Internship Report

On

“Supply Chain Management in FMCG sector of Meghna Group of Industries”

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Letter of Transmittal

May 25th 2014

Afsana Akhtar
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BRAC University

Subject: Submission of Internship Report

Dear Madam,

This is my pleasure to present my internship report entitled “Supply Chain Management in FMCG sector of Meghna Group of Industries”.

It is my pleasure to inform you that I have already finished my internship in a reputed organization in Meghna Group of Industries. It was an interesting opportunity for me. The main purpose of this report is to learn about importance of supply chain management in FMCG sector in Bangladesh. Supply chain management of FMCG sector is very complicated, because of abnormal demand at unexpected period. I have tried my best to prepare this report. This report has been prepared based on the practical experiences and different ideas obtained during working at Meghna Group of Industries.

Therefore I sincerely hope that you will appreciate my effort and I shall be grateful if my report is accepted for the appropriate purpose.

Yours Sincerely,

Md.Noor-A-kabir
Acknowledgement

At first I would like to thank my honorable internship supervisor from BRAC Business School (BBS), BRAC University, Afsana Akhtar for providing me such an opportunity to prepare an Internship Report on “Supply Chain Management in FMCG sector of Meghna Group of Industries”.

I would like to place my gratitude to A.K.M. Fazlul hoque, Sr. Executive (SCM) and Dr. Mohammad Abul Kalam, GM (SCM) of Meghna Group of Industries, enable me to complete my internship in their esteemed organization.

During my preparation of the project work I have come to very supportive touch of different individuals (respondents from Meghna Group of Industries) & friends who lend their ideas, time & caring guidance to amplify the report’s contents. I want to convey my heartiest gratitude to them for their valuable responses.
Meghna Group of Industries (MGI) is one of the largest Bangladeshi industrial conglomerates. Fast moving consumer goods (FMCG) division is one of the biggest portion revenue earner (2000 crore per year) of Meghna Group of Industries, which contributes to growth in national economy of Bangladesh. To bring efficiency and effectiveness MGI established supply chain management department in 2011. During that period supply chain management department only control distribution. From 2013 procurement, inventory, production, planning, distribution, depot management administer by supply chain management department, to minimize the cost and maximize the profit. To achieve its vision MGI gradually change their traditional system to upgrading system. Though it is quite difficult to adapt the new system among the employee, they should train them in where they are lack behind. In spite of lack behind in few areas, because of SCM they able to provide superior value to their customer. SCM department did tremendous performance during the unstable political situation. As an example for the period of hartal, strike they use rail and cargo trailer to ensure smooth delivery process and instead of day they deliver product at night to the party end from depot in 2013. Through out the Bangladesh they established 11 depots under SCM department and increase 67 % by value through increase sales order. In some cases if they able to adapt with the change in SCM, then MGI SCM will be the model for Bangladeshi FMCG Industry.
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Overview of Meghna Group of Industries

Meghna Group of Industries (MGI) is one of the biggest & leading conglomerates of Bangladesh. With a turnover of USD 2 billion & asset of USD 1 billion, MGI is currently operating in 32 companies, 30 Industries with more than 15000 employees, 3000 distributors & 1000 suppliers under its umbrella. Meghna Group of Industries has wide range of consumer goods under the umbrella brand Fresh. Fresh symbolizes freshness, purity, quality and trust. Fresh is committed to quality compliance and serving customers at affordable price.

Products under the 'Fresh' Brand are - Full Cream Milk Powder, Soyabean Oil, Mineral Water, Sugar, Flour, Spices (Chili, Turmeric, Coriander and Cumin Powder), Tea, Iodized Salt, Palm Oil, Mustard Oil, Cement and Feeds.

Brief Profile of Meghna Group of Industries

The full name: Meghna Group of Industries
Head office: Fresh Villa, House-15, Road-34, Gulshan-1, Dhaka-1212.
Industries: 30 & more to come
Business partners: 3000 plus
Suppliers: 1000 plus
Employees: 15000 (Professionals, Skilled, Semi-Skilled) and casual labours
Brands: Fresh, Super Fresh, Pure, No.1
Products: Consumer goods, Cement, Chemical, Power, Fibre, Pulp & Paper, Feeds, Steel, Real Estate, Securities and media
Export Market: India, Bhutan, Nepal, UAE, Kuwait, Singapore, Malaysia, UK, Hong Kong, Vietnam
History
The history of Meghna Group of Industries dates back to 1976 when its predecessor Kamal Trading Company was born. The groups humble debut occurred with the inception of Meghna Vegetable Oil Industries Ltd in 1989 on a small chunk of land at Meghnaghat in Narayanganj. Now, the group is running 30 Industrial units on over 350 acres of land. Meghna Group of Industries has been marketing various Fast Moving Consumer Goods (FMCG), Cement, Commodities, Chemical, Seed Crushing, Fish and Poultry feed, Power Plant, other bulk and industrial products under the brand name of ‘Fresh', ‘No.1' and ‘Pure'. Moreover, the group has Ship Building Dockyard, Shipping, Securities, General Insurance, Media, Aviation and many other businesses.

