ENVIRONMENTAL SCANNING PRACTICES IN

KENYAN LARGE MANUFACTURING FIRMS
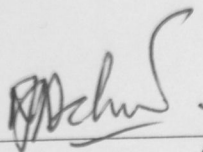
BY

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**A MANAGEMENT RESEARCH PROJECT IN PARTIAL FULFILMENT OF
THE REQUIREMENTS OF THE DEGREE OF MASTER OF BUSINESS
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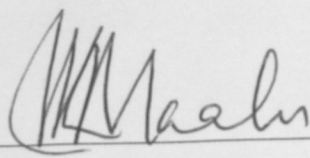NAIROBI**

FEBRUARY 2005

DECLARATION

This project is my original work and has not been submitted for a degree in any other university.

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This project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

This project is dedicated to Mr. and Mrs. Kwengu my loving Uncle and Aunt who have been my pillar and strength since I lost my Dad at a tender age of 15 years.

ACKNOWLEDGEMENTS

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ABSTRACT

This study was designed to document environmental scanning practices in Kenyan large manufacturing firms. The study had two main objectives:

1. To establish the environmental scanning practice (s) in large manufacturing firms in Kenya.

2. To find out the factors behind the use of the environmental scanning methods in practice.

To achieve these objectives primary data was collected using structured questionnaires from a sample of 100 manufacturing firms picked from the Kenya Industrial Research & Development Institute's (KIRDI) directory. One questionnaire per large manufacturing firm was administered to the Chief Executive Officer (CEO) or a senior manager. A drop and pick later approach was adopted and on many occasions the researcher discussed the contents of the questionnaire with the respondents. A total of 32 firms responded positively giving a response rate of 32%.

The data was analysed with the aid of SPSS software. Simple descriptive statistics were used to present this data. Relationship tests were done to determine the influence of scanning on performance. Kruskal-Wallis or better known as the H-test was used to determine any significant differences.

The objectives of this study have been met. The manufacturing companies in Kenya do use environmental scanning practices due to the uncertainties and turbulence in the business environment. They only differ on how they conduct the environmental scanning exercise with most preferring market intelligence.

The findings of this study further revealed that manufacturing firms have been successful over the last five years, recording above average levels of performance. This confirms the literature review that the manufacturing industry is going through a transition as a result of the stable macro-economic environment, government intervention in promoting export opportunities among others, which have increased investor confidence.

ABBREVIATIONS

AGOA   - Africa Growth and Opportunity Act

CBS   - Central Bureau of Statistics

COMESA   -Common Market for Eastern Africa

CEO   - Chief Executive Officer

DF   - Degree of Freedom

EPZ   - Export Processing Zone

GDP   -Gross Domestic Product

H   - Hypothesis

KAM   - Kenya Association of Manufacturers

KIRDI   - Kenya Industrial Research & Development Institute

LDCs   - Less Developed Countries

MBA   -Masters of Business Administration

NSE   - Nairobi Stock Exchange

PESTEL   - Political, Economic, Social, Technological, Environmental and Legal

SBU   - Strategic Business Unit

SIM   - Strategic Issue Management

WWW   -World Wide Web

CHAPTER ONE: INTRODUCTION

1.1 Background

For many years one of the qualities that distinguished successful businesses, and their executives and managers, was a demonstrated ability to think fast and stay on top of or even to influence the course of the economic, social, political and technological conditions of the environment in which they operated. But in the past decade the task of a manager has changed. The environment no longer supports unlimited commercial and technological expansion. Society has become increasingly critical of business initiatives and increasingly adept at measuring and assessing the social costs of business decisions. Contests for market and ownership control have intensified to the point where the competitive environment of business is changing more rapidly and less predictably. It is difficult to follow, much less anticipate, that change (Lynch, 1997).

In this setting, even the best of managers and planners have found it more and more difficult to move fast enough to maintain an aggressive stance in strategy without allowing risks to run out-of-bounds. They have found the cost of misdirected or non-directed business efforts both high and rapidly rising. The growing difficulty in devising timely responses to issues from the business environment, plus the rising cost and risk of improper responses, are the fundamental reasons why environmental scanning is vital to today's CEO.

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Environmental scanning is a methodology for coping with external competitive, social, economic and technical issues that may be difficult to observe or diagnose but that cannot be ignored and will not go away (Stoffels, 1994). Scanning has long been an important element of strategic management and is continually developing. Companies need to identify emerging changes early enough to gain advantage from them. This intelligence is vital in a world of increasing change and uncertainty.

Pearce and Robinson (1997) state that in order for organizations to achieve their goals and objectives, it is necessary for them to adjust to their environment. The dynamism of the environment implies that the organization have to constantly redesign their strategies in order to remain competitive. Failure to effectively adapt the organization to its environment leads to a strategic problem. Such a problem will be evidenced by a mismatch between what the organization offers and what the market demands.

Daft (1988) observed that planning has two major purposes today. The first is not so much to control as to enhance resilience and a sense of responsibility, both to immediate and the indirect stakeholders. In order to see the possibilities as well as the problems in our uncertain world, we've got to be as clear as we can about what we don't know. The irony is that now we need planning and future studies precisely because we cannot do what we thought planning and future studies were for gaining and maintaining control. The second purpose of planning is to help an organization learn how to move into an uncertain future by asking itself again and again where it wants to go, how and if it is getting there, and is that still where it wants to go.

Therefore scanning presents a system for managing strategic issues that can help us "be clear as we can about what we don't know."

According to Stoffels (1994) scanning identifies the segment of a firm's strategic management activities requiring a view outside the firm's boundaries. It invokes a process of externalisation, causing the firm to expand the focus of decision making to include the perspective of outsiders such as customers, competitors, regulators or community members. The lowest level of environmental scanning is observation, by which the firm seeks to learn "what is." The highest level is prediction or synthesis, as the firm seeks to integrate signals of future events or conditions into meaningful model upon which to build strategy. The key conditions inviting environmental scanning are external turbulence with observable signals yielding distinguishable consequences.

Strategy is the direction and scope of an organization over the long term, which achieves advantage for the organization through its configuration of resources within a changing environment to meet the needs of the markets and fulfill stakeholder expectations (Johnson and Scholes, 1996). Strategic Management is a systematic approach to position and relates the firm to its environment in its continued success and make it secure from environmental surprises (Ansoff and McDonell, 1990).

Granda (2000) asserts that the world in which we happen to live is not static at all, but is object of deep transformation. This implies that today's manager should be accorded an enabling environment to exercise entrepreneurial managerial skills

towards meeting the global challenges. McKenna (1997) gave the following real time message: Companies will learn about the technologies of real time in the only way they truly can - by adopting them and putting them to practical use. They will deploy them not to predict the future but to live virtually on top of changing patterns and trends affecting every sphere of their business environment, making rapid and continuous refinements in their way of doing business.

Pumpin (1993) stated that the highest organizational goal must be perceived to be maximizing benefits for all stakeholders, which solves the problem of survival much more neatly and given entity continues in existence if this function is fulfilled. For this to happen, organizations must create flexibility within it. Flexibility implies quick adaptability to new directions, ability to learn and capacity to keep an open mind.

1.2   An Overview Of Kenya's Manufacturing Sector

Kenya's industrial and manufacturing sector is going through a transition. This is largely as a result of the turbulent macro economic environment due to multi-party politics, government interventions in promoting export opportunities for the manufactured products; enactment of anti-dumping and countervailing duty legislation to curb restrictive practices that disadvantage local manufacturers, zero rating of excise duty and related taxes for majority of input increased and then decreased investor confidence due to allegations of corruption. According to the Economic Survey 2004 edition, real output in the manufacturing sector expanded by 1.4% in 2003 compared to 1.2% growth recorded in 2002.

High levels of concentration characterize the Kenyan large manufacturing sector. Few large companies account for a large proportion of the sectors' output and employment. This is supported by Aosa (1992) who found out that 43-50% of manufacturing firms are monopolies or concentrated oligopolies. The small domestic market and high levels of protection encourage this tendency though this is changing after liberalisation. The African Growth Opportunity Act (AGOA) and the COMESA trading arrangement continued to play a major role in the exports of manufactured goods in Kenya. The growth in the sector was however constrained by consumer spending; high energy costs, insecurity, and poor infrastructure. Other factors affecting the sector were increased production costs due to escalating prices on raw materials, high fuel prices and appreciation of the Kenya shilling against the US dollar, which constrained exports.

According to the Manufacturers' directory 2002 Edition the sector contributed an average of 13 per cent to the Gross Domestic Product (GDP) from 1995 to 1999. The growth rate of the sector however declined from 3.9 to 1.0 per cent for the same period. The above trend is mainly attributed to stiff competition from imports; poor infrastructure; reduced investments in the sector partly caused by high cost of domestic funds and reduced direct foreign capital investments and capital as well political power play. This affects a firm competitiveness in some way or another and calls for environmental scanning.

