Prethodno priopćenje

## **GLOBAL LOGISTICS INDUSTRY**

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Abstract: The process of globalization influences primarily production and distribution of goods. During internalization, that preceded globalization, international transportation and freight forwarding developed. Nowadays and after Covid 19 pandemics, supply and distribution logistics have shown to be very successful relating to extremely expansively growing economic situation as well as with the problems on the global market. Companies, that want to survive on the global market must have very good logistics processes. Logistic process focuses on planning, realization and the control of effective flow and storage of products from the place of production to the place of consumption. These processes are provided by logistics centres whose main aim is the maximum fulfilment of customers' requirements. At present, logistics is being in the process of constant growth, and it is the strong trend of big business and industrial concerns which perform the distribution and transportation of its products by means of logistics companies.

**Keywords:** globalization, distribution logistics, logistics centre, distribution centre.

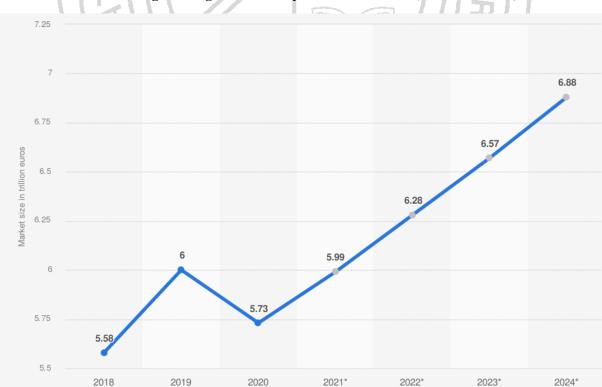
## 1. INTRODUCTION

Development and the significant position of logistics as such persisted in army industry where effective organization of distributional and storage logistics was necessary as for instance the regular delivery of munition, weapons, heavy industry, food supplies as well as employees that were the key factors of success. The main attention to logistics started after World War II in USA where it started to be used in civil life mainly in the field of entrepreneurship and business logistics and consequently economic logistics was created. The modern understanding of logistics as such is partially focused also on the management in the field of services provided to final consumers. Nowadays, we can see logistics from different aspects mainly as a live organism which is being developed in time and is modernized by new technologies. The main aim and reason of gradual advance and optimization of logistic system is to fulfil exponentially growing customers' requirements. Logistics is the management of material, information, and financial flow with reference to the fulfilment of requirements of final customer on time, in relation to the necessary profit creation in the whole flow of this material. When meeting the needs of final customer, it helps in product development, in choice of a convenient customer, in management of own realization of customer needs by convenient manner (in product

production), by convenient transfer of required product to customer and finally in arrangement of liquidation of morally and physically old thing. [1] Nowadays and after Covid-19 pandemics, supply and distribution logistics has appeared as very successful in connection to extremely expansive growing economic situation as well as with problems on the global market and almost full automatization of production systems, it plays very important role.

## Four phases of the economic logistics development

- 1. development phase logistics concentrated only on distribution. It focused mainly on business and marketing approach. It expressed itself by the lack of inventories and bad arrangement and structure.
- 2.development phase— inventories are reaching the first place for their ability to present themselves as the place for stored capital. Logistics expanded to supply and entered the production management where mathematical and optimization methods were used.
- 3.development phase—integrated logistic chains and systems connected from suppliers to final customers—so called integrated logistics started to be supported in companies (The total Supply-Chain). Reengineering must happen to enforce the competitiveness of companies by rising elasticity, by means of coordination and synchronization of processes.
- 4.development phase—integrated logistics systems will be optimized. It is important to call attention that this is the development phase not finished, yet. It is the extremely complex system, and it will be necessary to create many processes to accomplish it successfully, among other things, in the field of computer integration, also including simulations for the support of decision-making process, electronic data interchange and other management methods. [2]



Size of the global logistics industry from 2018 to 2024(in trillion euros)

#### 24. MEĐUNARODNA KONFERENCIJA "NOVE TEHNOLOGIJ E U FUNKCIJI ODRŽIVOG RAZVOJA SAOBRAĆAJA, EKOLOGIJE, LOGISTIKE I POLITEHNIKE" 24. INTERNATIONAL CONFERENCE

"NEW TECHNOLOGIES IN THE FUNCTION OF SUSTAINABLE DEVELOPMENT OF TRAFFIC, ECOLOGY, LOGISTICS AND POLYTECHNICS" 27.-28. May 2022.

