

INTERNSHIP REPORT

Supply Chain Process flow:

Domino's Pizza Bangladesh

**Domino's Pizza
Bangladesh:
Expansion,
Localization, and
Operational
Excellence**





Course Title- Internship
Course Code- INT4399

Topic

Supply Chain Process flow at Domino's Pizza Bangladesh

Submitted To

Dr. Saad Hasan

Associate Professor

School of Business & Economics

United International University

Submitted By

Saima Tasnia Arpita

ID: 111201052

Major: Supply Chain Management

Date of Submission: 17/12/2024

Letter of Transmittal

Date: 17/12/2024

Dr. Saad Hasan

Associate Professor

School of Business & Economics

United International University

Subject: Submission of Internship Report on “SCM Process Flow at Domino's Pizza Bangladesh”

Dear Sir,

Assalamualaikum. I hope this message finds you in good health. I want to express my heartfelt gratitude for your invaluable guidance and support throughout the preparation of my internship report. The report focuses on the “**SCM Process Flow at Domino's Pizza Bangladesh,**” detailing various aspects of the supply chain management process, including planning, sourcing, production, warehouse management, inventory management, and logistics.

During my internship, I had the opportunity to actively participate in the indent planning process, days of inventory management, fill rate calculations, and ensuring on-time inventory fulfillment. These experiences provided me with practical insights into the operational dynamics at Domino's Pizza and the critical role each component plays in the supply chain.

I gathered information from my colleagues and utilized secondary sources, such as online resources, to enrich my understanding and analysis. I recognize that there may be areas in the report where I have made mistakes, and I kindly ask for your understanding in this regard.

I am immensely grateful for the chance to learn and grow under your mentorship. Your support has enhanced my knowledge and skills during this period. I look forward to your feedback on my analysis and hope to further improve through your insights.

Thank you once again for your guidance.

Sincerely yours,

Sama Tasnia Arpita

ID: 111201052

School of Business & Economics

United International University

Declaration of Studentship

My name is Saima Tasnia Arpita, a student of the School of Business and Economics at United International University. I declare that the report titled “**Supply Chain Management Process Flow, Domino’s Pizza Bangladesh**” based on my experience and information that I have gathered as an intern in the SCM department of Domino’s Pizza Bangladesh a concern of Jubilant Foodworks Ltd. The report has been prepared in part fulfillment of the academic requirements for the BBA program. I pledge that all of the material included in the report is genuine, up-to-date, and derived from authentic sources. Any references, citations, or quotes that were used in the report have been suitably acknowledged via the inclusion of suitable citations and a bibliography.

Saima Tasnia Arpita

111201052

Bachelors of Business Administration

United International University

Supervisor Certificate

This is to state that Saima Tasnia Arpita, ID: 111201052, completed the internship report titled “Supply Chain Management Process Flow, Domino’s Pizza Bangladesh” as part fulfillment of Bachelor of Business Administration (BBA) degree at School of Business & Economics, United International University. The report complies with the requirements set forth by the university authority regarding format and quality.

Dr. Saad Hasan

Associate Professor

School of Business and Economics

United International University

Acknowledgment

First and foremost, I would like to express my deepest gratitude to the Almighty for providing me with the strength and perseverance needed to complete this assignment within the allocated time. Internships are vital to the BBA curriculum, allowing students to gain practical experience by observing and actively participating in a company's daily operations. I am especially grateful to Domino's Pizza Bangladesh for offering me this opportunity to intern in the Supply Chain Management (SCM) Department, where I was able to experience and learn from the industry firsthand.

I would like to extend my heartfelt thanks to my esteemed internship supervisor, Dr. Saad Hasan, an Associate Professor at the School of Business and Economics (SOBE) at United International University. This project would not have been possible without his invaluable guidance and support, which provided a strong foundation for my work. My sincere appreciation also goes to the SCM team at Domino's Bangladesh, particularly my direct supervisor, for their constant encouragement and insightful feedback throughout this project.

I am equally grateful to the officers and staff members at Domino's Bangladesh for their unwavering support during this period. Their confidence in my capabilities played a crucial role in the successful completion of this project.

In closing, I extend my gratitude to my family, close friends, United International University, and the entire team at Domino's Bangladesh for their support and encouragement throughout this learning journey. This acknowledgment reflects the collaborative efforts of all those who contributed, and I am genuinely grateful for their assistance.

Executive Summary

This report, titled *SCM Process Flow at Domino's Pizza Bangladesh*, presents an in-depth examination of supply chain management practices within Domino's Bangladesh, a leader in the country's food retail sector. The focus is on critical supply chain functions, with a specific emphasis on the practical experience gained during the internship in inventory and operational management, and the effectiveness of these strategies in supporting Domino's organizational objectives.

Throughout the internship, I actively contributed to key areas of supply chain operations at Domino's Bangladesh, gaining hands-on experience in the core processes that ensure supply chain efficiency. In the indent planning process, I participated in the development of order forecasts to maintain optimal stock levels, ensuring adequate product availability across outlets. In managing the days of inventory, I was involved in monitoring stock turnover to strike a balance between maintaining sufficient product levels and minimizing holding costs. This experience highlighted the importance of efficient inventory control in meeting both operational demands and cost management goals.

My role also extended to calculating fill rates to assess the availability of products and their readiness to meet customer demand. This involved analyzing supply consistency to reduce the risk of stockouts and maintain high service levels. Additionally, I worked on the on-time inventory fulfillment process, ensuring that products were delivered within specified timeframes to support Domino's commitment to operational efficiency and customer satisfaction.

These practical experiences offered valuable insights into the complex dynamics of Domino's supply chain operations and the critical role each function plays in supporting the company's broader objectives. Through this hands-on approach, I developed a comprehensive understanding of how effective inventory management, accurate demand forecasting, and timely delivery impact the company's overall performance.

The report also includes an overview of Domino's SCM process including Planning, production, Warehouse management, inventory management, logistics, transportation, sourcing, etc. While the three-month timeframe limited data collection and analysis scope, this report provides a well-rounded view of Domino's operational efficiencies and the impact of robust supply chain practices on maintaining competitive advantage, enhancing profitability, and fostering customer satisfaction.

Table of Contents

Letter of Transmittal	ii
Declaration of Studentship.....	iii
Supervisor certificate	iv
Acknowledgment	v
Executive Summary	vi
Chapter 1: Company Profile and SCM Process.....	1
1.1. Domino's Outlet.....	2
1.2. Domino's Supply Chain Process	3
1.3. Planning.....	4
Chapter 2: Sourcing	11
2.1. Sourcing in Domino's SCM Process.....	11
2.2. Sourcing in SCM	12
2.3. Supplier Selection Process	12
2.4. Contractual Considerations.....	13
2.5. Post-Procurement Processes	14
Chapter 3: Production	15
3.1. Dough Production	15
3.2. Vegetable Preparation	16
3.3. Sauce Production	16
3.4. Choco Lava Cake Production.....	17
Chapter 4: Warehouse Management.....	18
Chapter 5: Inventory Management	21
5.1. Inventory Location	22
5.2. Stock-out Threats.....	23
5.3. Inventory in Stores.....	23
5.4. Local Inventories and Export Inventories	24
5.5. Order Fulfillment or Fill Rate.....	25
5.6. Days of Inventory (DOI).....	25
5.7. Reorder Point.....	26
5.8. Safety or Buffer Stock	27
5.9. ABC Analysis.....	27
5.10. Raw Materials and Capex Management.....	28

5.11. Economic Order Quantity (EOQ).....	29
Chapter 6: Logistics Process.....	31
6.2. Transportation Cost	34
6.3 Legal Compliance	35
Chapter 7: Indent Planning	38
Chapter 8: Days of Inventory.....	41
8.1. Procedure for Managing Inventory.....	41
8.2. The Role of the DOI System in Supply Chain Efficiency	43
8.3. Fill Rate.....	44
8.4 On-Time Inventory Fulfillment (OTIF)	46
Chapter 9: Conclusion.....	47
9.1. Recommendation.....	47
References.....	49
Appendix.....	50

Chapter 1: Company Profile and SCM Process

Pizza Domino's Bangladesh is a member of the world-famous Domino's Pizza franchise, which is run by Jubilant FoodWorks Limited (JFL). In Bangladesh, India, and Sri Lanka, JFL is the master franchise holder for Domino's Pizza. With the opening of its first location in 2019, Domino's is a relatively new player in the Bangladeshi market. To meet the rising demand for global fast-food brands, the firm has since increased its footprint in important cities like Dhaka. The brand immediately became well-known for its emphasis on prompt service, personalized products, and reliable quality.

Domino's Bangladesh places a high priority on offering regional menu selections that appeal to the varied palate of the nation while maintaining the brand's essential characteristics. To cater to the Bangladeshi clientele, Domino's provides locally inspired delicacies like the Spicy Chicken Pizza and Achari Do Pyaza in addition to international classics like Pepperoni and Margherita pizzas. The firm places a strong emphasis on using premium ingredients and making sure that its goods adhere to global standards for food safety and quality. Their strong supply chain and effective delivery network guarantee timely service in all of Bangladesh's main cities.

In Bangladesh, Jubilant FoodWorks has made significant investments to establish a dependable supply chain and customer service strategy, emphasizing its "30-minute delivery" guarantee, which has come to represent Domino's brand globally. By providing a user-friendly mobile app and online ordering platform, the firm also uses technology to improve client experiences, which helps it gain market share in the nation. Domino is a pioneer in Bangladesh's fast-food industry because of its dedication to operational effectiveness and in-depth knowledge of regional preferences.

1.1. Domino's Outlet

SL	Store Location	SL	Store Location
1	Dhanmondi-2	19	Banasree
2	Uttara-13	20	ECB
3	Banani	21	Narayanganj
4	Panthapath	22	Shantinagar
5	Mirpur-12	23	Bailey Road
6	Mirpur-2	24	Shewrapara
7	Mohammadpur	25	Agrabad
8	Laxmibazar	26	GEC
9	Wari	27	Dania
10	Khilgaon	28	Palton
11	Eskaton	29	Bali Aracde
12	Jamuna Future Park	30	Shatarkul
13	Gulshan	31	Gulshan 2
14	Kemal Ataturk	32	Khulna
15	Bashundhara	33	Coxs bazar
16	Dhanmondi-27	34	Sylhet
17	Badda	35	Jashimuddin Avenue
18	Uttara-6	36	SKS tower

1.2. Domino's Supply Chain Process

Domino's Pizza uses a simplified supply chain to guarantee that premium pizzas arrive at your door quickly. In the pizza delivery business, Domino's Pizza has made a name for itself by servicing millions of consumers worldwide. A strong Supply Chain Management (SCM) procedure that guarantees the effective sourcing, manufacturing, and delivery of premium pizzas to its clients' doorsteps is the foundation of its success. Domino's supply chain management consists of multiple phases: procurement, production, shipping, and receiving. At local distribution hubs and retail locations, ingredients are carefully processed and assembled according to established recipes, sourced from reliable vendors. Modern equipment, such as conveyor belt ovens, guarantees efficient and reliable cooking. Using sophisticated routing algorithms, orders are dispatched quickly and with real-time tracking for the customer's convenience. Domino's dedication to quality is driven by constant feedback, guaranteeing that every pizza offers a positive experience. The whole dominos SCM process includes Planning, production, Warehouse management, inventory management, logistics, transportation, sourcing, etc. In case of Domino's supply chain process explanation, let's start with the planning process-



1.3. Planning

The well-known pizza chain Domino's is mostly recognized for its delicious pizzas, but efficient supply chain management (SCM) procedures are also a key component of its success. Planning, forecasting, production estimating, standard operating procedures, order planning, material requirement planning, delivery planning, profit, and cost analysis, and managing uncertainty are some of the important steps in Domino's supply chain management process. In the end, these phases all contribute to Domino's success in providing high-quality items to its clientele across the globe by guaranteeing the smooth flow of goods and services from suppliers to customers. We will explore the different elements of Domino's supply chain management process in this talk, with a special emphasis on the planning stage.

Planning in Domino's SCM Process

 **Sales and Operation Forecasting:** Forecasting sales and operations is essential to Domino's supply chain management process throughout the planning stage. It entails



forecasting future sales using information from the past, current market trends, advertising

campaigns, seasonality, and other pertinent variables. The forecast's accuracy directly affects a number of downstream tasks, including resource allocation, inventory control, and production scheduling. Firstly, Domino's collects and examines past sales information from multiple sources, including online orders, POS (Point of Sale) systems, delivery logs, and client testimonials. This information offers insightful information on previous sales trends, shifts in demand, popular menu items, geographical preferences, and consumer behavior. Domino's use statistical techniques, forecasting models, and algorithms to extrapolate future sales trends based on the acquired and analyzed past data. Regression analysis, moving averages, exponential smoothing, time series analysis, and machine learning approaches are a few examples of these models. Domino's also considers outside variables that may affect sales, including shifts in customer preferences, the state of the economy, rival activity, meteorological circumstances, and seasonal fluctuations. For example, sales typically peak around holidays, athletic events, or marketing campaigns, but bad weather can reduce demand. In addition, Domino's works with a range of internal and external partners, such as supply chain, operations, finance, and marketing departments, to obtain information and inputs for forecasting. The integration and alignment of sales projections with overarching corporate objectives and plans is ensured by this cross-functional collaboration.

