



Nestlé

“Critical Evaluation of the Supply Chain of Nestlé Bangladesh Limited”

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Internship Report

BUS400

Submitted To

Mr. Mahmudul Haq

Associate Professor

BRAC Business School

BRAC
UNIVERSITY

Submitted By

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BRAC Business School

Inspiring Excellence

Submission Date: January 3, 2017

Letter of Transmittal

January 3, 2017

Mr. Mahmudul Haq
Associate Professor
BRAC Business School
BRAC University, Dhaka

Dear Sir,

I, with due honour, would like to mention that I am a student of BRAC Business School. I have completed the required duration of placement at Nestlé Bangladesh Limited to fulfil the requirement of my internship and I am grateful to present you with my report on the internship titled: **“Critical Evaluation of the Supply Chain of Nestlé Bangladesh Limited”**.

It was a priceless learning opportunity to work at Nestlé Bangladesh Limited, a subsidiary of Nestlé S.A. – the largest food company in the world in terms of revenues. My placement was with the Supply Chain Function and I am still continuing my internship with them. I have received extended support from Nestlé Bangladesh’s Supply Chain function in learning the work and preparing this report. Your input and guidance during the process was instrumental to the outcome and I hope the result would be able to meet your expected standards.

Sincerely,

Mohaiminul Islam
ID: 12204057
BRAC Business School
BRAC University

I consent that Mohaiminul Islam (ID: 12204057) has completed and fulfilled the requirements for his internship as per instruction and hereby accept this report for due consideration.

Mahmudul Haq
Associate Professor
BRAC Business School
BRAC University

Acknowledgement

I would like to start by expressing my gratitude towards my advisor throughout my internship, Mr. Mahmudul Haq, for his guidance and help with all aspects of this report. Starting from deciding on a topic, to developing the structure and providing reading materials that would allow me to better understand the concepts and formulate constructive recommendations, his feedback has been crucial for the completion of the report. I would also like to extend my gratitude to Mr. Hasan Maksud Chowdhury, Assistant Professor, BRAC University. His guidance towards constructing a more detailed and sensible report was crucial throughout.

I would thank Mr. Moinuddin Ahmed Chowdhury (Strategic Buyer, Services & Indirect Materials Procurement), who is my line manager for the internship. He has made sure that there was knowledge to be gained from every assignment I was given, and included me in several unique projects, even at the policy-making level, so that I have a concrete understanding of the procurement process not only at Nestlé Bangladesh, but also at multiple markets of Nestlé in the surrounding region.

Furthermore, I would like to express my sincere gratitude to the entire Procurement team, Customer Service & Distribution team, and the Demand & Supply Planning team, the members of which took time out of their busy schedules to make me fully understand how the core workflow of Nestlé Bangladesh's supply chain takes place on a day to day basis. Their inputs undoubtedly made sure that this report brought out the real day to day scenario as accurately as possible.

Finally, I would like to mention my fellow interns at Nestlé Bangladesh Limited, especially the ones from BRAC University, who continue to support me in various ways till date.

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Executive Summary

The leading Nutrition, Health and Wellness (NHW) company in the world, Nestlé S.A. is a global organization with operations in 189 countries of the world. (Nestlé S.A., n.d.) Nestlé Bangladesh Limited is a wholly owned subsidiary of Nestlé S.A. operating commercially since 1994, “enhancing lives with science-based nutrition and health solutions for all stages of life, helping consumers, care for themselves and their families” (Nestlé S.A., 2015) It offers a range of products in the local market either through production or bulk repackaging activities, and the key function which is planning, coordinating, implementing, and evaluating all the crucial operational aspects of this is the Supply Chain function of Nestlé Bangladesh Limited. It is a function spread across the company’s value chain, with three primary departments: i) Demand & Supply Planning; ii) Procurement; and iii) Customer Service & Distribution. Demand & Supply Planning coordinates all the other departments, both within and beyond the supply chain function, and aligns them to the company’s strategic plans, which sets the pathway of translating strategic visions into real business achievements. In a way, it can be deemed as the central focus of supply chain’s work as it coordinates the resources moving through the process, and makes sure it moves in the right direction to reach the operational goals of the company. Procurement deals with the material inflow, or inputs that come into the organization, whereas Customer Service & Distribution deals with the material output, or outflows from the organization, which ultimately reach the final consumers. The report looks into a holistic view of the entire chain, and provides a comparison with a defined “ideal structure” and provides possible recommendations of overcoming existing constraints and shortcomings for the company’s benefit.

Introduction to the Organization

About Nestlé

Nestlé S.A. is a transnational company which was founded by Henri Nestlé, and is headquartered in Vevey, Switzerland. This is the 150th year of its establishment, which has been a major cause for celebration across its market operations worldwide. It has been ranked as the largest food company in the world for the past three years, and ranked 33rd in the Forbes Global 2000 list of the largest public companies. Operating 436 factories across 189 countries and employing over 335,000 people, it is no surprise that Nestlé is one of the leading companies to ever exist in the FMCG sector, closing revenues at 88.8 billion Swiss Francs (CHF) in 2015, which is approximately USD 87.2 billion. (Nestlé S.A., 2015) With a market capitalisation of USD 243.7 billion, Nestlé ranked No. 14 in the 2015 Financial Times Global 500 list. (Nestlé S.A., n.d.)

Nestlé's Mission & Vision

Being the world's leading Nutrition, Health and Wellness Company, Nestlé's motto of "Good Food, Good Life" outlines their mission to provide consumers with the best tasting, most nutritious choices in a wide range of food and beverage categories and eating occasions, from morning to night. (Nestlé S.A., n.d.)

People understand that food is a source of nourishment and satisfaction, but also pleasure, health, happiness and peace of mind. They are increasingly aware that their food and beverage choices can impact their quality of life and affect the lives of others. (Nestlé S.A., 2015)

Innovation has been at the heart of the company since its beginning. Ever since Henri Nestlé invented Farine Lactée to alleviate infant mortality, the company has been dedicated to enhance people's lives. (Nestlé S.A., n.d.)

Hence, Nestlé strives to be a leading, competitive, Nutrition, Health and Wellness Company providing better shareholder value by being a preferred corporate citizen, employer of choice, and preferred supplier selling preferred products.

About Nestlé Bangladesh Limited

Nestlé has divided its worldwide operations into three zones: i) Europe Regions (Adriatic, Benelux, Iberian and Russia), ii) Americas Regions (Austral-America, Bolivarian, Caribbean and Central American), and iii) AOA Regions (Asia, Oceania and Africa). (Nestlé S.A., n.d.) Nestlé Bangladesh Limited is a non-traded public limited company in Bangladesh, which started its first commercial production in 1994 as a 60-40 joint venture between Nestlé S.A. and Transcom. In 1998, Transcom sold their 40% stake and Nestlé Bangladesh Limited and became a wholly owned subsidiary of Nestlé S.A. The company's vision is to establish itself as the leading Nutrition, Health & Wellness (NHW) Company in Bangladesh, generating sustainable, profitable growth, and continuously improving results to become a CHF 1 billion concern of Nestlé.

