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Transport & **Logistics**

Industry Dossier

| Executive Summary

The logistics industry facilitates business activities between two or more parties by transporting, storing and delivering goods through **B2B**, **B2C** or **C2C** supply chain networks. Today's logistics companies are implementing land, air and sea freight transportation services while adapting to the changing nature of business models and digitization. This industry is one of the pillars of international trade with a value of more than **5.5 billion** euros in 2018. In 2018, Germany was the main logistics market in the world, while Railway Corp. of China was the third largest logistics company.

With a market size of **151.9 billion** euros, the global freight forwarding market provides the logistics industry with faster and simpler solutions for the transportation process. In June 2019, the Danish company DSV was the world's largest trucking company in terms of market value. Since 2004, global air logistics traffic has continued to grow somewhat steadily, reaching **61.2 million metric tonnes** in 2019. In that year, Qatar Airways was the world's third largest airline in domestic and international freight tonne-kilometers.

| Recent **Scenario**

The recent logistics industry in India comprises the input and output sectors of production and service supply chains. Also, logistics infrastructures have captured the attention of businesses and decision-makers. With the implementation of advanced technologies and refined processes, the planning, implementation and control of the movement of goods has become faster and more efficient.

Modern processes and activities support various supply chain processes. Lately, inadequate logistics infrastructure and traditional practices have created bottlenecks in the growth of the Indian economy. But the latest logistics management procedure has the ability to overcome difficulties while providing long-term leading edge competitiveness.



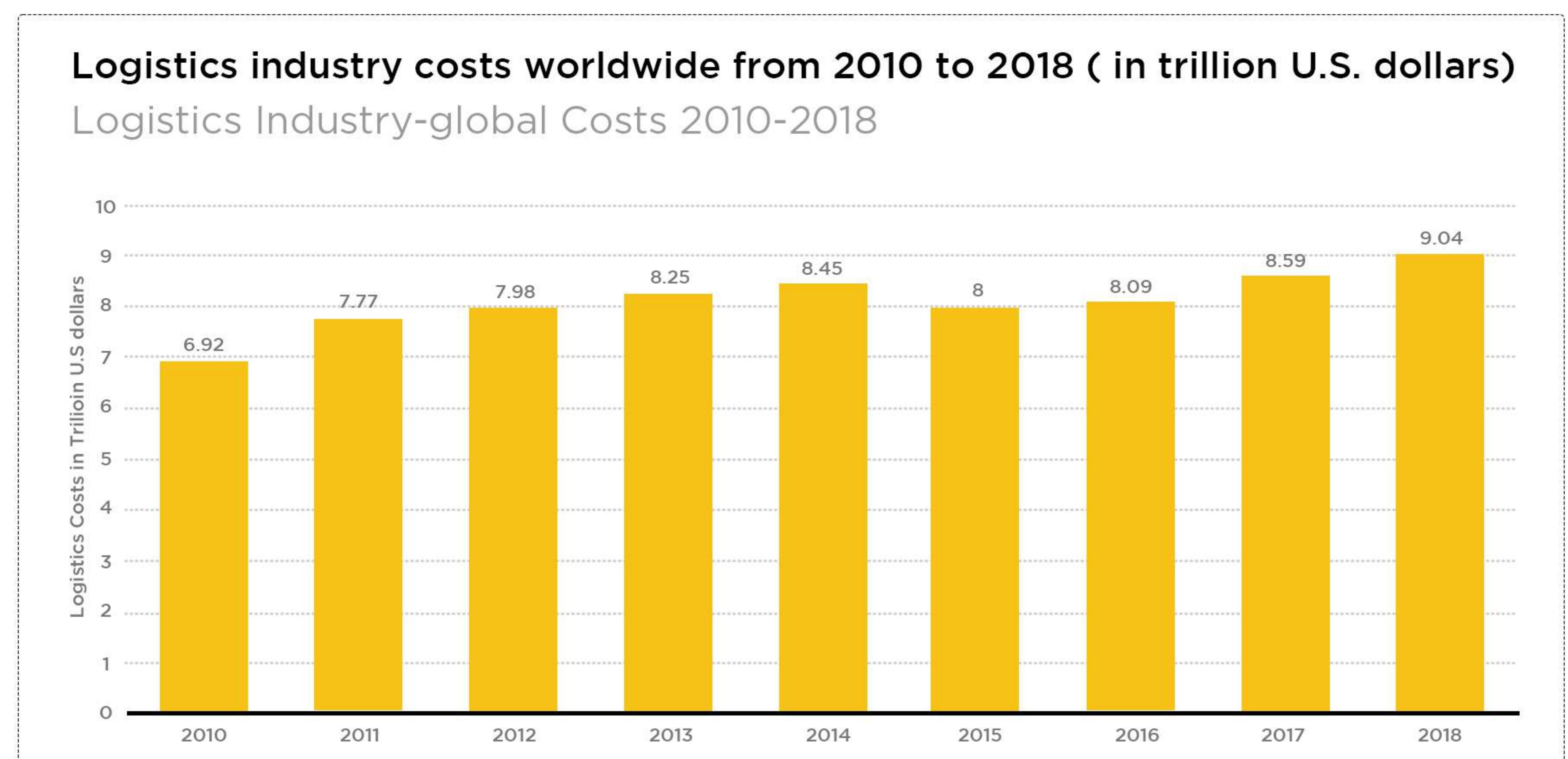
| Transport & Logistics Industry Market Statistics

We have always found that numbers are the most compelling factor in business and the field of **logistics** also has some promising areas.

