Addis Ababa University
Faculty of Business and Economics
MBA Program

SITUATIONAL ANALYSIS OF HEAVY INDUSTRY MANAGEMENT IN ETHIOPIA A CASE STUDY OF MESFIN INDUSTRIAL ENGINEERING PLC (MIE)

A Project Paper in Partial Fulfillment Of The Requirement For The Completion Of MBA Program

By
Tigist Kebede

Project Advisor
Zewdie Shibre (Dr.)
Faculty of Business and Economics
Addis Ababa University

July 2005
Addis Ababa

Letter of Certification

This is to certify that W/t Tigist Kebede has carried out her research work on the topic entitled **Situational Analysis of Heavy Industry Management in Ethiopia - A Case Study of Mesfin Industrial Engineering PLC (MIE).**

This work is original in nature and it is suitable for submission for the reward of the degree of Masters of Business Administration.

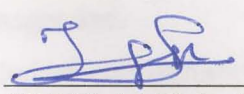
Tigist Kebede
(Reseracher)

Zewdie Shibre (Dr.)
(Research Advisor)

July 2005

Statement of Declaration

I, W/t Tigist Kebede, declare that this study entitled, **Situational Analysis of Heavy Industry Management in Ethiopia - A Case Study of Mesfin Industrial Engineering PLC (MIE)** is the output of my effort. I have carried out this research with the guidance and suggestions of the research advisor. This study has not been submitted for any degree/diploma in this or any other institutions. It is done for the partial fulfillment of the degree of Masters of Business Administration.



W/t Tigist Kebede

(Researcher)

July 2005

Acknowledgements

I wish to express my heartful gratitude to those people who have been contributing their time, technical, material and moral support for the preparation of this project paper.

First and for most, my deepest thanks goes to my advisor, Dr. Zewdie Shibre for his unrestricted efforts to guide, comment and correct the technical aspects of my work.

I am also very grateful to MIE staff especially:

- Ato Hadera Tesfaye - Finance Manager
- Ato Meareg Hadgu - Planning & IT Acting Manager
- Ato Kiros Berehe - DGM- Support Services Manager
- Ato Kidanemariam Atakiliti - HRD Manager
- Ato Getachew Equbay - Metal Construction Manager
- Ato Fasil Gessessew - Marketing and Sales Department Manager
- Ato Daniel Gebre - Acting Marketing Research Division Manager
- Ato Besefew Kebede- Acting Marketing Research Division Manager and,
- Ato Abraham Halefom – Design Engineer for their time, technical and unreserved moral support.

Furthermore my warm appreciation goes to Ato Tadesse Wondim of Tigray Investment Bureau and Ato Mulualem Berhane of EFFORT as well as Ato Aregahegn Tesfamicheal of Ministry of Trade and Industry.

Last but not least, I would like to express my sincere and deepest gratitude to W/O Kiros Seyoum, W/O Shefena Gebremeskel and all my family and friends who supported and encouraged me throughout the entire course of my research.

Table of Content

Content	Page
Chapter IV: Conclusion and Recommendation	
4.1 Summary of Findings	46
4.2 Conclusion	47
4.3 Recommendation	49
4.3.1 Scenario I	50
4.3.2 Scenario II	50
4.3.3 Scenario III	50
Bibliography	52
Appendix A : Organizational Structure	
Appendix B : Compile Financial Statements	
Appendix C : List of Interviewees and Companies Visited	
Appendix D : Interview Questions	

I. Operational Definitions

Competitive advantage	An advantage over competitors gained by offering consumers greater value than competitors
Feedback control	Post-action controls focusing on the end results of the process
Feedforward control	In-process quality controls designed to detect and anticipate deviations from standards at various points throughout the processes
Heavy industry	Large scale manufacturing industries
Integrate backward	Moving towards the customer business or a customer producing a supplier's product
Integrate forward	Moving towards the supplier or a supplier producing a customers product
Mission	A statement of the basic purpose of the company which reflects the reason for its existence
Opportunity	A major favorable situation in the environment
Preventive control	Control placed at the start of the process focusing on establishing conditions that will make it difficult or impossible for deviations to occur
Strategy	Action plan to attain the objectives of the company in light of the organization's strength and the opportunities in the environment
Strength	A resource, skill or other advantage of the company
Threat:	A major unfavorable situation in the environment that is a key impediment to the company's current or desired position
Vision:	A corporate long-term goal
Weakness:	A limitation or deficiency in resources, skills and capabilities

II. Abbreviations

ADLI	Agricultural Development Lead Industrialization
CAD	Computer Aided Design
CAM	Computer Aided Manufacturing
CBB	Construction and Business Bank
CBE	Commercial Bank of Ethiopia
CGS	Cost of goods sold
CIM	Computer Integrated Manufacturing
COLA	Cost of Living Adjustment
COMESA	Common Market for Eastern and Southern African Countries
CSA	Central Statistics Authority
CSF	Critical Success Factor
DBE	Development Bank of Ethiopia
EFFORT	Endowment Fund for the Rehabilitation of Tigray
EIC	Ethiopian Insurance Corporation
EMW	Electro Mechanical Works
FDI	Foreign Direct Investment
FDRE	The Federal Democratic Republic of Ethiopia
G.C.	Gregorian Calendar
GSP	Generalized System of Preference
HRD	Human Resource Development
ICSID	International Convention on the Settlement of Investment Disputes
IGAD	Intergovernmental Authority on Development
ISIC	Information Storage Industry Center
ISO	International Organization for Standardization
IT	Information Technology
KWH	kilowatt Per Hour
MIE	Mesfin Industrial Engineering
MVA	Manufacturing Value Added
MW	Mega Watt

NBE	National Bank of Ethiopia
NPRDA	National Petroleum Reserve Depots Administration
O/W	Of which
PEST	Political, Economic, Socio-cultural and Technological
QMS	Quality Management System
R & D	Research and Development
SBU	Strategic Business Unit
SWOT	Strength, Weakness, Opportunity and Threat
TPLF	Tigray People Liberation Front
TVET	Technical and Vocational Education and Training
VAT	Value Added Tax

III. List of Tables and Graphs

IV Abstract

This project was performed to assess the Political, Economic, Social and Technological environment in Ethiopia with regard to heavy industry establishment and management based on a case study of Mesfin Industrial Engineering PLC. It reviewed the strengths, weaknesses, opportunities and threats of MIE as a large scale manufacturing industry. The techniques of PEST analysis of the external environment, Porter's Five Forces Analysis of the competitive environment and SWOT analysis of the operational and financial performance evaluation was done to find out the opportunities and threats in the environment and the Strengths and weaknesses of the company. It was perceived that the political and legal environment of the country is stable assuming recent developments will have temporary effect, however; the agricultural led economic policy doesn't seem to create an encouraging environment. Moreover, lack of competitive infrastructure is found to be one of the impediments with the low economic and technological development of the country for effective and efficient industry management and growth. On the other hand, Porter's five forces analysis pointed out that the general portrait of the industry's competitive environment is stable with moderate to low competitive rivalry. On the other hand, the internal environment analysis demonstrated the company's major strengths to be availability of adequate working area, flexible manufacturing system with relatively low switching cost, large market share, the recent application of QMS and ownership of in-company welders training center and most pounced weaknesses to be lack of proper planning and scheduling, very low capacity utilization, frequent machine breakdowns, low gender diversity, high turnover, lack of competitive remuneration, lack of cheap and dependable suppliers, time consuming clearing process, late delivery and wrong position of Marketing and Sales Department. The overall result of the project indicates that there is unfavorable industrial environment with little competitive rivalry but very low operational performance.

CHAPTER I Introduction

1.1 Background Information

Industrialization has a crucial role in long-term development of a nation. It provides employment, foreign exchange and domestic saving. It is also one of the best training grounds for skill development and can increase flexibility of the economy and reduce dependence on external sources.

It is obvious that this especially can be pursued by promoting large-scale industries. Several studies deduced that heavy industry to be the basis for building a strong and independent economy. However, in the case of Ethiopia, the economy is predominantly agrarian with ADLI policy where heavy industries are almost non-existent and the share in the MVA of the industries in the sub-sector broadly covers less than 16%. (Yeheyes: 1986, 4)

Mesfin Industrial Engineering (MIE) is one best example of those few heavy manufacturing industries in our country. MIE was set up at the time when the TPLF was at the war field. Then at the end of the war in 1992 G.C., it has got its legal recognition in Tigray National Regional State, Mekelle, as a share company. The number of shares issued was 500,000 with a par value of birr 20 (birr twenty) and the major shareholder being EFFORT possessing 90% of the total share capital and Hiwot Agriculture Mechanization sharing the 10%.

EFFORT Corporation is established to take over the assets of the welfare organization and invest it on areas that will enable it boost the resources. It currently heads 11 independent SBUs including MIE. The SBUs of EFFORT or sister companies of MIE are Trans Ethiopia PLC, Sur Construction PLC, Almeda Textile Factory, Saba Dimensional Stone PLC, Messobo Cement Factory, Express Transit Service Enterprise, Addis Pharmaceutical Factory, Hiwot Agricultural Mechanization, Ezana Mining Development PLC, Guna Trading and Sheba Tannery.

MIE was initially established as an engineering company to design, manufacture and erect works for the mining, energy, construction, manufacturing, agriculture and transport sector. During its infancy, MIE was involved in giving support to workshops and small businesses as well as in reconditioning engines.

Currently, MIE designs, manufactures and supplies different products from its different specialized factories supported with CIM especially CAD and CAM.

1. Vehicle Body and Trailer Factory

   MIE has a combined annual capacity of more than 3,000 units of:

   - Trailer and semi-trailers for dry and liquid cargo
   - Truck body for dry and liquid cargo
   - Trippers, cement transporters and trans-mixers
   - Bus bodies for city and inter-city transport
   - Sewer cleaners, waste packers and skip-loaders for municipal services

2. Industrial and Equipment Factory

   MIE has an annual capacity of 10,000 tons of equipment and steel structures and one billion liters of storage trunks, including:

   - Stone crushing plant of various capacity
   - Industrial cranes of various types
   - Hydro-power equipment and components
   - Equipment and components for industrial projects and factories
   - Storage tanks for petroleum, water, grain and chemicals
   - Steel bridges and buildings

3. Electro-Mechanical Service

   It provides electro-mechanical and steel erection services such as:

   - Erection of Hydro-power stations
   - Erection of Industrial projects and factories
   - Erection of steel bridges, cranes and buildings

It also provides industrial maintenance for factories.

4. Component Manufacturing Plant

MIE manufactures parts and components from its foundry and machine shop.

1.2 Statement of the Problem

Manufacturing industries in Sub-Saharan Africa were a leading sector in the 1960s with an average growth rate substantially higher than the growth rate of total GDP. (Meier and Steel: 1989, 46) However, it became a lagging sector in the low-income countries afterwards. Meier and Steel also reported that it has failed to provide many of the benefits expected of it. Moreover, large saving of foreign exchange upon which much industrial investment can be based has not materialized. It is obvious that every organization operates in a dynamic environment that can create a variety of problems or opportunities in the firm's existing or potential markets. (Guiltinan and Paul: 1994, 24)

Therefore, to assess the situation specifically existing in Ethiopia this project paper will try to investigate the current situation of MIE focusing on three major aspects i.e. people, production and marketing management.

1.3 Objective of the Study

An agriculture-oriented development strategy with industry in a supporting role does not mean that Ethiopia would forgo industrial development. Long-term industrial growth might in fact be higher with this approach. Although agriculture would be the driving force, industry would still grow. In fact, higher agricultural income will stimulate demand for products from a number of industries.

