#### Introduction

With the ever-expanding world economy, the Third-Party Logistics market has become incredibly valuable. These companies are responsible for the storage and transportation of goods between suppliers, retailers, ports and everything in between. One company that has taken this industry by storm is XPO Logistics. Founded in 1989, XPO started taking over the United States Logistics market after its first acquisition which took place in 2012. The smart executives understood the growing importance of technology and invested heavily in the information technology department. This allows XPO to have a competitive advantage by having more efficient systems. This analysis will focus mainly on XPO economic position in the United States economy since that is where most of its business is done and where most of its infrastructure is located. While relatively young compared to other companies, XPO has a lot to offer in this rapidly growing market.

#### **Industry Structure**

The third-party logistics market consists of many different firms in what is best described as monopolistic competition. The revenue generated by these companies [3] is in the same ballpark which makes me believe there is no monopoly. While C.H. Robinson Worldwide and XPO Logistics do generate the most revenue by a few billion (in the United States), the vast number of firms means their market share is still a small percentage. The predicted market size of the global third-party logistics market is 672 billion U.S. dollars according to Grand View Research [9]. No firm gets close to controlling ten percent of the market and the many firms present make me additionally believe this is clearly not an oligopoly. Although the third-party logistics market is well defined each company does a good job to make its strengths unique. The many varying ways these companies conduct their business gives customers many varied ways to achieve the same task. Each company tries to set itself apart to attract customers even though their services are similar. These logistic firms compete with price, regional availability, new technology and even customer service since the communication between the logistics firm and their customers is integral to make sure their products are delivered and stored appropriately. The structure of this market clearly supports a monopolistic type of economy.

XPO Logistics takes great strides to stand out in the market. Unlike some other competitors, XPO works hard to have functional last mile delivery [1]. This service allows customers to have their materials delivered to their front door if they would like. The advanced software developed [1] to make last mile delivery quick and easy helps XPO stand out in this area.

#### Competition

The third-party logistics market has numerous qualified firms itching to get the top spot. In the United States market there are several top competitors that compete with XPO such as C.H. Robinson Worldwide, UPS Supply Chain Solutions and J.B. Hunt Transportation Services [2]. Like XPO, these competitors have well connected networks with warehouses and multiple

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modes of transportation to ensure a timely delivery of a customer's materials [4]. XPO, being a much newer company than its rivals, has taken great strides in recent years to expand its influence, mostly in North America.

One of the major ways XPO made itself stand out from its competition was by making many acquisitions in order to quickly expand its reach. Between 2011 and 2015, XPO Logistics made 17 acquisitions under the leadership of CEO Bradley S. Jacobs. Some of these companies were Con-Way Inc. [5], 3PD Holding [6], and Norbert Dentrassangle S.A. [5]. These acquisitions allowed XPO to quickly compete with its much older competitors not only in the logistics department, but in the trucking and shipment of materials market. The acquisition of trucking companies allowed XPO to develop its own fleet of full truckload trucks and less-than-truckload trucks [1]. Having its own fleet allowed for more flexibility when transporting materials and the implementation of any technology, such as GPS tracking to see where the trucks are live at any time. XPO also specifically acquired many I.T. companies to stay up to date on the most advanced technology. This has given XPO an competitive advantage over other competitors by allowing them to quickly integrate their new acquisitions and quickly facilitate the inclusion of the latest technology.

A great way to show the competition in the market is to look at the adoption of machine learning by these firms in just the last decade [12]. XPO employs many software developers and data scientists to make their services more efficient. For example, certain machine learning programs allows you to predict increases in reverse logistics [1]. This allows the firm to prepare for these events and ensure they are not caught off guard by the changing needs of a market. These new technologies not only make logistic firms more efficient buy more appealing to potential customers. A normal business doesn't have access to advanced data computing techniques but by using third-party logistics' services they can reap the benefits [12]. This is a reason why the competition is so highly centered around more advanced technology rather than physical infrastructure like warehouses.

