

RESPONSES OF BOTTLED WATER COMPANIES IN KENYA TO THE
THREAT OF SUBSTITUTE PRODUCTS: THE CASE OF BOTTLED
WATER COMPANIES IN NAIROBI

BY

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A MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT
OF THE REQUIREMENTS OF THE MASTER OF BUSINESS ADMINISTRATION
DEGREE, FACULTY OF COMMERCE, UNIVERSITY OF NAIROBI

2005

DECLARATION

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

DEDICATION

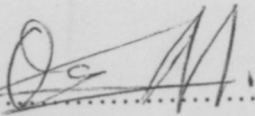
To Karol, my dearest friend.

Signed *Methu*

Date 28-7-05

Julia Wangari Methu

The project has been submitted for examination with my approval as the university supervisor.

Signed 

Date 29/7/05

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ACKNOWLEDGEMENTS

I am highly indebted to many people who made the completion of this project possible. I can never be able to express my gratitude to all those who supported me in various ways from material, academic to moral help.

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I especially want to thank my supervisor, Dr. Ogutu, for his unfailing availability to guide me through this project. Thanks to his constancy this project was completed in spite of the many temptations to despair.

I am also grateful to all my lecturers for what they taught formed the backbone of this project. In a special way I would like to thank Mrs. Ombok and Mr. Masu whose positive criticisms made this project take the shape of a scholarly paper. I also wish to thank Sophie who helped me critique this project.

In addition, I would like to express my gratitude to all the consultants that filled in my questionnaires and especially the individuals who did so.

I also wish to thank my dad for being my role model and encouraging me to always go higher. I would like to express my appreciation to my family for patience and support in the difficult situations that presented themselves.

I would also like to mention my great companion, the internet, that got me all the help and encouragement through out the MBA course. This also applies to my brother Frank, Peter and Ruth. I thank you all for everything.

Finally I extend my gratitude to my MBA class for being a support in all the hard times I encountered. The gratitude received from my class will never be forgotten. Thank you all.

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TABLE OF CONTENTS		Page
CHAPTER 3		18
METHODOLOGY		18
3.1 Research Design		18
Declaration		i
Dedication		ii
Acknowledgements		iii
List of Tables		vi
Abstract		vii
CHAPTER 4		20
DATA ANALYSIS AND FINDINGS		20
CHAPTER 1		1
INTRODUCTION		1
1.1 Background		1
1.1.1 <i>Threat of substitutes</i>		1
1.1.2 <i>Bottled Water Industry in Kenya</i>		2
CHAPTER 5		32
1.2 Research Problem		3
1.3 Research Objectives		5
1.4 Importance of the Study		5
1.5 Suggestions for Further Research		36
CHAPTER 2		6
LITERATURE REVIEW		6
2.1 Environment and Strategy		6
2.2 Porter's Five-Forces Model		9
2.3 Substitute Products		10
2.4 Responses to the Threat of Substitute Products		12

CHAPTER 3	18
METHODOLOGY	18
3.1 Research Design.....	18
3.2 Population.....	18
3.3 Data collection.....	18
3.4 Data Analysis	19
Table 4: Challenges faced because of threat of substitute products	24
CHAPTER 4	20
DATA ANALYSIS AND FINDINGS	20
4.1 General Findings.....	20
4.2 Substitute Products	21
4.3 Challenges Posed by Threat of Substitutes.....	23
4.4 Responses to the Threat of Substitutes.....	24
Table 11: Changes in the production programs	30
CHAPTER 5	32
CONCLUSION	32
5.1 Summary, Discussions and Conclusion.....	32
5.2 Limitations of the Study.....	36
5.3 Suggestions for Further Research	36
5.4 Recommendations for Policy and Practice.....	37
REFERENCES	38
APPENDIX 1: List of bottled water companies	42
APPENDIX 2: Questionnaire	43
APPENDIX 3: Overview of Company Characteristics	49
APPENDIX 4: Letter of Introduction	50

LIST OF TABLES AND FIGURES

		Page
Table 1:	Target market for bottled water	21
Table 2:	Products considered to be a substitute for bottled water	22
Table 3:	Substitutes considered a threat to bottled water business	23
Table 4:	Challenges faced because of threat of substitute products	24
Table 5:	Goals considered important	25
Table 6:	Strategic Responses	26
Table 7:	Communalities of variables	27
Table 8:	Total variance	28
Table 9:	Matrix of coefficients	28
Table 10:	Change in marketing programs	29
Table 11:	Changes in the production programs	30
Table 12:	Change in the human resource programs	30
Table 13:	Change in research and development programs	31
Figure 1:	Relationship between environment, strategy and organizational capability	9

ABSTRACT

CHAPTER I

The bottled water industry in Kenya is young with a large number of new market entrants. This industry is experiencing stiff competition especially from the beverages it had hoped to replace. Bottled water was introduced due to the need for safe drinking water when many consumers could not trust the purity of tap water. However now the government is making Water Sector reforms to ensure that tap water is safe for consumption.

The study sought to identify the substitute products that the bottled water companies consider as a threat, challenges posed by this threat and how they have responded to counter the threat of substitute products.

The population of study consisted of the 22 bottled water companies operating in Nairobi at the study. However, only twelve of them responded constituting a 55% response rate. Data was collected using a structured questionnaire (see Appendix 2). The data collected was analyzed using SPSS computer based statistical program to obtain the descriptive statistics. Data was presented in tables.

The study revealed that the bottled water companies were concerned about carbonated soft drinks, juices and tap water as substitutes to bottled water. The companies acknowledged the fact that they experienced challenges but pricing seemed to be the key challenge.

Faced with this threat of substitute products the companies have concentrated on their core product, which is bottled water. They have also differentiated their products from those of competitors, endeavored to create strong brand names and have made quality improvements in order to meet their main goal, which is customer satisfaction.

Arising from the above findings, it was recommended that bottled water companies should consider introducing new beverages in the substitute industry. This implies viewing the substitutes as an opportunity. The companies also need to segment their markets and target those segments in which the substitution threat is least.

CHAPTER 1

INTRODUCTION

1.1 Background

All organisations are environment dependent. The firms' external environment plays a significant role in their growth and profitability. The external environment is complex and challenging thereby presenting the organisation with opportunities and threats. The external environment has three major parts- the remote environment, industry environment, and operating environment. Compared to the remote environment, the industry environment has more direct effect on the firm's efforts to achieve strategic competitiveness and earn above average returns (Hitt et al, 1997).

Porter, (1980) identifies five forces that affect the level of competition in an industry. He states that the rules of competition are embodied in the entry of new competitors, the threat of substitutes, the bargaining power of suppliers, the bargaining power of buyers, and the rivalry among existing competitors. This study will focus on one of these five forces, that is, the threat of substitute products in the bottled water industry in Kenya. Substitutes are far from being an irrelevant factor. They constitute a primary component of a well-conceived strategic analysis (Hax and Majluf, 1991; Jauch and Glueck, 1988).

1.1.1 Threat of Substitutes

Mintzberg and Quinn (1991), define substitutes as those products that appear different but can perform the same function as another product. As well as competition in their own industry, firms also face competition from industries producing substitute products (Johnson and Scholes, 2002). A serious concern of any business is the threat of substitute products in which buyers can meet their original needs (Pearce and Robinson, 1997).

consumption and avoid artificial flavours used in carbonated drinks (King'ong'o). Substitute goods serve as replacement for one another. Thus, a fall in price of one good causes a decline in demand for its substitutes (Case and Fair, 1989). Substitution reduces demand for a particular 'class' of products as customers switch to the alternatives- even to the extent that this class of products or services becomes obsolete. This depends on whether a substitute provides a higher perceived benefit or value (Johnson and Scholes, 2002). Substitutes limit the potential of an industry by placing a ceiling on the price it can charge. The impact of substitutes can be summarized as the industry's overall elasticity of demand (Porter, 1979).

1.1.2 Bottled Water Industry in Kenya

1.2 Research Problem

The bottled water industry emerged in Kenya about fifteen years ago. The range of bottled water offered varies from spring water to purified tap water enhanced with minerals. The introduction of bottled water in Kenya is attributed to the failure of the local authorities to provide adequate clean water to its residents (Kisese, 2002). Water shortages are common in most city estates. There have been claims of untreated tap water which always endangers the lives of citizens because of the risk of cholera outbreaks (Daily Nation, March 22, 2005).