According to Kenya's Economic Survey 2004, there was a recovery in the sector and this could be attributed to rise in output of some of the agro-based processing industries. However, key sub-sectors including sugar and grain mill recorded declines.

Significant growth was registered in dairy production, fish processing, fats and oil, confectionary and chocolate miscellaneous foods and prepared animal feeds sub-sectors. Other key sub-sectors, which performed well, are in drugs and medicine, perfumes and toiletries, petroleum produce and non-metallic products. The motor vehicle assembly experienced some positive turnaround as a result of incentives provided by the government. The main players in the sector registered growth in production of alcoholic spirits and soft drinks on account of increased demand coupled with the incentives to the consumers through competition. Other major industries that recorded growth were in wearing apparel, paper products, plastic products and electrical machinery apparatus and appliances.

The value of output in the manufacturing sector rose by 6.1% in 2003, while in the same year total wages increased by 22.1%. Employment in EPZs increased by 32%, while the number of manufacturing companies under the zone increased by 15 to 69 in 2003. The biggest external market for Kenya's manufactured goods has been and still is neighbouring African countries.

1.3   Statement Of The Problem

External changes in the Kenyan economy have contributed to the intense competition faced by firms in the country. Guaranteed business opportunities that were offered to organizations where the government had interests, fell away. With the liberalization, and the emergence of competition and highly discerning customers, such businesses have to be competitively won.

Large manufacturing firms are expected to be using environmental scanning most, especially now, because they are the most hit by the effects environmental turbulence and trade liberalization in

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the country. Firstly, they face stiff competition from imported goods, which have been increasing. Secondly, they encounter foreign exchange uncertainties and local currency value fluctuations, both of which affect their operations, especially importation of raw materials. Thirdly and most importantly, the opening up of regional markets such as Common Market for Eastern Africa (COMESA). For these reasons, there is therefore a need to make these firms aware of the existing environmental scanning techniques, if they are not using or already aware of, and how to use them effectively so as to improve their strategic planning and decision-making. Aosa (1992) found out that no Kenyan firm had an environmental scanning unit. Instead where environmental scanning was formal, it was the responsibility of the management teams i.e. the CEO and the departmental heads. Each function head gathered information pertinent to their departments. Karemu (1993) observed absence of long-range plans therefore planning horizons was short and plans were kept informal. Kang'oro (1998) on the other hand noted that public sector had well articulated plans. This was confirmed by other similar studies done on strategic management practices in some Kenya's organizations include, Kombo (1993), Gekonge (1999), Abdullahi (2000), Nganga (2001) and Kiptugen (2003). Little attention however has been paid on environmental scanning practices in large manufacturing companies in Kenya. Therefore a knowledge gap exists in this area, which the study aims at bridging.

1.4   Objectives Of The Study

(i) To establish the environmental scanning practice (s) in large manufacturing firms in Kenya.

(ii) To find out the factors behind the use of the environmental scanning methods in practice.

1.5 Importance Of The Study

The outcome of the study will greatly help manufacturing firms and other organizations to know the existing environmental scanning methods, the situations in which they are best applied and how to select an appropriate method (s) so as to achieve effective planning and decision making and hence reduce the adverse effects of a turbulent environment.

The findings of the study will also enable universities and other centres of training for environmental scanning to know the most commonly used methods so that they place more emphasis on how these methods can be effectively used to improve planning and other forms of decision-making.

Environmental scanning consultants will also benefit very much from the findings of the study. They will be able to know the problems faced by firms in applying forecasting methods, if they do, so as to improve their consulting services. The findings of the study will also be very useful to researchers as they will be able to identify the issues to be addressed when developing new environmental scanning methods and how to modify the existing ones so as to achieve high degree of accuracy.

1.6 Structure Of The Study

Chapter one deals with the introduction, chapter two covers literature review, chapter three covers research design, chapter four focuses on data analysis and findings while chapter five contains the summary, discussions and conclusions.

CHAPTER TWO: LITERATURE REVIEW

2.1 Environmental Scanning Practices

According to Stoffels (1994) monitoring signals from the environment is the predominant technique employed in environmental scanning. Management tailors these scanning approaches to the fundamental nature of a particular environment and to the degree of interaction and dependency perceived among the dimensions of that environment, and selects sources of information appropriate to its scanning strategy. Then, by managing its scanning resources and communications, an effective system for capturing environmental intelligence can be established. Rich inferences can be drawn from environmental data in an intuitive fashion by making routine and non-routine inquiries of the environmental database. Intuition ultimately reaches its limits however, as the quantity of data increases, as the complexity of relationships grows or as environments exhibit signs of change or instability. The techniques include, analytical techniques, mapping techniques, modelling techniques and subjective techniques of analysis.

The four environmental parameters are complexity, irreducible uncertainty, instability, and the firm's knowledge about that environment. If a firm knows little about its environment, it faces a high degree of uncertainty. That gaining knowledge, since increasing knowledge, can reduce uncertainty is associated with decreasing reducible uncertainty. At some point, increased expenditures for knowledge yield decreased marginal reductions in uncertainty. The uncertainty that remains after knowledge has reached its economic limit is irreducible uncertainty (Grant 1998).

The independent aspect of uncertainty relates to the breadth of probability distributions that are associated with values and outcomes in the environment. That is, the firm may well understand the functional determinants of demand for one of its products and be able to explain demand accurately in an ex-post sense, but be confounded in the prediction of future demand by the wide probability distributions (uncertainties) associated with one or more of the interacting variables in the demand equation. Finally, the independent aspect of instability is associated with the degree to which concepts and relationships somewhere in the environment are undergoing the processes of fundamental change (Lynch, 1997).

2.2 Why Environmental Scanning Is More Necessary Today

Scanning can provide early warning signals for the organization from emerging environmental issues, threats and opportunities. Scanning helps companies develop and modify strategy to meet changing external circumstances, thereby helping the organization succeed and survive (Calori 1999). In short, environmental scanning helps the organization adapt its behaviour to the changing reality of the external world.

Surveillance systems put in place for the purpose of scanning provide signals. The signals are analysed by information systems to determine whether an event has occurred or has a changed probability of occurring. Diagnostic systems then determine threats and opportunities (Stoffels, 1994).
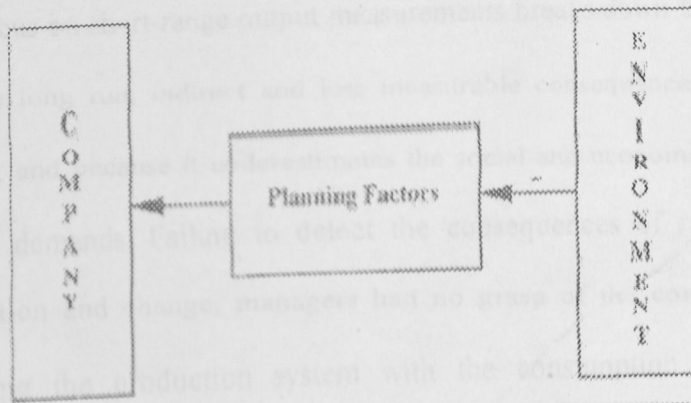
Figure 2.1: The Firm Separate from Its Environment

(Source: Stoffels, 1994 pp 5)

Today's greater environmental uncertainties may be the result of previously unforeseen long-run consequences of the planning models and the belief that business and society have traditionally embraced by viewing companies as isolated from the environment (Fig. 2.1).

In the typical strategic planning process, the environment has been a given from which management has taken factor inputs such as interest and wage rates, taxes, and available technology. The environment seemed inapproachable, delivering at random "events" such as embargoes, oil cartels, factory accidents, terrorism and hostile take-overs. Except for a few cases, such as the oil company pressure to reduce royalties that motivated the formation of OPEC, the environment has appeared uncontrollable and unaffected by any one company's actions. By applying this environmental model, businesses have permitted themselves the luxury of planning for short-range outcomes — planning mainly based on the assumption that rapid growth permanently delivers the prosperity observed in rising output measures such as earnings per share (Grant 1998).

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This focus on short-range output measurements breaks down because it oversimplifies the long run, indirect and less measurable consequences of rapid economic growth, and because it underestimates the social and economic readjustment rapid growth demands. Failing to detect the consequences of radical technological innovation and change, managers had no grasp of the complexity involved in matching the production system with the consumption system in a world marketplace. If this mismatch was observed, it appeared as an uncontrollable environmental "event" and therefore did not cause anyone to hesitate (Calori, 1999).

For planners and managers, the turbulence of recent years and likely future changes reinforce the need for intelligent environmental scanning, beginning with the recognition that the firm is a part of its environment as depicted in Figure 2.2, and requires changes in the planning processes and techniques developed when the environment appeared more stable.

