

An Organization Study Report on

BEML LTD

(18MBAOS307)

By

RASHMI. A

USN: 1CR19MBA70

Submitted to

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI



In partial fulfillment of the requirement for the award of the degree of

MASTER OF BUSINESS ADMINISTRATION

Under Guidance of

Mr. Santosh Kathari

Assistant Professor

Department of Management Studies

CMR Institute of Technology, Bengaluru



Department of Management Studies and Research Center

CMR Institute of Technology

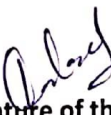
#132, AECS Layout, Kundalahalli, Bengaluru - 560037

Class of 2019-21

CERTIFICATE BY THE INSTITUTION


This is to certify that Ms. RASHMI A bearing USN 1CR19MBA70 is a bonafide student of Master of Business Administration of our Institution during 2019-21 batch. The organization study report on **BEML LIMITED** is prepared by her under the guidance of Mr. Santosh Kathari, Assistant Professor, in partial fulfillment of the requirements for the award of the degree of Master of Business Administration, affiliated to Visvesvaraya Technological University, Belagavi Karnataka.


Signature of the
Guide



Signature of the
HOD
Head of the Department
Department of MBA
CMRIT-PG Studies
Bangalore-560 037

Sanjay Jain
Signature of the
Principal
Principal
CMR Institute of Technology
Bangalore - 560037

Viva-voce Examination:

Internal Examiner:  30/09/2020
[Signature & Date]

Kathari Santosh, Asst. Professor, CMR Institute of Technology,
[Name, Designation & Affiliation]

External Examiner:  30/09/2020
[Signature & Date]

Sabeha Mufti, Asst. Prof. CMR Institute of Technology
[Name, Designation & Affiliation]

DECLARATION

I, **Ms. Rashmi A** bearing **USN: ICR19MBA70**, hereby declare that the Organization Study conducted at **BEML LIMITED** is record of independent work carried out by me under the guidance of **Prof. Kathari Santosh** faculty of M.B.A Department of CMR Institute of Technology, Bengaluru.

I also declare that this organisation study report is towards the partial of the university regulation for the award of degree of **Master of Business Administration by Visvesvaraya Technological University, Belagavi.**

I have undergone an organization study for a period of four weeks. I further declare that this organisation study report is based on the original study undertaken by me and not been submitted for the award of any degree/diploma from any other University /Institution.

Disclaimer

The enclosed document is the outcome of a student academic assignment, and does not represent the opinions/views of the University or the institution or the department or any other individuals referenced or acknowledged within the document. The data and information studied and presented in this report have been accessed in good faith from secondary sources/web sources/public domain, including the organisation's website, solely & exclusively for academic purposes, without any consent/permission, express or implied, from the organisation concerned. The author makes no representation of any kind regarding the accuracy, adequacy, validity, reliability, availability or completeness of any data/information herein contained.

Place: *Bengaluru*
Date: *29-09-2020*

Rashmi A
Signature of the Student
USN: ICR19MBA70

ACKNOWLEDGEMENT

I acknowledge the deep gratitude to all those who have made organization study successful and helped in preparing the report.

I would like to express my sincere thanks to **Dr. Sanjay Jain**, Principal of CMR Institute of Technology, Bengaluru for his valuable support and guidance throughout the course of organization study.

I am grateful to **Prof. Sandeep Kumar M**, HOD of the Department of MBA, CMR Institute of Technology, Bengaluru for his constant motivation and inspiration.

I thank my Internal Guide, **Mr. Santosh Kathari**, Professor of the Department of MBA, CMR Institute of Technology, Bengaluru for his constant guidance and support throughout the organization study.

Ms. RASHMI A

USN: 1CR19MBA70

TABLE OF CONTENTS

Chapter No	TITLE	Page No.
	Executive Summary	8
1	Introduction Introduction about the Organization Industry Profile	9-11
2	Organization Profile Background Nature of Business Vision, Mission and Quality Policy Workflow Model Product/Service Profile Ownership Pattern Achievements/Awards Future Growth and Prospects	12-27
3	McKinsey's 7S Framework and Porter's Five Force Model McKinsey's 7S Framework Porter's Five Force Model	28-35
4	SWOT Analysis	36-38
5	Analysis of Financial Statements	39-44
6	Learning Experience	45
	Bibliography	46
	Annexure	46-51

LIST OF TABLES

Table No.	Title	Page No.
1	Product collaborations and Competitors	21
2	Ownership Pattern	22
3	Shared values	33
4	Current ratio and Quick ratio	40
5	Absolute Liquidity ratio	41
6	Asset turnover ratio and Debt Equity ratio	42
7	Operating Profit ratio	43
8	Net Profit ratio	44
9	Profit and Loss Account	46-47
10	Balance Sheet	48-49
11	Weekly Report	50-51

LIST OF CHARTS/PICTURES

Chart/ picture No.	Title	Page No.
1	BEML Logo	9
2	Workflow model	18
3	Picture of MD/chairman	23
4	Mc kinsey's 7s framework	28
5	Organisation Structure	29
6	Porter's five force model	33
7	SWOT	36

EXECUTIVE SUMMARY

BEML limited incorporated in May 1964, and commenced operations on January 1965. It was wholly owned and operated by India's ministry of Defence until 1992, when the Government divested 25% of its holdings in the company.

The Company has partially disinvested and presently Government of India owns 54 percent of total equity and rest 46 percent is held by Public, Financial Institutions, Foreign Institutional Investors, Banks and Employees. It commands 70% market share in domestic earthmover industry. Nearly 40% of its equity has been divested to financial institutions and public.

BEML Limited is a premier ISO 9001-2000 Company in India and the second largest manufacturer of earthmoving equipment in Asia. A four-decade old location and multi- product company. It has numerous local workplaces everywhere throughout the world. BEML has vital application in diverse sectors of economy such as coal, mining, steel, cement, power, irrigation, construction, road, building and railway.

BEML has its corporate headquarters and central marketing division in Bangalore and also has assembling units in Bangalore, Mysore, Kolar gold fields.

The main objective of organisation study report on BEML is to learn, understand the organization structure, work flow model, diversification of company, its business and also to analyse the SWOT of the company, the McKinsey 7S framework and Porters five force model. This report is prepared based on the secondary sources of data available in the website, annual reports of the company and few internship reports.

This report of organisation study undertaken on BEML Ltd consists of six chapters, where the First chapter deals with the introduction about the organisation and industry profile.

The Second chapter of the study deals with some theoretical concept about the Organization profile which includes the back ground of the company, the nature of the business that the company is in, work flow model, the vision, mission and the quality policy of the company, the products/services provided by the company, the ownership pattern of the company, the details of achievements or awards made by the company and the future growth prospects of the company.

The Third chapter of the study deals with the McKinsey's 7S framework and Porters five force model with reference to organization. The Fourth chapter is about identifying the Strength, Weakness, Opportunity and threats of the company by using the SWOT analysis.

The Fifth chapter deals with the analysis of financial statements of the company and the final chapter is about the learning experience that I gained from undertaking the organisation study.

CHAPTER: 1

INTRODUCTION TO ORGANISATION AND INDUSTRY

INTRODUCTION TO ORGANISATION



Company name: BEML LTD

Location: KGF

Type: Public sector undertaking

Headquarters: Bangalore.

Founded: May 1964

Revenue: 3,077.37 crores INR (US\$430 million)

Key people: Sri Deepak Kumar Hota (chairman and M D)

Number of employees: 7,185

Activity: Manufacturing of Earth Moving and Defence Equipment's and supply to core sectors of the economy.

BEML Limited operates as a construction equipment company in India and internationally and is rated as the first amongst the fastest growing construction equipment in India. It is today leading the infrastructure revolution in the country with successful foray into hi-tech metro trains.

Being a multi-technology, multi-unit and multi-location company, BEML offers high quality products for diverse sector of the economy such as coal, mining, steel, cement, powder, irrigation, construction, road building, Defence, Metro and Railways. It has come to the forefront of heavy engineering industry with a track record of growth and profit in the last for decades.

The company offers a range of mining machinery for opencast and underground mines; and produces machines, such as electric rope shovels, hydraulic excavators, bulldozers, wheel loaders, wheel dozers, dump trucks, motor graders, pipe layers, tire handlers, water sprinklers, and backhoe loaders, as well as mammoth walking draglines for the opencast mines.

It also supplies integral rail coaches, overhead electric inspection cars, postal vans, AC/DC electric multiple units, D-EMUs, utility track vehicles, track laying equipment, broad-gauge rail buses, treasury vans, and spoil disposal units to the Indian railways.

In addition, the company manufactures defence equipment, including Tatra vehicles for all terrain operations, which comprise bridge layers, field artillery tractors, medium and heavy recovery vehicles, pontoon mainstream bridge systems, crash fire tenders, and mobile mast vehicles, as well as engineering mine ploughs, tank transportation trailers, weapon loading equipment, armored recovery vehicle, mil rail coaches and wagons, aircraft weapon loading trolleys, and aircraft towing tractors to meet the Indian army and air-force requirement.

Further, it trades in iron ore, coal, and steel billets; and offers services in areas of computer aided design, computer aided engineering, testing, and technical documentation.

It has expanded its product range to cover high quality hydraulics, heavy duty diesel engines, welding robots and heavy fabrication job. With the increased focus on the quality, safety and productivity BEML limited is pioneering new technologies aiming at value addition in all its processes and products.

