

# FULLY AUTONOMOUS ROBOTS ACTING AS REBEL FOR LAST-MILE DELIVERIES



## OVERVIEW:

Implementation of autonomous delivery solutions is considered to be most promising for last-mile logistics operations. The utilization of such solutions helps in overcoming urban logistical issues. It has been witnessed that an increase in urbanization surges the mobility and transportation need, which ultimately raises the amount of traffic, air pollution, and accidents. Moreover, e-commerce also puts pressure on logistics companies to cater to the rising expectation of clients for better service and delivery times. Service-wise electrified autonomous delivery options have the ability to run 24/7 and can assist in addressing the driver shortage. The COVID epidemic over the past two years has increased e-commerce sales drastically. The desire for home deliveries paved the way for home delivery robots and even helped investors to make investments in autonomous delivery startups over the past two years. This offers a glimpse into the future and includes driverless vehicles and drones. Several significant players such as FedEx, Amazon, Kiwibot, Starship Technologies, and others have demonstrated their abilities when it comes to home delivery robots. The objective is to develop devices that can quickly, affordably, reliably, and safely deliver food and small products to people. Nowadays, autonomous delivery bots are being tested by many businesses in cities and on college campuses. Battery-powered vehicles are now prepared to reach the streets and pavements of urban areas.

## CLIENT BACKGROUND:

The client wants to analyze the opportunities in regard to autonomous robots for last-mile deliveries in terms of new product launches and business expansion globally. The main objective of the client is to not only enhance their market presence in other regions but also align their product offerings with upcoming customer demands. The following are the requirements asked by the client:

- Addressable market size and future growth rate for the required market
- Key influential factors towards the adoption of autonomous robots both in a positive and negative manner
- Regulatory requirements on the country level to avoid legal issues
- Current and future technological trends
- Product differentiation strategies adopted by various companies
- Consumer behavior and buying patterns
- Competitive analysis of both leading players and market disruptors including market share, trackable revenue, strategic initiatives, technological adoption, and others
- Impact of the COVID-19 pandemic and Russia and Ukraine war on the market

## DBMR APPROACH/RESEARCH METHODOLOGY

**Data Bridge Market Research followed a tripod model for analyzing and validating data to provide valuable insights based on client requirements. DBMR's approach or research methodology for autonomous robots for last-mile deliveries is explained below:**

DBMR conducted secondary and primary research for both top-down and bottom-up methods for data analysis and validation. This approach was utilized to access both qualitative as well as quantitative data for each mentioned segment on global, regional, and country-level data

Secondary research includes data published by government associations, certified publications, investor presentations, SEC filing annual reports, white papers, articles from recognized authors, and many more. For instance, the most recent findings are included in the literature review, which also covers the benefits and drawbacks of the focused product, a comparison of various technologies based on the pertinent factors that have been found, and others



Primary research incorporates in-depth interviews with various primary respondents via cold calling, LinkedIn, e-mail, and others, with key industry participants, subject-matter experts (SMEs), C-level executives of key market players, and industry consultants namely VP, CEO, managers and executive among others, to validate both qualitative and quantitative information

## OUTCOME AND BUSINESS IMPACT

Following are the outcomes founded while analyzing the autonomous robots for last mile deliveries market:



Market size and CAGR of autonomous robots along for last mile deliveries on the global, regional, and country level was provided to comprehend the market potential for each segment

Factors influencing the adoption of autonomous robots for last mile deliveries market considering both positive and negative parameters with supporting statistics