The Corporate Office is located in Ninakabbo, a modern office complex on the Gulshan-Tejgaon Link Road, and the factory is 47 kilometres away at Rajendrapur, Gazipur. The only production facility of Nestlé Bangladesh Limited till date, it is used to produce instant noodles, seasoning, and infant cereals. It also carries out repackaging operations of dairy, soups, and powdered beverages. Focusing on developing their human resources across functions, and taking up projects to improve and streamline processes throughout the company, Nestlé Bangladesh Limited is at a vantage point to be the industry leader in the Food & Beverages sector. Their continuous commitment to foster innovation, and focus on ensuring the best quality products for the consumers will facilitate them to reach that leading position in the industry.

Structure of the Organisation

Nestlé Bangladesh Limited currently is headed by Mr. Stephané Nordé, who is the Managing Director of Nestlé Bangladesh Limited. Ten core functions operate the daily workflows for Nestlé Bangladesh Limited, and a brief description of their work is outlined as follows:

General Management (GMTG): This is the key strategy hub for the company where the central operations coordination is done, and the strategic decision-making takes place for the other functions.

Manufacturing (MFG): All operating activities of the factory is coordinated and implemented by the members of this department.

Sales (Sales): The driving force behind the market presence which makes Nestlé what it is, this department is responsible for generating the revenue for the company and ensuring the implementation of market activities.

Marketing (MKTG): Working in close contact with Sales, the marketing function drives the development, sustenance, and growth of the various Nestlé brands in the market.

Nutrition (NN): This department deals with a specialized portfolio of products and brands, mainly infant formula (Nan, Lactogen, etc.) and infant nutrition (Cerelac).

Nestlé Professionals (NP): To establish Nestlé as a brand people prefer beyond the confines of their homes, this team strives to establish that by taking charge of after institutional sales.

Supply Chain (SC): To ensure effective business operations, the Supply Chain function manages the procurement and movement of relevant inputs, certain processing aspects of materials into finished goods, inventory management, and the movement of finished goods out of the organization to the end customer.

Finance & Control (F&C): One of the key aspects of companies worldwide is financial compliance, and this department is in charge of ensuring it through exacting a global standard in transaction processing, and making sure appropriate control mechanisms are in place.

Human Resources (HR): They are in charge of acquiring, managing, and developing, Nestlé's most important asset, its people. They nurture the organizational culture that the company hopes to achieve.

Corporate Affairs: All internal and external communications are taken care of by the members of this department, in addition to most external stakeholder engagement activities on behalf of corporate.

(Mohajan, 2015)

Each department is headed by the respective Head of Function, who collectively form the Management Committee (MANCOM) of Nestlé Bangladesh Limited, chaired by the Managing Director. They report to the Board of Directors, which is headed by the Chairman, Mr. Latifur Rahman.

Each function has separate, specialized departments, with senior, mid-level, and entry-level professionals, taking care of detailed work that form integral parts of each function. For instance, Supply Chain function has three departments under it: Procurement, Demand & Supply Planning, and Customer Service & Distribution, each with a specialized responsibility relating to the Supply Chain.

Product Portfolio for Nestlé Bangladesh Limited


The products that Nestlé Bangladesh Limited is currently serving the market with can be divided into five broad categories. These categories have one or multiple brands that are available in the market in one, or multiple, Stock Keeping Units (SKUs). The infographic below illustrates a list of all the brands offered in the market by Nestlé Bangladesh Limited.



Nestlé Koko Krunch



Nestlé Corn Flakes



Nestlé Milo Cereal



Nescafé Instant Coffee



Nescafé 3 in 1



Nestea



Nestlé Coffee Mate



Nestlé Nido



Nestlé Baby & Me



Nestlé Everyday



Culinary



Maggi 2 Minute Noodles



Maggi Shaad E Magic



Maggi Healthy Soups



Nestlé Nan



Nutrition



Nestlé Lactogen



Nestlé Cerelac

Summary of Key Responsibilities

I joined Nestlé Bangladesh Limited as an intern of the Supply Chain function on August 1, 2016 after passing the regular selection process, which included sending in my CV, being interviewed, and taking a written test. However, I did not formally begin work before August 16, 2016, as I was still sitting for the semester finals of my last semester at university.

As I was going to work for the procurement department, at first I was asked to read and understand the “Nestlé Bangladesh Procure to Pay Guideline” (later to be restructured as the “Nestlé Bangladesh Source to Pay Guideline”). It is an internal guideline that provides a framework as to how the procurement process is to take place for Direct Materials (DM), and, Services & Indirect Materials (S&IM), in both the offline and the online SAP Globe System.

The first assignment I was handed was to follow up the delivery schedules with the supplier of Consumer Promotion materials (CP) for various Stock Keeping Units (SKUs) of Maggi 2 Minute Noodles. There were unique products for each of the SKUs which had specific delivery timelines to meet. I was in charge of following up with the supplier and the distribution centre of the dispatch or delivery status of the promotional materials, and prepare a report at the day’s end to communicate to the internal stakeholders.

I also conducted market studies and cost analysis of several industries, to ensure efficient sourcing of materials and services for the organization. I prepared Comparative Cost Statements for various activities and projects of the marketing function to make sure effective cost-benefit analyses were considered before making decisions.

Another project where I was included was in the Nestlé Business Partners' Meet 2016, where almost 100 attendees joined for a half-day interactive workshop on Responsible Sourcing. Two other interns and I were in charge of executing the event successfully, with full responsibility of the event, and we delivered a praiseworthy event.

Furthermore, I was made part of a functional team in charge of adapting the "Procure to Pay Guideline" and establishing the new "Source to Pay Guideline". I was also part of a cross-functional team in charge of developing a Standard Operating Procedure for Labour Supply at the factory and distribution centre. It enabled hassle free operations and set out clear KPIs which ensured efficient operations.

Major Learning Reflections

The key learning I will take from my experience at Nestlé Bangladesh Limited, in addition to the functional learning of the roles, responsibilities, and importance of an optimized supply chain to achieve business excellence, is the importance of time management and prioritisation in the corporate arena. For a dynamic function like Supply Chain, it is imperative that the regular workflow stays on track at all times to ensure inbound and outbound movement of goods/services. Of course, I was able to learn the operational perspective of procurement procedures and policies of Nestlé, from the receipt of a requisition, to completing the sourcing process, ensuring satisfactory delivery, and handing over the payment documents to the Accounts Payable team, for all inputs coming into the company.

On top of that, a key part of Supply Chain, as explained by Mr. Sanjeev Yadav, Supply Chain Director of Nestlé Bangladesh Limited, is managing exceptions that seem to arise in a constant flow across all parts of the value chain. This management of exceptions requires a keen sense of time management and prioritisation which ensures a seamless system day in and day out for the company, which would otherwise suffer delays in various places, ultimately leading to loss of business.

Another key learning I will take with me is the importance of emotional intelligence (EQ) in the workplace. While it is important that one must have the necessary learning capacities and intelligence to carry out a certain work, a very important aspect of how well a person will be at doing the actual work, connecting with peers, and leading in the future to ensure career and business growth, depends heavily on a person's EQ. Few employers seem to take care of this, and it should be given much emphasis, as it will yield good long term returns.

