

**MARKET RESEARCH** 

WAREHOUSING AND DISTRIBUTION



# **TABLE OF CONTENTS**

**03** EXECUTIVE SUMMARY

O4 LIMITATIONS ANDPOTENTIAL BIASES

**05** AUTOMATION AND ROBOTICS

O6 A.I. IN WAREHOUSING AND DISTRIBUTION

O7 CHALLENGES DUE TO LABOR SHORTAGES AND RISING COSTS

# **EXECUTIVE SUMMARY:**

The warehousing and distribution sector plays a crucial role in the supply chain industry by providing storage and transportation solutions for goods. With the growth of e-commerce and globalization, the demand for warehousing and distribution services has increased significantly in recent years. This report analyzes the current state of the warehousing and distribution sector, key trends and drivers, challenges, and future outlook.

# **MARKET SIZE AND GROWTH:**

The global warehousing and distribution market was valued at USD 586.91 billion in 2020 and is projected to grow at a CAGR of 8.5% from 2021 to 2028. The growth of the e-commerce industry and the increasing adoption of just-in-time (JIT) inventory systems are the major drivers of the warehousing and distribution sector.

### **KEY TRENDS:**

- Automation and Robotics
- Demand for Cold Storage
- Sustainable Warehousing



- Labor Shortages
- Cost Pressures
- Technological Obsolescence

## **CHALLENGES:**

### LIMITATIONS AND POTENTIAL BIASES

As with any research, there are limitations and potential biases that should be taken into account when interpreting the findings of this report on the warehousing and distribution sector.

- Data Limitations: The report's findings are based on data collected from various sources such as market research reports, industry publications, and government data. While these sources provide a valuable overview of the industry, there may be limitations in the accuracy or completeness of the data available.
- Sample Bias: The data used in this report may not be representative
  of the entire warehousing and distribution industry. For instance,
  the data may focus on certain regions, industries or company sizes,
  which could limit the generalizability of the findings.
- Respondent Bias: The report may rely on surveys or interviews of industry professionals to collect data. Respondents may be biased based on their personal experiences, preferences, or beliefs, which may influence the accuracy and reliability of the data collected.
- Timeframe Bias: This report's findings are based on the state of the warehousing and distribution industry as of September 2021. The industry is constantly evolving, and new developments could have occurred since the data were collected.
- Confirmation Bias: The report may have a confirmation bias in favor of the trends and drivers that were identified as important. Alternative explanations or contradictory data may have been overlooked or given less weight.

Overall, it is important to consider the potential limitations and biases of this research and triangulate the findings with other sources of information to gain a more comprehensive understanding of the warehousing and distribution industry.

# **HEADLINES:**

- 1. Global Warehousing and Distribution Market Projected to Grow at 8.5% CAGR from 2021 to 2028
- 2. Automation and Robotics Driving Efficiency and Reducing Labor Costs in Warehousing and Distribution
- 3. Demand for Cold Storage Facilities Increases with Growth of Food and Beverage Industry
- 4. Warehousing and Distribution Companies Focus on Sustainability to Minimize Carbon Footprint
- 5. Labor Shortages and Rising Costs Pose Challenges for Warehousing and Distribution Sector
- 6. Future Outlook for Warehousing and Distribution Sector: Continued Growth and Focus on Automation and Sustainability



# INCREASED SPEED AND THROUGHPUT

Increased Speed and Throughput: Automation and robotics can handle tasks much faster than human workers, which can significantly increase the speed and throughput of the warehouse or distribution center. For example, automated conveyor systems can move goods from one location to another much more quickly than manual labor, while robotic picking and packing systems can process orders much faster than human workers.

#### **INCREASED ACCURACY**

Automation and robotics can also increase accuracy, reducing the likelihood of errors and improving the overall quality of the work. For example, robotic picking systems can accurately identify and retrieve the correct products, reducing the risk of errors and minimizing the time needed to complete each order.

#### **REDUCED LABOR COSTS**

One of the primary advantages of automation and robotics in warehousing and distribution is the ability to reduce labor costs. As the cost of labor increases, many companies are turning to automation and robotics to minimize their dependence on human workers. Robots and automated systems can work around the clock without the need for breaks, and they can perform repetitive tasks without getting tired or making mistakes.



Automation and robotics are becoming increasingly popular in the warehousing and distribution sector because they can significantly improve efficiency, reduce labor costs, and increase accuracy.

#### **IMPROVED SAFETY**

Automation and robotics can also improve safety in the warehouse or distribution center.

Automated systems can handle dangerous or heavy items, reducing the risk of injury to human workers. Additionally, robots can be used in hazardous environments where it may not be safe for humans to work.

### **FLEXIBILITY**

Automation and robotics can also provide greater flexibility in warehousing and distribution operations. For example, automated conveyor systems can be reconfigured to handle different types of products, while robotic systems can be programmed to handle different tasks, depending on the needs of the warehouse or distribution center.



#### **PREDICTIVE ANALYTICS**



Al can be used to analyze large volumes of data to identify patterns and trends, and make predictions about future demand, inventory levels, and shipping requirements. This can help warehouses and distribution centers to optimize their operations, reduce waste, and minimize the risk of stockouts.

#### **AUTONOMOUS VEHICLES**



Al is also being used to develop autonomous vehicles, including drones, self-driving trucks, and automated guided vehicles (AGVs). These vehicles can be used to move goods around the warehouse or distribution center, reducing the need for manual labor and improving efficiency.

#### **CUSTOMER SERVICE**

Al-powered chatbots and virtual assistants can be used to provide customer service and support, helping customers to track their orders, answer questions, and resolve issues.

#### **ROBOTICS**



Al is also being used to develop more advanced robotics systems, including robotic picking and packing systems, which can identify and retrieve the correct products and pack them into boxes or containers for shipping.

#### **INVENTORY MANAGEMENT**



Al can help optimize inventory management by analyzing data from sensors and RFID tags to track the movement and location of products in real-time. This can help to reduce the risk of stockouts, minimize inventory costs, and improve the accuracy of inventory records.



# ATTRACTING AND RETAINING WORKERS

One of the biggest challenges faced by warehouses and distribution centers is attracting and retaining workers. As unemployment rates decrease, competition for workers is increasing, making it harder to find and keep qualified employees. This is especially true for jobs that require specific skills or training.

# ATTRACTING AND RETAINING WORKERS

As competition for workers increases, wages are also rising, which is putting pressure on labor costs. This is particularly challenging for companies that rely heavily on manual labor, as they may need to pay higher wages to attract and retain workers.



#### **AUTOMATION COSTS**

To address labor shortages, many companies are turning to automation and robotics, which can be expensive to implement. While automation can help reduce labor costs in the long run, the initial investment can be significant, and it may take time to see a return on investment.



This Market Research report is an extract and is used primarily for the purpose of "an overview / summary" of the subject matter. This document is used as content for Retina Holdings. It must not be interpreted as the governing thesis on the subject matter.