Internship Report on

"Reducing Lead Time as a Strategy for Achieving optimal KPI Performance at Kuehne Nagel BD."

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An internship report submitted to the Brac Business School in partial fulfilment of the requirements for the degree of

Bachelor of Business Administration

BRAC Business School BRAC University April 2023

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Declaration

It is hereby declared that

1. The internship report submitted is my/our own original work while completing degree at

Brac University.

ID-18304105

2. The report does not contain material previously published or written by a third party, except

where this is appropriately cited through full and accurate referencing.

3. The report does not contain material which has been accepted, or submitted, for any other

degree or diploma at a university or other institution.

4. I/We have acknowledged all main sources of help.

Student's Full Na	me & Signatur	re:	
Afrina Rahman			

Supervisor's Full Name & Signature:

MD Hasan Maksud Chowdhury

Assistant Professor, Brac Business School Brac University

Letter of Transmittal

MD. Hasan Maksud Chowdhury

Assistant Professor

BRAC Business School, BRAC University

66 Mohakhali, Dhaka-1212

Subject: Submission of the Internship Report on "Reducing Lead Time as a Strategy for

Achieving optimal KPI Performance at Kuehne Nagel BD.

Dear Sir.

This is to inform you that I have completed the internship report on "Increasing KPI of

Kuehne Nagel Bangladesh by decreasing Lead Time at Kuehne Nagel Ltd ., which has

been prepared as a requirement for the completion of the BBA Program of BRAC University. I am fortunate enough that I have got an experience and efficient professional team in the

organization. I have got an opportunity to work with them at different Departments to learn

their process effectively.

I tried my level best to cover everything I have learned here. Finally, I would like to assure that

I will remain standby for any clarification and explanation when required. Thank you in advance

for your kind assistance. I enjoyed working on the report and hope you will consider all my

mistakes generously.

Sincerely Yours,

Afrina Rahman

ID- 18304105

BRAC Business

School

BRAC University

Date: 4 March 2023

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Non-Disclosure Agreement

This agreement is made and entered into by and between Kuehne Nagel Ltd and the undersigned student at BRAC University Afrina Rahman, to eliminate the unlawful exposure of the organization's confidentiality.

Acknowledgement

At first, I would like to thank my supervisor **Hasan Maksud Chowdhury** (Assistant Professor, BRAC Business School, BRAC University) for providing me guidance and suggestions for making this Final Internship Report and also for being helpful and informative regarding the Internship report. I would like appreciate her generous cooperation that made me really confident about the desired outcome of my internship project.

I would like to show my warm-hearted gratitude to the whole Department of Kuehne Nagel Limited which has provided me with great deal of information's, adequate data and finally cooperated me for the accomplishment of the report successfully. I am especially grateful to **Mr. Sumon Sarker** (Operation Manager) and my collogues for invaluable support and direction that lead me to the successful completion of my internship report.

I am very much thankful to Kuehne Nagel Limited and its Supply Chain Management Department specially the employees of the entire Department for their cordial support to prepare this difficult study with important information and data. Without them it would not possible for me to complete this difficult task. I got all necessary guidelines, cooperation and advice from them to complete this complicated task.

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Executive Summary

Kuehne Nagel Bangladesh is a prominent logistics service provider in Bangladesh that offers comprehensive supply chain solutions to various industries. As with most logistics companies, Kuehne Nagel's success is measured by a range of key performance indicators (KPIs), with lead time being one of the most important.

The report begins by providing an overview of Kuehne Nagel Bangladesh and its operations in the country. It highlights the importance of logistics and supply chain management in the success of the company and introduces the concept of lead time, which is the time it takes for a product to be delivered from the supplier to the customer. The report then discusses the various KPIs that are used to measure the success of logistics operations, including on-time delivery, inventory turnover, and order cycle time.

The report presents a detailed analysis of the current state of Kuehne Nagel Bangladesh's logistics operations, focusing on the lead time and the KPIs that are most impacted by it. The analysis includes an assessment of the company's current lead time and KPIs, as well as a comparison with industry benchmarks and best practices. The report identifies several areas for improvement, including process optimization, technology adoption, and supplier management.

To address these areas for improvement, the report presents a set of recommendations that can help Kuehne Nagel Bangladesh reduce its lead time and improve its KPIs. The recommendations are based on a thorough analysis of the company's operations and take into account the unique challenges and opportunities of the Bangladeshi market. The report also discusses the potential benefits of implementing these recommendations, including increased customer satisfaction, improved operational efficiency, and higher profitability.

Overall, the report provides a comprehensive analysis of the impact of lead time on the KPIs of Kuehne Nagel Bangladesh and offers practical recommendations for reducing lead time and improving KPIs. By following the recommendations outlined in the report, Kuehne Nagel

Bangladesh can increase its KPIs, improve customer satisfaction, and achieve greater operational efficiency and profitability.

Keywords: Lead time, KPI, Supply Chain, Logistics

List of Acronyms

3PL- 3rd Party Logistics

4PL- 4th Party Logistics

B/L- Bill of Lading

CFS- Container Freight Station

C&F- Cost and Freight

CBM- Cubic Metre

COD- Cash on Delivery

CY- Container Yard

ETA- Estimated Time of Arrival

ETD- Estimated Time of Departure

FCL- Full Container Load

FOB- Free On Board

FTP- File Transfer Protocol

GDP- Gross Domestic Product

Incoterms- International Commercial Terms

KN- Kuehne+Nagel

KN BD- Kuehne+Nagel Limited Bangladesh

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Chapter 1



Overview of the Internship

Chapter 1: Overview of Internship

1.1 Student Information

Name: Afrina Rahman

ID: 18304105

Program: Bachelor of Business Administration

Major/Specialization: Operations and Supply Chain Management

Minor/Secondary Specialization: Human resource Management

1.2 Internship Information

1.2.1 Period, Name, Department, Address

Period: 01/01/2023 till 30/03/2023

Company Name: Kuehne Nagel Limited.