Business-as-usual approaches seem very difficult to justify in the post-industrial era (Ansoff, 1987). Leading, aggressive firms are no longer in a sufficient power position to establish the style and pace of progress or to control their own destinies. For management, garnering meaningful signals from the environment replaces gaining experience as a principal guide to the future. Effective environmental scanning becomes more and more a competitive and strategic necessity.

Figure 2.2. The Firm Interacting with its Environment

ENVIRONMENT

Technological Developments

Ecology Issues

Resource Availability

COMPANY

Planning Factors:
Inflation
Interest rates
Behavior norms
Regulations
"
"

Economic Volatility

Social and Political Attitudes
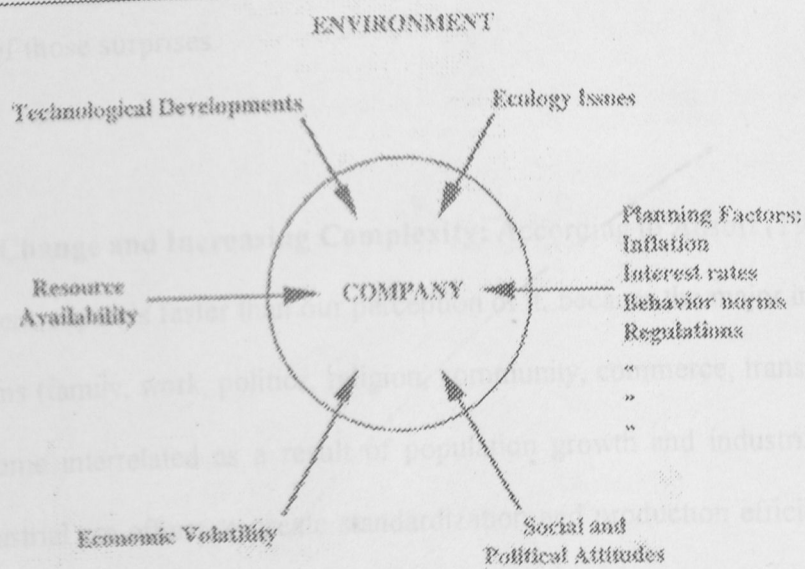
(Source: Stoffels, 1994 pp 6)

2.3 Reasons For Scanning.

The costly impacts of an imperfect reading of the environment can lead to lost profits, lost market share, lost jobs, lost wealth and the destruction of share value in the marketplace. Judgments simply turned out to be faulty because the environment evolved into a different state of nature than strategies anticipated. There are several reasons why increased scanning intensity in today's environment could reduce the incidence of similar strategy failures in the future.

Industrial Evolution: Naisbitt (1984) argues that a new order is emerging, that the nation is moving from an industrial to a post-industrial society. Old rules do not apply in this new order, and a strategy based on extrapolation of experience gained using old rules is likely to be wrong. The purpose of environmental scanning is to

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help reduce, through intercepting and interpreting signals, the frequency and impact intensity of those surprises.

Speed of Change and Increasing Complexity: According to Ansoff (1990), "our environment expands faster than our perception of it, because the major institutions and systems (family, work, politics, religion, community, commerce, transportation) have become interrelated as a result of population growth and industrialization." Early industrial era efforts to create standardization and production efficiency gave way to the pursuit of differentiation in product, technology or market and to the rapid rate of design, development and invention such differentiation requires. Scanning creates inputs to a flexible and opportunistic management system. Such a system permits organizations to become responsive to their emerging circumstances, to become adaptive, and, in various ways, to "learn to dance."

Evolution in Planning Methodology. In the wake of substantial criticism of the timeliness and effectiveness of the results of planning efforts, in the past decade strategic planning as a profession has undergone significant changes. A principal criticism has been that the profession has been too preoccupied with process and definition — questions such as how to organize the planning process and how to identify a good strategic decision.

Freed from preoccupation with process or form, planners can focus on more funda-mental issues, such as, "What information do I need to make a good strategic decision?" In a complex, rapidly changing environment, that necessary information is mainly about the future, to some degree about the present, and little about the extrapolated past. The information environmental scanning seeks to provide fits this need (Ackoff, 1993).

Asymmetry of Environmental Impacts. A company with an abundance of resources might argue that it is sufficient to know about what is happening now. Yet, the perceived now may already be a step behind the real present environment and is certainly behind the environment that will exist over the period during which current decisions are implemented. However, evidence suggests that the environment can be unforgiving. Schendel and Patton (1986) found out that unfavourable changes caused significant deterioration in firm performance in downturns, but that positive changes did not lead to significant countervailing benefits in upturns. They con-cluded that environmental monitoring is required to help avoid unfavourable impacts.

2.4 The Concept Of Strategy And Strategic Management

Porter (1985) asserts that strategy means what a company does, how it actually positions itself commercially and conducts competitive battle while Aosa (1988) defined strategy as solving a strategic problem, which is, a mismatch between the internal characteristics of an organization and its external environment. According to

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Ansoff and McDonnell (1990), strategy seeks to bridge the gap between current positions of the organizations to its future intended direction. It is therefore a continuous activity that enables the organization plan for the exploitation of opportunities using its internal strengths while minimising the impact of threats posed by the environment in the light of the organization weakness.

Bowman (1998) observed that strategy could be viewed in three levels for large organizations with several businesses. These levels are corporate strategy (which defines the envelope vision of the company, mission statement, objectives and corporate culture); Strategic business unit (SBU), which defines the competitive arena & SBU's capability and Functional strategy which addresses the operating, plans of the company.

Crainer (1995) observed that traditional hierarchies are ill equipped to respond to speedy decisions making process demanded by the challenging environment. However, Katzenbach and Santamaria (1999) noted that many organizations have therefore resulted in restructuring to enhance flexibility, employee participation and customer orientation. Crainer (1995) further described the characteristics of the new organization as being flexible, non-hierarchical, participatory, creative, entrepreneurial, emphasize on team work, driven by corporate goals and make use of the powerful tool of information technology to sustain its competitive advantage.

Burnes (1998) observed that the unstable and unpredictable conditions in which organizations have to operate today means that the ability to think strategically and to manage strategic change successfully is key competitive strengths for a sustainable

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competitive advantage. However, Mintzberg and Quinn (1991) observed that strategy itself is really about continuity not change. But they also noted that to manage strategy is frequently to manage change - to recognize when a shift of a strategic nature is possible, desirable, necessary and then to act.

2.5 Strategic Planning Model

In today's highly competitive business environment, budget-oriented planning or forecast-based planning methods are insufficient for a large corporation to survive and prosper. The firm must engage in strategic planning that clearly defines objectives and assesses both the internal and external situation to formulate strategy, implement the strategy, evaluate the progress, and make adjustments as necessary to stay on track (Bradford, Robert W., Duncan, Peter J., Tarcy, and Brian, 1999). A simplified view of the strategic planning process is shown in figure 2.3.

Figure 2.3: Strategic Planning Model

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┌─────────────────────────────────┐
│     Mission and Objectives      │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│     Environmental Scanning      │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│       Strategy Formulation      │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│     Strategy Implementation     │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│     Evaluation and Control      │
└─────────────────────────────────┘
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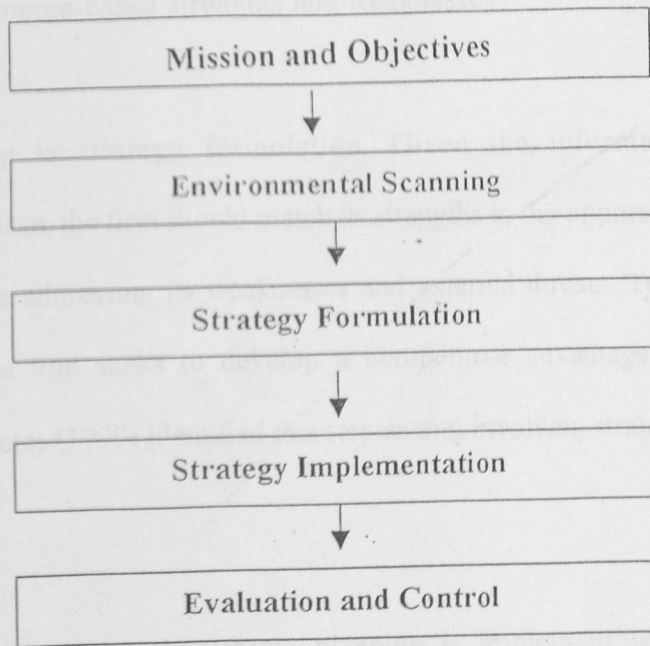
(Source: Bradford, Robert W.,Duncan, Peter., Tarcy, Brian, 1999)

The first step in formal planning process is defining the business starting by a mission and forming a strategic vision. Defining the business begins with thinking strategically about the firm's future makeup and forming a vision of the firm's future (Thompson & Stickland, 1995; Pearce & Robinson ,2001).