Many players have since come into the bottled water industry. Among them are companies such as Highlands and Coca Cola that have previously concentrated on squashes and carbonated soft drinks respectively. Nyang'au (2003) observes that this trend may be attributed to an increasing awareness that their products are indeed serving the same customers. Urban retail stores have seen a proliferation of bottled water brands that have in the end resulted in stiff competition (Kisese, 2002). This could be attributed to the low entry barriers and easily obtainable raw materials (Nyangau, 2003).

In Kenya, bottled water has also become popular as consumers get increasingly health conscious. A portion of the Kenyan population is keen to lower their sugar

consumption and avoid artificial flavours used in carbonated drinks (King'ong'oi, 2004). Bottled water also seems to be popular among travellers and tourists.

However, bottled water seems to face competition from cheaper substitutes such as sodas, juices and *ready to drink* squashes. Though these substitutes may not be considered to be as healthy as water, consumers feel there is more value for money from these substitutes. Bottled water companies will have to reposition themselves to counter the threat of these substitutes that will eventually limit the penetration of their product to a wide population. These companies will therefore have to take a strategic approach towards the threat imposed by substitute products.

1.2 Research Problem

Bottled water was initially introduced with a "snob appeal" for high-income buyers (Daniels and Radebaugh, 1994) and to some extent to provide safe drinking water. New companies are now targeting the mass market. Although the prices of bottled water have reduced compared to those at the introductory stage, the price differential between bottled water and other non-alcoholic beverages is still large making consumers opt for these cheaper non-alcoholic beverages.

Bottled water may initially have gained popularity because it has no sugar and additives. However, the market for fresh juices and cordials is still growing and companies that were launched as bottled water companies are now entering the fresh fruit juices industry. Kenyan supermarkets have seen a proliferation of imported canned soft drinks, which target the up market. Some diet soft drinks have been introduced targeting consumers who are health conscious.

Bottled water is likely to face substitution from tap water following the ongoing Water Sector Reforms, which are spelt out by the Water Act of 2002. The government is in its final stage of transferring management and operations of water services from the central government to new Water Services Boards in the private sector. The Kenya

government is undertaking a US\$16.8 million project to improve water service delivery. (Daily Nation, March 22, 2005). The guarantee of clean tap water means is likely to reduce the number of consumers purchasing bottled water solely in search of safer drinking water.

It is evident that the bottled water industry is facing a threat from the same substitutes it had hoped to replace. The survival of the industry seems to be at stake. This study is aimed at discovering how the bottled water companies are responding to this threat. Therefore, this study will be useful to bottled water companies both existing and potential in formulation and evaluation of appropriate responses.

Inasmuch as this is an important industry few studies with their main focus on the soft drink industry have been carried out. Nyang'au (2003) carried out a study on the nature of competition in the soft drink industry using the Porter Five Force analysis. Though his study included bottled water, the conclusions were generalised for the entire soft drink industry. This study, however, focused on bottled water companies only. Abdalla (2001) studied the strategic management practices applied by the carbonated soft drinks industry in Kenya. Kisese (2002) carried out a research on the determinants of brand equity in the bottled drinking water industry. These two studies focused on marketing strategy but did not look at substitute products as a force affecting industry competition.

Only one study was found that had addressed the threat of substitute products. Goro (2003) carried out a study on the strategic responses of Commercial Banks to threat of substitute products. Whilst lessons may be learnt from her study, not all may be applicable to the bottled water industry. Banking products are generally homogeneous and competition is centred on service. However, bottled water is a convenience good. Convenience goods are usually branded and low priced (Kotler, 1998). Unlike banking products, the purchase of bottled water entails low consumer involvement.

A knowledge gap thus exists as no study has attempted to find out which substitute products bottled water companies consider to be threatening their industry and the responses to this threat. This research seeks to address the following questions: What is the threat of substitute products as considered by the bottled water industry? Does this threat pose any challenges to them? How are the bottled water companies responding to these threats?

1.3 Research Objectives

1. To determine what substitute products the bottled water companies in Kenya consider as being a threat.
2. To establish what bottled water companies in Kenya consider to be the challenges caused by the threat of substitute products.
3. To establish what are the responses of the bottled water companies in Kenya to this threat.

1.4 Importance of the Study

1. This study will help bottled water companies to identify any strategic gaps in their strategic responses and which strategies they could adopt in order to counter the threat of substitutes.
2. The study could be of interest to government agencies and policy makers in the formulation of regulatory policies. The bottled water industry is a Ksh. 2,000,000,000 industry (Daily Nation, May 29, 2005). This industry has played an important role in creating jobs and generating incomes for economic growth.
3. Apart from contributing to existing literature in the field, academicians will find the study useful as a basis for further research.

CHAPTER 2

LITERATURE REVIEW

This section will review literature in strategic management. It will focus on how strategy depends on the environment, industry forces according to Porter's five-force model, literature on substitutes and how companies respond to the threat of substitutes.

2.1 Environment and Strategy

All organisations without exception are environment serving or environment dependant. The environment is highly dynamic and continually presents opportunities and challenges. Strategic management is necessary for managing the relationship between an organisation and its environment. It is argued that strategic management is the only way of coming to terms with a changing world (Hussey, 1998). The strategy of a firm forms a comprehensive master plan stating how the firm will achieve its mission and objectives (Wheelen and Hunger, 1990).

The environment comprises of the internal environment and the external environment. Whereas the internal environment is controllable, control over the external environment is limited. The internal environment consists of variables that are within the organisation itself. These include the organisation structure, culture, and resources (Wheelen and Hunger, 1990). The external environment can be subdivided into the remote environment, industry environment and the operating environment.

Pearce and Robinson, (1997) state that the remote environment is composed of factors that originate beyond any single firm's operating situation-that is, political, economic, social technological factors. The external environment presents opportunities and

threats for the firm, while rarely does the firm exert any meaningful reciprocal influence.

Porter, (1979) propelled the concept of industry analysis into the foreground of strategic thought and business planning. According to him the nature and degree of competition in an industry hinge on five forces: the threat of new entrants, the bargaining power of customers, the bargaining power of suppliers, the threat of substitute products or services, and the jockeying among current contestants. The collective strength of these forces determines the ultimate profit potential of an industry.

The operating environment involves factors in the immediate competitive situation that provide many of the challenges that a particular firm faces in attempting to attract or acquire needed resources or in striving to profitably market its goods and services. Among the most prominent of these factors are a firm's competitive position, customer profile, reputation among suppliers and creditors, and accessible labour market (Pearce and Robinson, 1997).

Business success or failure is to a large extent dependant on making the right strategic decisions- upon doing the right things rather than doing things right (Howe, 1986). Strategic decision is based on what managers forecast and not what they know. An anticipatory stance is crucial if firms are to succeed in a turbulent environment. Theodore Levitt, (1960) in Mwanthi, (2003) suggested that a more definitive description of a firm's role in the environment is a requisite for growth and success. Such a description should encompass a broad scope of natural extension of a firm's product – market position, derived from some core characteristic of the present business.

A good strategy is one that enables the organisation to effectively match its capabilities to the environment. Ansoff, (1965) defines strategy as a set of decision-making rules for guidance of organizational behaviour. Porter, (1996) describes

strategy as the creation of a unique and valuable position, involving a different set of activities. This means that the firm seeks a different position from that of competitors by choosing to either perform activities differently or to perform different activities from those of rivals.

Johnson and Scholes, (2002) define strategy as 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 and to fulfil stakeholders' expectations. Aosa, (1998) describes strategy as a means of solving a strategic problem, which is a mismatch between the internal characteristics of the organization and its external environment to exploit opportunities in the external environment.

Quinn, (1980) defines strategy as a plan or pattern that integrates organisations' major goals, policies and helps marshal and allocate resources into a unique and viable posture based upon its relative internal competencies and shortcomings, anticipated changes in the environment and contingent moves by intelligent opponents.

Pearce and Robinson, (2000) recommend three critical ingredients for a successful strategy. First, the strategy must be consistent with conditions in the environment. It must take advantage of existing and projected opportunities and minimize the impact of major threats. Secondly, the strategy must place realistic requirements on the firm's resources. Lastly, the strategy must be carefully executed.