According to Market Watch, the global logistics market is expected to grow by **\$ 287.1 million** between 2021 and 2025. This equates to a 5% CAGR increase; in fact, the year-over-year growth rate for 2021 is projected to be 4.13% at the end of the forecast period. Moreover, this **CAGR** is considered to be the highest during the period 2019-2023.

In a report by Transparency Market Research, it was mentioned that the logistics sector is expected to be worth **\$ 15.5 billion by 2023**, which gives a positive glimpse into the future of the development market of the logistics on demand.

Also, when analyzing the statistics of the **Transportation and Logistics** industry, we find that logistics / trucking has the highest market share (35%).



| How big is the **industry?**

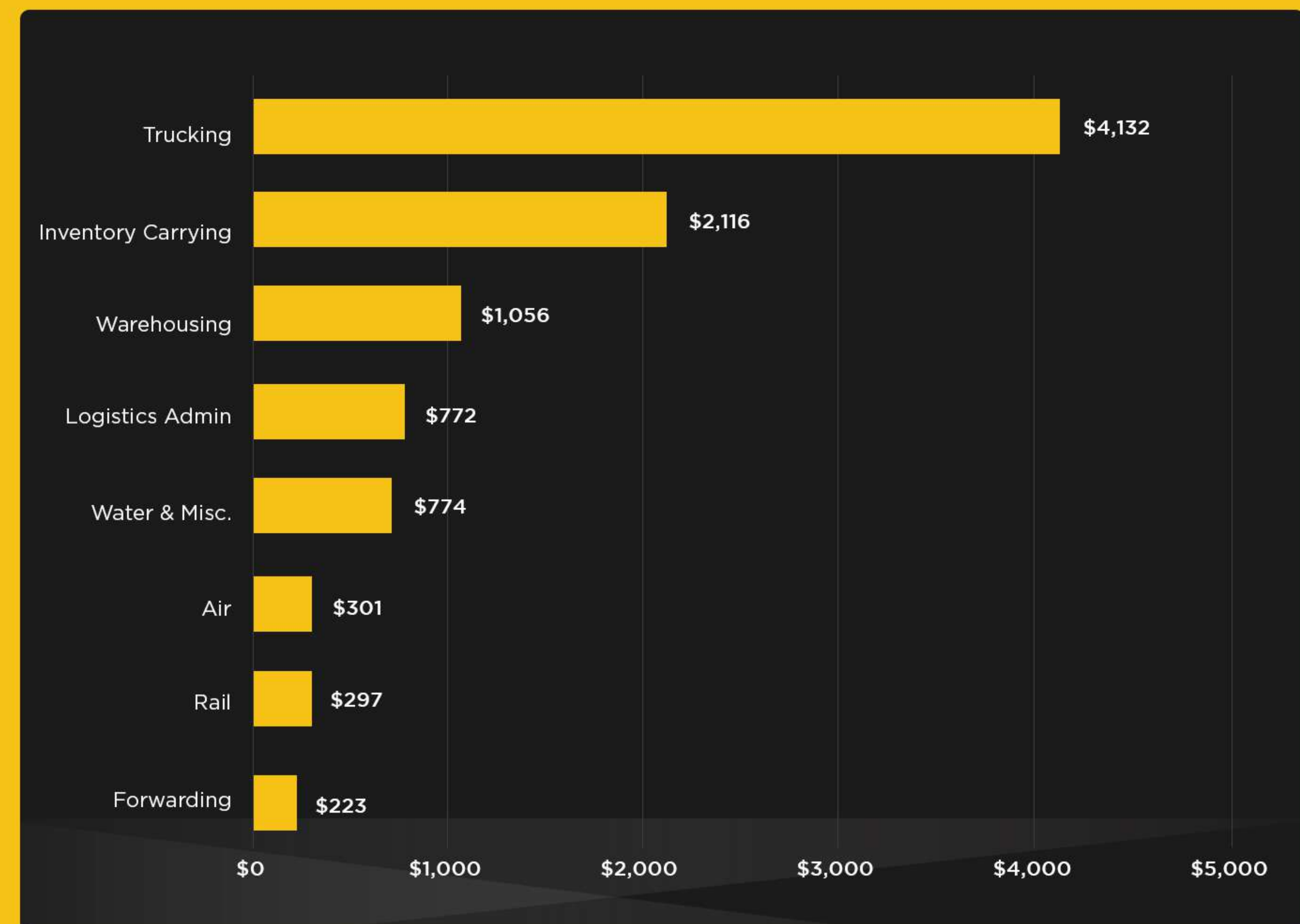
Estimates of the size of the global logistics industry range from **\$ 8 trillion** to \$ 12 trillion annually. The general rule used by many forecasters is percentage of GDP.

In the United States, some estimate that up to 10% of **GDP** is allocated to the logistics industry in any given year. Based on economic activity in 2019, the US logistics market is approaching the **\$ 2 trillion level**.