Because of these smart business moves by XPO it has grown tremendously within the last decade and has ousted many of its competitors for the top third-party logistics firm in North America [4]. XPO has successful made itself stand out because of the inclusions of the latest technology available. Since it owns many I.T. companies, the inclusion of autonomous security robots [7] or advanced automation filled warehouses [8] allow XPO to innovate much more than any of its competitors.

### **Supply and Demand Behavior**

Over the past few decades the third-party logistics industry has grown tremendously. On of the most important changes is the improvement of modern computers [9]. More advanced computers give logistics companies the ability to streamline and optimize operations through advanced computing techniques, such as Big Data analytics [9]. This has helped drive the cost down for suppliers and increase supply in the market by optimizing their operations. XPO Logistics made smart moves to acquire technology companies to better equip itself with the latest and greatest technology to streamline its operations. XPO's data scientists and software engineers work to develop advanced machine learning and Internet of Things (IoT) programs to help reduce the cost and time it takes to supply its customers [9]. This increases the total supply

XPO provides and is why it has been one of the top logistics companies in the United States for the past several years.

XPO additionally owns its own trucks (full truckload, intermodal, and less-than-truckload) [1] which allows it to change operations at a moment notice in order to streamline performance. It also provides customers with real time tracking of their shipments through GPS. These improvements are not unique to XPO but show how the industry is changing to increase the supply of their services.

At the same time the ever-growing importance of the internet has greatly increased the demand for qualified logistic assistance (the Appendix includes a graph detailing predicted revenue in the United States). The internet has allowed companies to easily spread their business around the globe. With different components and products being produced all around the world these firms need third-party logistic companies more than ever in order to keep their business moving smoothly. Companies such as XPO help store and transport their customers goods so that their customer doesn't have to worry about it [1]. This makes third-party logistics companies crucial for any large-scale company that doesn't want to make heavy investments into their own logistic department.

#### **Elasticity of Demand**

Third-party logistics has become an integral part of how a firm operates. The significant amount of investment into both technology and employees means the average company cannot afford to self-run the logistics of their company [11]. This means the demand for logistic services doesn't change too much when the price for the services changes. The additional cost for companies switching between logistic companies, which can sometimes include changing routes, schedules or the software to manage their shipments, means that many companies would prefer to pay slightly higher prices in order to stay with their original logistic company. This essentially means the third-party logistics market is quite inelastic. Firms such as XPO can raise their prices and in the short term not lose much demand for their services, but in the long-term competition between these firms will lead to the lowest priced firms getting the most business.

If the trends continue, the third-party logistics industry will continue to grow in importance in the coming years. It will become harder and harder for businesses to operate without a logistics provider due to the constant outsourcing of manufacturing the dividing production across the world. It just takes too much time and money for a company to efficiently run its own logistics in a competitive global market.

#### **Conclusion**

XPO Logistics is positioned to stay at the top of the third-party logistics industry in the United States. The industry is structured so that ample competition in the market will allow XPO, with its many acquisitions and emphasis on advancing technology [7], to continue to innovate and stand out from its competitors. Having full-fledged data science departments allows XPO to use the latest technology to optimize its services. Although other firms such as C.H. Robinson Worldwide and UPS Supply Chain Solutions rank with XPO at the top of the logistics

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market, their lackluster technological innovation so far has not allowed them to completely dominate in the market. This increase in innovation across the board, however, is making the third-party logistics industry more efficient thereby increasing the supply available to consumers [9]. The increase in supply is associated with more efficient shipments and routes as well as the predictive ability of machine learning algorithms to ensure the company is not overrun during certain times of the year. This increase in supply is happening as the demand for logistic services is increasing due to the increasing globalized economy. Businesses of all sizes are increasingly outsourcing their production or their range of service and the high costs to start up an efficient logistics department [11] means that most smaller companies find it more profitable to purchase the services from a professional firm.