The second step in formal strategic planning process is analysing the environment and the resources of the organization (Pearce & Robinson, 2001). The internal analysis can identify the firm's strengths and weaknesses and the external analysis reveals opportunities and threats (Bradford, Robert W., Duncan, Peter J., Tarcy, and Brian, 1999). According to Johnson & Scholes (1999) external and

internal analyses are conducted so as to match environmental opportunities and threats with resource-based strengths and weaknesses.

The third step is strategy formulation. Given the information from the environmental scan, the firm should match its strengths to the opportunities that it has identified, while addressing its weaknesses and external threats. To attain superior profitability, the firm seeks to develop a competitive advantage over its rivals. Johnson & Scholes (1999) identified this step as that involving strategic analysis and choice.

The fourth step in formal strategic planning is implementing and executing strategy (Thompson & Stickland, 1995). The selected strategy is implemented by means of programs, budgets, and procedures (Bradford, Robert W., Duncan, Peter J., Tarcy, Brian, 1999). Generation of strategic options and their evaluation and planning, of implementation through resource allocation processes, the structuring of the organization and the design of control systems is critical in this step of formal strategic planning (Johnson & Scholes, 1999).

The fifth and last step is evaluating performance, reviewing new developments and initiating corrective adjustments. None of the tasks of strategic planning are a one-time only exercise. Managers constantly evaluate performance, monitor situation and decide how well things are going and make necessary adjustments (Thompson & Stickland, 1995). Evaluation and control consists of the following steps; defining parameters to be measured, defining target values for those parameters, performing

measurements, comparing measured results to the pre-defined standard and making necessary changes (Bradford, Robert W., Duncan, Peter J., Tarcy, Brian, 1999).

2.6 Environment, Strategy And Organisational Capability

Ansoff and McDonnell (1990) state that changes in the organisation's behaviours are necessary if success in the transformation of the future environment is to be assured. They noted that such changes, which touch on the organisation's strategy and capability, would need to be systematically identified through the strategic diagnosis approach.

This approach is derived from the strategic success hypothesis which states that a firm's performance potential is optimum when the aggressiveness of the firm's strategic behaviour matches the turbulence of its environment; the responsiveness of the firm's capability matches the aggressiveness of its strategy; and the components of the firm's capability are supportive of one another. When any one of these three aspects are lacking, then the firm's performance potential will be less than optimum. The real-time response is the specific action that is chosen and implemented in order to realign the organisation's strategic aggressiveness to the environmental turbulence.

Managing the Firm's Adaptation to the Environment

Environment | E_1
     Environmental Transformation → E_2

Strategic Response | S_1
     Strategy Transformation → S_2 Real-Time Response

Internal Capability | C_1
     Capability Transformation → C_2
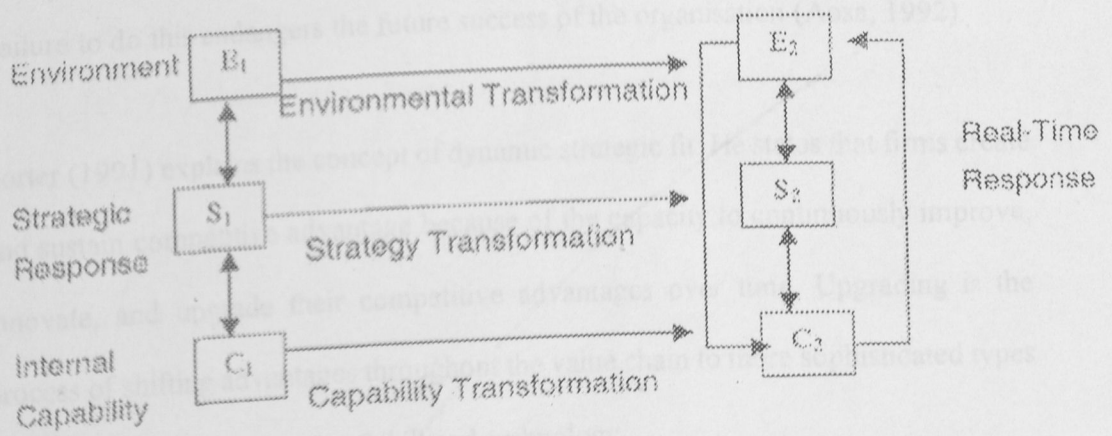
Key:

E_1	Current Environment	E_2	Future Environment
S_1	Current Strategy	S_2	Future Strategy
C_1	Current Internal Capability	C_2	Future Internal Capability

(Source: Ansoff and McDonnell, 1990, pp40)

The above diagram clearly indicates the environmental dependence of an organisation. When there is an environmental shift from E1 to E₂, then the organisation's strategy has to be changed from S1 to S2 in order to adapt to the changed environmental conditions. However, this is only possible when the organisation's capability is changed from C1 to C₂. Therefore, an organisation has to monitor its environment continuously so that it can identify any shifts that require it to adjust its strategies in response to such changes. This requires that the firm's capabilities be constantly updated through environmental scanning to ensure that they support the chosen strategy.

As the organisation's environment changes, it is necessary that the firm continuously adapt its activities and internal configurations to reflect the new external situation. Failure to do this endangers the future success of the organisation (Aosa, 1992).

Porter (1991) explains the concept of dynamic strategic fit. He states that firms create and sustain competitive advantage because of the capacity to continuously improve, innovate, and upgrade their competitive advantages over time. Upgrading is the process of shifting advantages throughout the value chain to more sophisticated types and employing higher levels of skill and technology.

According to Grant (2000), a successful strategy is consistent with the organisation's goals and values, external environment, resources and capabilities, and organisational systems. This indicates the fact that the organisation depends on the environment for its survival and the responses to the environmental situation will determine its performance. Thus, when there are changes in the environment, the organisation's capabilities and strategy would have to be changed in order to ensure a continued 'strategic fit.'

As environmental scanning enriches and expands the set of opportunities for developing basic and core business strategies, it becomes the very essence of hedge strategies Environmental scanning methodologies support the identification of high-impact scenarios and the assessment of probabilities of those scenarios. In short, scanning permits the identification of key contingencies for which hedge strategies are needed. (Calori 1999).

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 The Population

The targeted population of study consisted of all large manufacturing firms located in Kenya. A random sample of 100 large manufacturing firms was picked from the Kenya Industrial Research & Development Institute's (KIRDI) directory. There were about 260 companies in the targeted population. Determination of the size of the firm was done using the number of employees. KIRDI defines a large manufacturing firm as that which is concerned with the production of goods from raw materials using organised labour and production systems with the aid of a machinery and a workforce of 50 or more employees. A number of researchers such as Yego (1996), Aosa (1992), Maina (2001) and Nyamwange (2001) have used a similar sample size in the past. Other measures of size are capital employed, volume of sales turnover and level and type of technology. Aosa (1992) combined both sales turnover and number of employees. This criterion of number of employees was used mainly because in this era of stiff competition, information on sales turnover, capital employed or level or type of technology used is considered sensitive and confidential and could therefore not be obtained.

KIRDI's categorization is shown in Table 1.1 below. The directory was chosen because it was more comprehensive and organized compared to other business directories. Also the directory categorised firms according to the number of persons employed and so it was easy to pick those with at least 50 employees.

Table 1.1: Size Of Firms

Size Class Code	Number of Employees
A	5-19
B	20-49
C	50-59
D	100-199
E	200-499
F	Over 500

(Source: KIRDI Directory of Manufacturing Industries).

3.2 The Sample And Sampling Procedure

The sample size comprised of large manufacturing firms located in Nairobi and its environs namely Thika and Athi-River. These areas were picked because most large manufacturing firms are located there. This sample was considered large enough to provide a general view of the state of environmental scanning in the manufacturing sector in the country and hence provide a basis for valid and reliable conclusions.

3.4 Data Collection Method

Primary data was collected by use of "drop and pick" questionnaire and where possible the researcher discussed the contents of the questionnaire with the respondent and left him/her to fill it at his/her own time. This is a variant of mail questionnaire and was aimed at capturing the benefits of personal interview and to speed up data collection.

One questionnaire per large manufacturing firm was administered to the CEO or any other person or departmental head recommended by the CEO and this turned out to be mainly marketing, sales, planning, quality assurance, and operation and production managers. This questionnaire consisted of both closed and open-ended questions developed mainly from the literature review.

3.5 Data Analysis Techniques

The data collected was analysed by the use of descriptive statistics. First, data was coded to facilitate computer data input. Analysis was carried out using SPSS. The data was then summarised using tables and analysed using descriptive statistics. This entailed using proportions, percentages, means and frequency distributions. Gamma coefficients were used to determine relationship between environmental scanning practices and performance. Similar studies carried out by Karemu, (1993), Letting, (2003) and Kan'goro (1998) used similar analysis techniques.