Overall, Domino's dynamic and iterative sales and operation forecasting methodology is updated and improved regularly using data from real-time operations, market trends, and business insights. Domino's can efficiently satisfy consumer demand while minimizing costs and boosting revenue by optimizing its manufacturing, inventory, personnel, and distribution processes through accurate sales forecasting.

❖ **Production Estimate:** Domino's uses the data from the sales and operating projections to project the amount of production needed for the next period. To do this, the projected sales volumes must be converted into precise manufacturing amounts for every menu item, product category, and retail location. The production estimate takes into account a number of variables, including lead times, production schedule limitations, labor resources, equipment availability, production capacity, and ingredient availability. Domino's strives to maintain operational effectiveness and cost-effectiveness by balancing manufacturing output with projected demand in order to prevent stock outs or surplus inventory. Domino's uses demand fluctuation analysis, capacity utilization rates, production efficiency indicators, and historical production data to estimate production. Domino's can improve production schedules, distribute resources efficiently, and reduce waste by utilizing technology, including demand forecasting tools, ERP (Enterprise Resource Planning) systems, and production planning software. Furthermore, Domino's works closely with its distributors, manufacturers, and suppliers to guarantee the timely supply of ingredients, packaging, raw materials, and completed goods. This partnership shortens lead times,

decreases stockouts, and improves the supply chain's overall responsiveness by facilitating a smooth flow of commodities through the system. Additionally, Domino's constantly reviews and modifies its production projections in response to changes in demand, real-time sales data, customer feedback, marketing initiatives, and industry trends. Because of its agility, Domino's is able to maintain high standards of customer satisfaction and service while swiftly adapting to shifting demand patterns and making the best use of its resources. In conclusion, Domino's production estimate method is a crucial part of its supply chain management (SCM) strategy since it allows for effective resource allocation, schedule optimization, and flexibility in response to changes in customer demand. Domino's may increase its competitive advantage in the market, reduce expenses, and streamline operations by precisely projecting its production needs.

❖ **Standard Operating Procedure (SOP):** Essential papers known as Standard Operating Procedures (SOPs) provide detailed instructions and standards on how to do different jobs, processes, and activities related to Domino's supply chain operations. As a reference manual for staff members, these SOPs guarantee uniformity, effectiveness, quality, and adherence to corporate policies and guidelines.

SOPs are essential for creating and recording standard operating procedures and best practices for sales forecasting, production planning, inventory management, order processing, distribution, and other important tasks during the planning stage of Domino's supply chain management process. The data sources, procedures, instruments, and strategies utilized to produce precise sales projections are outlined in the SOPs for sales forecasting. They specify the expected frequency of prediction updates, the standards for judging forecast accuracy, and the roles and responsibilities of individuals or teams participating in the forecasting process. Similar to this, the SOPs for production planning specify how sales predictions are converted into production plans, how production quantities are determined, resources are assigned, and how to maximize production efficiency. These could contain specifications for inventory replenishment procedures, scheduling algorithms, capacity planning, and production performance measures. Additionally, the inventory management SOPs outline the processes for keeping an eye on stock levels, auditing inventories, handling stockouts and surplus inventory, rotating inventories according to FIFO or LIFO, and maximizing safety stock levels. The SOPs for order processing also outline the protocols for taking orders from clients, handling their requests, creating purchase orders or production orders, assigning inventories, setting up delivery windows, and updating customers on the progress of their orders. In addition, the distribution SOPs specify how product shipments should be scheduled, tracked, and routed. They also manage transportation logistics, optimize delivery routes, and guarantee that customers receive their orders on time. SOPs play a major role in fostering uniformity, effectiveness, and quality throughout Domino's supply chain activities. Domino's may

reduce errors and delays, increase productivity, improve customer satisfaction, and streamline its operations by adhering to best practices and standard operating procedures.

❖ **Total Order Planning, Quantity, and Consumption:** Important elements of the planning stage in Domino's supply chain management process are total order planning, quantity, and consumption. This is figuring out how much product needs to be ordered, made, or consumed in total within a given time frame in order to satisfy consumer demand while optimizing inventory levels, cutting expenses, and boosting profitability. Firstly, considering the sales forecast, production estimates, inventory levels, lead times, order cycles, and demand fluctuation, Domino's determines the total order amount. This entails taking into account elements that could affect order numbers, such as promotional efforts, new product releases, seasonal variations, and special occasions. Additionally, Domino's looks for patterns, trends, and demand factors that affect order amounts and consumption patterns by analyzing past order data, consumer preferences, market trends, and competitor actions. In addition, Domino's works with its distributors, manufacturers, suppliers, and logistics partners to organize orders, synchronize production schedules, maximize order amounts, and guarantee prompt product delivery to satisfy consumer demand. In order to maximize order quantities, reduce carrying costs, and mitigate stockouts or excess inventory, Domino's also uses inventory optimization techniques like ABC analysis, EOQ (Economic Order Quantity) models, JIT (Just-In-Time) inventory management, safety stock calculations, and reorder point strategies. Furthermore, Domino's makes use of technology to optimize order quantities based on real-time data and insights, track inventory levels, estimate demand, and streamline order planning. Examples of this technology include supply chain analytics, ERP systems, demand planning tools, and inventory management software. In general, Domino's supply chain management (SCM) strategy relies heavily on overall order planning, quantity, and consumption. These elements help the company fulfill consumer demand, optimize inventory levels, manage its supply chain operations, and attain operational excellence.

❖ **Material Requirement Plan (MRP):** Within Domino's supply chain, Material Requirement Planning (MRP) is a methodical process for identifying the materials, parts, and resources required to satisfy consumer demand and manufacturing needs. To create a comprehensive strategy for acquiring and managing ingredients, packaging materials, raw materials, and other resources, MRP analyzes the production schedule, bill of materials (BOM), inventory levels, lead times, and demand projections during the planning phase of Domino's supply chain management process.

First, based on the sales projection and production estimates, Domino's develops a master production schedule (MPS) that details the production quantities and timelines for every menu item, product category, and retail location. Domino's then examines the bill of materials (BOM) for every product to determine which components and materials are

needed for manufacturing. This covers ingredients like cheese, flour, sauce, and toppings as well as supplies for packaging including bags, boxes, and containers. Following material identification, Domino's computes material requirements based on lead times, BOM, production schedule, and inventory levels using MRP software or ERP systems. To acquire materials from vendors or internal production facilities, the MRP system creates purchase orders or production orders. Additionally, when choosing suppliers and negotiating contracts, Domino's takes into account variables including supplier lead times, order volumes, cost, quality, and dependability. By doing this, a steady and dependable supply of resources is guaranteed to support manufacturing processes and satisfy consumer demand. Furthermore, Domino's uses supply chain dashboards and MRP systems to track and monitor in real-time material availability, supplier performance, production progress, and inventory levels. Proactive material management, prompt problem solving, and production schedule optimization are made possible by this. To coordinate deliveries, maintain optimal inventory levels, and maintain production schedules, Domino's also works closely with its manufacturers, distributors, and suppliers.

Material Requirement Planning (MRP) is a crucial part of Domino's Supply Chain Management (SCM) process. It helps the company satisfy customer demand, improve production schedules, control costs, and manage its material resources.

 **Delivery Plan:** Delivery planning, which maximizes transportation logistics, route planning, and delivery operations, is a crucial component of Domino's supply chain management process. It guarantees the prompt and effective delivery of goods to consumers. Domino's creates a delivery plan during the planning stage that details the routes, times, and materials required to complete client orders and adhere to delivery obligations. Analyzing order quantities, delivery locations, traffic patterns, vehicle capacities, driver availability, and other pertinent variables are all part of this process. Initially, Domino's estimates the number and distribution of client orders across various areas, store locations, and timeframes using sales predictions, order data, and previous delivery trends. Next, in order to optimize delivery routes, reduce travel times, and maximize truck utilization, Domino's uses transportation management systems (TMS), GIS (Geographic Information System) technology, and route optimization software. Furthermore, when scheduling deliveries and allocating resources, Domino's takes into account variables including order priorities, delivery windows, customer preferences, and service level agreements (SLAs). Furthermore, in order to design routes, coordinate delivery operations, and track delivery performance in real time, Domino's works with its network of delivery drivers, franchisees, and outside logistics companies. Additionally, Domino's regularly reviews and modifies its delivery schedule in response to weather forecasts, traffic patterns, shifting demand, and other outside variables that could affect delivery operations. In general, delivery planning is a crucial component of Domino's supply chain management (SCM) strategy, allowing the business to maximize customer

satisfaction, minimize lead times, optimize transportation costs, and offer quick, dependable, and easy delivery services to its clients.

❖ **Profits and Costs Analysis:** An essential component of Domino's supply chain management (SCM) process is profits and expenses analysis, which helps the business evaluate the financial performance of its supply chain activities, pinpoint cost centers, and maximize profitability. Domino's performs a thorough examination of all supply chain expenses, including production, procurement, shipping, warehousing, and distribution costs, throughout the planning stage of the business. Initially, Domino's collects information on a range of expenditures associated with its supply chain, including labor, materials, overhead, transportation, and other running costs. Subsequently, Domino's examines the supply chain's cost structure to pinpoint inefficiencies, waste, or overspending. To evaluate the profitability and cost-effectiveness of various supply chain activities and processes, this may entail performing cost-benefit analyses, activity-based costing (ABC), variance analyses, and other financial indicators. Additionally, Domino's assesses the effects of numerous variables, including shifts in input prices, manufacturing volumes, order quantities, transportation rates, and overhead charges, on supply chain costs and profitability. Furthermore, Domino's performs scenario planning and sensitivity analysis to evaluate the possible advantages and disadvantages of various cost drivers, market circumstances, and business plans. Also, Domino's works in conjunction with its manufacturers, distributors, suppliers, and logistics partners to find ways to reduce costs, bargain for advantageous terms and execute efficiencies gains across the supply chain. All things considered, Domino's supply chain strategic decision-making is heavily influenced by profitability and cost analysis, which helps the business optimize its cost structure, boost shareholder value, and improve financial performance.

❖ **Uncertainty Circulation:** Uncertainty circulation is a key consideration in Domino's SCM process, recognizing the inherent risks and uncertainties associated with supply chain operations and developing strategies to mitigate, manage, or adapt to them. In the planning phase, Domino's identifies potential sources of uncertainty within its supply chain, such as demand volatility, supply disruptions, market fluctuations, regulatory changes, geopolitical risks, and natural disasters. Next, Domino's assesses the potential impact of these uncertainties on its supply chain performance, including risks to production continuity, inventory availability, delivery reliability, and customer service levels. Moreover, Domino's employs risk management techniques such as risk assessment, risk mitigation, risk transfer, and risk monitoring to address and mitigate supply chain risks proactively. Additionally, Domino's develops contingency plans, alternative sourcing strategies, and business continuity plans to ensure resilience and adaptability in the face of unexpected events or disruptions. Domino's monitors, analyzes, and predicts changes in market circumstances, demand patterns, and supply chain dynamics by utilizing technology such as supply chain visibility tools, predictive analytics, and scenario planning software. All

things considered; uncertainty circulation is a crucial component of Domino's supply chain management (SCM) strategy. It helps the business to foresee, reduce, and efficiently handle risks and uncertainties in its supply chain, assuring resilience, continuity, and market competitiveness. To sum up, the planning stage of Domino's overall supply chain management (SCM) process includes a number of crucial tasks, such as production estimation, standard operating procedures, sales, and operation forecasting, planning for the entire order, planning for material requirements, planning for delivery, analyzing profits and costs, and circulating uncertainty. Domino's can effectively satisfy customer demand, manage its supply chain operations, reduce costs, and increase profitability by carefully planning and organizing these actions. In the demanding and ever-changing foodservice market, Domino's maintains its competitiveness and responsiveness with constant innovation and adjustment.

Chapter 2: Sourcing

Let's delve into an in-depth discussion of Domino's overall Supply Chain Management (SCM) process, particularly focusing on the sourcing aspect. Sourcing sticks out as an important factor that directly affects the cost, dependability, and quality of the materials required to make pizza. This section will discuss the importance of sourcing within Domino's supply chain management (SCM) architecture and how it affects customer happiness and overall business operations.

2.1. Sourcing in Domino's SCM Process



2.2. Sourcing in SCM

Because it directly affects a number of important components of the supply chain, such as risk mitigation, cost management, quality control, and strategic alignment with company objectives, sourcing is crucial to supply chain management (SCM). For Domino's, sourcing involves more than just acquiring supplies and ingredients; it also entails developing strategic alliances with vendors that can reliably satisfy the company's standards for dependability, quality, and freshness.

