**INTRODUCTION**

Considering the latest developments in Information Technologies and the increase in the data storage means available to us, it is not unexpected for this type of advancement to lead to massive and increasingly growing amounts of sourced data. This enormous amount of information being generated and collected each moment, along with the challenges and creation of new qualitative data analysis methods, is accepted as a new concept referred to as Big Data.

Big data is defined as data with greater variety, arriving in more significant volumes and with more incredible velocity. Big data also refers to larger, more complex data sets, especially those derived from new data sources. Traditional data processing software is incapable of handling these massive data sets. However, these massive amounts of data can be used to solve previously unsolvable business problems.

The transportation and logistics sectors are best positioned to benefit from Big Data technologies' methodological advancements and analytical capabilities. Today, as the digitalization of these sectors progresses, transportation and logistics providers are constantly creating huge and huge datasets while managing the massive flow of goods and people. In transportation, the increase in data is especially evident in the availability of traffic information through navigation applications. A similar passenger information application provides departure information to users of public transport. In addition, payment of shipping costs (ticketing and tolls) is increasingly dependent on data-dependent technologies, applications, and services. Every day, location, content, size, weight, origin and destination, and much other information is tracked and gathered for millions of shipments around the world, creating valuable sets of Big Data and opening avenues for new data-driven businesses and new opportunities in terms of operational efficiency, customer experience, and new business models.

There is now a significant amount and diversity of data available for operators to improve performance, efficiency, service provision, safety, and security across all modes of transportation. Operators can also use data to manage demand conflicts, customer service, environmental impacts, and innovation. Traffic signal coordination, trains reporting track defects, online flight check-ins, and cargo tracking are examples of this. As a result, data is becoming increasingly important in managing and using transportation systems. Therefore, it is critical to identify data requirements and data capabilities and constraints. This will aid in determining the impact of big data on transportation and the expected or required innovations (such as the internet of things).

Companies, including those in the logistics and transportation industries, must use specialized tools known as big data analytics to obtain the best data analysis. These tools enable the management and analysis of massive amounts of data generated by sensors on roads and vehicles, GPS devices, customer applications, websites, etc. In fact, the impact of big data analytics is not limited to the logistics and transportation sectors; other branches of transportation, such as airlines, airports, freight, hospitality, and railways, can benefit from the impact of big data analytics, which will aid in decision making, operational management, brand management, and customer relationship services.