Therefore, promotion of indigenous large scale industries is mandatory and based on this premise, this study has tried:

1. To assess the Political, Economic, Social and Technological environment in Ethiopia
2. To review the strength, weakness, opportunity and threat of MIE as a large scale manufacturing industry
3. To identify conclusion and suggest possible strategies

1.4 Scope and limitation of the Study

Although heavy industry includes industries outside manufacturing, the scope of this paper is limited to manufacturing industries. The project also is restricted on a case study of one specific company, MIE, which might not be representative enough to make generalizations. It was not possible to make industry index comparison due to lack of information.

1.5 Methodology

The techniques of PEST analysis, Porter's Five Forces Analysis and SWOT analysis are applied in the study.

The methodology used is designed in a way to answer the following key questions:-

1. What strengths MIE has in human resource management?
2. What weaknesses MIE has in human resource management?
3. What opportunities MIE has in the environment for better human resource management?
4. What threats MIE has in the environment that jeopardizes its human resource management?
5. What strengths MIE has in production management?
6. What weaknesses MIE has in production management?
7. What opportunities MIE has in the environment for better production management?

8. What threats MIE has in the environment that jeopardizes its production management?
9. What strengths MIE has in marketing management?
10. What weaknesses MIE has in marketing management?
11. What opportunities MIE has in the environment for better marketing management?
12. What threats MIE has in the environment that jeopardizes marketing management?

The study used both primary and secondary sources. The primary data is gathered based on semi structured interview and observation. Company reports, financial statements, manuals and publications are intensively used with other different published and unpublished materials, books, journals and Internet websites as sources of secondary data.

1.6 Organization of the study

This paper is organized in four main chapters. The first chapter is an introduction which includes background information about MIE, statement of the problem, objective of the study, scope and limitation of the study, methodology and organization of the study.

The second chapter gives an overview of related literatures. It discusses about basic environmental facts and the three analytical tools.

The third chapter presents analysis and discussion on strengths, weaknesses, opportunities and threats of MIE.

And finally, the last chapter is dedicated to with summary of findings, conclusion and suggested possible strategies.

CHAPTER II Literature Review

2.1 Definition

The term industry is very wide and it covers manufacturing, mining and quarrying, electricity, gas and water as well as construction. (Yeheyes: 1986, 7)

Manufacturing is clearly indicated in the Central Statistical Authority bulletin of 2004 as defined in the international standard industrial classification as:

> The physical or chemical transformation of materials or components into new products, whether it is done in a factory power-driven machines or by hand, whether it is done in a factory or in the worker's home and whether the products are sold as wholesale or retail. The assembly of the component parts of manufactured products is also considered as manufacturing activities.

Even manufacturing is very wide-ranging and has a lot of branches. They are categorized in various forms depending upon the purpose. They can as well be broadly divided into two groups as light manufacturing and heavy manufacturing.

According to the United Nations publication on Appropriate Technology for Basic Industries as quoted by Yeheyes, heavy industry is defined as follows:

> Industrial sectors which exploit mineral resources or produce chemicals, petrochemicals, fertilizers and capital goods are often called heavy industries because of the large capital outlay they entail and the large scale of their operations.

The United Nations Industrial Development Survey defines the manufacturing industries that fall under ISIC divisions 27, and 31 to 38 as heavy industries as indicated in table 1 where MIE is categorized under division number 38.

Table 1

Title of Heavy Manufacturing Industries by ISIC Grouping

Division Number	Title of Category
27	Manufacturing of paper and paper products
31	Manufacturing of chemical and chemical products
32	Manufacturing of products of petroleum and coal
33	Manufacturing of non-metalic mineral products except products of petroleum and coal
34	Basic metal industries
35	Manufacturing of metal products except machinery and transport equipment
36	Manufacturing of machinery, except electrical machinery
37	Manufacture of electrical machinery, apparatus, appliances and supplies
38	Manufacture of transport equipment

Source: Yeheyes Aseffa (1986)

Although heavy industry covers a wide range of industries engaged in the manufacturing of diverse products and having their own particularities, they have some general common characteristics. These include:

- Technological complexity
- Large capacity and economies of scale
- Need for large scale supporting infrastructures
- Need for large proportion of highly qualified manpower and
- High capital requirement

The mentioned general characteristics of heavy industries make mandatory the fulfillment of certain pre-conditions for the development of the industry in a country such as:

- Availability of sufficient market to absorb their large scale output
- Availability of sufficient and suitable raw materials and utilities
- Availability of well developed supporting infrastructure and manpower
- Capability to generate the required skilled manpower
- Availability of sufficient finance and foreign currency

2.2 Heavy Manufacturing Industries in Ethiopia

The establishment of modern manufacturing in Ethiopia started towards the end of the 19th century. A number of factors contributed towards its development out of which the installation of the Ethio-Djibouti railways and the increasing, influx of foreign citizens from Armenia, Greece, Italy and India are cited as the principal ones. The evolution of the sector falls into three broad phases: the import-substitution period which lasted from the early 1950s to 1974; the centrally planned economic system from 1974/1975 to 1991; and liberalization and market-orientation since 1991. (UNIDO: 2001, 1)

The manufacturing sector in Ethiopia contributes no more than 6.5% to GDP and 9.5% employment, covering about 130 state-owned and 7000 private plants of all sizes. (UN: 2004, 45) However, same publication evidenced that from these the share of heavy manufacturing industries is trivial as it is to be expected in a least developed economy.

Assessment of Ethiopia's competitive position with regards to industries as compared to other countries in the region shows the degree of competitiveness of 23 African countries indicates that Ethiopia is among the least competitive countries on the continent.

It ranks 17 and scores less than other East African countries such as Kenya, Uganda and United Republic of Tanzania. (UN: 2002, 13) It is also noted that the top performers; Mauritius, Tunisia, Botswana and Morocco are countries that have invested heavily in infrastructure development, diversified their export base through domestic capacity building, created an environment favorable to a sustained inflow of FDI and managed over time private sector led development under stable economic and political conditions. The lesson for Ethiopia is that moving up in the competitive index may require among other things the strengthening of domestic supply capability through technological upgrading, increased investment be it domestic or foreign and infrastructural development.

According to Yeheyes, heavy industries might be broadly categorized into six branches as follows:

1. Paper and paper products industries
2. Chemical and chemical products industries
3. Petroleum and coal products industries
4. Non-metalic minerals industries
5. Basic metal industries
6. Engineering industries (Industries engaged in the production of fabricated metal products, machinery and equipment)

He indicated that the sub-sector in Ethiopia mostly relies on imported inputs. Lack of skilled manpower and delay in delivery of inputs are among the problems faced by the industries in the sub sector. Therefore, the future development of the sub-sector is clearly tied with the development of the engineering industry, the construction sector, the availability of indigenous raw material and finance.

According to United Nations Industrial Development Organization Review of Industrial and Trade Performance in 2002, although the industrial sector is still characterized by a number of structural weaknesses, the country has tremendous potentials for industrialization.

It also reported that manufacturing is dominated by light industries, including agro industries. It is estimated that there are over 7000 industrial establishments employing less than 10 people and some 500 enterprises employing more than 10 people each.

Table 2 shows that industry is not evenly distributed in Ethiopia with the bulk of productive enterprises located in the Addis Ababa area. MIE is one of those limited industries situated away from Addis Ababa and whether locating away is benefiting or deterring will be established from this study. CSA reported the distribution of Large and Medium Scale Manufacturing Industries by Regional States as follows.

No.	Industrial group
1	Manufacturing of food products & beverages
2	Manufacturing of Tobacco products
3	Manufacturing of textiles
4	Manufacturing of wearing apparel, except fur
5	Tanning & dressing of leather
6	Manufacturing of wood and of products of wood & cork except furniture
7	Manufacturing of paper, paper products & printing
8	Manufacturing of chemical & chemical products
9	Manufacturing of rubber & plastic products
10	Manufacturing of other non metallic material products
11	Manufacturing of basic iron & steel
12	Manufacturing of fabricated metal products except machinery & equip.
13	Manufacturing of machinery & equipment
14	Manufacturing of motor vehicles, trailers & semi trailers
15	Manufacturing of furniture

Table 2

Distribution of Large and Medium Scale Manufacturing Industries by Regional States* and Industrial Group – Public and Private 2002/03

Ind. group No.	Tig.	Afar	Amh.	Orom.	Soma.	S.N. N.P	Gam.	Har.	A.A.	D.D.	T.	%
1	11	-	27	57	4	7	1	5	166	10	288	29.8
2	-	-	-	-	-	-	-	-	1	-	1	0.1
3	1	2	5	-	-	5	1	-	23	1	38	3.94
4	1	-	-	1	-	2	-	-	27	1	32	3.32
5	1	-	6	8	-	-	-	-	41	-	56	5.8
6	-	-	-1	4	-	1	1	-	10	-	17	1.76
7	3	-	2	4	-	1	-	1	60	2	73	7.56
8	1	1	-	6	-	2	-	-	35	-	45	4.66
9	-	-	-	7	-	-	-	-	34	-	41	4.25
10	12	3	14	25	-	16	-	3	40	2	115	11.9
11	1	-	1	-	-	-	-	-	8	-	10	1.04
12	11	-	5	6	-	3	-	1	46	1	73	7.56
13	-	-	-	-	-	-	-	-	9	1	10	1.04
14	1	-	-	1	-	-	-	-	6	-	8	0.83
15	12	-	17	18	1	36	-	6	62	6	158	16.4
Total	55	6	78	137	5	73	3	16	568	24	965	100
%	5.7	0.62	8.08	14.2	0.52	7.56	0.3	1.66	58.9	2.49	100	

Source: CSA statistical bulletin of November 2004

*The area coverage of the survey excludes Benishangul-gumuz Region, where there are no manufacturing establishments that fall within the scope of the survey.

2.3 Analytical Tools

2.3.1 PEST analysis

PEST analysis is concerned with the environmental influences on a business. The acronym stands for the Political, Economic, Social and Technological issues that could affect the strategic development of a business. It is a useful tool for understanding overall environmental situation in a country viewing the potential and direction for a business.

PEST Analysis is a simple but important and widely-used tool that helps you understand the big picture of the Political, Economic, Socio-Cultural and Technological environment organizations are operating in. PEST is used by business leaders worldwide to build their vision of the future.

It is important for the following main reasons:

- Firstly, by making effective use of PEST Analysis, it can be ensured that what organizations are doing is aligned positively with the powerful forces of change that are affecting the world.
- Secondly, good use of PEST Analysis helps to avoid taking action that is doomed to failure for reasons beyond control; and
- Thirdly, PEST is useful when starting to operate in a new country or region. Use of PEST helps break free of unconscious assumptions, and helps quickly adapt to the realities of the new environment.

The list below shows some possible factors that could indicate important environmental influences for a business under the PEST headings:

Political and Legal

- Environmental regulation and protection
- Taxation (corporate; consumer)
- International trade regulation

- Consumer protection
- Employment law
- Government organization / attitude
- Competition regulation

Economic

- Economic growth
- Monetary policy (interest rates)
- Government spending
- Policy towards unemployment
- Taxation
- Exchange rates
- Inflation
- Stage of the business cycle

Social and Cultural

- Income distribution
- Demographics
- Labour / social mobility
- Lifestyle changes
- Attitudes to work and leisure
- Education
- Fashions and fads
- Health & welfare
- Living conditions

Technological

- Government spending on research
- Government and industry focus on technological effort

- New discoveries and development
- Speed of technology transfer
- Rates of technological obsolescence
- Energy use and costs
- Impact of changes in Information technology
- Internet

The four elements in PEST vary in significance depending on the type of business like, social factors are more obviously relevant to consumer businesses which are close to the consumer or end of the supply chain, whereas political factors are more obviously relevant to a globally sophisticated product supplier or manufacturer.