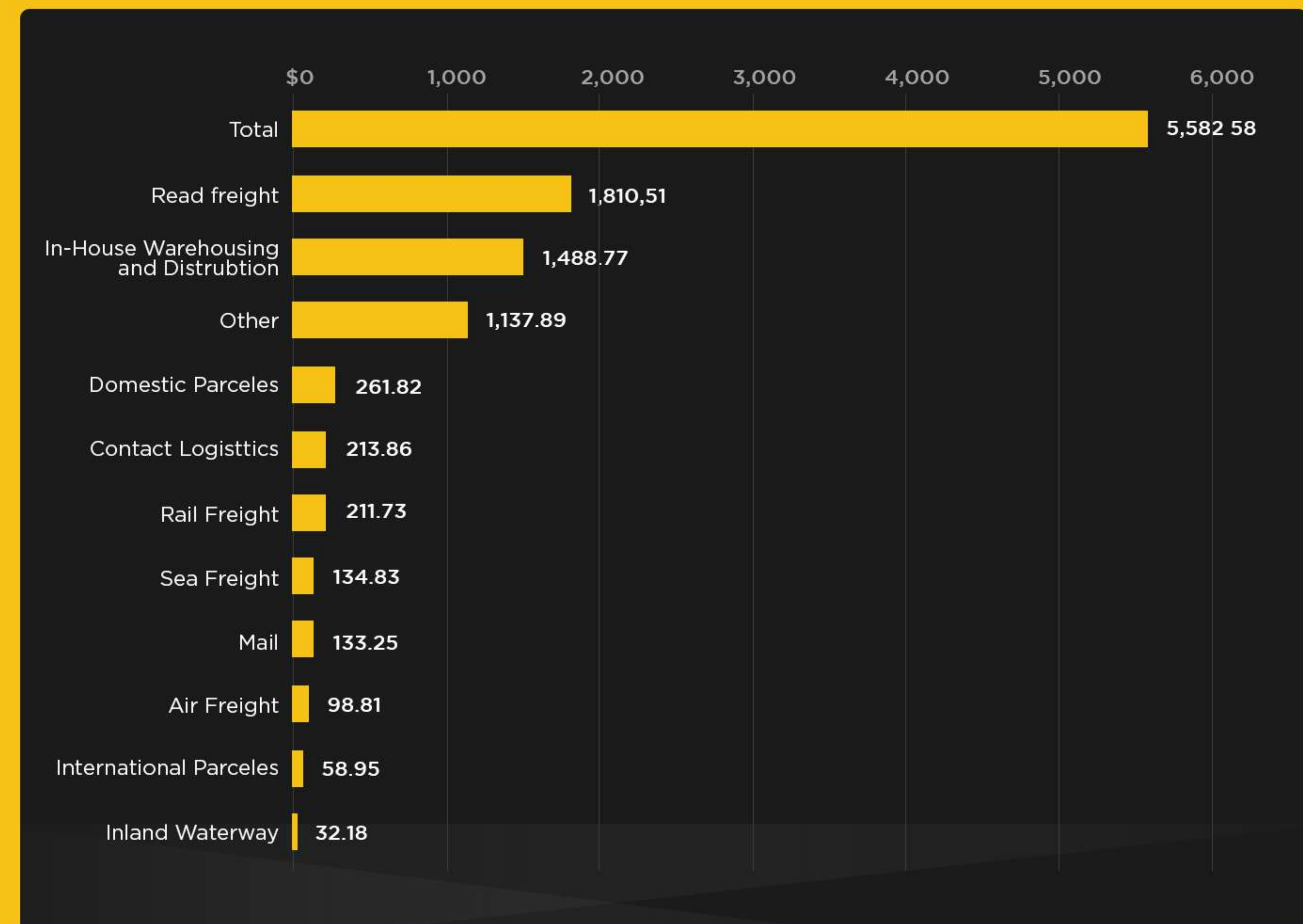
Globally, many believe that the logistics market represents around 12% of global GDP. The disparity in the percentage of GDP used to predict the size of the logistics market has been attributed to inefficiencies that exist in supply chains in many regions outside of the **United States**, creating a comparatively high cost structure.

The global logistics market was worth **\$ 9.6 trillion in 2018**, according to research and consulting firm Armstrong & Associates Inc. Trucking accounted for 43% of total logistics costs globally. Costs associated with stocking inventory accounted for a third, with modes other than trucking (marine, rail and air) accounting for less than 14% of the total.

2018 Global Logistics by Mode/Function (\$ in Billion)



Size of the global logistics market in 2018, by segment (in Billion Euros)