The Group has more than 35 years of national & global experience. In Bangladesh one in every three households use MGI brands and products. MGI has started to spread its footprints outside Bangladesh, especially in the Middle East, Southeast Asia, Europe, North and South America through exporting its various products.

MGI has been very aggressive in its expansion plan & emerged as the largest investor in industrial development of Bangladesh for three consecutive years I

Meghna Group's ambitious business expansion is designed and driven by a visionary yet very humble person Mr. Mostafa Kamal. Mr. Mostafa Kamal is not only a far sighted entrepreneur but also known for his patriotism, contribution towards development of industrial, health, education, sports, social welfare and various other sectors. His philanthropy, honesty, sincerity and dedication fetched the group to today's lofty achievements.

Meghna Group has already invested USD 1 Billion for setting up new lines of business and great expansion programs such as chemical complex, power, salt, seed crushing, cement and media.

Meghna Group has contributed almost 75 million US Dollars as Tax to the state exchequers in Fiscal year 2012-2013.

Corporate Vision, Mission, and Values:

Vision:
We are passionately creating sustainable economic value for our country and stakeholders by contributing to the industrial development of the nation and fundamental requirements of our consumers.

Mission:
We would like to enhance our capability in a competitive and globalizing environment delivering superior and sustainable value within next 5 years. Values:
MGI pays attention to the safety of people and products, acts pro-socially and is environmentally friendly. MGI is sensitive to cultural differences, treats social and commercial partners with respect and facilities the development of its partners.

**FMCG Products and services:**

Fresh refined sugar:

Fresh refined sugar is produced without any human interference using the most modernized process and state-of-the-art technology which guarantee its purity. Fresh refined sugar is packed in approved food graded pack with anti-wet process to maintain the cleanliness and clarity inside.

Super Fresh soyabean oil and super Pure vegetable oil:

It follows 3 steps of refining process-Perfect Degumming & Neutralization, Balanced Decolorization and Five steps Deodorization to ensure right ratio of Omega 3 & 6 and intact Beta-carotene in Soyabean Oil.

Fresh mustard oil:
Surma Mustard Oil Mills Limited produces the finest Mustard Oil and Mustard Oil Cake under the brand name of Fresh. Fresh Mustard Oil is produced from world’s finest & best quality mustard seeds and purified properly in an automatic plant. The legacy of this brand is to provide its great pungency & natural taste to the consumers. Also it connotes the heritage of our Bengali culture.

Fresh atta, Fresh maida & Fresh suji:

Fresh Atta, Fresh Maida & Fresh Suji offers the best quality and taste. The brand carefully selects best quality wheat. It uses multi step cleaning process and computerized Bhuler milling technology to keep nutritional goodness intact.

Fresh deshi mushur dal, Fresh anchor dal:

Fresh Dal offers the best quality and taste. The Lentils are majorly collected from various local sources, directly from farmers. To ensure best quality the factory uses Optical ColourSortex Z+ machine from switzerland. Fresh Dal is considered to be the best quality dal of the country.

Fresh full cream milk powder, super Pure full cream milk powder:
Fresh full cream milk powder provides the essential energy and nutrition for kid’s and adult’s intelligence, growth and strong health. Its choline helps in brain development, its protein, calcium, potassium, phosphorus aids in better growth and finally vitamin A, B, D and Zinc helps to build better immune system. These three nutrients allow your kids to become invincible.

No.1 sweetened condensed filed milk:

Tasnim Condensed Milk Limited is the largest condensed milk factory in Bangladesh with the most modern hi-tech and automatic process technology. No. 1 Sweetened Condensed Filled Milk is made in this factory by using quality milk powder, refined cane sugar, purified fat, lactose, non fat milk solids & UV treated water. No.1 Sweetened Condensed Filled Milk is homogenized, pasteurized and flash cooled to guarantee the best quality SCFM with smooth texture and complete nutrition.

Fresh super premium salt:

Fresh Super Premium Salt is produced by using the combination of Switzerland’s World Latest Technology and Vacuum Evaporation System which can remove all impurities and ensures a natural balance of all minerals like Sodium Chloride, Iodine, Calcium and Magnesium. As a
result it helps to create balanced electrolytes, activate nerve function and carries the nutrients to reach every cell within our body. Its balanced Iodine also helps to promote brain development and improve immune system.