Identifying PEST influences is a useful way of summarizing the external environment in which a business operates. However, it must be followed up by consideration of how a business should respond to these influences. .

The PEST analysis headings are a framework for reviewing a situation, and can also, like SWOT Analysis, and Porter's Fiver Forces Model, be used to review a strategy or position, direction of a company, a marketing proposition, or idea. It can also be used for business and strategic planning, marketing planning, business and product development and research reports.

2.3.2 Michael Porter Five Forces Model

Michael Porter described a concept that has become known as the "five forces model". This concept involves a relationship between competitors within an industry, potential competitors, suppliers, buyers and alternative solutions to the problem being addressed.

MIE just like every industry involves all of these factors, though, the relational strengths vary. Then thousands of "rules" are applied to evaluate hundreds of marketing and business concepts as they relate to the user's unique circumstances.

Porter's Five Forces model has long been considered the standard in the world of marketing strategy and economics. It identifies the five forces that drive competition including: threat of entry by new competitors, intensity of rivalry, pressure from substitute product, bargaining power of buyers and bargaining power of suppliers.

This model is still useful as a tool for understanding the concept of business strategy and lying the foundation for analysis for organizations today. However it should not necessarily be utilized as a single generic approach to business success, as the global marketplace and technological advances have changed the nature and scope of business, making it anything but generic in nature.

Porter's model outlines the primary forces that determine competitiveness within an industry and illustrates how those forces are related. The model suggests that in order to develop effective organizational strategies, managers must understand and react to those external forces within an industry that determine an organization's level of competitiveness within an industry.

However, the emerging era of rapid, systemic and radical change requires more flexible, systemic and dynamic approaches to strategy formulation. Thus today, corporate strategy formulation should be a combination of different currently practiced approaches.

Traditional strategy models, such as Michael Porter's five forces model, focus on the company's external competitive environment. Most of them do not attempt to look inside the company. In contrast, the resource based perspective highlights the need for a fit between the external market context in which a company operates and its internal capabilities.

2.3.3 SWOT Analysis

SWOT Analysis is a very effective way of identifying your Strengths and Weaknesses, and of examining the Opportunities and Threats one face. Carrying out an analysis using the SWOT framework helps to focus activities into areas where one is strong and where the greatest opportunities lie. Below are the fundamental principles associated with all four of these.

Strengths

Every organization has some strength. In some cases this is obvious like dominant market shares. In other cases, it is a matter of perspective, for instance, a company is very small and hence has the ability to move fast. It is important to note that companies that are in a bad position also have strengths. Whether these strengths are adequate is an issue for analysis.

Weaknesses

Every organization also has some weakness. In some cases, this is obvious; like a stricter regulatory environment. In other cases, it is a matter of perspective, such as a company has 99% market share and is open to attack from every new player. It is important to note that companies that are extremely competent in what they do, also have weaknesses. How badly these weaknesses will affect the company is a matter of analysis.

Opportunities

All organizations have some opportunities that they can gain from. These could range from diversification to sale of operations. Identifying hidden opportunities is the mark of an astute analyst.

Threats

No organization is immune to threats. These could be internal, such as falling productivity. Or they could be external, such as lower priced international competition.

Strengths and weaknesses are internal factors and Opportunities and threats are external factors. It is worth pointing out that SWOT analysis can be very subjective, two people rarely come-up with the same version of a SWOT analysis even when given the same information about the same business and its environment. Accordingly, SWOT analysis is best used as a guide and not a prescription. Adding and weighting criteria to each factor increases the validity of the analysis.

Simple rules for successful SWOT analysis are:

- be realistic about the strengths and weaknesses of the organization
- analysis should distinguish between where the organization is today, and where it could be in the future
- be specific, avoid grey areas.
- keep SWOT short and simple. Avoid complexity and over analysis
- SWOT is subjective.

2.4 PEST Versus SWOT Analysis

PEST analysis is similar to SWOT analysis - it's simple, quick, and uses four key perspectives. As PEST factors are essentially external, completing a PEST analysis is helpful prior to completing a SWOT analysis which is based broadly on half internal and half external factors.

A SWOT analysis measures a business unit or proposition, the market potential and situation, particularly indicating growth or decline, and thereby market attractiveness, business potential, and suitability of access.

PEST is useful before SWOT not generally vice-versa since PEST definitely helps to identify SWOT factors. There is overlap between PEST and SWOT, in that similar factors would appear in each. That said, PEST and SWOT are certainly two different perspectives:

PEST assesses an environment, including competitors, from the standpoint of a particular proposition or a business. SWOT on the other hand is an assessment of a business or a proposition, whether one's own or a competitor's. However, strategic analysis is not a precise science - no tool is mandatory - it's a matter of pragmatic choice as to what helps best to identify and explain the issues. Generally, PEST becomes more useful and relevant the larger and more complex the business or proposition.

CHAPTER III Data Presentation and Analysis

3.1 Vision and Mission

3.1.1 Vision and Mission of EFFORT

EFFORT Vision Statement

To be a corporation that can consistently and successfully be competitor in a global market, a corporation that has entered a progressive development path, and a corporation that can be exemplary corporate citizen.

EFFORT Mission Statement

- To boost the assets of the EFFORT welfare in such a way that assets are invested in profitable and lucrative business lines so as to continue its welfare activities on a sustainable base.
- EFFORT Corporation is highly committed and has social responsibility to support and be involved in the development endeavors of the Region in particular and the whole nation in general.
- To contribute to the social and economic development by investing in those business areas which are neither covered by the government nor private businessmen.

3.1.2 Vision and Mission of MIE

MIE Visions Statement

To be market leader in Manufacturing and Industrial Engineering products and service in East Africa.

MIE Mission Statement

To generate sustainable and continually growing profit to ensure realization of EFFORT's mission, through delivering value to our customers in Engineering Industry.

The writer of this project paper thinks that the vision statement of EFFORT is vague and doesn't clearly show the corporate long-term goal, while MIE has a vision it already has claimed to have achieved. Though, the Plant Manager of the Company acknowledged that its claim to be the "Leading Equipment Manufacturer in East Africa" to be a bit ambitious, it is already formally publicized on different guides of the Company.

Yet, a clear business mission should have each of the following elements:

- Purpose
- Strategy and Scope
- Values
- Standards and Behaviours

Thus, when assessed inline with the above basics, EFFORT's mission statement clearly depict why the corporation exists, what it will do and how, what the management believes in and the rules that guide how it will operate and MIE's mission statement is also sound but too general.

3.2 PEST Analysis

3.2.1 Political and Legal Environment

Ethiopia for a long period of time had been through continuous war where there was unstable political environment. However, after 1991 the existing government came up with market economic policy which has lead to more or less stable and conductive environment for business organizations apart from the Eriterean conflict.

Eriterea used to be a historic market for Ethiopian products as well as provide a port for export and import of goods. However, the hostilities between Eritrea and Ethiopia resulted in a significant demise in the demand for Ethiopian products in the country and reduced the foreign trade infrastructure to reliance on a single port.

The Acting Sales Manager of MIE reported that the conflict has created both positive and negative impacts on the company. The positive side was only temporary but has created a very high demand and boosted the company's sales during the war period. On the other hand, MIE which utilize large amount of imported material was affected adversely from lack of cost and time efficient port.

FDRE was established under a new Constitution as at 21 August 1995. The Constitution provides for a federal system of States, which is structurally based on the Federal Government, nine autonomous States and two chartered cities namely Addis Ababa and Dire Dawa. The States and chartered cities are vested with powers of self administration. They have also legislative, executive and judicial powers regarding all matters that fall under their respective jurisdictions except those exclusively given by the Constitution to the Federal Government.

The highest federal judicial authority is the Federal Supreme Court, followed by the Federal High Court and the Federal First Instance courts. Similarly, State Supreme Courts have the final judicial power over state affairs. Municipal courts are also organized in a similar manner. Besides Ethiopia is a signatory to the ICSID, a World Bank agreement for the arbitration of disputes between states and nationals of other states. (UN: 2004, 49)

The Federal Government of Ethiopia and the Regional Government of Tigray have adopted the following conducive policies for the private sector encouragement among others.

- The issuance of proclamation and regulation that provides the following major incentives:
    - Exemption from custom duty
    - Exemption from income tax
    - Carry forward of losses

- The promulgation of amended urban and rural land lease policies whose prime objective is to encourage private investment. Some of the provisions:

    - For selected and strategic projects land is provided freely and for some others at lower negotiable price
    - For agricultural projects the current land rent ranges from 30-40 birr per hectare and will not be revised for 10 years. It may be revised every 5 years but the increment of rent will not exceed 20%
    - Renting a farming land is possible from government and/or individual farmer up to 50 to 20 years respectively
    - The newly amended urban land lease regulation has elongated the lease term duration for trade, industry, social service and real state developers
    - Decentralization also has provided the liberal management decision making activities in the Region

Though the above states of affairs indirectly make the business environment conducive for MIE, the agriculture focused economic policy affect it negatively. Conditions are not that much encouraging for manufacturing companies in the country which took agriculture as the mainstay.

The Planning and IT Manager said that even in some cases the company becomes cost disadvantaged due to some of the policies which allow tax exemption for investors who import equipments the company does manufacture. Yet, MIE has the benefit of its large industrial compound of 35,000 m^2 covered premises on a 250,000 m^2 site in Mekelle, almost 90% of it being granted freely.

3.2.2 Economic Environment

The Ethiopian economy can also be viewed through two clear trends in its recent history. These are namely the Derge Era, ending 1991 and the Post Derge Period where changes to the structure and performance of the economy due to the major shifts in development policy orientation conquered. To reinforce the market oriented policy and utilize it for the economic development of the country, the government has taken the following major actions.

- It abolished price control
- It shift to auction system for exchange rate market which let the exchange rate market arrive at an optimal value
- It reconsidered tax rates
- It has produced globally acceptable labour proclamation
- It allowed privatization take place

However, as reported by the United Nations Industrial Development Organization in its Review of Industrial and Trade Performance in 2002, the structure of the economy remains the same with agriculture contributing the bulk of GDP. Between 1994 and 2002, agriculture's share in the economy declined from 50.7% to 43.2%. The sector that improved its share by a significant margin, however; was the service sector. Manufacturing contributed some 6% to GDP representing a slight increase of 0.5% in six years.

Customs duty

Custom duties which currently range from 0 to 35% are payable on imports by all persons and organizations that have no duty free privileges including MIE with a rate ranging from 5 to 30% on component assembly parts to spare parts.

Indirect taxes

Ethiopia has introduced VAT to replace various forms of commodity and service taxes including the sales tax and the withholding tax. The VAT rate is 15% of the value of every taxable transaction by a registered person and all imports of goods and services other than those exempted. MIE one of those legible organizations and according to the Acting Sales Division Manager, the introduction of VAT has resulted in increase in production cost with subsequent effect on selling price.

Excise tax is payable on a range of consumer goods, whether locally produced or imported. Its rates vary from 20% on toys to 100% on perfumes. It is payable in addition to VAT. There are number of export trade duty incentives that might create an opportunity for MIE if it decides to expand its market endeavors to foreign export.

Infrastructure and Utilities

The African Development Indicators 1998/99 of World Bank's Bulletin reported that in 1995 E.C. the road distance coverage of Ethiopia as compared with the total population is 0.5 km per 1 million people which is the least as compared with the other African countries except Sudan with 0.4 kms. In addition to that the existing telephone line was 3 for 1000 people which is better than Chad, Niger, Uganda, Central African Republic and Congo but is less than the rest. With regard to electricity the consumption level per person was 21.9 kilo watt which is lower than most African Countries.

