Final Year Project – MBA 1.5 (Supply Chain Management)

Evaluation of Bestway Cement's Supply Chain Network

Supervisor
Mr. Ahmed Hashmi

This research project is submitted in partial fulfillment of the requirements for the Degree of M.B.A

Submitted By

Hassan Faisal
(01-221152-021)

Fahad Ali
(01-221152-015)

Basim Ali
(01-221152-011)

Department of Management Sciences
Bahria University, Islamabad

Acknowledgement

We have taken much effort in this project. However it would not be possible without the kind support and help of many individuals at Bestway Cement ltd. We would like to extend our sincere thanks to all of them.

We are highly indebted to Mr. Nasir Butt for his guidance, as well as for providing information regarding the project and also their support in completing this project report. Also, we are thankful to our supervisor Mr. Ahmed Hashmi for supervising us, providing us with the materials which were very much helpful in our project and his guidance and experience.

Our thanks and appreciation also goes to our colleagues in developing the project and people who have willingly helped us with their abilities from the Bestway Cement ltd, university and our friends and acquaintances.

Abstract

Bestway Cement Ltd. Is a cement manufacturer company with 4 operational manufacturing plants on hand located in Hattar and Chakwal. Being the second largest cement producer in Pakistan and the largest exporter of cement in Pakistan, Bestway Cement maintains a large supply chain network in order to support its operations in the most effective and efficient manner. Bestway Cement ltd. is using specialized teams to handle different activities and operations that come under their supply chain network.

Working with Bestway Cement ltd. provided us an impressive opportunity to understand and apply our concepts in the practical field. Our main focus in this study was to evaluate Bestway cement's current supply chain practices and to study their on-going projects. After in-detail evaluation of the network, we provided and recommended solutions that are to improve their current practices and improve their efficiency and effectiveness by saving cost and time. By evaluating the network, we were able to find gaps which could use improvement.

After detailed meetings and understands of Bestway Cement operations, we have come up with certain recommendations which could improve their current on-going projects which are been carried out by the logistics team. We recommended solutions to fully utilize the potential from their on-going projects that are Fleet Cards and Pakistan Railway Transport. Along with recommendations improving the on-going projects, we have recommended Bestway Cement ltd. to adopt the state of the art ERP system SAP in order improve their information flow across the company for more effectiveness and efficiency.

Contents

Introduction:

Bestway cement limited started its business in 1980's and is part of Bestway group of United Kingdom. The founder of the business is Sir Mohammed Anwar Pervez whose vision and passion translated into unique and successful group of companies spread worldwide. Bestway Group achieved a leadership position in the market with the help of hardworking, committed and professional management and staff together with loyal customers and suppliers.

Bestway group has a range of products and services in its portfolio including cement manufacturing, global banking, cash & carry business, retail outlets, real estate investment, food and beverage, import and distribution of rice. Further diversifying its operations they recently entered into huge power generation project in Pakistan.

Over the past three decades Bestway group proved itself as a dynamic enterprise and achieved remarkable success and became amongst one of the top 10 privately owned enterprise of United Kingdom. They are 2nd largest cash & carry of United Kingdom in terms of turnover and they are 2nd largest cement producer in Pakistan. Bestway group is joint owner of United Bank Limited(UBL), third largest bank of Pakistan. They also own one of the largest rice milling facilities in Pakistan. Bestway is the largest overseas Pakistani investor with more than 1 billion US Dollars investments and workforce of more than 22,000 people spread around the globe.

Bestway decided to set its first cement plant in Pakistan 1992 and faced a lot of challenges due to lack of credibility and track record in Pakistan. The local economy was not stable and supportive characterized by high inflation rates, high interest and low liquidity. The political conditions of the country were also not very stable but due to its managerial effectiveness and technical strengths they were able to successfully manage manufacturing facilities and achieve market dominance. During economic recession in 1990's which badly affected the profitability of the industry they were able to make profits even at 60 percent capacity utilization. They invested heavily in local cement industry and in just over one decade there production capacity was more than 6 million ton per year making them 2nd largest cement producer of Pakistan.

Vision:

The vision of Bestway cement is to produce high quality product at lowest possible cost.

Aims and objectives

- Produce high quality cement.
- To become lowest cost producer.
- Gain 25 percent of shares in North zone in short term.
- Become largest cement producer of Pakistan.
- Maintain its market leadership position.
- Maintain high level of customer service.
- Invest in corporate social responsibility.
- Invest in research and development.
- Invest in employees training and development.

Products:

- Simple Portland cement
- Sulphat resistant cement
- Fast setting cement
- Low Alkali ordinary Portland cement
- Clinker

These products are supplied in standard packs or in bulk according to the requirements of the customers.

CORPORATE PROFILE

BestwayHattar

In 1994 work began on the cement plant in the low developed region of Hattar, Haripur inside the Khyber Pakhtunkhwa province, Pakistan. This turned into an initial funding of US $120 million. The contract for the supply of fundamental plant signed with Mitsubishi Co. employer of Japan in June 1995. The suppliers has given sub contracts for few of the components to other worldwide producers, i.e the crushers to FAM of Germany, Cement mill to Fuller of America and electric and instrumentation to ABB of Switzerland and Siemens of Germany. Works started in the first month of 1996 and the Kiln fired up in April 1998, which is a record in itself.

Plant Conversion to Gas

Initially the production at Bestway Cement was being carried out using furnace oil as gasoline. The management's proactive anticipation of an addition hike in oil costs lead to change of its plant to perform on natural gasoline. This was the first steps in achieving a price efficient production method and in the long run the manufacturing was converted to coal with an investment of approximately US$10 million.

Plant Conversion to Coal

The coal conversion machinery was procured from IPPR Engineering of China while the fabrication and erection paintings were done domestically. The entire assignment was supervised by highly skilled Chinese engineers along with Bestways own engineers. The whole task was completed in a record time of 10 months. Bestway has also established its own coal testing and analysis laboratory, which is equipped with the updated gadget to make sure that they use simply the best coal to prevent undesired operational and environmental results. Conversion to gasoline and then to coal has appreciably reduced the production cost, which constituted up to approximately 65% of the whole production cost.

Capacity Enhancement

Bestway's highly active management has always kept them ahead from their competitors. The strategic choices and timely decisions of the management have enabled the organization to keep its shares in the market around 8% and its position in the market as a lead exporter.

The initial capability or capacity of hattar plant was 1.0 million tonnes per year. With an investment of US $20 million in year 2002 the capacity of the plant was increased to 1.15 million tonnes per year to satisfy the ever increasing demand for excellent quality cement.

The proactive management's insight for the growing industry and demand for the cement and the potential for exports, they decided to further upgrade the plant's capacity in 2004. The plant's potential was upgraded to at least 1.25 million tonnes of clinker production.

Listing on KSE

Regardless of all the demanding situations the cement plant, from the start of its operations in October 1998, has been generating superb cash flows. In February 2001 Bestway Cement was listed on the Karachi stock exchange after which its market capitalization has grown by 850% making Bestway Cement certainly one of the leading groups by means of market capitalization. Bestway Cement Hattar maintains to play a key function in the economy of Pakistan. Bestway is providing employment to over 600 people directly with an additional 1,500 jobs being created in the transportation of cement from the plant. Due to its strict rules Bestway has been one of the most profitable company in the industry.