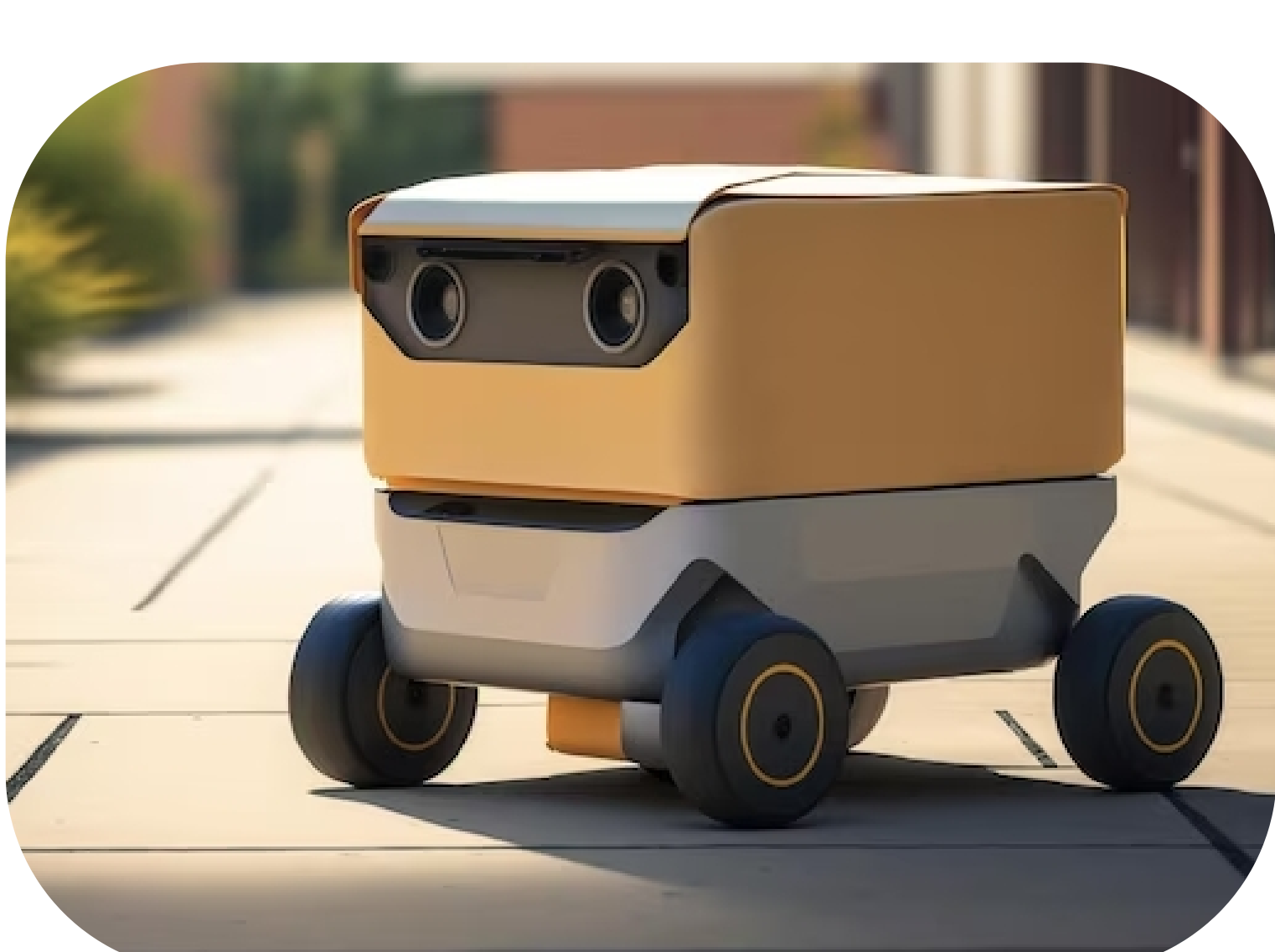
For instance,

An increase in e-commerce sector tends to drive the overall market share in the forecast period as more individuals are preferring to shop online rather than visit storefronts. As per article by Adobe, in 2022, U.S. retail ecommerce ecosystem generated a revenue of USD 856.8 billion approximately



Legal framework and certifications for both UAVs and ADRs in each individual nation affecting the production, verification process and others along with traffic laws. This will help the client to plan the entire process before entering or investing into the untapped markets. Adding to this, to enable seamless deployment, data regarding training, consumer behaviour, insurance and liability, influence on road infrastructure, and particular solutions for integrating passengers and freight was also provided

Company comparative analysis was shared in terms of company profiling, positioning & application grid, company landscape, SWOT, strategic initiatives and others in order to identify the market competition and gain competitive advantage



For instance,

While studying about FedEx, we found that the company has collaborated with state and municipal governments for testing and running new direct-delivery devices and related technology. The main aim was to provide affordable, dependable, and safe service. Latest version of Roxo utilizes third-generation technology which means it utilize artificial intelligence to choose the correct path, utilize artificial intelligence to choose the correct path, equipped with 360-degree of surrounding awareness, equipped with numerous cameras and lidar for better navigation and many others

Insights on technological advancements including Internet of Things (IoT), Artificial Intelligence (AI), sensors, machine learning and simultaneous localization and mapping (SLAM)-based navigation algorithms and others along with companies dealing in outsourcing subassemblies, were also shared for innovative product development and implementation

Both positive and negative feedbacks stated by varied customers to analyze the ongoing and upcoming demand and trends associated with it

Pricing analysis on different autonomous robots for last-mile delivery in order to develop a competitive pricing strategy

## Conclusion:

Data Bridge Market Research has provided in-depth insights in relation with autonomous robots for last-mile delivery to cater each requirement. Adding to this, the report's factual and consolidated information will help the client to evaluate the company's growth in terms of technology, and penetration and can also be further utilized for decision-making and future planning. Apart from this, the client can even access/capture the business opportunities from the reports' information.