BEML limited nationwide network of sales offices enables buyers with ready access to its wide range of products and services. The company extends the efficient after sales support to its customers through

nationwide service centers equipped with parts depots, rehabilitation services keeps its customers satisfied. The company's site engineers ensure higher availability of machines through prompt services.

INDUSTRY PROFILE

Industries are the pointing lights to the growth of an economy and are the backbone of the country. The development and growth of a country largely depends on industrialization of its economy.

India is the basically an agriculture-based country. It is after the independence, India has given importance to the growth of industrial development through five year planning programs. Government has taken a leading march to up heave the movement of industrialization.

For any country, small or big, developed or developing, need good infrastructure facilities such as roads, dams, tunnels etc, the infrastructural facilities are the primary needs for the transportation or movement of goods. Roads play a vital role in this aspect.

Tremendous development has taken place in science and technology, which has mechanized every work in every field. Manually carried out work is less productive and time consuming. Thus to increase efficiency and productive, mechanical equipment came into existence and almost every field is mechanized. As such, the demand for such mechanical equipment has increased tremendously.

India has been ruled by foreigners for several years. And such, after independence India has given priority to strengthen the country's defense force. Several industries producing defence equipment has been started by the government of India thereafter. India felt the need of having strong defense which is capable of defending its borders from neighbors. In this view, BEML has been established by ministry of defence mainly established to produce defence equipment and heavy capital equipment like railways coaches, earthmovers, machineries, etc. It was to a great extent perceived to create protection gear's and substantial capital hardware like railroad mentors, earth mover's machines and so on. Two dynamic wars with Pakistan and china have made resistance service to jerk one more unit of BEML Ministry of defence started one unit of BEML at KGF in the year 1964.

Today's BEML one of the premier ISO 9001-2000 certified company in India and the second largest manufacturing of earth moving equipments in Asia.

The company diversified its operations and offers products for various sectors of economy such as coal, mining, steel, limestone, power, irrigation, construction, road building, aviation, defence, metro and railway.

BEML has number of branches all over India. Its various units in different parts of the country have immensely contributed to the growth of the Indian economy. It not only has provided employment but also successfully achieved the advantage of economies of scale. Ancillary and small- scale industries have been started around its vicinity. It is contributing to the economic growth both directly and indirectly. It is emerged as a powerful industries unit of Indian economy.

CHAPTER: 2

ORGANISATION PROFILE

BACKGROUND

BEML LIMITED (Formerly Bharat Earth Movers Limited) is a PUBLIC SECTOR UNIT (PSU) under the effective administration of minister of defence department. The organization was set up in the late 40's as a part of HAL's Aircraft's now known as "Hindustan Aeronautics Limited" to manufacturing railway coaches. It gradually diversified into earth moving equipment in 1964, after one year i.e., since 1965 the organization has its own entity i.e. BEML.

The company was incorporated in the 1st five years plan when India was very weak economically. The main objective of setting up this organization was to manufacturing heavy earth moving equipment, rail coaches, heavy duty truck laying equipment etc.

BEML limited was incorporated with its corporate head quarter at Bangalore on 11-04-1964 under the Ministry of Defense. A premier ISO 9000 company in India and is the second largest manufacture of earth moving equipment in Asia. A four-decade old multi-location and multi-product company, BEML limited has vital applications in diverse sectors of economy such as coal, mining, steel, cement, power, irrigation, construction, road building and railway. It has expanded its product range to cover high-quality hydraulics, heavy-duty diesel engines, welding robots and undertaking of heavy fabrication jobs. With the increased focus on the quality, safety and productivity BEML limited is pioneering new technologies aiming at value addition in all its processes and products.

BEML is a 'Miniratna-Category-1' company under the ministry of defence and is engaged in design, manufacturing, sales and after-sales-service of a wide range of construction and mining equipment, defence products and metro coaches. In addition, the company also provides engineering solutions in certain specialized areas such as automotive and aeronautics. The newly formed trading division of the company deals in third party products catering to the requirements of its domestic and overseas customers. The company has four manufacturing facilities in Bangalore, Mysore, Kolar Gold Fields (KGF) and Palakkad in Kerala.

It also plays a pivotal role and serves India's core sectors like Defense, Rail, Power, Mining and Infrastructure. The company started with a modest turnover of 5' cr during 1965 and today, thanks to its diverse business portfolio, the company has been able to achieve a turnover of more than '3,500 cr. BEML's products are sold and serviced through its large Marketing Network spread all over the country and are exported to more than 67 countries.

The company has a dedicated R&D infrastructure and team in line with consistent policy of the company to

meet the technological demands through in-house R&D and strategic technical tie-ups with global players.

It's Rs.300 million R&D center at KGF is one of the best in Asia and houses most modern laboratories in fluid power engineering, material science, structural engineering and power line testing.

KGF COMPLEX

KGF complex of BEML limited was set up in the year 1967. BEML limited is proud to have a second largest machine shop at KGF complex, which is the second largest manufacturing facility in the entire Asia.

KGF COMPLEX DIVISIONS

- Earth Movers Division
- Marketing Division
- Hydraulics & power line
- Research & Development
- Rail Coach Unit
- Heavy Fabrication Unit

EM division manufactures earth moving and construction equipment like bulldozers, hydraulic excavators, wheel loaders, track shovels, rope shovels, pipe layers and walking dragline for open coast mining as well as long wall mining system for underground mining. Marketing division deals only with spare parts.

A separate division by name H&P line is also attached to the main division which meets the needs and requirements of the (other divisions) EM division and Mysore division. H&P division manufactures products termed as hydraulic aggregates it manufactures Hi-tech precision aggregates like transmission, final drives axles, pumps, control valves, cylinders and suspensions.

R&D facility for continuous up gradation through research part of manufacturing system methods etc. An amount of Rs.30 crores was invested.

BEML operates on three major business verticals for associated equipment manufacturing:

- Mining and construction
- Defence and aviation
- Rail and Metro

In addition to the above there are three Strategic Business Units (SBUs):

- Technology Division for providing end-to-end engineering solution.
- Trading Division for dealing in non-company products.
- International Business Division for export activities.

The company has 9 manufacturing units spread over the following locations:

- Kolar Gold Fields (KGF) Complex (around 100km from Bangalore)
 - Earth Moving Division
 - Rail coach Unit II
 - Heavy Fabrication Unit
 - Hydraulic and power line Division
 - Mysore Complex (around 130 km from Bangalore)
- Truck and Engine Division
- Bangalore Complex- Rail & Metro Division
- Palakkad complex
- Vignyan Industries, a subsidiary located at Tarikere (around 300 km from Bangalore)-steel castings

AREA OF OPERATION

BEML being a public sector undertaking operates well in the global market. The company's international divisions are involved in large trading as well as counter trade in countries worldwide covering Asia and Middle East besides entering into European market through UK, Italy and Greece. The company commenced its overseas operation in 1969-70 and has exposed earth moving equipments, rail coaches and spare parts valued at several million US \$ to countries all over the world.

As a recognized export house, BEML has expanded operations to include exports of engineering goods, defense items commodities and undertaking of project management and turnkey contracts.

Despite the pressure of highly competitive market for heavy constructions and mining equipment, BEML's export is attributed to good quality equipment and very efficient after sales services. Fully satisfied with BEML's services, customers in several countries have been placing repeat orders for the company's equipment.

Strategies have been adopted for improving Global presence through Region-wise Strategy, Appointment of Distributors (10 distributors have been appointed in SAARC, ASEAN, AFRICA and MIDDLE EAST countries), LoC opportunities, Collaboration with other DPSUs, Participation in Exhibitions etc. Your Company is focusing on Africa, Middle East, SAARC countries viz. Sri Lanka, Nepal, Bangladesh & Mauritius for export of Mining & Construction equipment, Defense equipment, Rail Coaches, EMUs & Metro Cars.

NATURE OF THE BUSINESS

In past three decades, BEML has been expressed as a leading corporate giant in manufacturing sophisticated earth moving equipment's for vital application in diverse sectors of economy. The company operates under three major Business verticals - viz. Mining & Construction, Defense and Rail & Metro.

CONSTRUCTION AND MINING

BEML Limited offers a comprehensive and diverse range of mining machinery for both opencast and underground mines. BEML produces machines such as Electric Rope Shovels, Hydraulic Excavators, Bulldozers, Wheel Loader, Wheel Dozers, Dump Trucks, Motor Grades, Pipe Layers, Tyre Handlers, Water Sprinklers and Backhoe Loaders. Besides, It also manufactures mammoth walking Draglines for cost-effective operations in the opencast mines.

BEML has diversified into underground mining with products such as side discharge loader, load haul dumper, winch winder, randy car and skip etc.

BEML has an active fleet of machines to take up works related to road construction, infrastructure, development, port handling, tunnel boring and petroleum projects. The company is floating a joint venture soon to take up contract mining and maintenance of mining equipment's.

BEML has entered into alliance with international partners for several new products which includes multi utility armed vehicles, mine laying vehicles, long wall mining system, tunneling equipment, mine protected vehicles, surface miners etc.

DEFENCE AND CIVIL AVIATION

Being India's leading defense equipment manufacturer, BEML Limited keeps the Indian Army and other defense forces abreast with state-of-the-art military equipment. The company manufacture variants of Tatra vehicle for all terrain operations including Bridge Layer, Field Artillery Tractor, Medium & Heavy Recovery vehicle, pontoon Main stream Bridge systems, Crash Fire Tenders, Mobile Mast Vehicle, etc.