Exports

The company continues to maintain its repute as a market leader due to superior product quality, powerful marketing, purchaser focus and employees determination. Before the start of Chakwal-I and Mustehkam Cement, Bestway enjoyed more than 8% of the market share of the local market. After the success introduction of its logo in Afghanistan, India, Africa Middle East has made Bestway one of the largest cement exporters of Pakistan.

Bestway Cement Chakwal-1

Bestway group took a decision after owning the growth in market demand in February 2004 to setup a new plant near Village Tatral of District Chakwal, Punjab Province, Pakistan. the capacity of this plant was 1.8 million tonnes per year. The cost of the project was 140 million US dollars and was the group's 2nd Greenfield development project.

The land acquisition for the site started in June 2004 and civil constructions started in January 2005. The plant specifications had been designed by the company's own engineers who have chosen the best equipment's available. The raw mill and coal-mill was provided by Loesche, fans by Venti, gear boxes by Flender, switch gear by ABB, Bucket Elevators via Aumund, motors, Motor management system and Automation through Siemens of Germany.

Prime minister of Pakistan Mr. ShaukatAzeezhave done the ground breaking ceremony of the plant In April 2005. Civil works for BestwayChakwal have been initiated in January 2005, the Kiln was fired in May 2006 and the plant started manufacturing in June 2006 which is an industry record.

Bestway Cement Chakwal-I has brought about more than 2000 jobs directly and indirectly, injecting a new life in one of the most economically dispossessed parts of Pakistan.

Mustehkam Cement

To further increase its presence in the cement industry, Bestway was determined to bid for 85.29% of equity of Mustehkam Cement a 0.6 million tonnes per year plant, following an offer by the Privatization commission, authorities of Pakistan. The business bid of approximately US$70.0 million became accepted in September 2005. Mustehkam's plant was located near its present operations in Hattar, District Haripur, and Khyber Pakhtunkhwa.

Capacity Enhancement and Modernization

Mustehkam Cement has an excellent past with the organization winning overall performance awards from the local stock exchanges. Through high investments in increasing capacity and plant up gradation Bestway seeks to return past glory to Mustehkam Cement.

Bestway has focused upon the upgradation and modernization of Mustehkam. In the preliminary phase, one of the process lines at Mustehkam is being upgraded to an ability of 0.9 million tonnes annually at an expected of dollars 50 million. This enhancement is being carried out mainly with the assistance of FL Smidth and will take the overall production capability at Mustehkam to above 1.2 million tonnes per year of clinker. Already planning to upgrade and enhance the remaining production lines also

Bestway Cement Chakwal-II

In May also 2006 the company introduced plans for the establishment of a 2nd 1.8 million tonnes per year capacity plant adjoining to the current operations in Chakwal at a cost of $180.0 million. This will be Bestway's 3rd Greenfield cement plant in Pakistan. This will be an equal plant to the prevailing Line-1, having 1.8 million tonnes capability.

At the end of the first quarter of 2008, by these investments, the group's cement production ability is set to exceed 6.0 million tonnes annually, making Bestway the second largest cement manufacturer in the Pakistan.

Acquisition of Lafarge cement

In 2014 Bestway Cement has acquired the management control of Lafarge Pakistan Cement Limited. They successfully bid for 75.86 percent shares of Lafarge Pakistan for US $329 million. They also acquired 12.07 percent of Lafarge through public offering process taking its shareholding in the company upto 87.93 percent. The acquisition of 2.4 million tonnes per year in Chakwal made Bestway the largest cement producer in Pakistan having total capacity of more than 8 million tonnes annually representing 18 percent of the total industry capacity in Pakistan.

Future outlook

The pace of economic activity in the country may however be somewhat affected by the law and order situation. On the export front, the cement industry in Pakistan enjoyed another good year despite global economic slowdown. While some regional markets like the UAE have seen severe decline in construction activity, other markets like Afghanistan continue to generate good demand for Pakistani cement. Bestway is already firmly established as one of the leading brands in Afghanistan and will continue to expand its share in that market.

Other regional markets like India and Sri Lanka are likely to continue to generate some demand for cement for few more years to come. Bestway is constantly exploring other international markets and has been able to make good inroads into markets like Africa. Given the huge gap between supply and demand of cement in numerous African countries, it is anticipated that Africa will prove to be a good market for many years to come.

Projects like Pakistan China Economic Corridor (CPEC) and increased allocation in Public Sector Development Programme (PSDP) in particular, should generate healthy cement demand in the domestic market. Increasing cement consumption should therefore result in stable prices which will help the Company to maintain healthy margins. Alongside the positives, cement industry will have to contend with certain challenges. Coal prices, having remained subdued for a long time, are on an upward trajectory on the back of limited supply and increasing trend in oil prices.

Higher oil prices will soon begin to impact power and fuel in nation. Power shortage will continue to hamper smooth operations. Pakistani Rupee is also likely to come under some pressure thus adversely impacting the Company's imports, in particular coal. Growing cement demand has encouraged some producers to announce expansion plans. Increase in production capacity might result in supply outstripping demand in the medium term. Bestway, being one of the lowest cost producers in the industry, is however comparatively better positioned to face those challenges and will continue to make all out efforts to ensure further growth and superior returns in the coming years.

Environment a Top Priority

Bestway's plants are safe and environmentally pleasant with emission far less than the acceptable level prevailing acceptable standards both locally and internationally. The level of emission of plant is 50 microns whereas the authorities of Pakistan's suitable standards are 300 microns and global standards are 100 microns per cubic meter of air at NTP.

Quality Assurance

Bestway Cement is pushed by using high standards of performance and best quality. Strict quality control tactics are applied to make certain that those aims are accomplished. The first-

class quality control gadgets in Pakistan are in use at Bestway. Apart from the standard equipment, Bestway's laboratories are equipped with state-of-the-art X-ray Fluorescent Analyzer and Diffractometer technology. Bestway turned into a pioneer in introducing this technology in Pakistan for the very first time. Through virtue of this equipment, the company has been capable of constantly produce better cement than is presently available in Pakistan.

ENVIORNMENTAL PROTECTION

Water Conservation

Water is utilized in a restrained amount in bestway's plant because cement is produced by way of dry system. Inside the production system, water is used for cooling cause (Cooling of Bearings, compressor jackets, Conditioning Tower, turbines and so on. They have a closed circuit cooling water system. Water is recycled by using passing via a cooling tower so that it can be used time and again. There is no waste water from the procedure which will be disposed outdoor the factory.

Sewerage Treatment Plant

For the sewerage generated within the plant, Bestway have mounted a sewerage treatment plant. The treated water is stored in especially built concrete tanks in the manufacturing facility. This water is used for irrigation of green lawns, orchids, greens vegetables and other plantations within the manufacturing unit vicinity, not only for self-consumption of fruits and greens but also to create an aesthetically laid out environment. It is ground realities that now not even single drop of treated sewerage water flows into the nearby ponds or lands.

They built clean water (Potable water) supply by way of installation of a tube well for locals of our neighboring Tatral village. Previously, they have been depending on one water reservoir "Kerala Walee Bun" for themselves and their animals. Now that water reservoir is used most effective for cattle's and tube well made by Bestway cement for local community is used for water for human beings.

Dust Collection System

Bestway's plant is geared up with excellent technology of dust collection system having aggregate of Bag Filters and Electrostatic Precipitators. As many as fifty seven Bag Filters had been hooked up in the Chakwal plant on different places additionally with 2 large Electrostatic Precipitators.