Further statistical analysis was conducted to bring out any significant differences between the sub samples. Kruskal-Wallis test method was chosen because it is expected that when data are divided into sub-samples, the constituent sub samples will not be equal. Also most of the data were ordinal and categorical. Likert type profiles were drawn to indicate any visual differences. Comparisons of findings were made with other similar studies carried out in Kenya.

CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

4.1 General Information

In this section of the report, the data collected have been analysed using descriptive statistics such as proportions, percentages, means, frequency distributions and summarized in tables for presentation. Gamma coefficients have been used to determine the significance, strength and direction of relationship between the environmental scanning practices and measures of performance. Likert profiles were drawn to give visual difference and Kruskal-Wallis test was used to determine significance of the difference.

The target population consisted of all manufacturing firms in located in Kenya. A random sample of 100 large manufacturing firms was picked from the KIRDI's directory. One questionnaire was distributed to all the 100 large manufacturing firms for the research. During the study it was discovered that some companies have since merged, others shared same management although they were listed as different companies, while others have ceased operating and have wound up. Some manufacturing companies were uncooperative and declined to participate in the study. Out of 100 questionnaires, 32 were completely filled while there was no response in some questionnaires and some were incomplete therefore excluded from further analysis. This represented a responsive rate of 32 % and this was considered sufficient for analysis. Similar studies in Kenya which have achieved the following response rate: Aosa (1992), 15%; Kang'oro (1998), 38%; Mugambi (2003), 48% and Warsame (2002), 20%.

Most of the manufacturing firms studied were established in Kenya between 1922

(Kenya Breweries) and 2001(Malplast Industries)

Table 1.2: Size of companies based on number of employees

Size class code	Number of companies	Percentage (%)
C	3	9.4
D	9	28.1
E	11	34.7
F	9	27.8
Total	32	100

There were no companies considered in the research in size class code A and B

because class A has 5 to 19 employees while class B has 20 to 49 employees.

According to KIRDI's classification large manufacturing firms should have a

workforce of 50 or more employees.

Therefore the firms studied were lying in classes C, D, E and F. 9.4 % of the

companies under study were in the size class code C, 28.1 % in size class code D,

34.7 % in size class code E and 27.8 % in size class code F. Thus looking at the

number of employees, then the study majored in large firms.

Table 1.3: Total Assets and Total Turnover as an indicator of size

Statistics	Total Asset (Ksh. M)	Total Turnover (000)
Mean	9181.40	2668800.00
Median	1500.00	800000.00
Mode	200.00	40000.00
Minimum	80.00	40000.00
Maximum	120000.00	18000000.00

The 32 companies studied had an average mean of Ksh. 9181.40 million of total assets and an average turnover of Ksh. 2668.8 million. The median was Ksh.1500million and Ksh.800 million for total assets and total turnover respectively. A firm with the lowest value of total asset totalled to Ksh. 80 million while the highest firm had a value Ksh.120000 million. On the other hand the lowest turnover recorded was Ksh. 40 million compared to the Ksh.18000 million which was recorded as the highest.

Table 1.4: Overall Ownership

Ownership	Number of companies	Percentage (%)
Local (51% or more)	18	56.3
Foreign (51% or more)	8	25
Joint Venture	6	18.7
Total	32	100

56.3 % of companies were predominantly local i.e. more than 51% was owned locally, compared to 25 % of the companies which are predominantly foreign while 18.7 % were joint ventures. For six companies under joint ventures two were largely

owned locally and four were largely foreign owned. However there was no equal ownership of joint ventures between locally incorporated companies and foreign companies. This is illustrated in table 1.5 below.

Table 1.5: Ownership By Local And Foreign

Ownership	Number of Companies	Percentage(%)
Largely local	2	33%
Largely foreign	4	67%
Equally owned	0	0%
Total	6	100%

Table 1.6: Categories of companies

Industry	Number of companies	Percentage (%)
Textile	2	6.3
Steel manufacturing	2	6.3
Metal/ Plastics Man.	4	12.6
Chemical Processing	5	15.6
Food Processing	7	21.9
Paper or Wood	3	9.4
Others	9	27.9
Total	32	100

When the companies were classed according to the nature of products manufactured, out of the 32 companies studied, 6.3 % of these companies came from steel manufacturing industry, 12.6 % from metal/plastics manufacturing industry, 15.6 %

from chemical processing industry and 21.9 % from food processing and manufacturing industry. There was 6.3 % from the textile manufacturing industry and 9.4 % from paper or wood products manufacturing industry. Other industries such as household cleaners industry, leather and foot ware industry, paint manufacturing, engineering industry among others accounted for 27.9 % of the companies (Table 1.6). The bar chart below compares the different types of industries.

Industry Classification
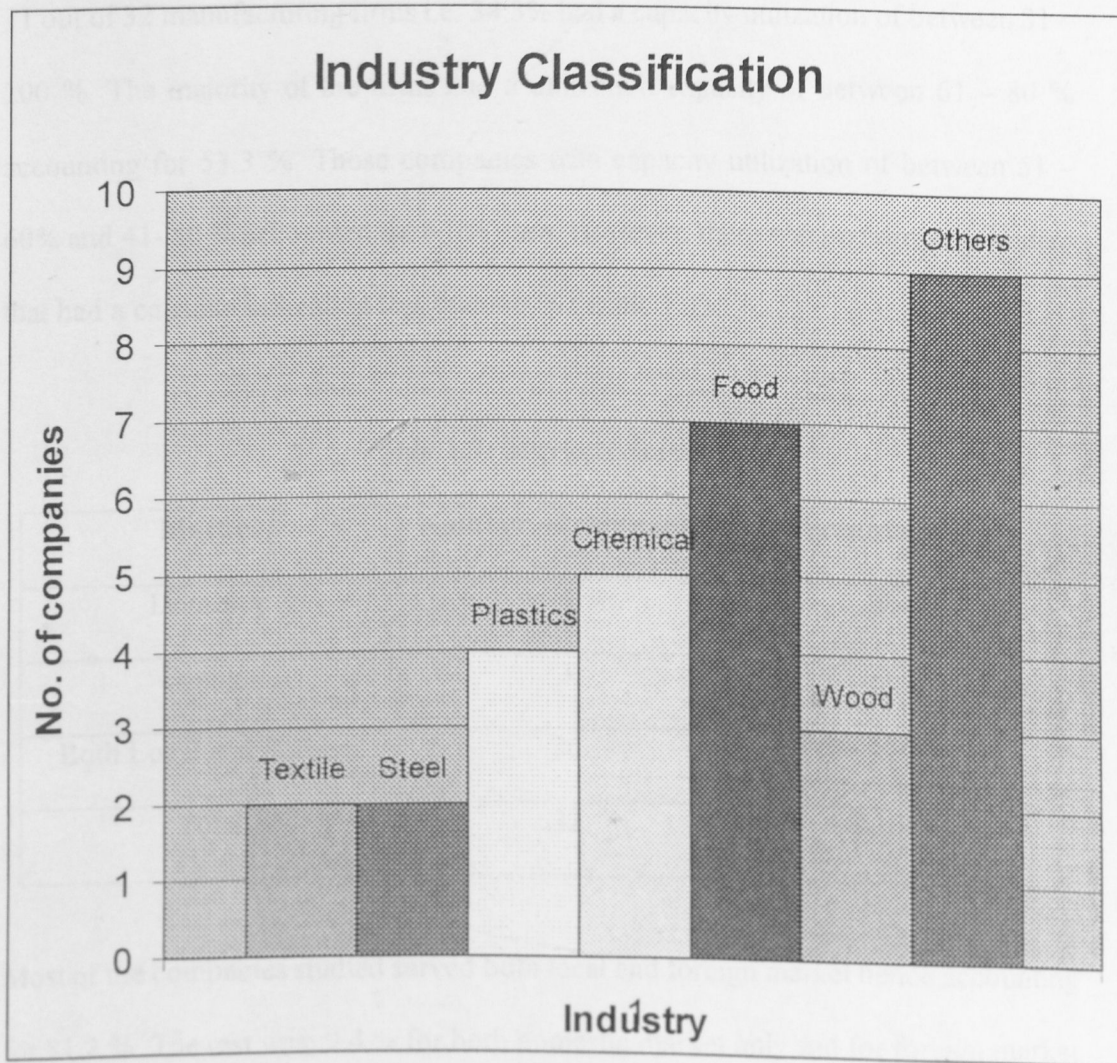
Total: 32 companies

Table 1.7: Capacity Utilization

Capacity (%)	Number of companies	Percentage (%)
81 – 100	11	34.3
61 – 80	17	53.1
51 - 60	2	6.3
41 – 50	2	6.3
Less than 40	0	0

11 out of 32 manufacturing firms i.e. 34.3% had a capacity utilization of between 81 –

100 %. The majority of the firms had a utilization capacity of between 61 – 80 %

accounting for 53.3 %. Those companies with capacity utilization of between 51 –

60% and 41- 50 % accounted for 6.3% each. However, there was no company studied

that had a capacity utilization less than 40 % (Table 1.7).

