

Research Article

Effects Of Logistics Management On Performance Of The Companies: A Case Study Of Germany

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Abstract

This study outlines the importance of warehouse management and inventory management in every business or organization's success and operational performance. Germany is a global leader in logistics with its excellent infrastructure, and the World Bank rated Germany #1 three times in a row in logistics. Hence the descriptive analysis was made by taking the eight operating companies of Germany. The data was collected through a questionnaire emphasizing logistics management and its connection with cost reduction, increased efficiency and outcomes with improved market competitiveness. The study aims to acquire fresh insights into German businesses' logistics management and highlight the long-term implications of adopting suitable management techniques. This research's practical aim is to make the results accessible to domestic businesses to help improve their operations and, if necessary, build a logistics based system. The study's findings reveal that effective storage management and control may help save money on storage expenses. The placement of primary and auxiliary storage helps companies to avoid "idle time," and stock control storage helps them to prevent the possibility of losing product lifetime and incurring extra expenses due to poor storage. Moreover, the study results concluded that logistics management positively impacts the companies or businesses' performance, and it plays a vital role in increasing the efficiency of any business's operations.

Keywords: Effects, Logistics Management, Performance, Germany

Introduction:

The globalization process makes it possible to sell goods at various producers at different prices for the same purpose. The expanded market offering has led to intense rivalry, with some businesses facing survival problems. The expansion of IT has revolutionized the world with the flow of information across the globe which has improved the education for producers and consumers [1]. The survival of the company depends upon the continuous advancement and diversification in the products by adopting the competitive strategies. It is also mandatory for the running companies to cut down their prices of products to sustain in the market. Likewise, the company's continual intense growth is essential for its local and international existence.

The creation and maintenance of the company's competitive advantage is a complicated, sustainable process, which mainly hängen with the company's flexibility and desire to adapt itself as per the existing competitor. Continuous process adjustment and improvement is the foundation for the operation of the business under the prevailing circumstances while being one of the major success reasons at the same time. In this scenario, contemporary management techniques are needed in all areas of the company's operations, particularly in supply chain management, contributing to increased competitiveness [2]. One vital element is logistics that delivers overall operational costs for management and improves the efficiency for the operations of the firm.

Logistics is not only about saving money; but used for customer-driven service strategy [3] Supply chain is a broader concept of management where logistics management falls is often used to fulfil client requirements via proper decision making, management, planning and execution of efficient transportation and storage, from source to destination, of relevant information, products and services. The management of logistics enables businesses to decrease costs and to improve customer service [4].

Effective logistics management does not need the specific size of the organization to do so, but rather ensures cost-effective and suitable procedures so that material, time and power are not wasted. It is thus essential for every business or organization to focus on their inbound and outbound logistics operations.

Germany is a global leader in logistics with its excellent infrastructure. The World Bank rated Germany #1 three times in a row in logistics. Germany is the territorial heart of the EU, with by far Europe's biggest logistical market and its most sophisticated transport infrastructure, providing quick access to more than 500 million European customers. Therefore, the purpose of this study is thus to investigate that how logistics management, warehouse management effect the performance of companies in Germany.

Research Question:

- Does the control in level of inventory reduces the inventory cost?
- Does the control and improvement in internal and external transport reduces the transportation cost?
- Does total control and ware house management reduces the storage cost?
- Does good decision making and control of internal and external information reduces the total cost of the company?

Literature Review

Logistics Management:

Many businesses want to acquire a foothold in the global market in today's highly competitive market and to take the opportunity from greater production and sourcing efficiency. The importance of logistics management in maintaining the seamless flow of resources, goods and services is now a significant factor in the company performance. Now a days, competitive climate, strive many companies to acquire a share in the global market to seek benefit from increased production and efficiency in the supply sector. [5]

For companies, the logistics management helps to improve current manufacturing patterns and supply procedures based on the same resources using organizational strategies to promote business efficiency and competitiveness.[6]

Sustainability is defined in business as the capacity to achieve and maintain ongoing competitiveness. However, logistics management must be seen as a contributor to a success of any company. [7]

Previous study revealed that, owing to logistical management implications in strong performance and increasing awareness by Using logistics to enhance customer value, Logistics performance has become a major emphasis.[8]

According to [7], a company would want to evaluate logistics performance for at least three reasons: to minimize operational costs, to utilize these metrics to generate adequate revenues, and therefore to increase the value of shareholder. He added, "By quantifying operating costs, a researcher may determine if, when, and where to implement operational adjustments to reduce expenditures and, most importantly, discover opportunities for better asset management."

