And Civilian Missions
Table 3-68 General Dynamics Autonomous Systems Implementation Functions
Table 3-69 General Dynamics Military Robots Functions
Table 3-70 General Dynamics Military Robot Positioning
Table 3-71 General Dynamics Military Warfighter Support
Table 3-72 General Dynamics MDARS Features:
Figure 3-73 General Dynamics Tactical Autonomous Combat – Chassis (TAC - C)
Figure 3-74 General Dynamics Tactical Autonomous Combat TAC-C Capabilities
Figure 3-75 General Dynamics Tactical Autonomous Combat TAC-C Vehicle Specifications
Figure 4-1 Nissan Fish Behavior Rules Model for Robot Car
Table 4-2 Fish Behavior Rules
Table 4-3 Automakers With Adaptive Cruise Control (Mid-2015)
Figure 4-4 Hitachi Modular Robot Configuration
Table 4-5 Military Robot Key Product Technology Factors
Table 4-6 Military Robot Technology Functions
Table 4-6 (Continued) Military Robot Technology Functions
Table 4-7 Missions (UUV “Sub-Pillars”) In Priority Order
Figure 4-8 UUVMP Vision

Table 4-9 Alliant Features:

Table 4-9 (Continued) Alliant Features:

Figure 4-10 iRobot / Evolution Robotics Technology Solutions

Figure 4-11 Military Robot Technology Enablers

Table 4-12 Military Robot Technology Characteristics

Figure 4-13 Military Ground Robot Ground Domain Technology Enablers

Table 4-14 US Army Military Robot Logistics Positioning

Figure 4-15 Robot Systems Associated with Force Application Description

Figure 4-16 Robotic Performance Characteristics

Table 4-17 Military Robotics Enabling Technology

TABLE 4-18 Military Robots Development Challenges

Table 4-19 Military Robot Integrated Circuit-Based Innovation Functions

Table 4-20 Military Robot Key Technology

Table 4-21 Robot Communications Key Technology

Table 4-22 Military Robot Key Navigation Technologies

Figure 5-1 Allen Vanguard Threat Intelligence

Table 5-2 Allen-Vanguard R&D Team Mandate:

Table 5-3 Allen-Vanguard Scientific And Engineering Topics Researched and Developed

Table 5-4 Allen-Vanguard R&D Fundamental Research

Table 5-5 Allen-Vanguard R&D Engineers And Scientists Comprehensive Research

Table 5-6 BAE Systems Standards

Figure 5-7 BAE Systems Revenue in Defense Market

Table 5-8 ECA Robotics Range Of Products

Table 5-9 Elbit Systems Activities:

Table 5-10 Elbit Systems Activities:

Table 5-11 Factors Impacting Ford Profitability Of Business

Table 5-12 G-NIUS Unmanned Ground Systems (UGS) Solutions

Table 5-13 Google Autonomous Vehicles Technology

Table 5-14 GM Market Positioning

Figure 5-15 Lockheed Martin Segment Positioning

Table 5-16 Lockheed Martin's operating units

Figure 5-17 Lockheed Martin Aeronautics Segment Positioning

Figure 5-18 Lockheed Martin Aeronautics Segment Portfolio

Figure 5-19 Lockheed Martin Aeronautics C130 Worldwide Airlift

Figure 5-20 Lockheed Martin Aeronautics Falcon Fighter

Figure 5-21 Lockheed Martin Electronic Systems Portfolio

Table 5-22 Mesa Robotics Technical Experience

Table 5-23 Thales Key Technology Domains

Figure 5-24 Thales Group Ground Master 400

Table 5-25 Thales Group GROUND Master 400 Key Features:

Table 5-26 Thales Group Ground Smarter 1000 Key Features:

Figure 5-27 Thales Critical Decision Chain

Table 5-28 Toyota / Lexus Advanced Active Safety Research Vehicle Features

Figure 5-29 Toyota Qi Wireless Charging

Figure 5-30 Volkswagon Brands

Figure 5-31 WiTricity Technology

About

WinterGreen Research announces that it has published a new study Robot Cars and Trucks: Market Shares, Strategy, and Forecasts, Worldwide, 2013 to 2019. The 2013 study has 362 pages, 144 tables and figures. Worldwide markets are poised to achieve significant growth as robot cars and trucks permit users to implement automated driving.

IBM and Google are sure to be a significant software vendors for all the robot car and truck market participants. IBM has a huge head start with its excellent middleware branded integrated solutions that are hardened and reliable.

As automated process hits the auto industry as a disruptive force, it parallels the automated piloting of the airline industry that saw significant labor savings implementation. Automated vehicle driving can be done anywhere just by connecting the car to the adaptive cruise control, adaptive steering and braking, and lane assist systems.

Robot cars and trucks incrementally add automated process to driving. As software is added to cars and trucks it is done in concert with modification to the steering, breaking, and other automotive systems. Autonomous functions for vehicles are increasingly adopted.

Change is incremental, we do not have fully functioning robot cars immediately, rather, steering, collision avoidance, parking, test driving, series of camera and radar based monitoring systems, lane assist, and adaptive cruise control are being implemented, presaging rapid adoption of robot cars and trucks as the various functions mature and work in the real world.

According to Susan Eustis, team leader for the preparation of the study, "The market for robot car and truck vehicles is anticipated to expand in parallel with the deployment of appropriate roadway controls funded by government programs. The large public investments for robot vehicles so far has been for development of technology that works for military purposes."

The robot car designs amalgamate a group of features to represent an automated process solution. These include the hardware, the software middleware, the steering system, adaptive cruise control, numerous software applications, an integrated systems approach, and related services. Significant investments in research and development

are necessary as the emerging robot cars and trucks industry builds on incremental technology roll outs.

Robot car and truck commercial autonomous car market shipments forecasts indicate that markets beginning to develop in 2014 will rise to \$3.6 billion by 2019. Growth is a result of various moves toward autonomous vehicles that park themselves, provide automated steering, are used as test vehicles, are used as mapping vehicles, and that provide driver alerts but fall sort of complete robotically operated car vehicles.

Market driving forces relate primarily to the need for increased safety and personization for autos. Car manufacturers are positioning with robot car models to meet demand at the high end. Many robot vehicle car vendors are making automation for personal vehicles and trucks a reality.

WinterGreen Research is an independent research organization funded by the sale of market research studies all over the world and by the implementation of ROI models that are used to calculate the total cost of ownership of equipment, services, and software. The company has 35 distributors worldwide, including Global Information Info Shop, Market Research.com, Research and Markets, electronics.ca, Bloomberg, and Thompson Financial.

WinterGreen Research is positioned to help customers face challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust WinterGreen Research to work alongside them to ensure the success of the participation in a particular market segment.

WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally.

These are all vital market research support solutions requiring trust and integrity. This robot car and truck shipment analysis is based on consideration of the metrics for the number of cars shipped, percent of cars outfitted with automated cruise control, and probable market penetrations of robot cars. Experience using the robot cars and trucks is another factor that contributes to development of triangulation regarding market forecasts for the sector.

I would like to order

Product name: Robot Cars and Trucks: Market Shares, Strategies, and Forecasts, Worldwide, 2015 to 2021

Product link: <https://marketpublishers.com/r/R42919BA892EN.html>

Price: US\$ 4,000.00 (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/R42919BA892EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970