BEML also supplies Engineering Mine Ploughs, Tank Transportation Trailers, Weapons Loading equipment, Armored Recovery vehicle, Milrail coaches and wagons apart from Aircraft Weapon Loading trolley and Aircraft Towing Tractor. BEML plays a stellar role in the country's Integrated Guided Missile Development project by supplying ground support vehicles. The company has also created a world class test track at its KGF complex.

BEML's multi-role vehicle and transportation trailers have found total acceptance with arms forces. For the civil aviation sector, BEML offers passenger Aerobridges, crash fire tender and aircraft towing tractor.

METRO & RAILWAY SECTOR

In recent years, BEML Limited has formed into high-tech Metro Trains deployed for intra-city commuting. BEML is expanding its infrastructure to meet the greater needs of metro projects and geared up for manufacturing and supply of high-tech stainless steel metro to upcoming urban infrastructure projects in various cities of the country.

Also, BEML supplies equipment to Indian Railways which include Integral Rail Coaches, Overhead Electric Inspection cars, postal vans, AC/DC Electric Multiple units, D-EMUs, Utility Track Laying Equipment, Broad-Gauge Rail bus, Treasury Vans and Spoil Disposal Units etc. It also offers electric multiple units for development in suburban services. The company also manufactures heavy duty diesel engines, diesel generators sets and hydraulic aggregates.

BEML has entered into alliance with international partners for several new products which includes multi utility armed vehicles, mine laying vehicles, long wall mining system, tunneling equipment, mine protected vehicles, surface miners etc.

VISION

To become a market leader, as a diversified company supplying quality products and services to sectors such as mining and construction, Railways and Metro, Defense and Aerospace and to emerge as a prominent International player.

MISSION

1. Improve competitiveness through organizational transformation and Collaboration / Strategic Alliances / Joint Ventures in technology.

2. Grow profitably by aggressively pursuing business and market opportunities in domestic and international markets.
3. Adoption of state-of-the-art technologies and bring in new products through Transfer of Technology and in-house R&D.
4. Continue in diversified growth in new products and markets.
5. Attract and retain people in a rewarding and inspiring environment by fostering creativity and innovation.
6. Offer technology and cost- effective total solutions for enhanced customer satisfaction.

QUALITY POLICY OF BEML LIMITED

“Quality is the hallmark of excellence”.

BEML Limited views quality improvement as a business strategy and hence remains proactive in the areas of the product and service quality. At BEML, a corporate Quality policy emphasizing Total Quality Management ensures that quality system adopted results in products, services and processes that meet stringent standards and requisite performance criteria. A separate Quality Department spearheads the thrust towards total quality management. All the manufacturing units in the company are under ISO certification and completed upgradation to ISO 9000-2015 standard during the year. KGF Complex, Bengaluru Complex and Mysuru Complex are also certified for Environmental Management System (EMS) and upgraded to ISO14001-2015 standard. Further, Bengaluru Complex is certified as per BS OHSAS 18001-2007 Integrated Management System standard and Aerospace Manufacturing Division (ASMD), Mysuru Complex gained certification as per AS9100D standard during the year.

QUALITY OBJECTIVES

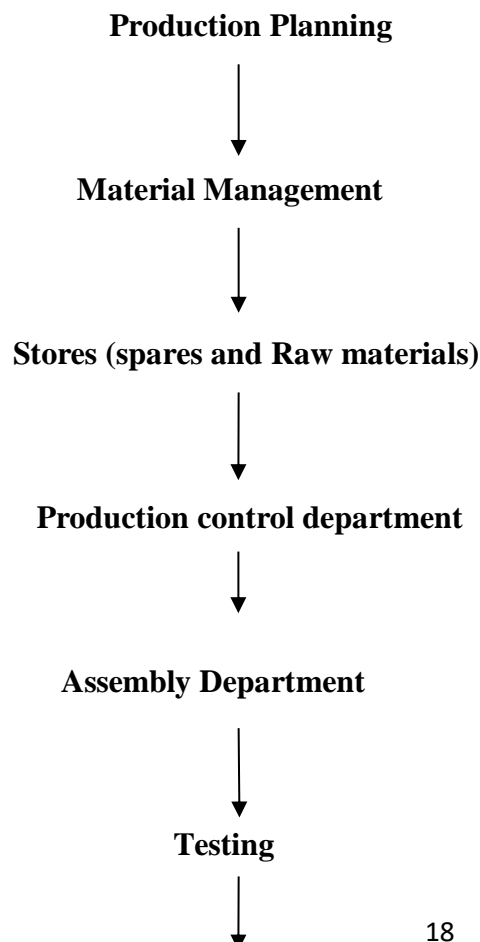
- Manufacturing and supply equipment to meet customers technical needs and guarantee satisfactory performance of products over their life-time.
- Have an effective and documented system to ensure that every input to the product is designed, procured, manufactured and controlled for optimum efficiency and service.
- Train and motive personnel at all levels, so as to include quality consciousness and foster team work.

- Bring about quality awareness in customer personnel in operation and maintenance of product to maximize their utilization.
- Establish high reliability standardized offer prompt customer service ensuring high equipment availability.
- Strive continuously for a better product quality through technological improvement.
- Achieve operational excellence through waste elimination and value engineering efforts.

WORK FLOW MODEL (End to End)

A nationwide network of 33 marketing offices customer with immediate access to BEML's range of products and services. Marketing activities include field operations and intensive training of customer personnel in operation and maintenance of equipment.

Recommendation-for-user-profit (RUP) studies enable customers to improve machine productivity and reduce operating costs. BEML's marketing strength has enabled it to achieve a share of over 70%.



Packing



Customer site

Productions planning are done at corporate office. This sent to all the departments in BEML. This is usually done in the month of January base on previous year's sales. The Material management department plans for the raw material and spares required sends requisition to Finances department for approval for purchases. Once the material is purchased it is inspected and stored in different stores.

The production control departments plan for numbers of Equipment to be manufactured and supplies the required spare part for the equipment to be manufactured and supplies the required spare part for the assembly of the Equipment to Assembly Department where they are assembled and painted. Later the equipment is tested at the factory and packed and delivered to customer.

PRODUCTS OF BEML

The products of BEML are as follows:

1.Mining and construction equipment

- Crawler dozers
- Wheel dozers
- Excavators
- Dumps trucks
- Loaders
- Backhoe loaders
- Pipe layers
- Walking dragline
- Rope shovel
- Sprinklers
- Graders
- Underground mining
- Tyra handler
- C-crane

2. Defense Equipment

- Heavy Duty TATRA Trucks
- Heavy Recovery Vehicles (HRV)
- Armored Recovery Vehicles (ARV)
- 50T Trailer for Tank Transportation
- Pontoon Bridge System
- Ground Support Vehicles for Integrated Guided Missile Programme
- Crash Fire Tender
- Aircraft Towing Tractor
- Aircraft Weapon Loading Trolley
- Mine Plough
- Dozers for snow clearance / road construction to DGBR and E-in-C
- Transmissions, Final Drives, Interface Items and Ejector & Air Cleaner Assemblies for Infantry Combat Vehicles (ICV-BMP-II)
- Hydro-pneumatic Suspension Systems, Hull, Turret, Transmission and Under Carriage items for MBT Arjun
- Military Rail Coaches and Military Wagons

3. Railways

- Metro Cars
- Passenger Rail Coaches
- Military Rail Coaches
- Track Laying Equipment
- Overhead Equipment Inspection Cars
- Railbus
- Treasury Vans
- Stainless Steel Electric Multiple Units (SSEMU)
- AC Electric Multiple Units (AC EMU)
- Diesel Electric Multiple Units (DEMU)
- Utility Track Vehicle

4. Diesel Engines

- 100-1000 Hp Engines for contribute /Mining Equipment

- Irrigation Pumps
- Marini Vessel Engines
- Compressors

5. Disaster Management Equipment

- Radio Control Dozers
- Hydraulic Excavators with Demolition Attachments

6. Road Construction Equipment

- Batching and mixing plants
- Vibratory Compactors
- Pneumatic Fired Rollers

7. Hydraulic Aggregates

- Hydraulic Pumps
- Hydraulic Cylinders and Control Valve

PRODUCTS AND THEIR COLLABORATION

PRODUCTS	COLLABORATION
210M Dump Truck	KOMATSU Mining System, USA
445E Electrical Dump	KOMATSU Mining System, USA
Walking Draglines	BUCRYUS International, USA
182cm 10cu.m Rope Shovel	BUCRYUS International, USA
Heavy Duty trucks for Defence	TATRA SIPOX
Diesel Engine	KOMATSU, JAPAN
Metro Railway	ROTEM, SOUTH KOREA

COMPETITORS OF BEML

Railways	Integral coach factory permbur, RCF at Karputhala
Bull dozer	Caterpillar (Hindustan Motors)
Excavators	L&T, Escort, TATA
Dumpers	Hindustan Motors, Volvo, TATA, TELCO, Ashok Leyland
Coaches for metro rail	Bombardier Transportation, Alstom

OWNERSHIP PATTERN

The shareholding pattern page of BEML Ltd presents the promoter's holding, FII'S holding, DII's holding, and shareholding by general public etc.