Nevertheless, the Ethiopian Airlines, which has made very good reputation for itself in its 57 years service, offers an excellent passenger and cargo air transport services. The airline and all its technical and training activities provided an opportunity for building Addis Ababa as a regional hub for air transport. Ethiopian has 3 international and 18 domestic airports. Its international flights link the country with over 45 cities in four contents; 26 in Africa, 12 in Asia, 5 in Europe and 2 in North America.

The new passenger terminal, with its new facilities, at Addis Ababa Bole International Airport could match the growth in operation and fleet. The construction of an ultramodern cargo terminal and maintenance hanger will soon be underway.

In contrast to air transport, Ethiopia has a limited rail service which stretches 780 km linking Addis Ababa with the port of Djibouti via the eastern Ethiopian cities of Dire Dawa and Nazareth. As a landlocked country, the main external trade route at present is through Djibouti. Port Sudan is another external trade route at present in the western part of the country. Cargo handling, harbour facilities and services are provided by Maritime and Transit Services Corporation. These services are also rendered by private transit companies.

Ethiopia's telecommunications facilities, which are relatively efficient by Sub-Sahara African standards, are showing marked improvement. (UN: 2004, 1) Direct microwave links connect all Regional cities and a number of smaller towns have automatic telephone services. Excellent international communications links are maintained through two satellite earth stations, providing telephone, telex, fax, internet and television services, digital data network, pre and post paid mobile telephone and coin box international telecommunication services. Microwave links exist with Kenya, Djibouti and Sudan.

With regard to power supply, Ethiopia has vast hydropower and promising geothermal energy resources. Its hydropower potential is estimated at about 15,000-30,000 MW. However, so far, the aggregate electricity generated is a mere two billion KWH, which is much less than two percent of the potential. It has the lowest KWH per capital consumption in the region. Only 5 percent of the population has access to electricity. (UN: 2002, 15).

However, in the last ten years improving the infrastructural basis has been the main pre occupation of the Federal Government as well as Regional Government of Tigray. Subsequently, here is a brief review of the regions infrastructure development as indicated on Tigray Region Investment Promotion bulletin of 2004/05.

- Up grading of the existing main road, that connects Tigray with the port of Djibouti, Addis Ababa and other regions, is under way
- The construction of 830 kms rural road is completed
- The construction of two international standard airports in Mekelle and Aksum
- Automatic and digital telephones, fax, internet express mail services are available
- Round-the clock-hydro electric power supply is available
- Hydroelectric project that is expected to generate 300 MW is under construction
- Water supply has been made available in major towns

Table 3

Financial and Insurance Institutions in Ethiopia

	YEAR					
	1996//97	1997/98	1998/99	1999/00	2000/01	2001/02
Number of Commercial Banks:	6	6	8	8	8	8
▪ O/w Private Banks	5	5	7	7	7	7
▪ Number of Bank Branches	220	227	246	267	283	295
Number of Insurance Companies	8	8	9	9	9	9
▪ O/w private insurance companies	7	7	8	8	8	8
▪ Number of insurance branches	57	64	79	91	95	101
Number of Development Banks	1	1	1	1	1	1
Number of DBB Branches	32	32	32	32	32	32
Micro-Financial Institutions	2	7	11	16	19	21

Source: National Bank of Ethiopia, Annual Report 2001/2002

Table 3 portray the banking and insurance facilities in the country. While NBE serves as the Central Bank, commercial banking functions are performed by the CBE and by a number of private commercial banks. The CBE and private commercial banks offer saving and checking accounts, extend short term loans, deal with foreign exchange transactions, provide mail and cable money transfer services, participate in equity investment, provide guarantee services and perform all other commercial banking activities.

The two specialized banks in the country are DBE and CBB. DBE extends short, medium and long term loans for viable development projects including industrial and agricultural projects and provide banking services. CBB provides long-term loans for construction of plants producing housing construction materials and other banking services.

EIC was the only insurance company that offered all classes of insurance service some years ago. But, now a number of private insurance companies which can offer all these services have joined the business. Consequently, a competitive business environment has been created in the sector.

When we look at the immediate environment of MIE, the availability of banking and insurance services in Tigray looks like:

Government banks and insurance companies

- Commercial Bank of Ethiopia with its eleven branches
- Development Bank of Ethiopia
- Construction and Business bank
- Ethiopian Insurance Corporation

Private Banks and insurance companies

- Dashen Bank with two branches
- Wegagen Bank with three branches
- Abyssinia Bank
- Nyala Insurance
- Nile Insurance
- United Insurance
- Africa Insurance

The company use credit and overdraft facilities from the Commercial Bank of Ethiopia at 7.5% interest rate which is reported to alleviate the financial problems of the Company by the Planning and IT Acting Manager. It also has got a banking relationship with Wegagen Bank. With regard to insurance, it utilizes the services of Ethiopia Insurance Corporation and Africa Insurance.

According to United Nations Investment Guide to Ethiopia, Opportunities and Conditions of 2004, school enrolment ratios have been going up in Ethiopia. The total number of senior secondary schools from 9-12 grades went up from 369 in 1997 to 455 in 2002 and the number of students increased from 426,495 to 764,641 screening a 79% increase over the four years.

Same publication proved that the higher education sector witnessed rapid expansion between 1997 and 2002. Four new government universities were established and five new private institutions accredited. Enrolment in higher education increased from 42,132 in 1997 to 101,829 in 2002, a 142% increase. As for private sector participation in education, over 125 kindergartens, 70 primary schools, 6 secondary schools, 2 technical and vocational institutions and 5 colleges have been established and accredited so far.

The new education and training policy is aiming at providing skilled and productive workforce that contribute to the country's economic development. To this effect, the government gave high priority for the TVET program and now there are 151 TVET schools in the country run by the Ministry of Education, Ministry of Agriculture and Rural Development and non-governmental organizations in 2001/02.

When we come to the situation in Tigray, we find the under listed teaching institutions existing in the Regional State.

Government Higher Institutions:

- Mekelle University with five faculties
- Maichew Technical College
- Mekelle Nursing School
- Abi-Adi Teachers College
- Agricultural College
- Other 10 private business and technical colleges

MIE's HRD Manager believes that the existing educational institutions to be adequate and the Acting Sales Manager rated it to be satisfactory.

Table 4

Key Marco-economic Indicators

	YEAR						
	1996/97	**1997/98**	**1998/99**	**1999/00**	**2000/01**	**2001/02**	**2002/03**
External Trade (in million USD)							
▪ Exports	1,070.2	1,060.4	943.9	999.9	977.1	994.4	1,156.97
▪ Imports	1,671.0	1,711.5	2,088.6	2,035.8	2,014.5	2,124.9	2,419.7
▪ Balance	-600.8	-651.1	-1,144.7	-1,035.9	-1,037.4	-1,130.5	-1,262.7
Inflation	0.3	3.9	4.8	6.2	-5.2	-7.2	15.1

Source: National Bank of Ethiopia, Quarterly Bulletin, 2002/03

As can be seen in table 4, import is showing an increasing trend throughout the years under view from 1996//97 to 2002/03 resulting in a deficit. Despite the fact that export after showing a declining trend until 1998/99, has started reviving, it couldn't match up with the level of imports.

United Nations Industrial Development Organization in its Review of Industrial and Trade Performance in 2002 also substantiated that the major raw materials used in the Transport Equipment sector are imported, which inevitably depletes the working capital of the sub-sector. MIE is one of the direct victims of this problem using 80% imported raw material. In addition to that the inflation is making the problem more severe for the company.

Ethiopia is a member of the following Multilateral and Bilateral Treaties:

- Lome Convention
- COMESA
- GSP
- IGAD
- Netherlands, Malaysia, Yemen, Russia, Sudan, Switzerland, Italia, Kuwait and Chad have a bilateral agreement with Ethiopia.

MIE has a business relationship mainly with Italia, Germany, Russia, Ukraine and so many other foreign countries to import raw materials, however; the company Acting Sales Manager think that the multilateral and bilateral agreements doesn't have a significant direct effect on the company due to the type of business it is dealing with.

However, the writer of this paper believes that the small domestic market made it difficult to achieve economies of scale. Thus, expansion of the potential market for Ethiopian products is a critical element for manufacturers to achieve the necessary economies of scale or technological capabilities. Thus, the potential increased market sizes hinge on strengthening and joining regional market groupings and exploit market access opportunities.

3.2.3 Socio-Cultural Environment

Ethiopia is strategically located in the Horn of Africa at crossroads between Africa, the Middle East and Asia. It has a population of 70 million in 2003 ranking the third most populous country in Africa after Nigeria and Egypt. (UN: 2004, 1)

The people are ethnically, linguistically and culturally diverse. So, there are 80 languages spoken in the country, which correspond to the number of ethnic groups. Amharic is the working language of the Federal Government. English is the medium of instruction in secondary schools and higher education institutions and it is widely used in business transaction, particularly in banking and insurance.

Though Ethiopia is highly populated, in terms of per capita income it is the second last next to Mozambique as per the African Development Indicators 1998/99 of World Bank's Bulletin of 1995. There is large number of abundant human resource which helps MIE get cheap labour to have a competitive advantage. However, the low economic capacity of the population has affected the company's market negatively. Moreover, the attitude of the people in the country which have a negative inclination towards local products is another setback for the company.

The population in the country is highly composed of large number of unskilled labour force. Thus, the company suffers a lot from shortage of skill and expertise from local sources. However, it has got lots of opportunity for the future where the company is making use of the existing educational institutions and its training center to develop its human recourse.

Brain drain seems to be a fact in the country. A large number of Ethiopians, especially those with good qualifications, go abroad to seek employment every year. And on the other extreme, those residing in Ethiopia don't want to go out of Addis Ababa to work. This levies a threat for the company and is making it suffer from the consequence.

3.2.4 Technological Environment

The new economy is not only based on technology but relies on technological advancement to improve productivity, product quality and a range of other factors that directly affect manufacturing activities. Technology development should form one of the pillars for future industrial activity in Ethiopia. However, the technology must always be appropriate technology and not necessarily a leading edge.

Ethiopia's general level of technology is low and lags well behind other countries in the region as shown in the above table. MIE utilize the ones available as well import new ones. The availability of automatic and digital telephones, fax and internet services let the company enjoy the facilities to a great extent. In general, change in this global era has a tremendous effect on organizations especially that are technology intensive.

Table 5

National Level of Technology Capability Indicators based on Access to IT

Country	Ethio.	Kenya	Uganda	Tanz.	Egypt	Tunisia	Moro.	Sub-Sah. Africa
Radio (per 1000 people, 1996)	206	96 (1995)	123	398	312 (1995)	176	226	-
TV (per 1000 people, 1996)	4	19	26	16	126	156	145	43
Main telephone lines (per 1000 people)	3	8	2	3	50	64	45	14
Waiting time for main telephone lines (1996)	>10	4.3	0.7	>10	5.0	1.5	0.3	5.4
Personal computers (per 1000 people, 1996)	---	1.6	0.5	---	5.8	6.7	1.7	---
Internet hosts (10,000 people, 1997)	0.01	0.14	0.01	0.01	0.29	0.05	0.51	0.07

Source: African Telecommunication Indicators 1998

*Data are for the most recent year available as at 2002

3.3 Porter's Five Forces Analysis

The five forces analysis helps the marketer to contrast a competitive environment. The strongest competitive force or forces determine the profitability of an industry.