Super Fresh drinking water, No.1 drinking water:

Super Fresh Drinking Water is popular and the market leader among the drinking water brands in Bangladesh. It is clear, transparent, free from microorganisms and refined in seven stage of purification process as De-Iron, Pre-Ozone, De-Odor, Softening, Reverse Osmosis, Ultraviolet Treatment and Ozonation. Hygiene practice is maintained in every step of our refining process. So, Super Fresh Drinking Water is safest, reenergizing, refreshing, trendy and suitable for human body. In February, 2013, a new brand of water "No.1 Drinking Water" also was introduced to the market to cater the popular segment

Fresh premium tea, Fresh danedar tea, Fresh dust tea, No-1 leaf tea, No-1 strong tea:

Fresh tea is the best Tea blend of the country with the best raw tea carefully chosen from the best gardens of Bangladesh. Fresh tea has great strength, mouth fullness & taste. Along with bright liquor, attractive colour and natural flavour it gives the best Freshness.
Fresh spice:

To spice up our daily life with good taste and add a healthy punch to all our breakfast, lunch and dinner; Spices have become essential. With latest grinding technology and a modern, hygienic manufacturing process, Fresh spices has been able to create a strong foothold in consumer mind. For its obsession with quality management, spices with international standards are also being exported to several countries.

Corporate social responsibilities (CSR):

The founder of Meghna Group of Industries, Mr. Mostafa Kamal who himself started his voyage with a quest for doing something for the people and the country is involved himself with different sectors. Corporate Social Responsibility is thus the ultimate form of corporate self-regulation integrated into MGI business model. MGI is equally concerned with the welfare of its employees. Few of his contributions are:

Industrial park of MGI:

Industrial park of MGI located at factory complex, Meghna ghat, Naryanganj. The objective of industrial park of MGI is not only for industrial development, but also to keep environment pollution free. Because of industrial park employee and worker get healthy working environment.

Education:

MGI care for education and contribute to educate people in Bangladesh by establishing school and college. Mostafa kamal, he is the founder and chairman of Al-Haj Noor Miah Degree College, Mostafa Kamal High School, Al-Haj Ayesha Noor Welfare Foundation etc in chauddagram.
Relief and rehabilitation:

Assistance to 5 flood affected districts in 2007. Donate to the Honorable Chief Adviser's Relief Fund for Sidor victim in 2007 and constructed 44 low-cost houses for poor, homeless, distress people in local areas.

Games and sports:


**SWOT analysis:**

**Strength:**

"National Export Trophy" (Gold Medal) Award for 2010-11 FY for outstanding performance in export trade.

"Best Brand Award Bangladesh" 2013 organized by Bangladesh Brand Forum in association with Millward Brown.
Conferred three award in "Best Brand Award Bangladesh" 2013 organized by Bangladesh Brand Forum in association with Millward Brown. Super Fresh Drinking Water secured 2nd position in the category of Bottled Drinking Water. Fresh Atta, Maida, Suji secured 2nd position in the category of Atta, Maida, Suji. Fresh Soyabean Oil achieved 3rd position among all local brands across all categories.


Weakness:

MGI has some limitations to run its operations. Most of the employee and worker of factory are not used to with ERP system. But in MGI FMCG sector it is very much essential to know how to use ERP to keep information up to date. So in this case to collect information sometimes need to use manual system, which causes information gap. In FMCG sector should use pull marketing strategy, but in MGI still they are mostly dependent on push strategy. HR policy of MGI is not so much strong, which causes dissatisfaction among employee and as a result employee turnover is high.

Threats:

Other competitor like Abul khaier group, City group, Edible Oil etc they are big threats for MGI industry. Those industries create tough competition for MGI industry. Inflation and political instability causes so many problems, like inflation raise the price of raw materials and instable political situation causes hamper in delivery process, planning process etc.

Opportunities:

There is a huge opportunity for MGI Industry. It has huge capital and resources to become multinational company. But in this case it has to change its position gradually and need to proper utilization of its resources.

Job Description:

In my 16 week work experience I go through different responsibilities, training, one to one conversation to know each persons responsibility and team meeting etc.
First two weeks of my job I go through different types of training and during this session I learn corporate culture of MGI industry, different rules and regulations, values etc. Next 3 weeks I assign with my senior colleague and learn how to use ERP system, preparing different kinds of notes, rebate bill etc.

From the sixth week I assigned with specific tasks like D.O creation and handle Sylhet depot. Gradually my responsibility increased and I learn how to handle work pressure. Sometimes in absence of other employees I did their tasks beside my own responsibilities. It helps me to learn other people's tasks.

**Specific responsibilities and activities:**

- Manage, organize & update relevant data using Advanced ERP (Software) to create customer & Sales Order sheet for Product Line B (Oil).

- Create financial & statistical reports, documents, proposing for credit limit and keep liaison with the accounts department, analyze and interpret other data and produce reports.