A logistics manager maintains computerized inventories to improve inventory management and to reduce the time needed to place orders [9]. Keeping comprehensive records for each executive travel inside the company makes comparing expenses easier.

Record of logistics and transports aids in timely delivery of the products and final breakpoints. The forecasting of any mode of transport ensures that all breakpoints may be encountered as compare to earlier modes of transport. Additionally, a complete record of any transportation should be kept in a specific programmed or online. The presence of these kinds of systems and databases enables rapid comparison of data from previous operations, resulting in better activity or a reduction in possible expenses and wasted time, allowing the business to select the most advantageous and least expensive choice [10]

Logistics managers understand how to appropriately locate warehouses. A warehouse's location should be favorable, since it enables each shipment to be processed more quickly. Although "idle" time is an inherent part of all modes of transmit as businesses are always looking for strategies to minimize it via appropriate product storage, thus extending their useful life.

According to the recent study [11], there has been a significant shift in the demand for products, which has had an effect on the logistic operations. When an organization's transport process grow in scale, it has a greater impact on the environment and it also has an effect on the brand name. Because of the dramatic changes, management is concentrating on policies and establishing methods to mitigate the negative effects of the environment. Logistics operation has an effect on a variety of

variables, including economics, a company's financial performance, and competitive advantage. Since it contributes to client satisfaction, increases the profitability of a company, and offers an economic advantage.

According to [12], an organization's growth and development plans are created by the organization itself. Supply chain activities, as well as logistics services, are being fostered in the present age in order to create a more diversified network for company. While logistics strategies are related to financial and environmental performance hence managers design the logistics strategies to better the performance of the company. Likewise, logistics have an effect on organizational objectives in in current business environment and it is encouraged to have a long-term plan for logistics.

According to study [13], businesses seek to gain a competitive edge to make sufficient revenues and to keep in the market respectively. Management decisions and its operations is a difficult job that is fraught with difficulties, which creates problems. Logistics service is one of the essential tasks for certain companies, therefore they choose to outsource it. It is preferable that outsourcing operations be set up in such a way that a next party can effectively grasp market drifts and be able to offer excellent customer service. According to the related study [14], logistics adds value to a company's operations and has a major impact on its growth. In order to sustain the effectiveness of the company, joint working and technological advancements are encouraged in logistics operations. Logistics operations, on the other hand, are being promoted since they have a major effect on the globalization process. Firms that have reliable logistics operations are able to extend their company activities on a worldwide scale, resulting in financial gains.

Logistics has been segregated in to two forms mentioned below:

Inbound Logistics, which relates to the operations related to material purchase, handling, storage and transportation, and • Outbound Logistics, which includes operations related to material collection, maintenance, dispensing and product delivery to the end consumer [15]. Since it is critical to gaining competitive advantage, logistics plays a key role in many sectors, including manufacturing. However, companies need to adapt the shift in consumer demands, and must opt flexibility in logistics [16]. Each business must establish or form its own logistical values that will be integrated into the product or that will enhance the value of the product when it is put to work. Customers usually concerns about the accessibility of a product, regardless of its shape and size, and it is essential that it will be available to them when they need it. Logistics information management is a capability that helps companies to manage their supply chains [17]. As part of the overall corporate governance of a business in today's competitive market, logistics management strategy is critical, particularly in the areas of asset management and financial flow management. That is to say, the utilization of logistical savings will allow for cheaper pricing, longer payment terms, and a better quality of service to consumers, resulting in improved operational efficiency.

Leaders concentrate on firm performance, and makes strategies which are intended to help a company to develop[18]. logistics is a key component that directly impacts entire company performance. An organization's logistics services must deliver reliable goods to consumers. For example, supply chain management is concerned with regulating forwarding, implementing, evaluating backward flow and shortage problems, and stores all relevant information with a Focus on improving service performance and allowing management to work with freedom. Customer relationship, market share growth, and customers ' satisfaction are all variables related to logistic operation[19] These elements help the managers to evaluate their firm's performance and concentrate on improving the end product and service.