Department/Function: Supply Chain Management

Address: SKS Tower, Mohakhali, Dhaka-1208

1.2.2 Line Manager

Name of Supervisor: Mr. Sumon Sarker

Designation: Sea Logistics Manager

1.2.3 Job Description

From January 2023, I have worked as an intern in sea logistics department at Kuehne + Nagel Ltd. In the first two weeks I have learned about our company's policies, code of conduct, possible customers, and buyers. My employer gave me two tiny booklets in the meantime, one of which was primarily about the business, and the other was the most crucial an address book. There was all the information about the Kuehne Nagel office in the address book. After training session, I been assigned with work. In sea Logistic department there are two sections which are operational team and customer care team. Luckily, I have worked in both. In customer care department we are supposed to take bookings from the exporters, then put all the information in the software. For example, creating booking number, shipping order, putting the information of shippers, buyers, product details, HS code, weight, communicating with both buyer and exporter etc. Then in operations department we are supposed to make BL. In marine transportation, the Bill of Lading is the main legal document. It serves as a contract for transportation, a receipt for the delivery of goods, and a certificate of title granting ownership. For export business and in completing the payment Bill of lading is must.

1.3 Internship Outcome

1.3.1 Contribution of Student

Throughout my internship, I was assigned a range of responsibilities to do, all of which were critical and urgent. Moreover, I created BL and took shipping orders. I have improved the effectiveness of the business. Also, I was able to finish all of the duties that were given to me on time and to a good quality. Also, as their main target is completing all the orders on time as there are huge workload. So, reducing lead time is very important. So, I did help them in that.

1.3.2 Benefits to the Student

I enjoyed working as an intern at Kuehne Nagel because I was able to broaden my knowledge in a variety of subjects and gain real-world experience. I did gather a lot knowledge about logistics, import and export. I've learnt how to describe job possibilities by taking into account opportunities within a business, industry, or sector as well as improvements in my professional and academic status. I learned how to communicate with a range of employers in the workplace while doing an internship at Kuehne Nagel Limited in Bangladesh. As part of my professional ethical practice, I also discovered how to keep a positive outlook during my internship. Also, I've made intriguing connections, dealt with challenging circumstances, and grown more self-reliant. I believe that participating in this internship will aid in the development of my resume in preparation for potential future employment opportunities.

1.3.3 Difficulties

Working for Kuehne Nagel was a really positive experience. But, there wasn't enough time for a thorough analysis of the data, and certain information couldn't be included for firm confidentiality reasons.

1.3.4 Recommendations

- > They should hire people who have knowledge on areas supply chain, logistics etc. It will help them to increase their work productivity.
- > They should update their software as it is the main medium of all the operations
- ➤ Each business needs a powerful brand. An organization's revenue may be impacted by how much is spent on branding and marketing. According to business policy, Kuehne Nagel isn't authorized to spend much money on branding. The growth may be even

- bigger, in my opinion, if the company makes a small increase in its branding and other promotional expenditures.
- Finding space on ships can occasionally provide a significant challenge for freight forwarding companies. Ship space may not be an issue, but ports' ability to manage the regular cargo clearances made by trucks is equally important. Kuehne Nagel is able to do this because of their standing in the field and skill in managing these better.

Chapter 2

Organizational Overview

Chapter 2: Organizational Overview

2. Introduction

An international logistics and shipping firm with its main office in Schindellegi, Switzerland, is called Kuehne Nagel Ltd. The business, which was established in 1890 by August Kuehne and Friedrich Nagel, has expanded to rank among the biggest logistic suppliers worldwide. Kuehne Nagel provides a complete variety of logistics services to companies across a wide range of sectors. The company has operations in over 100 countries and employs over 83,000 people (Niemi et al., 2020). The success of Kuehne Nagel may be due to its dedication to offering consumers top-notch services. A few of the services offered by the business are contract logistics, supply chain management, both rail and road transportation, and air and sea freight. In order to increase the effectiveness of its logistics chain and streamline operations, Kuehne Nagel has indeed made significant technological investments (Hasan, 2018).

A leader in sustainability and corporate social responsibility in addition to its core logistics services, Kuehne Nagel has made a name for itself in these fields. The organization has implemented a number of initiatives to promote sustainable practices throughout its operations and has set ambitious goals to reduce its greenhouse gas emissions. The success of Kuehne Nagel may be due to its dedication to innovation, sustainability, and customer service. The business has managed to hold onto its position as a pioneer in the logistics sector by remaining one step ahead of the competition and adjusting to shifting market conditions. Kuehne Nagel has been well to carry on offering world-class logistics services to companies because to its highly experienced team and extensive network of operations (Storgard,2021).

2.1 History of Kuehne Nagel

From the very beginning to now the journey of Kuehne Nagel was not so smooth. When it first started, Kuehne Nagel concentrated on offering shipping options for coffee shipments across Bremen and New York. The business, however, swiftly widened its scope to cover more goods and transportation lanes. With offices in significant cities across Europe, Asia, and the Americas by the 1920s, Kuehne Nagel had built a global presence (Alfalla-Luque et al., 2019). Due to the destruction or seizure of several of its offices by invading troops in World War II, the company suffered severe difficulties. Yet after the war, the business was able to endure and recover. Over the decades after World War II, Kuehne Nagel kept growing its offerings, adding customs brokerage and airfreight to its list of offerings (Liu and Wang,2018).

KN Ltd. made a number of important acquisitions throughout the 1980s & 1990s, notably the purchases of RH Freight in the UK and CMI Logistics in the US. Particularly in the fields of sea and airfreight, these purchases allowed Kuehne Nagel to broaden its reach and capabilities.

With over 83,000 employees globally, Kuehne Nagel now conducts business in over 100 nations. In addition to transportation, warehousing, and supply chain management, the firm offers a broad variety of logistical services (Kumar et al.,2021). A further factor in Kuehne Nagel's success as a leader in the logistics sector is its dedication to innovation and sustainability.