- ❖ **Ensure a consistent supply of high-quality ingredients:** Domino's is able to keep its pizzas consistently fresh and tasty at all of its locations by working with reliable suppliers that adhere to strict quality control procedures.
- ❖ **Optimize costs and enhance profitability:** By means of strategic sourcing activities, Domino's has the potential to bargain with suppliers for advantageous terms and prices, which lowers procurement costs and boosts total profitability.
- ❖ **Mitigate supply chain risks:** Domino's can lessen the effects of supply chain interruptions like ingredient shortages, delays in transit, or natural disasters by diversifying its supplier base and putting strong risk management procedures in place.
- ❖ **Drive innovation and sustainability:** By working together with creative suppliers, Domino's is able to launch new flavors, ingredients, and menu items that adapt to changing customer tastes. Furthermore, Domino's commitment to environmental stewardship and corporate social responsibility is aligned with sourcing ingredients sustainably.

2.3. Supplier Selection Process

A key component of Domino's supply chain management (SCM) strategy is the supplier selection process, which establishes the caliber, dependability, and affordability of the supplies purchased for the making of pizza. Domino's chooses its suppliers in a methodical manner, usually involving the following steps:

- ❖ **Market Research:** In order to find possible suppliers who can satisfy its particular needs for ingredients like cheese, sauce, dough, and toppings, Domino's performs a thorough analysis of the industry. This entails examining supplier capabilities, studying market trends, and evaluating their track record with regard to product quality, dependability, and ethical standards.
- ❖ **Quotation Collection:** After locating possible suppliers, Domino's asks them to provide quotes that include the costs, terms, and conditions of providing the needed materials. This

enables Domino's to assess and contrast the products and services provided by various vendors and bargain for advantageous conditions.

- ❖ **Negotiations:** Securing acceptable price, terms, and conditions from suppliers is mostly dependent on negotiation. In order to complete the procurement agreement's conditions, pricing schemes, delivery timetables, and other pertinent details, Domino's negotiates.
- ❖ **Comparative Statement:** After the receipt of quotations from several suppliers, Domino's prepares a comparison statement to assess and contrast each supplier's offerings according to criteria like cost, reliability, quality, and service level agreements (SLAs) as well as sustainability initiatives. By using this comparison research, Domino's can choose its suppliers with confidence.
- ❖ **Approval Process:** After that, the comparison statement is sent to the appropriate Domino's stakeholders for approval, such as finance controllers, supply chain executives, procurement managers, and quality assurance teams. The chosen supplier's total benefits and value proposition are evaluated, along with other aspects like cost-effectiveness, dependability, quality control, and strategic alignment with Domino's corporate goals, before approval is given.

2.4. Contractual Considerations

After choosing a supplier, Domino's creates a legal contract that will regulate the procurement relationship and guarantee that both parties abide by its terms and circumstances. Important contractual factors consist of:

- ❖ **Delivery Point:** In order to ensure effective logistics and distribution, the contract details the specified delivery places where the provider is obliged to deliver the materials. This could apply to Domino's major distribution hubs or to specific restaurant locations.
- ❖ **Purchase Orders:** Purchase orders specifying the quantity, requirements, and time of delivery for the materials to be delivered are sent by Domino's to the supplier. The precise terms and conditions of the procurement transaction, including price, payment terms, delivery criteria, quality standards, and other pertinent information, are outlined in purchase orders, which are legally binding agreements.
- ❖ **Quality Assurance:** In order to guarantee the consistent quality of the products supplied, the supplier may be required to comply with quality standards, specifications, and testing criteria outlined in the contract. To ensure adherence to Domino's quality standards and specifications, this may entail doing routine inspections, audits, and testing methods.
- ❖ **Tax and VAT Analysis:** To ensure compliance with local rules and reduce tax liabilities, the contractual agreement carefully considers and incorporates the tax and VAT implications.

2.5. Post-Procurement Processes

Following the procurement process, Domino's carries out a number of post-procurement procedures to guarantee the smooth incorporation of the purchased products into its supply chain:

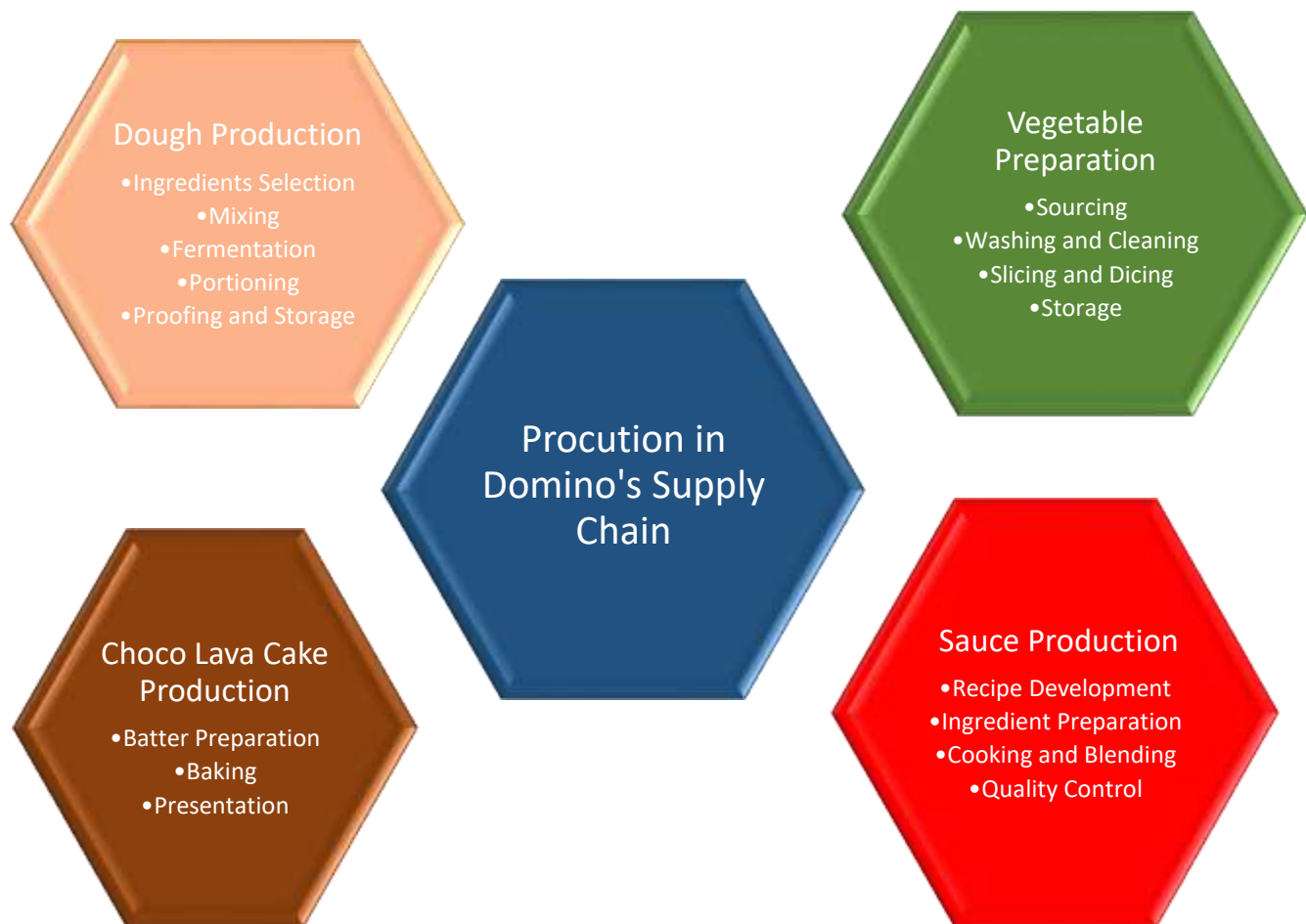
- ❖ **Challan Generation:** When the materials are delivered, Domino's creates a delivery receipt, or Challan, that helps with inventory management and reconciliation by acting as a proof of receipt. The Challan usually contains information on the date, time, and place of delivery in addition to the quantity, description, and condition of the materials received.
- ❖ **Quality Analysis and Release:** To ensure the ingredients fulfill its exacting standards and requirements, Domino's performs thorough quality analysis and testing on the acquired materials before using them to create pizzas. This could entail evaluating flavor, texture, appearance, freshness, and safety through sensory assessments, lab testing, and organoleptic analysis.
- ❖ **Goods Received Note (GRN):** For official purposes, Domino's creates a Goods Received Note upon receiving supplies from the supplier. This document is necessary for accounting and reconciliation since it acts as a record of inventory input. Typically, the GRN contains information like the name of the supplier, the purchase order number, the quantity received, the date of receipt, and the authorized recipient's signature.

In conclusion, sourcing is an essential part of Domino's supply chain management process that helps the business buy premium ingredients and supplies quickly and affordably. Domino's guarantees the smooth integration of its supply chain by adhering to a methodical supplier selection process, creating strong contractual agreements, and putting in place efficient post-procurement procedures. These measures ultimately help the company become a global leader in the pizza delivery sector. In the context of its SCM structure, this conversation offers a thorough summary of Domino's sourcing procedure. It emphasizes how crucial supplier selection, contract negotiations, and post-procurement procedures are to guarantee a smooth supply chain flow of commodities.

Chapter 3: Production

Domino's Production Process Overview: One of the biggest pizza chains in the world, Domino's is renowned for its reliable quality and effective production methods. The preparation of the dough, the preparation of the vegetables, the creation of the sauce, and the manufacturing of specialty goods like the Choco Lava Cake are some of the major steps in the production process at Domino's.

3.1. Dough Production



Every pizza is incomplete without its dough, and Domino's takes great pleasure in its dough-making procedure. Here's a closer look at Domino's method of making pizza dough:

- 🔍 **Ingredients Selection:** For its dough, Domino's meticulously chooses premium ingredients such as flour, water, yeast, salt, and occasionally sugar or oil for texture and flavor.

- ❖ **Mixing:** Industrial mixers are used to precisely measure out the ingredients and combine them. These mixers guarantee even when making huge amounts of dough, thorough blending and uniformity.
- ❖ **Fermentation:** The dough is mixed, then let to rise and ferment. The dough gains the appropriate texture and flavor as a result of this fermenting procedure. Fermentation might take several hours, depending on the recipe and environmental conditions.
- ❖ **Portioning:** The dough is divided into individual pizza crusts once it has properly risen. To guarantee that every crust is consistent in size and form, Domino's may employ trained personnel or automated technology.
- ❖ **Proofing and Storage:** To provide for extra rinsing before use, the dough could go through one last proving stage after portioning. After that, it is kept in temperature-controlled settings to preserve freshness until required.

3.2. Vegetable Preparation

One of the main ingredients of Domino's pizzas is fresh vegetables. Here's a deeper look at the vegetable topping preparation process used by Domino's:

- ❖ **Sourcing:** Domino's ensures quality and freshness by sourcing fresh vegetables from reliable vendors.
- ❖ **Washing and Cleaning:** The veggies are carefully cleaned and washed to get rid of any dirt or debris as they arrive. Maintaining food safety and quality requirements requires taking this action.
- ❖ **Slicing and Dicing:** After cleaning, the vegetables are cut, diced, or prepared in another way per Domino's instructions. Using consistent cutting methods helps guarantee consistency in the final output.
- ❖ **Storage:** To keep them fresh and stop them from spoiling prepared veggies are kept in refrigerators. Using FIFO (first in, first out) techniques can guarantee that older goods is used first.

3.3. Sauce Production

A key ingredient that gives Domino's pizzas taste and wetness is the sauce. This is a more thorough rundown of the steps involved in making Domino's sauce:

- ❖ **Recipe Development:** Domino's may have a special sauce formula that is designed to go well with its pizza selection.
- ❖ **Ingredient Preparation:** To make sauce, ingredients like tomatoes, herbs, spices, and maybe sugar or oil are gathered and ready to be used.
- ❖ **Cooking and Blending:** It is possible to simmer and reduce tomatoes to intensify their flavor before blending them with other ingredients. The smooth, uniform texture of the sauce is guaranteed by the blending procedure.

- ❖ **Quality Control:** Domino's employs stringent quality control procedures during the production process to guarantee that the sauce satisfies its requirements for freshness, consistency, and flavor.

3.4. Choco Lava Cake Production

Domino's provides a range of sweets in addition to pizza, one of which is the luscious Chocolate Lava Cake. A deeper look at how Domino's makes this decadent dessert is provided below:

- ❖ **Batter Preparation:** Eggs, chocolate, sugar, flour, and cocoa powder are used to make the batter for the Choco Lava Cake. The combination of these ingredients yields a thick, chocolaty batter.
- ❖ **Baking:** The batter is divided into portions and baked to perfection in separate cake molds. The secret to the molten center that makes the Choco Lava Cake so famous is exact timing and temperature control in the baking process.
- ❖ **Presentation:** After baking, the Choco Lava Cakes can be served warm and topped with cocoa powder or powdered sugar. For extra indulgence, they are frequently served with a side of vanilla ice cream.