Table 6

Responses on the Competitive Environment of MIE

Interview Question	Response	
	Yes	No
Power of Buyers		
Does your company purchase in large volume?		✓
Is the product you purchase from the supplier standard?	✓	
Are you desperate to lower your purchasing costs?	✓	
Is the cost of purchase insignificant for your company?		✓
Does MIE pose a credible threat of integrating backward to make the suppliers products?		✓
Power of Suppliers		
Are the company's suppliers few and/or concentrated?	✓	
Does the company's suppliers product unique?		✓
Is there a significant switching cost in changing suppliers?		✓
Is there a threat that your supplier can integrate forward into the company's business?		✓
Is your company an important customer to your supplier group?		✓
Threat of Substitutes		
Are there more attractive price-performance substitute products in the market?		✓
Competitive Rivalry		
Are there numerous competitors of MIE in the market?		✓
Is the industry growth slow, precipitating fight for market share?	✓	
Does the product lacks differentiation or switching costs to lock in buyers?		✓
Is the fixed cost of MIE high creating high switching cost?		✓
Are exit barriers high in the industry?		✓

Source: Compiled from interview response

The Threat of Entry

New entrants to an industry bring new capacity and the desire to gain market share. According to the Acting Sales Manager of the company, there are product differentiation, capital requirement and cost disadvantages as barriers for entry. Thus, a new entrant to the industry is not highly threatening for MIE.

The Power of Buyers

The power of a buyer depends on a number of characteristics of the market situation and on the relative importance of its purchases. It can be observed from table 6 that MIE's purchase in relative terms is not large in volume with low potent forces to pose on suppliers.

The company purchase standard products from suppliers which helped it gain power to bargain. However, the company to be efficient and compete in the market needs to lower its purchasing cost and the cost is very significant fraction of its total cost which limit its power on suppliers. The company also doesn't pose a credible threat of integrating backward to make the suppliers product. Thus, in general one can deduce that MIE's bargaining power is not tough.

The Power of Suppliers

The response in table 6 illustrates that the supply market is dominated by few and concentrated companies which give them power to bargain. However, the supplier's product is not unique and doesn't cause significant switching cost to change a supplier. Moreover, there is no threat that the supplier can integrate forward into the company's business. However, the company is not an important customer of the supplier group and the supplier's fortune is not closely tied to the industry which lessens the company's status.

The Threat of Substitutes

There is no more attractive price-performance substitute products in the market supplied locally which gave MIE the ability to maintain its market share of 70 to 80 percent on the major products (according to MIE's Head Marketing and Sales Department) with little threat of substitutes.

Competitive Rivalry

The responses compiled in table 6, confirm that there are few competitors in the market the major cluster being MIE and Maru and second class cluster incorporating KG, Teshale and Dan Technocraft though the growth rate is slow and those few need to fight for market share. In addition to that the products MIE produce are standard and didn't create switching cost to lock in buyer not to go to combatants.

Though, the fixed cost of MIE is relatively high, the switching costs as well as the exit barriers are squashy since it is having multipurpose flexible equipments rather than every specialized asset. Therefore, the rivalry among existing competitors seems to be moderate with low to no exit barrier.

3.4 SWOT Analysis

3.4.1 Operational Performance

3.4.1.1 Metal Construction Plant

This is the main production plant of MIE with the major products of dry and liquid trailers, heavy-duty cargo and fuel body, stationary tanks, petroleum tank fabrication and crushers. According to the Plant Manager of MIE, the company currently has utilized only 21% to 40% of its production capacity.

It temporarily has seized the operation of its Truck Assembly Plants responding to customers' dissatisfaction on the supplies of different ranges of Russian AFRO trucks at low which were not compatible for Ethiopia's environment. The situation has badly affected the company's image and demand rigorous image building job by the company.

According to the annual performance report of 2005, there were minor production problems, late delivery of materials and frequent breakdowns. On the other hand the department was using participative planning system, targets being provided for work stations, provision of certificate of appreciation to outstanding employees, control mechanism to reduce wastage of man-hour during tea breaks and awareness on materials management.

3.4.1.2 Industrial Maintenance and EMW Plant

The department has two divisions namely Industrial Maintenance and Electromechanical Works. The Industrial Maintenance was organized in July 2003 with the aim to avail and make ready machineries for production to the company and work heavy maintenance for sister companies and for the country at large. It perform preventive maintenances of machineries, control on spares, consumables and lubricants, mobilized machines and tools for NPRDA projects, overhauling Crusher engine and maintenance of electrical systems, provide training for technicians of the company and internship for students of technical schools.

The other division of EMW is actively working on petroleum depots erection projects at Combolcha and Sululta. Problems encountered were delay in starting the project due to weather inconvenience, rework due to drawing errors, power interruption, breakdowns of crane, machines and equipment, amendments by NPDRA in certain materials and oxygen plant producing low purity level. Some of the problems might have been caused due to lack of proper planning and not to have employed systematic project scheduling techniques.

3.4.1.3 Quality Assurance

The department has got three divisions under it namely quality planning, quality control and quality audit and improvement. It performed activities like identification, documentation, interface and common understanding of processes, implementation of new system, inspection and testing of NPDRA tanker erection, X-ray testing and ISO 9001:2000 quality management system implementation which is underway. As can be gathered from the interview, the company applies preventive, feedforward as well as feedback quality control system.

3.4.1.4 Human Resource Development

It has three divisions namely personnel, general service and training. The company on the average has got 500 permanent and 500 casual staff. The classification of employees by gender and qualification is depicted in table 7 below.

One can see from the table that the number of female staff is very small composing only 11% of the total staff and concentrated at lower level positions.

Table 7

Number of Permanent Employees by Position & Sex

For the Budget Year 2004/2005

Classification	Male	Female	Total
General Manager	1	-	1
Deputy Manager	2	-	2
Department Manager	8	-	6
Division Manager	16	2	18
Engineers	8	1	9
Auto Mechanic	24	-	24
Body man	20	-	20
Electrician	18	1	19
Foreman	28	-	28

Classification	Male	Female	Total
Mechanic	77	-	77
Painter	10	-	10
Store keeper	9	6	15
Welder	76	-	76
Accountant	11	2	13
Guard	37	2	39
Cleaner	-	9	9
Others	50	25	75
Grand Total	**395**	**48**	**443**

Source: MIE's Annual Performance Report, May 2005

3.4.1.4.1 Education and Training

By the end of June 46 industrial engineers with diploma and degree will graduate. Besides, one MBA and six management students' will continue their education. Training of off the job and on the job for about 350 employees has been conducted.

3.4.1.4.2 Promotion and salary increment

During the year 49 employees got promotion. Salary increment had been made four years ago. Because the salary is not competitive many skilled workers are leaving the company.

In addition to those, job description and job specification were prepared and distributed except for marketing and engineering departments, vacant posts of middle and top management positions were filled except for engineering and audit service, performance evaluation and training need assessment of employees has been done and QMS process flow was done in line with the requirement quality assurance. Some of the problems reported are unplanned annual leave, lack of qualified and experience manpower and high turnover of skilled manpower.

Table 8 shows that during the period under review, 44 employees have left the company. When compared with the total number of permanent employees, it is almost 10%.

Table 8

Turn over based on Year/s of Service

From July 2004 upto March 2005

Serial Number	Year of Service	Numbers
1	0 - 1	0
2	1 - 2	2
3	2 - 3	5
4	3 - 4	12
5	4 - 5	15
6	5 - 6	6
7	6 - 7	2
8	Above 7 years	2
Total		**44**

Source: MIE's Annual Performance Report, May 2005

3.4.1.5 Finance

The department has three divisions' namely general accounts, cost and budget and collection and disbursement. It has performed reconciliation of receivables with sister companies and others and clearing dead stocks and machines.

3.4.1.6 Supply and Procurement

It was organized this year at department level and has two divisions supply and procurement. During the year it has performed activities of purchase of raw material, component and accessories, consumable supplies, fixed asset and tools and spare parts of birr 31,850,673.00. It also has undertaken assessment of new potential suppliers, tried to minimize lead-time which is currently 3 to 6 months.

The major problems encountered were lack of cheap and dependable source of suppliers, delay of suppliers to give response on time for the company's perfoma, delay caused by quality inspection at time of receiving materials, delay caused by customs office of Mekelle to clear letter of credit and high cost of letter of credit incurred.

3.4.1.7 Planning and IT

The department has two divisions; planning and Information technology. The department except for its name was not a functional unit for the last few years. Recently, the management gave attention for reorganizing and creating conducive environment for the department.

3.4.1.8 Marketing

Under this department there had been serious qualified manpower problem for a number of years. The General Manager covered everything for a long time. At present department manager is assigned, however, it was acknowledged in the interview that there is low reliance on R & D.

The department has got two divisions; sales division and market research division. However, the department's position in the organizational structure of the company (Ref. Appendix A) evidence that it is not getting the attention it show have get. Actually, it is positioned under DGM Support Service which is wrong as marketing is the major activity of the organization with production unlike other support activities that facilitate the major operations of the company.

3.4.2 Consultancy Service

As part of strategic decision of CEO of EFFORT, a consultant (Tradesmen Engineering) has entered into a contractual agreement with MIE for consultancy service. The contractual document has details for deliverables of documents and is time bounded.

3.4.3 Financial Analysis

Table 9

Key Financial Ratios for the Past Consecutive 10 years

Years	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Debt to asset	0.10	0.17	0.55	0.72	0.86	0.41	0.43	0.28	0.24	0.14
Current ratio	3.80	1.58	1.11	0.81	0.96	1.93	1.85	2.75	3.34	4.88
Quick ratio	3.79	0.47	0.38	0.29	0.14	0.70	0.70	2.07	1.62	2.42
Inventory turnover	-	10.61	4.01	3.81	2.50	1.94	2.06	2.65	3.34	2.43
Fixed asset turnover	-	0.50	0.68	1.30	1.36	6.19	2.57	1.68	1.57	1.33
Total asset turnover	-	0.38	0.34	0.54	0.31	1.23	0.53	0.35	0.34	0.33
Gross profit margin	0.30	-0.06	0.19	0.45	0.50	0.50	0.22	0.34	0.18	0.12
Net profit margin	0.25	-0.13	-0.10	0.32	0.33	0.46	0.15	0.24	0.01	0.01
Return on asset	-	-0.05	-0.04	0.17	0.10	0.56	0.08	0.09	0.00	0.00
Return on equity	-	-0.05	-0.06	0.42	0.47	0.83	0.13	0.13	0.00	0.00

Source: Financial statements of MIE from Year 1995 to 2004 (Ref. Appendix B)

Leverage Ratios:

These will measure the extent to which the organization relies on borrowed funds rather than shareholder's equity or internal cash flow to finance operations. The most commonly used leverage ratio i.e. Debt to asset (total debt/total asset) for the past 10 years of the company operation is shown in table 9.