As shown on figure 1, if strategy is not matched to its environment, then a strategy gap arises. When the internal capabilities are not matched to its strategy, then a capability gap arises. Therefore, it is of importance that an organization is able to shift its strategy with changes in the environment and match its capability to the selected strategy in order to survive, succeed, and to remain relevant (Porter, 1985).

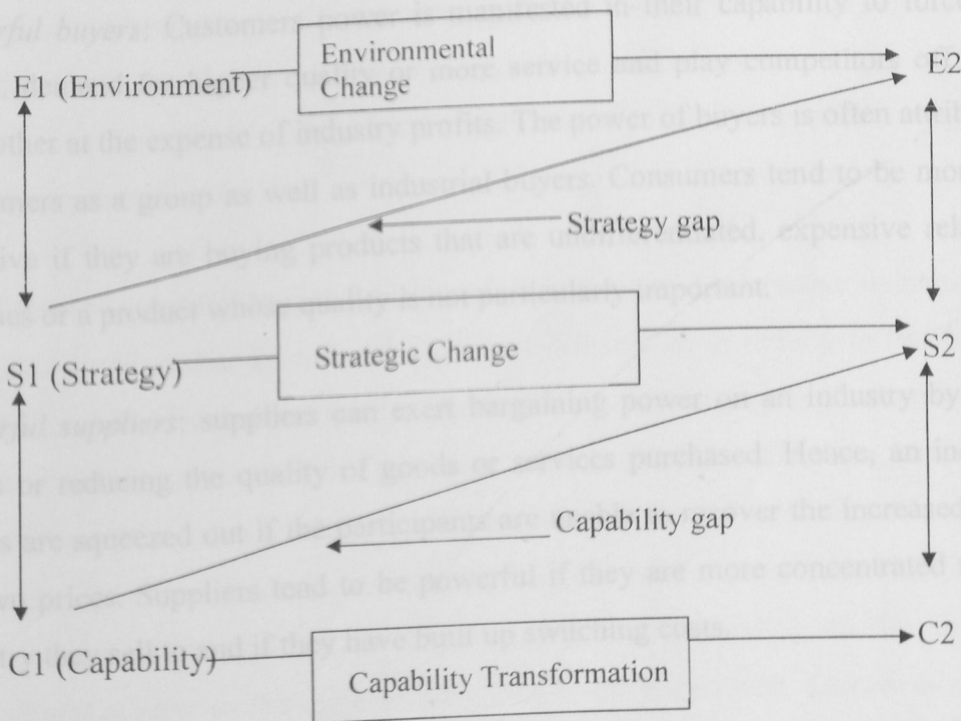


Figure 1: Relationship between environment, strategy and Organizational capability. Source: Ansoff and McDonnell.

2.2 Porter's Five Forces Model

Porter, (1979) emphasised on five forces that shape industry competition. The nature and degree of competition within an industry hinges on five forces: the threat of new entrants, the bargaining power of customers, the bargaining power of suppliers, the threat of substitute products and the jockeying among current contestants. There is greater opportunity for superior performance when these contending forces are weak.

2.3 Substitute Products

Threat of entry: new entrants in the industry bring in new capacity, the desire to gain market share, and often substantial resources. The seriousness of the threat will depend on entry barriers present in the industry. The threat of entry is low if the entry barriers are high and the newcomer expects sharp retaliation from entrenched competitors.

Powerful buyers: Customers power is manifested in their capability to force down prices, demand for higher quality or more service and play competitors off against each other at the expense of industry profits. The power of buyers is often attributed to consumers as a group as well as industrial buyers. Consumers tend to be more price sensitive if they are buying products that are undifferentiated, expensive relative to incomes or a product whose quality is not particularly important.

Powerful suppliers: suppliers can exert bargaining power on an industry by raising prices or reducing the quality of goods or services purchased. Hence, an industry's profits are squeezed out if the participants are unable to recover the increased cost in its own prices. Suppliers tend to be powerful if they are more concentrated than the industry they sell to and if they have built up switching costs.

Substitute products: Substitutes limit the potential of an industry in terms of earning and possibly in growth. This is because of a price ceiling posed by substitute products particularly where the price-performance trade-off offered by substitutes is more attractive. Substitute products compel the industry players to upgrade quality or to differentiate their product.

Jockeying for position: Rivalry among competitors takes the form of tactics like price competition, product introduction, and advertising slugfests. In some industries, rivalry is intense resulting in bitter price cuts. A company may have some latitude for improving matters through strategic shifts such as a focus on selling efforts in the fastest growing segments of the industry or market areas with the lowest fixed costs.

2.3 Substitute Products

Porter, (1985) argues that all industries face the threat of substitution. Substitution is the process by which one product or service supplants another in performing a particular function for the buyer. Substitution is one of the five competitive forces determining the profitability of an industry, because the threat of substitution places a

ceiling on industry prices. Penetration against substitutes is a major reason why industries and firms grow, and the emergence of substitutes is a major reason why they decline. Substitution is also inextricably tied to a firm's competitive scope within an industry, because it widens or narrows the range of segments in an industry.

The threat of substitution is a function of three factors: The relative value/price of a substitute compared to an industry's product, the cost of switching to the substitute, and the buyer's propensity to switch (Porter, 1985). A product offers an inducement to switch if the substitute provides the buyer with more value relative to price than the product currently being used. There is always some cost of switching to a substitute because of the disruption and potential reconfiguration of a buyer's activities that must result. However, the threat of a substitute will vary depending on the size of the inducement relative to the required switching costs. Faced with equivalent economic inducements for substitution different buyers will often evaluate substitution differently.

Hax and Majluf, (1991) argue that the impact of substitutes on an industry will depend on factors such as validity of substitutes, users switching costs, aggressiveness of substitutes producers, and price value trade offs between the original products and its substitutes.

Boone and Kurtz, (1992) state marketers usually face three types of competition. The most direct form of competition occurs among marketers of similar products. A second type of competition involves products that can be substituted for one another. In instances in which a change such as price increases or an improvement in a product's strength occurs, demand for the substitute is directly affected. A final type of competition occurs among organizations that compete for the consumer purchases. Traditional economics analysis views competition as a battle among companies in the same industry and among substitute goods and services. Marketers, however, accept the argument that all firms compete for a limited amount of discretionary buyer power.

Johnson and Scholes, (2002) argue substitution can take different forms: There can be a product for product substitution for example e-mails substituting for a postal service. There could be substitution of need by a new product, rendering an existing product or service redundant. For example, information technology provides tool to the user to undertake jobs previously they had to contract a service provider such as secretarial services. Generic substitution occurs where products or services complete for the consumers disposable incomes.

According to Hussey, (1998) emergence of a new substitute may bring new firms with different cost structures into the competitive arena. A substitute will often increase the power of the buyer and reduce the power of the seller. To reduce the attractiveness of substitute products, firms are challenged to differentiate their offerings along dimensions highly relevant to customers such as price, product quality, after sale service and location (Hitt et al, 1997 and Song et al, 2002).

2.4 Responses to the Threat of Substitute Products

Changes in the environmental conditions shape a firm's opportunities, challenges and threats. It is therefore necessary for any firm to understand the underlying sources of competitive pressure in its industry in order to formulate appropriate strategies to respond to competitive forces (Porter, 1979). When organisations are faced with unfamiliar changes, they should revise their strategies to match the turbulence level (Ansoff and McDonnell, 1990). Wheelen and Hunger, (1990) observe that companies respond differently to the same environmental changes. Greenstein, (2001) in Migunde, (2003) supports the idea that different firms respond with different strategies to the same opportunities.

Firms often respond to such environmental changes through *strategic responses* and *operational responses* (Bartol and Martin, 1998). Porter, (1996) notes that firms in dynamic industries respond to competitive forces in different ways; while some may

resort to improving current markets and products, diversification, divestiture, others employ techniques to ensure operational effectiveness. But operational effectiveness alone is not sufficient to achieve sustainable competitive advantage.

Strategic responses differ from operational responses. While operational responses are short term and concerned with efficiency of operations, strategic responses are long-term in nature and embrace the entire organization. Strategic responses involve large amounts of resources and decisions relating to them are usually made at corporate and business level (Byars, 1991).

Strategic responses are the choices that firms make in an attempt to address key issues arising from internal and external analysis of the firm and its business environment. They involve changes in a firm's strategic behaviour to ensure success in transforming future environment (Ansoff and McDonnell, 1990). Strategic responses require organizations to change their strategy to match the environment and also to transform or re-design their internal capability to match this strategy. The organization, therefore, has to harness both its tangible and intangible assets to maintain a strategic fit in its environment and strategy.