At every step of the way, Domino's production process is a well-oiled machine that puts quality, consistency, and customer pleasure first. Domino's dedication to quality is evident in all aspects of its offerings, from the preparation of vegetables to the fabrication of sauces and the creation of specialty dishes like the Choco Lava Cake.

Chapter 4: Warehouse Management

An essential component of Domino's entire supply chain management (SCM) procedure is warehouse management. To guarantee prompt delivery to clients while minimizing expenses and optimizing profitability, it entails the effective management and storage of raw materials, ingredients, and completed goods. The location and amenities of the warehouse, warehouse systems, maintenance, delivery pick-up locations, end destinations, and temperature maintenance in chilled warehouses are just a few of the aspects of Domino's warehouse management that will be covered in this talk.



- ❖ **Number and Type of Warehouses:** There are two main kinds of warehouses that Domino's runs: one for chilled goods and another for dry goods and other commodities. Based on the nature of their products and the requirement for certain storage conditions, this strategic choice was made. Perishable goods like cheese, meats, and vegetables must

be kept in chilled warehouses at precise temperatures to preserve their freshness. Conversely, non-perishable goods like flour, canned goods, and packing materials are kept in dry warehouses.

❖ **Warehouse Location and Facilities:** One important factor in supply chain optimization is warehouse placement. In order to save transportation costs and guarantee on-time delivery to stores, Domino's installs its warehouses in strategic locations. Consideration is given to details like the distance to suppliers, distribution hubs, and final customers. Furthermore, warehouse spaces are built to handle the handling and storage needs of Domino's goods. This comprises enough room for inventory, sections with controlled temperatures, loading docks, and security systems to guard against theft or damage to the items.

❖ **Warehouse Systems:** Effective warehouse management is largely dependent on reliable technologies and systems. Modern warehouse management systems (WMS) are purchased by Domino's in order to improve workflows, track inventories in real time, and streamline operations. These systems increase accuracy and efficiency in receiving, picking, packing, and shipping processes by utilizing barcode scanning, RFID technology, and automation. Ensuring smooth coordination and communication throughout the network is ensured by integration with additional supply chain software.

❖ **Warehouse Maintenance:** Maintaining the equipment and infrastructure of warehouses is crucial to ensuring both product quality and operating efficiency. Regular facility maintenance plans are put in place by Domino's, and these include routine inspections, repairs, and renovations as needed. This comprises material handling machinery like pallet jacks and forklifts, HVAC systems for temperature-controlled spaces, and refrigeration units for chilled storage. Sanitation and hygiene standards are also upheld in order to abide by food safety laws and reduce the possibility of infection. Domino's minimizes downtime, lowers the chance of equipment failure, and guarantees a safe working environment for warehouse personnel by giving warehouse maintenance top priority.

❖ **Delivery Pick-up Points and End Destination:** Efficient delivery locations and pick-up sites are essential for accurately and on-time delivering customer orders. To save travel time and fuel consumption, Domino's carefully chooses pick-up sites based on customer density, traffic patterns, and delivery routes. Retail establishments, centralized hubs, or

outside logistics companies for last-mile deliveries could all fall under this category. Likewise, consumer inclinations, market needs, and geographic reach are taken into consideration when selecting final destinations. Domino's uses GPS monitoring technology and route optimization algorithms to minimize idle time, improve delivery routes, and give customers real-time updates on the status of their orders.

❖ **Temperature Maintenance in Chilled Warehouses:** It is crucial to keep chilled warehouses at the right temperature in order to maintain the freshness and quality of perishable goods including meats, vegetables, and dairy products. To keep temperature levels within set ranges, Domino's makes investments in cutting-edge refrigeration systems and temperature monitoring equipment. In order to prevent spoiling and guarantee adherence to food safety regulations, this involves preserving the integrity of the cold chain during storage and transportation. Workers in warehouses are also trained on correct handling practices for commodities that are sensitive to temperature, such as loading and unloading methods and storage processes. Frequent quality inspections and temperature checks are carried out to spot any discrepancies and quickly implement corrective measures.

By carefully overseeing every facet of warehouse management, Domino's maximizes its supply chain activities to provide consumers all over the world with fresh, premium items. To address the needs of a changing market scenario, Domino's continues to develop and evolve its supply chain management (SCM) operations through strategic planning, technological investment, and a dedication to quality.

Chapter 5: Inventory Management

Any firm that deals with perishable goods, like the food industry, knows how important inventory control is. As a multinational pizza delivery company, Domino's depends significantly on efficient inventory control to maintain seamless operations and happy customers. To meet consumer demand and minimize holding costs and stockouts, Domino's Supply Chain Management (SCM) method depends heavily on inventory management. It guarantees the availability of raw materials, ingredients, and final products. We will cover several topics related to Domino's inventory management in this talk, such as raw material management, safety stock, Days of Inventory (DOI), order fulfillment, stock-out threats, inventory locations, reorder points, and Economic Order Quantity (EOQ).



5.1. Inventory Location

The actual locations of inventory products inside Domino's supply chain network are referred to as inventory locations. These places include retail establishments, commissaries, warehouses, and cold storage facilities. Every location in the supply chain has a distinct function that helps with order fulfillment and effective inventory control. Let's take a closer look at each inventory location:

- ❖ **Warehouses:** Large amounts of ingredients, raw materials, and completed goods are kept in storage at warehouses, which act as hubs for the entire process. Usually, Domino's runs a number of well-located warehouses close to its manufacturing sites, transportation hubs, and important marketplaces. These warehouses enable Domino's to optimize inventory levels and reduce transportation costs by facilitating economies of scale in sourcing, storage, and distribution. Sophisticated warehouse management systems (WMS) are used to manage inventory in warehouses. They facilitate order picking, track stock levels, and handle inbound and outgoing logistics operations.
- ❖ **Chilled Storage Facilities:** Specialized warehouses with refrigeration equipment to preserve temperature-sensitive goods like meats, vegetables, and dairy products are known as chilled storage facilities. In order to maintain freshness and increase shelf life, Domino's keeps completed goods and perishable ingredients in these facilities that require cold storage. Temperature monitoring equipment and cold chain management procedures are used to make sure that quality requirements and food safety laws are followed. Within Domino's supply chain network, chilled storage facilities are positioned to reduce transportation distances and guarantee prompt delivery of fresh items to retail locations and customers.
- ❖ **Commissaries:** Commissaries are centralized food production facilities where semi-finished goods such as dough, sauces, and toppings are prepared and assembled before distribution to retail stores. Domino's operates commissaries to streamline production processes, achieve economies of scale, and maintain product consistency across multiple locations. Commissaries receive bulk shipments of raw materials and ingredients from warehouses and suppliers, then process and package them into standardized components for use in pizza assembly at retail stores. By centralizing production in commissaries, Domino's reduces labor costs, enhances quality control, and accelerates time-to-market for new menu offerings.
- ❖ **Retail Store:** Retail stores, also known as pizza outlets or restaurants, serve as the final destination for Domino's inventory, where customer orders are fulfilled and served. Each retail store maintains a limited inventory of finished products and perishable ingredients to meet immediate demand from walk-in customers and delivery orders.

5.2. Stock-out Threats

Stock outs pose a significant threat to Domino's operations, potentially resulting in lost sales, dissatisfied customers, and damage to the brand's reputation. To mitigate stock out risks, Domino's employs demand forecasting models, inventory visibility tools, and real-time monitoring systems to anticipate demand fluctuations and adjust inventory levels accordingly. Additionally, strategic safety stock buffers are maintained to absorb variability in demand, supplier lead times, and production disruptions. By proactively managing stock out threats, Domino's ensures high service levels and customer satisfaction.

- ❖ **Demand Forecasting:** Domino's utilizes historical sales data, market trends, and seasonality factors to forecast future demand accurately. This helps in determining optimal inventory levels and preventing stockouts.
- ❖ **Inventory Replenishment Strategies:** Automated systems are employed to monitor inventory levels in real-time and initiate replenishment orders as needed. Just-in-time (JIT) inventory management minimizes the risk of stockouts while reducing excess inventory holding costs.
- ❖ **Safety Stock Levels:** To buffer against unforeseen fluctuations in demand or supply chain disruptions, Domino's maintains safety stock levels at warehouses and stores. This ensures that there's always a sufficient buffer to meet unexpected demand surges or delays in deliveries.

5.3. Inventory in Stores

Each Domino's store maintains its inventory to support daily operations and fulfill customer orders promptly. Inventory levels are closely monitored to avoid stockouts while minimizing excess inventory carrying costs.

- ❖ **Store Inventory Management Systems:** Utilizing inventory management software is crucial for Domino's to track stock levels accurately. This software likely integrates with their ordering system, allowing for seamless replenishment based on demand patterns. By having real-time visibility into inventory levels, stores can optimize their stock levels and minimize the risk of stockouts or overstocking.
- ❖ **Just-in-Time Delivery (JIT):** Implementing a JIT delivery model is beneficial for Domino's as it ensures that fresh ingredients are delivered to stores precisely when they are needed. This approach minimizes the need for excess inventory storage and reduces the risk of wastage due to spoilage. By aligning deliveries with demand forecasts, Domino's can optimize its inventory levels and reduce carrying costs.
- ❖ **Inventory Audits:** Regular inventory audits are essential for maintaining accurate inventory records and identifying any discrepancies between physical counts and system records. By conducting these audits, Domino's can ensure that inventory levels are

accurately tracked, minimize shrinkage due to theft or spoilage, and maintain the integrity of its inventory data.



Domino's inventory management practices appear to be focused on optimizing inventory levels, reducing waste, and ensuring the efficient operation of their stores. By leveraging technology, such as inventory management software, and implementing JIT delivery models, Domino's can effectively manage its inventory to support daily operations and meet customer demand promptly.

5.4. Local Inventories and Export Inventories

Domino's manages local inventories to meet the specific demands of each market while also catering to export markets where applicable. This involves tailoring inventory levels, product offerings, and supply chain logistics to suit regional preferences and regulations.

-  **Local Inventory Optimization:** Domino's understands that preferences, cultural differences, and market dynamics vary from one region to another. Therefore, they tailor their inventory management strategies to meet the specific demands of each market. This might involve sourcing ingredients locally to ensure freshness and availability, adjusting product offerings to align with local tastes and preferences, and optimizing delivery routes to minimize transportation costs and delivery times. By adapting its inventory management practices to local conditions, Domino's can better serve customers and maintain a competitive edge in each market it operates in.
-  **Export Market Logistics:** When catering to export markets, Domino's must navigate additional complexities such as regulatory requirements, transportation logistics, and maintaining product quality standards over long distances. To address these challenges, Domino's carefully manages export inventories by ensuring compliance with regulatory requirements related to food safety, labeling, and packaging. They may also implement specialized logistics solutions such as temperature-controlled transportation to preserve the quality and freshness of their products during transit. Additionally, they manage customs clearance procedures efficiently to minimize delays and ensure timely delivery to international markets. By effectively managing export inventories and logistics, Domino's can expand its global reach while maintaining consistent product quality and customer satisfaction levels across different regions.

Domino's commitment to local inventory optimization and efficient export market logistics allows them to adapt to diverse market conditions and serve customers effectively both locally and internationally. This strategic approach enables Domino's to capitalize on growth opportunities while maintaining high standards of product quality and customer service worldwide.

5.5. Order Fulfillment or Fill Rate

Order fulfillment refers to the process of successfully delivering customer orders within the promised timeframe while maintaining high fill rates (percentage of orders fulfilled completely). Domino's employs efficient order fulfillment strategies to meet customer expectations and minimize order discrepancies.

- ❖ **Delivery Time Optimization:** Domino's leverages technology to optimize delivery routes and minimize delivery times. Advanced routing algorithms and delivery optimization software help in planning efficient routes, prioritizing orders based on proximity to the store, and reducing idle time between deliveries. By streamlining the delivery process, Domino's can fulfill orders quickly and efficiently, meeting customer expectations for timely delivery.
- ❖ **Fill Rate Monitoring:** Monitoring fill rates is essential for evaluating order fulfillment performance. Domino's closely tracks the percentage of orders fulfilled completely to identify any areas of improvement. By analyzing the root causes of order discrepancies or stockouts, Domino's can take corrective actions to enhance fill rates and ensure that a high percentage of orders are fulfilled accurately and on time.
- ❖ **Customer Communication:** In cases where there are order discrepancies or stockouts, Domino's prioritizes proactive communication with customers. This involves informing customers promptly about any issues with their order, managing their expectations, and offering alternatives or compensation if necessary. By keeping customers informed and addressing any concerns promptly, Domino's can maintain customer satisfaction even in situations where orders may not be fulfilled as expected.