Holders Name:	No of shares:	% share holding
Promoters	2,25,00,000	54.03%
Financial Institutions	54,98,470	13.2%
General public	46,09,835	11.07%
Banks Mutual funds	39,88,403	9.58%
Other companies	28,64,477	6.88%
Foreign Institutions	15,61,074	3.75%
Foreign NRI	3,49,328	0.84%
Others	2,72,913	0.65%
TOTAL	4,16,44,500	100%

BOARD OF DIRECTORS



Sri Deepak Kumar Hota

Chairman & Managing Director (CMD) and Director (Rail and Metro) Additional. Charge

Shri D K Hota has assumed charge as Chairman & Managing Director with effect from 01.07.2016. He joined the Board of BEML Limited on 01.07.2013 as Director (Human Resources). He has graduated in Economics from St. Stephens College and Post Graduation in HR from XLRI. He has over three decades of professional experience in HR and Business and served in various capacities in Hindustan Petroleum Corporation Limited including CEO of HPCL Bio-fuels. Prior to joining BEML, he was heading the Natural Gas Division, HPCL, Mumbai. Dr. Deepak Kumar Hota with his rich experience in HR & business operations rose to the position of CMD, BEML, in July 2016. As CMD, he took defining steps enabling BEML to gain competitive edge, in the intense competitive business environment. His untiring efforts led to the Company achieving the highest ever Sales. He has been the driving force towards using IT as a major enabler across BEML's businesses and also in promoting sustainable development goals.

The other directors followed by the Managing Director are as follows:

Shri Puneet Agarwal

Government Nominee Director

Shri Puneet Agarwal (DIN:07192938) is a B.Tech in Electrical Engineering from IIT, Kanpur and also holds Masters in Public Administration from Syracuse University, New York Maxwell School of Citizenship and Public Affairs, USA. He belongs to the Indian Administrative Service of 1998 batch (Tripura Cadre). Shri Agarwal has been appointed as Government Nominee Director on the Board of BEML Limited w.e.f. July 27, 2020. Presently posted as Joint Secretary (Land System), Department of Defence Production, Ministry of Defence and had a wide experience in the area of land revenue system, rural development, IT, e-governance and finance in a career span of 22 years. He handled the Charge of JS (Coord) & CAO from November, 2019 to January, 2020 in the Department of Defence and served as Joint Secretary in the Ministry of Textiles, Government of India, from October, 2016 to November, 2019. Besides various important Cadre Postings, Shri Agarwal also worked as Director in the Department of Economic Affairs and as Deputy Secretary, Cabinet Secretariat in the Government of India.

Shri Suraj Prakash

Director (Finance)

Shri Suraj Prakash (DIN: 08124871) is a Cost Accountant from the Institute of Cost Accountants of India. He assumed charge as Director (Finance) of the Company on 10.05.2018. Before assuming charge as Director (Finance), he was General Manager (Finance) in BHEL. He has rich and varied experience in Indirect Taxation, Tax Management, Tax optimisation & Systems improvements and has been instrumental in various

key policies decisions like policy formulation, formation of consortium, technology collaboration, merger & acquisition, evaluation / appraisal of investment in JVs and capex investment etc. He was Chairman, Noida Chapter of the Institute of Cost Accountants of India during 1999-2001 and 2009-2012.

Shri MV Rajasekhar

Director (Mining & Construction)

Shri MV Rajasekhar (DIN: 08467141) is a graduate in Metallurgical Engineering from VNIT, Nagpur and holds a post graduate degree, MTech in Welding Engineering from IIT Chennai. In addition, he has done his MS in Technology Management in Germany. He assumed charge as Director (Mining & Construction Business) of the Company on 01.06.2019. Prior to assuming the charge as Director, he served as Executive Director (Mining & Construction Business). He has a vast experience of over 31 years spread across several functions like R&D, Production, Planning, Marketing in Mining & Construction and Rail & Metro businesses.

Shri R Panneer Selvam

Director (Human Resources)

Shri R Panneer Selvam (DIN: 08075917) is a Post graduate in Production Engineering with MBA having 36 years of experience, heading manufacturing Units both in Private and Public Sector Companies. He joined BEML Limited in the year 2004 as Deputy General Manager, KGF Complex. He assumed charge as Director (Human Resources) of the Company on 28.11.2019. Prior to assuming the charge as Director, he served as Executive Director (Corporate Planning and Materials). Over the period, Shri Selvam served in various capacities in different functional areas of the Company including Materials, Production in Defence as well as Mining & Construction verticals apart from heading Palakkad, Mysuru and KGF Complexes.

Shri Ajit Kumar Srivastav

Director (Defence)

Shri Ajit Kumar Srivastav (DIN: 08741858) is a graduate in Mechanical Engineering from IIT Kharagpur. He joined BEML as an Engineer Trainee and in his professional career spanning over three decades in BEML, has worked in various critical functions. He assumed charge as Director (Defence Business) on 01.06.2020. Prior to assuming the charge as Director, he served as Chief General Manager (Defence Marketing). He played

a significant role in phased indigenization of key products and import substitution. He also created a vendor ecosystem incorporating MSMEs and set up the Regional Quality Assurance Wing covering entire Northern India. As a District / Regional Manager, he has set up the first ever dealer network for construction equipment. As Head of International Business Division, he effectively used buyer's credit opportunities to enhance exports.

Dr. Gurmohinder Singh

Independent Director

Dr. Gurmohinder Singh (DIN: 08199586) has Post Graduate Diploma in Journalism from Bhartiya VidyaBhawan and holds Ph.D from Delhi University. Dr. Gurmohinder Singh assumed charge as Independent Director of the Company w.e.f. 13.08.2018. Presently he is the Principal of Sri Guru Nanak Dev Khalsa College, Delhi University and also Associate Professor in Department of Punjabi. He has about 24 years of academic and teaching experience. Dr. Singh has published various books and articles from time to time.

Shri Arvind Kumar Arora

Independent Director

Shri Arvind Kumar Arora (DIN: 08741858) is MTech from IIT Delhi and M.Phil from National Defence College (University of Madras). Shri Arora assumed charge as Independent Director of the Company w.e.f. 10.07.2019. He has served in various positions in Military Engineer Services, Government of India for more than 36 years and retired as Director General (Personnel). His area of specialization in Public Works, Infrastructure Planning and Management, Public Admin, Strategic Works, HR Management, Civil Engineering. He is also an Independent External Monitor (IEM) for Department of Telecom and HLL Infratech Services Limited.

Smt. Balmuri Vanitha

Independent Director

Smt. Balmuri Vanitha (DIN: 08679028) is B.A. and LL.B from Kakatiya University. Smt. Vanitha assumed charge as Independent Woman Director on the Board of the Company w.e.f. 24.01.2020. Smt. Vanitha has started Advocate Practice in the year 1998 at Godavarikhani and has been practicing for the last 22 years.

AWARDS AND ACHIEVEMENTS

There are many awards achieved by BEML LIMITED till now, some of them are listed below:

- On 22.08.2016, Company received two awards- (i) Excellence in Training, Learning and Development Programmes, and (ii) Outstanding Contribution in CSR. These awards were presented

in recognition of Talent Management, Talent Development and Talent Innovation, instituted by Employer Branding Institute, Mumbai.

- On 21.09.2016, Company won the prestigious QCI - DL Shah National Quality Award-2016 at the 11th National Quality Conclave held at New Delhi for metro quality assurance with a case study on 'Optimization of painting process parameters' for metro car interior panels.
- On 23.09.2016, Company was awarded the prestigious 'International Gold Award' for its Quality initiatives in the manufacture of Metro Cars at the International Convention of Quality Circle Competition held at Bangkok.
- On 25.10.2016, Company was bestowed with the prestigious award 'Buildcon India's Top Challenger 2015-16' instituted by ASAPP Info Global Group during the 14th Construction World Annual Awards-2016 at Mumbai.
- On 14.12.2016, Company had won prestigious 'Star Performer Award' in the Export category for the year 2014-15.
- On 16.12.2016, the Chairman & Managing Director of the Company was conferred with CEPM Fellowship Award-2016 at the 24th Global Symposium organized by Centre for Excellence in Project Management.
- On 26.01.2017, Company had bagged various awards for best maintenance of gardens at Complexes, Headquarters and Township Parks in the garden competitions held during Republic Day Horticultural Show-2017.
- On 17.04.2017, Company is bestowed with Hindustan PSU Award under the category 'Fastest Growing Organisation - Miniratna.'
- On 25.04.2017, Company is bestowed with Equipment India Awards under two categories viz., Best Seller in Rigid Dump Trucks and Best seller in Crawler Dozers for the year 2017.
- On 30.05.2017, Company is bestowed with Raksha Mantri award in the category "Design Effort: Own initiative projects" for the design and development of 180T Class Electric Hydraulic Excavator BE1800E.
- Bagged 'PSE Excellence Award 2017' from Indian Chamber of Commerce (ICC) for outstanding contribution in steering the Company to greater heights.
- Metro Team won "International Quality Gold Award – 2018" for case study on 'Minimizing Weld distortion in Metro Bogie Frame Manufacturing'.
- Received 'Top Challengers Award 2018' for excellent performance during FY 2017-18 and "Best Mining Equipment Seller Award" in Crawler Equipment - Dozers and Rigid Dump Truck segment for mining sectors.