2.2 Kuehne Nagel in Bangladesh

Kuehne Nagel has a significant presence in Bangladesh and offers a wide array of transport and logistics services to companies there. The business has been functioning in Bangladesh from 1995, and since then, it has made a name for itself as a pioneer in the regional logistics sector. Among the many services provided by Kuehne Nagel Bangladesh are contract logistics, customs brokerage, rail and road transportation, and air and sea freight (Storgard,2021). Because of its cutting-edge facilities and knowledgeable team, the company is able to offer topnotch services to companies in a variety of industries. In order to lessen its impact on the environment, Kuehne Nagel Bangladesh has launched a variety of measures as part of its commitment to offering sustainable logistics solutions (Niemi et al., 2020). The business has established a number of initiatives to advance healthcare and education in the area as part of its commitment to giving back to the neighborhood.

Overall, Kuehne Nagel's position in Bangladesh is a tribute to the company's dedication to provide top-notch logistics services to businesses throughout the world while simultaneously encouraging sustainable and socially responsible practices.

2.3 The major milestones of Kuehne Nagel in Bangladesh

Kuehne Nagel has made significant investments in Bangladesh's infrastructure, including the development of cutting-edge facilities for distribution and warehousing. Moreover, Kuehne Nagel has undertaken a variety of steps to lessen its environmental effect as part of its commitment to encouraging sustainable practices in Bangladesh (Hasan, 2018). They include implementing waste reduction initiatives and using energy-efficient equipment. Moreover, Kuehne Nagel has been actively assisting the neighborhood in Bangladesh via programs for healthcare and education. Overall, Kuehne Nagel's position in Bangladesh has been

characterized by a dedication to provide top-notch logistics operations while also supporting environmentally friendly and socially conscious habits (Kumar et al., 2021).

2.4 Business Principles

Global logistics provider Kuehne Nagel offers a number of services, such as supply chain management, warehousing, and shipping. Kuehne Nagel operates in Bangladesh with the same core values as its global operations, namely:

Focus on the customer: Kuehne Nagel runs its company with the needs and demands of its clients at the forefront. The business is dedicated to giving each client a customized solution and to enhancing its offerings over time to accommodate customers' evolving demands.

Operational excellence: To achieve the greatest degree of reliability and dependability in its services, Kuehne Nagel adopts best practices, makes use of cutting-edge technology, and implements effective procedures.

Sustainability: Kuehne Nagel is dedicated to using ethical business methods that reduce their negative effects on the environment and foster social responsibility. The business wants to lessen its carbon footprint while also helping the areas where it does business.

Integrity: Kuehne Nagel upholds the standards required of moral conduct in all of its business dealings. In its interactions with clients, suppliers, and other stakeholders, the business upholds legal and regulatory requirements and practices transparency.

Usually, Kuehne Nagel Bangladesh adheres to the same corporate values as the parent company, which emphasize the importance of innovation, sustainability, operational excellence, and customer happiness.

2.4.1 Vision

The goal of Kuehne Nagel is to keep leading the industry while offering a service that is responsible, economical, and kind to the environment.

2.4.2 Mission

The company's extensive global logistics network is its most valuable asset. Dedication, integration, and innovation are the organization's guiding principles. They prioritize the demands of their clients and provide comprehensive logistics solutions that are of the highest quality and are very productive.

2.4.3 Goals

- 1. The company's goal is to continuously raise the caliber of its data, processes, and services across the board.
- 2. To reduce employee health and safety risks as much as practicable.
- 3. To enhance professional competences and leadership abilities in accordance with aptitude, personal goals, and company requirements.

2.4.4 Tag-line

We seek to make a difference today, for the people of tomorrow is the Tagline of Kuehne Nagel ltd.

2.5 Conduct Guidelines for Kuehne Nagel Bangladesh Limited

- 1. <u>Ethical and legal compliance</u>: Workers are required to behave honorably, abide by all relevant rules and regulations, and uphold the company's moral principles.
- 2. <u>Discrimination and harassment:</u> The business forbids harassment and discrimination on the basis of age, gender, sexual orientation, race, color, religion, handicap, or any other protected feature.
- 3. <u>Health and safety:</u> The business values its employees' health and safety and offers a secure working environment. It is required of employees to adhere to safety protocols and to report any dangers or occurrences.
- 4. <u>Confidentiality and privacy:</u> The privacy of coworkers, clients, and business partners must be respected, and employees are expected to secure the company's private and sensitive information.
- 5. <u>Conflict of interest:</u> Workers are required to declare any possible conflicts of interest and to avoid having any.

2.6 Quality Policy

The complete quality management system that Kuehne + Nagel uses to support its quality policy is constantly evaluated and audited to make sure it is still working effectively and in line with the company's objectives.

The requirements and aspirations of its customers are constantly at the forefront for KNBD. In all facets of our operations, they work hard to have a strong focus on quality, safety, and sustainability. In addition, they keep upgrading their systems, processes, and procedures to boost customer satisfaction and lessen their negative effects on the environment. In order to foster long-term relationships and foster open and transparent communication with customers, suppliers, and other stakeholders.

2.7 Some frequently used important terms of KN Ltd.

<u>B/L (Bill of Lading)</u>: Bill of lading is the name of the legal contract in between shipper of the goods and the carrier. It details the kind, volume, & location of the products being shipped is known as. The B/L also functions as a receipt of shipping when the goods arrive at the designated location. No matter the mode of transportation, the receiver must obtain the B/L paperwork in order to release the sent goods. This B/L document must be approved by a representative from the carrier (ocean B/L), shipper, and any other parties involved (Stiff, 2017). The two primary categories of B/Ls are.

- Ocean B/L which is issued by carrier.
- House B/L which is issued by freight forwarder, in this case KN issues house B/L.

<u>Packing List:</u> A packing list is a written record that the shipper or supplier creates that details the weight, volume, contents, and packaging of each export shipment or package. Also, it details the product's color and amount.

<u>S/O (Shipping Order):</u> Once the timetable is established, the carrier is chosen, and the shipment date is set. KN gives the packing list, commercial invoice, and VGM to the C&F agent, who subsequently receives the shipping order from KN to deliver the cargo to CFS for warehousing and stuffing. So, a shipping order essentially gives CFS permission to receive the goods.