Overall, Domino's efficient order fulfillment strategies, coupled with proactive customer communication, contribute to a positive customer experience and help in building long-term relationships with customers. By continually monitoring fill rates and optimizing delivery processes, Domino's strives to uphold high standards of order fulfillment and service quality.

5.6. Days of Inventory (DOI)

DOI refers to the average number of days it takes for inventory to be converted into sales. Domino's aims to minimize DOI by optimizing inventory turnover rates, reducing excess inventory levels, and improving demand forecasting accuracy.

- ❖ **Inventory Turnover Rate:** Domino's calculates inventory turnover rates to gauge the efficiency of its inventory management. Higher turnover rates indicate that inventory is being sold and replenished quickly, which is essential for reducing DOI. By monitoring and optimizing inventory turnover rates, Domino's ensures that its inventory levels are aligned with customer demand, minimizing the risk of overstocking and excessive DOI.
- ❖ **DOI Reduction Strategies:** Domino's employs several strategies to reduce DOI and optimize inventory management. Just-in-Time (JIT) inventory management is a key approach, where inventory is replenished only when needed, thereby reducing excess

inventory levels and carrying costs. Additionally, Domino's optimizes order quantities to ensure that they have sufficient inventory to meet demand without overstocking. Improving supply chain visibility is another strategy, enabling Domino's to track inventory levels accurately and respond promptly to changes in demand or supply conditions.

- ❖ **Demand Forecasting Accuracy:** Accurate demand forecasting is crucial for reducing DOI and ensuring that inventory levels are aligned with actual customer demand. Domino's leverages advanced technologies such as data analytics, machine learning algorithms, and market insights to improve demand forecasting accuracy. By analyzing historical sales data, customer trends, and market dynamics, Domino's can make more informed decisions about inventory management, minimizing the risk of stockouts or excess inventory and optimizing DOI.

Overall, Domino's commitment to optimizing inventory turnover rates, implementing DOI reduction strategies, and improving demand forecasting accuracy enables them to maintain lean inventory levels while meeting customer demand effectively. By minimizing DOI, Domino's can reduce carrying costs, free up working capital, and enhance operational efficiency, ultimately driving greater profitability and customer satisfaction.

5.7. Reorder Point

The reorder point is the inventory level at which a replenishment order should be placed to avoid stockouts while accounting for lead time and demand variability. Domino's calculates reorder points for each inventory item based on demand forecasts, lead times, and desired service levels.

- ❖ **Reorder Point Calculation:** The reorder point is a critical parameter in Domino's inventory management system as it determines when to initiate replenishment orders. Domino's utilizes advanced inventory management software to calculate reorder points dynamically. These calculations take into account factors such as demand variability, lead times for procurement and transportation, and desired service levels. By incorporating these variables into the reorder point calculation, Domino's ensures that replenishment orders are placed promptly, preventing stock outs and maintaining optimal inventory levels.
- ❖ **Lead Time Management:** Lead times for procurement, production, and transportation play a significant role in determining the reorder point. Domino's carefully manages lead times by estimating their variability and incorporating safety stock buffers to account for uncertainties. By considering lead times in the reorder point calculation, Domino's can account for the time it takes for inventory to be replenished and delivered, ensuring that inventory levels are maintained at optimal levels to meet customer demand.
- ❖ **Service Level Targets:** Domino's sets service level targets to ensure a high probability of meeting customer demand without incurring excessive inventory holding costs. This involves balancing the trade-off between stock out risk and inventory investment to achieve optimal service levels. By setting appropriate service level targets, Domino's can

effectively manage inventory levels and ensure that customers receive their orders promptly without experiencing stock outs.

Overall, the accurate calculation of the reorder point is crucial for Domino's to maintain efficient inventory management practices. By considering factors such as demand variability, lead times, and service level targets, Domino's can optimize inventory levels, minimize stock outs, and ensure high levels of customer satisfaction.

5.8. Safety or Buffer Stock

Safety stock, also known as buffer stock, is extra inventory held to mitigate the risk of stock outs due to demand variability or supply chain disruptions. Domino's maintains safe stock levels to ensure a reliable supply of products and minimize the impact of uncertainties.

- ❖ **Safety Stock Calculation:** Domino's calculates safety stock levels based on factors such as demand variability, lead time variability, service level targets, and desired level of risk tolerance. This involves analyzing historical demand patterns, lead time variability, and supply chain performance metrics.
- ❖ **Risk Mitigation:** Safety stock serves as a buffer against unforeseen fluctuations in demand, supply disruptions, or lead time variability. By holding safety stock, Domino's can absorb demand spikes, production delays, or transportation disruptions without compromising customer service.
- ❖ **Inventory Optimization:** While safety stock helps mitigate stockout risk, Domino's aims to optimize safety stock levels to balance inventory carrying costs and service level targets. This involves periodically reviewing safety stock parameters and adjusting them based on changing market conditions and supply chain dynamics.

5.9. ABC Analysis

ABC analysis categorizes inventory items into three categories based on their value and contribution to overall sales. Domino's utilizes ABC analysis to prioritize inventory management efforts and allocate resources effectively.

- ❖ **ABC Classification:** Domino's categorizes inventory items into three groups – A, B, and C – based on their annual consumption value and contribution to overall sales revenue. Category A items are high-value items that contribute significantly to sales revenue, while Category C items are low-value items with lower sales contribution. Category B items fall in between.
- ❖ **Inventory Management Strategies:** Domino's applies different inventory management strategies for each ABC category to optimize inventory investment and service levels. Category A items, being high-value and critical to sales, are closely monitored and managed to minimize stockouts and ensure availability. This may involve implementing

strategies such as maintaining safety stock levels and utilizing just-in-time inventory replenishment. Category C items, on the other hand, are managed with less scrutiny due to their lower value and contribution to sales. Domino's may employ strategies such as periodic replenishment or even consider alternative sourcing options to minimize costs associated with managing these items.

- ❖ **Resource Allocation:** ABC analysis helps Domino's allocate resources effectively by focusing attention and resources on high-value items that have a significant impact on profitability. By prioritizing inventory replenishment, demand forecasting, and supply chain optimization efforts based on ABC classification, Domino's ensures that resources are allocated where they can generate the greatest return on investment. This may involve dedicating more resources to managing Category A items, such as investing in advanced inventory management systems or conducting more frequent demand forecasting analysis, while allocating fewer resources to managing Category C items.

Overall, ABC analysis enables Domino's to optimize inventory management practices, ensure high levels of customer satisfaction, and maximize profitability by focusing resources on managing high-value inventory items effectively.

5.10. Raw Materials and Capex Management

Raw materials and capital expenditures (Capex) play a critical role in Domino's supply chain operations. Efficient management of raw materials and Capex investments is essential for maintaining product quality, reducing costs, and supporting business growth.

- ❖ **Raw Material Sourcing:** Domino's prioritizes strategic sourcing of raw materials to ensure quality, freshness, and cost-effectiveness. They establish long-term partnerships with reliable suppliers and conduct regular audits to ensure compliance with quality standards. By implementing rigorous quality control measures, Domino's can maintain consistency in product quality across their supply chain.
- ❖ **Inventory Optimization:** Domino's employs various strategies to optimize raw material inventory levels. Just-in-Time (JIT) inventory management techniques are utilized to minimize excess inventory and reduce carrying costs while ensuring that sufficient stock is available to meet demand. Demand forecasting plays a crucial role in inventory optimization, allowing Domino's to anticipate customer demand patterns and adjust inventory levels accordingly.
- ❖ **Capex Investments:** Domino's makes strategic investments in capital assets to support its supply chain operations and business growth initiatives. This includes investments in production facilities, distribution centers, delivery vehicles, and information systems. By continuously investing in infrastructure and technology, Domino's aims to enhance operational efficiency, improve customer service, and support expansion into new markets.
- ❖ **ROI Analysis:** Domino's conducts a thorough Return on Investment (ROI) analysis to evaluate the financial impact of Capex investments. This involves assessing investment

costs, expected benefits, and payback periods to ensure that investments generate satisfactory returns. By conducting ROI analysis, Domino's can make informed decisions about allocating resources and prioritizing investment opportunities that offer the greatest potential for profitability and growth.

Overall, efficient management of raw materials and Capex investments is essential for Domino's to maintain product quality, reduce costs, and support business growth. By strategically sourcing raw materials, optimizing inventory levels, making strategic Capex investments, and conducting ROI analysis, Domino's can enhance its supply chain operations and drive long-term success in the highly competitive food industry.

5.11. Economic Order Quantity (EOQ)

The Economic Order Quantity (EOQ) is the optimal order quantity that minimizes total inventory costs, including ordering costs and holding costs. Domino's calculates EOQ for each inventory item to determine the most cost-effective order quantity.

- ❖ **EOQ Calculation:** Domino's uses the EOQ formula to determine the optimal order quantity for each inventory item. This formula considers factors such as demand patterns, ordering costs (cost per order), and holding costs (cost to store inventory). By balancing these factors, Domino's can calculate the order quantity that minimizes total inventory costs.
- ❖ **Cost Minimization:** The primary goal of calculating EOQ is to minimize total inventory costs. By determining the optimal order quantity, Domino's can reduce both ordering costs (e.g., cost of placing orders, transportation costs) and holding costs (e.g., storage costs, risk of obsolescence). This ensures that Domino's maintains adequate inventory levels to meet customer demand while minimizing unnecessary holding costs associated with excess inventory.
- ❖ **Inventory Cost Components:** Domino's considers various cost components when calculating EOQ. Holding costs include expenses such as storage, insurance, and the risk of obsolescence associated with carrying inventory. Ordering costs encompass procurement costs, transportation costs, and any administrative expenses related to placing orders. Additionally, Domino's also factors in stockout costs, which include the potential revenue loss from missed sales opportunities and the negative impact on customer satisfaction. By minimizing these costs through EOQ optimization, Domino's enhances profitability and operational efficiency.

Overall, EOQ plays a crucial role in Domino's inventory management strategy by helping to determine the most cost-effective order quantities. By accurately calculating EOQ for each inventory item, Domino's can maintain optimal inventory levels, reduce costs, and ensure smooth operations across its supply chain, ultimately leading to improved profitability and customer satisfaction.

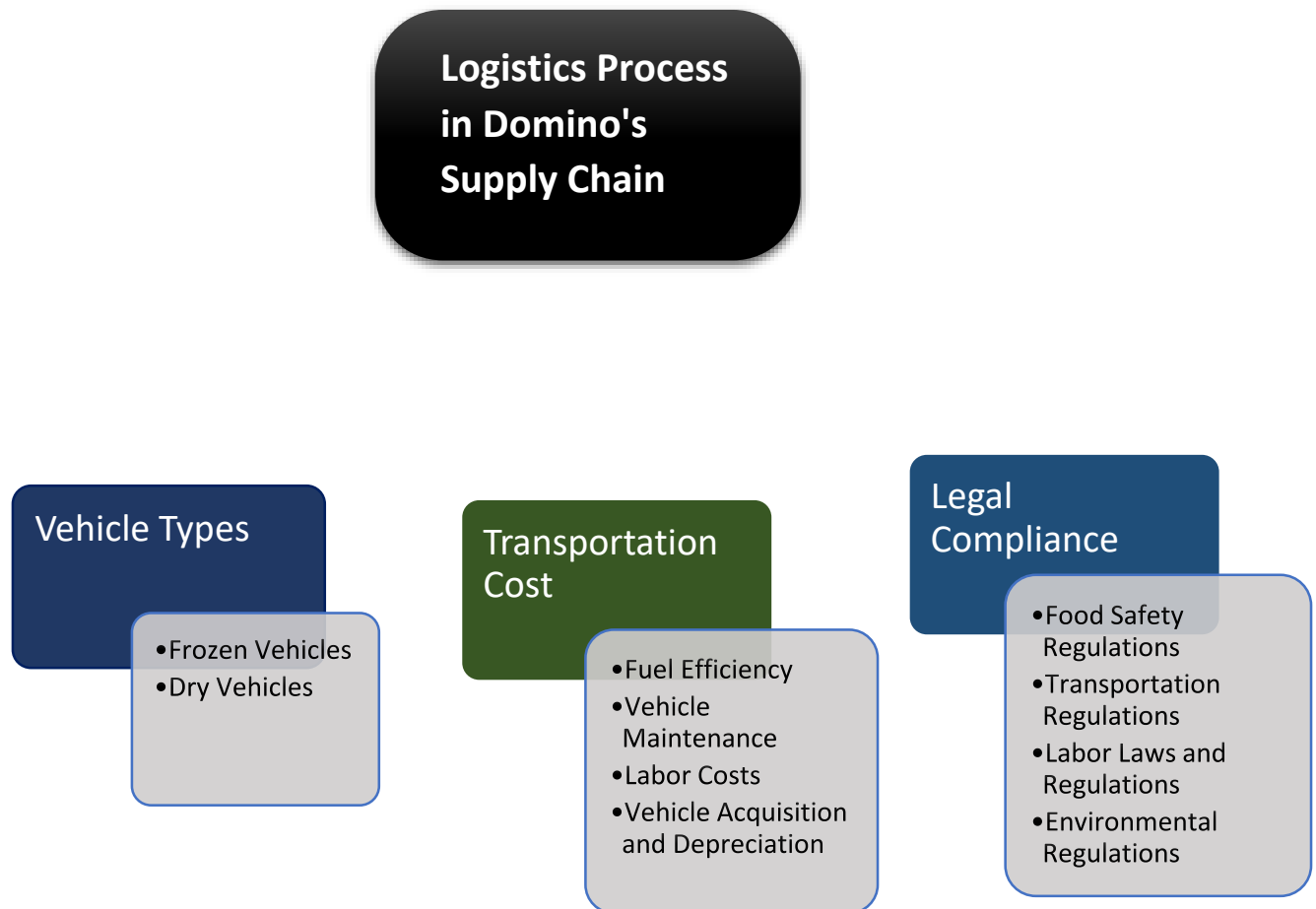
In conclusion, effective inventory management is paramount for Domino's Pizza, a global leader in the food delivery industry. Throughout this discussion, we've explored various facets of Domino's inventory management practices, highlighting their commitment to optimizing inventory levels, reducing costs, and ensuring customer satisfaction. Domino's employs sophisticated inventory management techniques, such as ABC analysis, Economic Order Quantity (EOQ) calculations, and safety stock management, to optimize its inventory levels and minimize stock out risks. By categorizing inventory items based on value and sales contribution, Domino's can allocate resources efficiently and prioritize inventory management efforts where they are most impactful.