- Received “SKOCH Award” under 'Corporate Excellence Gold Category' and “SKOCH Order of Merit” Award for design & development of Armoured Repair & Recovery Vehicle and Metro Cars for KMRCL.
- Bagged “CII Design Excellence Award 2018” for 'Design and Development of BD65 Torque Converter'.
- BEML Palakkad Complex has won the 'Kerala State Energy Conservation Award 2019' at a function held at, Thiruvananthapuram.
- Honoured with 'Research & Innovation and Digital PSU Award' by 'Governance Now' for outstanding contribution.
- Received 'Governance Now' 6th PSU Award under Resilient Growth (Miniratna-1) category for its achievement and commitment to raise the standard in the public sectors.
- On 19.01.2019, Company received ‘Governance Now’ 6th PSU Award under Resilient Growth (Miniratna-1) category for its achievement and commitment to raise the standard in the public sectors.
- On 15.02.2019, CMD was awarded the prestigious ‘World HRD Congress Award’ for CEO with HR Orientation Award from ET NOW, for his excellent services rendered in the area of Human Resource Development.

FUTURE GROWTH AND PROSPECTUS

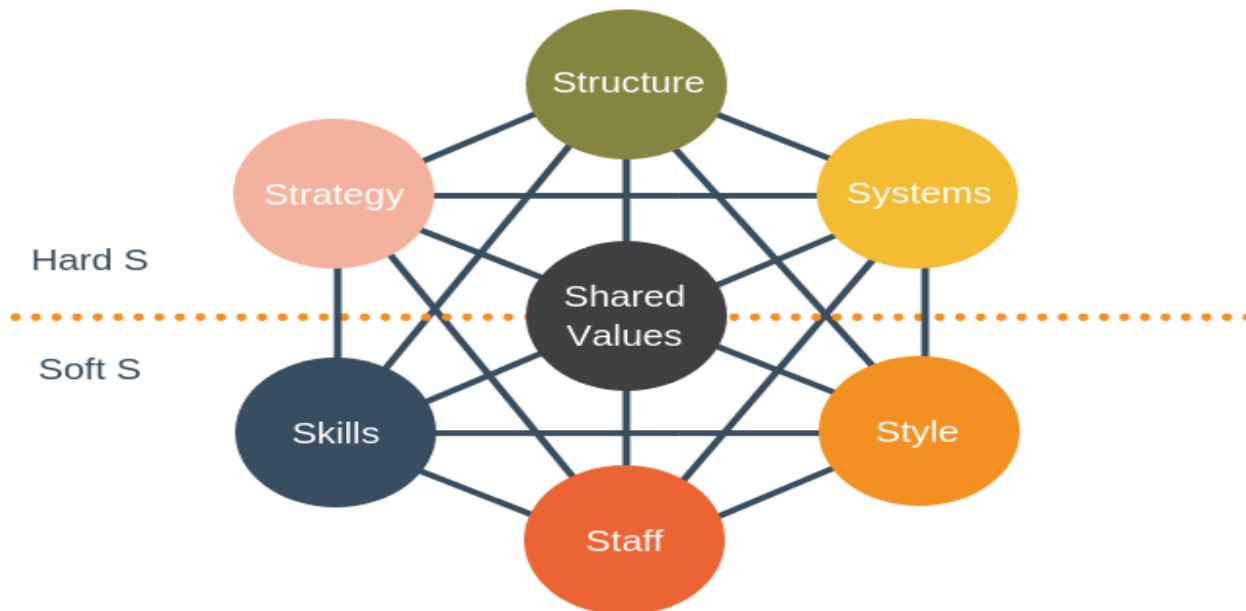
- Aerospace Manufacturing complex, the 10th factory of BEML, to go operational.
- Track laying business to put on track as yet another diversified business.
- Gear-up Dredging business to yield high volumes in turnover.
- There is a chance for mining and construction equipment’s are being expectable in mining and construction and complete annual production of coal to one billion ton consecutively by 2020.
- Rail and metro business to get further orders for non-metro products in EMU section
- BEML is also keen to participate in Defense Offsets in the coming years to boost its technical strength and business opportunities.
- Company has drawn Roadmap for design and development of AI enabled products.
- BEML signed MoU with Lockheed Martin to explore manufacturing of support equipment opportunities in Aerospace.
- On Mining front, Company has received orders for Indigenously Designed & Developed High end Excavators & Dumpers worth `450 Cr. and will be executing during FY 2020-21.

CHAPTER:3

Mc KINSEY'S 7S FRAMEWORK AND PORTER'S FIVE FORCE MODEL

Mc KINSEY'S 7S MODEL

McKinsey 7S Framework



The 7s framework of Mc Kinsey is a management model that describes 7 factors to organize a company in a holistic and effective way. The two persons who developed this model are Tom Peters and Robert Waterman were consultants at Mc Kinsey and Company. They published their 7-S model in their article “Structure Is Not Organization” (1980) and in their books “the art of Japanese management” (1981) and “in search of excellence” (1982).

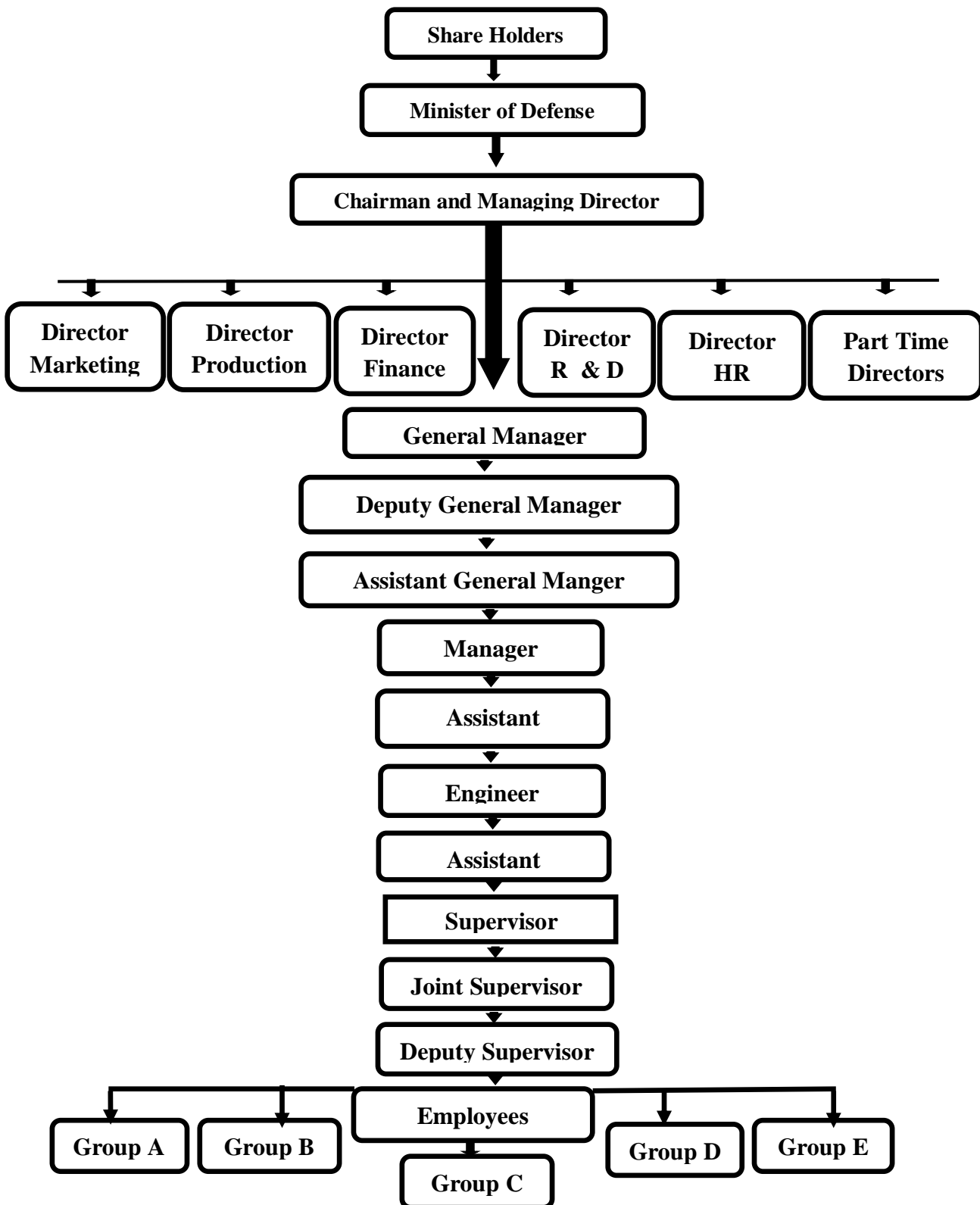
The McKinsey 7S model was named after a consulting company, McKinsey and Company, which has conducted applied research in business and industry. The McKinsey 7S Framework was created as a recognizable and easily remembered model in business. The seven variables, which the authors term "levers", all begin with the letter "S". These seven variables include structure, strategy, systems, skills, style, staff, and shared values.

1. Structure

The structure of organization represents the hierarchy of the organization. It is the pattern of relations among

various components or parts of the organization which represents the reporting system of the organization. The organization structure of BEML is Pyramidal. It has highly routine task, much formalized rules and regulations, tasks that are grouped into financial departments, centralized authority, and decision making that follow the chain of command and an elaborate administration structure with a sharp distinction between line and staff activities.

ORGANIZATIONAL STRUCTURE



2.Strategy

The strategy of BEML is to satisfy its customer by providing better products and giving service to its customer by sending one of the operators from BEML with the equipment, which has been purchased by them. Until the warranty period, the operator stays in the premises of the equipment to look after its day-to-day working. In this way, BEML provide better customer service for the customer.

To impact career development plans its employee's skills and knowledge to the changing technology to improve its productivity, quality, efficiency and also to increase moral of the employees so the company has undertaken the work of giving promotions to each and every employees based on the qualification and experience so as to contribute to the organization goals and objectives. To adopt advanced technology to beat its competitors and to produce the products of expected targets.