Hence, the extraordinary importance of time management and prioritisation of tasks, especially for an industry as dynamic as Food & Beverages, in the FMCG sector, along with the crucial necessity of EQ for career and personal growth, are the key learnings from my experience, and that which I hope to nurture throughout my career. The primary learnings of the workflow and procedures of the supply chain function will, without a doubt, help me have an insider's perspective on the workings, which will help me have a more wholesome business understanding in the future.

Critical Analysis of the Supply Chain of Nestlé Bangladesh Limited

Introduction to the Project

After discussion over the opportunities of Supply Chain and Operations Management with my internship supervisor, I decided upon his suggestion that the project would be a Critical Analysis of the Supply Chain Structure of Nestlé Bangladesh Limited. There are multiple models in which the supply chain of a company can be set up, and organizations in various industries choose to structure their supply chains in multiple ways to maximise profits and efficiency. Thus, an ideal framework for a manufacturing company was chosen as the basis of comparison and the existing structure of Nestlé Bangladesh Limited has been used to find where it stands in contrast. The gaps that will be identified will be explained as to why they have been kept (whether intentionally, or unintentionally) and how the changing business environment may change that gap, or bring more changes in the near future.

Purpose of the Project

The project's objective is to provide an overview on how the Supply Chain function in Nestlé Bangladesh Limited operates, and how it differs from an ideal framework for a manufacturing industry. It will also reflect upon the points of differences from the said "ideal framework" and would look into why such differences are there and whether they translate to any business advantage in the long or short term. It will also relate to the academic knowledge gained over the period of study and portray a practical viewpoint on how modern businesses function as far as supply chains are concerned.

Methodology

The primary source of information have been interviews with concerned employees, and Heads of Departments (HODs) of the Supply Chain function at Nestlé Bangladesh Limited. Many of the inputs, especially those pertaining to procurement, are from the observations I have made in process of learning while working there.

The theoretical framework of an ideal supply chain of a manufacturing organization have been taken from a textbook on Supply Chain Management. Many such inputs have been drawn from secondary sources, such as books, reports, websites, research papers, etc. The gap analysis and recommendations are from a combination of opinions of employees at

Nestlé Bangladesh Limited, and suggested course of actions from various textbooks and other secondary sources that have been cited.

Timeline

The project timeline is to be taken from October 2016 to December 2016, and any data or changes after the ending date have not been included or taken into consideration for the purpose of this report.

Limitations of the Project

The primary limitation for this project was the availability of information from the organization. Being one of the leading transnational companies, much of the information regarding the supply chain activities and processes are confidential and meant strictly for internal use, as it plays a vital role in keeping the competitive edge of the organization in the market. Even though I had access to many of the internal policies and guidelines, upon discussion with the concerned employees, I came to know that few of them can be disclosed in this report, and hence cannot be taken up for further discussion or analysis in the relevant sections of this report.

Also, supply chain management covers a vast field of study, and such a wide scope includes many theories on how to evaluate and structure each organization so that the process is optimized to their unique workflow. As the purpose of the project is to provide a critical evaluation of the structure, we will not be looking into any ideal efficiency parameters as that would include the need to evaluate the existing model with multiple models, which would not remain in focus of the primary purpose of this project. The performance measurements are added in qualitative form to maintain confidentiality, and are there to signify Nestlé's strive to drive Continuous Excellence in their process to ensure improvements across the value chain.

The Supply Chain

For most organizations, especially those in the manufacturing sector, supply chain is a crucial support function that directly facilitates the entire operational process of the company. To explain supply chain in detail, we can refer to the framework in the figure below, which we will also be taking as the “ideal supply chain structure” and the comparison, or evaluation, base with that of Nestlé Bangladesh Limited.

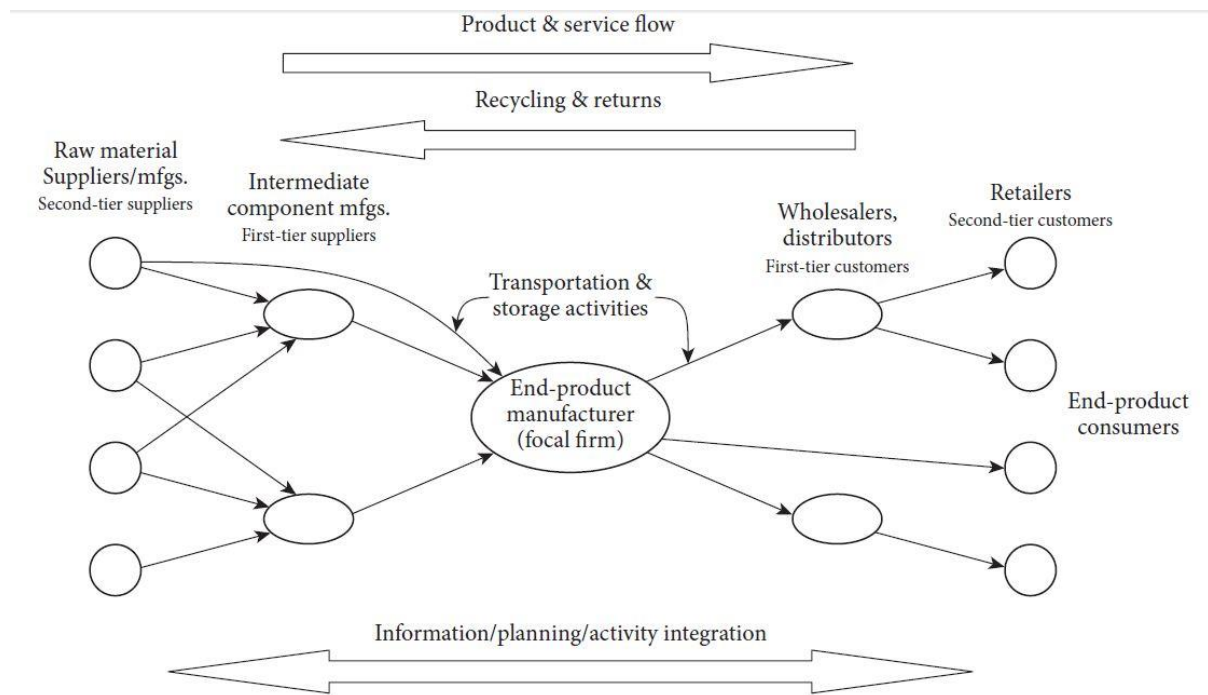


Figure 1: Ideal Supply Chain Structure of a Manufacturing Organization (Wisner, Tan, & Leong, 2012)

The supply chain shown in the figure starts from the left, with firms in the primary industry such as commercial farming, fishing, mining, etc. selling them to intermediate suppliers such as grain processing companies and steel mills. These intermediaries usually carry out basic processing of the goods so that the firms in the next stages can easily or readily use the outputs. The end-product manufacturer (focal firm) takes supply from these intermediaries and carries out further processing and assembling of inputs from various such suppliers to manufacture the finished product, which is sold to wholesalers and retailers on their way to reaching the final consumers.