Mustehkam Plant is equipped with 41 Bag Filters further with 2 Electrostatic Precipitators. Similarly, Hattar Plant has 2 Electrostatic Precipitators additionally with the 24 Bag Filters. The dust emission stays under the global standards of 50 mg/NM3.

Control of Noise Pollution

Almost all the machines contributing to high noise level are confined in concrete systems and individual equipment are geared up with Silencers in an effort to remain in the NEQS. The ground vibration resulting from drilling and blasting remains at raw material Quarries well properly in the prescribed Limits. Any fugitive dirt is managed by way of non-stop operation of water bowsers which sprinkle water on the roads. Environmental safety of the mining region is completed under the Mining Concession regulations and is often monitored by the Mining Authorities.

CORPORATE SOCIAL RESPONSIBILITY

At the core of Bestway group's philosophy is to help those who do not have enough to make their livings by empowering local communities and by the help of charities that Bestway do's. For further working on the empowerment Bestway established a foundation in 1997 with the soul motive that this foundation will only work for the betterment of the poor and this responsibility has been taken by the chairman of the foundation MrZameerChaudry. United bank limited and Bestway cements both are doing their own CSR programs on their own without any help.

The foundation continues its free education in the school of Gujar khan and has also provided support to numerous government schools in the under developed rural areas of Punjab and KPK. One of the main motives of this foundation is to provide scholarships to the large number of students who are talented across the country. During the year 2016, foundation has provided the sum of 32 million rupees to various institutions related to health across the country. Some of the beneficiaries and trustees like Forman Christian College Lahore, Northern universities Peshawar and several others. It continues working on empowering the poor and providing them with the

education Bestway cements provide monthly stipends to the local communities. During the year 2016, Bestway cements have managed to cure 33,000 patients from its free dispensaries.

Following are the couple of key areas,

Education

Bestway cements provide scholarships and grants to the needy because of their belief that everyone should be educated in order to remove the illiteracy from the country. So that everyone use their own knowledge for their living and can boost up their living standards. Improving the literacy rate in the country has always been the main motive for the company and the company do makes efforts to improve it.

Health, Relief and Disaster Management

For the health and safety, company has taken many initiatives like building up the Hospitals, clinics, medical researches with the help of the charities to ensure the safety concerns for the employees and for the local public as well. For the Disaster Management Company has reserved several portions of the profits.

ENVIORNMENT IMPROVEMENT

Waste Heat Recovery Power Plant

Bestway Cement limited settled up a Waste heat recovery energy Plant with an ability of 15 MW at its Chakwal Plant in September 2009. This can make contributions definitely in environmental safety as it reduces carbon emission upto 35,000 tonnes per anum. The plant fulfills up to 27% of the electricity requirement at the Chakwal plant.

This machine additionally conforms to the CDM (clean development Mechanism) challenge. It is registered with UNFCCC (United Nations framework convention on climatic change) and became the first in cement industry and 9^{th} in Pakistan to do so.

As Waste heat power generation consumes no fuel, there is no greenhouse gas emission within the process. In the meantime, the dirt emission and temperature of discharged flue gas is decreased which has a positive impact on the environment.

Reasons for project

The primary reason of doing our final project on Bestway cement is that we have a close reference there and after already doing two small projects during our BBA we are ascertained of their supportiveness and cooperation. Secondly one of our group members is currently working in their supply chain department and it will be easier for us to gather data and information we required for our project and it will be easier to implement suggestions and recommendations that we will give to the company at the end of the project. His firsthand knowledge and experience of working in bestway's supply chain department will be valuable for our project.

Analysis of Supply Chain department of Bestway cement, we came to know that there is a lack of resource utilization, the organizational structure is vertically organized which cause delays in the procurement process and also they are not using advanced technology as well which also cause delays in supply chain process. We decided to work on these issues and provide them suitable recommendations to convince Director Operations in order to improve or overcome this issue.

Bestway cement is not utilizing there resources, which reduces their efficiency and effectiveness and centralized decision making makes it hard for supply chain department to make timely decisions which cause delays in procurement process. Advance technology is another side where they are lagging behind which also adversely affects the business. So we are focusing mainly on these issues but we will also go through other related issues in our project.

Scope

In our project first we will evaluate and analyze the whole supply chain process of Bestway cement how production department works on planning, forecasting and production of the materials, how supply chain department works on procurement and how different departments are interlinked with each other, and how supplier's evaluation and selection is done by the company. After evaluating and understanding the whole process we will be able to formulate a

corporate level strategy model for procurement and to work at supply chain department and interlink production department with the new process.

It will increase the effectiveness and efficiency of procurement functions at Bestway cement which can later help to meet its financial goals and market demands.

Project Goals

- ✓ To evaluate and understand the supply chain process of Bestway cement.
- ✓ To understand procurement function of the company.
- ✓ To develop the corporate level strategy model for supply.
- ✓ To make a smooth planning and forecasting process which will enable to develop appropriate inventory levels for the whole supply chain.
- ✓ To improve overall resource utilization of the company.
- ✓ To adopt modern technology to save time and increase efficiency.
- ✓ To make a smooth procurement and optimized inventory management practices.
- ✓ Apply our learned knowledge and concepts of supply chain management in a practical scenario.
- ✓ To meet up with cement industry professionals of supply chain and gain their expertise and knowledge of the field.

Limitations:

- ✓ There are time constraint with meeting the employees in different departments of the company and there representatives because of their tough working schedules and ongoing trainings.
- ✓ We were bound not to use confidential data and information of the company.
- ✓ The company provided us hypothetical data (closely realistic) due to their internal management policy and confidential issues.
- ✓ There were some documents required for our project, but company didn't provide us. They provided us with its abstract or summary or closely related documents.
- ✓ As the company and its operations are so vast, we couldn't cover all aspects and problems so we limited our project only to supply chain department.

Assumptions

- ✓ Other department of the company will work as they are already performing. There will be no change in their process or working structure.
- ✓ We are also assuming that IT department of Bestway cement is technically capable enough to implement our suggested model in their organization and Human Resource Department is capable to conduct training for the usage of new technology in supply chain department.
- ✓ We have also assumed that company will keep using their existing database system for maintaining inventory levels for a trial period of three months along with suggested modern technology.

Methodology

We have collected primary data for our project through interviews. Interview was conducted with procurement manager Mr. Nasir butt who told us about the whole procurement process, inventory management process and fleet management. We had a detailed discussion with him regarding all the supplier and vendors and how they manage relationship with the supplier. We also have discussed about supplier evaluation and selection criteria at Bestway cement.

Firsthand working experience of one of our group member Mr. Hassan Faisal at Bestway cement also helped us to complete our project on time. He provided us the information which we couldn't get through interviews due to busy schedule of the managers at Bestway cement.

We have conducted 3 interviews with the procurement manager and informal interviews with other employees in other departments of the company. 1st interview was conducted at the start of the project in taken a general review of the whole supply chain processes and procedures. In the 2nd interview was conducted after midterm exams in which we have a detailed discussion about each component of their supply chain and in the 3rd interview we have a discussion related all the problems they are facing in the supply chain department.

Chapter 2: PEST and SWOT ANALYSIS

Pest Analysis

Political factors

The political situation of Pakistan is not satisfactory, due to the rapid changes in the government and every government sets its own trade policies. Those new trade policies badly affect Bestway Cement Company. Because of the increasing tax rates which are increasing day by day the profitability of the company is decreasing. Another most important factor is the presence of Corruption element due to the greediness in earning money using illegal things has also cost company much loss but now company is trying to solve this issue by hiring of new personnel. Whenever new government comes in the tariff rates for the imports always change due to the change in the tariff rates which is higher than the previous one's company incurs losses. Legislation policies for the labors has been changed during last few years because of which company is still unable to find skillful workers which reduce the amount of labor hours and do the work efficiently and effectively.