Most important strategy adopted by BEML is the "Elimination of Waste". Waste can be eliminated in many ways, which include

- Effective Designing
- Proper Planning
- Production Planning

3.System

A system defines as a process or a step of processes those links and orders activities to enable work to be done in order to achieve the goals. System in simple words is the formal and informal procedure including compensation systems, management information systems and capital allocation systems that govern everyday activity. Identifying, understanding and managing process as a system contributes to the organization effectiveness and efficiency in achieving its objectives.

Earth moving is computerized industry today. Complexities relating to selection and production of equipment, cost analysis, critical path method scheduling, preventing, maintenance, major repairs all have been simplified too much closed limits; computers have saved expensive men in material control and in many other applications. The most successful preventive maintenance program of the near future will be controlled from office by the person using the computers as a tool for decision-making.

ERP SYSTEM

- The entire operations of the company are now managed through ERP/SAP.
- Any activity is on-line intended to improve controls, increase efficiency and reduce costs.
- Personnel have been trained and in turn they are required to train others.

- All employees/officers are required to adopt themselves to the working accordingly.

4.Skill

Skill is needed to carry out the company's strategy. Every individual has individual skill or capacity within which he can carry out his functions effectively. Each employee possesses different types of skills, which is hidden by him. So it is the work of the organization to identify their skills and use it in the right way for the right purposes them effectively.

Even in this regard BEML has done well by identifying self -development and communication classes to increase their existing skills to further improvement and development of their personality by providing training.

Methods of training

- On the job training
- Off the job training

On the job training:

This is considered to be the most effective method of training the operative personnel. Under this method, the worker is trained at his workplace. This enables them to get training under the same work conditions and with the same processes, materials and equipment that he will be used ultimately.

Types of the job training

- Internship training
- Special projects and tasks
- Induction training

Off the job training

Off the job training means that training is not a part of everyday job activity. The actual location may be in the company classrooms or in places that are owned by the company or in universities, associations that have no connections with the company.

Types of off the job training

- Lectures
- Conferences
- Group Discussions

- Case studies

5.Styles

Style is the leadership approach, also the way in which the organization employees present themselves to the outside world, to suppliers and customers. In simple words, style is a pattern of behavior, which a leader adopts in influencing the behavior in the organization. BEML company adopts bureaucratic style. The employees in a company shares a common way of thinking and behaving. Leaders establish unity of purpose and direction of the organization. They create and maintain the internal environment in which people become fully involved in achieving the organizational goals.

The style of the organization is to look towards the employee requirements and provide other additional welfare and safety facilities to improve and develop the individual i.e. the employees and also for the development of the company.

STRENGTHS OF BUREAUCRATIC STYLE

- Achieve efficiency through specialization.
- Encourage development in inter functional co-ordination support.
- Centralized strategic decision making.

6. Staff

Staff means that the company has hired people, trained them well and assigned them to the right jobs for which they are best suited according to their qualification, skills, knowledge and experience.

Staff is one where employees work together under the control and direction of one department head who guide them in their routine business. An enterprise may have a comprehensive business plan, a sound organization structure, but it cannot accomplish results as per plan without effective staff in the company. So BEML has maintained good staff relations among the employee and also among the officers by directing and providing all guidance and responsibilities, In this way the company achieves its objectives by placing right people for the right jobs for which they are best suited and one supervisor or officer to guide and control the workforce.

7. Shared values

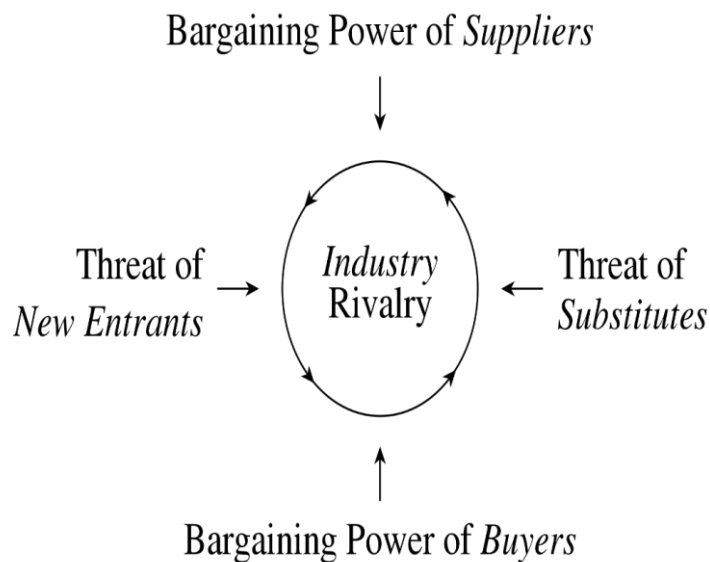
Values are the identity by which a company is known throughout the business arena. These values must be explicitly stated as both corporate objectives and individual values. The values of BEML is to Reiterate commitment towards holding 'BEML FIRST' with the intrinsic values and culture as guiding principles as under:

F - Focus on Customer	We strive to achieve customer delight in all our actions
I - Innovation & Technology	We leverage our continuous learning, innovation and technology in all our work
R - Reliability and Quality	We build reliability and quality in all our products & services
S - Speed & Responsiveness	We are agile and respond to needs and challenges of all stakeholders with swift execution
T - Trust & Teamwork	We help each other succeed through integrity, trust, respect, transparency, teamwork and being a socially responsible corporate citizen

PORTER’S FIVE FORCES MODEL

Porter's Five Forces Framework is a method for analyzing competition of a business. It draws from industrial organization (IO) economics to derive five forces that determine the competitive intensity and, therefore, the attractiveness (or lack thereof) of an industry in terms of its profitability.

Porter's five forces include three forces from 'horizontal' competition – the threat of substitute products or services, the threat of established rivals, and the threat of new entrants and two others from 'vertical' competition – the bargaining power of suppliers and the bargaining power of customers.



1.Threat of substitutes.

Firms mostly monitoring the trends within the industry to track the strategies but competition not only arise within the similar industry but also in different industry. This is about the substitution of the unique products the company produce. The easier people substitute products, the weaker the company is. Companies in other industry offer products with similar features and functionality or even better act as substitute for the products.

In case of BEML Ltd the threat of substitute of products or services is medium to high.

- Substitute product is inferior.
- Limited number of substitutes.

2. Threat of New Entrants.

In BEML the threat of entry of new competitors is medium to high. Potential entry for new competitors is also the factor to intense the competition in the industry. A larger pool of new entrants results in more changes of intense competition. Barriers to entry, however can restrict the firms from entering the market, more number of entry barriers will make it difficult for the new entrants to exploit the opportunity of new market. Government policy creates hurdles for new entrants by heavy taxes and interest rates. New firms must get to know the Government regulations and policies before making an entry decision into the country. If entering to a company's market is easy, this will show that the company is not powerful. The companies have to struggle to make it harder for others to conquer their market.

3.Threat of Competitive Rivalry.

In BEML the intensity of competitive rivalry is relatively few/low in the public sector. The main competitors for BEML are in the private sector who have their own manufacturing units in India, thus participating in the 'Make in India' initiative and also the competition from foreign players are high to the company.

The ongoing war between the firms competes in the same industry for gaining customer share in order to increase their revenues and profits. The industries which engaged in the production of various types of similar products compete each other to achieve more market share. The competition is more if the firm pursues strategies that give it a competitive advantage over the strategies pursued by its rivals. Developing new strategies is easier than retaining the uniqueness of the strategies so as to gain a competitive edge over the rivals in the industry. Changes in strategy by one firm may be met with retaliatory countermoves, such as lowering the prices, enhancing quality, adding features, providing services, extending warranties and increasing advertising.

4. Bargaining power of buyer.

Consumers are the final users of the product, performance of the companies totally depends upon the consumers. Bargaining power of buyers is usually more when they are huge in number and consumers purchase in large quantity. Rival firms offer discounts, warranty and services to switch the consumer from one brand to another in the same industry. As the satisfaction level of consumer goes up more the intensity level of competition increases.

In BEML bargaining power of buyers is high because of its competitor firms, which may provide similar type of products to customers.

- Product is important to customer.
- Large number of customers.
- Buyer choice.
- Low dependency on distributors.

5. Bargaining power of suppliers.

Supplier and producer relation always matters especially in manufacturing industries. Suppliers play an important role in the production of goods and services, making the raw material better and till the final product are made. Bargaining power of suppliers affect the intensity of competition especially if there are huge number of suppliers, less availability of raw material and the cost of switching between suppliers or raw material is high.

In case of BEML Ltd the bargaining power of suppliers is low to high, which depends on the intensity of competition from its rival companies.

- Volume is critical to suppliers.
- Inputs have little impact on costs.
- Large number of substitute inputs.

CHAPTER: 4

SWOT ANALYSIS

SWOT ANALYSIS



A scan of the internal and external environment is an important part of the strategic planning process. Environmental factors internal to the firm usually can be classified as Strengths (S) or Weaknesses (W), and that are external to the firm can be classified as Opportunity (O) or Threats(T). Such an analysis of the strategic environment is referred to as SWOT analysis. The SWOT (Strengths, Weakness, Opportunity and Threats) analysis has been a useful tool for industry. The SWOT analysis is effectively used as a Decision-Making Aid while planning new vocational programs.