Thus, the series of companies eventually making products and services available to consumers—including all of the functions enabling the production, delivery and recycling of

materials, components, end products and services — is called a supply chain. (Wisner, Tan, & Leong, 2012)

A simplified way we can look at the supply chain, in a manufacturing firm’s perspective, is the procurement of inputs, transforming them through the core process, and delivering the output to the end customers. Ensuring all these activities are done in a timely, accurate, and cost effective manner can be an umbrella objective of basic supply chain management.

Nestlé Bangladesh Limited’s Supply Chain

For Nestlé, they allow each subsidiary to develop or structure their own supply chain, within the company policies and guidelines, in accordance with the needs of the location’s business model, local business practices, market dynamics, and business cycles. For Nestlé Bangladesh Limited, the supply chain function is divided into 3 departments:

- Demand & Supply Planning (D&SP)
- Procurement
- Customer Service & Distribution (CS&D)

The organogram below illustrates the organization of the Supply Chain function of Nestlé Bangladesh Limited, along with the name and designation of the function/department heads.

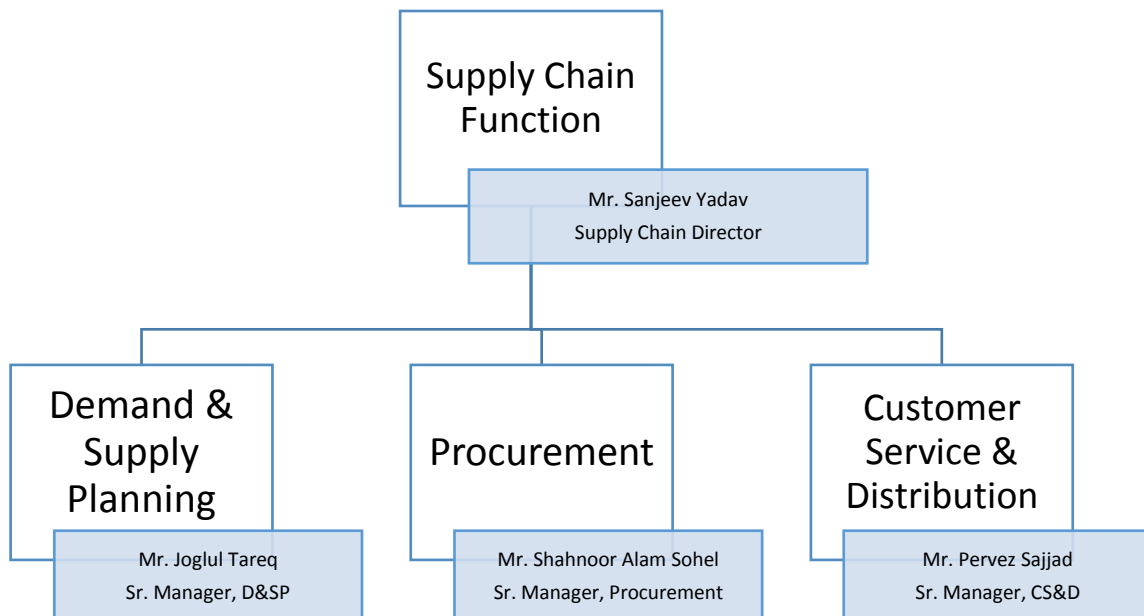


Figure 2: Supply Chain Function Organogram at Nestlé Bangladesh Limited

Demand & Supply Planning

Demand & Supply Planning regarded as the hub of Nestlé Bangladesh Limited's Supply Chain. Their primary objective is to effectively plan the National Consensus Demand Planning and Supply Planning for each of the products in an 18 month cycle. (Islam, 2014)

Demand Planning

The Consensus Demand Plan is prepared in tandem with, the Sales function at the Monthly Sales Review meetings to see if the products can be taken to market according to the plan, and the Finance function in the Monthly Gap Review to check if there is enough budgetary allocation to carry out the activities in accordance with the demand plan. A Monthly Forecast Review is then organized with all the Functional Heads where they sign off on the finalized Consensus Demand Plan. From the monthly breakdowns, they move to a weekly schedule of production and dispatch planning to ensure optimized inventory levels and market presence of the products with maximised shelf life. This requires close coordination with the production and factory supply chain teams.

Supply Planning

For the supply side, the primary objective is the Material Requirement Plan for all Direct Materials. In accordance to the Consensus Demand Plan, the department formulates the plan to ensure all related materials required to fulfil the forecasted market demand plan is on hand for production in a seamless supply process. This needs continuous collaboration with the direct materials procurement team, as well as the inbound logistics team. Services & Indirect Material Procurement team is also involved in this process when inputs such as consumer promotion (CP) materials are involved. Close contacts must also be maintained with Nestlé inter-market subsidiaries to ensure lead time communication for imported semi-finished bulks that are packaged at Nestlé Bangladesh Limited.

The department is also in charge of facilitating Monthly Business Planning meetings where all other related departments (Sales, Marketing, Finance, Procurement, etc.) are communicated and aligned with the business plan for the upcoming periods and can raise any issues or constraints of the plan if needed.

Procurement

The Procurement department is solely responsible for managing and sourcing all inputs for Nestlé Bangladesh Limited. They take the orders or plans from Demand & Supply Planning department and make sure all raw materials, packaging materials, and finished goods reach the company in the right quality, quantity, time, and at the lowest cost to company possible, which will ensure higher returns for the company. The Procurement department has 2 major teams working on the key scopes of sourcing for, and managing both direct and indirect inputs for Nestlé Bangladesh Limited:

- Direct Materials Procurement
- Services & Indirect Materials Procurement

Direct Material Procurement

Direct procurement is one of the key elements of procurement, in charge of purchasing all imported and local raw materials. Their main task is to work closely with suppliers to ensure there is adequate lead time to prepare and dispatch raw & packaging materials in due time, to ensure their timely arrival when needed. Their main source of reference is the forecast they receive from Demand & Supply Planning, and process the Purchase Requisitions into Purchase Orders, which are then communicated to the selected supplier, or the most suitable and cost effective supplier. For locally sourced materials, the team oversees the timely delivery of the order to the delivery site, after which the goods are received and the payment process is transferred to the finance team. For imported materials, they process further into preparing the Letter of Credit (L/C) documents and collecting all the relevant paperwork from the supplier upon shipment and arrival of the orders at the port. Their communication with the supplier regarding a particular purchase extends up to the arrival of the order at the local port, upon which the closing of the L/C is processed, and all relevant materials are handed over to the Inbound Logistics team for further processing.

The same process is followed for packaging materials, with less emphasis on the import documentation and L/C part as almost all major packaging materials are locally sourced.

Services & Indirect Materials Procurement

Services & Indirect Materials procurement is an equally important side of procurement as they account for roughly half of all spends by Nestlé Bangladesh Limited. (Nestlé S.A., n.d.) This team deals specifically with inputs of any nature that is not part of the core/direct

production process. The Services & Indirect Materials team primarily deals with: Capital Expenditure, media buying & creative content, point of sales assets, administration & HR services, logistics, etc.

For this particular team, the requisition is made by a purchase requestor from any department who may or may not be the direct user. The market situation for the requested product is assessed and the purchase order is sent to the supplier with the best or most suitable offer. After the goods are delivered in accordance to the pre-set terms and conditions, the team transfers the supplier to the finance team for settling the bill.