Economic factors

Business cycle of Bestway cements has been improved which has boost up the profitability of the company. In the past due to inefficient use of policies of business cycle, company has incurred losses. Growing GDP and GNP rates has impacted positively on the company's performance for last few years. Now that this is the era of globalization and one can talk to anyone while be in another country it has contributed positively on the performance of the company, now company takes care of what's happening in the other regions of the country. At the same time where GDP and GNP rates have went up inflation rate has impacted badly on the profitability of the company this is majorly because of the instability in the political situation of the country. It has been witnessed that the labor is cheap in Pakistan but from last few years because of the changing labor laws, now the labor cost is higher and the company is trying to cut down the labor cost by hiring the skilled labors which can do the work of 3 workers at a time. Interest rates also affects the company due to the changing position or the instability in the primary market, interest rate goes higher and higher which has adverse impact on the profitability of the company.

Social factors

As far as social and cultural factors are concerned Bestway cements has always been very impressive in protection of the environment and health and safety of the employees and the place where company is caring out its operations. Whenever new employee is hired he went with the extensive trainings. For health and safety company has taken many initiatives like recycling of the waste material so that it would not pollute the environment. Age distribution is another social factor because of the implementation of Age Distribution; Company always looks for the young and dynamic individuals and encourages new talent. Population growth rate is increasing day by day due to which company always looks for a room for new and fresh individuals. For the health and safety company has provided its employees with high health benefits including medical allowances.

Technological factors

Bestway cement has always looked for the new innovations and technologies that are coming into the market every Year, which is why company is spending highly on the research and development. Whose soul motive, is to continuously try for the betterment and new ways to improve the efficiency and effectiveness of the company. Because of the usage of latest technologies and the spending's on Research and Development, company has managed to increase its profitability and position in the market. They use state of the art production plants and waste heat recovery plant to reuse waste heat as energy. But Bestway Company hasn't reduced the internal cost by the implementation of the latest integrated system in the company. They need to upgrade to SAAP because of which lots of cost can been reduced.

SWOT analysis

Strengths

- Cement industry has been utilizing up to 98 percent of its total capacity which shows the strength of cement industry in Pakistan.
- Bestway cements have the widest distribution and sales network across the country in overall cement industry of Pakistan.
- One of the biggest strength of the company is it has always able to meet the domestic demands.
- Higher growth rates of the company are one of the important strength of the company.
- Bestway Cement Company has the most established business units as compare to other companies of the industry.
- Skilled workforce is the strength of the company.
- Barriers of market entry which means there are many barriers for the new cement company to enter into the industry.

Weakness

- High spending on research and development is one of the key weaknesses of the company.
- In the Northern region of the country, Bestway is focusing more and making good profits but on the Southern region of the country i.e Sindh province, the company didn't payed much attention.
- Centralized decision making structure makes procurement difficult which is also a weakness for the company.

Opportunity

- China Pakistan economic corridor (CPEC) project it has increased the demand for the cement in the market. This will be a great opportunity for Bestway cement to expand its business and to enter into new markets.

- A new acquisition like Lafarge has created the opportunity for Bestway to capture the overall demand of the market and can increase exports.
- Growing economy of the country is one of the opportunities for the company, as company can initiate new projects.
- Expand its business in the southern region of the country.

Threats

- Political instability of the country imposes major threats to the company.
- Changing legislation policies related to tariff rates is another threat to the company.
- Competitors like Lucky cement and DG cement are also threat for the company.

Chapter 3: Problem Statement

Problem statement

"Recommendations for Effective and Efficient Process of Planning, Forecasting and full utilization of resources using the techniques of JIT strategy, forward contracting and SAP for improvements in the operations of supply chain network of Bestway Cement ltd."

Now we will discuss the challenges faced by the supply chain department of Bestway cement in forecasting, fleet management, inventory management, invoice processing and contract management.

Forecasting is not an exact science but when done carefully can provide any company a competitive advantage as well as customer satisfaction. By using a proper forecasting model a company can save a lot off cost as well as they can meet the requirements of the customers on time. In today's competitive environment a businesses have to be proactive when it comes to procuring supplies in order to meet the sale demands. Under stocking can lead to customer dis-satisfaction and loss of market reputation. On the other hand over forecasting results in excess stocking of inventory which costs the business heavily in terms of storage cost.

Bestway cement have a problem that they store a lot more coal than they require, this results them facing high holding costs and as time passes, the quality of coal reduces which cannot be used due to its poor quality. So the stock which is spoiled also incurs huge loss for the company.

The second problem which Bestway cement faces is the delays in invoice processing due to the old technologies it uses like Oracle and Apex. These delays in the processing of invoice also cost heavily to the business. As the delays in payments bring interest rates into play.

For example: The company purchases fuel for its production from SHELL oil company and promises to pay the money within7 days of delivery but could not be able to deliver its promise due to slow invoice generation and approval from the top management then from the day 8^{th} the interest will be charged on the amount they have to pay. If the company pays the dues within the agreed time frame no interest rates will be charged.

The failure in payment of dues is mainly due to old technology which Bestway uses for invoice generation and approval from the management. Also centralized decision making plays a huge role in these delays as the invoice approval must be done by 4 people in the top management.

Fleet management is also another problem which is faced by Bestway cement as the coal is received by Karachi port in Sindh province of Pakistan and then sent through trailers to northern region in KPK province of Pakistan. This takes a lot of time in receiving shipments on the plant site and also a lot of transportation cost is charged by the transporters. These trailers go back to Karachi unloaded. So they are not utilizing these trailers for out bound trafficking. They use other trailers for out bound trafficking.

Another problem which is faced by Bestway is the contract management. As they award the contract to the oil marketing company who gives the lowest bid for only one month. But the big OMC's (oil marketing companies) do not make contracts for a small period of one month. They promise to supply for the month but don't sign a written agreement. Due to fluctuations in oil prices the oil companies don't deliver fuel and make excuses that they are short of fuel etc. This also affects the manufacturing process of the company as they have to find a new supplier. Shortage of fuel also costs the company.