Table 1.8: Markets Served

Market	Number of companies	Percentage (%)
Domestic	3	9.4
Foreign	3	9.4
Both Local and Foreign	26	81.2
Total	32	100

Most of the companies studied served both local and foreign market hence accounting

for 81.2 %. The rest was; 9.4 % for both domestic market only and for foreign market

only(Table 1.8).

4.2 Mission, Objectives And Factors Behind The Use Of Environmental Scanning Practices.

26 out of 32 firms studied had mission statements in a written form. Only 6 companies did not have mission statements. Contrasted to objectives all the firms whose correspondence was received had objectives although only 21 companies' objectives were in a written form while 11 were not. These unwritten plans are kept in the minds of directors and top managers. In terms of awareness of objectives by the employees, 18 companies responded that these objectives were known while 14 did not. This is shown in the Table 1.9.

Table 1.9: Mission, objectives factors behind the use of scanning methods

	Present		Form		Awareness		
	Yes	No	Written	Not Written	Yes	No	Total
Mission	26	6	26	6	-	-	32
Objectives	32	0	21	11	18	14	32

Table 2.0: Participation in Objective setting

Level	Number of companies	Percentage (%)
Directors only	0	0
Functional Staff	6	18
Managers Only	3	10
All the Above	23	72
Total	32	100

No company responded that directors had set objectives only. In contrast, 18 % said that functional staff set objectives and only 10 % said managers set objectives. The rest of the companies (80 %) replied that directors, functional staff and managers set objectives (Table). All the companies (32) developed approaches for doing business. Some of the approaches were operation, excellence initiatives, benchmarking, Toyota production system, focusing qualitatively and quantitatively on the market share and best operating practice. Various firms changed some of these approaches from time to time and this response accounted for 76 % and only 24 % did not change them from time to time. The findings were tabulated as shown in Table 2.1

Table 2.1: Participation in Objective setting

Features characterizing approaches	Yes	No	Total
Intention to achieve success	32	0	32
Driven by capability to plan	27	5	32
Chief Executive/ Manager determines conduct of business	4	28	32
Adjust Approach from experience	28	4	32
Conduct Business as Normal	6	26	32
Forced by external forces	15	17	32

4.3 Environmental Scanning Practices

30 companies out of 32 did say they scanned the external environment to help them make business decisions. Most firms did this through their research department by carrying out research or surveys and only one company did not do this.

Table 2.2: Methods/ Techniques/ Practice Used to Scan the Environment

Mapping Techniques

Method	Number of Companies	Percentage (%)
Flow Charts	6	15.8
Tree Diagrams	6	15.8
Impact Analysis	7	18.4
Input – Output Analysis	19	50.0
Total	38	100

Among the Mapping techniques the most widely used technique was input - output analysis accounting for 50 %. This was followed by Impact analysis taking 18.4% of the companies studied (Table 2.2). Flow charts and Tree Diagrams were equally used with a percentage of 15.8% each.

Table 2.3: Modelling Techniques

Method	Number of Companies	Percentage (%)
Trend Extrapolation	18	46.2
Time series Analysis	6	15.4
Causal Models	11	28.2
Econometric Models	4	10.2
Total	39	100

Trend Extrapolation was used widely (46.2%) as compared to other modelling techniques. Causal modelling had 28.2 %, then time series analysis with 15.4 % and lastly econometric models with a percentage of 10.2% (Table 2.3).

Table 2.4: Subjective Techniques

Method	No. of Companies	Percentage (%)
Brainstorming	23	48.9
Role Play	2	4.2
Opinion Surveys	13	27.7
Delphi Technique	3	6.4
Intuition and Conjecture	6	12.8
Total	47	100

In subjective techniques, 48.9 % of companies used brainstorming, 4.2 % used role-play, 27.7 % used opinion surveys, 6.4 % used Delphi-technique and 12.8 % used intuition and conjuncture (Table 2.4).

Table 2.5: External Environmental Survey

Method	Number of companies	Percentage(%)
Market Intelligence	23	72
Meetings & External Contact	6	19
Conference & Trade Fairs	2	6

All the manufacturing firms studied employed SWOT analysis (100%) to scan the environment. All respondents said they carry out external survey to help them in making business decisions. When asked how they conducted this external environmental survey, 23 out of 32 (72%) respondents indicated that they carried out the external scanning by means of marketing intelligence. This entailed market research, reading periodicals and marketing journals as well as espionage. Other methods used include meetings and contacts with regulatory bodies and colleagues in

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business (18%). Also business conferences and trade fairs play (6%) a vital role in learning about the external environment especially market and general economic trends (Table 2.5).

When asked about who are in charge of the environment scanning exercise most respondents said it is the managers with the marketing manager being the leader. Others said the exercise is left to the directors only while a small number said that everybody had in the organization has a responsibility to find out what is happening and to report to the marketing manager what strategies can be used to adapt the organization to the changes in the environment. One respondent said that it is the marketing team that is charged with the responsibility of environmental scanning.

Table 2.6: Involvement in external analysis

	N=32	
In Charge	**Frequency**	**Percentage (%)**
Managers	17	53.1
Directors	11	34.3
Marketing team	2	6.3
Everyone	2	6.3
Total	**32**	**100**

When respondents were asked whether they were facing competition they all agreed that they were facing considerable competition and it was one of the reasons as why they needed to scan their environment.

The respondents were asked to indicate the extent to which they considered various aspects of external environment in making business plans and decisions. Those

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aspects were ranked on a 5-point Likert scale. A mean score was computed for each aspect as shown in Table 2.7.

Table 2.7: Mean scores on various aspects of the External Analysis

Aspect	Mean Score*
Market Trends	4.56
General Economic Conditions	4.44
Competition	4.39
Technological Changes	3.67
Political and Legal factors	3.56
Social Cultural Trends	2.67

Mean score* ranked on a scale of 5 where 1= not considered and 5= given prime consideration.

From the above table 2.7, market trends, general economic trends and competition are given prime consideration. Technological changes and political/legal factors are given moderate consideration while social cultural trends are only slightly considered when making planning and business decisions.

All the 32 manufacturing firms (100%) responded that they made assessment of their resources. When asked how they did their internal analysis almost all of them said that they conducted internal financial audits (89%) among other technique of review. A good number of respondents performed staff appraisals and reviews (56%). This was mainly done to determine training needs and also to reward those performing well. Physical verification of assets and equipment was cited moderately (28%). Other

techniques of internal analysis were cited as checklists (6%) and management accounts (6%).

When the respondents were asked what they hoped to achieve by performing internal analysis of their resources, mixed answers were received. Gauging and evaluating performances were cited by 56% of the respondents. 17% respondents did internal analysis to determine whether they were meeting objectives. Other expectations cited included improvement of existing capacity, redirecting action, cost control, to avoid labour turnover and personal development. These accounted for a total of 30%.

53.1% of the respondents developed internal budgets to allocate their resources to cost centres, 34.3% used incremental method of budget creation whereby their estimates were based on the prior year. 6.3% use zero based budgets whereby they use estimates and another 6.3% use zero based budget where by they develop them from scratch by reading and anticipating the indicators in the market.

4.4 Performance

Questions in this section sought to determine whether strategies adopted by manufacturing firms in Kenya have influenced their performance. Respondents were asked to rank the top three factors they viewed as important, measures of performance. These factors were aggregated and overall performance determined. Gamma coefficients were used to determine relationship between strategy and performance (Table 2.8).

Table 2.8: Measures of performance ranks

Measure of Performance	Rank 1	Rank 2	Rank 3	Rank 4	Total	Likert Total	Likert Average
Profitability	25	1	1	5	32	50	1.56
Growth	3	18	2	9	32	81	2.53
Market share	1	8	14	9	32	95	2.97
Shareholders Value	2	4	7	19	32	107	3.34
Competent employees	1	2	3	26	32	114	3.56
Service quality	1	2	6	23	32	115	3.59 .
Timeliness of services	0	1	3	28	32	123	3.84

From the Likert average scale of overall ranking; Profitability is ranked the 1, growth is ranked 2, market share is ranked 3, shareholders value is ranked 4, service quality is ranked 5, competent employees is ranked 6 and timeliness of services ranked last (7). Profit was ranked as the best measure of performance. The results for those companies which ranked profit as the first measure of performance for a period of 5 years are as shown below (Table 2.9).