Domino's strategic sourcing of raw materials, rigorous quality control measures, and investments in capital assets demonstrate its commitment to maintaining product quality, reducing costs, and supporting business growth initiatives. Through accurate demand forecasting, efficient order fulfillment processes, and proactive customer communication, Domino's ensures that customer orders are fulfilled promptly and accurately, contributing to a positive customer experience.

Domino's continuous focus on inventory management excellence enables them to maintain a competitive edge in the dynamic and fast-paced food delivery industry. By leveraging technology, data analytics, and strategic partnerships, Domino's strives to optimize its supply chain operations, drive profitability, and deliver exceptional value to customers worldwide.

Chapter 6: Logistics Process

Domino's success in the fast-food delivery industry largely depends on its careful logistical planning, which guarantees that hot, fresh pizzas are delivered to customers' doors on time and with reliability. The careful sourcing of materials from several suppliers who are strategically positioned to save lead times and shipping costs is a key component of this procedure. Domino's maintains stringent quality standards and regularly audits and inspects its operations to make sure food safety laws are being followed. Production planning is essential to Domino's operations, working hand in hand with the procurement of ingredients. The company anticipates demand using advanced forecasting algorithms, which are based on seasonal patterns and previous sales data. This enables real-time adjustments to production plans to maximize resource efficiency. Modern kitchen gadgets make meal preparation more efficient. Pizza dough is manufactured using automated technology, and high-speed ovens quickly cook the dough while maintaining consistent quality. Domino's pizzas must be packaged carefully to maintain freshness while in transit. Utilizing specialist materials like heat-retaining sleeves and thermal insulation bags, the business consistently enhances package designs to reduce waste and its negative effects on the environment. Using both internal and external networks, delivery logistics are carefully handled. Advanced routing algorithms optimize delivery routes based on consumer preferences and traffic circumstances. To guarantee that kitchens are adequately stocked to satisfy client demand, effective inventory management is crucial. Just-in-time inventory techniques are made possible by automatic reorder points and real-time monitoring, which lowers carrying costs and waste. To meet Domino's high standards, strict quality control measures are applied throughout the logistics process. Inspections are carried out at each stage, from the arrival of ingredients to packaging. Additionally, Domino's is dedicated to constant innovation and technological adoption for betterment. Investments in research and development are centered on investigating new technologies and ways to improve processes in order to increase output, reduce costs, and improve customer satisfaction. Periodic comparisons with industry standards and evaluations of performance make it possible to pinpoint opportunities for improvement. By giving priority to these important parts of the logistics process, Domino's continues to be a leader in the fast-food delivery industry and provides its customers with consistently excellent dining experiences.



6.1. Vehicle Types

Domino's uses two main types of vehicles for transportation: frozen and dry.

Frozen Vehicles: Transporting perishable ingredients that need to be refrigerated to retain their freshness and quality is the specialty of frozen trucks. To maintain ingredients within safe temperature limits throughout transit, these vehicles are outfitted with refrigeration equipment that offers exact temperature control. Key information on frozen automobiles is as follows:

- ❖ **Refrigeration Systems:** Vehicles that are designated as frozen are equipped with powerful refrigeration systems that use cutting-edge cooling technology to keep temperatures down to -18 degrees Celsius (-0.4 degrees Fahrenheit). This guarantees that during transportation, perishable goods like cheese, meats, and vegetables stay safe to eat and remain fresh.

- ❖ **Insulation:** Frozen cars are insulated to reduce heat transfer from the outside environment in addition to having refrigeration equipment. A barrier between the vehicle's interior and outside air is created using premium insulation materials, which improves temperature management and maintains the integrity of the cargo being transported.
- ❖ **Temperature Monitoring:** Frozen vehicles are outfitted with temperature monitoring equipment that continuously measures and logs the inside temperature to maintain compliance with food safety laws. When temperatures fluctuate or deviate from the intended range, these devices notify and alert drivers and logistics management in real-time.
- ❖ **Loading and Unloading:** Processes specific to loading and unloading are used to reduce the amount of time perishable products are exposed to room temperature. To keep their temperature stable while traveling, frozen commodities are put into cars in insulated packing or containers. To avoid thawing or spoiling, commodities are quickly unloaded and moved to the proper storage facilities upon arrival at their destination.

Dry Vehicles: Non-perishable products like flour, sauce, packing supplies, and other dry goods that don't need to be refrigerated are transported in dry vehicles. These trucks are made to transport dry products safely and weatherproof, guaranteeing their safe and undamaged arrival at their destination. Here are some essential facts regarding dry vehicles:

- ❖ **Cargo Capacity:** Dry trucks are available in a range of sizes and configurations to suit different kinds and amounts of dry products. To maximize storage space and reduce the chance of shifting during transit, they have roomy cargo compartments with movable shelving and safe fastening systems.
- ❖ **Weatherproofing:** Dry trucks shield their cargo from moisture, dust, and other environmental elements by being built of waterproof materials and sealed. This guarantees the dryness and cleanliness of dry items during transportation, preserving their integrity and quality until they arrive at their destination.
- ❖ **Security Features:** Dry cars are outfitted with security elements including alarm systems, GPS monitoring devices, and locking mechanisms to deter theft and unwanted access. Customers and logistics staff may rest easy knowing that the goods are safe and secure during transit thanks to these precautions.
- ❖ **Handling Equipment:** To make loading and unloading cargo easier, dry vehicles can be fitted with specialty handling tools such as pallet jacks, hand trucks, and forklifts. These instruments lessen the possibility of accidents or damage to the products during handling while also streamlining the logistics process.

Through the use of dry and frozen vehicles specifically designed to accommodate their cargo, Domino's guarantees the effective and secure movement of supplies and ingredients across its

entire logistical network. This allows the business to satisfy customer demand for freshly made, delectable pizzas delivered straight to their door while maintaining product quality and reducing waste.

6.2. Transportation Cost

Fuel Efficiency: Delivery cars used by Domino's incur high transportation costs, largely due to fuel expenditures. Domino's uses several tactics to cut expenses and fuel consumption:

- ❖ **Fuel-efficient Vehicles:** Domino's makes investments in cutting-edge delivery trucks with high fuel economy ratings. To increase fuel efficiency, these cars are outfitted with cutting-edge engine technologies, aerodynamic designs, and lightweight materials.
- ❖ **Route Optimization:** Effective route planning minimizes delivery vehicles' trip distance, which lowers fuel consumption. Domino's makes sure that vehicles take the most fuel-efficient routes to get to their locations by using real-time traffic data and route optimization tools.
- ❖ **Driver Training:** Delivery drivers at Domino's receive training on fuel-efficient driving practices, such as gradual acceleration, consistent speed maintenance, and reducing idle time. These methods lower overall transportation costs and contribute to fuel conservation.

Vehicle Maintenance: Delivery vehicles need to have regular maintenance to operate at their best and spend as little money as possible. The following procedures are used by Domino's to control auto maintenance costs:

- ❖ **Scheduled Maintenance:** Domino's follows a rigorous maintenance program that includes regular tire rotations, brake inspections, and oil changes. Preventive maintenance prolongs the life of delivery vehicles and helps avoid expensive malfunctions.
- ❖ **Fleet Management Software:** Domino's uses fleet management software to keep track of maintenance plans, keep an eye on the condition of the vehicles, and spot possible problems before they get worse. This preventative maintenance strategy lowers repair costs and downtime.
- ❖ **Driver Inspections:** Delivery drivers are taught to check their cars both before and after a trip in order to find any mechanical problems or potential safety hazards. Domino's guarantees the optimal condition of its delivery vehicles by swiftly fixing any concerns that may develop.

Labor Costs: The cost of labor for delivery drivers is another factor that goes into transportation costs. Domino's controls labor expenses by:

- ❖ **Driver Efficiency:** To maximize driver schedules and reduce idle time in between deliveries, Domino's uses effective routing and dispatching techniques. This lowers labor expenses and increases the productivity of delivery drivers.
- ❖ **Performance incentives:** Delivery drivers who meet or surpass productivity benchmarks, such as finishing deliveries within predetermined timeframes or receiving high customer satisfaction ratings, may be eligible for performance-based rewards from Domino's. These rewards encourage drivers to work effectively and help reduce expenses.
- ❖ **Training and Development:** To give delivery drivers the abilities and information required to carry out their tasks well, Domino's invests in training and development initiatives. Long-term cost savings are achieved by having drivers with proper training since they are more adept at handling deliveries on time, navigating safely, and providing exceptional customer service.

Vehicle Acquisition and Depreciation: For Domino's, the purchase and depreciation of delivery cars are major expenses. To control these costs, Domino's uses the following methods:

- ❖ **Vehicle Leasing:** Instead of buying delivery cars entirely, Domino's may decide to lease them. By using leasing, Domino's may avoid significant upfront costs and spread out the cost of purchasing a car over time. To further cut expenses, leasing agreements can include clauses for auto repairs and maintenance.
- ❖ **Lifecycle Management:** To optimize the value of its delivery cars and save depreciation expenses, Domino's meticulously oversees their lives. Decisions on repairs, upgrades, or replacements are made when a vehicle's performance and dependability are routinely evaluated. These decisions are based on variables like maintenance costs, fuel economy, and resale value.
- ❖ **Asset Tracking:** To keep an eye on the use and state of its delivery vehicles for their lives, Domino's employs asset tracking systems. With the use of this data, Domino's can make well-informed decisions on whether to replace its fleet of cars, keeping costs down and operations running smoothly.

Through the application of these cost-management techniques, Domino's may efficiently regulate its transportation costs while preserving the dependability and effectiveness of its delivery services. By doing this, the business can maximize its profits and maintain its competitiveness in the fast-food delivery sector.

6.3 Legal Compliance

For Domino's to function within the parameters of numerous rules and regulations, ensuring legal compliance is crucial. This is a detailed examination of Domino's legal compliance management practices for its transportation operations:

Food Safety Regulations: To guarantee that its pizzas and other food products meet the highest standards of quality and hygiene, Domino's complies with stringent food safety requirements. The following are important facets of food safety compliance:

- ❖ HACCP (Hazard Analysis and Critical Control Points): To detect and manage possible risks in its food preparation and delivery procedures, Domino's uses HACCP principles. This methodical approach guarantees the safety of its products and aids in the prevention of foodborne illnesses.
- ❖ Food Handling Practices: To reduce the danger of contamination, Domino's provides training to all of its staff members, including delivery drivers, on proper food handling procedures. This covers how to wash your hands, use gloves, and keep food at the right temperature while it's being transported.
- ❖ Sanitation and Cleaning: Delivery vans, storage spaces, and kitchens are all kept hygienic and spotless by Domino's. To avoid cross-contamination and uphold food safety regulations, regular cleaning schedules and sanitation procedures are put in place.

Transportation Regulations: To guarantee that its delivery trucks are operating legally and safely, Domino's adheres to several transportation laws. This comprises:

- ❖ Driver licensing and Training: Domino's makes certain that each delivery driver has a current driver's license and has received extensive training on safe driving techniques, traffic rules, and operating a vehicle. To enforce adherence to transportation regulations, refresher training is offered regularly.
- ❖ Vehicle Safety Inspections: To make sure its delivery cars adhere to the safety requirements specified by law enforcement, Domino's regularly inspects them. To make sure cars are safe to drive and roadworthy, this involves inspecting the tires, brakes, lights, and other crucial parts.
- ❖ Hours of Service Regulations: The hours-of-service restrictions, which specify the longest period delivery drivers may operate a vehicle before being required to take mandatory breaks, are monitored and enforced by Domino's. This lessens the chance of accidents and prevents driver weariness.