Chapter 4: Bestway Cement's Supply Chain Network

SUPPLY CHAIN NETWORK:

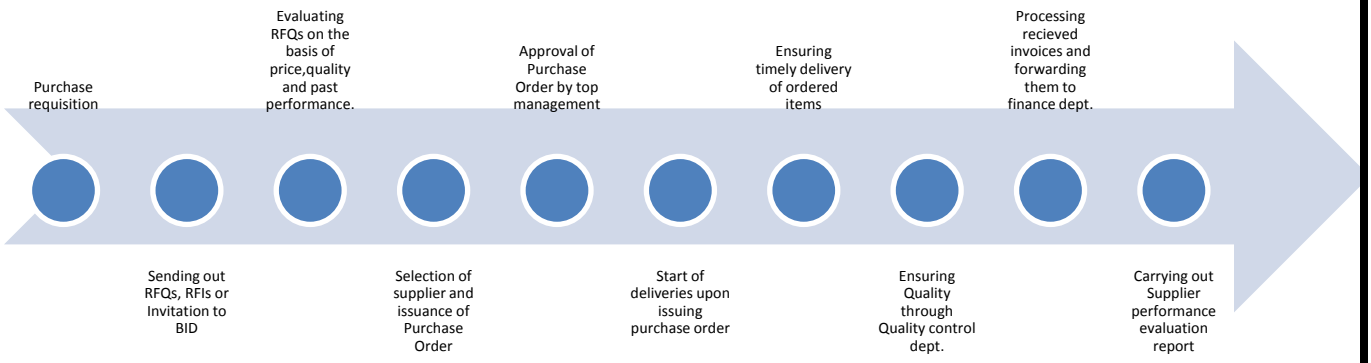
Bestway Cement's operations are heavily dependent on its supply chain department. The supply chain department itself is very vast and detailed. Since of the industrial background, all the main operations that are manufacturing and production are directly dependant on the Supply chain Network. The supply chain network in Bestway is divided into different departments which further have sub-departments. The supply chain network is divided into procurement department, manufacturing department and logistics. Despite having a huge supply chain network, many of the supply chain functions are also outsourced to finance department who assist supply chain department in many activities and functions. The functions and activities of the departments and their sub-departments will be explained in detail further in the project.

In order for the supply chain network to be effective in Bestway, all the departments need to be integrated at maximum. Each department is heavily dependent on each other hence the information flow needs to strong in order to achieve maximum efficiency and effectiveness. Since all the departments and their offices are located at different locations and settings hence reaching this goal isn't very easy. In order to integrate all departments and to have continuous information flow; the whole organization is connected through an ERP (Enterprise resource planning) system. The whole process will be explained separately. Currently there two ERP systems being used at Bestway Cement to integrate all departments, the two erpthat are being used are called APEX and ORACLE E-BUSINESS SUITE. The reason for using 2 different ERP softwares is because Bestway Cement originally adopted APEX back when it started the ERP practice but after its merger with LAFARGE, E-Business suite ORACLE was adopted as well as all the operations in LAFARAGE were running and dependent on Oracle E-Business suite.

The supply chain network has 2 sides which includes the technical side as well as the business related activities side. The technical side basically assists the procurement department in order to understand the technicalities and specifications of the item that is to be procured. This way, the procurement team is able to understand the requirement better and is also able to procure right product of the right quality at a cost effective price.

Procurement Department:

The basic function of Procurement Department office is the acquisition of supplies, raw material and services in support of the Bestway Cement's day to day operational activities. The Procurement Department is the entity which is authorized to issue Invitations to Bid, Requests for Proposal, and Requests for Quotation and issue contracts. The Procurement Department issues purchase orders, develops term contracts, and acquires supplies and services. The Procurement Department also disposes of all surplus property and equipment. The procurement department has different sub-departments which are responsible for different functions. Even with having different sub-departments with different roles and functions, the standard procurement process is followed by every sub-department. We will explain the procurement process through a diagram which is being implemented at Bestway Cement



Purchase Requisition: A PR is basically a demand from a department or in other words is the demand that is arised for an item. A PR gives you the required quantity of the time, the specifications and the date and time it is required by. For example, In Bestway Cement PRs are generated to daily basis by the manufacturing plant/department. Other PRs from head office are also generated from time to time. Regardless of the type of PR, all types of PRs are created on ERP.

Sending out RFQS and etc.: Acting upon the generated PR on ERP, RFQs are sent out to a certain pool of suppliers. Usually in Bestway Cement, pools of suppliers have already been generated, by making pools, it is easier for us to track their past performance with Bestway and also spares us the time for market evaluation every time for choosing vendors. However, if there is any need for choosing new vendors or for adding new vendors to the pool list, tenders and invitation to bid ads are published online and in newspaper. Word of mouth among suppliers also plays a very big role when need for new suppliers so most the times, vendors make contact with Bestway by sending out their quotations.

Evaluating RFQs on the basis of price, quality and past performance: As suppliers fill in the RFQs and submit their quotations, we make a Comparative statement which compares the price, quality and past performance of the supplier. That comparative statement is first reviewed by the line manager of the team which is acting upon the PR. If approved by the line manager, the general manager reviews and gives the final approval, then the request for the generation of a purchase order is forwarded.

Selection of supplier and issuance of Purchase Order: After the selection of the supplier from the comparative statement, contracts and deal confirmations are made with the supplier. Upon completing the required legal work, the supplier is issued a purchase order which is generated on the ERP system.

Ensuring timely delivery of ordered items and Quality through Quality control dept.: The team responsible for handling the requisition then ensures that the deliveries are made on time after issuing the purchase order. When the material is received, sample testing is conducted at our quality control departments which are located on each one of our four plants. Often, if the quality is not to the standards mentioned on the deal confirmation and purchase order, the delivered quantity is rejected.

Processing received invoices and forwarding them to finance dept. & Carrying out Supplier performance evaluation report: After the order is complete, the supplier sends the invoices to the procurement department where the invoices are verified and processed. The processed invoices are then sent to the finance department where the payments issued upon re-

checking and re-processing the invoices. After the completion of order, an evaluation of the supplier is carried out and a report his made documenting his order performance.

Sub-departments of Procurement:

The procurement department of Bestway Cement is located at 8th Floor, UBL Tower Blue Area, Islamabad. There are in total of 6 different teams working Procurement as sub-departments. I will explain the roles and function of each sub-department in detail in order to understand the Bestway Cement's supply chain network system better.

Fuel Team/Coal Team:

The fuel team consists of 3 team members; the main role of fuel team is to procure primary, secondary and any other required fuel for BCL sites (plants). The fuel team is considered to be a very important team in the eyes of the top management as the monthly budget for the procurement of fuel is above 2 billion rupees. The major role of fuel team is to procure Imported Coal. Imported Coal is basically procured from countries like South Africa, Indonesia and Columbia. Due to imported coal's high GCV that is Gross calorific value, it is the primary source of fuel for running the kiln at the plants. We can say that all BCL plants are heavily dependent on the consumption of imported coal in order to run kilns running. Due to bad forecasting and bad procurement, the inventory of imported coal can be disturbed leading to shut down of plants or slow down production. While procuring material of such high cost, an accurate forecasting is required in order to place orders. Inventory stock reports are made every each week which basically state the current coal inventory which is lying at BCL sites, the average consumption of coal per every plant, the future schedule of consumption of coal and the inventory we'll be left with by the end of the month. By keeping all such information in mind, we have to plan ahead for the next 2 months in order accommodate all BCL plants. The reason of planning ahead for the next months is because a vessel that is used to carry the coal to Karachi port takes around the lead time of 50 days hence order placement and forecasting is done 2 months in advance. Creating the weekly stock report requires information from every plant's manufacturing department who basically give the future consumption schedule of coal. The warehouse/store gives the current quantity of stock lying in the warehouse. By keeping such information in consideration, the coal team is able to make accurate forecasting and is also able to making timely orders. The process of ordering imported coal or in other words conducting international