- Coordinate with assigned depot for their daily operation as like order sheet approval and credit limit settled with the assist of accounts department.

- Prepare daily delivery report of edible oil supplied to distributor for Tariff Commission of Bangladesh (TCB).

- DO (Delivery Order) and TO (Transfer Order) creation through ERP software based on sales demand for smooth delivery operation.

- Prepare all kind of notes i.e. DO cancel note, Rate adjustment, Rebate bill etc.

- Work closely with Sales Management, Finance & IS to ensure robust Sales Order Management process is implemented across entire Supply Chain.

- Monitor delivery & undelivered status of products (Product line – B) with regular liaison with production & other supply chain colleagues.

- Perform any other assigned jobs related to Supply Chain operation

- Support on strategic decision by collecting and providing relevant information to retain old customers and attract new customers to fulfill increasing customers demand and gain competitive advantage over rivals.

- Resolve various depot related complex issues to enhance performance of the Organization in FMCG sector.
Co-ordinate Deputy Manager in report preparation on inventory analysis of FMCG division.

Assure & follow up the practice of MGI Values & Behaviors.

Observations and recommendations:
After working with SCM department of MGI my observations are:

- Adequate training for employee
- Salary structure and government holiday
- Employee safety
- Good HR policy

SCM concept is new for Bangladeshi industry, so most of the employee does not have proper knowledge about SCM but still they are working in this department. Adequate training on SCM is very much essential for the Industry because Company can swim or sink with SCM. There is no standard salary structure in MGI industry, so some employee get very poor salary compare to other. It should be structured to motivate employee. During most of the government holiday employee has to do their office and they do not get any extra benefit. If company need to open during holiday they should provide proper compensation. In MGI industry in FMCG division at Uttara, they do not have enough fire extinguishers and elevator which is used is not fit for commercial usage which causes employee safety. They should practice good HR policy for their future growth.

Description of the project:
A supply chain is a network of facilities and distribution options that performs the functions of procurement of materials, transformation of these materials into intermediate and finished products, and the distribution of these finished products to customers. Supply chains exist in both service and manufacturing organizations, although the complexity of the chain may vary greatly from industry to industry and firm to firm.

Traditionally, marketing, distribution, planning, manufacturing, and the purchasing organizations along the supply chain operated independently. These organizations have their own objectives and these are often conflicting. Marketing's objective of high customer service and maximum sales conflict with manufacturing and distribution goals. Many manufacturing operations are designed to maximize throughput and lower costs with little consideration for the impact on inventory levels and distribution capabilities. Purchasing contracts are often negotiated with very little information beyond historical buying patterns. The result of these factors is that there is not a single, integrated plan for the organization---there were as many plans as businesses. Clearly, there is a need for a mechanism through which these different functions can be integrated together. Supply chain management is a strategy through which such integration can be achieved.

Supply chain management consists of developing a strategy to organize, control, and motivate the resources involved in the flow of services and materials within the supply chain. A supply chain strategy, an essential aspect of supply chain management, seeks to design a firm’s supply chain to meet the competitive priorities of the firm’s operations strategy. Supply chain management encompasses the planning and management of all activities involved in sourcing,
procurement, conversion, and all logistics management. Importantly, it also includes coordination and collaboration with channel partners. Here the channel partners can be suppliers, intermediaries, third-party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies.

According to William J. Stevenson “A supply chain is the sequence of organizations – their facilities, functions, and activities – that are involved in producing and delivering a product of service. The sequence begins with basic suppliers of raw materials and extends all the way to the final customer. Facilities include warehouses, factories, processing centers, distribution centers, retail outlets, and offices.”

According to Mentzer and other “Supply chain management is defined as the systematic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole.”

According to Krajewski, Ritzman, and Malhotra “Supply chain management consists of developing a strategy to organize, control, and motivate the resources involved in the flow of services and materials within the supply chain. A supply chain strategy, an essential aspect of supply chain management, seeks to design a firm’s supply chain to meet the competitive priorities of the firm’s operations strategy.”

THE NEED FOR SUPPLY CHAIN MANAGEMENT

In the past, most organizations did little to manage their supply chains. Instead, they tended to concentrate on their own operations and on their immediate suppliers. However, a number of factors make it desirable for business organizations to actively manage their supply chains.

The major factors are
The need to improve operations
- Increasing levels of outsourcing
- Increasing transportation costs
- Competitive pressures
- Increasing globalization
- Increasing importance of e-commerce
- The complexity of supply chains
- The need to manage inventories

**ELEMENTS OF SUPPLY CHAIN MANAGEMENT**

Supply chain management involves coordinating activities across the supply chain. Central to this is taking customer demand and translating it into corresponding activities at each level of the supply chain. The key elements of supply chain management are listed in the following table.

