

# Robot Waiter Market - Global Outlook & Forecast 2023-2028

Market Report | 2024-02-15 | 231 pages | Arizton Advisory & Intelligence

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## Report description:

The global robot waiter market was valued at USD 324.12 million in 2022 and is expected to grow at a CAGR of 35.14% from 2022-2028.

MARKET TRENDS & OPPORTUNITIES

Rising Automation in the Restaurant Industry

The restaurant industry has witnessed a significant rise in automation in recent years, driven by technological advancements and the pursuit of efficiency, cost reduction, and improved customer experiences. This trend encompasses automated solutions, from check-in/check-out processes to in-room services and dining experiences. One prominent aspect of this automation trend is observed in the global robot waiter market, where robots are being deployed in hotels and restaurants to enhance the guest experience. These robots are designed to serve food and drinks, take orders, and interact with guests, all while providing an innovative and futuristic dining experience.

Increasing Focus Towards Enhanced Customer Experience

In recent years, the robot waiter market has seen a significant shift in priorities, with a growing emphasis on enhancing the customer experience and optimizing labor efficiency. This trend reflects a broader transformation in the hospitality industry as businesses aim to provide superior service while managing operational costs effectively. One of the key aspects of this trend is the integration of advanced technologies into robot waiter systems. These technologies include improved sensors, artificial intelligence (AI), and machine learning algorithms that allow robots to navigate crowded dining areas, avoid obstacles, and interact with customers.

INDUSTRY RESTRAINTS

## Technical Challenges & Customer Acceptance

Adopting robot waiters in the hospitality industry presents technical challenges and considerations regarding customer acceptance. On the technical front, ensuring robot waiters' seamless and safe navigation in dynamic and crowded restaurant environments remains a primary challenge. Developing robust obstacle detection and avoidance systems and refining autonomous navigation algorithms are crucial to preventing accidents and enhancing operational efficiency. Moreover, customer acceptance is equally vital. While some customers readily embrace the idea of robot waiters as a novel and efficient addition to their dining experience, others may have reservations.

#### SEGMENTATION INSIGHTS

#### INSIGHTS BY LOAD CAPACITY

The 20 - 40 KG load capacity segment held the most prominent share of the global robot waiter market in 2022. Robot waiters with a load capacity of 20 to 40 kilograms are advanced robotic systems designed to assist the service industry, particularly in restaurants and hotels. These robots have specialized compartments or trays to hold securely and transport items such as food orders, dishes, drinks, and even room service amenities. The versatility in load capacity also makes them adaptable to different service settings, ensuring they can handle a wide range of items while maintaining safety and precision in their movements.

# Segmentation by Load Capacity

- -□Below 20 KG
- -П20-40 KG
- -∏Above 40 KG

#### **INSIGHTS BY END USER**

The global robot waiter market by end users is categorized as HORECA, Bars and casinos, Senior living homes, and others, which includes food courts and catering services. HORECA are prominent end-users in the robot waiter industry, accounting for the largest share in the end-user segments. These establishments are integrating robot waiters to streamline their dining services, reduce wait times, and engage customers with cutting-edge technology. Robot waiters can create a unique and memorable dining experience, attracting customers and generating positive word-of-mouth. However, bars and casinos will likely grow at the fastest CAGR in the global market during the forecast period.

## Segmentation by End Users

- -□HORECA
- -∏Bars & Casinos
- Senior Living Homes
- -□Others

#### INSIGHTS BY DISTRIBUTION CHANNEL

The offline distribution channel segment held most of the global robot waiter market share 2022. However, the online sales channel and partnerships with system integrators were expected to witness higher growth rates due to their scalability and market penetration potential. This shift towards online growth is mainly steered by significant companies opting to expand their market presence through e-commerce platforms, thus driving the online segment's expansion.

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# Segmentation by Distribution Channel

- -[]Offline
- -□Online

#### **GEOGRAPHICAL ANALYSIS**

The Asia Pacific region was the primary contributor to the global robot waiter market, responsible for more than 30% of the total revenue 2022. This substantial share can be attributed to the robust demand for robot waiters from Japan and South Korea, where the adoption of robot waiters is due to high technological advancements. The demand for robot waiters in East Asia, particularly in China, Japan, and South Korea, has surged in the wake of multiple challenges, including a shortage of skilled labor, rising inflation, and increased wages driven by the aftermath of COVID-19 and the Russia-Ukraine conflict. Robot chefs and waiters gained prominence in Asian markets during the early stages of the pandemic as lockdowns and pandemic control measures led to labor shortages.

The robot waiter market in North America is expected to experience significant growth and adoption across the restaurant & hospitality industry. The United States and Canada are showing increasing interest in robot waiters, primarily driven by the restaurant industry's desire for automation and efficiency. Further, European countries, such as the United Kingdom, Germany, and France, are gradually embracing robot waiters, albeit at a somewhat slower pace compared to Asia. The European market is driven by a combination of factors, including a strong focus on enhancing customer experiences and the need for labor optimization.

# Segmentation by Geography

- -∏APAC
- o∏South Korea
- o∏apan
- o∏China
- o∏Singapore
- o∏Malaysia
- o∏Rest of APAC
- -∏Europe
- $o \\ \square Germany$
- o∏The U.K.
- o∏France
- o∏Italy
- o∏Spain
- -□North America
- o∏The U.S.
- $o \\ \\ \Box Canada$
- -□Middle East & Africa
- o∏UAE
- o∏Saudi Arabia
- o∏Rest of Middle East & Africa
- -□Latin America
- o∏Brazil
- o∏Mexico

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## o∏Rest of Latin America

#### COMPETITIVE LANDSCAPE

The robot waiter market is highly competitive, with established players like Bear Robotics, Keenon Robots, and Richtech Robotics offering advanced, customizable solutions. Partnerships between robot waiter manufacturers and restaurants are increasing, enabling smoother integration of these autonomous servers into existing operations. As competition intensifies, companies focus on improving technical capabilities and the overall customer experience, offering diverse load capacities and functionalities to cater to various dining establishments. This dynamic landscape underscores the potential for robot waiters to transform the restaurant industry.

# **Key Company Profiles**

- -□Bear Robotics
- Keenon Robotics
- Pudu Technology
- -∏Suzhou Pangolin Robot

## Other Prominent Vendors

- AIBAYES
- Comp-Point Systems
- -∏Gausium
- Guangzhou Aobo Information Technology
- -□LG Electronics
- -□ORION STAR Robotics
- -□Richtech Robotics
- Shenzhen Reeman Intelligent Equipment
- -□Segway Robotics
- -∏Telepower Communication
- UBTECH ROBOTICS

### KEY OUESTIONS ANSWERED:

- 1. ☐ How big is the robot waiter market?
- 2. What is the growth rate of the global robot waiter market?
- 3. Which region dominates the global robot waiter market share?
- 4. ☐ What are the significant trends in the robot waiter industry?
- 5. Who are the key players in the global robot waiter market?

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