procurement includes following the standard procedure of procurement process but international procurement of imported coal requires additional activities. As a vendor is chosen from the comparative statement to supply imported coal, the deal is followed and bonded by a deal confirmation along with a contract explaining all the technical specifications and details of the deal. Both sides present their own contracts to each other which are then approved and signed by the top managements of each side. After completing the legal work, the contracts are presented to Bestway's treasury department who then forward those details to the nominated banks in order to initiate an LC (line of credit). The same process is taken at the vendor's end who nominates a bank of their own side. The LC process includes the generation of a LC draft which explains the requirements of the deal that are to be performed from both ends. When both parties mutually agree on the LC draft, an LC is established. Following the establishment of the LC, coal is loaded upon the vessel from the departure port where a quality analysis report takes place which then sent to the buyer to ensure quality requirements. During the transit of the vessel, the coal team works upon acquiring the documentation required to birth the ship at Karachi vessel. These documents include Bill of Lading, Letter of Indemnity, Delivery order, commercial invoice, electronic import form and marine cover letter. Aside from this legal documentation that is required to birth the vessel, the team also works on the 'stevedoring processes. Stevedoring process is the of clearing the custom duties, shipping clearance and insurance of the received quantity at the port. Usually a stevedoring process is outsourced to a stevedoring agent who directly deals at the port but works hand in hand with coal team to acquire the necessary documentation for the clearance of the vessel at KPT. The procurement process also takes place here where a comparative statement of the stevedoring agents is made and a stevedoring agent is selected on the basis of price and performance. Then, a stevedoring contract is signed and the process of clearing custom payments and other activities initiates. Upon the birthing of the vessel, the stevedoring agents unload the inventory from the vessel and place it in grownie yard at KPT. The logistics team takes over upon the stocking of the coal at the grownie yard. The secondary fuels include High speed diesel and High furnace oil which are procured on monthly basis from registered OMCs on the basis of lowest revised rates every month without any formal contract or deal confirmation.

Logistics Team: The logistic team is split into multiple teams at different locations. One part of the logistics team is located at the head office in Blue Area. Their team known also as Fleet

Team works on communicating with suppliers of transporters who are responsible for delivering imported coal from Karachi port to all BCL plants. It is the Fleet teams job to tell transport vendors regarding how much coal should be lifted from the port. It is to be noted her that the function of transportation has been outsourced to different transportation companies who provide their trucks in order to lift coal from Karachi port and unload at BCL sites. It is Fleet teams's job to ensure timely delivery of the coal at BCL plants, if any delays caused in delivery, the situation of low stocks or low inventory is met which damages the production rate. The team is also responsible to ensure the transporter's performance and make sure that there is no loss in quality. As transporter's trucks leave KPT, bill tees along invoices are generated at the spot stating the weight of the coal loaded on the vehicle/truck. As these trucks arrive at BCL sites, BCL makes their own bill tees recording the received weight, both bill tees along with invoices are sent to fleet team for the inspection of any loss and fraudulent case. The fleet team verifies the bill tees along with invoices. The Fleet team also processes the fueling invoices that are charged by SHELL to Bestway for providing fleet card/fueling services to our outsourced transporters. This on-going project will explained separately later in the project.

The other logistics team which is located at BCL plants looks after warehousing and facility management. Their job is to work along with fleet team and inform them regarding the stock situation at warehouses. They also play the role of recording the coal into the warehouse and also insert its receiving into the purchase order through ERP. For example if we have a shipment of 25,000 tons coming in; out of which 10,000 MT is allotted BCL chakwal plant and a delivery of 240 tons is made on a single day to BCL CHAKWAL so in that case the logistics team will record that receiving into the PO of 10,000 generated for BCL CHAKWAL.

Legal:

Contract management, contrary to general opinion, does not only refer to contract drafting and post awarding activities, but it constitutes of effective upstream prior to any decision taken and managing the entire life cycle systematically such that operational and financial recitals are maximized while risk and uncertainties are minimized.

Following is the process adopted by the company's contract department:

1. Need identification:

Coordination with plant representatives (end user) and establishing communication to identify business requirements and the reason for the required job to be executed. Feasibility and practicability of the work is accessed by the team through discussions with the technical personals and the management above.

2. Budgeted Approval

When the Scope of Work or Services are finalized, an estimated budget is calculated after market research which is the set maximum expense limit within which the project has to be completed. An approval form along with all relevant documents i.e drawings, previous similar contracts and their prices or detailed description of job, are sent for BOD (Board of Directors) approval.

3. Developing a Sourcing Strategy

In some cases, a CS (comparative statement) is sent from the user end and the team only negotiates, set terms and implement a contract. While in some, the team is asked to source the potential contractor's on their own.

Contracts department has a database of its own consisting of potential suppliers and service providers to whom in case of sourcing, the team gets in touch with. Sourcing strategy varies based on job-to-job needed to be executed. Intricate or unique jobs, team conducts supplier research in market and gather company profiles. Prior to any job allocation, the vendor is inducted into the company database.

4. Pre-Qualification Vendor Evaluation

Prior to invitations sent for submitting their offers, the potential suppliers/vendor's are evaluated especially for long term or long duration contract. Assessment is done to ensure adequate economic and financial standing (debt to equity ratio), sufficient assets, competencies or skilled labour for the job. Insolvency is also taken into consideration.

5. Specification Drafting

All operational requirements are jotted down to present potential suppliers to clearly convey the plant needs. This draft is an RFX which helps to evaluate offers since they are received. When RFX are sent, a deadline is given to the vendor's for submission of their offers.

6. Evaluate Offers

Vendor Qualifications are evaluated ensuring all information needed by the plant is provided in the offer and is in-line with the RFX floated. The offers must be complete with a validity period for its price, catering the inflation. It must also address all future requirements and identify risks during execution, proposing remedies for each.

7. Comparative Statement

Relative analysis of the proposals/offers obtained is written in a form a grid or sheet that not only consists of commercial offers but also any variations in technical offers received. This assessment grit embodies complete proposition by the vendor for the project or job along with their proposed timeline. Information gathered aids the SWOT analysis which determined what strategy is to be used during negotiation.

8. Negotiations:

Purpose of negotiations is not just to get the best possible price from the vendor, but the best possible value that signifies the quality of work, services or supply, in short a best possible offering. For contract values up till 5 million are negotiated by the AM contracts along with the team. Any decision making and awarding of the contract is the sole discretion the AM contracts. For projects or annual amount of contracts above 5 million are negotiated in meeting conducted at head office procurement department. This meeting is attended by representatives from finance, audit, procurement, contracts and by the user end departments.

An agenda for the meeting is laid out for which participating vendors are invited on separate timeslots given. Meeting is intended to communicate all requirements and eradicate any ambiguity concerning the scope of work/services/supply. Issues are brought on the table from both sides and resolutions are suggested. Negotiation tactics used are either adversarial or partnership depending on the nature of Contract or tenure of the Contract.

Prices negotiated must be below the proposed budgeted price against which approvals are taken. Minutes of the meeting have all those, who attended the meeting as signatories in the light of technical recommendation of the vendor or vendors who qualify the standards set by the user department.

9. Awarding

When a vendor meets all requirements and confirms availability, then the team moves towards awarding the contract. It begins with informing the successful vendor about the assignment of job so that the vendor can gather and arrange resources, consumables or skilled/unskilled manpower.

Contract team ensures that all relevant parties and departments involved are clear of their roles and duties. End users are informed of the chosen vendor so that communications with the parties are initiated for execution. Unsuccessful vendors are informed and their participation is

appreciated. Debriefing maybe given to improve completive performance that leads to better offerings in future and developing a stronger supplier database.