In selecting a strategic response, Porter, (1980) suggests that a firm can choose, depending on its internal capability, between three generic competitive strategies namely: cost leadership, differentiation and focus. A high threat of substitution implies an alternative product type offers price or performance benefit and limits industry profitability. The firm can earn satisfactory profits while undercutting any potential investor on price by pursuing a cost leadership strategy. Thus, by reducing the alternative product types price advantage, the firm protects itself from attacks in the long term (Song et al 2002; Porter, 1980).

Faced with the threat of substitutes, firms are challenged to differentiate their offerings along dimensions that are highly relevant to customers such as price, product quality, after sale service and location (Hitt et al, 1997; Song et al, 2002).

In addition to these actions the company could consider other possibilities such as Jauch and Glueck (1998) suggest that companies can respond using product-market scope strategies. A company may use the *penetration strategy* when internal factors show strength in the present product and the external factors shows continued market opportunity and management has relative low risk orientations. This penetration also implies that there is a small gap between desired and expected performance.

New product development strategy is used when the external factors suggest that the market is saturated or that stronger competition or other threats to the market exist and the internal factors show weaknesses in distribution or strength in product development. *New market development strategy* may be adopted when internal factors suggest adding markets for existing products due to greater distribution strengths but production or product development weakness (Jauch and Glueck, 1988).

A *diversification strategy* could take the form of related diversification or unrelated diversification. Related diversification allows a business to escape from possible internecine war with existing competitors while minimizing product – market adjustment costs in terms of having to adopt new technology (Howe, 1986). Unrelated diversification is an expansion by a business into market areas that are not related to existing products or services in terms of technology, distribution channels or end use. The rationale for such an expansion path is financial rather than industrial. Unrelated diversification releases the firm from any constraints upon the chosen market in which to expand. Unrelated diversification could either be concentric or conglomerate.

In combating substitutes, Porter (1985) prescribes strategies such as improving the Relative Value/Price (RVP) relative to the substitute by reducing the cost, improving the product, improving complementary goods. The company could also modify the product image, raise switching costs, block pull-through attempts by aggressive selling efforts.

In addition to these actions the company could consider other possibilities such as: Finding new uses unaffected by the substitute. This is done by repositioning the product into entirely new uses.

Competition may be redefined away from the strengths of the substitute. A substitute's RVP generally stems from either low price or certain dimensions of value. A good defensive strategy may be to attempt to influence industry competition away from these advantages. Repelling a low price substitute may involve such actions as longer warranties, more engineering support, or new product features (Porter, 1985).

The company could enlist suppliers to help in defence. Suppliers of important purchased inputs often have a big stake in fighting substitution too, and can bring important resources and technological skills to the defence. Suppliers of inputs that are large cost items or that have an important influence on value are the best candidates for alliances.

Strategy may be redirected towards segments least vulnerable to substitution. Some products or buyers will be less vulnerable to substitution than others. A firm under attack from substitutes may be better off focusing its defensive investment on such segments. A firm may also exit from or harvest its position in the segments most vulnerable to substitution (Porter, 1985).

Another strategy could be to harvest instead of defend. Depending on the future RVP of a substitute and the feasibility of defensive strategies, the best strategy for a firm facing substitution may be to harvest its position instead of investing in defence at all. Such strategy involves such actions as concentrating on the segments where substitution will be the slowest, and raising prices.

The company may decide to enter the substitute industry. Rather than viewing a substitute as a threat, it may be better to view it as an opportunity. Entering the substitute industry may allow a firm to reap competitive advantages from interrelationships between a substitute and the product, such as common channels and buyers (Porter, 1985).

Firms can respond to environmental changes by crafting new operational strategies. *Operational strategy* is the approach the functional areas take to achieve corporate and business unit objectives and strategies by maximizing resource productivity. It is concerned with developing and nurturing a distinctive competence to provide a company or business unit with a competitive advantage (Wheelen and Hunger, 1990).

At the functional level companies can formulate strategies in marketing, finance, operations, research and development, and human resource functions. *Marketing strategy* deals with pricing, selling and distribution of a product. Using a market development strategy, a company can capture a larger share of an existing market for current products through market saturation and market penetration. The company could also develop new markets for current products. Using the product development strategy, a company can develop new products for existing markets or develop new products for new markets. For advertising and promotion, a company could use “push” and “pull” marketing strategies (Wheelen and Hunger, 1990).

Financial strategy examines the financial implications of corporate and business strategic options and identifies the best financial course of action. The trade off between the desired debt-to-equity ratio and relying on internal long term financing via cash flow is a key issue in financial strategy.

Operations strategy determines how and where a product or service is to be manufactured. Hayes et al (1996) argue that though operations function provides powerful sources of competitive advantage in most companies this function is regarded as subordinate to marketing, finance and R&D. *Purchasing strategy* deals

with the obtaining of the raw materials, parts, and supplies needed to perform the operations function. The basic purchasing choices are multiple, sole and parallel sourcing depending on the relationship with suppliers. *Research and development strategies* are an effective way to safeguard against either product or production process obsolescence (Byars, 1991).

3.1 Research Design

The *human resource strategy* is concerned with determining the human resources that the organization needs to achieve its objectives. The organization could decide to use low-skilled employees or skilled employees.

3.2 Population

The population of interest consists of all the bottled water companies operating in Nairobi, Kenya. According to the Kenya Business Directory (2005) there are 22 such companies (See Appendix 1). Owing to the small size of this population a census survey was conducted.

3.3 Data collection

Primary data was collected by the use of a semi-structured questionnaire (See Appendix 2). The questionnaire consists of: Part A that collected identification data, Part B provided data on the products considered substitutes and identified substitutes considered threat, Part C was used to gather data about challenges faced by the firm of substitutes, and Part D collected data on responses of the bottled water companies to the threat of substitutes.

The questionnaire was administered by telephone and face-to-face methods wherever this is not possible the questionnaire was sent by e-mail. The respondent was the Marketing Manager. Where the respondent was not available the Finance Manager or the General Manager administered the questionnaire.

RESEARCH METHODOLOGY

3.1 Research Design

This study was a census survey of the bottled water companies operating in Nairobi, Kenya.

3.2 Population

The population of interest consists of all the bottled water companies operating in Nairobi, Kenya. According to the Kenya Business Directory (2005) there are 22 such companies (See Appendix 1). Owing to the small size of this population a census survey was conducted.

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The questionnaire was administered by the "Drop and Pick later" method otherwise where this is not possible the postal system was used. In every organisation, the respondent was the Marketing Manager. Where this position was not available the Finance Manager or the General Manager filled in the questionnaire.

The study is descriptive in nature; therefore, descriptive statistics such as mean scores, standard deviations, and percentages were used. Objective 1, 2, and 3 were analysed using the mean score and standard deviation because they were measured at the ratio level using a five-point scale. The mean scores will be ranked giving the highest score the greatest importance. Factor analysis was used to summarize the strategic responses in objective 3. The rationale for using factor analysis was the large number of objects that would be of useful to see if they had a small number of factors in common which accounted for that correlation (Nachmias and Nachmias, 1996).

4.1 General Findings

4.1.1 Overview of the companies' characteristics

As shown in appendix 3 the bottled water companies operating in Nairobi have been in existence, between two to seventeen years. 50% of these companies have been in existence for two years or less. 91.7% of the companies that responded are locally owned. 66% of them (66%) are producing and selling only one brand of water. 88.9% of these companies have bottled water as their core business. All the companies had good customer service.

4.1.2 Target Market

The question sought to determine the target market of the bottled water. The data was collected on a five-point scale where 1 = to no extent, 2 = to a little extent, 3 = to a moderate extent, 4 = to a great extent and 5 = to a very great extent. The data was analyzed using mean scores. As shown in Table 1, to a great extent the respondents

CHAPTER 4

DATA ANALYSIS AND FINDINGS

This chapter presents data analysis and findings of the study. A total of 22 questionnaires were distributed. Twelve companies responded constituting a 55% response rate.