According to [20], logistic operations assist a business in every function. Logistics operations are vital for economic growth and play a vital role in each sector. Efficient logistic operations benefit the company and enhance the performance [21]. From manufacturing to delivery, company stability is important. Management uses technology to provide products to consumers in order to meet their requirements. Logistics is important in all aspects of the organization's operations. If a company cannot obtain material or deliver products on schedule, then it takes the risk of losing their competitive edge, which is now secured by logistics.

Empirical Research:

Nowadays, the success or failure of a company is based on its ability to produce profits; yet, in order to earn profits, the entire cost of the business must be less than the total revenue. If you want to remain competitive on the market at a time when competition is fierce, you have to keep the price of your goods at the lowest rate while maintaining the highest possible level of quality. The only way to do this is via cost-cutting measures. The fundamental concepts of supply chain management and logistics are focused on lowering costs while simultaneously increasing company performance. When it comes to improving the efficiency and effectiveness of operations while retaining a competitive edge, the adoption of logistics management practices, as well as its continual development, are key instruments in the process. There are a number of variables that influence supply chain efficiency, including the purchase process, distribution, personnel skills, and technological advancements.

This paper's main emphasis is on logistics management and its connection with cost reduction, increased efficiency and outcomes with improved market competitiveness. The aim of the study is to acquire fresh insights into German businesses' logistics management and to highlight the long-term implications of adopting suitable management techniques. This research's practical aim is to make the results accessible to domestic businesses to help and improve their operations and, if necessary, build a logistics based system. The study topic developed the following basic hypothesis: By implementing suitable logistics management techniques, the company's overall expenses would be reduced and its business performance would be enhanced.

Analysis of the study:

The existing study was conducted in eighty companies operating in Germany. In these companies, the questionnaire was given to 80 examinees, who were middle and senior level managers in their respective organizations. The effectiveness of logistics management is determined on respondents' reactions to questions pertaining to the 4 critical elements of logistics – record or inventory, transportation or transport process, storage and data information - and whether or not it leads to increasing the efficiency or a reduction in overall costs in the company.

Following the question: *In the company, regular or minimum check of each product in a stock is made continuously or at least once a week*, these responses were achieved: I Strongly Agree – 58 respondents, or 72.5%, I Agree – 12 respondents or 15%, I am Neutral – 5 respondents or 6.25% I Disagree – 2 respondents or 2.5 %, and I strongly disagree –3 respondents or 3.75% (as shown in

figure1)

In the company, regular or minimum check of each product in a stock is made continuously or at least once a week

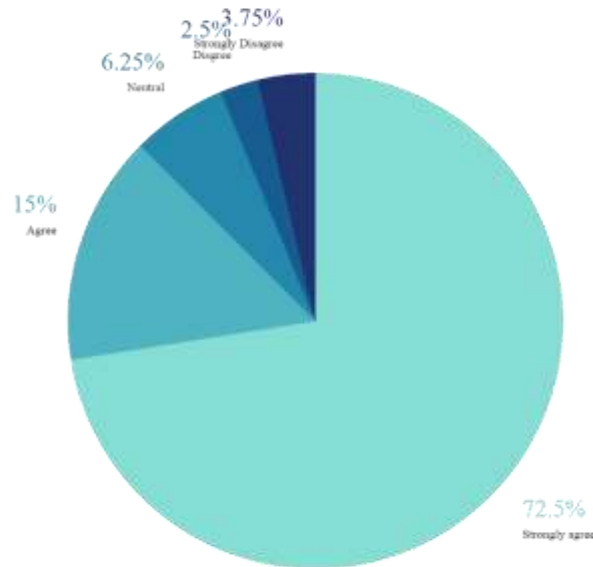


Figure 1: Inventory management

Following the question: *In the company, Internal or External check is made on transportation costs in terms of delivery to replace a costly transport process with a subsequent one.* , these responses were achieved: I Strongly Agree – 48 respondents , or 60%, I Agree – 20 respondents or 25%, I am Neutral – 7 respondents or 8.75% I Disagree - 3 respondents or 3.75 % , and I strongly disagree –2 respondents or 2.5%(as shown in Figure 2) .

In the company, Internal or External check is made on transportation costs in terms of delivery to replace a costly transport process with a subsequent...