Inbound Logistics

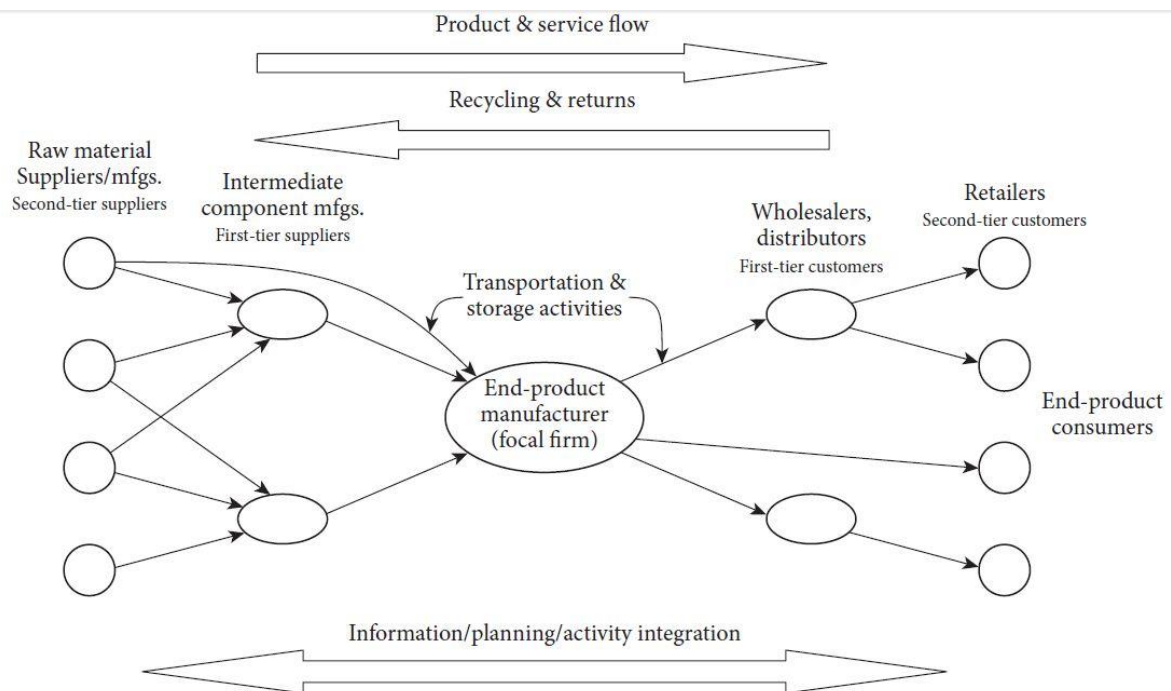
To facilitate both these teams, an auxiliary team known as Inbound Logistics works closely to ensure that all imported products are released from the port and transported to the designated location in due time. Once they receive the import documents from the procurement team, they pay the appropriate duties to the government and obtain the release from the port. After that, they follow up with transporters to ensure timely and effective delivery to the designated location.

Customer Service & Distribution

The Customer Service & Distribution team is primarily involved with the sale of the range of Nestlé products to enlisted distributors. Scattered among the 6 sales regions, there are a total of **109** distributors for Nestlé Bangladesh Limited, who can be attributed as the primary drivers of the organization's outputs in the downstream supply chain. They set a monthly target for distributors, based on the Consensus Demand Plan supplied by the Demand & Supply Planning department, and makes sure all the distributors, or customers, are aligned with the company targets. After orders have been captured from the distributors, they are edited and finalised before placement into the SAP system, where they develop the outbound delivery report for each order. They are accumulated to form the shipping plan, which is transferred to the Distribution Centre, who processes the order, loads the vehicles and dispatches them to all the customers across the market. (Tahsin, 2016)

Nestlé Bangladesh Limited has their Distribution Centre (DC) located at Hotapara, Gazipur, which is roughly 9 km away from the factory location. Although the internal management of the warehousing function and coordination is outsourced to a specialized global firm, the Customer Service & Distribution team is in charge of overseeing their operations, to ensure their workflow and plans are aligned with that of the Nestlé Bangladesh management.

Comparison Analysis



Since we took this figure mentioned before as the “ideal structure” for a supply chain of a manufacturing company, the current framework of Nestlé Bangladesh Limited’s supply chain will be pegged beside this to see where it stands and what opportunities lie ahead.

Upstream of the Supply Chain

To start off, Nestlé Bangladesh Limited’s supply chain can be defined as an “Agile Supply Chain”. This is defined as “supply chains that utilize strategies aimed at being responsive and flexible to customer needs, while the risks of supply shortages or disruptions are hedged by pooling inventory and other capacity resources. They are agile because they have the ability to be responsive to the changing, diverse, and unpredictable demands of customers on the front end, while minimizing the back-end risks of supply disruptions.” (Jacobs & Chase, 2008)

If we start from the far left and continue down the supply chain, the first to be considered are the raw material suppliers, manufacturers, or intermediaries. This section of the chain coming into the organization is managed by the Direct Materials team of the Procurement Department. They have to keep the Material Requirement Plan in close observation as harmonization is needed to ensure that all products reach the inventory in due time. This inventory enables the business with flexibility to adjust operational activities if needed, but they also keep in mind that holding too much can lead to increased costs for the business.

They also have to manage the L/Cs as most of the raw materials for Nestlé Bangladesh Limited, and that has a significant impact as timely settlement and proper documentation collection is crucial to ensure a seamless flow of inputs reaching the organization.