Table 1: Target market for bottled water

This study had three objectives. First was to determine what substitutes the bottled water companies in Kenya consider as being a threat; secondly, to establish what the bottled water companies in Kenya consider to be the challenges caused by the threat of substitutes; and thirdly, to establish what are the responses of the bottled water companies in Kenya to this threat. The results are presented in the order of these objectives.

	12	2	5	4.08	1.165
Travelers	11	2	5	3.91	1.375
4.1 General Findings	3	1	5	3.33	2.083
Sports activity	1	5	5	3.00	
4.1.1 Overview of the companies' characteristics				3.00	0.00
Ad agencies	1	5	5	3.00	

As shown in appendix 3 the bottled water companies operating in Nairobi have been in existence between two to seventeen years. 50% of these companies have been in existence for five years or less. 91.7% of the companies that responded are locally owned. A majority of them (66%) are producing and selling only one brand of water. 83.3% of these companies have bottled water as their core business. All the companies concurred competition was high.

4.1.2 Target Market

This question sought to determine the target market of the bottled water. This data was collected on a five point scale where 1= to no extent, 2 = to a little extent, 3 = to a moderate extent, 4 = to a great extent and 5 = to a very great extent. The data was analyzed using mean scores. As shown on Table 1, to a great extent the respondents

focus on hotels, tourists, travelers and offices as their target market (mean score of 4.33, 4.08, 3.91 and 3.75 respectively). In this study the mean scores were approximated to the nearest whole number, thus 3.91 and 3.75 being greater than 3.5 were approximated to 4. All the respondents target homes to a moderate extent (mean score of 3.33). A few of the companies target events or special clients such as aid agencies (table 1).

Table 1: Target market for bottled water

	N	Minimum	Maximum	Mean	Std deviation
Office	12	2	5	3.75	1.422
Homes	12	1	5	3.33	1.557
Hotels	12	2	5	4.33	1.073
Tourists	12	2	5	4.08	1.165
Travelers	11	2	5	3.91	1.375
Churches	3	1	5	3.33	2.082
Sports activity	1	5	5	5.00	.
Catering institutions	3	5	5	5.00	.000
Aid agencies	1	5	5	5.00	.
Supermarkets	3	5	5	5.00	.000
Bars and restaurants	3	5	5	5.00	.000

4.2 Substitute products

Identification of substitute products is an important part of strategic analysis. This was the first objective of this study that sought to determine what substitute products the bottled water companies in Kenya consider as being a threat. Two questions were asked to evaluate this objective. First, the respondents were asked to rate the extent to which the listed products were considered to be a close substitute to bottled water. This data was collected on a five point scale where 1= to no extent, 2 = to a little extent, 3 = to a moderate extent, 4 = to a great extent and 5 = to a very great extent.

The data was analyzed using mean scores to determine to what extent the listed products can substitute bottled water.

As shown on Table 2, though the respondents varied greatly, with a standard deviation of more than one, tap water was considered to be a substitute for bottled water to a great extent with a mean score of 3.83. Juices and ready to drink squash were considered to substitute water to a moderate extent with the mean score of 3.25 and 3.09 respectively. Cordials were considered to be a substitute to a moderate extent as indicated by a mean score of 2.67. Respondents agreed beer was not a close substitute to bottled water (mean score of 1.45) followed by tea, coffee, and milk with a mean score of 1.91, 1.92, and 2.25 respectively.

Table 2: Products considered substitutes for bottled water

	N	Minimum	Maximum	Mean	Std deviation
Juices	12	1	5	3.25	1.288
Carbonated soft drinks	11	1	5	3.09	1.514
Cordials	12	1	5	2.67	1.435
Ready to drink squash	12	1	5	3.17	1.467
Beer	11	1	3	1.45	.688
Milk	12	1	5	2.25	1.215
Tea	11	1	4	1.91	1.044
Coffee	12	1	4	1.92	1.165
Tap Water	12	1	5	3.83	1.193
Others	0				

The extent to which consumers substitute one product for another can threaten the survival of the original product. Substitutes threaten the business when they cause the demand for the original product to fall. In the second question that was used to evaluate the first objective, the respondents were asked to rate the above named substitutes according to the extent to which these substitutes pose a threat to their business. This data was collected on a five point scale where 1 = to no extent, 2 = to a

little extent, 3 = to a moderate extent, 4 = to a great extent and 5 = to a very great extent. The data was analyzed using mean scores to determine to what extent the listed products were considered to be a threat to bottled water business.

As shown in Table 3 carbonated soft drinks came on top of the list with a mean score of 3.73 indicating a threat to a great extent. In the second and third place are juices and tap water with a mean score of 3.55 and 3.45 respectively. Again the respondents did not consider beer, tea, coffee and milk (with a mean score of 1.73, 2.00, 2.00 and 2.27) to be of much threat to their business.

Table 3: Substitutes considered a threat to bottled water business

	N	Minimum	Maximum	Mean	Std deviation
Juices	11	2	5	3.55	.934
Carbonated soft drinks	11	2	5	3.73	1.191
Cordials	11	1	5	2.91	1.300
Ready to drink squash	11	2	5	3.27	1.009
Beer	11	1	3	1.73	.647
Milk	11	1	4	2.27	.905
Tea	11	1	3	2.00	.775
Coffee	12	1	3	2.00	.853
Tap Water	11	2	5	3.45	.934
Others	0				

4.3 Challenges posed by threat of substitutes

Substitute products pose challenges to the producers of the original product. As the second objective, the study attempted to establish what bottled water companies in Kenya consider to be the challenges caused by the threat of substitutes. This data was collected on a five point scale where 1= to no extent, 2 = to a little extent, 3 = to a moderate extent, 4 = to a great extent and 5 = to a very great extent. The data was analyzed using mean scores to determine to what extent the bottled water companies faced challenges in the variables listed.

The findings presented in Table 4 show all the variables except distribution had a mean score greater than 3.5 indicating that they faced these challenges to a great extent. The respondents considered pricing as the greatest challenge with a mean score of 4.58. The findings are consistent because economic inducement is the main reason why consumers substitute one product for another. In the second place were the challenges in terms of the market share and the marketing budget both of which had a score of 4.00. Distribution was considered to be challenging only to a moderate extent (mean score of 3.40).

Table 4: Challenges faced because of threat of substitute products

	N	Minimum	Maximum	Mean	Std deviation
Pricing	12	4	5	4.58	.515
Packaging	10	1	5	3.50	1.269
Distribution	10	1	5	3.40	1.350
Promotion	10	1	5	3.90	1.449
Market Segmentation	10	2	5	3.60	1.075
Market Share	11	2	5	4.00	1.000
Sales volume	11	1	5	3.64	1.286
Customer Loyalty	10	1	5	3.90	1.370
Marketing Budget	10	2	5	4.00	.943

4.4 Responses to the threat of substitute products

The third objective of the study was to establish the responses of the bottled water companies in Kenya to the threat of substitute products. In the first place the respondents were asked to rate the factors they consider important to their bottled water business. The purpose of the question was to determine which goals influence their strategic direction. This data was collected on a five point scale where 1= to no extent, 2 = to a little extent, 3 = to a moderate extent, 4 = to a great extent and 5 = to a very great extent. The data was analyzed using mean scores to determine to what

extent the bottled water companies considered the listed factors to be important to their organization.

Table 5 shows all the goals listed were considered important to a great extent (mean score of 4.0 and above). Customer satisfaction was rated as the most important goal with a score 4.92, with a range of 4 to 5 by all the respondents. Growth was the next important goal, with a rating of 4.82. The goals of profitability, technological advancement then followed with a mean score of 4.64 each. Market share leadership and social responsibility with a mean score of 4.50 and 4.45 had the greatest standard deviation (1.0) indicating disagreement among the respondents as to the importance of these goals.

Table 5: Goals considered important

	N	Minimum	Maximum	Mean	Std deviation
Profitability	11	4	5	4.64	.505
Market share leadership	12	2	5	4.50	1.000
Technological advancement	11	3	5	4.64	.674
Customer satisfaction	12	4	5	4.92	.289
Survival	11	2	5	4.45	.934
Growth	11	4	5	4.82	.405
Social responsibility	11	3	5	4.00	1.000

The second set of questions to determine the third objective mainly focused on strategies prescribed by Porter, (1985) used to combat substitute products. This data was collected on a five point scale where 1= to no extent at all and 5 = to a very great extent. The data was analyzed using mean scores to determine to what extent the bottled water companies had used the strategic responses listed.