<table>
<thead>
<tr>
<th>Element</th>
<th>Typical Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers</td>
<td>Determining what products and/or services customers want.</td>
</tr>
<tr>
<td>Forecasting</td>
<td>Predicting the quantity and timing of customer demand.</td>
</tr>
<tr>
<td>Design</td>
<td>Incorporating customers, wants, manufacturability, and time to</td>
</tr>
</tbody>
</table>
### Capacity Planning
- Matching supply and demand.

### Processing
- Controlling quality, scheduling work.

### Inventory
- Meeting demand requirements while managing the costs of holding inventory.

### Purchasing
- Evaluating potential suppliers, supporting the needs of operations on purchased goods and services.

### Suppliers
- Monitoring suppliers’ quality, on-time delivery, and flexibility, maintaining supplier relations.

### Location
- Determining the location of facilities.

### Logistics
- Deciding how to best move information and materials.

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**SUPPLY CHAIN MANAGEMENT MODEL**

The supply chain management model in Figure 1-1 viewed as a pipeline shows the scope of this definition. It is important to note that supply chain management is about the coordination of product flows across functions and across companies to achieve competitive advantage and profitability for the individual companies in the supply chain and the supply chain members collectively.
Three major processes related to supply chains are customer relationship, order fulfillment, and supplier relationship. It is important to monitor the performance these internal processes as well.
as the entire supply chain itself. Supply chain managers monitor performance by measuring costs, time and quality. Following table contains examples of operating measures for the three processes.

Supply chain process measures:

<table>
<thead>
<tr>
<th>Customer Relationship</th>
<th>Order Fulfillment</th>
<th>Supplier Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Percent of orders taken accurately.</td>
<td>1. Percent of incomplete orders shipped.</td>
<td>1. Percent of suppliers deliveries on time</td>
</tr>
<tr>
<td>2. Time to complete the order placement process</td>
<td>2. Percent of orders shipped on time</td>
<td>2. Suppliers lead times</td>
</tr>
<tr>
<td>3. Customer satisfaction with the order placement process</td>
<td>3. Time to fulfill the order</td>
<td>3. Percent defects in services and purchased materials</td>
</tr>
<tr>
<td></td>
<td>4. Percent of botched services of returned items</td>
<td>4. Inventory levels of suppliers and purchased components</td>
</tr>
<tr>
<td></td>
<td>5. Cost to produce the service of item</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Customer satisfaction with the order fulfillment process</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Inventory levels of work-in-process and finished goods</td>
<td></td>
</tr>
</tbody>
</table>

SUCCESSFUL SUPPLY CHAIN MANAGEMENT: REQUIRED STEPS

Integrating information is the first step in supply chain management. You must then analyze this information to determine which actions to take within the context of automated business
processes. Furthermore, to be most effective this information should automatically trigger a corresponding product transition. The tight coupling of execution and decision-making is an essential ingredient to effective supply chain management.

Today's information technologies remove communication barriers, enabling an improved flow of information among all members of the supply chain. Early adopters of these technologies have intensified the competitive marketplace in which all businesses must now operate.

The most successful companies realize they need a step-by-step approach to chart a business's course toward high-performance supply chain management. Those steps include:

- Achieving execution excellence by fully automating and optimizing business practices.
- Extending the enterprise to embrace all members of the supply chain.
- Integrating business systems with those of customers, suppliers, and partners to create a common information foundation.
- Deploying real-time decision support to increase responsiveness.
- Investing in re-educating and re-orienting employees, vendors, and other members of the supply chain on the practices needed to optimize business processes.
- Making a company-wide commitment to creating and managing a more complex organization capable of tackling global business issues.
Effective coordination and trust based relationship among partners is the key to supply chain success. To achieve strong bond resulting from effective coordination, supply chain professionals should focus on the following:

➢ Obtain top management commitment to coordinate with supply chain partners

➢ Devote resources for coordination

➢ Align incentives and goals for all partners

➢ Improve productivity by reducing duplication or through effective efforts at appropriate stages

➢ Design effective conflict resolution mechanisms

➢ Focus on effective communication at all stages in supply chain

➢ Use technology to improve connectivity in supply chain

➢ Share the benefits of coordination equitably among the partners

Present Key Activities of MGI SCM Department

Procurement
Raw materials and packaging materials inventory purpose continuously coordinate with local and foreign trade department.

As per product requirements based on market demand, analysis has been accomplished to find out exact quantity within the right time of raw materials and packaging materials. This analysis report submitted to the top level management.

After getting the approval from management, based on requirements advised to raise SPR.

**Inventory**

Accomplished real time visibility into demand, supply, costs and fulfillment measures and trends.