10. Contract Drafting

Contracts Process:

- Drafting of Agreement, Letter of Intent (LOI) and Award letter etc.
- Getting the Agreement reviewed by all the stakeholders.
- Finalization of the Agreement after necessary legal vetting & printing.
- In case of renewal of agreement, an “Performance Evaluation Form” dully filled by the relevant department. In case the rating of evaluation is less than 3, than contract may not renewed with the same vendor. Format is attached for necessary use.
- All the services against the agreements will be managed by relevant Plant / HO teams.
- All original contracts will reside with Legal department.

Sourcing and Raw Materials:

The role of sourcing team is to locate new suppliers, keep the current pool of suppliers aligned, manage supplier evaluations and processing of registering new suppliers. The sourcing teams makes weekly reports on current pool of suppliers for the whole procurement department and evaluate them on the basis of the reports submitted by the purchasing teams. The sourcing team works directly with the raw material team where PR of unique items show up on daily basis. To procure such unique items, the sourcing team conducts market evaluations and provides a list or pool of new suppliers who have the resources to sell or fulfil the unique PR.

Chapter 5: On-Going Projects

Fleet Cards:

One of the current on-going projects is fleet cards, which is being implemented by the Logistics team with the assistance of Fuel team. Through this fleet card project, the company is able to get many competitive advantages along with a lot of cost saving. In order to give a better understanding regarding this project, I will give an introduction on the general function of fleet cards, then I will relate to how logistics team is utilizing from this project.

A fuel card or fleet card is used as a payment card most commonly for gasoline, diesel, and other fuels at gas stations. Fleet cards can also be used to pay for vehicle maintenance and expenses at the discretion of the fleet owner or manager. Fleet cards are unique due to the convenient and comprehensive reporting that accompanies their use. Fleet cards enable fleet owners/ managers to receive real time reports and set purchase controls with their cards helping them to stay informed of all business related expenses. Typically, the majority of businesses using fuel cards are those which heavily rely on motor vehicles on a day-to-day basis e.g. transport, haulage, courier services. One of the primary reasons a business will use a fuel card is to obtain (potentially) significant savings both on the current price of fuel and on administrative costs. It would be normal for the business to receive a single weekly invoice, payable by direct debit; this replaces the manual reconciliation of individual paper receipts which could, for larger organizations, number in the hundreds each week. A number of additional benefits are available for users of fuel cards from a supplier offering an e-business capability.

Before starting the fleet card project, the logistic team had outsourced the transportation to multiple external transportation companies. Although the logistic team had a very good rate negotiated with the transporters for lifting coal per ton from KPT to BCL sites but there was very a lot of transparency against the operations carried out by the outsourced suppliers and also the logistics team had very low control. Issues like transparency and low control lead often lead to the suspicion of fraudulent business or cases from the outsourced transporters. Project Fleet card was introduced by the logistics team to eliminate issues like low control, transparency and ineffectiveness. Aside from these issues, through fleet card project, the logistic team also planned

to cut down further cost. So to execute this project, the logistics team got into talks with several Oil Marketing Companies to discuss the services they can offer to support the strategy; the team is planning to implement that is to have more control. Out of 7 OMCs, Shell Pakistan offered to give the most competitive services that support the team's planned strategy. Previously, fueling from KPT to BCL sites was paid and managed by the transporters themselves, fleet card project basically outsourced the fueling to SHELL eliminating many of the problems. I will list down the advantages of fleet card project in bullet points for a better understanding.

Tax Rebate:

A tax refund or tax rebate is a refund on taxes when the tax liability is less than the taxes paid. Taxpayers can often get a tax refund on their income tax if the tax they owe is less than the sum of the total amount of the withholding taxes and estimated taxes that they paid, plus the refundable tax credits that they claim. (Tax refunds are money given back at the end of the financial year. So after conducting researches and brainstorming sessions about how we can save cost through this project, the logistics team figured that Bestway cement is already paying tax on the final product so that already takes care of paying taxes for all the raw materials used in making the product. By paying tax for the fueling of the transportation that is used to bring coal from Karachi Port to BCL sites, we're basically paying double tax. This is because the fuel used to deliver the coal is directly associated with the raw material's cost as it is making a value addition in making the final product. By outsourcing the transportation function, we had no means of identifying the fuel cost that was being incurred to the transporter as the transporter billed as for the whole service. Shell proposed that three of their fuel stations can be used that are located in route from KPT to BCL sites for fueling the transporter vehicles. This way Shell will invoice us separately for the fueling where sales tax can be identified and submitted to FBR for rebate.

But the question was that why will the transporters get on board with this project as it will be a hassle for them to only fuel from limited stations. To overcome this problem, the logistics team in cooperation with Shell came with a solution and an incentive for the transporters. Shell and the logistics team proposed that when a transporter crosses a certain limit of fueling, he shall be awarded 1 rupee rebate upon 1 liter. This not only got them on board but also motivated them to increase their business with Bestway on cheaper rates and also better

performance. All the transporters are now issued with Shell fuel cards which are used at the selected fuel pump. The invoice we receive from the transporter now is inclusive of 40% of the fueling cost which is charged to Bestway by Shell for identifying sales tax.

Control and performance enhancement:

Project fleet card also helped the logistics team gain more control over transporters. Previously, the team couldn't track the vehicles that were on route from KPT to BCL sites but now as the trucks can only make fueling stops at selected fueling stations, we're able to track them quietly easily and also give an ETA. Whenever a truck/vehicle swipes the fueling card, the logistics team easily gets notified on the online portal provided by Shell. Lead times have improved due to more control, less cases of fraudulent activities as most of the activities can be tracked easily.

The process flow for Project Fleet Card:

Tasks to be performed by BCL:

- -Calculation of coal quota by BCL for the lifting purpose.
- BCL will intimate the transporters for the lifting of coal with proper follow-up.
- Confirmation regarding availability of trucks by the transporters for coal lifting.
- Proper communication with the transporters will be required that how many vehicles they will provide for the assigned quota and on which time.
- Cross checking by BCL with the stevedore whether the information provided by the transporter regarding the number of fleet and timing of coal lifting.
- In case the information provided by the transporter is wrong after confirmation by the stevedore regarding the availability of vehicles then BCL will push the transporter to provide required number of vehicles on right time.
- Loading of coal by the transporters with sharing of the below information to BCL.

1. Total quantity loaded vehicle vise
2. Vehicle number
3. Bill Tee number of each vehicle.
4. Plant site for which coal is lifted.

- Data processing by BCL (above mentioned information) which includes the following information is to be shared with OMC (SHELL) and nominated filling stations.

1. Assigning of fuel limits in OMC online portal for each transporter for every round trip as per number of vehicles along with their weights.
2. Individual fuel limits for every vehicle communicated to the filling station.

- Use of online portals by BCL for sharing of information with OMC.
- BCL will share information with both the OMC and filling stations in order to restrict them regarding the fuel limits of vehicles moved on daily basis.
- BCL will pass on the information to the filling stations when the fleet moved on a specific date will reach each nominated station.
- Daily follow-up by BCL regarding fuel limits information both from the OMC and filling stations.
- BCL will assure that the vehicles on return will use the fuel cards as per their assigned limits which need continuous coordination with the OMC and filling stations.

Pakistan Railway Coal lifting project:

The Pakistan Railway project is using the railway for transferring coal from Karachi Port to BCL sites. Despite of having a solid fleet card project and outsourced transporters, the logistics team sees an opportunity of decreasing the cost for transferring coal further. As we know that the railway system is proved to be much cheaper than road. Using railway as a mean to transfer coal will cut down major cost. We will provide a calculation table which will show the amount Bestway can save if this project is successful.