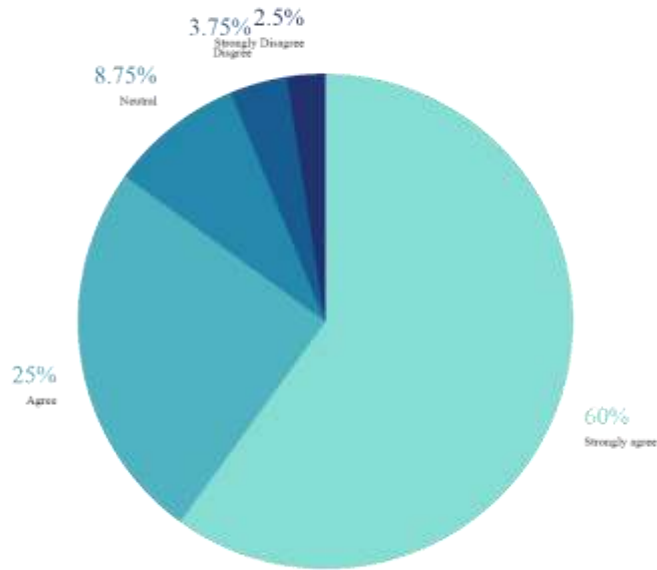


Figure 2: Transport Management

Following the question: *In the company, adequate storage reduces the cost of storage and does not impact adversely on the life span of product*, these responses were achieved: I Strongly Agree – 52 examinees, or 65%, I Agree – 22 respondents or 27.5%, I am Neutral – 2 respondents or 2.5% I Disagree – 3 respondents or 3.75 %, and I strongly disagree –1 respondents or 1.25%(as shown in figure 3)

In the company, adequate storage reduces the cost of storage and does not impact adversely on the life span of product

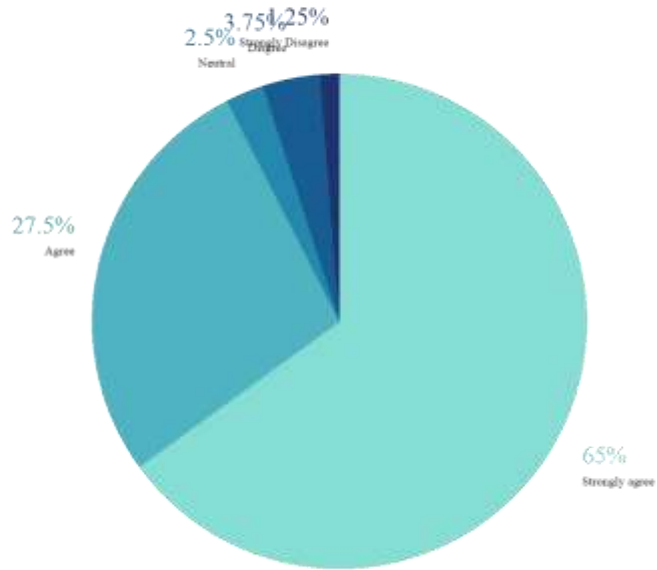


Figure 3: Storage Management

Following the question: *In the company, electronic or digital record of in stock products and transport, facilitates the control process by making reduction in costs*, these responses were received: I Strongly Agree – 45 respondents, or 56.25%, I Agree – 23 respondents or 28.75%, I am Neutral – 4 respondents or 5% I Disagree – 5 respondents or 6.25 %, and I strongly disagree –3 respondents or 3.75%.9(as shown in Figure 4)

In the company, electronic record of in stock products and transport, facilitates the control process by making reduction in costs