Source: Statista. (November 30, 2021). Size of the global logistics industry from 2018 to 2024 (in trillion euros) [Graph]. In *Statista*. Retrieved March 10, 2022, from https://www.statista.com/statistics/943517/logistics-industry-global-cagr/

In 2020, due to the coronavirus pandemic, the logistics industry shrank in size, reaching close to 5.73 trillion euros. By 2024, the logistics industry is projected to exceed 6.8 billion euros in size. The aim of logistics is in optimization of effectiveness of production and circulation processes, in as most effective bypass of space and time while it is necessary to emphasize that the logistic view is not restricted only to minimizing journey or time. [3] If a production company decides to progress and raise its present position on the market, it should pay a certain attention to logistic processes in the field of supply and distribution. Production company which would like to progress and face up the growing competition pressure from all sides must regularly optimize its models in the field of supply and distribution logistics. The final effect of searching for optimal models in a production company is a following reduction of costs connected to inventories as well as more effective use of distribution channels connecting a company with final customer, eventually with another warehouse and by that to arrange continuous development.

# 2. CLASSIFICATION CRITERIA OF LOGISTIC OBJECTS

Logistic objects can be divided according to various criteria, but range and focus of performing activities and services are generally considered. According to these criteria, objects are divided into: [4]

- -Warehouses
- -Distribution centres
- -Logistic centres
- -Logistic parks
- -Terminals of combined transport

From the point of view of ownership, objects are divided into:

- -Modest
- -public
- -Mixed

From the point of view of connection to infrastructure:

- -Monomodal- connected to one type of transport
- -Multimodal- connected to minimum of two types of transport
- -Intermodal- connected to minimum of two types of transport and enabling

Manipulation with loading units of combined transport

From the point of view of served field:

-Local

- -Regional (national)
- -International

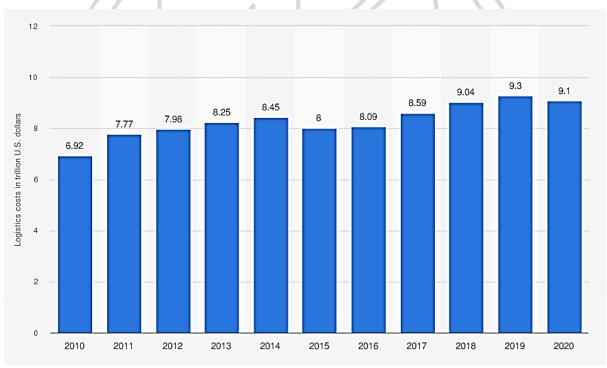
From the point of view of size:

- -Small logistic objects, area <10 000m2
- -Medium logistic objects, area 10 000m2 < x < 40 000m2
- -Large logistic objects, area >40 000m2

## 3. LOGISTICS COST

Logistic costs represent more than 30% of all costs connected to entrepreneurship of a company. Then the more qualitative management of logistic function of a company is a significant potential for reaching savings in the amount with which we can significantly contribute to the improvement of company's rentability. [5] The exact information about costs is the condition for the successful implementation of integrated logistics management. Moreover, it is important for the management and control of logistic operations.



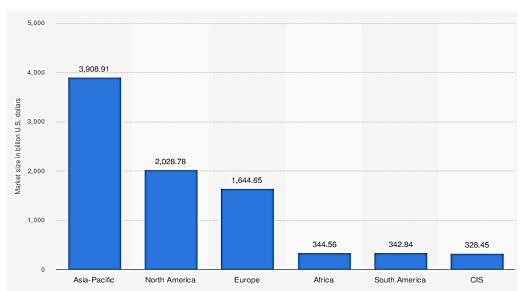


Source: Armstrong & Associates. (October 19, 2021). Logistics industry costs worldwide from 2010 to 2020 (in trillion U.S. dollars) [Graph]. In *Statista*. Retrieved March 11, 2022, from https://www.statista.com/statistics/943500/logistics-industry-costs-worldwide/

This statistics represents the costs of the logistics industry worldwide from 2010 through 2020. In 2020, global logistics costs amounted to 9.1 trillion U.S. dollars, a decrease from 9.3 trillion U.S. dollars in the previous year. Global customers are local and regional groups of customers with the similar needs and requirements who search for the benefits of products on market. The decision about the right place for opening for instance logistic centre includes decisions which

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are the best from the geographical regions and what countries are considered as alternative in this field. Then there is alternative places and cities in this field.