Labor Laws and Regulations: Domino's makes sure that labor laws and regulations are followed to safeguard the welfare and rights of all of its workers, including delivery drivers. This comprises:

- ❖ Minimum Wage Laws: Delivery drivers are paid at least the minimum wage required by local labor regulations by Domino's. If an employee works more hours than the legal limit, they will be paid overtime.
- ❖ Workplace Safety Regulations: By following occupational health and safety laws, Domino's ensures that all of its workers, including delivery drivers, have a safe place to

work. This entails offering the appropriate instruction, safety gear, and procedures to stop mishaps and injuries.

- ❖ **Employee Rights:** Domino's upholds the legal requirements on fair labor standards, non-discrimination, and harassment, as well as the rights of its workers. Workers receive knowledge about their rights and channels for reporting infractions or complaints.

Environmental Regulations: Domino's adheres to laws about environmental conservation and protection since it is dedicated to environmental sustainability. This comprises:

- ❖ **Emissions Standards:** For its delivery vans, Domino's complies with emissions regulations set by the relevant authorities. The organization might allocate resources towards energy-efficient automobiles or alternative fuel technologies to mitigate its carbon emissions and adhere to ecological guidelines.
- ❖ **Waste Management:** Domino's reduces its environmental effect by implementing recycling and waste reduction activities. This involves recycling waste produced during the preparation and delivery of food as well as appropriately disposing of packaging materials.
- ❖ **Environmental Permits and Compliance:** To operate its vehicles and facilities by environmental standards, Domino's acquires the required licenses and permissions. To track and lessen its influence on the environment, the business could also put environmental management systems into place.
- ❖ Domino's prioritizes legal compliance in all facets of its transportation operations to guarantee that it does business in an ethical, responsible, and law-abiding manner. By making this pledge, the corporation not only shields itself from legal risks and obligations but also improves its standing as a socially conscious corporate citizen.

In summary, Domino's logistics approach guarantees that customers receive hot, fresh pizzas each and every time they make an order by combining meticulous planning, effective shipping, and tight adherence to quality and safety requirements. Domino's can continue to lower costs, improve customer satisfaction, and keep its competitive advantage in the fast-food delivery market by consistently streamlining its logistics operations.

Chapter 7: Indent Planning

I oversee the indent planning system for Domino's Bangladesh, which adheres to a methodical and effective procedure to guarantee the seamless distribution of supplies and resources across its 33 stores. This system's major goal is to maintain an optimal stock level at all distribution centers while making sure that every shop gets the goods it needs to satisfy its operating demands. The procedure begins with gathering indents, or supply requests, from every shop and ends with the distribution and allocation of products from warehouses by these requests.

Indent Submission from Stores: The submission of indents from each of Bangladesh's 33 Domino's outlets starts the procedure. The inventory needs of any shop must be determined by taking into account client demand, sales projections, and stock levels. These indentations are a list of the commodities that the stores need. These items might be operational supplies like cleaning products or ingredients like dough, cheese, sauce, and packaging materials. Every retailer completes an Excel form that lists the precise amounts of each item that is required.

All stores have a uniform structure thanks to the Excel sheet format, which facilitates data collection and analysis. The Supply Chain team receives an email with the completed indent sheet from each shop, ready for processing. Confusion or misinterpretation of the store demands is avoided because to this centralized method of information collection, which guarantees that the data is supplied in a uniform way. Submission of these indents on a weekly or biweekly basis helps ensure that each retailer receives a consistent supply of goods.

Creation of the Top Sheet: Making the top sheet comes next once all the indents are turned in. In essence, the top sheet is a single, consolidated document that lists all 33 locations' combined supply needs. It offers a combined picture of how much of each item is required overall throughout the network of stores.

The top sheet consolidates all of the separate indents into a single, complete document, which streamlines the supply chain process. The Supply Chain staff can now handle orders more effectively as opposed to having to handle 33 different requests. It also lowers the possibility of supply allocation mistakes by giving a precise picture of the entire demand. The top sheet, which displays the total amounts needed from each warehouse to satisfy store demands, also aids in optimizing warehouse stock management.

Distribution to Warehouses: The supply orders must then be assigned to the appropriate warehouses for shipment when the top sheet has been completed. The three primary warehouses used by Domino's Bangladesh are denoted by the designations CB05, CB04, and CB02. Within the supply chain network, these warehouse codes are associated with certain sites that serve various areas or groups of retailers. Depending on variables like the closeness of stores and the product availability in each warehouse, the top sheet is split and dispersed throughout various warehouses. Reducing transportation time and expenses and upholding an optimal logistics network depends on the effective distribution of orders to these warehouses.

 **CB05**

 **CB04**

 **CB02**

Upon disassembling and assigning the top sheet to the appropriate warehouses, every warehouse team is ready to process the orders. Domino's Bangladesh can guarantee quicker and more dependable delivery by dividing its supply network into three separate zones, which also helps to minimize long-distance transportation delays.

Warehouse Fulfillment and Dispatch: The warehouses start filling in the indents as soon as they get the top sheet. Based on the top sheet, the warehouse workers meticulously choose the necessary supplies, making sure that the right amounts are ready for every shop. Picking must be done carefully since errors in product categories or amounts might cause problems for the store's operations.

Following selection, the goods are packaged and labeled in accordance with the stores to which they are going. The shipment of these items is coordinated by the warehouse crews, guaranteeing complete and timely delivery. For any business to be fully supplied and continuously satisfy client demand, this process must operate efficiently. The seamless operation of the whole process with few delays or disruptions is ensured by the cooperation between the supply chain and warehouse personnel.

Calculating Available to Proceed (ATP): One of the most important aspects of supply chain management is figuring out the Available to Proceed (ATP). The amount of stock that is still available after shops' current orders are fulfilled is measured by ATP. This computation aids in making sure that the warehouses keep enough inventory on hand to satisfy demand in the future and avoid shortages.

The ATP calculation formula is:

Total Stock - Total Orders = Available to Proceed (ATP)

ATP = 15,000 - 12,000 = 3,000 units.

If the warehouse fulfilled the existing indent demands, it would then have 3,000 pieces of stock ready for future orders. The supply chain's equilibrium depends on the ATP computation. When the ATP is low, a warehouse knows it has to replenish goods from vendors in order to satisfy future demand since it is running low on stock. On the other hand, a high ATP suggests that the warehouse is overstocked, which, if not controlled correctly, might result in additional inventory expenses.

The Supply Chain team can make educated judgments on stock replenishment and guarantee that the warehouses never run out of essential goods by routinely computing ATP. This guarantees that Domino's Bangladesh can continue running efficiently without any supply chain bottlenecks and helps prevent delays in fulfilling store indents.

The system of indent planning, I'm taking on this responsibility on behalf of Domino's Bangladesh supply chain team, which is essential to making sure all shops have the supplies they want in a timely and well organized manner. The technology streamlines the whole supply chain process by gathering indents through Excel sheets, combining them into a top sheet, and distributing them to warehouses that are strategically positioned. The Supply Chain team is able to maintain a healthy level of efficiency in the system because of the meticulous computation of ATP. balance between supply and demand. This structured approach ensures that Domino's Bangladesh can meet customer needs without disruptions, maintaining high operational standards across all its stores.

Chapter 8: Days of Inventory

At Domino's Bangladesh, the Days of Inventory (DOI) system is a vital tool for supply chain management. This approach, which was created to guarantee that retailers have adequate inventory to satisfy consumer demand while reducing waste, offers precise instructions on how to manage inventory for both standard goods and specialty toppings. This system's efficacy stems from its ability to strike a balance between guaranteeing product availability and reducing the possibility of overstock, which may result in spoiled goods or higher holding expenses.

Days of Inventory (DOI) is a notion that describes how many days a product may be in stock depending on how quickly it is being used in the business. This is computed by dividing the warehouse's current stock by the typical daily usage of the store. The supply chain can precisely estimate how long the current inventory will endure by employing DOI, which gives important information about when stock needs to be refilled. Maintaining a smooth flow of items from the warehouse to individual stores requires maintaining stock levels that are neither too high nor too low, which is largely dependent on this computation.

8.1. Procedure for Managing Inventory

Stock Replenishment When Inventory Falls Below 15 Days: The DOI system highlights how crucial it is to keep a minimum inventory requirement in place. Reordering stock is triggered immediately when the number of inventory days (derived by dividing warehouse stock by the daily consumption rate) is less than fifteen days. By allowing for a buffer period, you can make sure that there is enough time before inventory runs out to place a buy order, receive product from suppliers, and transport it to retailers.

The method makes sure that retailers don't experience severe shortages of essential materials, which might interfere with manufacturing and negatively impact customer service, by upholding this 15-day minimum level. For example, if a business utilizes 100 units of a specific component on a daily basis and the stock level is 1,000 units, the store will run out of stock in just 10 days. In order to prevent the supply from being too low at this point, an order needs to be placed.

This barrier reduces the danger of keeping too much inventory, which can result in higher holding costs and product expiry, while also enabling retailers to handle unforeseen spikes in consumer orders.

Purchasing Orders for 30-35 Days of Stock: The recommendation that purchase orders should be made to cover a 30- to 35-day window of stock is a crucial part of the DOI system. This time frame was selected to minimize capital-tying excess inventory or product spoilage while yet having adequate stock to fulfill demand.

Purchasing orders with a duration of thirty to thirty-five days provides the best possible supply chain scheduling. To make sure that goods arrive on time and in sufficient numbers, the supply chain team takes into account variables including supplier lead times, transportation schedules, and changes in store demand. Orders are placed well in advance of the inventory falling below the

15-day threshold, as the DOI system will account for, for instance, a product's 10-day delivery time from the supplier.

By lowering the frequency of orders, this process improves logistical efficiency and lowers administrative expenses. Additionally, since their stock levels are guaranteed for a considerable amount of time, store managers may concentrate on other tasks.

Topping Items to be in Stock for 45 Days: Items for toppings, such as cheese, meats, and sauces used in pizza, are vital to Domino's business operations. The inventory duration for these goods is extended by the DOI system to a minimum of 45 days, as they are essential to the main menu options.

This makes sense because toppings are used often and consistently in every order, so any scarcity would directly affect how satisfied customers are. The method protects against variations in supply chain procedures, whether brought on by supplier delays, transportation problems, or unforeseen demand spikes, by guaranteeing a 45-day stock level for these commodities.

Furthermore, a longer stock period is practical and lessens the need for frequent reorders, which streamlines the inventory management process because topping materials frequently have a longer shelf life than other perishable components. This lessens the possibility of stockouts for these essential commodities as well, guaranteeing the retailers' ability to continue providing a steady selection of products.

Expiration Threat for Products Over 60 Days: Making sure that products are fresh and minimizing waste is one of the main issues in inventory management. Products that have been in stock for more than 60 days are marked as "expiration threats" by the DOI system as a safety measure. This indicates that the product's useable shelf life is almost up, and the team has to act quickly.

Several steps can be performed when a product is labeled as potentially expiring. In order to minimize waste, the retailer or warehouse can sell these goods more quickly by offering a discount or by giving priority to utilizing it before it expires. To prevent legal and health problems, the team must dispose of the product appropriately if it cannot be utilized in a timely manner.

By taking this proactive step, food waste is decreased and clients are guaranteed to obtain high-quality items by ensuring that products are consumed within their ideal freshness period. Furthermore, it eliminates the possibility of foodborne infections and customer discontent resulting from the inadvertent use of expired items.

Ensuring Product Delivery Dates: Maintaining and monitoring product delivery dates is an essential component of the DOI system. Every product's freshness and shelf life are determined by the date of delivery. Effective stock management for the supply chain team is facilitated by the DOI system, which makes sure that these dates are appropriately documented and followed.

The system may use the First-In-First-Out (FIFO) inventory management strategy by closely monitoring delivery dates. By using older products first, this prevents newer deliveries from being consumed before older stock, which might cause the older things to deteriorate or expire. By

ensuring that items are routinely rotated, this technique reduces waste and keeps the inventory fresh.

Aside from preventing stockouts and restocking delays, ensuring precise and timely delivery also benefits retailers. Missed or delayed delivery dates might result in inventory gaps, which could impair the capacity to satisfy client demand or generate sales losses.

Integrated Inventory Monitoring: Data recording and ongoing monitoring help the entire inventory management process. Stock levels, consumption rates, lead times, and expiration dates are all regularly assessed using the DOI system. As a result, the supply chain can react swiftly to variations in demand, problems with suppliers, and other unforeseen events. The supply chain team can ensure smooth operations across all locations by adjusting orders, changing delivery schedules, and making backup plans thanks to the real-time data.