Table 6 shows the respondents failed to agree on a majority of the strategies as indicated by a standard deviation of greater than one. To a very great extent the respondents have concentrated on their core business (mean score of 4.75). This is

consistent with the fact that introducing new beverages scored the lowest (2.08). To a great extent the bottled water companies are pursuing a differentiation strategy by making their bottled water appear unique (mean score of 4.45), building strong brand names (mean score of 4.42) and improving the quality of the water (mean score of 4.25). The respondents aim at particular groups in the market (mean score of 4.18) and seek to build their current markets (mean score of 4.33). The respondents have entered new markets (mean score of 4.00) and have modified the product image (mean score of 3.92). Only to moderate extent have the bottled water companies sought to price below their competitors (mean score of 3.00) and only to a little extent have these companies exit from segments vulnerable to the threat of substitution (mean score of 2.4).

Table 6: Strategic Responses

	N	Minimum	Maximum	Mean	Std deviation
Pricing below competitors	12	1	5	3.00	1.414
Making your bottled water unique from others	11	2	5	4.45	1.036
Aiming at particular groups in the market	11	1	5	4.18	1.328
Concentrating on your core business	12	3	5	4.75	.622
Introducing new beverages	12	1	5	2.08	1.621
Building current markets	12	3	5	4.33	.888
Entering new markets	12	2	5	4.00	1.044
Building a strong brand name	12	2	5	4.42	.996
Water quality improvement	12	1	5	4.25	1.422
Modifying product image	12	2	5	3.92	.996
Suppliers alliances	12	2	5	3.25	1.055
Vulnerable segments exit	10	1	5	2.40	1.578

Factor analysis was also used to classify the strategic response listed above into a smaller number of dimensions or factors. In factor analysis, the factors are not directly observed; rather, they are defined by abstract factors. The communality of a variable is the total variance accounted for by common factors (Table 7). The *eigen* value is the total variance explained by each factor. Table 8 shows that 90.3% of the total variance is attributed to the first five factors. The coefficients that relate the variable to the five factors were obtained (Table 9). These are also known as factor loadings. A factor loading is similar to a correlation coefficient. The items with the highest factor loading on each factor are taken to be the best indicators of these factors.

Table 7: Communalities of variables

Communalities

	Initial	Extraction
1. Pricing below competitors	1.000	.883
2. Making your bottled water unique from others	1.000	.945
3. Aiming at particular groups in the market	1.000	.742
4. Concentrating on your core business	1.000	.844
5. Introducing new beverages	1.000	.897
6. Building current markets	1.000	.861
7. Entering new markets	1.000	.964
8. Building a strong brand name	1.000	.941
9. Improving quality of the water	1.000	.906
10. Modifying product image	1.000	.895
11. Alliances with your suppliers	1.000	.988
12. Exit from vulnerable segments	1.000	.972

Table 8: Total variance

Total Variance Illustrated

Component	Initial Eigen values			Extraction Sum of Squared Loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	3.622	30.182	30.182	3.622	30.182	30.182
2	2.764	23.032	53.214	2.764	23.032	53.214
3	1.788	14.899	68.113	1.788	14.899	68.113
4	1.553	12.942	81.056	1.553	12.942	81.056
5	1.113	9.273	90.329	1.113	9.273	90.329
6	.545	4.542	94.870			
7	.280	2.334	97.205			
8	.200	1.665	98.870			
9	.136	1.130	100.000			
10	3.669E-16	3.058E-15	100.000			
11	16	3.377E-16	100.000			
12	4.053E-17	-2.264E-16	100.000			
	-2.72E-17					

Table 9: Matrix of coefficients

Component Matrix

	Component				
	1	2	3	4	5
1	-.477	.109	.289	.735	-.142
2	.707	.635	-1.64E-02	5.196E-02	-.197
3	-.124	.734	.170	-.396	5.370E-02
4	-.266	.842	-.222	-.117	4.179E-02
5	.353	-.278	.252	-.627	.489
6	.576	.636	.312	2.373E-02	.167
7	.674	.176	.603	.330	7.365E-02
8	.830	.225	-.269	-.368E-02	-.357
9	.583	-.297	-.649	8.830E-02	.220
10	.583	7.913E-03	-.551	.422	.271
11	.603	-.535	.547	.157	.119
12	-.405	.406	-7.07E-02	.354	.716

Factor 1 on Table 9 is positively correlated with building a strong brand name (0.83), making the bottled water unique (0.707) and negatively correlated to pricing below competitors (-0.477). Factor 2 is positively correlated with concentrating on the core business (0.842) and targeting particular groups (0.734). Generally, factors with the highest percentage of the explained variance provide the most parsimonious representation of the items. In the third set of questions relating to the third objective, the respondents were asked to indicate the changes they had made in their functional strategies over the last three years. In this case, they were given a Yes or No scale. Mean scores were used to determine the changes in the functional strategies over the last three years. In interpreting the mean score, Yes = 1 and No = 2.

In the *marketing strategies*, the distribution outlets, the advertising budget, the prices, and the sales force have been increased (mean score of 1.17, 1.25, 1.36, and 1.36 respectively) as shown on Table 10. The respondents have not reduced their prices as indicated by a mean score of 1.58 nor have they done road shows as indicated by a mean score of 1.75. The respondents have organized sales promotions, increased the number of distribution outlets, increased their advertising budget and offered price discounts as shown by a mean score of 1.17, 1.17, 1.25 and 1.27 respectively.

Table 12: Change in the human resource programs

Table 10: Change in marketing programs

	N	Minimum	Maximum	Mean	Std deviation
Reduction in price	12	1	2	1.58	.515
Increase in price	11	1	2	1.36	.505
Offered price discounts	11	1	2	1.27	.467
Changed packaging	11	1	2	1.45	.522
Organized a sales promotion	12	1	2	1.17	.389
Done a road show	12	1	2	1.75	.452
Expanded sales force	11	1	2	1.36	.505
Reduced sales force	11	1	2	1.73	.467
Increased distribution outlets	12	1	2	1.17	.389
Reduced distribution outlets	11	1	2	1.82	.405
Increased advertising budget	12	1	2	1.25	.452
Reduced advertising budget	10	1	2	1.80	.422

Among the *production programs*, the respondents have increased the production volumes (mean score of 1.25). The mean score of 1.92 indicates that the respondents have not reduced the volume of production. The number of work shifts on average has not changed significantly as indicated by a mean score of 1.5 for an increase and 1.73 for a decrease in the work shifts as shown in Table 11 below.

Table 11: Changes in the production programs

	N	Minimum	Maximum	Mean	Std deviation
Increased production volumes	12	1	2	1.25	.452
Reduced production volumes	12	1	2	1.92	.289
Increased work shifts	12	1	2	1.50	.522
Reduced work shifts	11	1	2	1.73	.467

In the *human resource programs* respondents revealed they have increased the number of workers employed and have done staff training as shown by a mean score of 1.25 and 1.17 respectively as shown on Table 12. The mean score of 1.82 signifies the respondents have not reduced the number of workers.

Table 12: Change in the human resource programs

	N	Minimum	Maximum	Mean	Std deviation
Increased number of workers	12	1	2	1.25	.452
Reduced number of workers	11	1	2	1.82	.405
Done staff training	12	1	2	1.17	.389

Finally, the respondents were asked whether they had made changes in the *research and development programs*. Table 13 shows the respondents have increased their research budget (mean score of 1.36). The respondents have not reduced their research budget as indicated by a mean of 1.80.

CHAPTER 5

CONCLUSION

Table 13: Change in research and development programs

	N	Minimum	Maximum	Mean	Std deviation
Increased research budget	11	1	2	1.36	.505
Reduced research budget	10	1	2	1.80	.422

5.1 Summary, Discussion and Conclusion

In this section the results of the study are summarized, discussed and conclusions drawn. The presentation here is in the order of the objectives of the study. The first objective sought to determine what substitute products the bottled water companies in Kenya consider as being a threat. The results indicate carbonated soft drinks, juices and tap water presented a great threat while beer, tea and coffee presented the least threat.

The results indicate the bottled water companies are aware there exists in the market valid substitutes for bottled water. The results of this study tally with the findings of Nyang'au (2003) that the companies in the soft drink industry are in competition and their products act as substitutes to one another. This observation goes against the findings of Abdalla (2001) who concluded that the companies in the soft drink industry are not in competition with one another. Perhaps Abdalla (2001) differed due to the case study method he used gave him results that are unique to Coca Cola. This study and Nyang'au (2003) have used the survey research design.