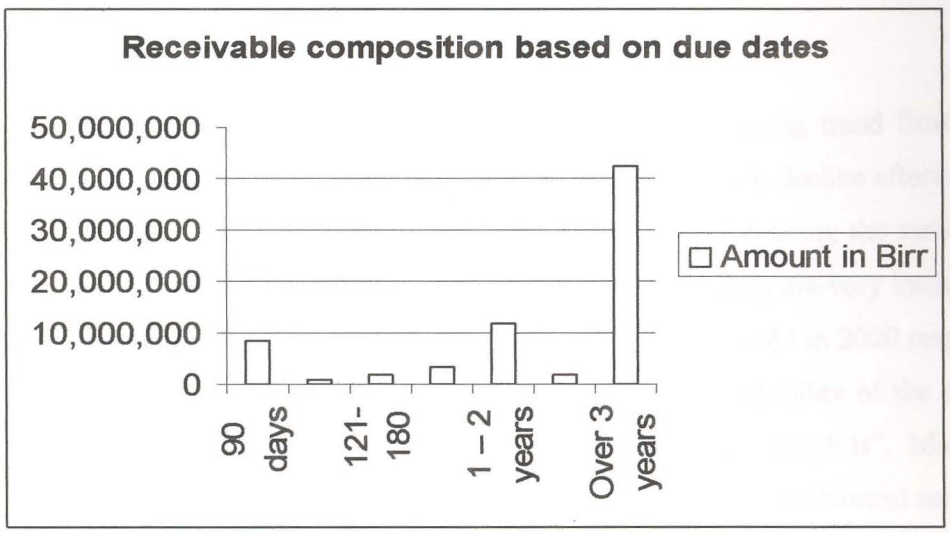
The debt to asset ratio had been as low as 0.10 in 1995 and reached its peak in 1999 of 0.86 and again started to go down after wards and reached 0.14 in 2004. It is normally assumed that a ratio above 80% display a problem of high dependence on debt while very low rate like only 14% debt to asset ratio together with total avoidance of long term loans suggest that the company is not considering the tax and related advantages of debt financing.

Liquidity Ratio:

It is a measure of a firm's ability to meet unexpected financial needs. The two ratios that can be used as a measure are current ratio (current assets/current liabilities) and quick ratio (current assets-stock/current liabilities).

There were two years, in 1998 and 1999, where the company was not liquid enough to cover its short term obligations. However, the rest of the periods show high current asset ratios reaching the climax in 2004 at 4.88:1. The rule of thumb is that a current ratio of 2:1 is acceptable and a ratio higher than 2:1 may suggest poor credit policy, too much inventory or poor cash management. The examination of the company's receivable composition as can be seen in "graph A" show that there is a poor credit policy in the organization. Out of the birr 79,142,378 outstanding receivable, birr 42,335,554 is overdue for more than three years.

Graph A



Source: Compiled from the company annual report of May 2005

Activity Ratios:

They measure a firm's utilization of its short-term and long term assets. They are a measure of a firm's efficiency. The three most commonly used activity ratios are inventory turnover (total asset/ average inventory), fixed asset turnover (total sales/average fixed assets) and total asset turnover (total sales/average total assets).

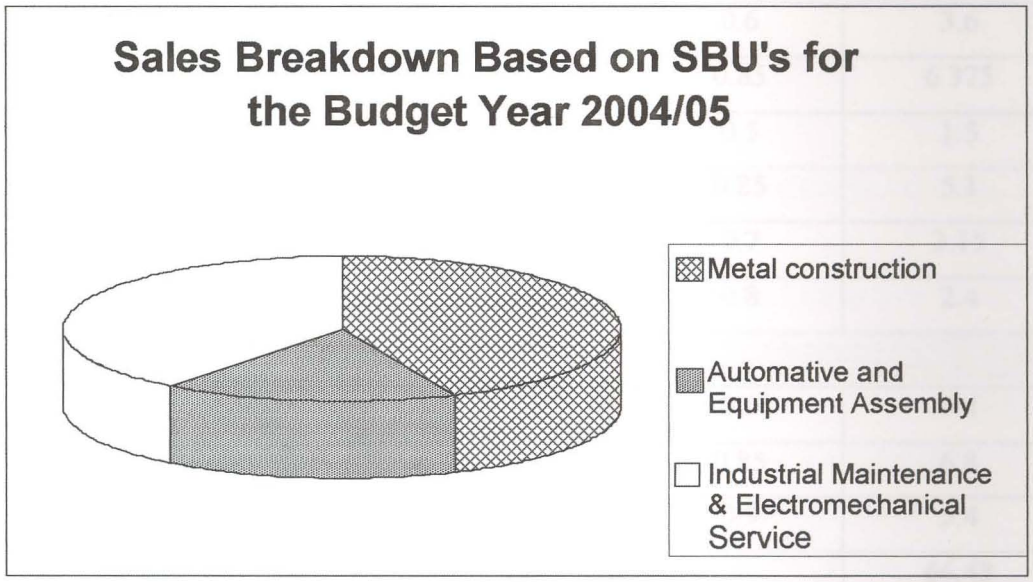
The inventory turnover ratio measures the relative size of inventories and this achievement is reflected in the higher inventory turnover of 10.61 times in 1996 versus 1.94 times in 2000. The fixed asset turnover measures the return from using fixed assets to generate earnings independent of the financing source and MIE's ratio ranged from 0.5 in 1996 to 6.19 in 2000 and started declining back afterwards. The total asset turnover ratio also shows the same trend as the fixed asset turnover and even with lowest score of 0.31 in 1999 and highest on 2000 being 1.23. The ratios evidence inefficient asset utilization to produce sales. The result is declining and shows no improvement which is very risky.

Profitability Ratios:

These ratios measure effectiveness as to how successfully the firm is creating wealth for its owners, the shareholders. The four most commonly used profitability ratios are gross profit margin (sales revenue-cost of goods sold/sales revenue), Net profit margin (sales revenue-all expenses/sales revenue), return on total assets (profit after taxes/average total assets) and return on equity (net income/average total stockholder's equity).

The gross profit margin ratio of MIE showed an improving trend from periods year 1995 to 1999 and remained constant in 2000 and started to decline afterwards except in 2003. When we come to the net profit margin the trend being the same the ratio got down drastically. The return on asset and return on equity are very inadequate ranging from -0.05 in 1996 to 0.56 in 2000 and -0.06 in 1997 to 0.83 in 2000 respectively. It is 0 in both ratio in 2004 showing near to the ground profitability of the company. The sales composition of the company can be dedicated from "graph B". Metal constructed the highest share while industrial maintenance and electromechanical service follows it with a slight difference.

Graph B



Source: Compiled from the company annual report of May 2005

3.4.4. Competitive Strength of MIE

Financial statement analysis mostly is the best predictor of profitability. However, strict reliance on only on it might not provide the best result. Therefore, examination of other competitive strength and market attractiveness dimension can endow with supplementary information.

Table 10

Evaluation of Attractiveness of MIE

CSFs	Weight	Rate*	Weight * Rate
Market Factors			
Market share	12.5	0.7	8.75
Growth rate	5	0.5	2.5
Customer bargaining power	5	0.4	2
Overseas sales potential	5	0.75	3.75
Price elasticity	7.5	0.8	6
Location	15	0.25	3.75

CSFs	Weight	Rate*	Weight * Rate
Environmental factors			
Speed of change	6	0.6	3.6
Experience curve effect	7.5	0.85	6.375
Rapid product innovation	3	0.5	1.5
Social factors	6	0.85	5.1
Regulatory climate	4.5	0.7	3.15
Substitutability	3	0.8	2.4
Competitive factors			
Industry structure	6	0.9	5.4
Competitive stability	8	0.85	6.8
Potential for differentiation	6	0.9	5.4
Total	**100**		**66.48**

Source: Compiled from the financial statements of MIE

*Industry index comparison was not done rather it is based on the judgment of the Acting Market Research Division Manager and company documentations

Table 10 shows the evaluation of overall attractiveness of MIE based on a scale of 1 point ranging from 0 (very low) to 1 (very high). The result shows an overall weighted average of 0.67 which is above average though not very strong.

One can see from the above table that location has got the highest weight as a critical factor but got the lowest rate evidencing poor location. The simplest locational model calculates the transport, production and distribution costs determined principally by access to raw materials and principal markets. However, MIE with regard to location decision seems to take into account only its commitment and social responsibility to support and be involved in the development endeavors of the Region in particular and the whole nation in general as stated in EFFORT's mission as a base.

CHAPTER IV Conclusion and Recommendation

4.1 Summary of Findings

Strength	Weakness
▪ Adequate working area ▪ Flexible manufacturing system ▪ Low switching cost ▪ Large market share ▪ Application of QMS ▪ In-company welders training center ▪ Availability of certified welders ▪ Low reliance on debt ▪ Above average market attractiveness ▪ Employment of consultants ▪ Expansion of export market potential	▪ Lack of clear strategic direction ▪ Poor location ▪ Lack of skilled manpower ▪ Low gender diversity ▪ High turnover implying dissatisfaction of employees ▪ Very low capacity utilization ▪ Weak bargaining power ▪ Late delivery ▪ Frequent machine breakdown ▪ Lack of systematic project scheduling technique ▪ Lack of competitive salary and COLA ▪ Lack of performance based salary increments ▪ Low reliance on R & D, hence innovativeness ▪ Unwise debt financing decision ▪ Very high investment on fixed asset ▪ Poor credit policy ▪ Inefficient asset utilization ▪ Very low profitability ▪ Very high reliance on imported industrial inputs ▪ Lack of cheap and dependable suppliers

Opportunity	Threat
▪ Stable political and legal environment* ▪ Export trade duty incentives ▪ Expansion of potential market for export ▪ Privatization and private investment expansion ▪ Abundant cheap labour force ▪ Existence of barrier for entry in the industry ▪ Moderate completive rivalry in the industry	▪ Agriculture focused economic policy ▪ Poor infrastructure facilities ▪ Lower price international competition ▪ Inefficient port ▪ Globalization ▪ Brain drainage ▪ Low technological development ▪ Tax free privilege to investors on imported equipment ▪ Time-consuming customs clearing process at Mekelle customs office ▪ Uncertainty due to state of affairs after the May 2005 election

* Doesn't take into consideration the recent incidents after the May 2005 election.

4.2 Conclusion

Heavy industry covers a wide range of industries with particular characteristics and requiring the fulfillment of certain pre-conditions for their development. While reviewing the case in Ethiopia, the contribution of industry is very low and heavy industry is even more trivial characterized by uneven geographical distribution and highly dominated by light industries. The sector also relies mostly on imported inputs and the country's competitive position with regards to industries as compared to other African countries to be among the least competitive ones.

Broadly speaking, the political and legal environment of the country is stable assuming recent developments will have temporary effect. Yet, it can be safely concluded that ADLI economic policy hasn't built an encouraging environment for the development of industries. In addition to that lack of competitive infrastructure is found to be one of the most critical factors constraining the competitive platform in Ethiopia.

Thus, MIE is operating in a poor infrastructural situation currently the problem being intensified by its location. However, there is a better prospect when the planned and underway projects are accomplished.

Moreover, the population being composed of large number of unskilled labour force makes it difficult for MIE to get the skill required from local source. The low economic as well as technological development of the country also poses negative impact on effective and efficient industry management and growth to be competitive in the global era.

On the other hand, Porter's five forces analysis pointed out that there is low threat of entry, low bargaining power of suppliers and low threat of substitutes. However, MIE also has low bargaining power. Thus, the general portrait of the competitive environment is stable with moderate to low competitive rivalry in the industry.

The main products of MIE are dry and liquid trailers, heavy-duty cargo and fuel body, stationary tanks, petroleum tank fabrication and crushers. The company, however; currently utilize only 21 to 40 percent of its capacity which is very small. The Afro truck which used to be assembled and supplied by the company at low cost has badly affected the company's image where the company reacted with the right defensive strategy of divestment or withdrawal.

The company is organized and operates in diverse departments, recently being strengthened and restructured with its potencies and limitations. The major strengths of the company are availability of adequate working area, flexible manufacturing system with relatively low switching cost, large market share, the recent application of QMS and availability of in-company welders training center. While the most pounced weaknesses signaled are lack of proper planning and scheduling, frequent machine breakdowns, low gender diversity, high turnover, lack of competitive remuneration, lack of cheap and dependable suppliers, time consuming clearing process, late delivery and wrong position of Marketing and Sales Department.