Size of the global logistics market in 2020, by region (in billion U.S. dollars)

Source: Statista. (October 20, 2021). Size of the global logistics market in 2020, by region (in billion U.S. dollars) [Graph]. In *Statista*. Retrieved March 11, 2022, from https://www.statista.com/statistics/1069868/total-global-logistics-market-size-region/

In 2020, the global logistics market was worth almost 8.6 trillion U.S. dollars. North America was the second largest region in that year, accounting for approximately two trillion U.S. dollars.

### Logistics in Asia-Pacific [6]

With roughly 3.9 trillion U.S. dollars in size, the logistics market in the Asia Pacific region is the largest one globally. The Asia-Pacific region has the most postal offices in the world as well. The leading position of the region in the logistics industry could be explained mostly because of the importance of the region in supplying most of the necessary trade goods globally. Since it was highly cost-effective for western companies to start moving the entire production of goods to less-developed countries in Asia, most of the companies today have their entire facilities performing from Asian countries. The expansion of trade routes and the shift of industrial production towards Asian countries contributed to the logistic market's development immensely. Yet, when one looks at the distribution of leading logistics firms by the origin of the country, the leading firms are non-Asian headquartered. Besides, the Asia Pacific region has the world's largest ports which grow at a continuous rate. PSA International, Hutchison Port Holdings, China Cosco Shipping and China Merchants Ports are four major marine terminal operators from the region.

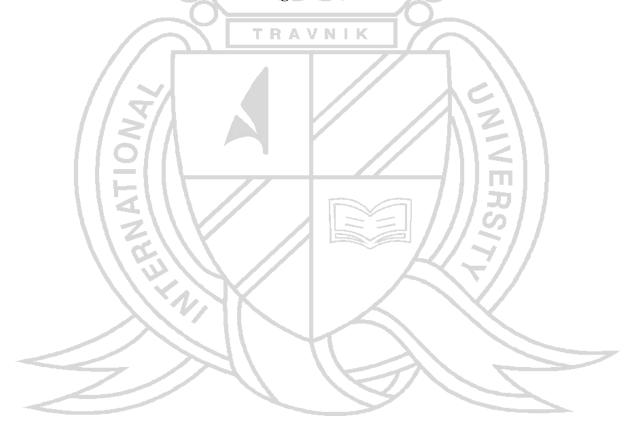
### **PSA International [7]**

Singapore-based marine terminal operator, PSA International was founded in 1964 and improved its global reach strategically since then. For instance, PSA International was

the leading marine terminal operator globally in 2019. During that period, the company handled some 60.4 million twenty-foot equivalent units (TEUs) during that period. The marine operator experienced a slump in its assets between 2009 and 2015. Yet, since 2016, the company recovered its level of assets held and by 2020 reaching its peak value of over 23.3 billion Singapore dollars. On the other hand, the revenue generated by PSA International has not recovered its peak value from 2011. Between 2009 and 2020 fiscal years, PSA International's revenue fluctuated around four billion Singapore dollars, generating just over 4.1 billion Singapore dollars in the fiscal year of 2020. The behaviour of a customer changes by the impact of globalization. A global customer has more and more possibilities how to satisfy his needs. He becomes more demanding in his requirements for the quality of the offered product, its price and quality of offered services connected to the purchase of a final production. In accordance with development, company logistics is increasingly more complex scientific discipline and becomes the strategic factor of the company success.