Manage margins with a clear view into inventory costs, turn rates and inventory profitability

Effectively and efficiently meet customer demand, helping drive and maintain superior customer service levels.

**Production**

Based on forecast production plan provide to the factory and meet demand from the stock.

Ability to maintain low but sufficient covers stock to counter the challenge of market demand.

**Planning**

Strategy for managing all resources that goes toward meeting customer demand for their product & services.

Utilize resources at optimum level to achieve efficiency through inventory and production planning.

Distribution planning to improve utilization levels of transportation.

Depot management has done in a planned way to achieve efficiency and effectiveness.

Optimize collaboration with suppliers, customers and partners.

Increase transparency and reaction capabilities in the value creation chain.

**Order processing & Distribution**
5.1 Co-ordinate with receipt order from customer, take immediate steps for approval & make DO for fast delivery.

5.2 Organize transport program, so that it is different in cost & service

5.3 Use third party transport as well as own vehicle to distribute the product

5.4 Abnormal situation like strike, hartal we use rail and cargo trailer to ensure smooth delivery process

5.5 Developed cost effective distribution and kept undelivered in minimum status

5.6 Instant decision has done to revised transport rate during the hartal to agree third party for smooth delivery, that’s reduced use of company vehicle.

5.7 Transport optimization through analysis of data.

**Flow Chart of MGI SCM**

```
Sourcing/Procurement  | Inventory  | Manufacturing/Production | Distribution/Transportation
```

**Depot mgt.**

1. Company owns 56-nos covered vehicle in total in depot for their daily distribution operation.
2. As per critical moment logistic support given to depot when required.
3. Third party transport contract and negotiation of rate has been done
4. Inauguration new depot in Tongi and Jessore.
5. Achieve efficiency and cost effective operation of depot.
6. Damage return from depot.
7. Depot productivity increase (67 % by value) through increase sales order at depot and delivery support. **Annexure-05**
8. Small amount sales order taken from depot and distributed from there to minimize the transport cost and leading time.

**Others**

Cross functional work with Accounts, Sales and Brand department for smooth business operation.
Support on strategic decision by collecting and providing relevant information to retain old customer and gain competitive advantage over rivals.

<table>
<thead>
<tr>
<th>MGI SCM Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure quality service, Profit maximization, Cost minimization</td>
</tr>
</tbody>
</table>

**KPIs of SCM**

**Brand:** Tasnim condensed Milk Ltd (No.1 Condensed).

**Product:** Finished Goods.

<table>
<thead>
<tr>
<th>KPIs</th>
<th>Sep-2013</th>
<th>Oct-2013</th>
<th>Target</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inventory Turnover</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qty (ctn)</td>
<td>2.67</td>
<td>2.09</td>
<td></td>
<td>To Increase Inventory turnover</td>
</tr>
<tr>
<td>Value</td>
<td>3.27</td>
<td>2.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Perfect Order Rate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qty (ctn)</td>
<td>0.0021 (0.2%)</td>
<td>0.0017 (0.17%)</td>
<td></td>
<td>To achieve better performance by reducing error.</td>
</tr>
<tr>
<td>Value</td>
<td>0.0021 (0.2%)</td>
<td>0.0017 (0.17%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inventory to sales ratio</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td>0.36 (36%)</td>
<td>0.41 (41%)</td>
<td></td>
<td>To increase Inventory to Sales Ratio</td>
</tr>
<tr>
<td><strong>Rate of Return</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qty (ctn)</td>
<td>0</td>
<td>0.00179</td>
<td></td>
<td>To reduce rate of return</td>
</tr>
<tr>
<td>Value</td>
<td>0</td>
<td>0.00181</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Inventory Turnover**

This is one of the most important supply chain KPIs for our organization to monitor. This KPI provides a barometer for the health of our organization because it shows how quickly we are able to move inventory. To formulate this KPI, calculate the cost of inventory sold during the period and divide the balance left over at the end of the year. A high inventory turnover rate is preferred, although it is important to compare our turnover rate to other organizations within the same industry.

**Objective: To increase inventory turnover**

Formula: \( \frac{Sales}{(Opening\ stock + Closing\ stock)/2} \)  
(In here greater value indicates better)

### September, 2013

Quantity: \( \frac{116055}{(36082 + 50784)/2} = 2.67 \)

Value: \( \frac{280709111}{(70070036 + 101129005)/2} = 3.27 \)

### October, 2013

Quantity: \( \frac{111178}{(50784 + 55408)/2} = 2.09 \)

Value: \( \frac{268456366}{(101129005 + 110703078)/2} = 2.53 \)
Perfect Order Rate

This inventory KPI is closely related to customer satisfaction as it measures our ability to put together a "perfect" order. This means shipping without damage, delivering the shipment on time, invoicing the order correctly, and ensuring the accuracy of the order. This metric will tell us a lot about the efficiency of our warehouse and the ability of our organization to meet (and exceed) customer expectations. Understanding this supply chain KPI is essential for gauging the efficiency and effectiveness of our organization.