| Types of Mobile Apps for **Logistics Companies**

1. Fleet Management

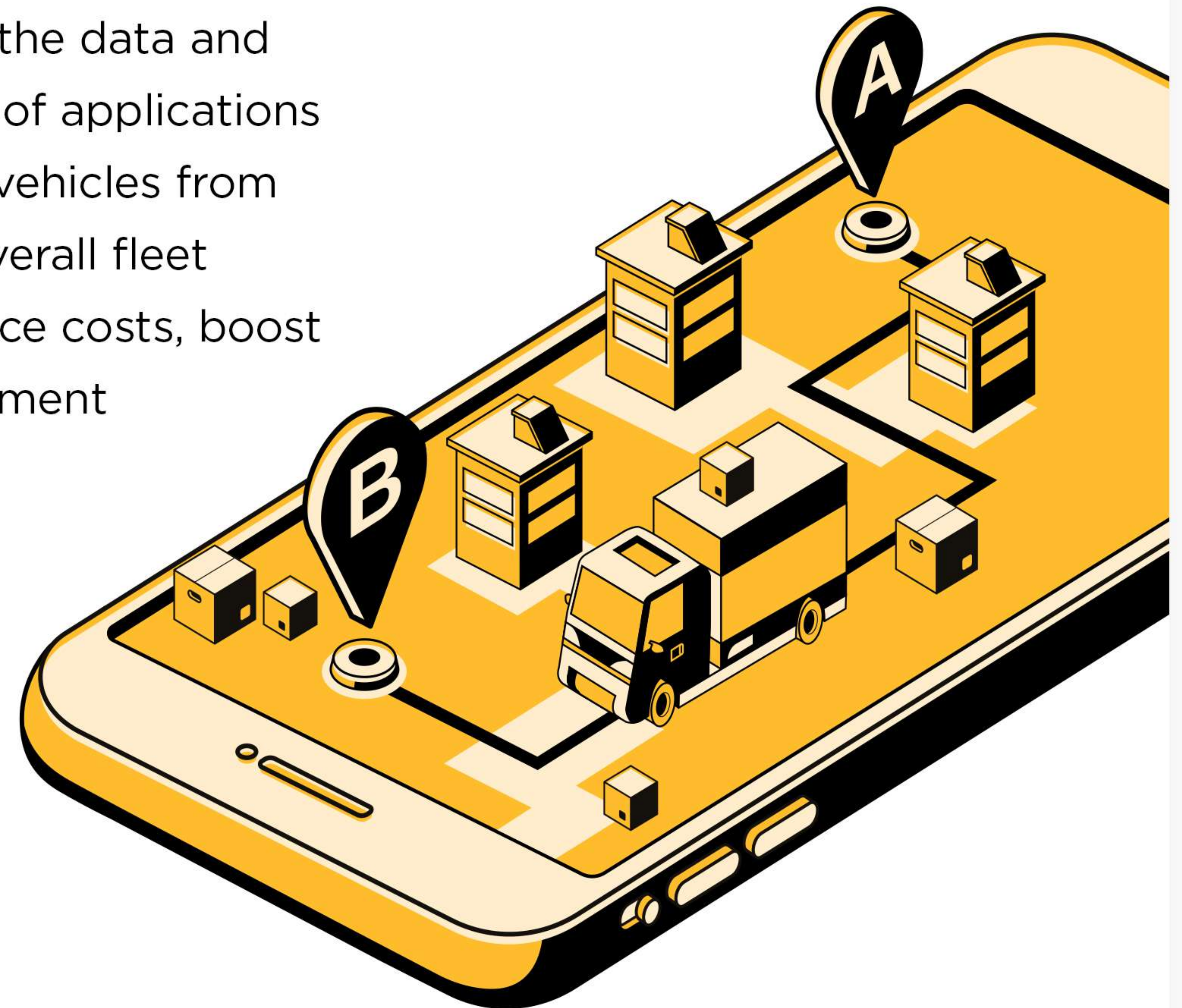
This type of logistics application caters for recording the data and information related to vehicles and fleets. These type of applications help users in organizing, managing and coordinating vehicles from the central information system in order to keep the overall fleet operation hassle-free. These kind of applications reduce costs, boost performance while providing compliance with government regulations.

2. Logistics on-demand

These kind of applications are all about goods delivery as per the users' requirements. These apps not only fulfill users' needs but also help in building connections.

3. Warehouse Mobile Apps

Warehouse mobile apps are designed to store a huge amount of data related to the products stored in the warehouse. It does it in such a simplified way as to make it easy to access any data any time.



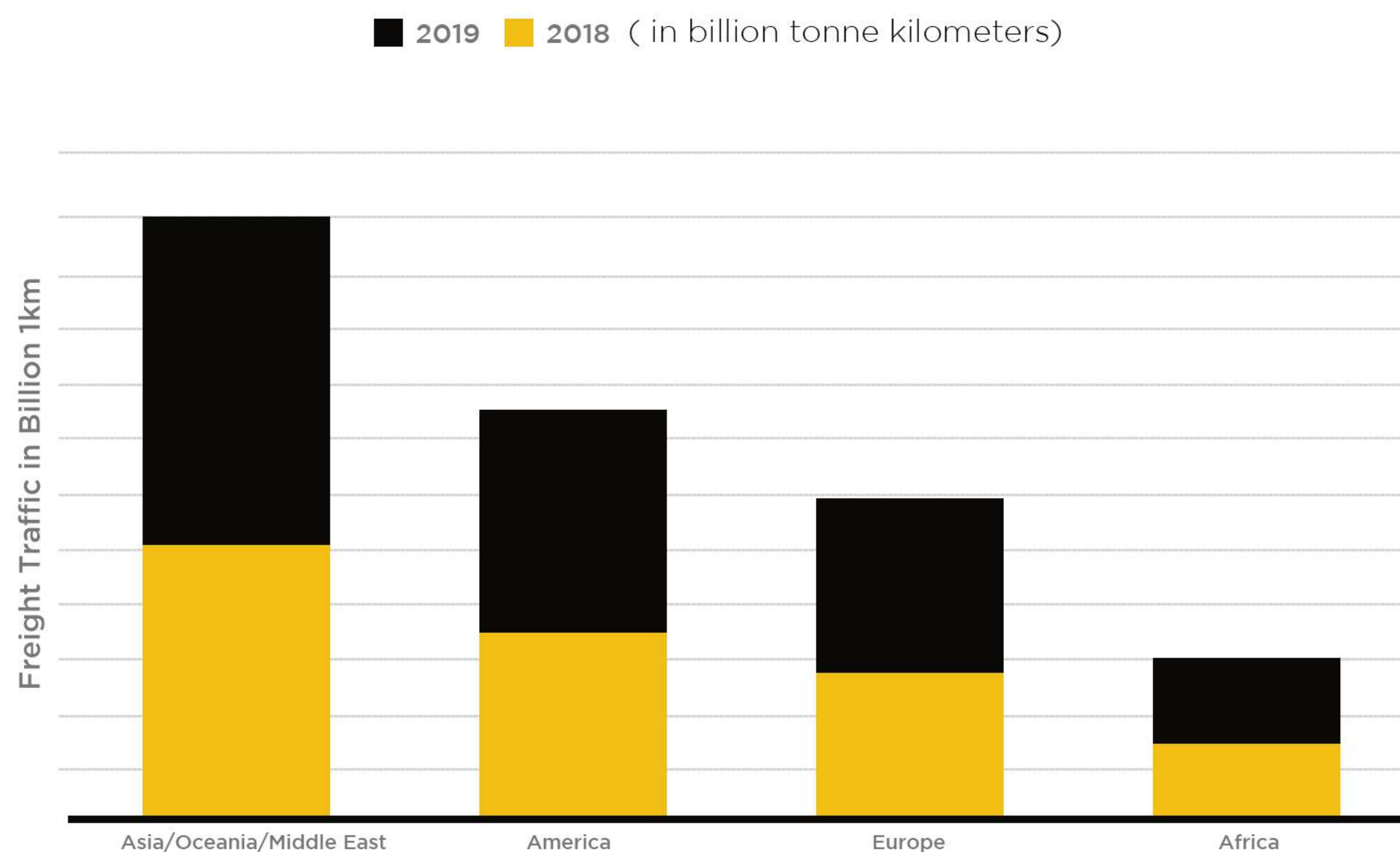
| Types of Mobile Apps for **Logistics Companies**