<u>D/O (Delivery order):</u> Regarding imports, once C&F agents approach KN with an original B/L bearing the proper signature, a commercial invoice, a packing list, a notice of custom assessment, a bill of entry, and a detailed declaration in Bangladeshi customs (ASYCUDA), and after all payments have been made, KN gives the C&F agents the delivery order (D/O), allowing them to discharge the cargoes from the port. After obtaining the actual DO from the carrier, KN issues a residential delivery order.

<u>VGM (Verified Gross Mass)</u>: The weight of the cargo, including dunnage and bracing, and the tare mass of the container transporting this cargo, is known as the Verified Gross Mass (VGM).

<u>CBM (Cubic meter)</u>: A cubic meter, or CBM, is a unit of volume measurement (one cubic meter is measured as one meter wide by one meter long by one meter high). CBM is used by shippers to determine chargeable weight. Multiply the length, breadth, and height of your shipment to determine the total CBM (in meters).

2.8 Product Description

Global logistics provider Kuehne + Nagel provides a comprehensive variety of logistical services to companies of all sizes and in all sectors. Moreover, Kuehne + Nagel's logistics services are intended to assist companies in streamlining their supply chain processes, lowering costs, and enhancing their overall logistical performance. The organization is a dependable and trusted partner for businesses all over the world because to its extensive worldwide network, cutting-edge technology, and knowledgeable staff of logistics specialists.

2.8.1 Product Classification

With 138 people overall, W KN is one of the top IT-based freight forwarding companies in Bangladesh. KN offers two brunches in the nation's capital Dhaka and Chittagong, the country's largest port. Moreover, KN is considering setting up a third brunch in Khulna. The Asia Pacific area includes Kuehne & Nagel Bangladesh Limited. These are the primary services provided by Kuehne + Nagel Bangladesh Limited. The main services Kuehne + Nagel Bangladesh LTD.is given below:

- Sea Freight
- Air Freight
- Road and Rail logistics
- International freight forwarding
- Logistics and Consolidation
- Off-Dock services
- Warehousing and transportation
- Project cargo forwarding
- Sometime C&F service

2.9 Practices of Supply Chain Management at Kuehne Nagel

Kuehne + Nagel is a global logistics company that is known for its efficient and effective supply chain management practices. The company has developed a comprehensive supply chain management system that is designed to ensure that goods are transported from the point of origin to the point of consumption in the most cost-effective and timely manner possible.

One of the key practices of supply chain management at Kuehne + Nagel is its focus on customer-centricity. The company believes in understanding its customers' needs and designing logistics solutions that are tailored to meet those needs. Kuehne + Nagel achieves this by conducting indepth analysis of its customers' supply chain operations and developing customized solutions that are designed to improve efficiency, reduce costs, and enhance customer satisfaction.

Another important practice of supply chain management at Kuehne + Nagel is its use of advanced technology. The company has developed a range of innovative logistics technologies, including its KN Login and KN FreightNet platforms, which enable customers to track and manage their shipments in real-time. Kuehne + Nagel also uses advanced data analytics tools to analyze supply chain data and identify areas for improvement.

In addition to these practices, Kuehne + Nagel also places a strong emphasis on sustainability in its supply chain management. The company has developed a comprehensive sustainability strategy that is designed to reduce its carbon footprint and promote sustainable practices throughout its supply chain. This includes initiatives such as using more environmentally friendly transportation methods and optimizing logistics operations to reduce energy consumption.

Overall, Kuehne + Nagel's supply chain management practices are focused on delivering value to its customers while also promoting sustainable practices and reducing costs. The company's customer-centric approach, use of advanced technology, and emphasis on sustainability have made it a trusted and reliable logistics partner for businesses around the world.

2.9.1 Order taking Process

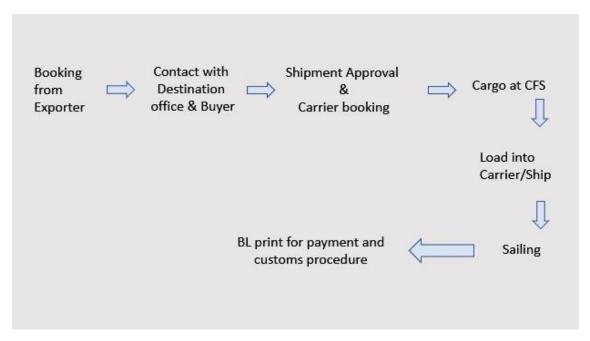


Figure 1: Order process

Kuehne + Nagel has a well-defined order taking process to ensure that it delivers the right logistics solutions to its customers. The process typically involves the following steps:

- Consultation: The first step in the order taking process is consultation with the customer.
 Kuehne + Nagel's logistics professionals work closely with the customer to understand their needs and requirements. This may involve an in-depth analysis of the customer's supply chain operations, including the nature of their products, their shipping volumes, and their delivery timelines.
- 2. Proposal: Once Kuehne + Nagel has a good understanding of the customer's needs, the company prepares a detailed proposal outlining the logistics solutions that it recommends. This proposal may include a range of logistics services, such as air or sea freight, road or rail logistics, contract logistics, and customs brokerage services. The proposal may also include pricing information and a timeline for implementation.

- 3. Negotiation: After the customer has reviewed the proposal, Kuehne + Nagel engages in a negotiation process to finalize the logistics solutions and pricing. This may involve further consultation with the customer to address any questions or concerns they may have.
- 4. Confirmation: Once the logistics solutions and pricing have been agreed upon, Kuehne + Nagel confirms the order with the customer. This may involve the signing of a contract or other formal agreement.
- 5. Implementation: After the order has been confirmed, Kuehne + Nagel implements the logistics solutions according to the agreed timeline. The company's logistics professionals work closely with the customer to ensure that the solutions are implemented smoothly and that any issues are addressed promptly.
- 6. Tracking and Monitoring: Throughout the order taking process, Kuehne + Nagel uses advanced technology to track and monitor shipments in real-time. This enables the company to provide customers with accurate and up-to-date information on the status of their shipments.