Objective: To achieve better performance by reducing error

Formula $= \frac{Cancel\ D.O}{Total\ Customer\ Order}$ (In here lesser value indicates better)

<table>
<thead>
<tr>
<th></th>
<th>September, 2013</th>
<th>October, 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity (ctn)</td>
<td>$\frac{250}{118556} = .002$ (.2%)</td>
<td>$\frac{215}{121202} = .0017$</td>
</tr>
<tr>
<td>Value</td>
<td>$\frac{607100}{286764328} = .0021$ (.21%)</td>
<td>$\frac{520260}{292636930} = .0017$</td>
</tr>
</tbody>
</table>

![Graph showing Perfect Order Rate comparison between September and October 2013.](chart.png)
**Inventory to sales ratio**

This inventory KPI measures the ratio of in-stock items versus the amount of sales orders we are filling. Inventory to sales is a good barometer for the performance of our organization, providing us with a strong indicator of the economy. The challenge with this supply chain KPI is identifying a ratio that reflects our goals and industry norms.

**Objective: To maintain stability with regards to prevailing economic conditions.**

\[
\text{Formula= } \frac{\text{Total inventory value}}{\text{Total sales value}} \quad \text{(In here greater value indicates better)}
\]

<table>
<thead>
<tr>
<th></th>
<th>September, 2013</th>
<th></th>
<th>October, 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>(\frac{101129005}{280709111} = .36) (36%)</td>
<td>(\frac{110703078}{268456366} = .41) (41%)</td>
<td></td>
</tr>
</tbody>
</table>

**Rate of Return**

This supply chain metric looks at the rate that items are returned to us after they have been shipped. The key to this metric is providing a breakdown for the reasons why items are returned, so we can identify trends and reduce our rate of return ratio. The example below provides a chart that compares reasons for returning items, but this inventory metric also gives well with the perfect order rate KPI

**Objective: To reduce rate of return**

\[
\text{Formula= } \frac{\text{Total items Return}}{\text{Total items shipped}} \quad \text{(In here lesser value indicates better)}
\]
**September, 2013**

\[
    \text{Quantity (ctn)} = \frac{0}{116055} = 0
\]

**October, 2013**

\[
    \frac{2}{111178} = 0.00179
\]

\[
    \text{Value} = \frac{0}{28079111} = 0
\]

\[
    \frac{4864}{268456366} = 0.00181
\]

**Limitations and constraints**

**Back order rate**

There is no status of D.O report and challan report based on hour, at ERP. This report is necessary to calculate back order rate. Moreover, if there is an option at ERP to write the **reason** why the product is undelivered, which will be helpful to illustrate and take essential steps against delay.
**Inventory Accuracy**

To count number of items physically, is not possible for us where inventory is located in factory and depot. It will be more effective if physical quantity recorded at ERP by hour/days. So this option should be developed at ERP.

**Order Status**

To calculate order status, we need information of qty of order placed vs qty of D.O confirm status vs qty of challan (shipment) status etc in one report which is not available at ERP. It should be developed at ERP which will provide accurate direction for taking further steps.

**Carrying cost of inventory**

We do not get any information which is related with carrying cost, through ERP. So everything which is related with carrying cost of inventory should be developed at ERP.

**WAYS TO POPULARIZE THE CONCEPT OF SUPPLY CHAIN IN BANGLADESH**

Developing appropriate concept is a crucial starting move for businesses in Bangladesh. More Knowledge sharing, understanding the tools and techniques of successful implementation of SCM and transferring best practices should become top agendas for all professional Organizations, including consultants, training institutes, education providers such as universities, NGOs and donor organizations. This is perhaps the high time that the government heavily encourages and invites local and foreign assistance in implementing SCM as compliance in every business. Business organizations that are yet to implement SCM should at least start arranging dialogue with capable individuals and organizations that could help them demonstrate the benefits of SCM.
**Conclusion:**
Supply chain is basically a group of independent organizations connected together through the products and services that they separately or jointly add value on in order to deliver them to the end consumer. It is very much an extended concept of organizations which adds value to its products or services and delivers them to its customers. There are many methods in implementing SCM that can help the manufacturing companies operate their SCM efficiently. Besides that, good planning, strategy, infrastructure and management teams are necessary to improve the efficiency of SCM implementation and achieve the competitive advantages. From this report it is clear that Meghna Group of Industries performance could be improved through effectively implements SCM and reduce the problems that occurred in the SCM implementation.