4. Tracking and Forwarding Applications

These applications target to deliver information related to real-time concerning routes and delivery of the goods and products which means that it also displays drivers' location which is also a prominent feature.

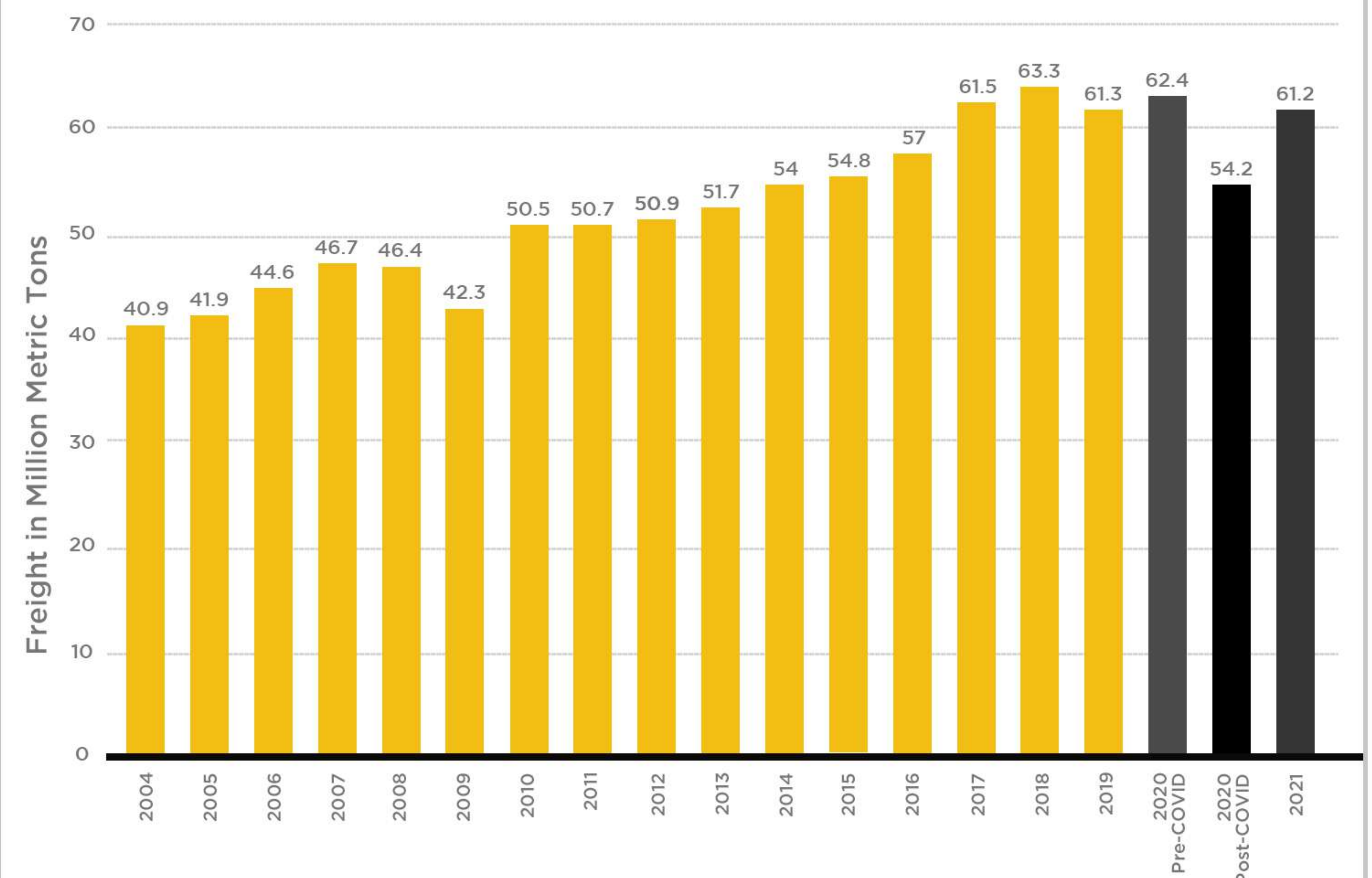
Global rail freight between 2018 and 2019, by region