Structured internal and external examination is unique in the world of curriculum planning and development. It is a useful way of examining current environmental conditions around program offerings. A SWOT analysis looks at the future possibilities of the institution through a systematic approach into both Positive and negative concerns.

The Strengths, Weaknesses, Opportunities & Threats of BEML are discussed below:

STRENGTH

- Established manufacturing infrastructure and knowledge base.
- Expertise in manufacturing Stainless Steel Coaches, Metro Cars, EMUs, etc.
- Capability to design & manufacture of high-end Mining equipment.
- Established R&D base with dedicated test facilities.

- All manufacturing units accredited with ISO 9001-2000 certification and Quality Management System (QMS) as per ISO 9000-2008 standard.
- Strong relationship with Services, Defense Labs and Government agencies
- Market Leader in High Capacity Dozers in India
- Major market share in Metro cars in India.
- Green Company – Use of Renewable energy sources
- Good Brand value, Large Customer base and work ethics culture

WEAKNESS

- Depletion of Skilled Manpower & Ageing Workforce
- No assured business from GOI unlike some of the other DPSUs.
- Uncertainty in orders for Rolling stock.
- Low Exports
- Low Market Share in Construction Equipment.

OPPORTUNITIES

Mining & Construction

- Coal India Limited has earmarked Capex of ₹9,500 Crore during 2020-21.
- Increased thrust by Government in infrastructure development and reforms in coal sector.

Rail & Metro

- Capex of ₹1,61,042 Crore earmarked by Indian Railways during 2020-21 towards capacity augmentation and Maintenance.
- Metro Rail extending to Tier-II cities in the Country. Light Rail Metro is also catching up as a revenue line which is expected to emerge from tier-II & tier III cities.

- Indian Railways is graduating to LHB Coaches and Stainless-Steel EMUs.
- Regional Rapid Transit System (RRTS) across National Capital Region is expected to emerge as a revenue line for Rail Business.
- Thrust on GOI Public Procurement (Preference to Make in India), Order 2017.

Defense

- 'Make in India' policy of Government is a boon to Indian industry and focus is on for Indigenous production.
- Growing opportunities in Maintenance, Repair, Overhaul and Upgrade programs.
- Thrust on Exports thru LOC for Defense Products.
- Increased impetus on modernization of central paramilitary forces.

New Areas

- Demand for high end Electric Drive Dump Trucks, Excavators and Bull-Dozers.
- New Opportunities in Aerospace Business and ISRO.
- Medium speed EMUs and High-speed trains.
- Emerging business opportunity for Light Rail.
- AI based products.

THREATS

- Post liberalization, technology leaders operating directly than parting technology to Indian counterparts.
- Mergers & Acquisitions in Mining and Construction equipment industry.
- Project delay, especially in Mining sector due to delay in resolving environmental and social issues.
- Increasing pressure on reducing life cycle costs.
- Increased FDI caps in Defense sector.
- Opening up of Defense purchases to private sector.
- Manifold increase in competition from Indian Private industry and foreign OEMs in Defense sector.

- Policy interventions favoring Private sector.

CHAPTER :5

ANALYSIS OF FINANCIAL STATEMENTS

ANALYSIS OF FINANCIAL STATEMENT

Financial statements are records of a company's financial condition and activities during a period of time. Financial statements are complex. It shows the financial performance and strength of a company. The three core financial statements are the income statement, balance sheet and cash flow statement.

Financial statement analysis is the process of analyzing a company's financial statements for decision-making purposes. It also helps an analyst assess the profitability and liquidity of a company

Several techniques are commonly used as part of financial statement analysis.

Three of the most important techniques include

- horizontal analysis
- vertical analysis
- ratio analysis.

Ratio analysis is used to analyze the BEML financial statements.

Ratio analysis refers to a method of analyzing a company's liquidity, operational efficiency, and profitability by comparing line items on its financial statements. It uses important ratio metrics to calculate statistical relationships.

Ratios used in analysis of BEML financial statements are:

- Current Ratio
- Quick or Liquidity Ratio
- Absolute Liquid Ratio
- Debt Equity Ratio
- Asset Turnover Ratio
- Operating Profit Ratio

- Net Profit Ratio

Table 1: Current Ratios of BEML Ltd during 2015-16 to 2019-20.

Current Ratio = Current Assets/Current Liabilities

Standard Form = 2:1

Financial Year	Current Assets (in crores)	Current Liabilities (in crores)	Current Ratio
2015-2016	3,340.27	1,326.31	2.52
2016-2017	3,811.73	1,685.07	2.26
2017-2018	3,747.63	1,669.83	2.24
2018-2019	4,165.91	2,000.69	2.08
2019-2020	4,159.48	1,437.73	2.89

Inference:

The above table presents current ratio of BEML Ltd during 2015-16 to 2019-20. It is observed that, when compared with standard form of current ratio, the BEML current ratio are above 2 during all five years. Hence, this is good indicator for financial health of the company.

A higher current ratio indicates a large proportion of current assets and liabilities.

Table 2: Quick or Liquidity ratios of BEML Ltd during 2015-16 to 2019-20.

Quick Ratio = Liquid Assets/ Current Liabilities

Liquid Assets = Current Assets- (stock + prepaid expenses)

Financial Year	Liquid Assets (in crores)	Liquid Liabilities (in crores)	Quick Ratio
2015-2016	1643.95	1,326.31	1.24
2016-2017	1837.27	1,685.07	1.09
2017-2018	1948.13	1,669.83	1.17

2018-2019	2463.64	2,000.69	1.23
2019-2020	2156.76	1,437.73	1.50

Inference:

The above table presents quick ratio of BEML Ltd during 2015- 16 to 2019-20. It is observed that, the year 2019-2020 has highest quick ratio and 2016-2017 has lowest quick ratio when compared during all five years.

A higher quick ratio indicates the liquidity of a company. It measures the ability of a company to meet its current liabilities as they fall due.

Table 3: Absolute Liquid ratios of BEML Ltd during 2015-16 to 2019-20.

Absolute Liquid ratios = Absolute Liquid Assets/ Liquid Liability

Absolute Liquid Assets = Current Assets- (stock + prepaid expenses)

Liquid Liability = Current Liability- Bank Overdraft

Standard form: 0.5:1

Financial Year	Absolute Liquid Assets (in crores)	Liquid Liabilities (in crores)	Absolute Liquid Ratio
2015-2016	1643.95	1,326.31	1.24
2016-2017	1837.27	1,685.07	1.09
2017-2018	1948.13	1,669.83	1.17
2018-2019	2463.64	2,000.69	1.23
2019-2020	2156.76	1,437.73	1.50

Inference:

The above table presents absolute liquid ratio of BEML Ltd during 2015- 2016 to 2019-2020. It is observed that, when compared with standard form of absolute liquid ratio, the BEML company ratio are more than 1 i.e, double than the standard form during all five years.

The higher the absolute liquid ratio the greater the company's liquidity.

Table 4: Debt Equity ratios of BEML Ltd during 2015- 2016 to 2019-20.

Debt Equity ratio = Debt/ Shareholder's fund

Standard form: 2:1

Financial Year	Debt (in crores)	Shareholder's fund (in crores)	Debt Equity ratio
2015-2016	4,322.96	2,109.36	2.05
2016-2017	4,694.40	2,181.55	2.15
2017-2018	4,674.67	2,200.24	2.12
2018-2019	5,000.50	2,187.25	2.28
2019-2020	5,066.71	2,257.15	2.24

Inference:

The above table presents debt equity ratio of BEML Ltd during 2015- 2016 to 2019-20. It is observed that, when compared with standard form of debt equity ratio, the BEML company ratio are more than 2 during all five years. Hence it is an indicator that the company is financially unstable.

The optimal debt equity ratio will tend to vary widely by industry, but the general consensus is that it should not be above a level of 2.0.

Table 5: Asset turnover ratios of BEML Ltd during 2015- 2016 to 2019-20.

Asset turnover ratio = Net Sales/ Total Assets

Standard form: 2.5 or more

Financial Year	Net Sales (in crores)	Total Assets (in crores)	Asset turnover ratio
2015-2016	2983.72	4,322.96	0.69

2018-2019	2498.81	4,694.40	0.53
2017-2018	3245.55	4,674.67	0.69
2018-2019	3481.06	5,000.50	0.69
2019-2020	3028.82	5,066.71	0.59

Inference:

The above table presents Asset turnover ratio of BEML Ltd during 2015- 2016 to 2019-20. It is observed that, the asset turnover ratio is very low than the standard ratio during all five years which indicates that the company is failing to efficiently employ its assets to generate sales.

Table 6: Operating Profit ratio of BEML during 2015- 2016 to 2019-20.

Operating Profit ratio = Operating Profit/Net Sales *100

Financial Year	Operating Profit (in crores)	Net Sales (in crores)	Operating Profit ratio
2015-2016	128.38	2983.72	4.30%
2016-2017	145.62	2498.81	5.82%
2017-2018	251.22	3245.55	7.74%
2018-2019	236.82	3481.06	6.80%
2019-2020	87.31	3028.82	2.88%

Inference

The above table presents Operating Profit ratio of BEML Ltd during 2015- 2016 to 2019-2020. It is observed that, during 2015-2016 to 2017-2018 gross profit ratio of the company increases gradually for 3 year, there is decrease in 2018-2019(4th) and in the financial year 2019-2020 there is a downfall in gross profit ratio which reduces to 2.88%.

Operating profit ratio reflects the percentage of profit a company provides from its operations.

Table 7: Net Profit ratio of BEML Ltd during 2015- 2016 to 2019-20.