Overall, Kuehne + Nagel's order taking process is designed to ensure that it delivers the right logistics solutions to its customers, while also providing a high level of customer service and support. The company's customer-centric approach, use of advanced technology, and experienced logistics professionals make it a reliable and trusted logistics partner for businesses around the world.

As the order comes by the sales team. Then the customer service department attend those. Finally, with accounts department confirmation the customer service team forward invoices.

2.9.2 Route

Supplier/
Factory → CFS → Chittagong Port → Transshipment Port → Destination

Figure 2: Route

2.10 Industry and Competitive Analysis

2.10.1 Porter's Five Forces Analysis

Porter's Five Forces is a framework used to analyze the competitive environment of a company. Here's a Porter's Five Forces analysis for Kuehne + Nagel Bangladesh:

<u>Threat of New Entrants</u> > **Low**: The threat of new entrants to the logistics industry in Bangladesh is low to medium. While there are no significant barriers to entry, the logistics industry is capital intensive, and new entrants would need to invest heavily in infrastructure and technology to compete with established players like Kuehne + Nagel. The company's strong brand reputation and established customer base also act as a barrier to entry.

<u>Bargaining Power of Suppliers > Low</u>: The bargaining power of suppliers is low to medium for Kuehne + Nagel Bangladesh. The company has a large network of suppliers, and the logistics industry is highly fragmented, with many suppliers. However, suppliers of critical services, such as transportation providers, may have some bargaining power.

<u>Bargaining Power of Buyers > **High**</u>: The bargaining power of buyers is high for Kuehne + Nagel Bangladesh. Buyers, including manufacturers, retailers, and other logistics companies, have many options to choose from, and they can easily switch to another logistics provider if they are dissatisfied with Kuehne + Nagel's services. This puts pressure on the company to provide competitive pricing and high-quality services.

<u>Threat of Substitute Products or Services > Low</u>: The threat of substitute products or services is low for Kuehne + Nagel Bangladesh. The company offers a wide range of logistics and transportation services, and there are few substitutes for these services. However, some customers may choose to handle their logistics needs in-house, which could affect demand for Kuehne + Nagel's services.

<u>Intensity of Competitive Rivalry >**High**</u>: The intensity of competitive rivalry in the logistics industry in Bangladesh is high. Kuehne + Nagel Bangladesh faces strong competition from both local and international players, including DHL, FedEx, and UPS. To remain competitive, Kuehne + Nagel must continuously innovate and differentiate its services from those of its competitors.

Overall, Kuehne + Nagel Bangladesh operates in a competitive market, with high bargaining power for buyers and intense competitive rivalry. However, the company's established brand reputation, wide range of services, and advanced technology provide a competitive advantage.

Understanding the type and amount of competition, as well as how Berger Paints can handle it, will be made easier with the aid of Porter's five forces analysis.

2.10.2 SWOT analysis

SWOT analysis is a method for strategic planning that helps a company determine its strengths, weaknesses, opportunities, and threats. This is Kuehne + Nagel Bangladesh's SWOT analysis:

Strength

- 1. <u>Established Brand:</u> Kuehne + Nagel is an internationally recognized company with a long history of offering logistics and transportation services.
- 2. <u>Large selection of services:</u> Kuehne + Nagel Bangladesh offers a large selection of logistics and transportation services, including air freight, sea freight, giving customers a one-stop solution for their logistical needs.
- 3. <u>Modern technology:</u> In order to improve operations and increase the effectiveness and dependability of its services, Kuehne + Nagel Bangladesh has invested in cutting-edge technology.
- 4. <u>Workforce with Experience:</u> The organization has a group of specialists with expertise who are prepared to handle the logistics sector's complexity.

Weaknesses:

- 1. <u>Limited Presence:</u> Kuehne + Nagel Bangladesh has a limited presence in the Bangladeshi market, which may affect its ability to capture market share and compete with other established logistics companies.
- 2. <u>Reliance on International Trade:</u> The company's business model relies heavily on international trade, which can be affected by changes in global trade policies and economic conditions.

Opportunities:

- 1. <u>Growing Demand:</u> The logistics industry in Bangladesh is growing rapidly, providing ample opportunities for Kuehne + Nagel Bangladesh to expand its operations.
- 2. <u>Emerging Markets:</u> Bangladesh is an emerging market, providing opportunities for Kuehne + Nagel Bangladesh to expand its services to new and untapped markets.
- 3. <u>E-commerce Boom:</u> The boom in e-commerce in Bangladesh is creating new opportunities for logistics companies like Kuehne + Nagel Bangladesh to provide logistics and transportation services to e-commerce businesses.

Threats:

- 1. <u>Intense Competition:</u> The logistics industry in Bangladesh is highly competitive, and Kuehne + Nagel Bangladesh faces competition from both local and international players.
- 2. <u>Economic Conditions:</u> Economic conditions in Bangladesh can be unpredictable and can affect the demand for logistics services.
- 3. <u>Geopolitical Tensions:</u> Geopolitical tensions in the region can also impact the company's operations, especially with regards to cross-border transportation and trade.

2.11 Summery and Conclusion

In conclusion, Kuehne + Nagel Ltd. is a global logistics company that has established itself as one of the leaders in the industry. The company's strong global presence, diversified portfolio of services, and consistent growth in revenue demonstrate its ability to meet the demands of its customers and adapt to changing market conditions. However, the company's profitability may be impacted by rising operating expenses and competitive pressures, which highlights the need for ongoing analysis and optimization of its order fulfillment process.

Kuehne + Nagel Ltd. has demonstrated a commitment to innovation and digitalization, which has helped to streamline its operations and improve its ability to meet the needs of its customers. The company's focus on sustainability and corporate responsibility is also commendable, as it recognizes the importance of balancing economic growth with social and environmental considerations.