Rail Freight- Worldwide 2018-2019



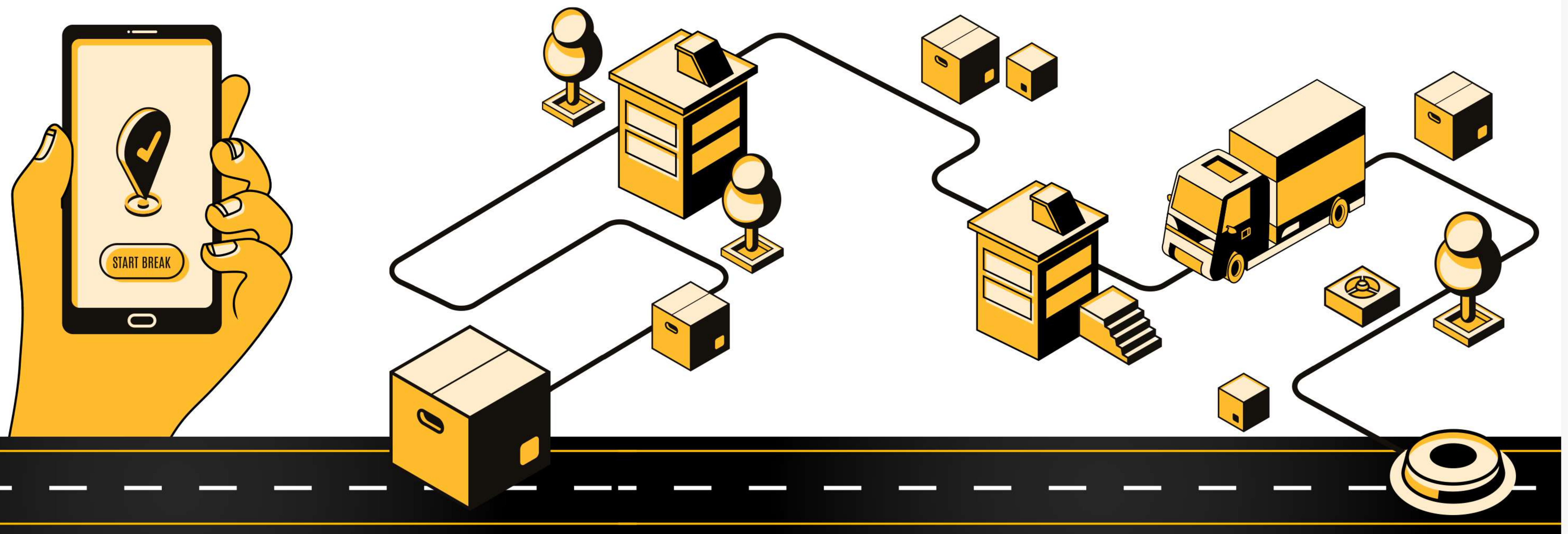
World air freight traffic from 2004 to 2021 (in million metric tons)

Air cargo traffic-worldwide volume 2004-2021



| What can **Mobile Apps** for **Logistics** do?

Uber-like app solutions are already popular in the taxi and transportation industry, with a growing number of taxi companies investing in their own white label taxi apps to stay competitive in the market. Not to be outdone, the logistics industry spanning freight forwarder and **Transportation Business, Freight Delivery Companies, Pickup and Delivery Services**, etc., is also embracing mobile apps like never before. The benefits include lower costs, improved operational efficiency, higher productivity and an incredible user experience in the overall **Supply Chain Management** and parcel delivery process. A functional and feature-rich logistics application can easily help eliminate complex logistics problems and solutions.



| What can **Mobile Apps** for **Logistics** do?

Here are some ideas to meet the challenges of the logistics industry where the use of a **Mobile Application** may be the appropriate solution.

1.Warehouse and Yard Management

With the digitization of goods arriving and leaving the warehouse, it is easier and error-free to track products, equipment, merchandise, storage, etc. Supervisors have quick access to update data in the automated log of these product identifiers and prevent human error.

2.Flexibility to optimize routes and delivery schedules

The ability to obtain information on transport routes and optimize delivery schedules is a major asset to ensure maximum commercial efficiency in the management of the supply chain. In addition, a good logistics application creates new opportunities for a lasting partnership between the logistics company and the customer leading to increased customer loyalty.

3.Location Tracking

Today's advanced mobile GPS technologies provide real-time vehicle and fleet tracking. For businesses that need to manage a huge fleet of vehicles crossing multiple routes, a partner driver logistics application provider can provide real-time data to ensure cargo and fleet tracking.

| What can **Mobile Apps** for **Logistics** do?

4.Vehicle and Fleet Management

Critical success factors such as assessing the amount of fuel and mileage on a route, can help optimize operations through intelligent vehicle management through logistics applications. This utility value can also be extended to other functions such as battery check, network coverage status, engine condition and tire condition. Vehicle maintenance and repair can become proactive rather than reactive by extracting intelligent and predictive signals from collected data points.