Transporter Rate	Rs.3,500/ton
Proposed Railway Rate	Rs.2700/ton
Average per month coal lifting	100,000 MT
Transporter Cost	Rs.350,000,000
Railway Cost	Rs.270,000,000
Saving	Rs.80,000,000

The above stated rates are not entirely accurate as the negotiated rates are confidential and cannot be published publically but these calculations should give an idea of the savings Bestway can make. Through this project. The only problems that are to be seen in this project is the reliability of Pakistan Railway. Pakistan Railway does not have a good reputation in the industry which makes it harder for the logistics team to take the decision. Pakistan Railway has asked for a freight advance of 6 months over which finance department is not agreeing as they believe that the investment of such a big amount affects the cash flow strongly.

Chapter 6: Recommendations & Conclusion

Recommendations:

Over Stocking:

One of the problems that we have identified at Bestway Cement is over stocking of Coal at warehouses at all BCL plants. By reviewing the stock report of the last 4 months, we've evaluated that that the warehouse holds much more inventory of coal than actually required. By holding excess inventory, not only does the holding cost goes up but with time, there is a significant drop in the quality of coal. The raw material Coal is represented by its gross calorific value, with time that caloric value drops as it lies around in the warehouse not being utilized. Our solution to this issue is quite simple and can help save a lot of cost along with maintaining the quality for which the price is paid for. We suggest the implementation of Just-in-Time technique which encourages the practice of eliminating any kind of waste. Bestway can take advantage of this technique by improving their forecasting. As mentioned earlier in the project, the Fuel team prepares weekly stock reports upon which coal buying decisions are made. By discussing this process with the fuel team, we got to know that coal buying is mostly dependent on its market price. Basically what this means is that even if the stock report shows that we have sufficient stock for the next month but the coal prices in the market are down, this will make it mandatory for the fuel team to purchase coal regardless of the ending stock quantity lying at BCL plants. The fuel team does not keep in factor that by purchasing access quantity, they will have to bear extra holding cost along with quality loss. We believe that the fuel team should focus on forecasting accurately and not make purchasing decisions based on the market. Their first priority should be to handle the inventory on hands effectively. This does not mean that they do not consider the market trends, it only means that they need to find a balance between purchasing and inventory on hand. A better approach to deal with this situation will be to maintain a safety stock at all times which will reduce the risk of running out of inventory, which is the biggest concern of the fuel team and the reason for buying excessive coal despite of preparing weekly stock reports.

Upgrading ERP and invoice handling:

The current ERP softwares that Bestway Cement is using are APEX and Oracle. 90% of the work is being done APEX and oracle is just being used temporarily as it was being used in Lafarage which has recently been acquired by Bestway. Now the problem that exists is that APEX is not a very up to date software, it is also not very flexible and customizable. The procurement department is bound to follow steps which cause unnecessary delay in the generation of a purchase order. APEX requires approval from every site the ERP is being implemented on upon the generation of a PO. This process can slow down the generation as it can get quite difficult to get so many people on board on order to process a single purchase order. On average, everyday around 30 purchase orders are made. This process is very time consuming which ultimately disturbs the payment process. The finance department cannot process any invoices that received from vendors unless the purchase order has been generated. On average, we noticed that from the date of the order, purchase order is made and approved on the gap of around 3 4 days. This practice delays the payments, where finance department is charged with interest upon payments by vendors for not being able to make payments within the given credit days. Our solution to this problem will be to upgrading to SAP (systems, applications and product). SAP is an ERP software which is widely being used and is a highly customizable product. If Bestway choose to invest in SAP, SAP will support bestway's operations by being specially designed for its structure. Instead of getting approval for a purchase order from all the irrelevant departments, it can be designed to seek approval only from concerned department/team or purchaser. We believe this will help the procurement team generate purchase orders on time and will also assist the finance department process invoices timely.

Forward Contracting:

Seeing recent back-outs by HSD suppliers in the middle of the month, we've suggested the solution of forward contract. In current practice, the fuel team selects a new HSD supplier every new month on the basis of lowest price but the drop outs or non-performing suppliers have become very frequent as there is no contract binding the deal. The sudden and random back-outs affect following factors,

Stock levels: While back-outs are made, Bestway is unable to make any further orders for BCL Sites which ultimately bring low stock levels leading to utilization of safety stock. The process of shifting to the 2nd tier supplier requires approval, generation of new Purchase orders and takes times; damaging the stock levels.

Cost and Risk: By shifting to the 2nd lowest supplier, the HSD price also increases affecting the cost. In addition to cost, there are situations where suppliers are not willing to accommodate demand in the middle of the month since their volume allocation is done at the beginning of every month.

In order to overcome this situation, we suggest Bestway to consider the option of forward contract with a supplier who can provide an attractive discount. By binding a contract and locking a good discount, fuel team will be able to eliminate the risk of drop-outs and at the same time, will also be able to get a good price. The following working will provide an understanding of how discounts work and how they can be of Bestway's advantage.

	Ex. Refinery Rate	**Ex. Refinery Rate w/o tax**	**OMC Margin**	**OMC Cost w/o Profit margin**	**Freight charges**	**OMC Cost Price**	**Margin for OMCs**
BCL CHK	Rs.75.22	Rs.57.24	2.42	55	Rs.0.72	Rs.55.72	Rs.0.5
BCL HTR	Rs.75.22	Rs.57.42	2.42	55	Rs.0.43	Rs.55.43	Rs.0.5

The above given data is from a recent RFQ from M/S TOTAL. By gathering some insight and evaluating the controlled market, the calculated profit margin for M/S TOTAL which is 0.5 rupees with a discount of Rs.1.92 being offered for this month. Our agenda is to lock such attractive discount for a longer period securing constant and uninterrupted supply of HSD.

We recommend the Bestway to opt for forward contract with an OMC in order ensure constant supply of HSD which is Bestway's secondary source of fuel.

Efficient use of Fleet Cards and Pakistan Railway:

We believe that the current on-going projects of Fleet Cards and Pakistan Railway are not being utilized effectively. While analyzing the projects, we realized that trucks/train capacity is being utilized only for inbound operations whereas the trucks/train leave empty on their outbound journey. It is to be noted here that the fuel cost paid by Bestway for the trucks is for both inbound and outbound. In current practice, Bestway has hired separate transportation companies to carry their cement bags from BCL plants to South region. So not only are they not utilizing the most out of fleet cards or Pakistan Railway project but they are also generating unnecessary expense. We recommend that Bestway should suspend these additional suppliers who carry cement bags to the South region, they should start negotiations with their current outsourced suppliers who are involved in the fleet cards project. As coal transporters go empty on their return journey, they will be willing to offer low price for carrying the cement bags as this will be an incentive for them to gather some business than none. This deal will mutually benefit the supplier and Bestway. Through this strategy, Bestway will be able to save cost that was being incurred on additional transporters used for carrying cement bags and also will be able to get a much cheaper rate.

Conclusion:

We hope that our evaluation of Bestway Cement's supply chain network will help them identify the gaps in their network and we also hope that our recommendations prove to be helpful to Bestway Cement Ltd. in the best way. We provided them with solutions that are realistic and can be implemented in Bestway Cement's current capacity.

References

- http://www.bestway.com.pk/
- http://www.pakistantoday.com.pk/blog/2015/04/24/bestway-cement-takes-over-lafarge-pakistan-cement-limited/
- http://www.bestwaygroup.co.uk/sectors/cement

Contents