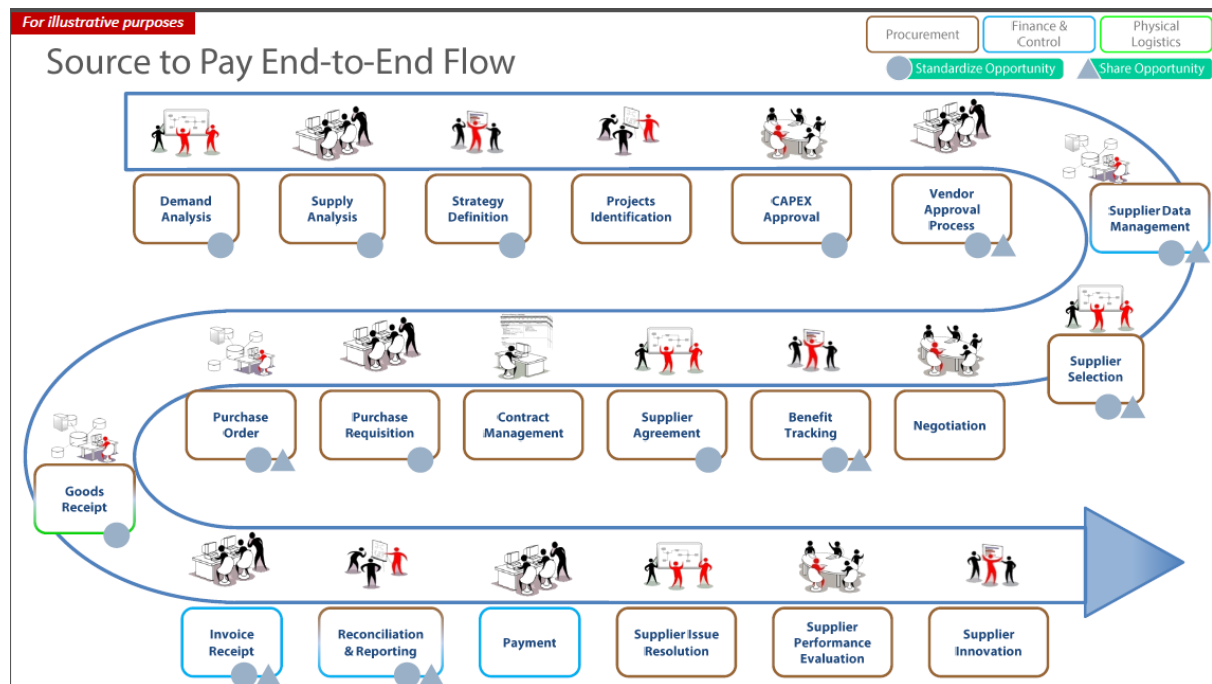


Figure 3: Nestlé Source to Pay End-to-End Flow (Nestlé Intranet, 2016)

The current sourcing structure followed at Nestlé Bangladesh Limited is the **Nestlé Source to Pay Guideline**, which follows the End-to-End Flow illustrated above.

- The requirement for the input is first analysed through the **Demand Analysis**, to help decide on the sourcing strategy.
- The market study is then carried out as part of the **Supply Analysis**, which is also an integral part in deciding the sourcing strategy.
- After these steps have been completed, the **Strategy Definition** is done, where the buyer decides on which method to employ for sourcing the input.
- **Project Identification** is necessary to decide on the delivery timeline of the input, as various projects/processes may need them in various times, and this has to be communicated clearly to the suppliers.
- If the input is one that requires capital expenditure, or is part of a development project, further **CAPEX Approval** is required to validate the purchase.
- All Nestlé vendors have to be approved by Nestlé QA, or needs to have certification for a four pillar responsible sourcing audit, to ensure ethical sourcing practices. If the vendors are not pre-approved, the **Vendor Approval Process** takes place, and this

can have a significant effect on the delivery timeline, making it a crucial factor in the supplier selection process.

- The support activity of **Supplier Data Management** is undertaken as well, to develop a pool of ready suppliers who are pre-approved to meet Nestlé requirements.
- **Supplier Selection** is done based on the above parameters, in addition to the basic criteria of price, quantity, etc. Multiple suitable suppliers are selected to create a market benchmark, before moving to the next step.
- The suppliers are called and **Negotiation** takes place. The negotiation may be in terms of price, delivery terms, payment terms, or any other aspect pertinent to the input.
- After negotiation, a cost benefit analysis takes place through the **Benefit Tracking**, to compare and decide who the best vendor is.
- After all due consideration, the **Supplier Agreement** is made, where a contract is drawn up and the two parties then formally enter into a commercial relationship.
- **Contract Management** is also essential after this, as following up with the terms and conditions, updating changes, re-negotiating or renewing term contracts are necessary throughout the course of business.
- The **Purchase Requisition** is then made by the requestor of the input in the ERP system, e.g. SAP.
- After processing the Purchase Requisition, the **Purchase Order** is issued to the supplier, which has all pertinent details of the input that has been ordered.
- The **Goods Receipt** is carried out by the respective user group when the actual input arrives to the location of delivery.
- Following that, the **Invoice Receipt** is carried out by the Finance & Control function to process the payments.
- Frequent or regular supplier accounts go through **Reconciliation & Reporting** before their balance is confirmed.
- Following balance confirmation, the **Payment** is made to the supplier.
- **Supplier Issue Resolution** takes place if there are any issues brought forward by them.
- Procurement also carries out **Supplier Performance Evaluation** to ensure that they perform to expected levels.
- Nestlé also helps suppliers improve their processes and develop a business partnership through supporting various **Supplier Innovation** initiatives.

This Source To Pay process is followed as much as possible for all procurements at Nestlé Bangladesh Limited.

A crucial branch of this, which is missing in the “ideal structure” that we have taken, is the input of services and indirect materials. The Services & Indirect Materials procurement team is a vital part of the process as well, as they address to sourcing for roughly 50% of all spends at Nestlé Bangladesh Limited. Their sourcing also has impacts on the direct manufacturing process, e.g. they brought the daily labour supply at the factory under a contract with the supplier to ensure all relevant standards and procedures are maintained, and kept in check by the outsourced organization, with the monitoring role being played by Nestlé Bangladesh Limited through enforcing mutually agreed KPIs.

eProcurement

The agile process of sourcing and procurement is facilitated by the eProcurement process, where Nestlé Bangladesh Limited uses the SAP business software to manage the entire process. There is a manual approval process involved as well, but the requisition, purchase orders, approvals, and payments are all managed in the SAP system. The eProcurement process is completely in line with the process outlined below (the threshold values are BDT 10,000, BDT 30,000 and BDT 50,000, instead of \$25,000, <\$50,000 and > \$50,000 respectively):

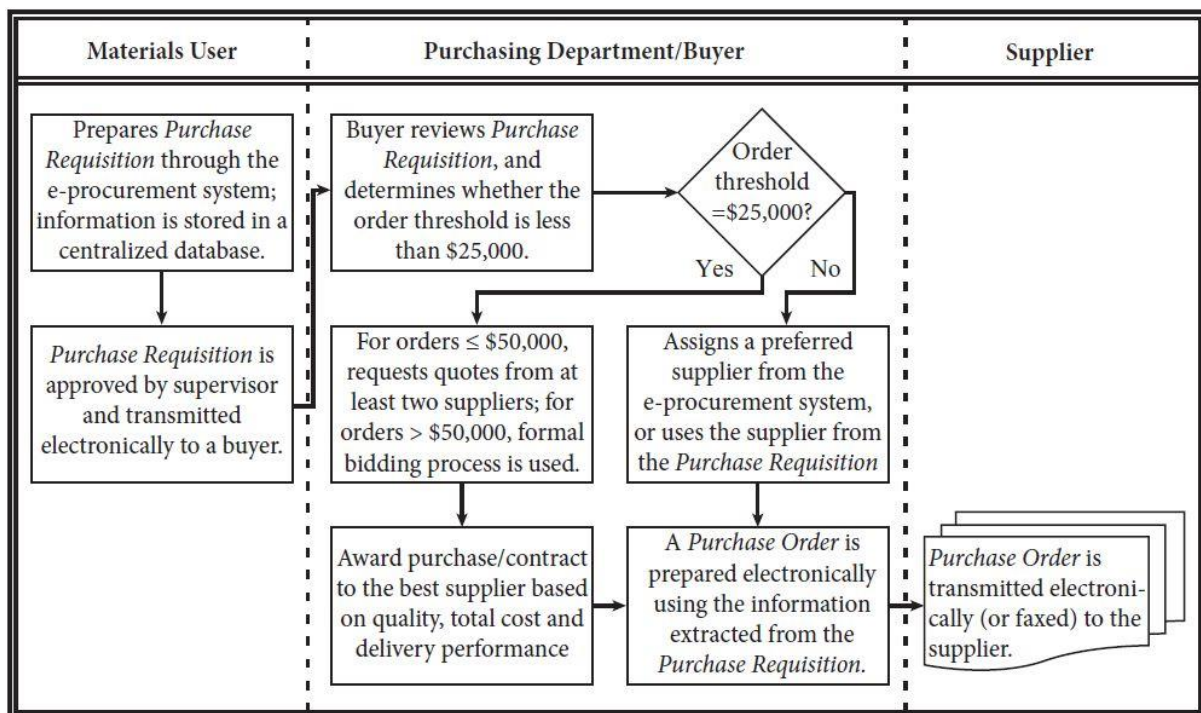


Figure 4: eProcurement or Electronic Purchasing System (Wisner, Tan, & Leong, 2012)