The competition in terms of soft drinks are competing for the same consumer purchases. Lately soft drink producers have lowered their prices to induce more purchases. A large number of consumers opt for juices and carbonated soft drinks because of their pleasant taste as opposed to water that is considered plain. Fresh juices are popular because they are wholesome in terms of nutrients such as vitamins.

CHAPTER 5

CONCLUSION

This chapter presents the summary, discussions and conclusion from the research findings. Also included in this chapter are the limitations, suggestions for further research and recommendations for policy and practice.

5.1 Summary, Discussions and Conclusion

In this section the results of the study are summarized, discussed and conclusions drawn. The presentation here is in the order of the objectives of the study. The first objective sought to determine what substitute products the bottled water companies in Kenya consider as being a threat. The results indicate carbonated soft drinks, juices and tap water presented a great threat while beer, tea and coffee presented the least threat.

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The competition is intense and sellers are competing for the same consumer purchases. Lately soft drink producers have lowered their prices to induce more purchases. A large number of consumers opt for juices and carbonated soft drinks because of their pleasant taste as opposed to water that is considered plain. Fresh juices are popular because they are wholesome in terms of nutrients such as vitamins,

fat and carbohydrates. This may explain why some of the bottled water companies are introducing fruit flavored bottled water, while others are producing carbonated water.

challenge of pricing because though a high price is associated with quality. Beer, tea and coffee were considered not to be posing much substitution threat. Beer, tea and coffee have a lower validity as substitutes because they do not offer the same convenience to the customer as the bottled water does. The packaging of water, for example, makes bottled water portable. Tea and coffee may not be considered the drink of choice to quench thirst. Beer, being an alcoholic drink restricts its consumption in specific occasions. Porter, (1985) argues when identifying substitutes one should consider the function of the product not the form. In this case, though tea, coffee, and beer are liquids they do not perform the same function of quenching thirst as water does.

Tap water is readily available to the consumers at a significantly low fee compared to bottled water. Measures introduced by the local authorities to provide safe tap water may cause a decline in the sales volumes of bottled water in the future.

From the foregoing discussion, we can conclude that bottled water companies are facing the threat of substitution from the non-alcoholic beverages. Currently, this is a highly placed threat but not yet likely to cause the industry heavy losses, in deed the bottled water has not managed to replace the other soft drinks.

The second objective of the study was to establish what the bottled water companies in Kenya consider to be the challenges caused by the threat of substitute products. The study revealed pricing was the greatest challenge. In addition, the companies found it difficult to acquire a substantial market share. In fact, all the factors presented a great challenge except distribution, which provided a moderate challenge.

The challenge of pricing is expected in an industry facing the threat of substitutes. Porter, (1985) states substitution places a price ceiling. Porter also gives importance to

the value/ price ratio, which is the value a product gives to the buyer compared to the price the buyer pays for it. The bottled water companies may also be facing the challenge of pricing because though a high price is associated with quality, affordability is a key success factor in the soft drink industry (Nyangau, 2003).

The challenge of acquiring substantial market share may be attributed to the fact observed by Nyangau (2003) that the future growth would mainly come from snatching of market share from the others as opposed to overall industry growth. It may also be concluded that distribution is not a challenge because it is easy to gain channel access. Perhaps the channels do not have a full complement of brands yet. Jauch and Glueck (1988) propose greater distribution strength is useful for adopting a new market development strategy.

In concluding the second objective, it is deduced that faced by the threat of substitute products, the bottled water companies in Kenya are challenged on various fronts. The companies acknowledge these are great challenges and cannot be ignored. These companies are challenged to set a price that persuades customers not to switch to substitute products while at the same time to cover the cost of differentiating their products.

The third objective was to establish the responses of bottled water companies in Kenya to the threat of substitute products. The study shows that to a very great extent these companies have concentrated on their core business, which is bottled water, and have avoided introducing new beverages. Concentrating on the core business may be a useful strategy for developing competencies and increase efficiency.

To great extent, these companies have made their water appear unique from others and have improved the quality of the water in aspects such as taste and clarity and for this they charge a premium price. The bottled water is targeted at particular groups as opposed to mass marketing. These features characterize a differentiation narrow scope

strategy. Porter, (1985) states the interaction between segmentation and substitution is vital. Substitution threat can vary for various buyer segments.

A few of the companies have responded by entering the substitutes industry, for example by introducing juices and ready to drink squashes. Other companies have continued with their initial business in these other beverages because they have realised they are aimed at the same buyers.

The bottled water companies have also changed their operational strategies to achieve business unit objectives. The bottled water companies have increased the prices of their products, increased production volumes, employed more staff and have done staff training. The companies have increased their research budget to meet their goal of technological advancement. Gravens et al, (1996) conclude extensive actions in the areas of new product introduction, research and development marketing effort and so on have a positive effect on performance.

In concluding the third objective, it can be said the bottled water companies in Kenya have responded to the threat posed by substitute products. Mainly these companies have responded by concentrating on their core business, which is bottled water, and have sought to differentiate themselves, their water products along dimensions of price, quality and branding. These strategies conform with the suggestion made by Hitt et al (1997) as to how firms can respond to the threat of substitute products. They have also targeted their products at particular market groups. In addition, the bottled water companies have changed their operational strategies so that they can meet the overall company objectives of customer satisfaction, growth and profitability.

From the foregoing discussion, the following may be drawn regarding what the bottled water companies consider to be the threat posed by substitute products, challenges faced and how they have responded to counter this threat: the companies acknowledge there are some products capable of substituting bottled water and some of these pose a threat to their business. Given the threat of substitution, the companies'

main challenge is how to price their product. The companies have settled for a differentiation narrow scope strategy by making their water appear unique, improving quality and targeting specific groups.

5.2 Limitations of the study

The study was limited to Nairobi and its environs. This was mainly because the records available of bottled water companies in operation in Kenya were only sufficient for those companies operating in Nairobi. There were no sufficient records for bottled water companies operating outside of Nairobi area. A national study would have made the findings more representative.

Given the small size of the population, it would have been desirable to get a higher response rate. Only 55% of the companies approached responded. A number of companies declined to give information citing fear the information would be used against them.

5.3 Suggestions for further research

The respondents indicated certain strategies in use. It may be important to establish how strategy formulation and implementation process is carried out. It may be useful to find out if they have a formal strategy making process as this may indicate the effectiveness of the strategy they use.

A nation-wide study may be done to see whether the same findings would still hold if the study were done on a wider scope.

5.4 Recommendations for policy and practice

The study found a majority bottled water companies have not used the strategy of product development. These companies could consider introducing new beverages

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1. Abercrombie Water Ltd
2. Aqua Pure Ltd
3. Aqua Pure Ltd
4. Aqua Pure Ltd
5. Coca Cola Co Ltd
6. Coca Cola Co Ltd
7. Elipa (2002) Enterprises
8. George Park Mineral Water
9. Highlands Mineral Water Co. Ltd
10. Kenya Nat Company Ltd
11. Keringet Pure Natural Mineral Water
12. Kevian Ltd
13. Kilimanjaro Beverage Company
14. Koba Waters Ltd
15. Liztan Enterprises
16. Micfood Executive Industries
17. Mountain Spring Pure Natural Mineral Water Ltd
18. Munjo Foods Products
19. Nestle Foods Ltd
20. Raili Enterprises
21. Ridgeways Spring (K.) Ltd
22. Savannah Springs Mineral Water

APPENDIX 1:

List of Bottled Water Companies in Nairobi

1. Aberdares Water Ltd
2. Alpine Coolers Ltd
3. Annum Trading Co.
4. Aquamist Ltd
5. Coca Cola Co Ltd
6. Crown Distributors Ltd
7. Elipa (2002) Enterprises
8. Grange Park Mineral Water
9. Highlands Mineral Water Co. Ltd
10. Kenya Nut Company Ltd
11. Keringet Pure Natural Mineral Water
12. Kevian Ltd
13. Kilimanjaro Beverage Company
14. Koba Waters Ltd
15. Liztan Enterprises
16. Micfood Executive Industries
17. Mountain Spring Pure Natural Mineral Water Ltd
18. Munjo Foods Products
19. Nestle Foods Ltd
20. Raili Enterprises
21. Ridgeways Spring (K) Ltd
22. Savannah Springs Mineral Water