Table 2.9: Profitability for the past 5 years

Profitability(%)	2003	2002	2001	2000	1999	Average
0-25	4	6	5	5	7	5.4
26-50	2	2	3	7	5	3.8
51-75	12	8	12	9	9	10
76-100	5	7	3	2	2	3.8

An average of 5.4 of companies made profits of between 0- 25 % for a period of 5 years. 3.8 companies made a profit of between 26 – 50 % for the same period, while 10 companies posted a profit of between 51 - 75% yet only 3.8 companies on average reported between 76 – 100 % in profits in 5 years period.

	Value	Approx. Sig.	Relationship	Strength	Conclusion Sig. Relationship
MAPPING * PROFIT	-0.06	0.003	Negative	Weak	Significant
MAPPING * GROWTH	-0.02	0.739	Negative	Weak	Not significant
MAPPING * MSHARE	0.6	0.003	Positive	Strong	Significant
MAPPING * OTHERS	1.0	0.000	Positive	Strong	Significant
MODELING * PROFIT	0.333	0.48	Positive	Weak	Not significant
MODELING * GROWTH	-0.333	0.48	Negative	Weak	Not significant
MODELING * MSHARE	-0.333	0.48	Negative	Weak	Not significant
MODELING * OTHERS	-0.667	0.046	Negative	Strong	Significant
SUBJECTI * PROFIT	-0.111	0.42	Negative	Weak	Not significant
SUBJECTI * GROWTH	-0.06	0.073	Negative	Weak	Not significant
SUBJECTI * M/SHARE	-0.111	0.828	Negative	Weak	Not significant
SUBJECTI * OTHERS	-0.200	0.661	Negative	Weak	Not significant

Table 3.0 on gamma coefficients shows the significance, strength and direction of the relationship between the environmental scanning practices and measures of

performance. A low significance value (typically less than 0.05) indicated a significant relationship between the two variables.

The H-test or Kruskal-Wallis test, is a rank sum test which serves to test the null hypothesis that **k** independent sample comes from identical populations against the alternative hypothesis that the means of these populations are not equal. It ranks the data jointly from low to high as though they constitute a single sample. If the null hypothesis is true and each sample has at least five observations, the sampling distribution of H can be approximated closely with a chi-square distribution with k-1 degrees of freedom. Consequently, we reject the null hypothesis that the population sampled are identical and accept the alternative hypothesis that the means of these populations are not all equal, if the value we get for H is greater than or equal 0.05.

Table 3.1: Kruskal -Wallis Test

Test Statistics [a,b]

	Mapping	Modelling	Subjective
Chi – Square	2.000	2.000	2.000
Df	2	2	2
Asymp. Sig.	0.368	0.368	0.368

a. Kruskal Wallis Test
b. Grouping Variable: GROUP

The significance level for mapping techniques, modelling techniques and subjective techniques is 0.368 each. This is more than 0.05 and therefore at least one of the environmental scanning techniques comes from a different group of the three classifications of techniques. Therefore it shows that the firms used other environmental scanning practices such as SWOT, PESTEL and others.

4.5 Comparison With Other Empirical Studies Done In Kenya.

In this section the findings of this study are compared with those of other studies carried out on strategic management on areas related to environmental scanning in other sectors of the Kenyan economy. Aosa (1992) found out that majority of the companies he studied did not have explicit mission statements. "If they existed at all it was vaguely in the mind of top managers" (Aosa, 1992, page 246). This finding was corroborated by studies done by Karemu (1993) and Kiruthi (2001) who noted presence of well-articulated mission statements. However there was lack of general commitment to the mission during strategy implementation phase. Karemu (1993) observed absence of long-range plans. She noted that the planning horizons were short and plans were kept informal. Karemu on the other hand noted that public sector had well articulated plans.

Aosa (1992) observed that most companies he studied had difficulties conducting environmental scanning. Where the activity was carried out, it was informal and unsystematic. This was corroborated by Karemu (1993). This study observed that manufacturing firms participated in environmental scanning. However they differed on how they conducted the exercise, with most preferring market intelligence. This difference could still be attributed to the context.

Karemu (1993) noted that among the environmental factors given prime consideration are economic trends and marketing trends. She attributed this to the availability of information and their direct relationship to profits. This study also had similar findings. However in addition to economic and market trends, competitors were also given prime importance.

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CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary And Conclusions

This study sought to investigate the environmental scanning practices in large manufacturing firms in Kenya and the factors behind their use. In general the research concluded that environmental scanning practices were used in all the firms studied as a tool in making business decisions. These decisions were based on tools such as mapping techniques (Flow charts, tree diagrams, impact analysis, input-output analysis), modelling techniques (trend extrapolation, time series analysis, causal models, economic models) and subjective techniques (brainstorming, role play, opinion surveys, Delphi techniques, intuition & conjecture). Other tools also used for environmental scanning were SWOT analysis and PESTEL analysis.

When the above tools were employed, the best measure of performance for most manufacturing firms was profitability followed by growth prospects, shareholder value ranked third, service quality fourth, competent employees fifth and timeliness of service sixth.

This study was to document environmental scanning practices in Kenya using strategies developed in other countries and being used Kenya. This indicated that the underlying logic of such models was applicable in countries outside where they were developed. Due to environmental and company differences specific aspects of these models needed to be modified. It is these differences that led to variations in environmental scanning practices. The variations reflected adaptations to local

environment. In finding the relationship between environmental scanning practices and measures of performance using gamma coefficient were varied in significance, as most of them were insignificant as at 95% confidence interval.

5.2 Recommendations For Further Research

Large samples are needed to make the study more reasonable. The response rate was only 32 out of the 100 questionnaires given out. A similar study can still be conducted to confirm these findings and be inclusive of all the large manufacturing firms in Kenya and not just in Nairobi and its environs.

Given the nature of the study, the time allowed was not sufficient enough to exhaustively carry out the project. Time constraint in particular made it quite difficult to carry out a detailed interview and it greatly reduced the response rate. The university should think of allocating more time for research studies of this nature away from the current restrictive a semester rule. This is because it takes quite sometime to collect data and some firms regard questionnaires as a waste of their employees' valuable time.

The research involved personal delivery of questionnaires to the wide spread large firms, and making follow-ups through telephone contacts, was constrained by the negative response from the respondents. The university needs to develop and inculcate trust with the manufacturing firms so that their CEOs can see the benefits derived from these kinds of study. Right now most firms think that you are spying or doing research for a rival firm.

The study used a pre-determined structured questionnaire and it was assumed that all the respondents could answer all questions. It was noted that respondents just answered questions even without understanding them and this affected the quality of the answers. Therefore there is need for open-ended questions and discussion with respondents in case of any difficulty and this calls for more time and trust.

It was evident from the study that some large manufacturing firms were managed in an informal basis. There is need for further studies to understand why they are managed this way. This will facilitate our understanding of their practices, problems and experience. There exists many family owned firms and very little is known or documented about these firms and this also calls for further research.

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APPENDICES

Appendix 1: Letter To The Respondent

Dear Sir/Madam,

I am a postgraduate student undertaking a degree of Master of Business Administration, Faculty of Commerce, University of Nairobi. For my final research project, I am conducting a research on: "Environmental Scanning Practices in Kenyan large manufacturing firms" as a partial fulfilment of the requirements for the award of the degree.

Your firm has been selected to form part of the study. I kindly request you to fill the attached questionnaire. Any information that you provide will be treated in strict confidence and used only for the purpose for which it is intended i.e. academic. Neither your name nor the name of your organisation is required.

A copy of the research project will be made available to you upon request.

Your co-operation will be greatly appreciated.

Thank you in advance.

Yours sincerely,

ACHUO MAURICE OTIENO   JACKSON MAALU

MBA II STUDENT   SUPERVISOR

Appendix II: Questionnaire

<div style="border:1px solid">

QUESTIONNAIRE FOR THE ENVIRONMENTAL SCANNING PRACTICES IN KENYAN LARGE MANUFACTURING FIRMS.

Maurice A. Otieno compiles this questionnaire for research as part of his Master of Business Administration (MBA) degree programme, Faculty of Commerce, University of Nairobi. Please complete it as truthfully as possible. Your responses will be treated in strict confidence and used only for academic purposes.

</div>

PART I: GENERAL INFORMATION

Please tick (√) where appropriate

1 a)   Manufacturing Company name...

  b)   Position of the respondent..

2.   Year of the company establishment in Kenya ....

3.   Number of employees in Kenya (2003)..

4.   Approximate value of total assets in Kenya (2003)...

5.   Approximate value of total turnover in Kenya (2003).....................................

6.   How would you classify your ownership

   a)   Predominantly local (51 % or more)   [   ]

   b)   Predominantly foreign (51 % or more)   [   ]

   c)   Joint Venture   [   ]

7. In case your firm is a joint venture between foreign and local investors, what is the proportion of ownership?

   Largely Local Owned   [   ]

   Largely Foreign Owned   [   ]

   Equally Owned   [   ]

8.In which of the following categories does your company fall under?(Tick appropriately)

   Textile Manufacturing Industry   [   ]

   Steel Manufacturing Industry   [   ]

Metal/Plastics Manufacturing Industry

Chemical Processing or Manufacturing   [   ]

Food Processing & Manufacturing Industry   [   ]

Paper or Wood Products Manufacturing Industry   [   ]

Others (please specify)..