XPO Logistics is in a good situation to grow in the coming years, mostly because of their willingness to accept new advances in technology. The competitive market they are in, however, means they need to keep innovating to keep their dominance in the market. In the United States economy XPO is at the top of the ranks but on the world stage it is lacking in the large-scale distribution of its warehouses and hubs to fully compete on the world stage.

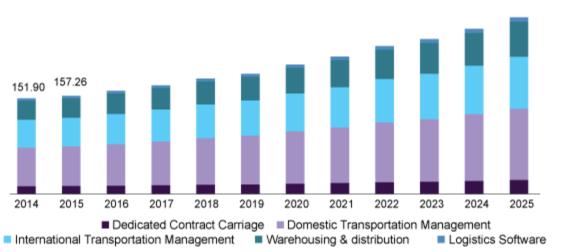
#### References

- [1] XPO Logistics (n.d.). Transportation Solutions. Retrieved from https://xpo.com/solutions/
- [2] Gartner Peer Insights (n.d.). XPO Logistics Competitors and Alternatives. Retrieved from https://www.gartner.com/reviews/market/third-party-logistics-3pl-north-america/vendor/xpologistics/alternatives
- [3] Burnson P (June 6, 2018). Top 50 US and Global Third Party Logistics Providers (3PL) in 2017: Collaboration Is Now Paramount. Retrieved from https://www.logisticsmgmt.com/article/top\_50\_us\_and\_global\_third\_party\_logistics\_providers\_3pl\_in\_2017\_collaborat
- [4] Transport Topics (2018). 2018 Essential Financial and Operating Information for the 50 Largest Logistics Companies in North America. Retrieved from https://www.ttnews.com/top50/logistics/2018
- [5] Benzinga F (December 5, 2018). At XPO Logistics, I.T. Kept Up With One Acquisition After Another. Retrieved from https://finance.yahoo.com/news/xpo-logistics-t-kept-one-180151313.html
- [6] XPO Logistics (August 16, 2013). XPO Logistics Completes Acquisition Of 3PD. Retrieved from http://investors.xpo.com/news-releases/news-release-details/xpo-logistics-completes-acquisition-3pd/
- [7] XPO Logistics (April 3, 2018). XPO Logistics Uses Emerging Technology In Robot Security Program. Retrieved from https://news.xpo.com/en-us/news/780/xpo-logistics-uses-emerging-technology-in-robot-security-program
- [8] XPO Logistics (June 18, 2018). Nestle and XPO Logistics Build A Digital Warehouse Of The Future In The UK. Retrieved from https://news.xpo.com/en-us/news/1186/nestle-and-xpologistics-build-a-digital-warehouse-of-the-future-in-the-uk
- [9] Grand View Research (April 2018). Third Party Logistics (3PL) Market Size, Share & Trends Analysis Report By Transport (Roadways, Railways, Waterways, Airways), By Service, By End-use, By Region, And Segment Forecasts, 2014 2025. Retrieved from https://www.grandviewresearch.com/industry-analysis/third-party-logistics-market
- [10] Taylor, T. (2018). *Principles of Microeconomics 2e*. Retrieved from https://openstax.org/details/books/principles-microeconomics-2e
- [11] Datex (n.d.). The Role of 3PLs in Warehousing & Distribution. Retrieved from https://www.datexcorp.com/the-role-of-3pls-in-warehousing-distribution/
- [12] Columbus L. (June 11, 2018). 10 Ways Machine Learning Is Revolutionizing Supply Chain Management. Retrieved from https://www.forbes.com/sites/louiscolumbus/2018/06/11/10-ways-machine-learning-is-revolutionizing-supply-chain-management/#68bbe85f3e37

# Appendix



## U.S. third party logistics market, by service, 2014-2025 (USD Billion)



Graph from reference [9]. Shows the expected increase in revenue from third-party logistics services in the United States. Note: the 672 billion mentioned under "Industry Structure" refers to the global market.