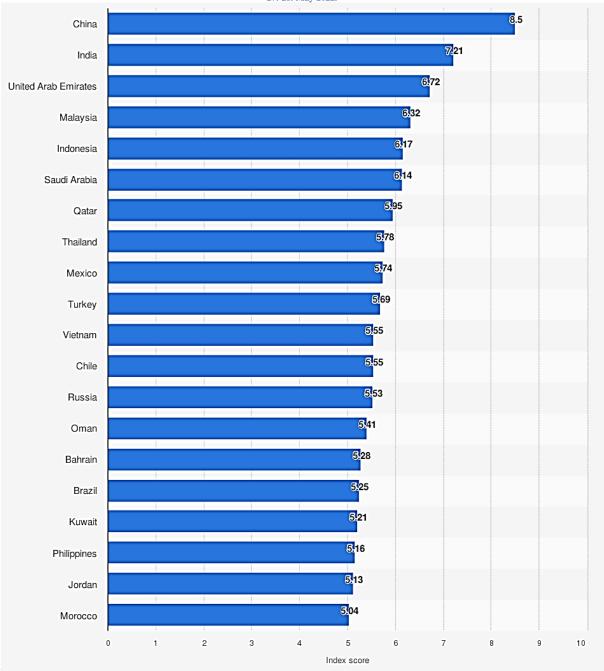
Leading emerging logistics markets in 2022, based on the Agility Emerging Markets

Logistics Index\*



#### 24. MEĐUNARODNA KONFERENCIJA "NOVE TEHNOLOGIJ E U FUNKCIJI ODRŽIVOG RAZVOJA SAOBRAĆAJA, EKOLOGIJE, LOGISTIKE I POLITEHNIKE" 24. INTERNATIONAL CONFERENCE

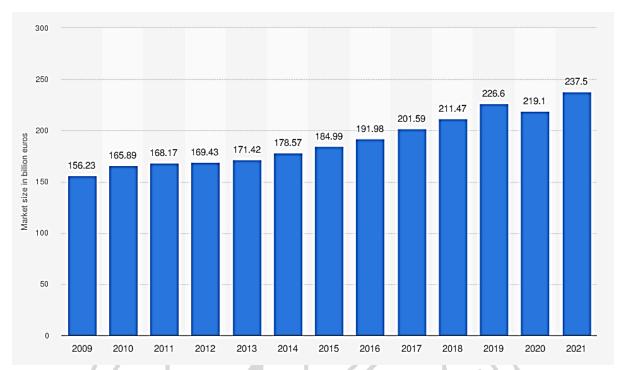
"NEW TECHNOLOGIES IN THE FUNCTION OF SUSTAINABLE DEVELOPMENT OF TRAFFIC, ECOLOGY, LOGISTICS AND POLYTECHNICS" 27.-28. May 2022.



Source: Agility. (February 8, 2022). Leading emerging logistics markets in 2022, based on the Agility Emerging Markets Logistics Index\* [Graph]. In Statista. Retrieved March 11, 2022, from <a href="https://www.statista.com/statistics/669044/emerging-economies-ranked-by-agility-emerging-markets-logistics-index/">https://www.statista.com/statistics/669044/emerging-economies-ranked-by-agility-emerging-markets-logistics-index/</a>

The statistic shows the leading emerging logistics economies in 2022 ranked by the Agility Emerging Markets Logistics Index. With an index score of 7.21, India was ranked second in that year. Logistics in its present understanding interferes into the whole company's process. Logistic centres have a great significance in all around the world. Nowadays, there is a large construction of logistic and distribution centres. They are spacious and shaped buildings taking big sites. Investors are interested very much in construction of logistic centres.

## Size of the contract logistics market worldwide from 2009 to 2021

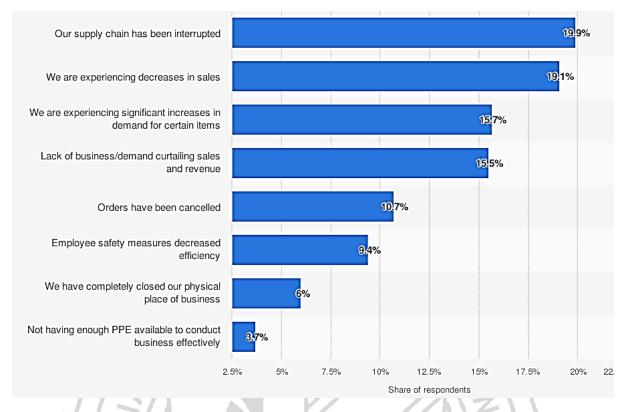


Source: Transport Intelligence. (October 5, 2021). Size of the contract logistics market worldwide from 2009 to 2021 (in billion euros) [Graph]. In *Statista*. Retrieved March 16, 2022, from https://www.statista.com/statistics/1066792/contract-logistics-market-size-worldwide/

In 2021, the contract logistics market was sized at around 237.5 billion euros worldwide. The leading companies in this field include DHL Supply Chain, Kuehne + Nagel, and CEVA Contract Logistics.