The financial performance of the company also evidenced that the company isn't highly leveraged but is highly liquid above the acceptable rule of thumb evidencing poor credit policy. Moreover, the company's asset utilization to generate income is poor or inefficient coupled with very low profitability.

The company has to make thorough analysis and take the appropriate measures to overcome its weak performance since its competitive strength and market attractiveness show above average result witnessing possible better future.

4.3 Recommendation

Though the company doesn't have written and documented clear cut strategy being followed, from observation it can be deduced that it is following a combination of growth and defensive strategies. It is making fresh investments on replacement of machines for the shop machine, purchase of machines and equipment for isothermal panels production and purchase of machinery and equipments for fabrication of honey processing and queen excluder. On the other hand, it is withdrawing from loosing strategic business units like Afro truck assembly and take actions to stem the downslide and reverse the gear.

Basically, strategy is about two things, deciding where you want your business to go and deciding how to get there. There are three possible scenarios for MIE that can be followed to foster the use of the strength and benefit from the opportunities as well as react on the weaknesses and cope up with the threats.

Scenario I

Follow growth as the grand strategy and cost leadership as a generic strategy focusing on market development or market creation.

Scenario II

Follow growth as the grand strategy and differentiation as a generic strategy focusing on product development.

Scenario III

The third scenario involves the combination of the first two scenarios meaning, follow growth as the grand strategy and cost leadership with differentiation as a generic strategies focusing on both market and product developments.

4.3.1 Scenario I

MIE though the leader in the industry, is at the maturity/declining stage. Thus, it has to expand into new markets in addition to the current target market, local government and other organizations and businessmen, through export to foreign customers. For this to materialize, the company needs to build its capacity through strategic alliance with foreign companies and achieve economies of scale to reduce its production cost consequently its price. It is obvious that combining the strength of two or more organizations will provide marketing as well as other numerous advantages such as gain access to needed resources, increase efficiency and effectiveness through experience sharing and entering new markets.

4.3.2 Scenario II

MIE has to make fresh investment on R & D to identify the company's competitive advantage and diversify its product line through innovative new products or modification of present products for the existing domestic market. The strategy will aim at increasing sales by developing new products, creating different quality versions of the existing products or developing additional designs or unique after sales services.

4.3.3 Scenario III

Expand into new markets as well as diversify the company's product line and provide customers with lower price or unique features different from competitors.

However, in all cases to be able to maintain successful results, the company has to pave the way by:

- Creating clear companywide strategic direction and translate that into department, division goals and objectives as well as individual task and targets
- Restructuring the Marketing and Sales Department as full-fledged segment to be Headed by Deputy General Manager and report to the General Manager
- Continuously developing the skill and competence of the employees and evaluate effects of trainings and development programs
- Ensuring employee satisfaction through reasonable remuneration compensations, women empowerment etc
- Improving capacity utilization as well as cut as much investment costs on fixed assets as possible
- Identifying and getting into contract with reliable and cost efficient suppliers
- Developing inspection and maintenance capability of the company
- Establishing proper planning and systematic project scheduling techniques
- Improving the asset utilization ability and control techniques to maintain efficiency
- Establishing strong credit policy and exerting maximum effort to collect bad debts and write off the uncollectible
- Investigating possible domestic sources of industrial inputs
- Making cost benefit analysis of the viability of integrating backward to produce suppliers products

Bibliography

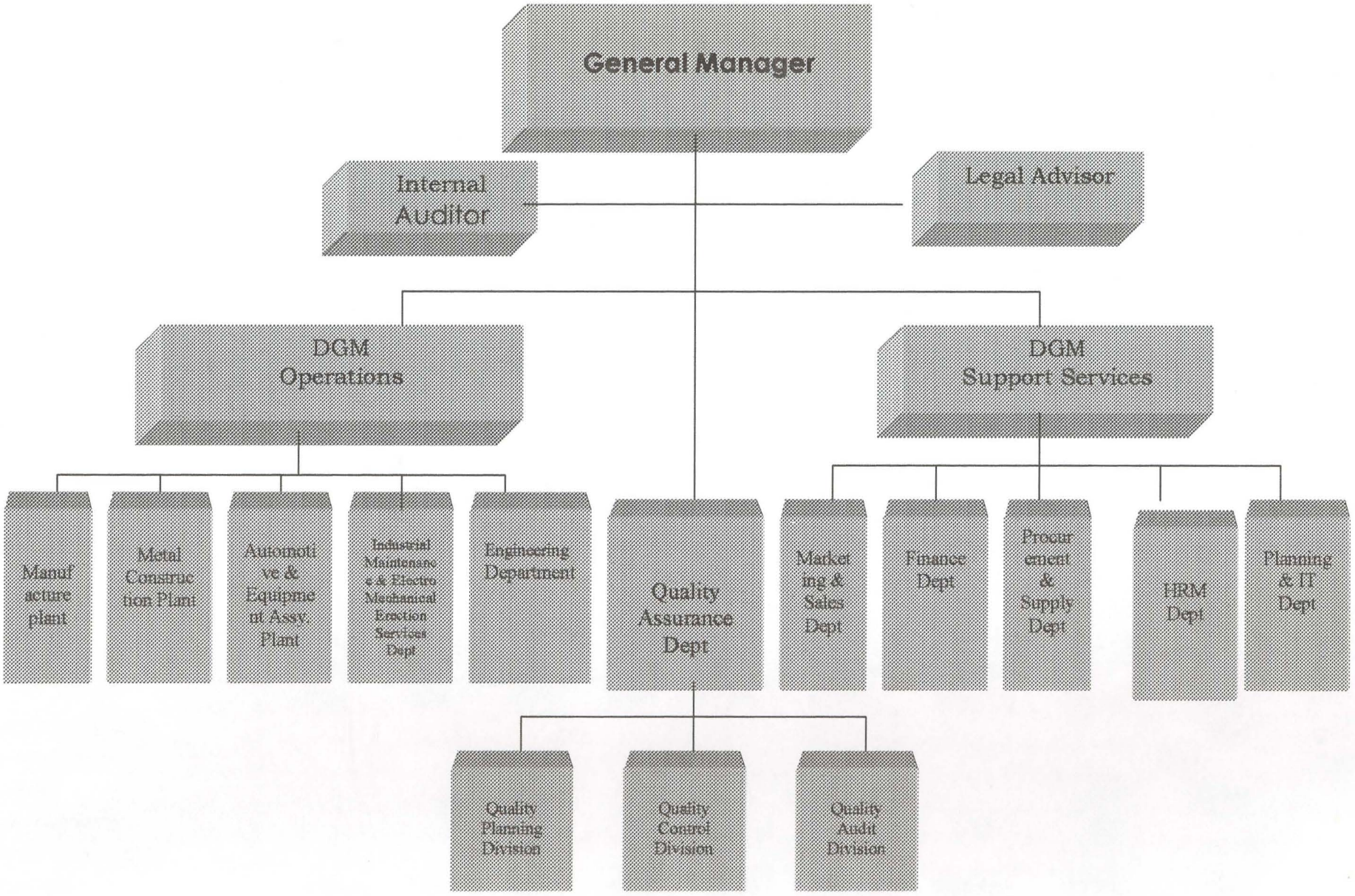
1. Aferwork Tesgaye (1972), "Infant Industry Protection", B.A. Thesis, Addis Ababa University.
2. Anderson, Henry R., Needles Belverd E., Caldwell James C. and Mills Sherry K. (1996), "Managerial Accounting", Houghton Mifflin Company, 4th ed.
3. Bittle, Lester R., Burke, Rolands and Laforge, A. Lawrence (1984), "Business in Action", Mc Graw-Hill Book Company, 2nd ed.
4. Churchill, Gilbert A. (1990), "Strategic Marketing Management Cases and Applications", IRWIN, 3rd ed.
5. CSA (2004), "Report on Large and Medium Scale Manufacturing and Electricity Industries Survey" (Ethiopia: CSA).
6. Guiltinan, Joseph P. and Paul, Gordon W. (1994), "Marketing Management Strategies and Programs", McGraw-Hill, Inc., 5th ed.
7. Guiltinan, Joseph P. and Paul, Gordon W. (1994), "Marketing Management-Strategies and Programs", McGraw-Hill Inc., 5th ed.
8. Hutt, Michael and Speh, Thomas W. (1998), "Business Marketing Management – a strategic view of Industrial and Organizational markets", The Dryden Press Harcourt Brace College Publishers, 6th ed.
9. Hutt, Michael D. and Speh, Thomas W. (1998), "Business Marketing – A Strategic View of Industrial and Organizational Markets", The Dryden Press, 6th ed.
10. International Telecommunication Union (1998), "African Telecommunication Indicators", (Switzerland: Geneva), 4th ed.
11. Kardes, Frank R. (2001), "Consumer Behavior and Managerial Decision", Prentice Hall, 2nd ed.
12. Kotler, Philip (2003), "Marketing Management", Prentice Hall of India Pvt. Ltd., 11th ed.
13. Kuzmin, S. A. (1969), "The Developing Countries Employment and Capital Investments", International Arts and Sciences Press.
14. Meier, Gerald M. and Steel, William F. (1989), "Industrial Adjustment in Sub-Saharan Africa", Oxford University Press.

15. MIE (2005), "Mesfin Industrial Engineering PLC, Annual Performance Report", (Ethiopia: Mekelle).
16. Moorhead, Gregory and Griffin, Ricky W. (1913), "Organizational Behavior", Hougton Mifflin Company, 4th ed.
17. Mullins, Laurie J. (1996), "Management and Organizational Behcaiour", Pitman Publishing, 4th ed.
18. NBE (2003), "National Bank of Ethiopia, 2001/2002 Annual Report", (Ethiopia: Addis Ababa).
19. NBE (2004), "National Bank of Ethiopia, 2002/2003 Quarterly Bulletin ", Number 4, (Ethiopia: Addis Ababa).
20. Piercy, Nigel F. (2002), "Market-Led Strategic Change", Butter Worth Heinemann.
21. Stickney, Clyde P. (1996), "Financial Reporting and Statement Analysis – A strategic Perspective", The Dryden Press, 3rd ed.
22. UN (2002), "United Nations Conference on Trade and Development Investment and Innovation Policy Review", (New York and Geneva : United Nations).
23. UN (2004), "An Investment Guide to Ethiopia, Opportunities and Conditions", The International Chamber of Commerce, (New York and Geneva: United Nations).
24. UNIDO (2001), "Ecology Sustainable Industrial Development Project – Situational Analysis of the Industrial Sector", (UNIDO)
25. UNIDO (2002), "Review of Industrial and Trade Performance: Macro-Economy Total Manufacturing Industrial Sub-sectors", Federal Democratic Republic of Ethiopia, Ministry of Trade and Industry, (Vienna: UNIDO).
26. UNIDO (2004), "Sustainable Industrial Development and Competitiveness", Federal Democratic Republic of Ethiopia, Ministry of Trade and Industry, (Vienna: UNIDO).
27. Upadhyaya, K. K. (1980), "Financing of Industrial Growth in a Developing Region", Chugh Publications.
28. Williamson, Oliver E. (1996), "Industrial Organization", An Elgar Critical Writings Reader.