Supplier Relationship Building

Another key factor the procurement department has to pay special attention to is developing and maintaining supplier relationships that ultimately transform to business benefit. Nestlé Bangladesh Limited focuses on moving from the supplier or vendor relationships, and becoming business partners. “Significant competitive advantage can be achieved by organizations working closely with their suppliers. Without a shared vision, mutual benefits and top management commitment, partnerships are likely to be short-lived. Organizations that successfully implement supplier relationship management can improve quality, reduce cost, access new technologies from their suppliers, increase speed-to-market, reduce risk and achieve high performance.” (Wisner, Tan, & Leong, 2012)

Responsible Sourcing

The final key element that the Procurement department focuses on when managing the flow of inputs is making sure the materials are ethically and sustainably sourced. Nestlé has various guidelines to ensure the aspects of this, which they choose to term “Responsible Sourcing”. Starting from enforcing the Nestlé Supplier Code, to having business partners carry out third party audits on responsible sourcing, to carrying out Nestlé QA audits through the internal Quality Assurance team, it is the Nestlé approach of going the extra mile to ensure a responsible and exemplary corporate citizenship in their operational aspects that provides them with a significant edge in consumer perception over their competitors as a company that truly cares about ensuring maximum benefit for the consumers and making sure negative external impacts are minimal across the value chain.

Support Activities

These sourcing or procurement teams are supported by the Inbound Logistics team, who make sure the imported products reach the destination from the ports of entry in a timely manner, with minimal cost impact, and in the desired quality. The transportation and carrying and forwarding works are done by external parties who have been awarded contracts, however the team ensures their monitoring and KPIs to ensure smooth and agile operational activities.

The “transportation and storage activities” mentioned in the structure as the inputs come in to the factory for processing, and move out after being processed, are also outsourced to one or several contractors. After the inputs have been received and processed into outputs, they move in to the distribution centre (DC) of Nestlé Bangladesh Limited, located in Hotapara,

Gazipur (just a few kilometres away from the factory). The DC is managed by an external firm, specialised in warehousing & distribution activities, but everything overseen by the Customer Service & Distribution department. They also manage all outbound transportation of products to distributors around the country, and although the transportation service is outsourced to various agencies, the primary activities of the downstream supply chain is managed by the Customer Service & Distribution team.

Performance Measures

PR to PO Processing Time: The primary performance measure for the efficiency of Procurement is the Purchase Requisition to Purchase Order (PR to PO) processing time. While exact numbers are unavailable, over the last 3 years, the processing time has been cut down significantly. According to members of the Nestlé Bangladesh procurement team, this can be primarily attributed to overall political stability in the country and the maturity developed over time by local businesses. While major suppliers for raw materials are foreign, most of packaging, services and indirect materials are sourced from the local market, and the development of such businesses in terms of both capacity and flexibility have reduced the PR to PO processing time by an average of 32% over three years.

SHARK Savings: Another performance measure used to evaluate procurement performance is the achievement of SHARK savings. Savings tracking is done throughout all procurement processes, however SHARK savings is defined internally as the reduction in cost that the company was previously incurring, or would have incurred under the present business processes/established procurement terms. The AOA Zone assigns a certain savings target for the procurement department every year, and measures their performance by evaluating how much of the target they were able to achieve. The target has been more than BDT 100 million per annum, for the past two years, and the Nestlé Bangladesh Procurement team has surpassed targets every year. In 2016, they have surpassed their set target by 12.6% and is on the cards to be the best performing market in the region.

Downstream of the Supply Chain

The Customer Service & Distribution department deals with all downstream activities of Nestlé Bangladesh Limited's Supply Chain. It processes orders for all nationwide distributors of Nestlé products, and the team is in charge of all primary sales orders from the customers from order placement to shipment planning. Each distributor has a designated time of when they can place orders, and they have limits on their allowance for carrying inventory. (Tahsin,

2016) The entire process is carried out through SAP, and the customer service team monitors inventory levels across products and SKUs when planning the shipping of the products to be dispatched. The shipment plan is given to the Distribution Centre, and they process the movement of the products from inventory to the loading, ultimately leading to the customers.

They start by communicating the sales volume targets and consensus demand plans to the distributors, so that they are aligned with the company strategy plans. They capture orders and process outbound delivery, which is pooled into the shipment plan. Another crucial task they carry out is the Customer Facing Supply Chain, which sets the direction and focus of the collective supply chain activities. What they primarily ensure through this is the On Shelf Availability (OSA) and On Shelf Freshness (OSF) of the products for the end consumers. They operate in the Distributor to Retailer link of the chain, and as part of OSA, ensure maximum availability and exposure to consumers (in terms of shelf space). They also monitor the duration for how long the product is available to consumers, and initiate the reverse supply chain process if a product is past 80% of its effective shelf life. This On Shelf Freshness (OSF) ensures that whatever product the consumer receives is of the highest quality when being consumed. The sales function works closely on this task as well, and a cross-functional team drives this process.

Transportation Carriers

The use of contract carriers is practiced at Nestlé Bangladesh Limited as opposed to common or private carriers. Contract carriers are not bound to serve the general public as common carriers. Instead, contract carriers serve specific customers under contractual agreements. Typical contracts are for movement of a specified cargo for a negotiated and agreed-upon price. (Wisner, Tan, & Leong, 2012) Now, while this may be more expensive than using common carriers, it is significantly more cost effective than using private carriers, as the contracted agencies are much more specialised in this field. More importantly, the transport of food and beverage products require immaculate attention to hygiene factors in the carrier vehicles, and contract carriers can be bound through the legal agreements to adhere to the standards set out for food safety compliance parameters. This would not be possible with the case of common carriers.

Now in terms of comparison with the structure we have taken, Nestlé Bangladesh Limited only goes as far downstream as first-tier customers, and prefers to not go any further because the costs that would be incurred when managing that high a volume of customers will not

have adequate benefits for sustainable business. Also, since the size of the market in Bangladesh is still quite small, the volumes dealt by lower tier customers are not significant enough for truckloads to be sent economically, hence the company only operates through the first-tier customers who then break the bulk and send the products further downstream to the final consumers.

Performance Measures

CDP Fulfilment: The key performance measure for the downstream activity is the percentage fulfilment of the Consensus Demand Plan for each product SKU. For certain popular products, like MAGGI 2 Minute Noodles, the CDP is fulfilled and exceeded every time, however for newly introduced, or slow moving products, the CDP is not fulfilled regularly.