Moving forward, Kuehne + Nagel Ltd. is well-positioned to continue its growth and maintain its position as a leader in the logistics industry. By leveraging its global reach, diversified portfolio of services, and commitment to innovation and sustainability, the company can continue to meet the evolving needs of its customers and drive value for its shareholders.

2.12 Recommendation

Based on the analysis of Kuehne + Nagel Ltd., several recommendations can be made to help the company maintain its position as a leader in the logistics industry:

<u>Focus on digitalization:</u> Kuehne + Nagel Ltd. should continue to invest in digitalization to streamline its operations and improve its ability to meet the needs of its customers. This might involve implementing advanced analytics and machine learning algorithms to optimize the supply chain, or developing mobile applications to enhance communication with customers.

<u>Expand in emerging markets</u>: Kuehne + Nagel Ltd. should continue to expand in emerging markets to capitalize on growing demand for logistics services. This might involve building new distribution centers or acquiring local logistics companies to gain a foothold in new markets.

<u>Invest in sustainability:</u> Kuehne + Nagel Ltd. should continue to prioritize sustainability and corporate responsibility in its operations. This might involve investing in renewable energy sources

or developing more sustainable transportation options to reduce the company's environmental footprint.

<u>Develop strategic partnerships:</u> Kuehne + Nagel Ltd. should consider developing strategic partnerships with other companies to expand its portfolio of services and drive growth. This might involve partnering with technology companies to develop new logistics solutions, or partnering with other logistics providers to offer complementary services.

<u>Enhance employee training and development:</u> Kuehne + Nagel Ltd. should focus on enhancing employee training and development programs to ensure that its workforce has the skills and knowledge needed to meet the evolving needs of its customers. This might involve developing new training programs or offering professional development opportunities to employees.

By following these recommendations, Kuehne + Nagel Ltd. can continue to drive growth, maintain its position as a leader in the logistics industry, and create value for its shareholders.

Chapter 3

Reducing Lead Time as a Strategy for Achieving optimal KPI Performance at Kuehne Nagel BD

3.1 Project

3.1.1 Background

Lead time is a crucial component of freight forwarding firms' performance since it directly influences their Key Performance Indicators (KPIs), which include on-time delivery, client satisfaction, and cost effectiveness (Hasan, 2018). From the time a shipment is picked up until it is delivered to its destination, the lead time is the period of time needed to complete the shipment. To be competitive in the market and satisfy changing customer needs, freight forwarding businesses must concentrate on cutting lead times (Niemi et al., 2020). Improving on-time delivery rates is one of the biggest benefits of cutting lead times. Consumers rely on their shipments to get there on schedule, and any delays can seriously affect how their businesses run. A freight forwarding business will have greater customer satisfaction ratings and is more likely to get repeat business and recommendations if it consistently delivers on schedule. Consequently, a freight forwarding company's KPIs might benefit from reduced lead times, particularly in terms of customer satisfaction and retention (Graham, 2015).

Also, cutting lead times might aid a freight forwarding firm in becoming more cost-effective. Transport expenses will be reduced the quicker an item is delivered. Freight forwarding businesses may decrease the time it takes to complete a cargo and lower the expenses involved with it by simplifying their operations and optimizing their routes. Offering reduced prices to consumers can help them stay competitive in the market and increase the amount of business they receive (Bhatti et al, 2013). Last but not least, minimizing lead times might aid freight forwarding businesses in boosting production. They can handle more shipments in the same amount of time if they streamline their processes and cut down on the time it takes to finish a shipment. This may raise sales and profit margins and enhance KPIs like delivery times, customer happiness, and cost effectiveness (Setijono & Dahlgaard. 2007).

In conclusion, lead time is a crucial component of freight forwarding businesses' performance. The KPIs of a firm, such as on-time delivery, customer happiness, cost effectiveness, and productivity, can all be significantly impacted by reducing lead times. Hence, in order to cut lead times and maintain their position as market leaders, freight forwarding businesses must concentrate on streamlining their processes.

3.2 Problem Statement

Kuehne + Nagel Bangladesh's emphasis on Good Distribution Practices (GDP) in the pharmaceutical business and its high turnover are the main reasons for Bangladesh's success in the logistics sector. 80,000 tons of pharmaceutical products were handled by the firm in 2020, showcasing its expertise in this field. KNBD reported a revenue of BDT 4.6 billion (about USD 54 million) in 2020, an increase of 14.6% from the year before. These accomplishments demonstrate the company's capacity to seize new business possibilities and dedication to provide its customers high-quality logistics services while upholding a strong commitment to sustainability & corporate responsibility (Storgard,2021).

It is evident that KNBD is growing day by day but recently their work performance is falling especially from 2022. The reason behind this is the operations team does not prepare Bill of lading on time. For that reason, even after sailing of an order payment procedure gets stuck. For this reason, orders get stuck in the port and buyer cannot receive the order on time. As a result, the whole supply chain process breaks down. Along with that, sometimes, perishable items get rotten. For this reason, KPI is continuously falling down as customer dissatisfaction is increasing. Due to the lacking of proper monitoring these things are happening (Hasan, 2018).

3.3 Objective of the Report

The study has been done with the objective given below-

- Find out the reason behind falling of KPI
- > Understand the relationship between lead time and KPI
- ➤ Propose some suggestion to Increase the KPI

3.3.1 Scope of the study

Kuehne Nagel Bangladesh Limited has been playing a significant role in the economic development of the country. This study contains an overall analysis about the Supply chain management process, KPI of Kuehne Nagel Bangladesh Limited and the sectors that which can be improved in a view to survive as a leader in this logistic industry.