In short, Domino's Bangladesh follows a very disciplined and exact process for controlling inventory using the DOI system. In order to maintain a balance between availability and cost-efficiency, it offers a clear framework for when to reorder stock, how much to purchase, and how long to keep items in inventory. This technique reduces waste, boosts supply chain efficiency overall, and guarantees that retailers can fulfill customer expectations without overstocking.

8.2. The Role of the DOI System in Supply Chain Efficiency

The framework that the DOI system offers enables the supply chain to function effectively and with a great degree of flexibility. Two major problems are prevented by the DOI system: stockouts and overstocking. These problems are prevented by giving explicit instructions on when to restock stock and how long to retain things in the warehouse. Stockouts can cause operational disruptions in stores, which can result in a drop in customer satisfaction and lost revenue. Conversely, overstocking may lead to greater waste from out-of-date merchandise and increased storage expenses.

Simplifying the purchase procedure is one of the DOI system's other main benefits. Stores can lower order frequency, save administrative expenses, and improve logistical predictability by scheduling orders over a duration of thirty to thirty-five days. Smoother operations are made possible by the increased stock duration for topping goods, which guarantees that businesses are never caught off guard by unforeseen increases in demand.

Last but not least, the DOI system's expiry threat mechanism makes sure that every product is handled with consideration for its shelf life. This lessens the possibility of waste and guarantees that clients receive top-notch, freshly-made goods. This makes the DOI system a comprehensive solution to inventory management, covering both the supply and demand sides of the equation, especially when combined with the tight monitoring of product delivery dates.

In conclusion, Domino's Bangladesh uses the Days of Inventory system as a crucial tool for supply chain management. This approach finds a compromise between guaranteeing product availability and reducing waste by giving explicit instructions on when to restock stock, how long to keep it in the warehouse, and when to dispose of things.

8.3. Fill Rate

By calculating the capacity to satisfy store needs with available stock, Domino's Bangladesh's fill rate system is essential to preserving an effective supply chain. This key performance indicator (KPI) guarantees customer satisfaction through on-time delivery in addition to measuring how well inventory management is working. My fill rate calculation process takes into account a number of crucial elements that provide supply chain transparency and performance monitoring.

Fill Rate as a KPI

One of the most important KPIs for assessing an inventory management system's performance is fill rate. It assesses how well a business is controlling its inventory levels and supply chain efficiency by looking at the proportion of customer orders that are satisfied from available stock. The fill rate is used to track how effectively the stores are stocked with essential commodities both daily and weekly in the instance of Domino's Bangladesh. By using current inventory to complete most or all of the businesses' requests, a high fill rate reduces delays and upholds service standards. A poor fill rate, on the other hand, might be a sign of stockouts, hold-ups, or inefficiencies in the ordering and stocking procedure.

Fill Rate Calculation Process

Indent planning, a method I created to guarantee efficient supply chain operations by predicting store orders and adjusting stock levels appropriately, is the first step in the fill rate process. The baseline for assessing the fill rate, for instance, is if 33 retailers use the indent planning system to place orders for 50 goods per day. The total number of things ordered by the retailers in this scenario is 1,650 (33 stores × 50 items daily). There would be a shortage of 66 items across all shops if the warehouse or supply center could ship 48 things each store, which would equal 1,584 goods (33 stores × 48 items sent).

The formula to calculate the fill rate is:

Fill Rate= (Items Delivered/Items Ordered) ×100

Applying this to our example: Fill Rate= (1,584/1,650) ×100 = 96%

In this case, 96% of the total order was fulfilled from existing stock, meaning there was a 4% shortfall in meeting the demand. Based on this, corrective actions such as adjusting inventory levels or improving demand forecasting can be taken to ensure a higher fill rate in future orders.

Weekly Fill Rate and Long-Term Planning

To give a more comprehensive picture of supply chain performance, the fill rate is measured both weekly and daily. Weekly tracking makes it easier to spot patterns or reoccurring problems that daily data might not show as clearly. A supply chain problem, such as a supplier delay or inventory mismanagement, may need to be addressed if, for instance, a certain item is routinely under-delivered over the course of a week.

The organization can make strategic decisions about inventory planning, supplier management, and even production scheduling thanks to the weekly fill rate, which provides a more thorough

view of how the supply chain is operating. Additionally, it aids in demand planning and long-term forecasting, guaranteeing that the business can foresee future requirements and prevent interruptions.

Financial Penalty for Shortfalls

I implemented a fill rate-based financial penalty mechanism to encourage more efficient planning. Stores or the supply chain may be penalized financially when the fill rate drops below 100%. Since only 98% of the anticipated things were shipped in the aforementioned example, the corporation would pay 2% less than the whole price for the delivered items if the fill rate was 96%. The warehouse and supply chain personnel are encouraged to strive for continuously greater fill rates by this penalty. It helps make ensuring that retailers don't run out of essential goods, which might cause problems and lower consumer happiness.

Impact on Supply Chain Performance

Domino's Bangladesh's supply chain has been significantly impacted by the fill rate method, which makes sure that outlets have enough inventory to satisfy consumer demand. The fill rate method encourages ongoing improvement in order fulfillment, demand forecasting, and inventory management by monitoring daily and weekly performance. Additionally, the punishment system encourages all parties involved to give effective inventory control top priority and guarantee constant high stock availability.

This methodical approach to fill rate calculation and monitoring has improved supply chain operations visibility, decreased inefficiencies, and aided in the expansion of the company as a whole. The fill rate is a crucial KPI that not only shows how well the supply chain is doing but also acts as a catalyst for ongoing development at Domino's Bangladesh.

Importance of the Fill Rate System

For Domino's Bangladesh to maintain an effective supply chain, the fill rate system is essential. It allows the business to continually assess and enhance its capacity to satisfy retail requests by offering a transparent, quantifiable measure of supply chain success. A high fill rate lowers the possibility of stockouts, cuts down on delays, and guarantees that businesses can run efficiently, all of which improve customer happiness.

Additionally, the system's incorporation of the monetary punishment mechanism guarantees responsibility and promotes ongoing supply chain development. The entire performance of the company is directly impacted by this methodical approach to fill rate monitoring, which helps to maximize inventory control, cut down on inefficiencies, and guarantee that Domino's locations are consistently adequately stocked to satisfy consumer demand.

8.4 On-Time Inventory Fulfillment (OTIF)

At Domino's Bangladesh, the On-Time Inventory Fulfillment (OTIF) process is a strategy framework intended to improve the dependability and effectiveness of inventory management. The goal of this process is to make sure that the correct items are delivered to the right places at the right times, so every store is ready to satisfy consumer demand straight away. The proactive approach of the OTIF system, which includes careful planning and collaboration with suppliers and logistical partners, is its cornerstone. The supply chain team can forecast changes in demand and modify inventory levels by examining past sales data, seasonal patterns, and promotional activities. This foresight prevents the expensive problem of overstocking and helps to reduce the frequency of stock-outs, which can result in lost sales and unhappy consumers.

The application of cutting-edge tracking technology and analytics is essential to the OTIF process. Order statuses, delivery schedules, and inventory levels may all be tracked in real-time with the help of these technologies. The supply chain team can respond more quickly to any possible interruptions by using data analytics to find patterns and areas for improvement. To keep the stores supplied and running, for instance, the system may swiftly redirect orders or find other sources if a provider is delayed.

Complementing the OTIF system is the **Indent Planning System**, which serves as the backbone of inventory management at Domino's Bangladesh. This system is designed to create a seamless connection between demand forecasting and supply procurement. By utilizing sophisticated forecasting models, the indent planning team can generate accurate predictions of ingredient needs based on historical sales data and future trends. The result is a streamlined ordering process that ensures stores receive the appropriate quantities of essential items, such as dough, toppings, and packaging materials.

Last but not least, the Fill Rate System is essential to guaranteeing that every shop receives the right amounts of merchandise with every delivery. This system assesses supplier performance in addition to tracking order correctness. Domino's can spot irregularities and fix supply chain inefficiencies by keeping an eye on fill rates, which eventually boosts service dependability. All of these linked systems work together to form a strong foundation for inventory management, supporting Domino's dedication to providing its clients with excellent products and services.

Chapter 9: Conclusion

This internship at Domino's Pizza Bangladesh provided a unique opportunity to gain hands-on experience in essential supply chain management functions, particularly in a fast-paced food retail environment. The report captures critical learning outcomes, including effective inventory control, demand forecasting, and the importance of precise logistics management in maintaining high service standards. By actively contributing to indent planning, inventory turnover, and on-time fulfillment systems, the internship has not only enhanced the intern's professional competencies but has also supported operational objectives at Domino's Bangladesh. In conclusion, this experience has underscored the integral role that each SCM function plays in the company's success, from sourcing quality ingredients to delivering customer satisfaction through timely and accurate service. The insights gathered from this internship will be instrumental in shaping future endeavors in the field of supply chain management.

9.1. Recommendation

Enhance Demand Forecasting Accuracy

- ❖ To increase accuracy, use sophisticated statistical and machine learning models for operations and sales forecasting. Take into account outside factors that might affect demand, such as local events, weather, and economic trends.
- ❖ To adjust to changing market conditions, forecasting models should be updated often using real-time sales data.

Optimize Inventory Management

- ❖ Establish dynamic safety stock levels that adapt to supplier lead times and demand fluctuations.
- ❖ Investigate automation options for real-time inventory tracking to lessen instances of overstock and stockouts.
- ❖ Assess how well barcode or RFID technologies can monitor inventory in warehouses.

Refine Indent Planning System

- ❖ Improve accessibility and decrease human mistakes by digitizing the indent submission process by creating a centralized cloud-based platform to replace Excel sheets.
- ❖ Improve cooperation by including store feedback loops in the indent planning process, which will guarantee that supply more accurately reflects operational requirements.

Enhance Fill Rate and OTIF Metrics

- ❖ Create an OTIF and fill rate tracking dashboard that incorporates real-time data from delivery networks and warehouses. This will make it possible to react to interruptions more quickly.

- ❖ To guarantee ongoing progress, take into account performance evaluations with logistics companies and suppliers based on these measures.

Improve Sustainability in the Supply Chain

- ❖ Examine current sourcing procedures for ways to lessen their impact on the environment, such as collaborating with regional vendors to cut down on transportation-related emissions.
- ❖ When choosing vendors and making inventory decisions, take sustainability metrics into account.

Invest in Warehouse Technology

- ❖ To automate tasks like order picking, packaging, and shipment, implement a warehouse management system (WMS).
- ❖ To reduce waste and increase inventory handling efficiency, teach warehouse employees lean techniques.

Strengthen Transportation and Delivery Planning

- ❖ Use Geographic Information Systems (GIS) and real-time traffic data to optimize delivery routes.
- ❖ To cut operating expenses, periodically analyze transportation costs and assess the viability of fuel-efficient automobiles.

Focus on Employee Training and Development

- ❖ Organize frequent training sessions to upskill employees in new technology, forecasting techniques, and inventory management.
- ❖ The procedures and best practices described in the study should be codified in a manual or online course.

Leverage Data Analytics

- ❖ Throughout the planning, sourcing, and delivery phases, use supply chain analytics to spot trends and potential areas for enhancement.
- ❖ To make sure they are in line with corporate goals, evaluate key performance indicators (KPIs) regularly.

References

- ❖ <https://www.thedailystar.net/lifestyle/news-flash/news/dominos-pizza-now-bangladesh-1720177>
- ❖ <https://www.apollo.io/companies/Domino-s-Pizza-Bangladesh/5e56d20bda9f020001d71d7e>
- ❖ <https://www.jubilantfoodworks.com/Uploads/Files/169akm-Bangladesh-Press-Release-23rd-Mar19.pdf>
- ❖ <https://www.scribd.com/document/476659537/Dominos-supply-chain-docx>
- ❖ <https://markedium.com/how-dominos-pizza-is-doing-in-bangladesh/>
- ❖ <https://www.daily-sun.com/printversion/details/378128>

Appendix



Internship Certificate

Ref: JFBL/IEL/05/2024

Saima Tasnia Arpita started her internship with Jubilant FoodWorks Bangladesh Ltd. (Domino's Pizza Bangladesh) Department of Supply Chain Management from 10 January 2024 to 10 April 2024.

Saima Tasnia Arpita was responsible for Indent planning, RSTN, days of inventory, reorder point, Stock transfer order & other tasks, which came from her manager. Saima Tasnia Arpita's first week was her training period. Following training, she has performed her duties in a highly competent and professional manner.

If you have any queries, I will be happy to answer regarding this thing.

Sincerely,



Khurshid Imbisat Chowdhury
Country Head, Human Resources
Jubilant FoodWorks Bangladesh LTD.
(Domino's Pizza Bangladesh)

Jubilant FoodWorks Bangladesh Limited
Paragon House (Level-4)
5 Mohakhali, C/A, Dhaka-1212.
Bangladesh Tel: 09612008877