

# Robotics Technology Market by Type (Industrial Robots, Service Robots, Mobile Robots and Others) and Application (Defense and Security, Aerospace, Automotive, Domestic and Electronics) Global Opportunity Analysis and Industry Forecast, 2013 - 2020

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# **Abstracts**

Robotics Technology, is a combination of machine tools and computer applications, used for the designing, manufacturing and application of robots. Use of robotics technology allows consumers to automate processes, increase productivity, enhance quality and reduce human errors. Robotics technology is used in a wide range of industries including healthcare, defense, aerospace, automotive and infrastructure. Robots can be used for numerous activities which include assembling products, detecting and defusing bombs, surgical operations, product inspection, space missions, and domestic works such as cleaning and other household chores. The impending need of automation solutions is a major factor that drives this market. Manufacturers are increasingly opting for process automation, owing to the rise in labor costs and market competition. A dynamic rise in the number of smartphones and tablets supplements the process of robot development and contributes to the growth of the global market. Additionally, emerging technologies in robotics and cost reduction in products with the use of robots supplement the market growth. With the growth of robotics technology, there will be a significant increase in the number of jobs available for the human workforce. Lack of awareness about the advantages of robots in the market, along with the high installation cost of robotics technology are the major drawbacks for this market. The growing demand for automation in mechanical, aerospace and defense industries, along with the growing adoption of new technologies like nano-robotics and cloud robotics, highlight the growth opportunities for players in the market. There has been an



increase in the adoption of robotics by SMEs, owing to the development of small, compact and affordable robots by the key players in the market. The vendors in the market offer a wide range of robotics systems to meet the requirement of the customers. The development of robots require high quality hardware and software to control the robots' operations and integration along with its auxiliary systems in a working environment. The key players in the market are developing small, compact, energy efficient and low cost robotics systems, which can be used in a wide range of industries, particularly by SMEs. Additionally, the vendors in the market are acquiring and collaborating with the top companies in the market, to enhance their product portfolio. For instance, in September 2014, ABB introduced a new dual arm robot named Yumi, to work in collaboration with humans and ease the process of automation. This launch will further enhance the company's offerings and support its growth. In June 2013, Yaskawa acquired Agile Planet to strengthen its product portfolio of robotics as well as motion control. This acquisition would also enable Yaskawa to expand its geographic presence. Other key players dominating this market are ABB Group, Adept Technology, Fanuc Corporation, Yaskawa Electric Corporation, KUKA AG, Intuitive Surgical, Yamaha Corporation, Kawasaki Heavy Industries, Honda Motor Co Ltd and iRobot.

The global Robotics Technology market is segmented on the basis of types of robots, components, applications and geography. The various types of robots used across different industries include industrial robots, service robots and mobile robots. Industrial robots account for a larger share among others. The component segment is further categorized into hardware, software, and services. The different hardware components include sensors, controllers, effectors, power supply and actuators. Robotic technology finds applications across a wide range of domains including healthcare, defense and security, automotive, aerospace, infrastructure, industrial and residential. The microscopic analysis of the market has been performed by examining various regions such as North America, Europe, Asia-Pacific and LAMEA.

**KEY SEGMENTATION** 

The market is segmented based on Types, Components, Applications and Geography.

MARKET BY TYPES

Industrial Robots

Service Robots

Mobile Robots



# Others

Otners	
MARKET BY COMPONENTS	
Hardware	
Software	
Services	
MARKET BY APPLICATIONS	
Healthcare	
Defense and Security	
Aerospace	
Automotive	
Electronics	
Domestic	
Others	
MARKET BY GEOGRAPHY	
North America	
Europe	
Asia Pacific	
LAMEA	



### **KEY PLAYERS**

**ABB** Group

Adept Technology

**Fanuc Corporation** 

Yaskawa Electric Corporation

**KUKA AG** 

iRobot

Intuitive Surgical

Honda Motor Co., Ltd.

Yamaha Corporation

Kawasaki Heavy Industries



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