3.3.2 Limitations:

- 1. Gathering data was not easy as most them are confidential
- 2. Time was limited

3.3 Significance of the research

This research will help KNBD to get an idea on how they should maintain their work so that the KPI never falls again. A freight forwarding company should concentrate on KPIs because they provide a measurable way to evaluate the company's performance and identify areas for improvement. Freight forwarding is a complex process that involves numerous interconnected processes, and KPIs provide a means to track performance in each process, from transportation to

customs clearance. By focusing on KPIs such as on-time delivery, transit time, cost per shipment, and customer satisfaction, KNBD can identify inefficiencies and make data-driven decisions to improve their operations. For example, tracking transit time KPIs can help identify bottlenecks in the supply chain, enabling companies to optimize their routing and improve delivery times. Focusing on KPIs also helps them to stay competitive in the market by benchmarking their performance against industry standards and identifying areas where they can reduce costs and increase profitability.

In conclusion, focusing on KPIs is crucial for a freight forwarding company as it enables the company to measure performance, identify inefficiencies, and make data-driven decisions that lead to improved service and increased profitability.

3.4 Literature Review

Reducing lead time has been a topic of interest for many researchers and practitioners in the logistics and supply chain management field as it can significantly improve KPIs. Several studies have investigated the relationship between reducing lead time and improving KPIs in the freight forwarding industry. Several studies have been done to investigate the impact of reducing lead time on transportation cost and delivery performance. The study found that reducing lead time by 10% resulted in a 4.4% decrease in transportation cost and a 3.1% increase in delivery performance. The authors concluded that reducing lead time can improve KPIs and reduce costs (Liu and Wang,2018).

Similarly, a study investigated the impact of reducing lead time on KPIs in the automotive industry. The study found that reducing lead time resulted in significant improvements in KPIs such as delivery time, order fulfillment, and inventory turnover (Alfalla-Luque et al.,2019). It is also noted that reducing lead time can improve customer satisfaction and reduce costs. Also, reducing lead time resulted in improvements in KPIs such as delivery reliability, order fulfillment, and customer

satisfaction (Siddigi et al., 2019). The authors also noted that reducing lead time can improve the

agility and flexibility of the supply chain, allowing companies to respond to changing market

demands. Furthermore, a recent study by Kumar et al. (2021) investigated the impact of reducing

lead time on KPIs in the e-commerce industry. The study found that reducing lead time resulted in

improvements in KPIs such as on-time delivery, transit time, and customer satisfaction. The

authors also noted that reducing lead time can increase repeat purchases and improve customer

loyalty.

In conclusion, reducing lead time has been shown to be an effective strategy for improving KPIs

in various industries, including the freight forwarding industry. Studies suggest that reducing lead

time can improve delivery performance, reduce transportation costs, improve order fulfillment,

increase customer satisfaction, and improve overall supply chain performance. Freight forwarding

companies can reduce lead time by optimizing their logistics processes, using technology to

streamline operations, and improving their customs clearance processes.

3.5 Methodology

The data for the study were collected following several ways

Primary Data: Primary Data were collected mostly by -

Face to face conversation with my Line manager, the other stuff of Kuehne Nagel Bangladesh,

exporters.

Secondary Data: Secondary Data were collected from Previous research papers, Different journals

on Kuehne Nagel Limited, Different book to know about different terminology, Official websites

of Kuehne Nagel Bangladesh Limited.

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3.6 Proposed Solution

While analyzing the issue, it has been found out that due to less accountability and monitoring the KPI of KNBD is continuously falling down. To cope up with this situation primary solution was needed. As a solution, a live excel sheet was made. Everyone has access of that sheet. The sheet has the record of everyone's assigned task, deadlines and other information. As a result, it will be easy for the manager to keep record everyone's woks, pending works. So, if someone does not fulfill their work on time, it will be easy for the manager to detect that. As a result, no BL will be pending.

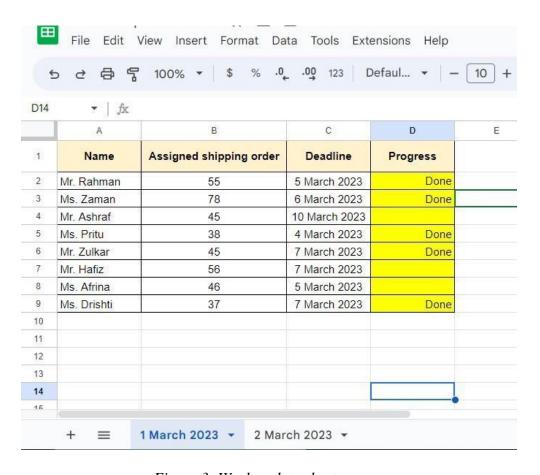


Figure 3: Work update sheet

3.7 Finding & Analysis

3.7.1 Recent KPI Report of KN BD in terms of performance & customer satisfaction

Report of previous years

Year	KPI percentage
2019	86%
2020	93%
2021	80%
2022	65%

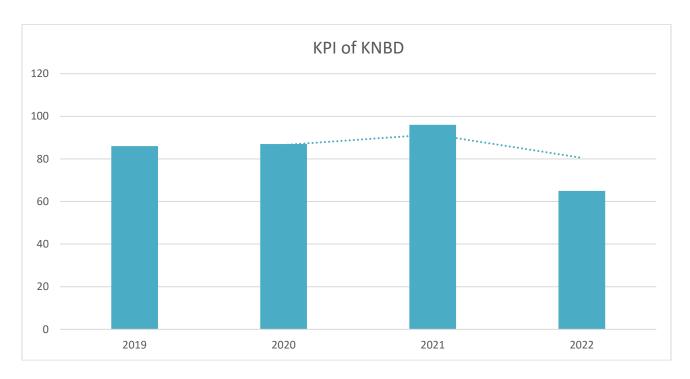


Figure 4: KPI Report of previous years

Report of 2023 till March

Month	KPI Percentage
January	62%
February	70%
March	77%



Figure 5: KPI Report of 2023 till now

3.7.2 Comparison of Lead Time after Introducing Live Sheet

Exporters Name	Previous req. avg. time	Current req. avg. time
Joy Auto Garments	12	6
Unicorn Sweaters	11	6
Square Fashion	8	4
Crossline Ltd	14	7
R.B Knit Wears	9	5
Bengal Meat	12	6
Radisson Garments	15	8