Carbonated soft drinks

Cordrinks

Ready to drink squash

Other (Specify)

QUESTIONNAIRE

7. To what extent is each of the following a target market for your bottled water product?

(Kindly tick)

PART A: CLASSIFICATION QUESTIONS

1. Name of the company _____

2. What brand names of water do you produce and sell _____

3. Number of years of operation in Kenya _____

4. What is the ownership of the company

(i) Local ownership []

(ii) Foreign majority shareholding []

5. Please indicate the level of competition your company is facing now

(i) Very high []

(ii) High []

(iii) Moderate []

(iv) Low []

(v) None at all []

6. What is your core business? (Please tick the relevant box)

Bottled water []

Juices []

Carbonated soft drinks []

Cordials []

Ready to drink squash []

Other (Specify) _____

PART B: IDENTIFICATION OF SUBSTITUTES

7. To what extent is each of the following a target market for your bottled water product?
(Kindly tick the relevant box for each)

	5	4	3	2	1
	To a very Great extent	To a great extent	To a moderate extent	To a little extent	To no extent
Offices	[]	[]	[]	[]	[]
Homes	[]	[]	[]	[]	[]
Hotels	[]	[]	[]	[]	[]
Tourists	[]	[]	[]	[]	[]
Travellers	[]	[]	[]	[]	[]
Others (specify)					
_____	[]	[]	[]	[]	[]
_____	[]	[]	[]	[]	[]
_____	[]	[]	[]	[]	[]

8. To what extent do you consider the following products to be a substitute for bottled water?

	5	4	3	2	1
	To a very Great extent	To a great extent	To a moderate extent	To a little extent	To no extent
Juices	[]	[]	[]	[]	[]
Carbonated soft drinks	[]	[]	[]	[]	[]
Cordials	[]	[]	[]	[]	[]
Ready to drink squash	[]	[]	[]	[]	[]
Beer	[]	[]	[]	[]	[]
Milk	[]	[]	[]	[]	[]
Tea	[]	[]	[]	[]	[]
	5	4	3	2	1
	To a very Great extent	To a great extent	To a moderate extent	To a little extent	To no extent
Coffee	[]	[]	[]	[]	[]
Tap water	[]	[]	[]	[]	[]

Others (Specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. To what extent is each of the following a threat to your bottled water business?

	5	4	3	2	1
	To a very Great extent	To a great extent	To a moderate extent	To a little extent	To no extent
Juices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carbonated soft drinks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cordials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ready to drink squash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coffee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tap water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others (Specify)					
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PART C: CHALLENGES CAUSED BY SUBSTITUTE

PRODUCTS

10. Faced by the current threat of substitute products, to what extent does your organization experience challenges in the following aspects?

	5	4	3	2	1
	To a very Great extent	To a great extent	To a moderate extent	To a little extent	To no extent
Pricing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Packaging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Distribution	[]	[]	[]	[]	[]
Promotion	[]	[]	[]	[]	[]
Market segmentation	[]	[]	[]	[]	[]
Market share	[]	[]	[]	[]	[]
Sales volume	[]	[]	[]	[]	[]
Customer loyalty	[]	[]	[]	[]	[]
Marketing budget	[]	[]	[]	[]	[]

PART D: STRATEGIC AND OPERATIONAL RESPONSES

11. To what extent is each of the following factors important to your organization?

	5	4	3	2	1
	To a very Great extent	To a great extent	To a moderate extent	To a little extent	To no extent
Profitability	[]	[]	[]	[]	[]
Market share leadership	[]	[]	[]	[]	[]
Technological advancement	[]	[]	[]	[]	[]
Customer satisfaction	[]	[]	[]	[]	[]
Survival	[]	[]	[]	[]	[]
	5	4	3	2	1
	To a very Great extent	To a great extent	To a moderate extent	To a little extent	To no extent
Growth	[]	[]	[]	[]	[]
Social responsibility	[]	[]	[]	[]	[]

12. To what extent has your firm used the following approaches to respond to the threat of substitute products facing bottled water? (Kindly tick the relevant box using the scale given below as a guide)

5- To a very great extent

1- To no extent at all

	5	4	3	2	1
Pricing below competitors	[]	[]	[]	[]	[]
Making your bottled water unique from others	[]	[]	[]	[]	[]
Aiming at particular groups in the market	[]	[]	[]	[]	[]
Concentrating on your core business	[]	[]	[]	[]	[]
Introducing new beverages	[]	[]	[]	[]	[]
Building current markets	[]	[]	[]	[]	[]
Entering new markets	[]	[]	[]	[]	[]
Building a strong brand name	[]	[]	[]	[]	[]
Improving quality of the water	[]	[]	[]	[]	[]
Modifying product image	[]	[]	[]	[]	[]
Alliances with your suppliers	[]	[]	[]	[]	[]
Exit from vulnerable segments	[]	[]	[]	[]	[]

13. In the last three years have your operating programs changed in terms of:

Yes No

Marketing programs

Reduced prices	[]	[]
Increased prices	[]	[]
Offered price discounts	[]	[]
Changed the packaging	[]	[]
Organized a sales promotion	[]	[]
Done a road show	[]	[]
Expanded the sales force	[]	[]
Reduced sales force	[]	[]
Increase number of distribution outlets	[]	[]
Reduced number of distribution channels	[]	[]
Increased your advertising budget	[]	[]
Reduced your advertising budget	[]	[]

Production programs

Increased production volume	[]	[]
-----------------------------	-----	-----

Reduced production volumes [] []
 Increased work shifts [] []
 Reduced work shifts [] []

Human Resource Programs

Increased number of workers 1 [] 8.33 []
 Reduced number of workers 1 [] 8.33 []
 Done staff training 8 [] 66.67 []
 Total 12 100

Research and Development Programs

Increased the research budget [] []
 Reduced the research budget [] []

Valid	Local	Frequency	Percent	Valid Percent	Cumulative Percent
	Local	11	91.7	91.7	91.7
	Foreign with majority shares	1	8.3	8.3	100.0
	Total	12	100.0	100.0	

Thank you for responding to this questionnaire

Indicate on business

Valid	Bottled Water	Frequency	Percent	Valid Percent	Cumulative Percent
	Bottled Water	10	83.3	83.3	83.3
	Other	2	16.7	16.7	100.0
	Total	12	100.0	100.0	

Level of competition experienced in market

Valid	Very High	Frequency	Percent	Valid Percent	Cumulative Percent
	Very High	6	50.0	50.0	50.0
	High	6	50.0	50.0	100.0
	Total	12	100.0	100.0	

APPENDIX 3: Overview of companies' characteristics

Brands produced and sold per company

Number of brands	Frequency	Percentage
4	2	16.67
3	1	8.33
2	1	8.33
1	8	66.67
Total	12	100

Mode of ownership of company

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Local	11	91.7	91.7	91.7
Foreign with majority shares	1	8.3	8.3	100.0
Total	12	100.0	100.0	

Indicate core business

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Bottled Water	10	83.3	83.3	83.3
Other	2	16.7	16.7	100.0
Total	12	100.0	100.0	

Level of competition experienced in market

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very high	6	50.0	50.0	50.0
High	6	50.0	50.0	100.0
Total	12	100.0	100.0	

APPENDIX 4: Letter of Introduction

Julia Methu

P. O. Box 972 -00606

NAIROBI

June 21, 2005

The Marketing Manager

P.O. Box

Nairobi

Dear Sir,

RE: REQUEST FOR YOUR PARTICIPATION IN AN MBA RESEARCH PROJECT

I am a student at the University of Nairobi pursuing a Masters of Business Administration (MBA) Degree, specializing in Strategic Management. As part of my course work assessment, I am required to submit a research project report on a real management issue: **Responses of Bottled Water Companies in Kenya to the Threat of Substitute Products.**

Kindly assist me by completing the attached questionnaire. I assure you the information you provide is purely for academic purposes and will be treated with the utmost confidence. Further, the name of your organization will not be mentioned in the report except in the list of Water companies operating in Kenya.

Should you be interested in the findings of the research, this will be availed to you on request. A copy will also be available at the University of Nairobi library.

Thank you.

Yours faithfully,

Julia Methu