29. Yeheyes Aseffa (1986), "Possibilities and Constraints of Developing Heavy Industries in Ethiopia".
30. www.academon.com
31. www.businessballs.com
32. www.marketingteacher.com
33. www.mindtools.com
34. www.netmba.com
35. www.quickmba.com
36. www.stfrancis.edu
37. www.themanager.org
38. www.tutor2u.net

Appendix A

Organizational Structure



Appendix B COMPILED FINANCIAL STATEMENTS

Concise Balance Sheet for the Past Ten Years from 1995 to 2004

Years	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Inventory	2	1889	7781	18525	134772	126517	133056	45385	96800	71775
Other Assets	3535	795	4103	10520	23283	72468	81114	137970	91333	70576
Total current asset	3537	2684	11884	29045	158055	198985	214170	183355	188133	142351
Fixed Assets	6094	7345	7486	21104	33510	54943	52629	53315	48983	62478
Total Assets	**9631**	**10029**	**19370**	**50149**	**191565**	**253928**	**266799**	**236670**	**237116**	**204829**
Current Liabilities	932	1700	10672	35983	165402	103002	115943	66721	56253	29174
Long term debt	0	0	0	0	0	0	0	0	0	0
Capital & Reserves	8699	8329	8698	14166	26163	150926	150856	169949	180863	175655
Total Liab. & Capital	**9631**	**10029**	**19370**	**50149**	**191565**	**253928**	**266799**	**236670**	**237116**	**204829**

Concise Income Statement for the Past Ten Years from 1995 to 2004

Years	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Sales	3813	3346	5015	18605	37192	273581	138363	88942	80440	73843
Less CGS	2651	3550	4079	10162	18676	136830	107518	58880	65816	65105
Gross profit	1162	-204	936	8443	18516	136751	30845	30062	14624	8738
Other income	67	161	40	44	119	547	1723	4148	1267	703
Less Expenses	290	382	1497	2586	6325	12514	9156	6171	7436	6941
Operating profit	939	425	-521	5901	12310	124784	23412	28039	8455	2500
Dividend income									304	273
Other expenses									-589	-2252
Bad debts								-5450	-7290	
Interest expense							-3200	-837		
Re-investment relief										31
Net Income	**939**	**-425**	**-521**	**5901**	**12310**	**124784**	**20212**	**21752**	**880**	**552**

Appendix C List of Interviewees and Companies Visited

List of Interviewees

Name of Interviewee	Department	Position	Date of Interview
Ato Hadera Tesfaye	Finance	Finance Manager	June 7, 2005
Ato Meareg Hadgu	Planning & IT	Planning & IT Acting Manager	June 7, 2005
Ato Kiros Berehe	DGM Support Services	DGM- Support Services Manager	June 8, 2005
Ato Kidanemariam Atakiliti	HRM	HRD Manager	June 8, 2005
Ato Getachew Equbay	Metal Construction Plant	Metal Construction Manager	June 9, 2005
Ato Fasil Gessessew	Marketing and Sales Department	Marketing and Sales Department Manager	June 9. 2005
Ato Daniel Gebre	Marketing & Sales Department	Acting Marketing Research Division Manager	June 20, 2005 and June 21, 2005
Ato Besefew Kebede	Marketing & Sales Department	Acting Marketing Research Division Manager	June 20, 2005

List of Companies Visited

1. Mesfin Industrial Engineering – Mekelle
2. Mesfin Industrial Engineering - Addis Ababa
3. Investment Office of Tigray - Mekelle
4. Ethiopian Investment Office – Addis Ababa
5. Ministry of Trade and Industry
6. EFFOTR
7. Central Statistics Authority

Appendix D

Addis Ababa University
Faculty of Business and Economics
MBA Program
Interview Questions on Situational Analysis of Mesfin Industrial Engineering (MIE)

The objective of the interview is to assess the opportunities and threats underlying in the external environment for MIE and the strengths and weaknesses the company exhibited within its internal environment as well as review the competitive situation for the industry to forward possible strategies to foster the use of the opportunities and strengths and cope with the threats and react on the weaknesses.

Name of interviewee _____
Department _____
Position _____

Part I External environment

1. Is the existing political and legal environment favorable for MIE?
   _____ Yes _____No

2. Does the Eriteria conflict affected MIE?
   _____ Yes _____No

   If yes, how
   _____
   _____

3. Is MIE exempted from custom duty?
   _____ Yes _____No

4. Is MIE exempted from income tax?
   _____ Yes _____No

5. Does VAT applicable for MIE?
   _____ Yes _____No

   If yes, how does it affect its business
   _____
   _____

6. Does MIE enjoy carry forward of losses provision?
   _____ Yes _____No

7. How is globalization affecting MIE? Check the applicable choice.

Very strongly	Strongly	Marginal	Weakly	Very weakly
☐	☐	☐	☐	☐

8. How is the infrastructure and utilities service in country? Check the applicable choice.

8.1. Transportation facility

Very satisfactory ☐ Satisfactory ☐ Marginal ☐ Unsatisfactory ☐ Very Unsatisfactory ☐

8.1.1. Road

Very satisfactory ☐ Satisfactory ☐ Marginal ☐ Unsatisfactory ☐ Very Unsatisfactory ☐

8.1.2. Ocean

Very satisfactory ☐ Satisfactory ☐ Marginal ☐ Unsatisfactory ☐ Very Unsatisfactory ☐

8.1.3. Air

Very satisfactory ☐ Satisfactory ☐ Marginal ☐ Unsatisfactory ☐ Very Unsatisfactory ☐

8.1.4. Rail

Very satisfactory ☐ Satisfactory ☐ Marginal ☐ Unsatisfactory ☐ Very Unsatisfactory ☐

8.2. Financial and Insurance services

Very satisfactory ☐ Satisfactory ☐ Marginal ☐ Unsatisfactory ☐ Very Unsatisfactory ☐

8.3. Education and Health services

Very satisfactory ☐ Satisfactory ☐ Marginal ☐ Unsatisfactory ☐ Very Unsatisfactory ☐

8.4. Utilities

8.4.1. Water Supply

Very satisfactory ☐ Satisfactory ☐ Marginal ☐ Unsatisfactory ☐ Very Unsatisfactory ☐

8.4.2. Power Supply

Very satisfactory ☐ Satisfactory ☐ Marginal ☐ Unsatisfactory ☐ Very Unsatisfactory ☐

9. Does your company involved in export?

_____ Yes _____No

10. If your answer is no for question number 9, does it have a plan for the future?
_____ Yes _____No

11. Is your company involved in import?
_____ Yes _____No

12. If your answer is no for question number 11, does it have a plan for the future?
_____ Yes _____No

13. How is technology affecting MIE? Check the applicable choice.

Very strongly	Strongly	Marginal	Weakly	Very weakly
☐	☐	☐	☐	☐

14. Do Ethiopia's multilateral and bilateral agreements affect MIE's business?
_____ Yes _____No

If your answer is yes, pls. specify how

_____

_____

Part II People management aspect

1. State MIE's vision statement.

_____

_____

2. State MIE's mission statement.

_____

_____

3. What is the number of permanent employees in the company? Check the applicable choice.

_____ < 100
_____ 101 – 500
_____ 501 – 1000
_____ > 1001

4. What is the number of permanent employees in the company? Check the applicable choice.

_____ < 100
_____ 101 – 500
_____ 501 – 1000
_____ > 1001

5. What is the ratio of female employees?

_____ < 10%
_____ 11% – 40%
_____ 41% – 50%
_____ > 50%

6. Do you think you have adequate skilled manpower?
   _____ Yes _____No

7. Is the skill your company requires available in the market?
   _____ Yes _____No

8. Do you provide your employees with a competitive salary?
   _____ Yes _____No

9. When the company did made a salary increment?
   _____ < 1yr
   _____ 2yr – 3yrs
   _____ 4yrs – 5yrs
   _____ > 6yrs

10. Is there high staff turnover rate in the company?
    _____ Yes _____No

11. Is there high absenteeism rate in the company?
    _____ Yes _____No

12. Is there occupational safety control mechanism in the company?
    _____ Yes _____No

13. If your answer for question number 12 is yes, please specify the detail
    _____
    _____

14. Does the company provide medical benefit for its employees?
    _____ Yes _____No

15. Does the company provide insurance coverage for its employees?
    15.1. Life insurance
    _____ Yes _____No

    15.2. Accident
    _____ Yes _____No

Part III Production aspects

1. What kinds of products does MIE manufacture?
   _____
   _____

2. What are your strengths and weaknesses in the production process?
   _____
   _____

3. Do the company have flexible manufacturing system (FMS)?
   _____ Yes _____No

4. What kind of quality control system do you apply? Check the applicable ones.
   _____prevention
   _____feedforward
   _____feedback

5. What kind of inventory management system do you apply in the organization?
   _____
   _____

6. How much is the lead time period?
   _____ < 1 month
   _____ 2- 6 months
   _____7-12 months
   _____ > 1year

7. Which elements of computer integrated manufacturing (CIM) do you apply in the company?
   _____ CAD
   _____ CAM
   _____Robotics and Robots
   _____ Group technology

8. Do you have fast delivery time?
   _____ Yes _____No

9. Do you provide after sales services?
   _____ Yes _____No
   If yes, what are they
_____
_____

10. How much do you rely on Research and Development?

Very strongly	Strongly	Marginal	Weakly	Very weakly
☐	☐	☐	☐	☐

11. How much is your production capacity utilization?
   _____ < 20%
   _____21% – 40%
   _____41% – 50%
   _____51% – 80%
   _____ > 80%

12. Do your employees work overtime during peaks and be idle during slack demand periods?
   _____ Yes _____No
   If no, what do you do
_____
_____

13. Which project scheduling technique do you apply?
_____Gantt charts
_____PERT
_____CPM
_____Others, pls specify
_____
_____

Part IV Marketing aspects

1. Which one of the following barriers to entry are there in the industry?
_____Economies of scale
_____Product differentiation
_____Capital requirements
_____Cost disadvantages
_____Access to distribution channel
_____Government policy
_____Others, pls specify
_____
_____

2. Are the company's suppliers few and/or concentrated?
_____ Yes _____No

3. Does the company's suppliers product unique?
_____ Yes _____No

4. Is there a significant switching cost in changing suppliers?
_____ Yes _____No

5. Is there a threat that your supplier can integrate forward into the company's business?
_____ Yes _____No

6. Is your company an important customer to your supplier group?
_____ Yes _____No

7. Does your company purchase in large volume?
_____ Yes _____No

8. Is the product you purchase from the supplier standard?
_____ Yes _____No

9. Are you desperate to lower your purchasing costs?
_____ Yes _____No

If yes, what are the reasons behind?
_____
_____

10. Is the cost of purchase insignificant for your company?
_____ Yes _____No

11. Does MIE pose a credible threat of integrating backward to make the suppliers products?
_____ Yes _____No

12. Are there more attractive price-performance substitute products in the market?
_____ Yes _____No

13. If your answer for question number 12 is yes, are these products produced by industries earning high profits?
_____ Yes _____No

14. Are there numerous competitors of MIE in the market?
_____ Yes _____No

15. Is the industry growth slow, precipitating fight for market share?
_____ Yes _____No

16. Is the product lacks differentiation or switching costs to lock in buyers?
_____ Yes _____No

17. Is the fixed cost of MIE high creating high switching cost?
_____ Yes _____No

18. Are exit barriers high in the industry?
_____ Yes _____No

Part V Evaluation of Attractiveness of MIE

CSFs	Weight	Rate	Comment
Market Factors			
Market share			
Growth rate			
Customer bargaining power			
Overseas sales potential			
Price elasticity			
Location			
Environmental factors			
Speed of change			
Experience curve effect			
Rapid product innovation			
Social factors			
Regulatory climate			
Substitutability			
Competitive factors			
Industry structure			
Competitive stability			
Potential for differentiatio			

19. What kind of marketing strategy do you follow?

_____

_____

20. Any other comments regarding heavy industry management in Ethiopia

_____

_____

_____

_____

_____.

Thank you!!!