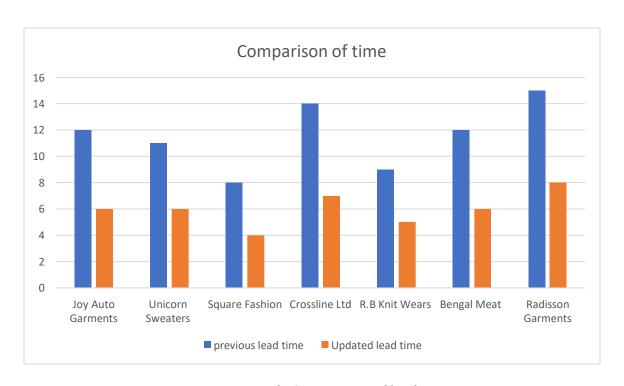


Figure 6: Comparison of lead time

Mathematical Solution

To calculate the increase in Key Performance Indicators (KPI), we first need to define what KPI we are measuring. In this case, we can use the average lead time as our KPI.

To calculate the average lead time before and after the change, we can use the following formula:

Average Lead Time = (Sum of Lead Times) / Number of Exporters

Before the change, the average lead time was:

$$(12 + 11 + 8 + 14 + 9 + 12 + 15) / 7 = 11.29$$
 days

After the change, the average lead time was:

$$(6+6+4+7+5+6+8)/7 = 5.86$$
 days

The increase in KPI can be calculated as the percentage difference between the two averages:

Increase in KPI =
$$((5.86 - 11.29) / 11.29) * 100\% = -48.11\%$$

The negative value indicates a decrease in the average lead time, which is actually an improvement in performance. Therefore, the KPI has improved by **48.11%**.

3.7.3 Customer Satisfaction

Exporter Name	Previous orders in a month	Current order number in a month
Square Fashion	45	55
Square 1 asmon	13	33
Radission Garments	55	62
R.B Knit wears	32	40
Unisense	23	27

Mathematical Solution

To calculate the percentage increase in order for each exporter within one month, we need to compare the order numbers from January and February and calculate the percentage increase.

First, let's calculate the difference in orders for each exporter:

Square Fashion: 55-45 = 10

Radisson Garments: 62-55 = 7

R.B Knit wears: 40-32 = 8

Unisense: 27-23 = 4

Next, let's calculate the percentage increase for each exporter:

Square Fashion: (10/45) x $100\% \approx 22.2\%$

Radisson Garments: (7/55) x $100\% \approx 12.7\%$

R.B Knit wears: $(8/32) \times 100\% = 25\%$

Unisense: $(4/23) \times 100\% \approx 17.4\%$

Therefore, the percentage increase in order within one month for Square Fashion is approximately 22.2%, for Radisson Garments is approximately 12.7%, for R.B Knit wears is 25%, and for Unisense is approximately 17.4%

T Test

	Previous order number	er number	in a month
Mean	38.75	46	
Variance	198.9167	244.6667	
Observations	4	4	
Hypothesized Mean Difference	0		
df	6		
t Stat	-0.68846		
P(T<=t) one-tail	0.258441		
t Critical one-tail	1.94318		
P(T<=t) two-tail	0.516882		
t Critical two-tail	2.446912		

Figure 7: T test

Null Hypothesis: Orders number are same in previous lead time and after reducing lead time Here, we can see that t stat not equal to two critical two tail. As a result we reject we reject the null hypothesis. This is the case, -0.68846 < 2.446912

So, we reject the null hypothesis as we can see order number increased after reducing lead time.

4. Recommendation

Kuehne Nagel BD is a logistics and supply chain company operating in Bangladesh. To remain competitive and meet the demands of their customers, it is important that they continuously improve their Key Performance Indicators (KPIs). One way to do this is by decreasing lead time, which refers to the time it takes to complete a process or task, from start to finish. Here are some recommendations on how Kuehne Nagel BD can decrease their lead time and increase their KPIs:

Streamline Processes: The company should review their current processes and identify areas that can be streamlined to reduce lead time. This can be done by eliminating unnecessary steps or tasks, reducing handovers between departments, and automating manual tasks where possible. This will help to reduce the time it takes to complete a process and increase efficiency.

Invest in Technology: Kuehne Nagel BD should invest in technology that can help to automate processes and reduce lead time. This can include software for tracking and monitoring shipments, electronic data interchange (EDI) for exchanging information with partners and customers, and warehouse management systems (WMS) for optimizing inventory management.

Improve Communication: Effective communication is critical to reducing lead time. Kuehne Nagel BD should ensure that all stakeholders, including customers, suppliers, and internal teams, are kept informed about the progress of a shipment or process. This can be achieved through regular status updates, automated notifications, and clear communication channels.

Optimize Inventory Management: Kuehne Nagel BD should optimize their inventory management practices to reduce lead time. This can be achieved by implementing a just-in-time (JIT) inventory

system, which involves ordering inventory only when it is needed, rather than keeping large amounts of inventory on hand. This will help to reduce the time it takes to process orders and improve customer satisfaction.

Continuous Improvement: Finally, Kuehne Nagel BD should adopt a culture of continuous improvement. This involves regularly reviewing and analyzing their processes to identify areas for improvement. By continuously improving their processes, they can reduce lead time and increase their KPIs.

In conclusion, reducing lead time is a key strategy for improving KPIs for logistics and supply chain companies like Kuehne Nagel BD. By streamlining processes, investing in technology, improving communication, optimizing inventory management, and adopting a culture of continuous improvement, they can reduce lead time and improve their performance.

5. Conclusion

Working with one of Bangladesh's top organizations was a fantastic chance for me, and I'm looking forward to developing my career by keeping the position and putting in constant effort. I continue to discover how effectively KNBD Limited manages its supply chain management department, one of the complicated management systems, and I also learned about the strategy that helped them become the industry leader in freight forwarding in Bangladesh. Collecting shipping orders, creating BLs, corresponding with exporters and purchasers, and making contributions to raising the KPI were all parts of my job.

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Appendix