Net Profit ratio = Net Profit/ Net Sales *100

The net profit margin of company below 5% is considered as low.

Financial Year	Net Profit (in crores)	Net Sales (in crores)	Net Profit Ratio
2015-2016	52.65	2983.72	1.76%
2016-2017	84.45	2498.81	3.37%
2017-2018	129.45	3245.55	3.98%
2018-2019	63.49	3481.06	1.82%
2019-2020	68.38	3028.82	2.25%

Inference:

The above table presents Net profit ratio of BEML Ltd during 2015- 2016 to 2019-20. It is observed that, during 2015-2016 to 2017-2018 Net profit ratio of the company increases gradually for 3 years, there is decrease in 2018-2019(4th) and in the financial year 2019-2020 there is a rise in net profit ratio which did not exceed more than 5%.

Hence the net profit margin of BEML Ltd during all the five years is considered as low which indicates that net income or profit earned by a company as a percentage of revenue is low.

Other Financial Results for the current financial year (2019-20) and the previous year (2018-19).

The company achieved revenue from operations of 3,029 crores as against 3,481 crores in the previous year, by reduction of 13%.

The value of production is 3,321crores as against 3,467 crores in the previous year, by reduction of 4%.

The profit before tax is 24 crores as against profit before tax 131 crores recorded against previous financial year.

The profit after tax is 68 crores as against profit after tax 63 crores recorded against previous financial.

CHAPTER: 6

LEARNING EXPERIENCE

LEARNING EXPERIENCE

“Learning gives creativity, Creativity leads to thinking, Thinking provides knowledge, Knowledge makes you great”. - A P J Abdul Kalam

It had been privilege to undertake an organization study about “the largest & most profitable construction equipment company” which is conferred with Mini-Ratna status. Though the study was online based on secondary sources. It was a wonderful experience & indeed a great learning about a multi-technology company which offers high quality products to the various sectors of the economy. The learning’s acquired from the India’s largest wealth creator BEML are many along which a few are penned.

- A part from learning as to how the organization function, its structure, departments, policies & processes the study has opened the doors to explore the organization, whose operation are highly refined.
- The study has provided a chance to know and a have a look about the various gigantic machines, modern equipment & tools which one could have not seen without a study in such an organization.
- The various contributions of the company to GOI especially in defense sector which strengthened the Indian Army.
- The study has also helped to know about the technological advancement in various equipment of different sectors.
- The contributions made in enhancement of infrastructure and others sectors in the country.
- The functioning of the various departments quality policies of the organization & innovative management practices followed by the organization.
- The cordial relationship between the workers & the management has helped in understanding the fact that, the success of the organization depends not on employees or on management alone but it depends on the combined efforts of both the employees and management.
- The working of the entire BEML limited as one family taught the basic concepts of team building.

The overall study in the organization has ignited the spark in the mind to take part in such company as an employee in the later days that would serve as an asset to the entire country & the human race.

BIBLIOGRAPHY

Websites:

<http://www.bemlindia.in>

<http://www.moneycontrol.com>

en.wikipedia.org/wiki/BEML_Limited

Other References:

Annual Report of BEML Limited

Previous year Reports

Internship Reports

ANNEXURE

1. Profit & Loss of BEML Ltd. Rs (in Crores)

Particulars	2019-2020	2018-2019	2017-2018	2016-2017	2015-2016
INCOME:					
Sales Turnover	3028.82	3481.06	3305.42	2834.66	3287.44
Excise Duty	.00	.00	59.87	335.85	303.72
NET SALES	3028.82	3481.06	3245.55	2498.81	2983.72
Other Income	48.5500	23.1132	24.8968	62.4495	39.0218
TOTAL INCOME	3077.37	3504.18	3270.45	2561.26	3022.74
EXPENDITURE:					
Manufacturing Expenses	.00	34.99	36.15	34.34	32.52
Material Consumed	1598.57	1996.91	1758.88	1232.48	1733.70
Personal Expenses	843.87	801.93	808.50	780.73	767.89
Selling Expenses	.00	.00	.00	.00	3.09

Administrative Expenses	499.07	410.42	390.80	305.65	318.13
Expenses Capitalised	.00	.00	.00	.00	.00
Provisions Made	.00	.00	.00	.00	.00
TOTAL EXPENDITURE	2941.51	3244.24	2994.33	2353.19	2855.34
Operating Profit	87.31	236.82	251.22	145.62	128.38
EBITDA	135.86	259.93	276.12	208.07	167.41
Depreciation	71.30	69.58	64.24	61.98	53.21
Other Write-offs	.00	.00	.00	.00	.00
EBIT	64.56	190.35	211.88	146.09	114.19
Interest	40.50	59.39	48.09	47.80	49.03
EBT	24.06	130.96	163.79	98.29	65.16
Taxes	-44.32	67.47	34.35	13.84	11.62
Profit and Loss for the Year	68.38	63.49	129.45	84.45	53.55

2. Balance Sheet of BEML Ltd (in crores)

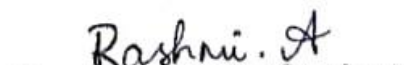
PARTICULARS	2019-20	2018-19	2017-18	2016-17	2015-16	
EQUITIES AND LIABILITIES						
SHAREHOLDER'S FUNDS						
Equity Share Capital	41.77	41.77	41.77	41.77	41.77	
TOTAL SHARE CAPITAL	41.77	41.77	41.77	41.77	41.77	
Reserves and Surplus	2,215.38	2,145.47	2,158.46	2,139.78	2,067.59	
TOTAL RESERVES AND SURPLUS	2,215.38	2,145.47	2,158.46	2,139.78	2,067.59	
TOTAL SHAREHOLDERS FUNDS	2,257.15	2,187.25	2,200.24	2,181.55	2,109.36	
NON-CURRENT LIABILITIES						
Long Term Borrowings	201.49	302.97	304.49	310.52	362.65	
Deferred Tax Liabilities [Net]	0.00	0.00	0.00	0.00	0.00	
Other Long-Term Liabilities	983.99	333.88	333.75	342.31	363.99	
Long Term Provisions	186.35	175.71	166.37	174.94	160.64	
TOTAL NON-CURRENT LIABILITIES	1,371.83	812.56	804.60	827.78	887.29	
CURRENT LIABILITIES						
Short Term Borrowings	36.20	97.51	135.02	112.85	145.42	
Trade Payables	661.26	762.09	535.16	496.85	408.21	
Other Current Liabilities	529.65	835.64	662.96	925.97	617.51	
Short Term Provisions	210.62	305.45	336.69	149.40	155.17	
TOTAL CURRENT LIABILITIES	1,437.73	2,000.69	1,669.83	1,685.07	1,326.31	

TOTAL CAPITAL AND LIABILITIES	5,066.71	5,000.50	4,674.67	4,694.40	4,322.96	
ASSETS						
NON-CURRENT ASSETS						
Tangible Assets	617.46	573.06	530.84	518.44	523.06	
Intangible Assets	0.00	46.81	52.01	52.42	17.16	
Capital Work-In-Progress	0.00	25.28	68.02	79.42	58.83	
Other Assets	0.00	0.00	0.00	0.00	0.00	
FIXED ASSETS	617.46	645.15	650.88	650.29	644.10	
Non-Current Investments	2.58	2.58	2.58	2.58	2.58	
Deferred Tax Assets [Net]	208.00	117.48	138.27	111.18	103.52	
Long Term Loans and Advances	0.10	0.09	8.59	16.80	228.16	
Other Non-Current Assets	79.09	69.28	126.72	101.83	4.34	
TOTAL NON-CURRENT ASSETS	907.23	834.58	927.03	882.67	982.70	
CURRENT ASSETS						
Current Investments	0.00	0.00	0.44	0.52	0.62	
Inventories	2,002.72	1,702.27	1,799.51	1,974.46	1,696.32	
Trade Receivables	1,510.37	1,613.05	1,642.23	1,430.37	1,208.05	
Cash and Cash Equivalents	27.85	31.42	2.34	14.01	65.56	
Short Term Loans and Advances	0.00	8.17	8.18	8.22	206.82	
Other Current Assets	618.54	811.00	294.93	384.16	162.89	
TOTAL CURRENT ASSETS	4,159.48	4,165.91	3,747.63	3,811.73	3,340.27	
TOTAL ASSETS	5,066.71	5,000.50	4,674.67	4,694.40	4,322.96	

WEEKLY PROGRESS REPORT

Student Name	Ms. Rashmi A
USN	1CR19MBA70
Title of the Study	An Organisation Study on BEML LIMITED
Organization	BEML LIMITED
WEEK-1	
Duration (Start date - End date)	6.8.2020 - 12.8.2020
Chapters covered	Chapter 1 and Chapter 2
Descriptions of activities performed during the week	Introduction to organization, Industry profile and company profile
WEEK-2	
Duration (Start date - End date)	13.8.2020 - 18.8.2020
Chapters covered	Chapter 3
Descriptions of activities performed during the week	McKinsey's 7S framework, Porter's Five Force Model.
WEEK-3	
Duration (Start date - End date)	19.8.2020 - 26.8.2020
Chapters covered	Chapter 4 and Chapter 5
Descriptions of activities performed during the week	SWOT Analysis and analysis of financial statements
WEEK-4	
Duration (Start date - End date)	27.8.2020 - 30.8.2020
Chapters covered	Chapter 6
Descriptions of activities performed during the week	Learning experience and Bibliography


Signature of the Guide


Signature of the Student