Distributor Satisfaction: Distributor satisfaction can also be a performance measure for the CS&D department, and in a recent survey it was found that 8.33% of the distributors are not interested to carry on doing business with Nestlé. (Tahsin, 2016) It also found the following areas of improvements that the department or the organization should go for:



Figure 5: Distributor Feedback on Different Issues (Tahsin, 2016)

The survey also found that 72.16% of customers are satisfied with the Customer Service team's responses, however they are dissatisfied with their maintenance of the CDP by Nestlé as frequent fluctuations lead to business difficulties.

Information/Planning/Activity Integration

If we refer back to Figure 1 again, we see a two way arrow at the bottom that signifies the primary planning activity that is spread across the chain. This is where the Demand & Supply Planning department of Nestlé Bangladesh Limited comes in. They are, in a way, the central information hub for all supply chain activities, and all the links of the chain have to work closely with this branch as they are the primary planners for the core activities that the other departments use as reference to set out their workflow. The prime area of work for Demand & Supply Planning department is forecasting internal demand for materials and services, and ensuring adequate and efficient supply of the outputs from the factory, in accordance to the projections, in the wider market.

Planning (Long Term): They take information from every branch of the supply chain, and hence work in tandem with all of them through the National Consensus Demand Plan, National Supply Plan, and Material Requirement Plan, which amalgamates the activities of all supply chain departments onto a single platform. Hence, it ensures full-fledged alignment of activities of all supply chain departments, and coordination with all other stakeholder departments which is the basis of the national forecasts they base their planning upon. They also do the resource requirement planning, and all these plans are the product of various monthly meetings with stakeholders and compilation of numbers from large pools of data.

Planning (Short Term): The short term planning is also managed here, and that is where the main “activity integration” takes place. During the production and dispatch planning, they deal with the weekly horizon where all the plans cumulate to actions. These actions are carried out through the various other departments, and the Demand & Supply Planning department serves as a guidance for the execution departments.

Being one of the key departments contributing to operational excellence of Nestlé Bangladesh Limited, any measurement data, be it qualitative or quantitative, is unavailable for public access, as it has significant contributions to their market competitiveness.

Observations and Recommendations

Recycling & Returns: If we look at the “ideal structure” once again, it is apparent that we have not discussed one aspect of it, “Recycling & Returns”. This refers to any bad or damaged goods that are sent back in a reverse flow of the supply chain. Now, in case of returns, Nestlé’s process is quite simple as they use contract carriers for their products, who can easily carry the damaged goods pooled by distributors back to the factory. However, the frequency of returns can be minimised further as the percentage of goods that are returned are still quite high, compared to the global standard of 0.5%. (Intranet, n.d.)

Lean Practices: Since my appointment was with a wing of the procurement department, one of the key observations I have made there is that the offline approval process for procurement that is currently in place, seems to be replaceable with a paperless process as it can cut back on time consumption and reduce paper requirements, contributing to a greener operational workflow and facilitating the movement towards “Lean”, which is being taken up as a companywide initiative across all of Nestlé’s locations.

No Purchase Order Threshold: I was also privileged to work on a project that adapted the existing “Procure to Pay Guideline” to the “Source to Pay Guideline”, which proposed updated procedures in place of dated procurement practices. For instance, the exclusion of taking multiple quotations for orders below BDT 30,000 was an important inclusion, as such trivial purchases led to much hassle for the buyer in charge of sourcing for them. Also, the inclusion of detailed responsibilities for the various roles within procurement was a constructive step towards process improvement as confusions or misunderstandings were present in certain cases. Although the current procurement finance policy is that no payments are to be made via cash, or outside the SAP framework without a purchase order, it creates a cumbersome process for small purchases, especially during implementation phases of various activities. This eventually leads to bottlenecks or lags that would have otherwise not been there. Hence, it can also be suggested that a no PO threshold of BDT 10,000 can be made, through an accountable and verifiable process.

Local Raw Materials: As for Direct Materials procurement, they have recently moved to including raw material suppliers from within the country, allowing more agility in the upstream supply chain. Rice, sugar, spices, and packaging materials are completely or partially being sourced from the local market. Not only does this allow more flexibility, it also leads to high levels of cost savings for the organization.

More Distribution Centres: Further downstream, one of the key challenges is high lead times, especially for distributors located far away from the distribution centre as there is only one serving distributors across the country. Although the business volume is significantly lower than it should have been, the growth has been steadily picking up, and will soon reach new heights within the market. In addition to that, the surging consumer market that Bangladesh is, with over 2 million people joining the \$5000+ annual income group every year (Munir, Muehlstein, & Nauhbar, 2015), it is a safe option to say that the market and trade volumes, especially for companies like Nestlé, are poised to grow. Soon, it will be difficult for the current distribution centre to cope with the product volumes, which could only be managed by either expanding the current facilities or developing a new facility.

At least for now, the country can be divided into two parts and another supplementary distribution centre can be made where regular inventories can be maintained, and faster dispatch of goods can be ensured to consumers, eliminating any chance of stock shortages due to uncertain road conditions, and allowing deliveries to be made in faster timelines.

Delivery Performance Tracking: In addition to that, no delivery performance tracking exists for the Customer Service & Distribution department, and an inclusion of such a metric can help drastically by tracking company performance, and opening up new avenues of process improvement and cost minimization. Strict enforcement of KPIs with carriers can also be practised, as they are the representing faces to the distributors and should behave so as they are representations of Nestlé Bangladesh Limited.

Planning Accuracy Improvement: From the planning perspective, one performance measure that should be improved is the planning accuracy during high demand periods, or during consumer promotion campaigns, as the distributors express dissatisfaction due to the shortage or inability to provide adequate supply during such times. During promotion campaigns, demand forecasts can be made more accurate through various methods, which will allow for higher turnover and more content customers, since popular consumer promotion campaigns lead to surges in demand, which are frequently met with shortages in supply.

Conclusion

Despite being the global leader in the Food & Beverage business, the scale of operation for Nestlé Bangladesh Limited is still quite small. Local competitors operate in much higher volumes and offer wider product ranges, so they are larger organizations at the moment. However, the key to changing that is already with Nestlé as they possess strategic advantages which the competitors lack. Starting from being a leading employer brand, allowing them to hire and retain the best talents, to having access to resources and market knowledge of similar countries from around the world, Nestlé is perfectly poised in the local market to capture a high growth position as soon as it seems feasible. The work environment and the people there are collaborative, and their alignment helps them to achieve the best results across functions. While no system is perfect, the supply chain department is operating at efficiency levels that are rarely found in the local industry. Although it has multiple scopes of improvements available, it is merely a matter of time when such improvements like measuring value addition productivity across the chain are introduced. Once such steps have been taken, stopping Nestlé Bangladesh Limited from being the market leader in the food and beverage sector will have close to no probability as the shifting consumer tastes, shifting demographics, and higher consumer awareness about food safety and hygiene will propel Nestlé's presence in this market to a new era, and the supply chain function will be key in supporting that growth through ensuring high efficiency across all links of the chain.

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