During Covid-19 pandemics, transportation and logistics play increasingly bigger role in the development of international cooperation and business relationships. [8] Investors require logistic services on the high level and expect from them a contribution in the form of expansion of their field of performance or decreasing their costs or increasing the level of customer service and their profit. Distribution channels and logistic chains are becoming more concentrated on good geographical placement, high technical facilities, and concentration of providers of logistic services.

# Impact of COVID-19 on supply chain operations 2020



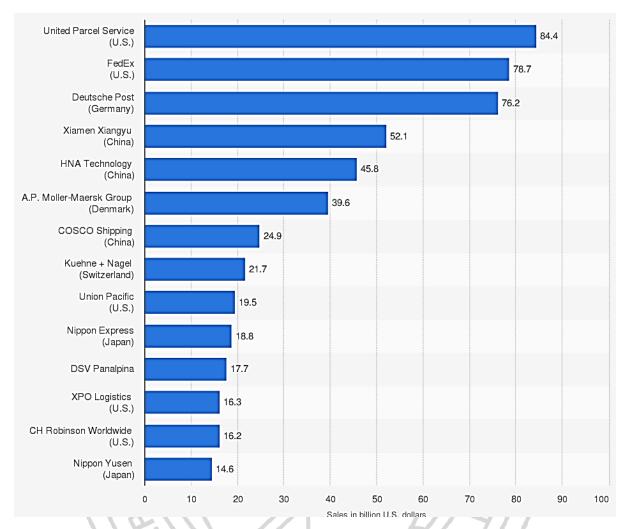
Source: Agility. (February 1, 2021). How have your operations been affected by COVID-19? [Graph]. In *Statista*. Retrieved March 15, 2022, from https://www.statista.com/statistics/1225523/impact-of-covid-on-supply-chain-operations/

About 20 percent of logistics industry professionals reported that their supply chains were interrupted by the COVID-19 pandemic in 2020. In addition, about 11 percent of respondents also reported that their orders were cancelled because of the pandemic.

## 4. THE BEST LOGISTIC CENTRES

Development of logistic centres in the world is nowadays in the great growth phase. Even though Covid-19 pandemics influenced all sectors of economy, logistic sector has got into the fast growth despite this crisis. Unambiguously, inadequately built infrastructure and inadequate state support can be considered as the most significant problem in the development of logistic centres. In the countries where the infrastructure is on the very high level, logistics is among the countries more interconnected and more effective.

World's leading companies in the logistics industry in 2020, based on sales (in billion U.S. dollars)



Source: Forbes. (August 19, 2021). World's leading companies in the logistics industry in 2020, based on sales (in billion U.S. dollars) [Graph]. In *Statista*. Retrieved March 16, 2022, from https://www.statista.com/statistics/263938/revenue-worldwide-leading-transportation-companies-in-the-shipping-industry/

The top three logistics companies worldwide in 2020 operated as air couriers, with United Parcel Service generating the most revenue from sales with 84.4 billion U.S. dollars. Due to the influences of the globalization on the market, networks of partners have arisen, whose aim is to reach the success in the satisfaction of the need of global customer. Logistics companies are responsible for managing the flow of goods from one point to another; this includes not only the transportation of cargo but also the packaging and warehousing of such goods. In some cases, logistics companies may specialize in certain modes of transportation, namely, air, rail, road, and sea. [9]

### 5. CONCLUSION

In today's understanding, logistics interferes into the whole company's process. Company's logistics is in connection to development more and more complex scientific discipline, and it becomes a strategic factor of company's success. In the world, there is a trend of building the

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modern logistic parks and centres which should provide more complex services for their customers. [10] The present trend is to build logistic parks near highways. Only the perfect quality of logistic services in harmony with the quality of offered product and fair price enables companies to survive in competitive fight. There is a big emphasis on the construction of logistic parks to be ecological and protect surrounding environment.

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