5.Process Efficiency

A large number of documents are required in the whole process of handling the delivery of goods from point A to point B. With a logistics management solution, all documents can be easily exchanged with a paperless solution based on technology that allows rapid retrieval of information, secure access and better management than the traditional paper system.

6.Better Inventory Management

Inventory and inventory management becomes very precise and almost in real time through the proper logistics application. This not only helps reduce excess inventory in the warehouse, but also ensures that freight shipments are properly prioritized based on their sensitivity.

| What can **Mobile Apps** for **Logistics** do?

7.Driver Dispatcher Efficiency

Drivers can automatically receive new dispatch requests on their dedicated mobile application. A dispatcher needs up-to-date information to ensure routes are optimized and deliveries are expedited. It would have been a challenge if logistics applications and technological advancements such as GPS navigation and location tracking had not been implemented. Critical details like mileage, distance traveled, delivery times and driver list can be quickly viewed for decision making and process optimization.

8.Improve User Experience

Shippers and customers have their own dedicated app to request items and items on the go, all at the push of a button. From sending packages and courier to friends and family, to delivering furniture, delivering food and more. The whole process of accessing delivery and logistics services like yours just gets much simpler and cooler. Previously, if a customer had to ship a package, they would have to visit a courier provider with their items, stand in line, and waste precious time. With the rise of on-demand logistics applications that provide door-to-door pickup and delivery, the whole user experience is much better. With features like real-time tracking, notification alerts, online payments, reviews and comments, and more, the end customer experience will be just plain enjoyable.

| What features should a **Logistics Management** solution have?

- **Dispatcher Interface (Control Center):** This interface allows a dispatcher to benefit from task automation. They can assign a load to a particular vehicle or driver based on variables such as distance, direction of travel, kilometers traveled, and vehicle load capacity.
- **Feedback Mechanism:** A good feedback channel ensures that your customers can submit complaints directly from the sender's app. A good logistics app and a good management solution should have driver and shipper feedback.
- **Up-to-date task tracking:** Get real-time update of driver movements with a dedicated driver/ field agent app. You can reduce pickup times, reduce complaints, increase efficiency, and reduce the number of missed deliveries.
- **Route optimization:** This feature includes planning and deciding the best route to follow for a particular shipment and then align the most suitable vehicle at the right time so that the delivery schedule can be optimized to save time and fuel. You can also optimize bad routes and allow closer monitoring of problematic routes. Get the most out of every trip with the intelligent routing feature built into your logistics application solution.
- **Driver Records:** Keeping a record can help track driver performance based on their daily activities. This will give you valuable information over a period of time once you have enough data on hand. Supervisors can use this data to strengthen their company-driver relationship and enable a fair and data-driven assessment of drivers.

| Logistics Industry **Trends** in **2021** & Beyond

- **Internet of Things:** Internet of Things is a connection of physical devices that monitor and transfer data over the Internet and without human intervention. IoT in logistics improves visibility at every stage of the supply chain and improves the efficiency of inventory management. The integration of IoT technology in the supply chain and logistics sectors improves and enables efficiency, transparency, real-time visibility of assets, condition monitoring and fleet management.
- **Artificial intelligence:** Artificial intelligence algorithms combined with machine learning help companies to be proactive in the face of fluctuations in demand. For example, artificial intelligence-based forecasting solutions allow managers to plan supply chain processes and find ways to reduce operating costs. Autonomous artificial intelligence and smart road technologies are influencing a positive shift towards the automation of delivery services. Additionally, AI-based cognitive automation technology brings intelligence to automate administrative tasks and accelerate information-intensive operations.
- **Robotics:** The integration of robotics in logistics increases the speed and accuracy of supply chain processes and reduces human errors. Robots provide more uptime and increase productivity compared to human workers. Robots, however, do not take over the work of humans, but rather work in conjunction with them to increase their efficiency. Physical robots, such as collaborative robots and autonomous mobile robots (AMRs), are used to collect and transport goods in warehouses and storage facilities. Moreover, software robots perform repetitive and mundane tasks that free up time for human workers.

| Logistics Industry **Trends** in **2021** & Beyond

- **Big Data and Data Analysis:** Data analysis provides useful insights to improve warehouse productivity, performance management and optimal use of logistics resources. Position and weather monitoring data as well as fleet schedules help optimize routes and delivery planning. Analyzing market data allows further optimization of supplier prices, inventory levels and risk management reports. In addition, advanced analytics provide information that helps identify anomalies and offer predictive maintenance solutions.
- **Autonomous vehicles:** Autonomous vehicles improve vehicle safety and deliver goods safely by eliminating human error while driving. They increase efficiency in first and last mile delivery as they are designed to run all day and night. In addition, self-driving vehicles improve fuel efficiency by using platoon techniques for long-haul routes, reduce congestion, and optimize travel routes by taking advantage of AI-enhanced technology.human workers.

With ever-increasing **Customer Expectations** and interests shifting towards a variety of personalized products and services, the supply chain and logistics industries are facing increasing pressures. Rapid advancements in emerging technologies such as the Internet of Things, advanced mobile robots, **Artificial Intelligence**, and **Blockchain-based Solutions** leave companies with a dilemma when choosing the most suitable technologies to invest.

| Today- **Transport** and **Logistics** Apps Are Like Game changers!

With a few clicks on your mobile, book a taxi and wait 7 to 8 minutes. The taxi is at your doorstep just in time! You don't have to haggle or pay high fees for the taxi you hire. The car comes to your door instead you of chasing after them. For this review, all credit goes to transit applications.