**Recommendation:**
Supply chain management in Meghna Group of Industries should be approached in a more systematic manner based on integrated and documented processes. The various supply chain components like suppliers, manufacturers, warehouses and stores should be integrated in a single system, which makes supply chain management more effective. The team involved in the operational side on handling the supply chain should be highly trained in supply chain management function.
Figure: Tea Stock Status
Figure: Forecast for Production
মেসার্স ইউনুস টি হাউজ
M/S. YOUNUS TEA HOUSE

<table>
<thead>
<tr>
<th>প্রোডাক্ট</th>
<th>প্রাক্কর্ত</th>
<th>পর্যায়</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.49 F</td>
<td>70.00</td>
<td></td>
</tr>
<tr>
<td>2.49 F</td>
<td>20.00</td>
<td></td>
</tr>
<tr>
<td>2.69 F</td>
<td>80.00</td>
<td></td>
</tr>
<tr>
<td>2.09 F</td>
<td>20.00</td>
<td></td>
</tr>
<tr>
<td>2.09 F</td>
<td>20.00</td>
<td></td>
</tr>
<tr>
<td>2.99 F</td>
<td>20.00</td>
<td></td>
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<tr>
<td>2.99 F</td>
<td>20.00</td>
<td></td>
</tr>
<tr>
<td>2.09 F</td>
<td>20.00</td>
<td></td>
</tr>
<tr>
<td>2.09 F</td>
<td>20.00</td>
<td></td>
</tr>
</tbody>
</table>

মোট মূল্য: 6335

Figure: Customer Order Copy
**Daily Statement of Edible Oil Supplied to Distributors**

Brand Name: Super Fresh Soyaabean Oil

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Distributors</th>
<th>Area</th>
<th>Total Quantity (Kg)</th>
<th>Price of Edible Oil per Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>D. R. S. ENTERPRISE - HOSSAINA</td>
<td>HOSSAI</td>
<td>6000</td>
<td>120</td>
</tr>
<tr>
<td>2</td>
<td>S. S. ENTERPRISE - PAMIGATE</td>
<td>DACCABAGI POLICE LINK, DHAKA</td>
<td>8000</td>
<td>120</td>
</tr>
<tr>
<td>3</td>
<td>KHAN ENTERPRISE - DHAKA</td>
<td>DHAKA</td>
<td>7400</td>
<td>120</td>
</tr>
<tr>
<td>4</td>
<td>ANWAR ENTERPRISE - BARI</td>
<td>BARI</td>
<td>6500</td>
<td>120</td>
</tr>
<tr>
<td>5</td>
<td>R. K. ENTERPRISE - BEG</td>
<td>BEG</td>
<td>6500</td>
<td>120</td>
</tr>
<tr>
<td>6</td>
<td>NOOR ENTERPRISE - HAT</td>
<td>HAT</td>
<td>1300</td>
<td>120</td>
</tr>
<tr>
<td>7</td>
<td>NOOR ENTERPRISE - SUN</td>
<td>SUN</td>
<td>4000</td>
<td>120</td>
</tr>
<tr>
<td>8</td>
<td>IQBAL ENTERPRISE - KULSOOM</td>
<td>KULSOOM</td>
<td>2000</td>
<td>120</td>
</tr>
<tr>
<td>9</td>
<td>IQBAL ENTERPRISE - BEG</td>
<td>BEG</td>
<td>2000</td>
<td>120</td>
</tr>
<tr>
<td>10</td>
<td>IQBAL ENTERPRISE - KULSOOM</td>
<td>KULSOOM</td>
<td>8000</td>
<td>120</td>
</tr>
<tr>
<td>11</td>
<td>IQBAL ENTERPRISE - KULSOOM</td>
<td>KULSOOM</td>
<td>8000</td>
<td>120</td>
</tr>
<tr>
<td>12</td>
<td>IQBAL ENTERPRISE - KULSOOM</td>
<td>KULSOOM</td>
<td>6200</td>
<td>120</td>
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<tr>
<td>13</td>
<td>IQBAL ENTERPRISE - KULSOOM</td>
<td>KULSOOM</td>
<td>6200</td>
<td>120</td>
</tr>
<tr>
<td>14</td>
<td>IQBAL ENTERPRISE - KULSOOM</td>
<td>KULSOOM</td>
<td>7000</td>
<td>120</td>
</tr>
<tr>
<td>15</td>
<td>IQBAL ENTERPRISE - KULSOOM</td>
<td>KULSOOM</td>
<td>5900</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td><strong>85674</strong></td>
<td></td>
</tr>
</tbody>
</table>

N.B: Conversion rate 1 (Kg) = 50 (Kg)

---

**Figure:** Delivery Statement
References:

1. http://scm.ncsu.edu/scm-articles/article/what-is-supply-chain-management
3. Operation Management – Processes and Value chain, by Krajewski, Lee Ritzman, and Manoj Malhotra