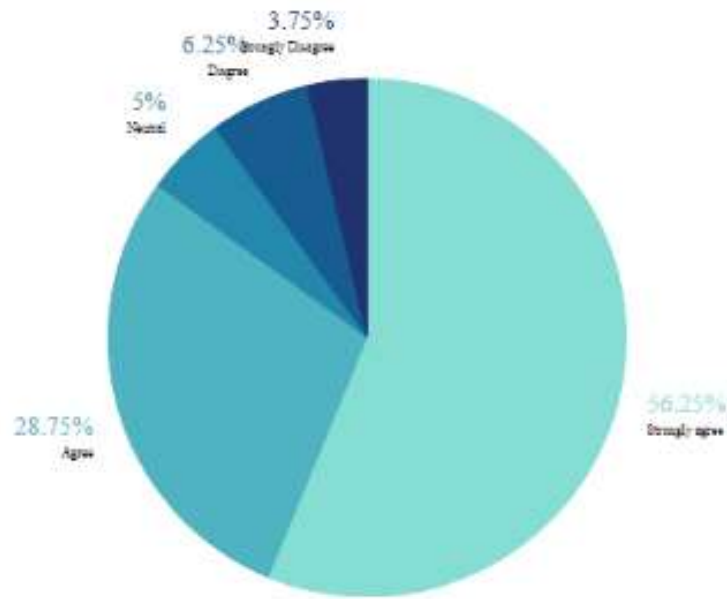


Figure 4: stock management

Following the question: *In the company, timely decisions are made upon reliable and accurate information*, these responses were achieved: I Strongly Agree – 57 respondents, or 71.25%, I Agree – 10 respondents or 12.5%, I am Neutral – 4 respondents or 5% I Disagree – 6 respondents or 7.5 %, and I strongly disagree –3 respondents or 3.75%.

In the company, timely decisions are made upon reliable and accurate information

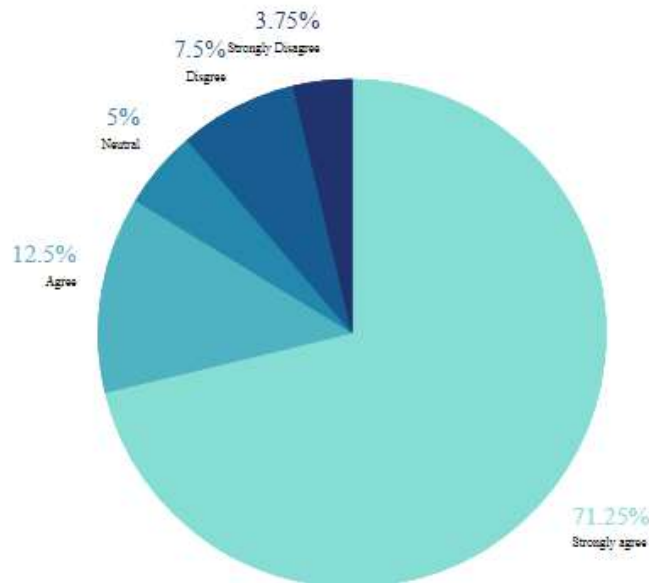


Figure 5: Information management

Conclusion:

Any organization's main objective must be continual improvement of operations, as well as an increase in the efficacy and efficiency. With this study, we hope to set a good example for companies in Germany by adopting effective logistics management techniques in their operations.

From the prevailing study, it can be learned whether or not businesses pay attention to effective stock management, data storage and transportation, information storage and implementation for proper coordination and integration of company operations. The fallouts indicates that businesses control inventory levels or digital records of the bare minimum inventory, decreases the amount of "dead" capital kept in reserve. Moreover, Procurement flexibility and cost reduction simplify inventory management. According to the questionnaire answers, business transportation is continuously reviewed, regulated, and improved.

Storage record of all transportations made it possible for the prediction of delivery times and, as a result, the cost of future transports may be predicted and reduced. In this respect, the information on transportation costs accessible in electronic records from previously completed transports enables selecting the cheapest and most efficient mode of transportation in the future, resulting in a decrease in transportation costs. According to research, effective storage management and control may help you save money on storage expenses. The placement of primary and auxiliary storage helps companies to avoid "idle time," and stock control storage helps them to prevent the possibility of losing product lifetime and incurring extra expenses due to poor storage. Additionally, the automated records of all goods kept make it possible to manage storage costs more quickly, effectively, and simply, resulting in a decrease in storage expenses and, therefore, a reduction in overall expenditures. Based on the findings, it seems that correct, significant, and useful information from both inside and outside the business facilitates to take the good decision in time. To make it happen, it is mandatory to have comprehensive information management, data collection and control for proper usage of the information. It is vital that data should be accurate in order to avoid doing wrong decisions and

incurring excessive costs, and if the selected information is useful, the expected time for handling such data would be shorter, allowing for prompt decision-making in critical situations. When quick choices are essential to a company's performance, Electronic databases provide anytime, everywhere access to information, regardless of time or distance. As a result, electronic databases reduce overall expenses while improving the company's success. Because of this, logistics operations are essential to modern businesses, since they provide them with more value in relation to their expenses. If any company or businesses desire to be the most successful on the market, they should focus on improving logistics management.

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