Since then, getting to work has become more and more difficult. The public transport industry therefore calls for big changes. Now they are focusing more on smart mobility services. They also want to broaden the recognition of "information everywhere" to disrupt the status quo of transportation. Digital influence is set to change the passenger experience, help set new expectations that will shape public transport services around the world. Additionally, the viral growth of the smartphone over the past three years has made us more app-prone. As a result, the **Transportation** and **Logistics Industry** struck a chord and started developing applications to reduce the daily challenges that the traveler faces. Also in India, we are witnessing a growing trend in transportation and logistics applications.



COVID-19 impact on Transportation & Logistics Industry Worldwide

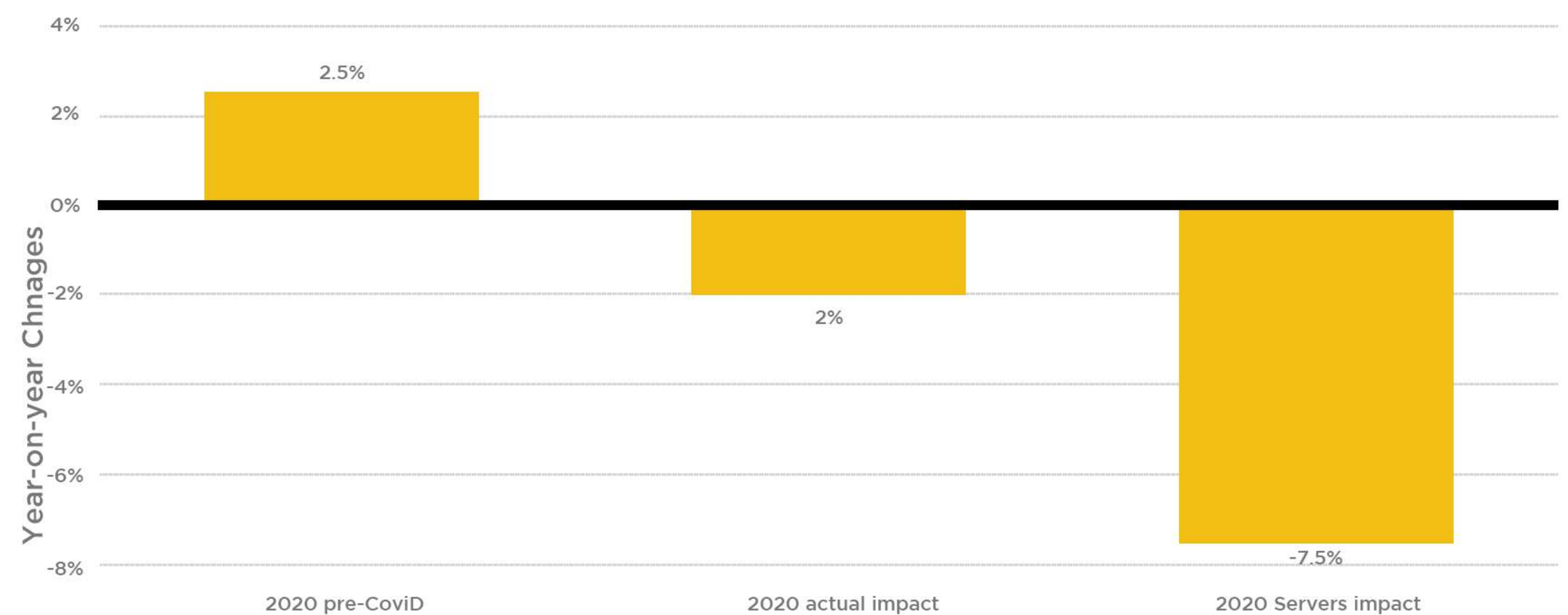
The transport and logistics industry provides one of the most vital services in the modern, globalized and interconnected world. Since the start of 2020, more and more countries around the world have closed their borders and restricted transport and travel to contain the **Coronavirus (COVID-19) Epidemic**, creating barriers to international trade and transport. The pandemic is affecting almost all dimensions of economic activity and population around the world. As a result of the coronavirus outbreak, important supply chains in the logistics and transport sector are hampered. The coronavirus outbreak has brought about meta-uncertainty in the market.

The estimated impact of **COVID-19** on logistics markets varies by country, from a drop of **0.9** in China to a drop of **18.1** in Italy.

In a severe impact scenario, the sea and air freight market in North America is expected to contract respectively from **12.1%** to **9.5%** in 2020 compared to the previous year.

Year-on-year change of the global freight forwarding market due to the coronavirus outbreak in 2020, by scenario

Covid-19 impact on freight forwarding market by scenario 2020



Conclusion

The logistics sector continues to evolve, improve with the changing business environment. In developed countries like the US, logistics costs comprising transportation costs account for 7% to 9% of the cost of the final product, warehousing cost accounts for about 1% to 2% and inventory holding costs account for about 3% to 5%. In developing countries, logistics costs are estimated to be higher at around 15% to 25% of the final cost of the product due to lack of adequate logistics system. In India, logistics cost is around 13%, comparatively higher than the developed & other developing countries.

To stay competitive, we need efforts from all the ends, also from both government & private sectors. With spending on infrastructure & implementation on GST, Indian logistics industry will surely transform. Also with the use of technology & so many tech-based companies, transport industry is also integrating which ultimately benefit our logistics sector & economy.

Presented By

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