9. What is the level of your capacity utilization?

 [   ] 81-100%   [   ] 61-80%   [   ] 51-60%   [   ] 41-50%   [   ] Less than 40%

10. What markets do you serve?

 [   ] Domestic   [   ] Foreign   [   ] Both

PART II: MISSION, OBJECTIVES AND FACTORS BEHIND THE USE OF ENVIRONMENAL SCANNING METHODS.

11 a)   Do you have mission statement for your manufacturing firm

            Yes   [   ]   No   [   ]

    b)   If yes, what is it?

          ....

          ....

          ....

    c)   Is your mission statement in a written form?

            Yes   [   ]   No   [   ]

12. a) Do you have any set objectives for your manufacturing

        firm?   Yes   [   ] No   [   ]

    b)   Who participates in setting of these objectives?

         D i r e c t o r s   o n l y   [ ]   F u n c t i o n a l   s t a f f [ ]
         M a n a g e r s   o n l y [ ]   A l l   t h e   a b o v e [ ]

         Others (Specify) ....

    c)   Is every one in the company aware of these objectives?

         Yes   [   ]   No   [   ]

    d)   How do you communicate these objectives?

    e)   Are these objectives in written form?

         Yes   [   ]   No   [   ]

13 a) Have your manufacturing firm developed any approach (es) for doing business?

   Yes   [   ]   No   [   ]

   b) If so what are these approaches.....................................

c) Have you changed these approaches overtime?

   Yes   [   ]   No   [   ]

   Why..

   d) Do you intend to maintain these current approaches over 3 - 5 years?

   Yes   [   ]   No   [   ]

14 a) How do you develop these approaches?..............................

   b) Who participates in this development process?....................

   c) Are these business approaches ever written?

   Yes   [   ]   No   [   ]

d)   What problems have you faced (if any) in developing and effecting these business approaches?

15.   Please indicate whether the following features characterize your approach to business by ticking where appropriate.

   a) Our approach to Business is driven by our management intention to achieve success   Yes [   ]   No   [   ]

   b) Our approach to business is driven by our capability to plan
       Yes [   ]   No [   ]

   c) Our chief executive / Managing Director is the only one who determines how we should conduct our business.   Yes [   ]   No   [   ]

   d) We adjust our approach to business through our experience from the things we do on daily basis.   Yes   [   ]   No   [   ]

   e) We conduct our business the way we do it today because this is how that it has always been done here.   Yes[   ]   No[   ]

   f) We are forced by external forces to conduct our business the way we do.
       Yes   [   ]   No   [   ]

PART III: ENVIRONMENTAL SCANNING PRACTICES

16 a) Do you survey external environment to help you make business decisions

   Yes [   ]   No   [   ]

b) If Yes how do you do it and who is in charge?.......................................

17. Which method/technique/practice do you use to scan your environment?

a) Mapping techniques;

      ( ) Flow charts

      ( )Tree diagrams

      ( ) Impact analysis (including both cross and trend)

      ( ) Input-output analysis

      ( ) Others (please specify)...

b) Modelling techniques;

      ( ) Trend extrapolation

      ( ) Time series analysis

      ( ) Causal models

      ( ) Econometric models

      ( ) Others (please specify)...

c) Subjective techniques

      ( ) Brainstorming

      ( ) Role-play

      ( ) Opinion surveys

      ( ) Delphi technique

      ( ) Intuition and Conjecture

      ( ) Others (please specify)...

Please explain in a few words how you execute the method/technique/practice.

....

18) Apart from the above practices do your firm use the following tools to scan the environment?

    a) SWOT analysis   Yes ( )   No ( )

    b) PESTEL analysis   Yes ( )   No ( )

    c) Others (please specify and explain briefly how you use it)..

(N/B: SWOT stands for the firm's Strengths, Weaknesses, Opportunities and Threats while PESTEL stands for Political, Economic, Social, Technological, Environmental and Legal conditions which a firm faces in its environment).

19. Indicate the extent to which the following is considered in making business plan and decisions. Rate on a 5-scale where by 1 = not considered to 5 = given prime consideration.

	1	2	3	4	5
General economic trends					
Political and legal developments					
Competitors					
Technological changes					
Social and cultural trends					
Market trends					
Company's competitors					

20. Which manufacturing firm do you view to be your biggest competitor and why?...
....

21. a) Do you make assessments of all your resources?

Yes [ ]   No   [ ]

b) Please explain how you do it.

c) What do you hope to achieve by conducting internal assessment of your resources?

d) Do you have budgets?

e) How do you develop them?

f) What is the range of your budget forecasts?

22. What do you do when the targets/objectives/benchmarks are not met?

( ) Report the variance to the management only

( ) Report to top management and include it in the list of issues to be investigated

( ) Others (please specify)..

23. a) To what extent do you think that your   approach to business has impacted on your performance?

No impact   [   ]   Small extent   [   ] on average   [   ]   greater extent [   ]

  b) What do you consider to be the impact? Please explain ....

24. Do you consider your organization to have been successful?

Yes   [   ]   No   [   ]

25. There are various measures of performance. Please rank the first three you consider most important in measuring performance of your manufacturing firm from the list given below:

a)	Profitability	[ ]
b)	Growth	[ ]
c)	Market share	[ ]
d)	Shareholders value	[ ]
e)	Competent skilled employees	[ ]
f)	Service quality	[ ]
g)	Timeliness of services	[ ]
i)	New technology adopted	[ ]
j)	Training programmes	[ ]
k)	Others (please specify)	

26. a) From question 25 above, please list the first most important measure of performance in your company...

  b) Please indicate the level of performance over the last five years based on the above measure.

	0-25%	26-50	51-75%	76-100%
i) 2003	[ ]	[ ]	[ ]	[ ]
ii) 2002	[ ]	[ ]	[ ]	[ ]
iii) 2001	[ ]	[ ]	[ ]	[ ]
iv) 2000	[ ]	[ ]	[ ]	[ ]
v) 1999	[ ]	[ ]	[ ]	[ ]

c) List the second most important measure of performance in your company..............

d) Indicate the level of performance for the last 5 years based on the above measure.

		0-25%	26-50%	51-75%	76-100%
i)	2003	[ ]	[ ]	[ ]	[ ]
ii)	2002	[ ]	[ ]	[ ]	[ ]
iii)	2001	[ ]	[ ]	[ ]	[ ]
iv)	2000	[ ]	[ ]	[ ]	[ ]
v)	1999	[ ]	[ ]	[ ]	[ ]

e) Now list the third most important measure of performance in your company..

f) Indicate the level of performance for the last 5 years based on the above measure.

		0-25%	26-50%	51-75%	76-100%
i)	2003	[ ]	[ ]	[ ]	[ ]
ii)	2002	[ ]	[ ]	[ ]	[ ]
iii)	2001	[ ]	[ ]	[ ]	[ ]
iv)	2000	[ ]	[ ]	[ ]	[ ]
v)	1999	[ ]	[ ]	[ ]	[ ]

THANK YOU VERY MUCH FOR YOUR COOPERATION.

Appendix I11: List Of Large Manufacturing Firms Who Participated In The Study.

1. Baumann Engineering Ltd
2. Bestfoods Kenya Ltd
3. Bamburi Cement Company Ltd.
4. British American Tobacco Kenya Ltd.
5. Crown Berger Kenya Ltd.
6. Cosmo Plastics Ltd.
7. David Engineering (K) Ltd.
8. E. A. Portland Cement Co. Ltd.
9. Firestone E. A. Ltd.
10. Galaxy Paints & Coatings Ltd.
11. General Motors (K) Ltd.
12. Glaxo Smithkline (K) Ltd.
13. Kenafric Industries Ltd.
14. Kentainers Ltd.
15. Kenya Breweries Ltd.
14. Kinech Industries Ltd.
16. Khetshi Dramshi Co. Ltd
17. Kuguru Food Industries Ltd.
18. Kentex Apparels (EPZ) Ltd.
22. Malplast (K) Ltd.
23. Marshall Fowler Engineering Ltd.

21. Mecol Ltd.
22. Orbit Enterprises Ltd
23. Reckit Benckister E. A. Ltd.
24. Roto Moulders Ltd
25. Super Manufacturers Ltd.
26. Stripes Industries Ltd.
27. Synresins Ltd.
28. Toyota Kenya Ltd.
29. Trufoods Ltd.
30. Twiga Chemicals Industries Ltd.
31. Unilever (K) Ltd.
32. Wrigley Co. E. A. Ltd.